

U.S. House Committee on Energy and Commerce
Subcommittee on Energy
“Appliance and Building Policies: Restoring the American Dream of Home Ownership and
Consumer Choice.”
September 16, 2025
Documents for the Record

1. A letter from the Consumer Product Safety Commission addressed to Chairman Latta and Chairman Guthrie, submitted by the Majority.
2. A letter from the Business Council for Sustainable Energy addressed to Chairman Latta and Ranking Member Castor, submitted by the Majority.
3. A letter from the Great Lakes Community Action Partnership addressed to Chairman Latta, submitted by the Majority.
4. A letter from the Miami Valley Community Action Partnership addressed to Chairman Latta, submitted by the Majority.
5. A letter from the Northwestern Ohio Community Action Commission addressed to Chairman Latta, submitted by the Majority.
6. A letter from Plumbing Manufactures International, addressed to Chairman Latta and Ranking Member Castor, submitted by the Majority.
7. A letter from Delta Faucet Company addressed to David Taggart submitted by the Majority.
8. A letter from Plumbing Manufactures International addressed to David Taggart, submitted by the Majority.
9. A report from the Pacific Northwest National Laboratory titled, “National Cost-Effectiveness of the Residential Provisions of the 2024 IECC,” submitted by Rep. DeGette.
10. Budget in Brief from the Department of Energy (FY 2026 Congressional Justification), submitted by Rep. DeGette.
11. A letter from the Office of Management and Budget addressed to Chair Susan Collins, submitted by Rep. DeGette.



UNITED STATES
CONSUMER PRODUCT SAFETY COMMISSION
4330 EAST WEST HIGHWAY
BETHESDA, MD 20814
ACTING CHAIRMAN PETER A. FELDMAN

September 10, 2025

The Honorable Bob Latta
Chairman
Subcommittee on Energy
United States House of Representatives
Washington, DC 20510

The Honorable Brett Guthrie
Chairman
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20510

Dear Chairman Latta and Chairman Guthrie:

I write to thank you for holding yesterday's hearing on "Building the American Dream: Examining Affordability, Choice, and Security in Appliance and Buildings Policies." I also want to commend your leadership in standing up to the heavy-handed regulatory agenda of the previous administration. This hearing highlighted rules that raise costs, reduce performance, and restrict consumer choice when it comes to home appliances.

The U.S. Consumer Product Safety Commission (CPSC) is the federal regulatory agency responsible for protecting the public from unreasonable risks of injury associated with consumer products. CPSC shares many of the concerns raised by witnesses and members, including with respect to the Commission's effort to ban gas stoves during the previous administration.

Earlier this year, the Commission formally concluded its review of a request for information on gas stoves initiated during the Biden Administration, without further action. That review followed the 2022 circulation of a former commissioner's proposal to ban gas stoves, a proposal rooted in climate ideology not consumer safety. Under new leadership, the Commission has made clear it will not regulate gas stove emissions or ban this product category, consistent with President Trump's agenda and his commitment to preserve the freedom of the American people to choose from a full range of goods and appliances.

The American people have made it clear that they expect their government to focus on real, tangible issues, not to weaponize regulation against everyday life. They are tired of bureaucratic overreach that distracts from genuine safety concerns and undermines their freedoms. It is incumbent upon federal agencies like CPSC to respect this mandate and direct our efforts toward meaningful, data-driven protections against real hazards.

CPSC has now returned to a safety mission rooted in sound science, robust data, and common sense. Regulations and practices that do not reasonably advance safety -- but instead promote

unscientific ideological agendas, impose unnecessary costs, restrict consumer choice, or reduce competition, entrepreneurship, and innovation -- are no longer agency priorities.

Thank you for the opportunity to submit this statement; I ask that you please include it in the record. I look forward to continued collaboration with the Committee in advancing consumer safety policy grounded in evidence, law, and respect for consumer choice.

Sincerely,

A handwritten signature in black ink, reading "Peter A. Feldman". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Peter A. Feldman
Acting Chairman
U.S. Consumer Product Safety Commission

cc: The Honorable Kathy Castor
Ranking Member
Subcommittee on Energy
United States House of Representatives
Washington, DC 20510

The Honorable Frank Pallone
Ranking Member
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20510

September 15, 2025

The Honorable Bob Latta, Chairman
House Committee on Energy and Commerce
Subcommittee on Energy
2470 Rayburn House Office Building
Washington, DC 20515

The Honorable Kathy Castor, Ranking Member
House Committee on Energy and Commerce
Subcommittee on Energy
2188 Rayburn House Office Building
Washington, DC 20515

Chairman Latta and Ranking Member Castor:

In preparation for your Subcommittee's hearing on September 16th regarding appliance and building policies and restoring the American dream of home ownership and consumer choice, the Business Council for Sustainable Energy (BCSE) is writing to convey our views regarding the role of energy efficiency in reducing costs for households and businesses by expanding access to efficient, affordable energy solutions that allow consumers to manage their energy use and lower their bills.

The BCSE is a coalition of companies and trade associations that deploy a broad portfolio of energy and decarbonization solutions, with a sector focus on energy efficiency, natural gas, and renewable energy. Our members include investor-owned utilities, public power, independent power producers, equipment and product manufacturers, project developers, technology providers, environmental and energy market service firms, and others.

We commend the Subcommittee's focus on energy affordability at a time of growing national energy demand. The most effective way to reduce costs for households and businesses is to expand access to efficient, affordable energy solutions that allow consumers to manage their energy use and lower their bills.

A 2022 study by ACEEE, the Alliance to Save Energy, and the Business Council for Sustainable Energy, documented that energy efficiency is America's most abundant energy resource. While we continue to see rising energy consumption the 2023 U.S. economy would likely have required two-thirds more energy without the energy efficiency we have seen since 1980.¹

By improving the energy efficiency of homes and buildings, families and property owners save money, month after month, year after year. The U.S Department of Energy (DOE) estimated that while the average household spends \$2,000 on their annual utility bills, between \$200 to \$400 of this amount is being wasted as the result of drafts, air leaks, and outdated heating and cooling systems.² This is why energy efficiency is so critical to energy affordability. According to ACEEE, using 2023 energy prices, energy efficiency saves Americans approximately \$1.4 billion annually.³

¹ Alliance to Save Energy, American Council for an Energy-Efficient Economy, and Business Council for Sustainable Energy, Energy Efficiency Impact Report, 2022, <https://energyefficiencyimpact.org/>.

² "Why Energy Efficiency Matters," U.S. Department of Energy, <https://www.energy.gov/energysaver/why-energy-efficiency-matters>.

³ American Council for an Energy-Efficient Economy (ACEEE), Energy Efficiency Impact Report, 2022, <https://energyefficiencyimpact.org/>; ACEEE, Energy Efficiency Impact Report update (unpublished), September 2025.



BCSE has long supported model energy codes as a proven tool to limit energy waste, lower household energy costs, and reduce energy demand. It is essential that these codes remain fuel-neutral, cost-effective, and preserve consumer choice.

The benefits of building codes are tangible. At a local level, the Department of Energy estimates that an Ohio household living in a home built with an updated model code saves over \$260 annually on energy costs, reaching positive cash flow in just six years. In Florida, households save an estimated \$225 annually, with positive cash flow in only two years.

Model energy codes also deliver resilience benefits. Pacific Northwest National Laboratory research shows that homes built to current codes provide significantly more “days of safety” during outages from extreme weather. For example, during a heat-related event in Atlanta, a code-compliant home provides roughly seven safe days compared to only three in older housing stock. With the residential sector accounting for nearly 20 percent of U.S. primary energy use, these improvements also strengthen national energy security and competitiveness.

Federal tax credits have been critical drivers of efficiency investment. The Section 45L New Energy Efficient Home Credit and the Section 25C Energy Efficient Home Improvement Credit have spurred construction of efficient new homes and upgrades to existing ones. Unfortunately, both are set to expire under Public Law 119-21. BCSE urges Congress to work with industry to design the next generation of incentives to ensure U.S. housing remains affordable to purchase and to operate.

BCSE also supports the repeal or significant modification of Section 433 of the Energy Independence and Security Act of 2007, which prohibits certain fuels or technologies in federal buildings. In comments submitted to the Department of Energy during its 2023 building performance standard rulemaking, BCSE recommended a holistic, inclusive, and flexible approach. A technology-neutral, whole-building framework will lower costs, improve reliability, security, and resilience, and allow for greater ambition over time.

BCSE appreciates the Committee’s leadership in examining policies that reduce costs while enhancing the resilience and reliability of the U.S. energy system. Our members stand ready to work with Congress on pragmatic, bipartisan solutions that make American homes more efficient, affordable, and secure.

Sincerely,

Lisa Jacobson
President
Business Council for Sustainable Energy



About the BCSE

Since its founding in 1992, BCSE has worked to ensure a vibrant, competitive, and sustainable U.S. economy by advocating for policies that advance a wide range of supply- and demand-side technologies. These solutions improve the efficiency, reliability, and affordability of the U.S. energy system. Collectively, BCSE members represent \$3.8 trillion in market capitalization and employ nearly one million Americans. BCSE also works closely with its small business division, the Clean Energy Business Network (CEBN).

CEBN encompasses a network of more than 8,000 cleantech business and community leaders across all 50 states. Collectively, BCSE and CEBN mobilize the full breadth of the clean energy economy, from innovators and small businesses to industry leaders and the trade associations that represent them. On a national basis, these industries support more than 3 million U.S. jobs.

CC: Members of House Energy Subcommittee



September 15, 2025

The Honorable Robert Latta
Chairman
Subcommittee on Energy
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

RE: Support Bipartisan Weatherization Enhancement and Readiness Act of 2025 (H.R. 1355)

Dear Subcommittee Chairman Latta,

On behalf of Great Lakes Community Action Partnership (GLCAP) I am writing to urge you to support **the Weatherization Enhancement and Readiness Act of 2025 (H.R. 1355)**, introduced by Reps. Tonko (D-NY-20), Lawler (R-NY-17), Kaptur (D-OH-09), Riley (D-NY-19) and Del. Moylan (R-GU-AL). Thank you for including this important legislation in this week's legislative hearing, "Appliance and Building Policies: Restoring the American Dream of Home Ownership and Consumer Choice."¹

GLCAP is the Home Weatherization Assistance Program provider for Wood, Sandusky, Ottawa, Seneca, Erie, Huron, Lorain and Lucas Counties. As you are aware, these funds provide vital services in our communities in relation to energy efficiency and safety. It is in this capacity that we support this legislation and urge its passage.

The bipartisan Energy Act of 2020, signed by President Trump, authorized the Weatherization Assistance Program through fiscal year 2025. H.R. 1355 would reauthorize WAP at existing levels through 2030 – authorization currently set to expire at the end of this fiscal year. H.R. 1355 would also authorize the vital Weatherization Readiness Fund, first funded by Fiscal Year 2022 appropriations, to give state programs the flexibility to reach more low-income homeowners currently ineligible for funding under WAP due to their homes' structural, electrical, or health-related issues.

Additionally, the bill would increase the statutory Average Cost Per Unit, allowing state programs to keep up with rising costs of building materials, equipment, and wages while also supporting more improvements per project for maximum energy savings. In the face of rising energy prices, reauthorizing WAP will ensure that cost-saving program benefits continue to flow directly to the low-income households who need them most.

P.O. Box 590
127 S. Front St.
Fremont, Ohio 43420

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www.glcap.org

This institution is an equal opportunity provider.

State WAP offices, including the Ohio Department of Development, are responsible for overseeing this vital federal investment and ensuring taxpayer dollars are spent effectively and in alignment with each state's rules and regulations. In Project Year 2025, Ohio is allocated \$18.6 million to operate the state's WAP program, with an additional \$1.6 million allocated for the state's

Weatherization Readiness Fund.² Like nearly all state WAP offices,³ the Ohio Department of Development has also requested a transfer of funding from the Low Income Home Energy Assistance Program (LIHEAP) that would bring the state's total Project Year 2025 funding for WAP to approximately \$38 million.⁴

In the 49 years of WAP's existence, the return on this investment has been substantial. According to the Department of Energy, more than 7 million households have received WAP services, an average of 35,000 homes weatherized each year.⁵ This work supports 8,500 highly skilled jobs with competitive salaries,⁶ jobs that are local to each community and cannot be outsourced.

Weatherization's impact extends far beyond the number of homes reached and jobs supported. It can make a life-changing difference in the health and safety of our most vulnerable neighbors, including senior citizens and low-income families. For every \$1 spent on energy and health benefits, weatherization produces a 350 percent return on that investment, lowering the energy burden by an average of \$372 annually for households that spend as much as 16.3 percent of their income on utilities.⁷ Those living with asthma or other mold-borne illnesses spend less time in the emergency room and have seen their medical bills decrease by an average of \$514 per year. By retrofitting homes in need of repair, weatherization makes homes more resilient during extreme weather events and disasters, and the housing stock more affordable. In short, we know that weatherization works.

We are grateful for the bipartisan support H.R. 1355 has received and hope to work with you and your colleagues to build additional congressional support in the days and weeks to come.

Sincerely,



Ruthann House
President/CEO

¹ House Energy & Commerce Committee Hearing Notice: "Appliance and Building Polices: Restoring the American Dream of Home Ownership and Consumer Choice." September 16, 2025.

<https://docs.house.gov/meetings/IF/IF03/20250916/118615/HHRG-119-IF03-20250916-SD001.pdf>.

² Department of Energy, Weatherization Program Notice 25-2, July 1, 2025.

<https://www.energy.gov/sites/default/files/2025-07/wap-wpn-25-2.pdf>.

³ National Association for State Community Services Programs, FY2025 Percent of LIHEAP Transfer to Weatherization Assistance. <https://nascsp.org/liheap-weatherization-info-resources/>.

⁴ Ohio Department of Development, Draft 2025 LIHEAP Waiver Request.

https://dam.assets.ohio.gov/image/upload/v1743016291/development.ohio.gov/individual/energyassistance/Draft_2025_LIHEAP_Waiver_Request.pdf.

⁵ Weatherization Assistance Program, Department of Energy, Office of State and Community Energy Programs, <https://www.energy.gov/sites/default/files/2023-08/2023-WAP-Fact-Sheet.pdf>.

⁶ Ibid.

⁷ Weatherization Assistance Program: Driving Energy Efficiency and Security, NASCSP, <https://nascsp.org/wp-content/uploads/2025/02/250212-Energy-Awareness-Flyer.pdf>.



September 15, 2025

The Honorable Robert Latta
Chairman, Subcommittee on Energy
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

Dear Subcommittee Chairman Latta,

**RE: Support Bipartisan Weatherization Enhancement and Readiness Act of 2025
(H.R. 1355)**

On behalf of Miami Valley Community Action Partnership, I am writing to urge you to support **the Weatherization Enhancement and Readiness Act of 2025** ([H.R. 1355](#)), introduced by Reps. Tonko (D-NY-20), Lawler (R-NY-17), Kaptur (D-OH-09), Riley (D-NY-19) and Del. Moylan (R-GU-AL). Thank you for including this important legislation in this week's legislative hearing, "Appliance and Building Policies: Restoring the American Dream of Home Ownership and Consumer Choice."ⁱ

Miami Valley Community Action Partnership operates one of Ohio's largest Weatherization programs, serving low-income households in nine counties with energy-saving home repairs and health and safety improvements. It is in this capacity that we support this legislation and urge its passage. It is in this capacity that we support this legislation and urge its passage.

The bipartisan Energy Act of 2020, signed by President Trump, authorized the Weatherization Assistance Program through fiscal year 2025. H.R. 1355 would reauthorize WAP at existing levels through 2030 – authorization currently set to expire at the end of this fiscal year. H.R. 1355 would also authorize the vital Weatherization Readiness Fund, first funded by Fiscal Year 2022 appropriations, to give state programs the flexibility to reach more low-income homeowners currently ineligible for funding under WAP due to their homes' structural, electrical, or health-related issues. Additionally, the bill would increase the statutory Average Cost Per Unit, allowing state programs to keep up with rising costs of building materials, equipment, and wages while also supporting more improvements per project for maximum energy savings. In the face of rising energy prices, reauthorizing WAP will ensure that cost-saving program benefits continue to flow directly to the low-income households who need them most.

State WAP offices, including the Ohio Department of Development, are responsible for overseeing this vital federal investment and ensuring taxpayer dollars are spent effectively and in alignment with each state's rules and regulations. In Project Year 2025, Ohio is allocated \$18.6 million to operate the state's WAP program, with an additional \$1.6 million allocated for the state's Weatherization Readiness Fund.ⁱⁱ Like nearly all state WAP offices,ⁱⁱⁱ the Ohio

Main Office
Montgomery County
719 S. Main Street
Dayton, OH 45402
937-341-5000

Darke County
1469 Sweitzer Street
Greenville, OH 45331
937-548-8143

Greene County
469 Dayton Avenue
Xenia, OH 45385
937-376-7747

Preble County
308 Eaton-Lewisburg Rd.
Eaton, OH 45320
937-456-2800

**Weatherization &
Housing Services**
3155 Elbee Road, Suite 3
Moraine, OH 45439
800-617-2673

Department of Development has also requested a transfer of funding from the Low Income Home Energy Assistance Program (LIHEAP) that would bring the state's total Project Year 2025 funding for WAP to approximately \$38 million.^{iv}

In the 49 years of WAP's existence, the return on this investment has been substantial. According to the Department of Energy, more than 7 million households have received WAP services, an average of 35,000 homes weatherized each year.^v This work supports 8,500 highly skilled jobs with competitive salaries,^{vi} jobs that are local to each community and cannot be outsourced.

Weatherization's impact extends far beyond the number of homes reached and jobs supported. It can make a life-changing difference in the health and safety of our most vulnerable neighbors, including senior citizens and low-income families. For every \$1 spent on energy and health benefits, weatherization produces a 350 percent return on that investment, lowering the energy burden by an average of \$372 annually for households that spend as much as 16.3 percent of their income on utilities.^{vii} Those living with asthma or other mold-borne illnesses spend less time in the emergency room and have seen their medical bills decrease by an average of \$514 per year. By retrofitting homes in need of repair, weatherization makes homes more resilient during extreme weather events and disasters, and the housing stock more affordable. In short, we know that weatherization works.

We are grateful for the bipartisan support H.R. 1355 has received and hope to work with you and your colleagues to build additional congressional support in the days and weeks to come.

Sincerely,

Erin M. Jeffries
President and Chief Executive Officer
Miami Valley Community Action Partnership

ⁱ House Energy & Commerce Committee Hearing Notice: "Appearance and Building Policies: Restoring the American Dream of Home Ownership and Consumer Choice." September 16, 2025.
<https://docs.house.gov/meetings/IF/IF03/20250916/118615/HHRG-119-IF03-20250916-SD001.pdf>.

ⁱⁱ Department of Energy, Weatherization Program Notice 25-2, July 1, 2025.
<https://www.energy.gov/sites/default/files/2025-07/wap-wpn-25-2.pdf>.

ⁱⁱⁱ National Association for State Community Services Programs, FY2025 Percent of LIHEAP Transfer to Weatherization Assistance. <https://nascsp.org/heap-weatherization-info-resources/>.

^{iv} Ohio Department of Development, Draft 2025 LIHEAP Waiver Request.
https://dam.assets.ohio.gov/image/upload/v1743016291/development.ohio.gov/ndvdua/energyassistance/Draft_2025_LIHEAP_Waiver_Request.pdf.

^v *Weatherization Assistance Program*, Department of Energy, Office of State and Community Energy Programs, <https://www.energy.gov/sites/default/files/2023-08/2023-WAP-Fact-Sheet.pdf>.

^{vi} Ibid.

^{vii} *Weatherization Assistance Program: Driving Energy Efficiency and Security*, NASCSP, <https://nascsp.org/wp-content/uploads/2025/02/250212-Energy-Awareness-Fyer.pdf>.



September 15, 2025

The Honorable Robert Latta
Chairman
Subcommittee on Energy
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

RE: Support Bipartisan Weatherization Enhancement and Readiness Act of 2025 (H.R. 1355)

Dear Subcommittee Chairman Latta,

On behalf of Northwestern Ohio Community Action Commission (NOCAC), I am writing to urge you to support **the Weatherization Enhancement and Readiness Act of 2025 (H.R. 1355)**, introduced by Reps. Tonko (D-NY-20), Lawler (R-NY-17), Kaptur (D-OH-09), Riley (D-NY-19) and Del. Moylan (R-GU-AL). Thank you for including this important legislation in this week's legislative hearing, "Appliance and Building Policies: Restoring the American Dream of Home Ownership and Consumer Choice."¹

As Executive Director of NOCAC, a Community Action Agency and Weatherization provider serving families across your district, my team and I see every day how critical these services are for the low-income households we assist. It is in this capacity that we support this legislation and urge its passage.

The bipartisan Energy Act of 2020, signed by President Trump, authorized the Weatherization Assistance Program through fiscal year 2025. H.R. 1355 would reauthorize WAP at existing levels through 2030 – authorization currently set to expire at the end of this fiscal year. H.R. 1355 would also authorize the vital Weatherization Readiness Fund, first funded by Fiscal Year 2022 appropriations, to give state programs the flexibility to reach more low-income homeowners currently ineligible for funding under WAP due to their homes' structural, electrical, or health-related issues. Additionally, the bill would increase the statutory Average Cost Per Unit, allowing state programs to keep up with rising costs of building materials, equipment, and wages while also supporting more improvements per project for maximum energy savings. In the face of rising energy prices, reauthorizing WAP will ensure that cost-saving program benefits continue to flow directly to the low-income households who need them most.

¹ House Energy & Commerce Committee Hearing Notice: "Appliance and Building Policies: Restoring the American Dream of Home Ownership and Consumer Choice." September 16, 2025.
<https://docs.house.gov/meetings/IF/IF03/20250916/118615/HHRG-119-IF03-20250916-SD001.pdf>.

State WAP offices, including the Ohio Department of Development, are responsible for overseeing this vital federal investment and ensuring taxpayer dollars are spent effectively and in alignment with each state's rules and regulations. In Project Year 2025, Ohio is allocated \$18.6 million to operate the state's WAP program, with an additional \$1.6 million allocated for the state's Weatherization Readiness Fund.² Like nearly all state WAP offices,³ the Ohio Department of Development has also requested a transfer of funding from the Low Income Home Energy Assistance Program (LIHEAP) that would bring the state's total Project Year 2025 funding for WAP to approximately \$38 million.⁴

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We are grateful for the bipartisan support H.R. 1355 has received and hope to work with you and your colleagues to build additional congressional support in the days and weeks to come.

Sincerely,

Northwestern Ohio Community
Action Commission



Angie Franklin
Executive Director

² Department of Energy, Weatherization Program Notice 25-2, July 1, 2025.

<https://www.energy.gov/sites/default/files/2025-07/wap-wpn-25-2.pdf>.

³ National Association for State Community Services Programs, FY2025 Percent of LIHEAP Transfer to Weatherization Assistance. <https://nascsp.org/liheap-weatherization-info-resources/>.

⁴ Ohio Department of Development, Draft 2025 LIHEAP Waiver Request.

https://dam.assets.ohio.gov/image/upload/v1743016291/development.ohio.gov/individual/energyassistance/Draft_2025_LIHEAP_Waiver_Request.pdf.

⁵ *Weatherization Assistance Program*, Department of Energy, Office of State and Community Energy Programs, <https://www.energy.gov/sites/default/files/2023-08/2023-WAP-Fact-Sheet.pdf>.

⁶ Ibid.

⁷ *Weatherization Assistance Program: Driving Energy Efficiency and Security*, NASCSP, <https://nascsp.org/wp-content/uploads/2025/02/250212-Energy-Awareness-Flyer.pdf>.



September 16, 2025

The Honorable Robert Latta
Chairman
House Committee on Energy and Commerce
Subcommittee on Energy
U.S. House of Representatives
Washington, D.C. 20515

The Honorable Kathy Castor
Ranking Member
House Committee on Energy and Commerce
Subcommittee on Energy
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Latta, Ranking Member Castor, and Members of the Subcommittee:

On behalf of Plumbing Manufacturers International (PMI), thank you for the opportunity to submit comments as the House Energy Subcommittee considers several pieces of legislation affecting appliance efficiency standards, including those for plumbing products such as faucets and showerheads.

PMI is the nation's leading trade association for the plumbing fixtures and fittings manufacturing industry. Our members produce 90% of all the plumbing products sold in the United States and represent more than 150 brands. PMI's members are industry leaders in producing innovative, reliable, technologically engineered plumbing products, including kitchen and bathroom faucets, showerheads, toilets, urinals, bidets, bottle filling stations, drinking fountains, bathtubs, sinks, eye wash stations, as well as hundreds of types of components, valves, and piping, which are key to our nation's indoor plumbing systems. Plumbing fixtures and fittings are truly the heart of the home.

Our members' products are manufactured in more than 25 states including Ohio, Kentucky and Indiana, and distributed in all 50 states. The U.S. plumbing manufacturing industry, along with our wholesale and retail partners, provides more than 460,000 jobs, generates \$26 billion in wages annually, and drives nearly \$85 billion in economic output.

Plumbing manufacturers believe customer experience is paramount. They have spent hundreds of millions of dollars over the last 30 years since the federal maximum flow rates for faucets and showerheads were established to engineer, test, and optimize products for U.S. consumers while meeting U.S. plumbing codes, safety and performance standards, as well as state and federal flow rate requirements. *Unlike other appliance standards, the federal maximum standards for faucets and showerheads have been in place since the mid-1990s and changes to these standards would require redesigning U.S. manufacturing facilities, which takes 3 to 5 years and millions of dollars, while foreign manufacturers would be able to provide higher flow rate products very quickly.* We ask that the Subcommittee consider this burden to U.S. manufacturers as it considers two pieces of legislation during today's hearing.

H.R. 4626, Don't Mess with My Home Appliances Act

PMI generally supports reforming the Energy Policy and Conservation Act of 1992 (EPACT92 or EPCA) to ensure that consumers and business owners are able to choose appliances and equipment with the features and performance that best meet their needs as H.R. 4626 accomplishes. However, it is critical that any changes to EPCA also protect long-standing investments by U.S. plumbing manufacturers. PMI has some concerns that the provisions of the bill that would allow an individual

or group to petition the Department of Energy (DOE) to amend **or revoke** a standard could allow for drastic changes to flow rates for faucets or showerheads without adequate preparation time for U.S. manufacturers to make changes to their products.

We recommend amending this language to clarify that only standards in place less than five years can be petitioned for amendment or revocation, and only if manufacturers are given three to five years to adapt products.

H.R. 4593, Saving Homeowners from Overregulation with Exceptional Rinsing (SHOWER) Act

In an April 2025 Executive Order, President Trump directed the DOE to revert to a definition of “showerhead” used in the first Trump administration, allowing multiple-nozzle showerheads to be tested with all nozzles running, each at 2.5 gallons per minute (gpm). The change became effective in May 2025. H.R. 4593 would codify the change to the definition of showerhead, but NOT require a change to the underlying federal maximum flow rate of 2.5 gpm.

PMI is neutral on this bill.

DOE Regulatory Proposal to Increase the Current Federal Maximum Faucet Flow Rate

PMI would like to alert the Subcommittee to a pending DOE regulatory proposal that if finalized, would have far-reaching impacts on the companies that manufacture, import, distribute, and sell covered products, as well as on the consumers and businesses that purchase such products. As noted above regarding our concerns with H.R. 4626, DOE’s proposal to increase the current federal maximum faucet flow rate from 2.2 gpm to 2.5 gpm without a minimum of 3 to 5 years for U.S. manufacturers to be able to reengineer and develop new faucets would place U.S. manufacturers at a competitive disadvantage.

The current federal standards for kitchen and bathroom faucets have been in place for more than 30 years under EPCA, which passed in 1992 and became effective date in 1994. PMI members do not presently manufacture faucets with a flow rate of 2.5 gpm and would be required to develop new products to remain competitive in the marketplace should the proposed rule be implemented.

PMI submitted detailed comments in July 2025 to the DOE outlining our significant concerns regarding the potential impact of this faucet flow rate change on U.S. plumbing manufacturers which are also being submitted for the record for this hearing. The timing of DOE finalizing this rule is unknown.

DOE’s proposed rule to adjust faucet flow rates will negatively impact U.S. manufacturers while offering no significant enhancement to the customer experience.

Over the past 30 years, plumbing manufacturers have invested significant resources in engineering, research and development, testing, certification, labeling, and marketing to meet the federal flow rate standards for faucets. Moving to a new flow and/or pressure rate could necessitate retesting product lines, updating fixtures and control systems, revising procedures, retraining staff, and undergoing new accreditation audits.

By rescinding long-relied-upon standards, DOE’s proposal threatens to flood the U.S. market with imports that undercut U.S. manufacturers that have long standing investments in the country.

The production of new faucets that would have to meet the revised flow rate standards requires detailed planning and the execution of development over a course of several years before a product

can be brought to the marketplace. For example, engineers develop new faucet designs that are simulated and tested on computers to ensure functionality and durability before production even begins. After finalizing the designs, production lines are reconfigured accordingly. Once the faucet and components have been manufactured and assembled, rigorous testing and inspection are performed, after which the products are certified, packaged, labeled, and prepared for marketing.

If DOE adopts its faucet flow rate proposal and increases the federal maximum flow rate to 2.5 gpm, many states will continue to require lower flow rates.

More than a dozen states¹ have set faucet flow rates more stringent than the federal standard. Two-dozen states require a 2.2 gpm rate in their building and plumbing codes. Even if the federal maximum standard increases, plumbing manufacturers will still have all the expenses and requirements of producing, testing and certifying hundreds of thousands of models at these lower flow rates to meet these state requirements.

The DOE proposal faces significant legal concerns.

EPCA explicitly bars the weakening or removal of standards without a new, statutorily authorized rulemaking that includes technical and economic feasibility analyses justifying the change(s). The DOE proposal does not provide these analyses, which would be required by H.R. 4626 being considered today.

PMI opposes DOE's proposed change to the decades-old faucet standard without a minimum of 3 to 5 years for U.S. manufacturers to be able to reengineer and develop faucets to meet the new flow rate.

Conclusion

Thank you for convening this important hearing. PMI appreciates the opportunity to provide these comments for the Subcommittee's consideration as it examines how to reform appliances and building energy efficiency policies. If you have any questions, please contact me, 847.481.5500 x 101 or kstackpole@safeplumbing.org, or Stephanie Salmon, PMI's Washington representative at 571-242-0186 or ssalmond@gmail.com.

Sincerely,



Kerry C. Stackpole, FASAE CAE
Chief Executive Officer and Executive Director
Plumbing Manufacturers International

¹ California, Colorado, Georgia, Hawaii, Maine, Maryland, Massachusetts, Nevada, New Jersey, New York, Oregon, Rhode Island, Utah, Vermont, and Washington

July 15, 2025

David Taggart
U.S. Department of Energy (DOE)
Office of the General Counsel
GC-1
1000 Independence Avenue, SW
Washington, DC 20585-0121

RE: EERE-2025-BT-STD-0021, Energy Conservation Program: Energy Conservation Standards for Faucets

Submitted via www.regulations.gov

Mr. Taggart:

Delta Faucet Company (Delta), established in 1954 and headquartered in Indianapolis, is one of the largest U.S. manufacturers of faucets and plumbing fixtures, with over 2,700 employees and major operations in Indiana, Kentucky, Michigan, New York, New Jersey, California, and Tennessee. Our brands, including Delta, Brizo, Peerless, Kraus, and Newport Brass, combine design and innovation to serve both the residential and commercial markets, consistently delivering a reliable cadence of new products to U.S. consumers.

We appreciate the opportunity to comment on the DOE's notice of proposed rulemaking "rescinding the current water use standards for faucets." If finalized, the existing maximum flow rates for faucets would revert to the Energy and Policy Conservation Act (EPCA) statutory rate of 2.5 gallons per minute (gpm) tested at 80 pounds per square inch (psi). While we support the comments submitted by Plumbing Manufacturers International (PMI), we are also submitting our own, to underscore how this proposal would directly and negatively impact our U.S. based operations and workforce, without necessarily improving customer experience.

We believe customer experience is paramount. To that end, Delta has spent hundreds of millions of dollars over decades to engineer, test, and optimize its products for U.S. consumers, while meeting U.S. plumbing codes, safety and performance standards, and state and federal flow rate requirements. As a result, Delta's products are sold in all fifty states, while providing excellent user experience. For the reasons that follow, we ask the DOE to consider the impacts this proposal will have on U.S. faucet companies like Delta and, at minimum, incorporate a three-to-five-year compliance timeline and clarify that no additional testing would be required.

The Proposal Would Benefit Foreign Manufacturers At The Expense Of U.S. Manufacturers.

The DOE's current proposal would provide a competitive advantage to foreign faucet manufacturers, while adding significant expense and complexity for U.S. manufacturers. Foreign manufacturers, many from China, already sell higher flow rate faucets outside the U.S., so they will quickly flood the states allowing higher flow rate faucets with their existing products. U.S. manufacturers like Delta, meanwhile,

would have to design, revise complex manufacturing processes, test, certify and create new packaging for the new higher flow rates, to compete in these states. This effort would require three to five years and cost untold millions of dollars. U.S. manufacturers need time to prepare product for such a new regulatory landscape.

Additionally, many states will continue to require lower flow rates, even if the DOE adopts this current proposal. Thirteen states have set faucet flow rates more stringent than the federal standard. Additionally, at least 24 states require Uniform Plumbing Code (UPC) compliance, which incorporates yet another set of flow rate standards. So, regardless of the federal maximum standard, U.S. plumbing manufacturers will still have all the expense and complexity of manufacturing, testing, and certifying hundreds of thousands of models to these lower standards.

Increased Faucet Flow Rates May Not Enhance Customer Experience, Due to Limitations in Plumbing Infrastructure.

All these detrimental impacts to U.S. manufacturers do not guarantee an improved customer experience. Since the mid-1990s, homes have been built based on a maximum flow rate of 2.2 gpm and 1.8 gpm in multiple states. Allowing for higher flow faucets does not increase water pressure from the overall system. So, if faucet flow rates increase, these plumbing system limits mean users will not have an appreciably different experience.

The DOE Should Clarify That New Testing Would Not Be Required.

Any change to the test pressure requirement (i.e., from 60 psi to 80 psi) requires significant resources to retest and relist products on DOE's Appliance & Equipment Standards Program, CCMS. As of June 3, 2025, the CCMS database includes over 750,000 models.

If DOE changes the federal maximum flow rate to 2.5 gpm at 80 psi, Delta strongly recommends that DOE make it clear that current products certified to meet 2.2 gpm at 60 psi, will be deemed compliant with the new rate and retesting at the federal level will not be required. This would lower the already tremendous burden on U.S. manufacturers if the DOE adopted the current proposal.

Voluntary Consensus Standards Are Critical To Health and Safety Regulation Compliance.

The plumbing industry has long relied on industry consensus standards to certify several required features for federal, state, and local statutes and building and plumbing codes. Delta agrees with PMI that standard harmonization plays a vital role for manufacturers, code developers and other stakeholders. The ability to harmonize standards serves a vital role, enabling one set of criteria to govern the performance, safety, and health impacts of plumbing products.

ANSI-accredited voluntary consensus standard development considers all interested parties and shared public health and safety goals. As manufacturers innovate and products evolve, standards incorporate new criteria. This also leads to the adoption of new versions into state and local plumbing codes.

Codes are published on a set cycle, like standards. Independent from standard development bodies, code developers review new editions and decide whether to adopt the most recent versions. These



development cycles provide continuous improvement in the built environment, while allowing for innovation. For all these reasons, it is critical that the voluntary consensus standard process remain in place.

Conclusion

Delta appreciates the DOE's consideration of both PMI's and Delta's comments. As a U.S. manufacturer, we appreciate the Administration's focus on enhancing customer experience while increasing U.S. manufacturing and supportive deregulation. The proposed changes to the federal maximum faucet flow rate, however, are not calculated to accomplish the Administration's goals and will open the U.S. high flow faucet market to foreign manufacturers, at the expense of longstanding U.S. manufacturers held to prior restrictions. Delta urges the DOE to carefully consider the impact of any changes to the federal maximum standard of faucets to U.S. manufacturers like Delta and, at minimum incorporate a three-to-five-year compliance window, while clarifying that new testing would not be required.

Please let me know if you have any questions or if Delta can provide any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "MSJ", with a stylized flourish extending from the end.

Mike Johnson
Manager, Product Compliance & Regulatory Affairs
Phone: 317.848.0736
E-mail: msj@deltafaucet.com



July 15, 2025

Mr. David Taggart
U.S. Department of Energy
Office of the General Counsel, GC-1
1000 Independence Avenue, SW
Washington, D.C., 20585

Re: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy - Energy Conservation Program: Energy Conservation Standards for Faucets – Notice of Proposed Rulemaking [EERE-2025-BT-STD-0021; RIN 1904-AF91]

Dear Mr. Taggart,

Plumbing Manufacturers International (“PMI”) appreciates the opportunity to comment on the Department of Energy’s (“DOE”) notice of proposed rulemaking (“NPRM”) for Energy Conservation Standards for Faucets, 90 Fed. Reg. 20854 (May 16, 2025). Our comments are focused on why the current maximum federal flow rate for faucets should be retained based on the regulatory burden on U.S. manufacturers and key legal criteria of the Energy Policy and Conservation Act (“EPCA”). PMI urges DOE to maintain the current federal standard for faucets based on these comments.

Background

PMI is the nation’s leading trade association for the plumbing fixtures and fittings manufacturing industry. Our members produce 90% of all the plumbing products sold in the United States and represent more than 150 brands. PMI’s members are industry leaders in producing innovative, reliable, technologically engineered plumbing products, including kitchen and bathroom faucets, showerheads, toilets, urinals, bidets, bottle filling stations, drinking fountains, bathtubs, sinks, eye wash stations, as well as hundreds of types of components, valves, and piping, which are key to our nation’s indoor plumbing systems. Plumbing fixtures and fittings are truly the heart of the home.

Our members’ products are distributed in all 50 states and manufactured in more than 25 states, including a new manufacturing plant that opened in 2024 in Arizona employing 500 workers. The U.S. plumbing manufacturing industry, along with our wholesale and retail partners, provides more than 460,000 jobs, generates \$26 billion in wages annually, and drives nearly \$85 billion in economic output.

U.S. plumbing manufacturers have a long and distinguished history, including with producing faucets as indoor plumbing became more widespread in the 18th and 19th centuries. Kohler, a PMI member, established in 1872, started mass-producing porcelain faucets in Wisconsin in the early 1900s. Other PMI members include American Standard, which has manufactured plumbing products for over 150 years, and Pfister, which has produced plumbing fixtures since 1910 for residential and commercial customers. Al Moen, the founder of another PMI member with a famous name, invented in 1937 the

single-handled mixing faucet (commonplace today in kitchens around the country). Delta Faucet Company, another PMI member, began producing single-handled ball-valve faucets in the 1950s.

These early innovations have paved the way for the robust faucet manufacturing industry in the U.S. today. Many of these renowned brands in the world of faucets are still in business producing high-quality and innovative kitchens and bathroom faucets that come in countless styles, finishes, and configurations to suit various designs and customer preferences. And those companies are among PMI's leading members.

Faucets have come a long way since their inception; this is evident in the innovative features such as touchless technology, temperature sensors, pull-down sprayers, and magnetic docking systems, to name just a few. The increasing emphasis on hygiene, especially in public and healthcare settings, has driven the adoption of touchless solutions like automatic faucets. Innovations in sensor technology, AI integration, and IoT connectivity have enhanced the functionality and appeal of automatic faucets, making them more efficient and user-friendly.

All this innovation has occurred against a backdrop of ever-changing federal, state, and local regulatory requirements. It is important to recognize that because DOE preempted EPCA for the federal faucet standard in 2010, states are allowed to set their own standards provided they are more stringent than the federal standard. In addition, the ASME/ANSI A112.181 standard referenced in EPCA and requiring manufacturers to meet the 2.2 gallon per minute (gpm)/60 pressure per square inch (psi) standard, is codified in state and local building codes. This means that even if DOE were to revert to the statutory 2.5 gpm/80 psi flow rate for faucets at the national level, manufacturers will have to make different products for different parts of the U.S. to remain compliant with state and local laws.

I. The proposed rule would be costly to the U.S. plumbing manufacturing industry and increase regulatory burdens, while producing little or no customer benefit.

The existing standard was well-justified when DOE adopted it because this standard put DOE in alignment with industry's consensus standard and with the anticipated standards in Canada and Mexico (which had, at the time, already signaled their plans to follow the 1996 version of the ASME standard). Moreover, changing the standard now is not at all economically justified.

Plumbing manufacturers have been required to comply with the current federal standards for kitchen and bathroom faucets for 30 years. PMI members do not currently offer kitchen and lavatory faucets that flow greater than the existing 2.2 gpm federal standard. Their products are engineered for 2.2 gpm or lower, deliver strong performance, and their customers are not demanding higher flow. Their products have been optimized for the United States market based on state regulations, current performance standards, and plumbing codes.

Any rollback of the existing federal maximum flow rate of 2.2 gpm/60 psi to the proposed 2.5 gpm/80 psi flow rate would carry far-reaching, costly, and largely unnecessary burdens for plumbing manufacturers. Manufacturers estimate that redesigning their faucets to be in line with the newly proposed flow rate would require approximately one to four years, or potentially longer in certain cases. The associated costs are projected to reach millions of dollars per manufacturer, depending on the number of faucets developed, tested, certified, and marketed under the new standard. This timeline and economic impact are because any changes to the faucet standard impact more than just design, but also affects:

- Assembly processes, tooling, fixtures, and equipment;

- Model box & carton sizes and freight costs;
- Technical information on packaging, labels, and customer-facing information (i.e., specification sheets, websites);
- Some products will need to be retested to the higher flow rate and pressure, and in some circumstances may require retesting and updates to third-party certifications and listings;
- Storage locations and support staff will be required to handle a larger number of models (made for different jurisdictions); and
- All customer displays will need to be updated for any styling/appearance changes.

For those products whose designs and assembly processes have already been optimized to reduce waste and cost based on the current flow rates and performance requirements, significant design changes would be required to permit an increase in the flow rate (i.e., sizes of waterways, different valving, different wands/sprayers). These changes often require the size of components to increase, which impacts the overall size, appearance, and style of models and brands.

The materials and components utilized in the production of faucets are carefully selected, tested, and certified to meet current pressure and flow standards. Disrupting the existing federal requirements forces costly redesigns; conversion costs including capital costs (one-time investments in plant, property, and equipment); research and development (R&D), testing, and marketing costs; supplier requalification; and complex logistics changes and will likely increase consumer prices without any significant user experience benefit. It would also drive the creation of additional SKUs, which will fragment North American product lines, as well as adding significant administrative and logistical burdens. In-line production checks, incoming inspection audits, and final test protocols all rely on current flow-rate standards. Raising the flow rates requires new test fixtures, updated audit criteria, and additional quality-assurance training, none of which are budgeted, and would add no value to end users. Moreover, diverting engineering and R&D resources into compliance conversions would pull focus and investment away from developing truly innovative, competitive new faucet products.

A. Revising the maximum federal flow rate risks generating competition from imports to the detriment of U.S. manufacturers.

Foreign competitors have been able to sell faucets at a higher flow rate than 2.2 or 2.5 gpm outside the U.S. for years, all while U.S. manufacturers have had to comply with both federal and state mandates, third-party certification rules, as well as safety standards such as lead in faucets and scalding controls. As soon as the federal maximum flow rate is 2.5 gpm, imports, mainly from China, will flood the U.S. market at least for the 37 states without stricter flow-rate standards, and likely for all the U.S., given that there are few checks against interstate sales. U.S. manufacturers need time to make competitive decisions on what new products will be available in what markets before they must compete with imports.

Redesigning faucets to meet the newly proposed requirements will put U.S. manufacturers at a competitive disadvantage against foreign competitors who already produce faucets with higher flow rates. Unregulated importers will be able to adapt more easily. For these reasons, we urge DOE to maintain the existing maximum federal flow rate of 2.2 gpm/60 psi. Increasing faucet flow rates offers no technical or commercial benefit and only lowers market barriers for low-cost competitors, without providing any discernible benefit to consumers.

B. A revised maximum federal flow rate with a different pressure requirement will necessitate repeated testing across entire existing product lines.

PMI opposes any change to the pressure at which our members' existing faucets are tested. Modifying the test pressure requirement requires significant resources for retesting, and for relisting products on DOE's Appliance & Equipment Standards Program, Compliance Certification Management System (CCMS). As of June 3, 2025, the CCMS database includes over 750,000 basic models. All those basic models, which manufacturers have tested and registered over the years, will have to be retested before the next annual certification renewal if DOE changes the federal standard. This is a mammoth undertaking, with enormous cost to the plumbing manufacturing industry.

Moreover, those same products that would have to be tested for 2.5 gpm at 80 psi will STILL have to be tested for 2.2 gpm at 60 psi in states that have incorporated that rate into their plumbing codes, and in California and any state that has incorporated California's protocols products will have to be tested to 1.8 gpm at 60 psi for kitchen faucets and 1.2 gpm at 60 psi for private lavatory faucets. Manufacturers' existing test reports would not be valid for compliance with the new proposed standard without retesting. Moving to a new flow or pressure could necessitate retesting product lines, updating fixtures and control systems, revising procedures, retraining staff, and undergoing new accreditation audits. Externally, labs would face long delays and steep retesting fees, threatening launch schedules. In short, decades of investment in test infrastructure and quality systems would be destabilized, imposing massive operational burdens. Changing the flow rate threshold from 2.2 gpm at 60 psi to 2.5 gpm at 80 psi alters the foundational requirements for performance evaluation of these products.

Additionally, 2.5 gpm 80 psi is not a permitted flow rate in the ASME A112.18.1/CSA B125.1 standard. Therefore, kitchen and bathroom faucet manufacturers would not be able to third-party certify to the proposed standard. The ASME A112 standard committee meets twice a year with a typical 5-year cycle for publishing new standards. It would take at least a year to complete the project for such a change. ASME A112.18.1/CSA B125.1 is published every 5 years, and the standard was last published in 2024 and is not scheduled to be published again until 2029.

PMI urges DOE to consider this testing and certification regulatory burden and not finalize this proposal. If DOE proceeds to change the maximum federal flow rate to 2.5 gpm/80 psi, PMI requests that DOE take regulatory action to deem current certifications at the current standard of 2.2 gpm/60 psi as compliant. Any required changes should be based on products manufactured after the effective date which should be at least 3 years in the future.

C. Customer experience of faucets will not improve.

There is no evidence that the proposed change for kitchen and bathroom faucets to 2.5 gpm/80 psi will create a better customer experience. Water pressure is a factor of flow, pipe size, and building design.

PMI members have invested hundreds of millions of dollars over 30 years in engineering and product development to ensure that our products meet our customers' satisfaction while being optimized for the various existing federal and state requirements. The market is dynamic, with new products and models constantly being introduced and older ones being discontinued.

Independent reviews from sources like Good Housekeeping¹, CNET², and Popular Mechanics³, show that there are a wide variety of kitchen and bathroom faucets that are innovative and perform well at or below federal flow rate standards.

The U.S. faucet market size was estimated at \$4.39 billion in 2024 and is projected to grow at a Compound Annual Growth Rate (CAGR) of 6.3% from 2025 to 2030.⁴ The growth of the fittings industry is presenting opportunities for faucets because of the rising demand for modernized bathrooms and kitchens, and PMI members are meeting these demands. In addition, the increasing prominence of multi-functionality features on plumbing fixtures and aesthetic appeal are boosting demand for a variety of faucets. Growing interest and requirements for water conservation fixtures is also resulting in the greater penetration of new and efficient faucets across kitchen and bathroom applications.

II. DOE's previous choice to follow the 1996 edition of the ASME standard for faucets was lawful.

DOE suggests only two reasons for its proposed amendment. One is that DOE “is now questioning whether” its adoption of the faucets standard “resulted in an unconstitutional delegation of legislative power to a private entity.” 90 Fed. Reg. at 20,854. In truth, there was no such delegation, neither in DOE’s past rulemaking, nor in the statute itself.

The development of the 1998 rule that adopted the current standard shows straightforwardly that DOE, not the private standards bodies, exercised all the lawmaking power involved. As DOE notes, EPCA itself set the initial standard as a maximum flow of 2.5 gpm at 80 psi (or 0.25 gallons per cycle (gpc) for metering faucets). 42 U.S.C. § 6295(j)(1). EPCA then stated that if ASME revises its standard, as compared to the 1989 version, in a way that “improve[s] the efficiency of water use of any type or class of . . . faucet,” DOE must consider whether to update the regulatory standard to match the updated ASME standard. In its 1998 rulemaking, DOE concluded that the 1996 revision by ASME did not trigger this provision. ASME changed its standard to be 2.2 gpm maximum flow at 60 psi, and DOE concluded that this standard “is equivalent theoretically to the statutory requirement (2.5 gpm at 80 psi).” 62 Fed. Reg. 7,834, 7,836 (Feb. 20, 1997); *see also* 63 Fed. Reg. 13,308, 13,309 (Mar. 18, 1998) (final rule adopting a revised faucets standard “[b]ased on the . . . considerations” from the proposed rule). DOE stated clearly that it “does not believe the revised standard for faucets constitutes an improvement in water efficiency and therefore incorporation of the revised standard would not be necessary.” 62 Fed. Reg. at 7,836.

Thus, it is quite clear that DOE itself chose the 2.2 gpm/60 psi standard that is currently in place. That is the standard not because ASME wrote the standard and DOE had some obligation to

¹ Diclerico, Dan, 8 Best Kitchen Faucets, Dec. 13, 2024 - <https://www.goodhousekeeping.com/home-products/g40678200/best-kitchen-faucets/>

² Vachon, Pamela, Best Kitchen Faucets for 2025, Feb. 16, 2025 - <https://www.cnet.com/home/kitchen-and-household/best-kitchen-faucet/>

³ Russell, Brandon and Klein, Rachel, The 7 Best Kitchen Faucets of 2024, Aug 23, 2024 - https://www.popularmechanics.com/home/g35947869/best-kitchen-faucets/?utm_source=google&utm_medium=cpc&utm_campaign=mgu_ga_pop_md_dsa_hybd_mix_us_20523107939&gad_source=1&gad_campaignid=20523107939&gbraid=0AAAAADCyiSnmZZ2gfXAGev2f23U5mGazK&gclid=CjwKCAjwprjDBhBTEiwA1m1d0ssHBN2rBLPAnD6dgjWzH6jPL-XLr_UL2k3xQExETysCVd_2hON5JhoCDRMQAvD_BwE

⁴ U.S. Faucet Market Size & Trends, 2018-2024, Report ID: GVR-4-68039-407-3, Grand View Research, <https://www.grandviewresearch.com/industry-analysis/us-faucet-market>

follow what ASME prescribed (as though ASME were exercising legislative or other governmental authority), but because DOE, in its full discretion as the rulemaker under EPCA, concluded that using the 2.2 gpm/60 psi standard was sound policy. To think that accepting an idea from ASME (its 1996 standard) amounts to delegating authority to a private body is like saying an agency cannot change a proposed rule based on notice-and-comment because the comments come from the public.

DOE explicitly explained its policy reasons: to reduce “burden on the industry;” to avoid “confusion in the marketplace;” and to “promot[e] harmonization in North America.” 62 Fed. Reg. at 7,836. These reasons were, to be sure, dependent on the reality that the 1996 ASME standard was being widely adopted and was likely to be adopted in Canada and Mexico. Such dynamics will often be at play whenever an agency chooses to use a private standard. These standards arise precisely because various industries work together to develop them; the standards adopted represent consensus, and industry members then use the standards that have been developed in a consensus manner.

The ASME process is a robust, transparent process designed to achieve substantial agreement from all materially affected stakeholders. Committees meet multiple times to consider a proposed standard, solicit comment through multiple publications that are widely read by ASME membership, and conduct repeated votes before seeking multiple levels of approval from the ASME supervisory board and then from the American National Standards Institute. The commitment, and the reality, of consensus standard setting is stronger than in the federal rulemaking process.

DOE’s hypothesis that the 1998 rulemaking constituted a delegation of authority to a private body implies that a policy choice to incorporate such a standard into regulation is illegitimate precisely because the standard was developed outside of government. PMI strongly objects to that notion. Sensible regulation should take account of private standards as indicated in EPCA itself. Where a regulation is to be imposed, it is a good policy to reduce burdens on industry by harmonizing the regulation with private standards to the extent consistent with the regulatory goals. Congress has established such sensible harmonization as the policy of the United States across the government. National Technology Transfer & Advancement Act, Pub. L. 104-113, § 12(d), ___ Stat. _____. And it is not unconstitutional for an agency, exercising its congressionally conferred policy discretion, to choose harmonization with privately developed standards.

That the concept that DOE embodied in its regulations was derived from a privately developed standard is, as a matter of law, not improper. “Private entities may serve as advisors that propose regulations.” *Oklahoma v. United States*, 62 F.4th 221, 229 (6th Cir. 2023). Under the standard established long ago by the Supreme Court, what matters is that the agency, “not the code authorities, determines the [standards].” *Sunshine Anthracite Coal Co. v. Adkins*, 310 U.S. 381, 399 (1940). That is certainly true under section 6295(j)(3)(A). The Supreme Court just weeks ago reiterated and affirmed that principle, as the Court reversed the Fifth Circuit on an erroneous finding of private nondelegation. “As long as an agency thus retains decision-making power, it may enlist private parties to give it recommendations.” *FCC v. Consumers’ Research*, No. 24-354, slip op. at 31 (June 27, 2025). Given that it is legitimate to give a private party a formal role as an advisor making recommendations, it cannot have been unconstitutional for DOE to decide on its own to adopt a suggestion from industry in the guise of the 1996 ASME standard.

Furthermore, the Office of Management & Budget (OMB) has repeatedly instructed agencies to use voluntary consensus standards where possible, and to participate in developing those private standards. OMB Circular A-119 mandates that “[a]ll federal agencies must use voluntary consensus standards in lieu of government-unique standards in their . . . regulatory activities, except where

inconsistent with law or otherwise impractical.” OMB Circular A-119, Q & A 6, p.7 (Feb. 10, 1998; revised Jan. 22, 2016). “The use of such standards, whenever practicable and appropriate,” OMB says, helps “decrease . . . the burden of complying with agency regulation.” Circular A-119 also encourages agencies to participate in standards-drafting processes, and DOE had the opportunity to participate at ASME in the preparation of the 1996 standard that inspired the current EPCA faucets standard.

The use of voluntary consensus standards has been the backbone of American building and construction for more than 100 years. The plumbing industry has long relied on voluntary consensus standards to certify several required features for federal, state, and local statutes, as well as building and plumbing codes. These standards promote consistency among levels of regulation and increase the opportunity for U.S. exports as these standards are adopted in other countries. PMI members and our association technical director actively participate in the development of industry voluntary consensus standards.

It is important to underscore that if a state or local building code requires the use of a certain voluntary consensus standard, then industry must certify to that standard regardless of whether the standard is referenced in federal statute.

Harmonization of standards plays an important role for manufacturers, code developers, and other stakeholders. The ability to harmonize standards serves a vital role in product development and adoption of codes to have one set of criteria for the performance, safety, and health impacts of plumbing products. For example, ASME A112.18.1 is harmonized with Canada’s CSA B125.1 to allow a level playing field for market access in both the United States and Canada versus two different standards, which would mean added complexity to product development and costs for manufacturers who export products.

III. Criticisms of the 1998 rulemaking are not a valid basis for rescinding the 1998 rule.

DOE’s other rationale for amending the faucets standard is that DOE has “tentatively determined that the maximum water use values” in the 1998 standard “were not economically justified, and likely should not have been adopted in regulation,” 90 Fed. Reg. at 20,854. DOE openly acknowledges that its current proposal “[is] not designed to achieve a maximum reduction in energy efficiency” because the existing standard is “not economically justified” and is “inconsistent with a policy of maximally reducing regulatory burdens.” *Id.* These assertions are wrong as a matter of policy and of fact, as discussed further below. Aligning with the industry’s consensus standard is the way to reduce burdens, as DOE recognized in 1998; and imposing a standard that is different from the industry standard, for no apparent reason, is an increase, not a decrease, in regulatory burden. Moreover, regardless of the policy and the facts, DOE’s theory is contrary to the law. Even if the 1998 rulemaking had not been justified based on technological feasibility and economic impact, and even if it had not been proper to take account of the ASME standards at the time, those supposed deficiencies of the 1998 rule cannot justify revoking the rule 30 years later.

Under EPCA, whenever DOE amends a standard, the standard resulting from the change must “be designed to achieve the maximum improvement in . . . water efficiency, which the Secretary determines is technologically feasible and economically justified.” 42 U.S.C. § 6295(o)(2)(A). And DOE cannot amend a water conservation standard for faucets in a way that “increases the maximum allowable . . . water use . . . of a covered product.” *Id.* § 6295(o)(1). Any amendment of the faucets standard must comply with all these criteria, and DOE must analyze, in the rulemaking, whether its amendment is compliant.

A rescission of a rule is an amendment of the standard. What is at issue is certainly a “standard” regarding faucets since the regulation states a maximum allowable water usage—a “standard” in any ordinary English understanding of the word. “Amend” ordinarily means to change; a rule that changes the standard is amending it. There is no special category in EPCA distinguishing different ways to change a standard that could exempt a “rescission” from subsection 6295(o). DOE is proposing to amend the standard for faucets. To make that change, DOE must determine that the amended standard satisfies the subsection 6295(o) criteria.

Nor does DOE’s suggestion that the original rulemaking, decades ago, was mistaken or improper generate a different excuse from subsection 6295(o). The 1998 rulemaking was quite sound and not flawed in the ways DOE suggests. But even if it were, no agency has authority to correct its mistakes beyond “the period available for taking an appeal.” *Am. Methyl Corp. v. EPA*, 749 F.2d 826, 835 (D.C. Cir. 1984). That period (60 days, per 42 U.S.C. § 6306(b)) expired decades ago. Moreover, “[w]hen a statute limits a thing to be done in a particular mode, it includes the negative of any other mode.” *Id.* at 836 (alteration in original). Under EPCA, the restrictions on how to amend standards apply once a standard has been published in the Federal Register. *Natural Resources Defense Council, Inc. v. Abraham*, 355 F.3d 179 (2d Cir. 2004). That too occurred decades ago for the faucets standard. DOE cannot “construe [a] statute in a way that completely nullifies textually applicable provisions meant to limit its discretion.” *New Jersey v. EPA*, 517 F.3d 574, 583 (D.C. Cir. 2008). Congress stated what analysis DOE must do, and what determinations it must make, to change a standard. And Congress specifically barred DOE from amending a standard in a way that leads to greater water use for covered products. DOE must comply with those limitations even if it believes the 30-year-old faucets standard was mistaken.

IV. DOE cannot satisfy the EPCA criteria based on the proposal as published.

As noted above, to establish an amended standard as it proposes, DOE must determine what water consumption would be the lowest level that is technologically feasible and economically justified. The Administrative Procedure Act obligates DOE to provide public notice, through a Federal Register publication, of the key facts on which it plans to rely for those assessments. The DOE’s Process Rule provides the same obligations. 10 C.F.R. part 430, subpart C, app. A. But DOE has provided no public notice of any information. It has provided nothing more than a vague assertion that the existing standard was not economically justified, a claim for which DOE provides no data. DOE has also provided no public notice of any information supporting the claim that reverting to the standard of 30 years ago would reduce regulatory burdens.

DOE’s evidentiary burden on this issue is particularly difficult to meet. There will be a water consumption standard for faucets, whether the current one or the older one that DOE wants to restore. So, DOE cannot claim to be reducing burden by eliminating EPCA regulation of faucets. Moreover, instead of reducing the burden, DOE will be increasing regulatory burden. It will be requiring the industry to comply with a second, different regulatory standard, alongside the industry consensus standards that have been built into myriad supply contracts over 30 years, and that are embodied in regulations in Canada and Mexico, as well as in California and other states. DOE was right in 1998 to think that harmonizing standards reduces regulatory burden. The proposal offers no evidence to support DOE’s counter-intuitive departure from that principle.

In addition, DOE is not permitted to amend the standard to allow increased water use. This sort of anti-backsliding rule “requires the agency to state the basis for its conclusion” that the restriction “has been satisfied.” *Nat’l Mining Ass’n v. MSHA*, 116 F.3d 520, 536 (D.C. Cir. 1997)

(addressing the “no-less-protection” restriction in the Mine Safety Act). DOE must also provide public notice and receive comments on the basis for such a conclusion. DOE appears to have decided that subsection 6295(o)(1) does not apply, and it has made no effort—and provided no public notice of supporting data—to show that the amended standard would comply with it.

Assessing whether the change from 2.2 gpm/60 psi to 2.5 gpm/80 psi permits any increased water use is not trivial. DOE noted in 1998 that the two standards are “equivalent theoretically.” 62 Fed. Reg. at 7,836. But that “theoretical[]” premise depends on an assumption that fittings and pipes respond linearly to pressure and flow, producing the familiar relationship that flow is proportional to the square root of pressure. In the real market of 2025, many faucets are not linear in that sense, and flow does not simply respond with the same proportionality. To conclude that 2.5 gpm/80 psi really does represent no more flow than 2.2 gpm/60 psi, DOE would need to know how real faucets in the market operate, and how those real products would behave under the different standards and testing regimes. DOE has not completed the requisite notice and comment for that sort of information.

Conclusion

In conclusion, PMI strongly urges DOE not to adopt its proposed rule regarding the EPCA faucets standard. PMI believes the proposed action fails to meet the necessary EPCA criteria and burdens U.S. manufacturers at a time the Administration is striving to help them. If DOE ultimately decides to finalize this proposal and increases the federal maximum flow rate for faucets to 2.5 gpm/80 psi, PMI requests that the agency provide at least a three-year compliance timeframe to transition to the new flow rate to provide U.S. manufacturers with a level playing field against foreign competitors. We also request that no new testing and certifying be required of existing products and until such time as the industry standard can be updated as part of its 2029 adoption cycle.

If you have any questions regarding these comments or our industry, please feel free to contact me at kstackpole@safeplumbing.org, or our Washington Representative, Stephanie Salmon, at ssalmondc@gmail.com.

Sincerely,



Kerry C. Stackpole, FASAE CAE
Chief Executive Officer and Executive Director
Plumbing Manufacturers International

PNNL-35986

National Cost- Effectiveness of the Residential Provisions of the 2024 IECC

January 2025

V. Robert Salcido
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Prepared for
the U.S. Department of Energy
under Contract DE-AC05-76RL01830

Pacific Northwest National Laboratory
Richland, Washington 99354

Executive Summary

The U.S. Department of Energy (DOE) Building Energy Codes Program (BECP) provides technical assistance supporting the development and implementation of building energy codes and standards (42 USC 6833), which set minimum requirements for energy-efficient design and construction of new and renovated buildings, and impact energy use and environmental impacts over the life of buildings. Continuous improvement of building energy efficiency is achieved by periodically updating national model energy codes through consensus-based code development processes, such as those administered by ASHRAE and the International Code Council (ICC). DOE provides technical analysis of potential code revisions and amendments, supporting technologically feasible and economically justified energy efficiency measures during the national model code development process, as well as their implementation across U.S. states and municipalities. Evaluating the expected impacts of the updated model energy codes, including their cost effectiveness, helps ensure that code changes are economically justifiable and encourages their adoption of the latest building codes. Pacific Northwest National Laboratory (PNNL) prepared this analysis to support DOE in evaluating the economic impacts associated with updated codes in residential buildings.

This analysis focuses on single-family and low-rise multifamily residential buildings based on the latest edition of the International Energy Conservation Code (IECC). The IECC is developed by the International Code Council (ICC) on a 3-year cycle through a public development and consensus process. While proponents of code changes often include the energy and cost-effectiveness criteria for their respective code change, the IECC process does not include an energy or cost-effectiveness analysis of the entire edition of the code. DOE conducts such an analysis to evaluate the cost-effectiveness of the updated IECC edition, which helps inform states local governments and industry stakeholders as they adopt and implement updated building energy codes.

PNNL evaluated the cost-effectiveness of the changes in the prescriptive and mandatory residential provisions of the 2024 edition of the IECC, hereafter referred as the 2024 IECC, compared to those in the prior edition, the 2021 IECC. The simulated performance path and the Energy Rating Index (ERI) path are not considered in this analysis due to the wide variation in building construction characteristics that are allowed, and because the prescriptive path is widely considered the predominant path utilized by practitioners.

The process of examining the cost-effectiveness of the code changes has four main components:

- Identification of the building components affected by the updates to the *prescriptive* and *mandatory* residential provisions of the IECC that directly affect building energy use
- Assessment of construction costs associated with these updates
- Analysis of energy and cost impacts associated with these updates
- Cost-effectiveness analysis of the collective updates that combines the incremental costs of these updates with the associated energy impact. The cost-effectiveness analysis does not report the energy and cost impact of individual code changes.

This current analysis builds on the PNNL technical report titled *Energy Savings Analysis: 2024 IECC for Residential Buildings* (Salcido et al. 2024), which identified the prescriptive and

mandatory changes introduced by the 2024 IECC, compared to the 2021 IECC, and determined their energy savings impact.

DOE has an established methodology for determining the energy savings and cost-effectiveness of residential building energy codes (Salcido et al. 2024).¹ This methodology forms the basis of this analysis and defines three cost-effectiveness metrics to be calculated in assessing cost-effectiveness of code changes:

- **Life-Cycle Cost (LCC)** – This is reported as the savings (reduction) in LCC over a 30-year analysis period.
- **Simple Payback** – A simplified metric that estimates the number of years required for energy cost savings to make up for increased construction costs, assuming no escalation in prices or discounting of future cash flows.
- **Cash Flow** – A small suite of metrics summarizing the net cash flows (costs versus savings) for every year of the 30-year analysis period.

Table ES.1 summarizes the weighted LCC savings per dwelling unit for the 2024 IECC compared to the 2021 IECC for each climate zone, aggregated over all residential prototype buildings. Table ES.2 and Table ES.3 summarize the associated simple payback periods and impacts on consumer cash flows. The results show that new construction based on the 2024 IECC is cost-effective when compared to construction based on the 2021 IECC across all climate zones. Simple payback by climate zone ranges from 0 to 9 years, with a national weighted average of 2.5 years. Homeowners see net positive cash flows ranging from 0 to 2 years, with a national weighted average of 1 year.

INSERT

LCC is the primary metric used by DOE to determine the cost-effectiveness of the code or specific code changes. The simple payback is reported for information purposes only and is not used as a basis for determining the cost-effectiveness of the 2024 IECC.

¹ See DOE Residential Energy and Cost Analysis Methodology at:
https://www.energycodes.gov/sites/default/files/2024-10/residential_methodology_2024.pdf

Table ES.1. Life-Cycle Cost Savings for the 2024 IECC

Climate Zone	Compared to the 2021 IECC (\$/dwelling unit)
1	2,406
2	3,254
3	2,509
4	3,790
5	2,496
6	2,190
7	7,422
8	9,481
National Average	2,954

Table ES.2. Simple Payback Period for the 2024 IECC

Climate Zone	Compared to the 2021 IECC (Years)
1	9.0
2	5.2
3	2.7
4	0.0
5	0.0
6	7.8
7	0.0
8	0.0
National Average	2.5

Table ES.3. Impacts on Consumers' Cash Flow from Compliance with the 2024 IECC

Climate Zone	Compared to the 2021 IECC	
	Net Annual Cash Flow Savings (\$ for Year 1)	Years to Cumulative Positive Cash Flow
1	86	2
2	135	1
3	122	1
4	192	0
5	154	0
6	105	2
7	324	0
8	410	0
National Average	144	1

The prescriptive and mandatory provisions of the 2024 IECC are shown to generate an average life-cycle cost savings of \$2,954, an average payback of 2.5 years, and the years to cumulative positive cashflow averaging 1 year. These results reflect measures in the 2024 IECC that reduce construction costs as described in this report. The results illustrate that homeowners can benefit financially from the investment in energy efficiency of the 2024 IECC. The analysis shows the higher efficiency levels of the 2024 IECC requires an increased investment in some climate zones with short payback times while remaining cost-effective whereas other climate zones have a decreased investment with an immediate payback.

Acknowledgments

This report was prepared for the DOE Office of Energy Efficiency and Renewable Energy (EERE) Building Technologies Office (BTO). The authors would like to thank Jeremy Williams and Christopher Perry at DOE for providing programmatic direction and oversight.

Acronyms and Abbreviations

ACH50	air changes at 50-pascal pressure differential
AEO	Annual Energy Outlook
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
BC3	Building Component Cost Community
BECP	Building Energy Codes Program
Btu	British thermal unit(s)
CF	cubit feet
CFM	cubic feet per minute
CPI	Consumer Price Index
DOE	U.S. Department of Energy
DX	direct expansion
ECPA	Energy Conservation and Production Act
EIA	U.S. Energy Information Administration
EF	energy factor
ERI	Energy Rating Index
ERV	energy recovery ventilator
EUI	Energy Use Intensity
°F	degree(s) Fahrenheit
ft ²	square foot(feet)
hr	hour(s)
HPWH	heat pump water heater
HRV	heat recovery ventilator
HSPF2	heating seasonal performance factor
HVAC	heating, ventilating, and air conditioning
HWDS	hot water distribution system
ICC	International Code Council
IECC	International Energy Conservation Code
IgCC	International Green Construction Code
IPC	International Plumbing Code
IRC	International Residential Code
kWh	kilowatt-hour(s)
LCC	life-cycle cost
LED	light-emitting diode
LPD	lighting power density
million Btu	million British thermal units
NREL	National Renewable Energy Laboratory

PNNL	Pacific Northwest National Laboratory
SEER2	seasonal energy efficiency ratio
SHGC	solar heat gain coefficient
SRE	sensible recovery efficiency
yr	year(s)

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1.0 Introduction

The U.S. Department of Energy (DOE) supports the development and adoption of energy-efficient building energy codes. Title III of the Energy Conservation and Production Act (ECPA), as amended, requires DOE to participate in the development of model building energy codes and assist states in the adoption and implementation of these codes (42 U.S.C. 6831 et seq.). ECPA also mandates DOE to conduct a determination analysis to evaluate whether the new edition of the code saves energy compared to its immediate predecessor, within 1 year of a new code being published (42 U.S.C. 6833(a)(5)(A)).

Building energy codes set the minimum requirements for energy-efficient building design and construction for new buildings. They impact energy consumed by the building over its life. These codes are developed through consensus-based public processes that DOE participates in by proposing changes that are technologically feasible and economically justified. Pacific Northwest National Laboratory (PNNL) provides technical analysis and support to DOE during the code development processes.

This analysis focuses on single-family and low-rise multifamily residential buildings. These buildings are regulated by the International Energy Conservation Code (IECC). The IECC is updated on a 3-year cycle (i.e., a new edition of the code is published every 3 years, by the International Code Council [ICC]). The 2024 edition of the IECC, hereafter referred as the 2024 IECC, was published in May, 2024 (ICC 2024). Subsequently, DOE published its model energy code *determination* for the 2024 IECC on December 30, 2024. DOE's determination analyses indicate an increase in energy efficiency in single-family and low-rise multifamily residential buildings that are subject to the 2024 IECC compared to the 2021 IECC.

1.1 Purpose

The IECC is developed through a public process administered by the ICC.¹ While proponents of code changes often include the energy and cost-effectiveness criteria associated with their respective code change proposals, the IECC process does not include an energy or cost-effectiveness analysis of the entire edition of the code. Ensuring the cost-effectiveness of IECC changes encourages their adoption and implementation at the state and local levels. In support of this goal, DOE conducts cost-effectiveness analyses of the latest edition of the code compared to its predecessor, following the publication of an updated edition of the IECC. These analyses are conducted at the national and state level by accounting for regional construction and fuel costs.

DOE provides technical assistance, such as the present cost-effectiveness analysis, to states to ensure informed decision-making during their consideration of adopting, implementing, and enforcing the latest model energy codes. DOE has commissioned prior cost-effectiveness analyses of the IECC (DOE 2021). Figure 1 shows the status of the adoption of residential building energy codes as of February 2024 (BECP 2024), with states expected to adopt the 2024 IECC in the coming years, based on historical trends. The state adoption map shows the functional equivalent of the adopted code, including any applicable state amendments.

¹ <https://www.iccsafe.org/codes-tech-support/codes/code-development/>

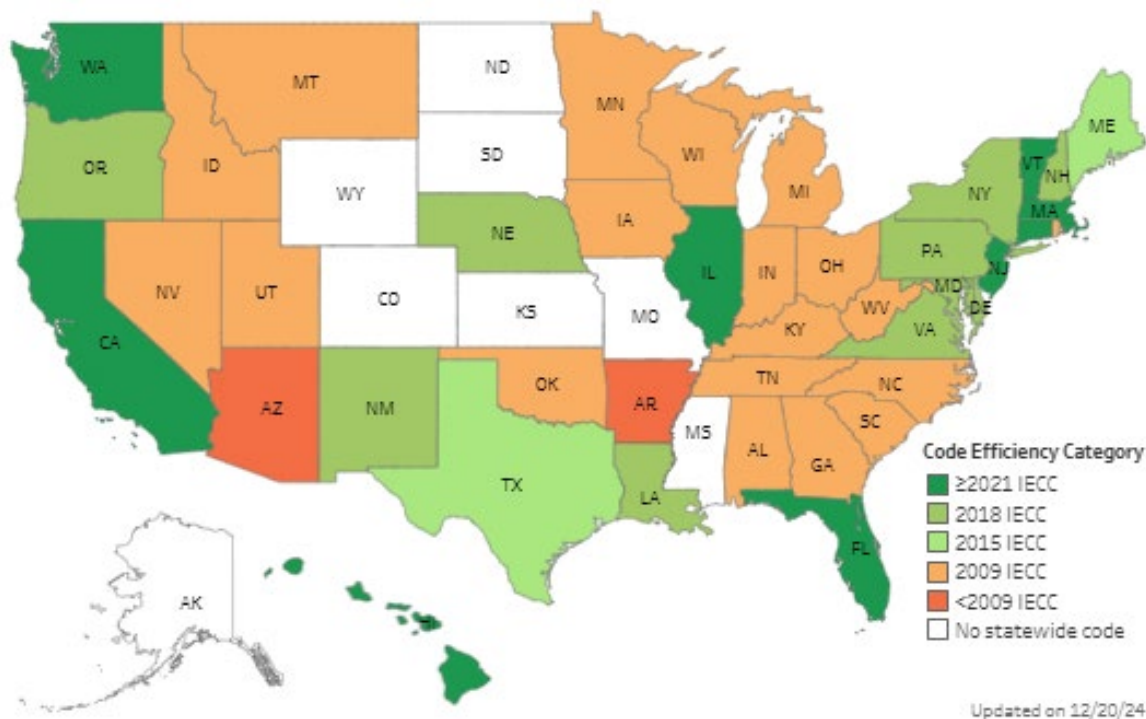


Figure 1. Current Residential Building Energy Code Adoption Status in the United States (BECP 2024)

1.2 Overview

This analysis examines the cost-effectiveness of the prescriptive and mandatory residential provisions of the 2024 IECC. The simulated performance path and the Energy Rating Index (ERI) path are not considered in this analysis due to the wide variation in building construction characteristics that can comply through those paths, and as the prescriptive approach remains the most prominently utilized option. While some states choose to adopt amended versions of the IECC, this analysis focuses on the unamended provisions of the 2024 and 2021 IECC. The methodology established by DOE for determining the energy savings and cost-effectiveness of residential building energy codes (Salcido et al. 2024) forms the basis of this cost-effectiveness analysis.

1.2.1 Building Prototypes

The DOE methodology proposes a suite of 32 residential prototype building models to represent the U.S. new construction residential building stock. This suite, summarized in Table 1, was created based on construction data from the U.S. Census (Census 2020) and the Residential Energy Consumption Survey (RECS 2020). Detailed descriptions of the 32 prototype building models and operational assumptions are documented by Mendon et al. (2014).

Table 1.1. Residential Prototype Buildings

No.	Building Type	Foundation Type	Heating System Type
1	Single-family	Vented Crawlspace	Gas-Fired Furnace
2	Single-family	Vented Crawlspace	Electric Furnace
3	Single-family	Vented Crawlspace	Oil-Fired Furnace
4	Single-family	Vented Crawlspace	Heat Pump
5	Single-family	Slab-On-Grade	Gas-Fired Furnace
6	Single-family	Slab-On-Grade	Electric Furnace
7	Single-family	Slab-On-Grade	Oil-Fired Furnace
8	Single-family	Slab-On-Grade	Heat Pump
9	Single-family	Heated Basement	Gas-Fired Furnace
10	Single-family	Heated Basement	Electric Furnace
11	Single-family	Heated Basement	Oil-Fired Furnace
12	Single-family	Heated Basement	Heat Pump
13	Single-family	Unheated Basement	Gas-Fired Furnace
14	Single-family	Unheated Basement	Electric Furnace
15	Single-family	Unheated Basement	Oil-Fired Furnace
16	Single-family	Unheated Basement	Heat Pump
17	Multifamily	Vented Crawlspace	Gas-Fired Furnace
18	Multifamily	Vented Crawlspace	Electric Furnace
19	Multifamily	Vented Crawlspace	Oil-Fired Furnace
20	Multifamily	Vented Crawlspace	Heat Pump
21	Multifamily	Slab-On-Grade	Gas-Fired Furnace
22	Multifamily	Slab-On-Grade	Electric Furnace
23	Multifamily	Slab-On-Grade	Oil-Fired Furnace
24	Multifamily	Slab-On-Grade	Heat Pump
25	Multifamily	Heated Basement	Gas-Fired Furnace
26	Multifamily	Heated Basement	Electric Furnace
27	Multifamily	Heated Basement	Oil-Fired Furnace
28	Multifamily	Heated Basement	Heat Pump
29	Multifamily	Unheated Basement	Gas-Fired Furnace
30	Multifamily	Unheated Basement	Electric Furnace
31	Multifamily	Unheated Basement	Oil-Fired Furnace
32	Multifamily	Unheated Basement	Heat Pump

1.2.2 Climate Locations

The 2024 IECC climate zone map is based on the 2013 edition of ASHRAE Standard 169, Climatic Data for Building Design Standards (ASHRAE 2013) and aligns with that used by ASHRAE Standard 90.1, ASHRAE Standard 90.2, and the International Green Construction Code (IgCC). ASHRAE Standard 169-2013 includes nine thermal zones and three moisture regimes.

The U.S. climate zones and moisture regimes are shown in Figure 2.

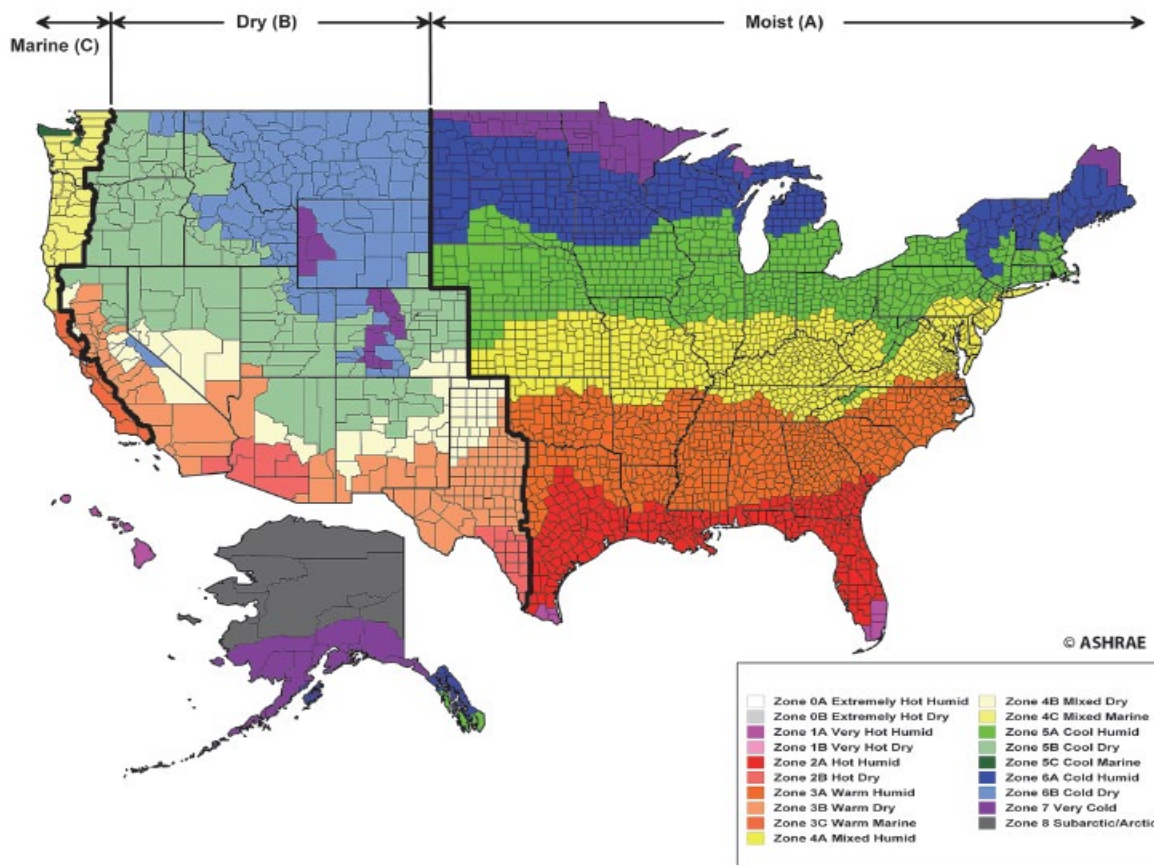


Figure 2. U.S. Climate Zone Map

Climate zones are divided into moist (A), dry (B), and marine (C) regions. However, not all the moisture regimes apply to all climate zones in the United States, and some zones have no moisture designations at all (zones 7 and 8 in the United States); thus, only 19 thermal-moisture zones exist in ASHRAE 169-2013, of which 16 are represented in the United States. In addition, the residential IECC includes a tropical climate designation with an alternative prescriptive compliance path for semi-conditioned buildings meeting certain criteria. Because the national analysis for DOE determinations looks only at the primary prescriptive compliance path, the alternative for tropical semi-conditioned buildings is not considered in this analysis. All homes in the tropical zone are modeled as complying with the prescriptive path. The appropriate state level analyses will include the parameters of the tropical semi-conditioned prescriptive requirements.

The IECC further defines a warm-humid region in the southeastern United States. This region is defined by humidity levels, whereas the moist (A) regime is more closely associated with rainfall. The warm-humid distinction affects only whether basement insulation is required in climate zone 3. This brings the total number of representative cities analyzed to 18.

For the quantitative analysis, a specific climate location (i.e., city) was selected as representative of each of the 18 climate/moisture zones found in the United States:

- 1A: Honolulu, Hawaii (tropical)
- 1A: Miami, Florida
- 2A: Tampa, Florida
- 2B: Tucson, Arizona
- 3A: Atlanta, Georgia
- 3A: Montgomery, Alabama (warm-humid)
- 3B: El Paso, Texas
- 3C: San Diego, California
- 4A: New York, New York
- 4B: Albuquerque, New Mexico
- 4C: Seattle, Washington
- 5A: Buffalo, New York
- 5B: Denver, Colorado
- 5C: Port Angeles, Washington
- 6A: Rochester, Minnesota
- 6B: Great Falls, Montana
- 7: International Falls, Minnesota
- 8: Fairbanks, Alaska

For the determination analysis, one set of prototype models was configured to represent construction practices as dictated by the 2021 IECC, another set was configured to represent the 2024 IECC, and then both sets were simulated in all the climate zones and moisture regimes defined in the IECC. Annual energy simulations were carried out for each of the 592 models using *EnergyPlus* version 23.1.0 (DOE 2024). The resulting energy use data were converted to energy costs using national average fuel prices, and the energy and energy cost results were weighted to the national level using weighting factors based on housing starts.

1.2.3 Weighting Factors

Weighting factors for each of the 32 residential prototype buildings were developed for each of the climate zones using 2020 state new residential construction starts¹ and residential construction details from the U.S. Census (Census 2020). The weights were fine-tuned by the revised county-to-climate zone map based on ASHRAE 169 climate zones. These weighting factors are used to aggregate energy and costs across all building types for each climate zone. Table 2 through Table 5 summarize the weights aggregated to building type, foundation type, heating system, and climate zone levels. Table 6 shows the detailed weighting factors for all 32 residential prototype buildings.

Table 1.2. Weighting Factors by Building Type

Bldg. Type	Weight (%)
Single-Family	82.12
Multifamily	17.88

¹ <https://www.census.gov/construction/bps/stateannual.html>

Table 1.3. Weighting Factors by Foundation Type

Foundation Type	Weight (%)
Crawlspace	15.53
Slab-On-Grade	59.20
Heated Basement	15.71
Unheated Basement	9.56

Table 1.4. Weighting Factors by Heating System

Heating System Type	Weight (%)
Gas-Fired Furnace	55.60
Electric Furnace	7.88
Oil-Fired Furnace	0.15
Heat Pump	36.37

Table 1.5. Weighting Factors by Climate Zone

Climate Zone	Weight (%)
1	2.12
2	26.02
3	28.84
4	19.07
5	18.33
6	5.05
7	0.55
8	0.01

Table 1.6. Weighting Factors for the Residential Prototype Building Models by Climate Zone (CZ)

Building Type	Foundations	Heating Systems	CZ1 (%)	CZ2 (%)	CZ3 (%)	CZ4 (%)	CZ5 (%)	CZ6 (%)	CZ7 (%)	CZ8 (%)	Weights by Prototype
Single-Family	Crawlspace	Gas-Fired Furnace	0.16	0.28	1.38	2.2	2.01	0.38	0.11	0	6.52
Single-Family	Crawlspace	Electric Furnace	0.01	0.06	0.25	0.26	0.11	0.03	0.01	0	0.73
Single-Family	Crawlspace	Oil-Fired Furnace	0	0	0	0	0	0	0	0	0.01
Single-Family	Crawlspace	Heat Pump	0.05	0.45	2.82	1.73	0.34	0.06	0.02	0	5.48
Single-Family	Slab-On-Grade	Gas-Fired Furnace	0.46	8.97	8.16	2.42	2.99	0.8	0.11	0	23.91
Single-Family	Slab-On-Grade	Electric Furnace	0.13	2.42	1.53	0.35	0.16	0.08	0.01	0	4.68
Single-Family	Slab-On-Grade	Oil-Fired Furnace	0	0.01	0.01	0.01	0.01	0	0	0	0.03
Single-Family	Slab-On-Grade	Heat Pump	0.65	9.26	8.02	1.82	0.44	0.12	0.02	0	20.33
Single-Family	Heated Basement	Gas-Fired Furnace	0.01	0.03	0.48	2.45	4.56	1.26	0.1	0	8.89
Single-Family	Heated Basement	Electric Furnace	0	0.01	0.07	0.24	0.24	0.11	0.01	0	0.69
Single-Family	Heated Basement	Oil-Fired Furnace	0	0	0	0.01	0.02	0	0	0	0.03
Single-Family	Heated Basement	Heat Pump	0	0.08	0.64	1.58	0.51	0.16	0.02	0	2.98
Single-Family	Unheated Basement	Gas-Fired Furnace	0	0.07	0.2	1.22	3.3	0.96	0.07	0	5.81
Single-Family	Unheated Basement	Electric Furnace	0	0.02	0.04	0.1	0.14	0.06	0.01	0	0.36
Single-Family	Unheated Basement	Oil-Fired Furnace	0	0	0	0.01	0.02	0.01	0	0	0.04
Single-Family	Unheated Basement	Heat Pump	0	0.08	0.5	0.55	0.36	0.11	0.01	0	1.6

Building Type	Foundations	Heating Systems	CZ1 (%)	CZ2 (%)	CZ3 (%)	CZ4 (%)	CZ5 (%)	CZ6 (%)	CZ7 (%)	CZ8 (%)	Weights by Prototype
Multifamily	Crawlspace	Gas-Fired Furnace	0.04	0.04	0.31	0.73	0.37	0.08	0.01	0	1.58
Multifamily	Crawlspace	Electric Furnace	0	0.01	0.05	0.07	0.02	0.01	0	0	0.16
Multifamily	Crawlspace	Oil-Fired Furnace	0	0	0	0	0	0	0	0	0
Multifamily	Crawlspace	Heat Pump	0.02	0.06	0.5	0.38	0.06	0.01	0	0	1.04
Multifamily	Slab-On-Grade	Gas-Fired Furnace	0.14	1.87	1.87	0.63	0.57	0.21	0.02	0	5.31
Multifamily	Slab-On-Grade	Electric Furnace	0.03	0.55	0.27	0.07	0.03	0.03	0	0	0.99
Multifamily	Slab-On-Grade	Oil-Fired Furnace	0	0	0	0	0	0	0	0	0.01
Multifamily	Slab-On-Grade	Heat Pump	0.39	1.7	1.35	0.37	0.08	0.03	0	0	3.93
Multifamily	Heated Basement	Gas-Fired Furnace	0	0	0.12	0.78	1.06	0.28	0.02	0	2.26
Multifamily	Heated Basement	Electric Furnace	0	0	0.01	0.06	0.06	0.03	0	0	0.17
Multifamily	Heated Basement	Oil-Fired Furnace	0	0	0	0	0	0	0	0	0.01
Multifamily	Heated Basement	Heat Pump	0	0.01	0.12	0.39	0.12	0.04	0	0	0.68
Multifamily	Unheated Basement	Gas-Fired Furnace	0	0.02	0.03	0.45	0.65	0.15	0.01	0	1.31
Multifamily	Unheated Basement	Electric Furnace	0	0.01	0.01	0.03	0.03	0.02	0	0	0.09
Multifamily	Unheated Basement	Oil-Fired Furnace	0	0	0	0	0	0	0	0	0.01
Multifamily	Unheated Basement	Heat Pump	0	0.01	0.08	0.15	0.07	0.02	0	0	0.33
Totals by Climate Zone			2.12	26.02	28.84	19.07	18.33	5.05	0.55	0.01	100.00

1.3 Report Contents and Organization

This report documents the methodology and results of the cost-effectiveness analysis of the prescriptive and mandatory provisions of the 2024 IECC compared to those of the 2021 IECC. The present analysis builds on work conducted by PNNL during the determination analysis of the 2024 IECC (Salcido et al. 2024).

Building energy models were developed to evaluate the energy performance of the 2024 and 2021 IECC editions as applied to DOE's established residential prototypes. Incremental cost estimates for the provisions of the 2024 IECC compared to the 2021 IECC are combined with the energy performance results to calculate the cost-effectiveness of the 2024 IECC.

This report is divided into three parts. Section 2.0 provides a summary of residential code changes in the 2024 IECC compared to the 2021 IECC and the details of the code changes considered in the present cost-effectiveness analysis. Section 3.0 details the methodology and incremental cost for the code changes considered in this analysis. Section 4.0 provides an overview of the economic analyses and summarizes the aggregated results of the cost-effectiveness analysis at the climate zone level.

The approved code changes incorporated into the 2024 IECC that have a direct effect on energy use are listed in Appendix A. Additional details about the building energy models created for simulating the energy use of buildings built to meet the provisions of the various editions of the IECC are provided in Appendix B.

2.0 Changes Introduced in the 2024 IECC

Following the publication of the 2024 IECC, DOE conducted both a qualitative and a quantitative energy savings analysis of that code compared to its immediate predecessor, the 2021 IECC. All the changes introduced in the 2024 IECC were identified, and their impact on energy efficiency was qualified. A total of 273 formal code change proposals were accepted into the 2024 IECC as shown in Table A.1. Of the 273 changes, 54 were identified as impacting energy use (48 decreasing, six increasing), and eight were identified as requiring further analysis by energy simulation to quantify their impact using whole-building energy simulations of the 32 PNNL residential prototype buildings across the IECC climate zones.

Table 2.1 summarizes the characterization of the eight approved code changes with quantifiable energy impacts considered in the present cost-effectiveness analysis.

Table 2.1. Summary of Analyzed Changes to the 2024 IECC

Proposal Number ^(a)	Code Section(s) ^(b)	Description of Change(s)	Impact on Energy Efficiency	Included in Energy Analysis	Discussion
REPI-018-21	R401.2, R401.2.1, R401.2.5, R401.3, R405.2, SECTION R408, R408.1, R408.2, TABLE R408.2 (New), R408.2.1, R408.2.1.1 (New), R408.2.1.2 (New), TABLE R408.2.1.2 (New), R408.2.2, R408.2.3, R408.2.4, R408.2.5, R408.2.7 (New), TABLE R408.2.7 (New), R408.2.8 (New)	Changes the Section R408 additional efficiency packages to an energy credit methodology. Each residential building must select at least two energy credit measures to achieve 10 energy credits.	Reduces energy use	Yes	The energy credit methodology provides a path to increase the energy efficiency of a residential building while providing design flexibility. There are a total of 53 energy credit measures for envelope, heating, ventilating, and air conditioning (HVAC), service water heating (SWH), duct leakage and location, air leakage and ventilation, demand response, lighting, efficient appliances, and on-site renewable energy. Each energy credit represents a 1 percent reduction in total energy savings.

Proposal Number ^(a)	Code Section(s) ^(b)	Description of Change(s)	Impact on Energy Efficiency	Included in Energy Analysis	Discussion
REPI-028-21	TABLE R402.1.2, TABLE R402.1.3	Reduced fenestration U-factors in climate zones 4 and 5 from 0.30 to 0.28 and reduced all skylight U-factor requirements to 0.6 in climate zones 0 through 2, 0.53 in climate zones 3, 4A, and 4B, and 0.50 in climate zones 4C through 8 in Table R402.1.2 and R402.1.3.	Reduces energy use	Yes	
REPI-063-21	R402.4.1.2, R402.4.1.3, TABLE R405.4.2(1)	Changes the prescriptive air leakage requirements in climate zones 0, 1, and 2 from 5.0 ACH50 to 4.0 ACH50. The air leakage of the standard reference home in Table R405.4.2(1) is set to 4.0 ACH50 in climate zones 0 through 2.	Reduces energy use	Yes	
REPI-064-21	R402.4.1.2, R402.4.1.3, TABLE R405.4.2(1), R408.2.5	Changes the prescriptive air leakage requirements in climate zones 3 through 8 from 3.0 ACH50 to 2.0 ACH50. The air leakage of the standard reference home in Table R405.4.2(1) is set to 2.0 ACH50 in climate zones 4 through 8.	Reduces energy use	Yes	The air leakage for this proposal was adjusted to keep the prescriptive air leakage requirements at 3.0 ACH50 for climate zones 3 through 5 and 2.5 ACH50 for climate zones 6 through 8.
REPI-089-21	R403.5.2, TABLE C403.12.3, TABLE R405.2, TABLE R406.2	Increases pipe insulation for hot water piping from R-3 to 1 inch of insulation (R-7), which applies to all sizes of piping.	Reduces energy use	Yes	One inch of pipe insulation will achieve an R-7 level of insulation.
REPI-093-21	R403.6.1	Dwelling units shall be provided with a heat recovery or energy recovery ventilation system in climate zones 5 through 8. The ventilation system shall be balanced with a minimum sensible recovery efficiency (SRE) of 65 percent at 32°F (0°C) at a flow greater than or equal to the design airflow.	Reduces energy use	Yes	The proposal was modified to remove the heat recovery ventilator (HRV) requirement for climate zone 5 so the final adjustment is to add HRV requirement for ventilation in climate zone 6 on top of the 2021 IECC requirement of HRVs in climate zones 7 and 8.

Proposal Number ^(a)	Code Section(s) ^(b)	Description of Change(s)	Impact on Energy Efficiency	Included in Energy Analysis	Discussion
RED1-110-22	R404.1.2, R404.1.3, R404.1.4, TABLE R404.1	Revises the exterior lighting sections and adds a new lighting power allowance table to match the equivalent requirements in IECC-C. Additional exceptions from IECC-C were added that could apply to the Group R occupancies.	Reduces energy use	Yes	Previously in 2021 IECC, the exterior lighting for low-rise multifamily buildings was required to comply with the commercial exterior lighting provisions.
REPI-033-21	TABLE R402.1.2, TABLE R402.1.3, R408.2, R408.2.1 (New), R408.2.1-R408.2.4	Ceiling insulation in Table R402.1.3 was reduced from R-49 to R-38 in climate zones 2 and 3 and reduced from R-60 to R-49 in climate zones 4 through 8. The associated ceiling U-factors were adjusted for the same climate zones in Table R402.1.2. The new U factor is 0.030 for climate zones 2 and 3 and 0.026 for climate zones 4 through 8.	Increase energy use	Yes	This proposal adjusts the ceiling insulation in climate zones 2 through 8 back to the 2018 IECC levels.

(a) Proposal numbers are as assigned by the ICC (<https://energy.cdpaccess.com/live/cah>)

(b) Code sections refer to the 2021 IECC. Sections may be renumbered by the ICC in the 2024 IECC.

3.0 Construction Cost Estimates

This section describes the methodology used for calculating the incremental costs of construction of the 2024 IECC compared to the 2021 IECC. Detailed incremental cost estimates for the new provisions of the 2024 IECC considered in this analysis are provided along with a summary of total incremental costs by building type and climate zone.

3.1 Methodology

The present analysis includes only the prescriptive and mandatory provisions of the IECC pertaining to residential buildings. The first step in evaluating the cost-effectiveness of these changes introduced by the 2024 IECC is estimating their incremental construction costs. Data sources consulted for these estimates include, but are not limited to, the following:

- Building Component Cost Community (BC3) data repository (DOE 2012)
- National Renewable Energy Laboratory (NREL) National Residential Efficiency Measures Database (NREL 2013)
- ENERGY STAR Single-Family New Homes, Version 3.2 (Rev.12) Cost & Savings Estimates (EPA 2023)
- ENERGY STAR Multifamily New Construction, Version 1.1 Cost & Savings Estimates (EPA 2018)
- DOE Zero Energy Ready Home Savings & Cost Estimate Summary (DOE 2015)
- RS Means Residential Cost Data (RS Means 2024)
- The Cost of Decarbonization and Energy Upgrade Retrofits for U.S. Homes (Less et al, 2021)
- Residential Ducts in Conditioned Space/High Performance Attics (Wei et al, 2015)
- Price data from nationally recognized home supply stores.

The incremental costs are calculated separately for each code change, and then added together to obtain a total incremental cost by climate zone and building type. The following sections discuss the specific cost estimates identified for the efficiency measures that changed in the 2024 IECC.

3.2 Incremental Cost Estimates for New Provisions of the 2024 IECC

The incremental construction costs associated with the eight code changes in Table 7 are detailed in the following sections. Only costs for the eight code changes with quantifiable energy impacts are considered.

3.2.1 Energy Credits

Recent energy codes have included provisions for additional efficiency measures above and beyond the prescriptive code requirements that must be included in the building design and construction. The 2024 IECC (REPI-18) assigns energy credit values to energy efficiency measures based on the percentage of annual total site energy savings achieved over the baseline prescriptive energy code. Energy credit savings could be expressed in terms of site energy, energy cost, or emissions depending on the emphasized metric. The higher the

savings, the more energy credits assigned. The energy credits are divided into traditional efficiency measures (envelope, HVAC, service water heating, thermal distribution systems, air leakage, and appliances). The amount of energy credits for each measure was determined based on simulation analysis of the energy measure over the prescriptive code for each climate zone. The 2024 IECC stipulates that a typical residential building must achieve 10 energy credits (by selecting not less than two energy credit measures) for prescriptive compliance while dwelling units over 5,000 sq ft require an additional 5 energy credits. The energy credits provide flexibility for meeting the required credit amount, by allowing various combinations of measures to meet the requirement. For the 2024 IECC quantitative analysis, energy credit measures were selected to meet the required 10 energy credits for the prototype building size, based on several factors including standard practice, cost-effectiveness, and the ability to quantify savings using the methodology described in this report. Table 3.2.1 shows the energy credit selections for the all-electric prototypes. Tables 3.2.2 shows the energy credit selections for the fossil fuel prototypes.

Table 3.2.1. Energy Credit Measures for Quantitative Analysis for All-Electric Buildings (Heat Pump and Electric Furnace)

		Credit Value								
Measure	Measure Description	CZ 1	CZ 2	CZ 3	CZ 4	CZ 4C	CZ 5	CZ 6	CZ 7	CZ 8
R408.2.1.2(1)	Window U-factor – 0.25						1			
R408.2.3(3)	Integrated HPWH: UEF = 3.30	10	9	9	7	6	4	3	3	2
R408.2.3(8)	Compact Hot Water Distribution				2	2	2			
R408.2.4(3)	80% of Ducts in Conditioned Space							7	7	9
R408.2.5(1)	HRV @ 75% SRE					1	3			
R408.2.6	Energy Efficient Appliances	1	1	1	1	1				
Total Credits		11	10	10	10	10	10	10	10	11

Table 3.2.2. Energy Credit Measures for Quantitative Analysis for Mixed Fuel Buildings (Gas and Oil Furnaces)

Measure	Measure Description	Credit Value									
		CZ 1	CZ 2	CZ 3	CZ 4	CZ 4C	CZ 5	CZ 6	CZ 7	CZ 8	
R408.2.1.2(1)	Window U-factor – 0.25						1				
R408.2.2(2)	High Performance Cooling 15.2 SEER2	5	4	3	2						
R408.2.3(2)(b)	Gas-Fired Instant WH, UEF-0.95					3	6	6	7	8	
R408.2.3(8)	Compact Hot Water Distribution	2	2	2	2		2	2	2	2	
R408.2.4(2)	100% of Ducts in Conditioned Space	2	3	4	6	7					
R408.2.5(1)	HRV installed							2	2		
R408.2.6	Energy Efficient Appliances	1	1	1			1				
Total Credits		10	10	10	10	10	10	10	11	10	

3.2.1.1 R408.2.1.2(1): U-factor and SHGC for windows per Table R408.2.1

The energy credit for U-factor and SHGC for windows further reduces (makes more efficient) the U-factor required for residential fenestration (windows and doors) in climate zone 5 from 0.28 to 0.25 Btu/hr-ft²-F for the 2024 IECC. This energy credit is applied across all prototypes in climate zone 5.

The EPA single-family cost and savings estimate report (EPA 2023) shows the cost of moving from a window U-factor of 0.3 to 0.27 is \$0.82/ft² of window area converted to 2024 dollars. In order to further reduce the window U-factor to 0.25 required an extrapolation of the window upgrade costs from both the ENERGY STAR single family and multifamily (EPA 2018) to come up with an estimate. The final calculated incremental cost to go from a window U-factor of 0.30 to 0.25 would cost \$2.05/ft². The incremental cost to go from a window U-factor of 0.28 to 0.25 would cost an additional \$1.23/ft². For the single-family prototypes, the incremental construction cost to move from a window U-factor of 0.28 to 0.25 is estimated to be \$438 while the multifamily dwelling unit estimate shows an incremental cost of \$149.

3.2.1.2 R408.2.2(2): High performance cooling - 15.2 SEER2

For the gas and oil-fired furnace prototypes utilizing the high-performance cooling (15.2 SEER2) energy credit measure, the federal minimum 13.4 SEER2 efficiency air conditioner is replaced with a 15.2 SEER2 centrally ducted air conditioner of the same capacity. The single-family air conditioner energy credit is applied in climate zones 1 through 4A/4B. The multifamily prototypes use the high-performance cooling energy credit in climate zone 4. Above climate zone 4, the air conditioner only awards one energy credit and was not used in favor or higher earning energy credit measures.

The BC3 cost database (DOE 2012) includes average/typical costs for various air conditioner efficiencies. Air conditioner costs were isolated for specific efficiency levels and capacities. For the single-family prototypes, a 3-ton 13.4 SEER2 central air conditioner is estimated to cost \$6,099 to install while a 3-ton 15.2 SEER2 central air conditioner is estimated to cost \$6,577 for an incremental cost of \$498. For the multifamily prototypes, a 1.5-ton 13.4 SEER2 central air conditioner is estimated to cost \$3,911 to install while a 1.5-ton 15.2 SEER2 central air conditioner is estimated to cost \$4,544 for an incremental cost of \$634. These costs were adjusted from 2012 to 2024 dollars using a consumer price index increase of 34 percent as found on the Inflation Calculator provided by the Bureau of Labor Statistics website.

3.2.1.3 R408.2.2(5): High-performance gas furnace - 95 AFUE

For the gas furnace prototypes utilizing the high-performance gas furnace (95 AFUE) energy credit measure, the federal minimum 80 AFUE gas furnace is replaced with a 95 AFUE forced air furnace of the same capacity. The high-performance gas furnace energy credit is applied only to climate zones 4C through 8 for single-family buildings and climate zones 5 through 8 for the multifamily buildings. In climate zones 1 through 4B, the high-performance gas furnace rewards fewer energy credits due to climate and was not used in favor or higher earning energy credit measures. The single-family unit contains an 80 MBH gas furnace while the multifamily dwelling units contain a 60 MBH gas furnace.

To calculate the incremental cost for the high-performance gas furnace measure, the installed cost of the 80 AFUE furnace are subtracted from the installed cost of the 95 AFUE furnace. The installed costs account for material and labor with overhead and profit accounting for 20%.

Table 3.2.4 shows the material, labor, overhead and profit estimated costs for the 80 AFUE gas furnace and the 95 AFUE gas furnace in 60 MBH and 80 MBH capacities. The material costs were obtained from the Grainger online cost database¹ while the labor costs were obtained from the 2024 RS Means online catalog. The incremental cost for the single-family gas furnace energy credit measure is estimated to be \$1,068 and the estimated incremental cost for the multifamily gas furnace energy credit is \$952.

Table 3.2.3. Costs for the High-Performance Gas Furnace Energy Credit

Gas Furnace	Material Cost	Labor Cost	O&H	Total
80 AFUE – 80 MBH	\$1,178	\$163	\$268	\$1,609
96 AFUE – 80 MBH	\$1,681	\$366	\$409	\$2,456
80 MBH Gas Furnace Incremental Cost				\$847
80 AFUE – 60 MBH	\$1,051	\$163	\$243	\$1,457
96 AFUE – 60 MBH	\$1,665	\$366	\$406	\$2,437
60 MBH Gas Furnace Incremental Cost				\$980

3.2.1.4 R408.2.3(3): Integrated heat pump water heater (HPWH) - 3.30 UEF

The electric prototypes (electric furnace and heat pump) utilize the integrated heat pump water heater (HPWH) energy credit with a uniform energy factor (UEF) of 3.30. The integrated HPWH is one option within the family of reduced energy use in service water heating energy credit options. The HPWH energy credit requires the replacement of the federal minimum efficiency 50-gallon electric storage water heater with a 3.30 UEF integrated HPWH 80-gallon tank for single-family and a 50-gallon tank for multifamily dwelling units. An 80-gallon hot water tank ensures adequate hot water for a family.

According to 2024 RS Means, a 40-gallon, double element electric water heater is estimated to cost \$1,078 to install. Based on home supply store costs and 2024 RS Means, the estimated cost to install an 80-gallon 3.30 UEF HPWH is \$3,296 and a 50-gallon 3.30 UEF HPWH is estimated to cost \$2,157 to install.

The 2021 IECC electric prototypes contain an integrated HPWH with a UEF of 2.0. As a result, the incremental installation cost of the 3.30 UEF HPWH needs to be compared to a 2.0 UEF HPWH. According to the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) directory², the lowest rated UEF for a HPWH on the market is 2.8. Based on home supply store costs and 2024 RS Means, the installed cost for a 50-gallon 2.8 UEF HPWH is estimated at \$1,751 and \$2,674 for the 80-gallon 2.8 UEF HPWH. The delta installation costs for the 3.30 integrated HPWH in the single-family and multifamily prototypes are estimated to be \$621 and \$406 respectively.

¹ <https://www.grainger.com/category/hvac-and-refrigeration/central-equipment/whole-house-gas-furnaces?categoryIndex=1>, May, 2024.

² <https://www.ahridirectory.org/>

3.2.1.5 R408.2.3(2)(b): Gas-fired instantaneous water heater (Option 2)

The gas prototypes utilize the gas-fired instantaneous water heater (option 2) energy credit with a uniform energy factor (UEF) of 0.95. The gas-fired instantaneous water heater is one option within the family of reduced energy use in service water heating energy credit options. The gas-fired instantaneous energy credit requires the replacement of the federal minimum efficiency 50-gallon gas storage water heater with a gas-fired instantaneous water heater rated at 0.95 UEF.

According to 2024 RS Means, a 50-gallon, gas-fired storage water heater is estimated to cost \$1,438 to install. Based on home supply store costs, an average gas-fired instantaneous water heater with a UEF of 0.95 is estimated to cost \$1,575. Adding the installation estimated costs from 2024 RS for a gas-fired instantaneous water heater at \$221 plus 20% of profit and overhead estimates the installed cost for the instant water heater at \$2,065. The incremental cost to install the gas-fired instantaneous water heater is estimated to be \$627.

The 2021 IECC gas prototypes contain an electric instantaneous water heater with a UEF of 0.82 as part of the additional efficiency package requirement. As a result, the incremental installation cost of the gas-fired instantaneous water heater at 0.95 UEF needs to be compared to an electric instantaneous water heater at 0.82 UEF. Based on home supply store costs and 2024 RS Means, the installed cost for an electric instantaneous water heater at 0.82 UEF is estimated at \$1,735 (\$1,418 for material and \$196 for labor plus overhead and profit). This represents an incremental cost of \$297 over the 50-gallon gas storage water heater of \$1,438. The delta installation cost for the gas-fired instantaneous water heater with a 0.95 UEF over the electric instantaneous water heater for both single-family and multifamily prototypes is \$330.

3.2.1.6 R408.2.3(8): Compact hot water design

In previous versions of the residential prototype models, the hot water distribution assumed adiabatic piping for the domestic hot water systems and pipe losses were estimated by applying an assumed pipe loss factor to the hot water usage. For this analysis, the heat losses from the hot water piping are directly simulated in *EnergyPlus* to determine the impacts of those heat losses on hot water energy consumption. By simulating the hot water pipe heat losses, reduction in the domestic hot water energy use resulting from changes in the hot water piping layout can be quantified. The new modeling strategy allows for analysis of the hot water system design and comparison with compact design strategies. The heat losses from the hot water piping not only impact the domestic hot water energy consumption, but also has a small effect on the heating and cooling energy because of the heat dissipated to the indoor air.

The modeled heat transfer from the hot water distribution system is calculated based on pipe material, pipe insulation R-value, pipe diameter, pipe length, indoor air temperature and the rate of water flow. Hot water piping layouts for the single-family and multifamily prototypes were created based on the floor plans which specifically located the water heater and hot water fixtures to determine the necessary pipe lengths required for the hot water distribution. The hot water fixtures are in the bathrooms (each with a sink and shower/tub), the kitchen (sink and dishwasher) and laundry room (clothes washer). The single-family prototypes have three bathrooms while the multifamily prototype dwelling units have two bathrooms. Other than the bathroom fixtures, the two prototypes share the same hot water fixtures (per unit). The water heater is placed in the basement for single-family prototypes with a basement and is otherwise in the garage for the remaining single-family prototypes. The multi-family prototypes have the

water heaters located in a closet unit within conditioned space. Using these layouts, the pipe length from the water heater to each hot water fixture is added to the models.

For the single-family and multifamily prototype floor plans, typical hot water piping layouts were estimated based on foundation type and location of the hot water heater. The baseline hot water piping layout covered approximately 80 percent of the conditioned floor area. For the compact hot water design (R408.2.3(8)), a new floor layout was assumed that created a new hot water piping layout to meet the 16-ounce volumetric requirements in the pipe length between the hot water heater and farthest hot water fixture. The compact hot water layout utilizes shared walls for the hot water fixtures (e.g., a kitchen sink and dishwasher on the opposite side of a shared wall with a bathroom) and places the water heater as close to these fixtures as possible to create the compact design. The compact hot water piping layout covered approximately 3 percent of the conditioned floor area. The compact hot water system design energy credit is modeled by estimating the reduction in pipe lengths from the water heater to the hot water fixtures. The heat loss savings are simulated based on the pipe lengths in the baseline and compact hot water designs. Ultimately, the reduction in hot water usage for the compact design is estimated based on the “time to tap” (estimated time for hot water to arrive at fixtures from the water heater) and the average number of cold start events per day (15 in this analysis).

All piping and fitting costs were estimated from the 2024 RS Means database. The estimated hot water piping costs include cross-linked polyethylene (PEX), acrylonitrile butadiene styrene (ABS) and steel piping and fittings for hot water supply piping, water drain piping and gas supply piping respectively. Pipe insulation is also included in the cost for $\frac{3}{4}$ ” piping. The cost for the piping materials for the baseline piping layout in the single-family prototypes is \$9,291 and the multifamily dwelling baseline piping layout costs \$8,809. The estimated cost for the compact hot water piping layout in the single-family prototypes is \$7,701 and the for the multifamily unit is \$7,637. The incremental construction cost for the single-family compact hot water design - \$1,590 and -\$1,173. Tables 3.2.6 and 3.2.7 show the itemized costs for the piping, fittings and pipe insulation for the single-family and multifamily dwelling units respectively. In addition to capturing energy savings in hot water energy use, the construction costs are significantly lower.

Table 3.2.4. Costs for the Single Family Compact Hot Water Design Energy Credit

Baseline Design				Compact HW Design			
Installed Unit Costs (2024 RSMeans)				Installed Unit Costs (2024 RSMeans)			
	Quantity	Unit Cost	Total Cost		Quantity	Unit Cost	Total Cost
Supply Piping - PEX (3/4")	68	\$ 1.24	\$ 84.32	Supply Piping - PEX (3/4")	4	\$ 1.24	\$ 4.96
Supply Fittings - PEX (3/4")	6	\$ 29.60	\$ 177.60	Supply Fittings - PEX (3/4")	2	\$ 29.60	\$ 59.20
Supply Joints - PEX (3/4")	6	\$ 47.00	\$ 282.00	Supply Joints - PEX (3/4")	2	\$ 47.00	\$ 94.00
Supply Hangers - PEX (3/4")	12	\$ 28.25	\$ 339.00	Supply Hangers - PEX (3/4")	2	\$ 28.25	\$ 56.50
Supply Piping - PEX (1/2")	91	\$ 0.73	\$ 66.43	Supply Piping - PEX (1/2")	74	\$ 0.73	\$ 54.02
Supply Fittings - PEX (1/2")	14	\$ 27.95	\$ 391.30	Supply Fittings - PEX (1/2")	12	\$ 27.95	\$ 335.40
Supply Joints - PEX (1/2")	14	\$ 30.95	\$ 433.30	Supply Joints - PEX (1/2")	12	\$ 30.95	\$ 371.40
Supply Hangers - PEX (1/2")	42	\$ 24.89	\$ 1,045.38	Supply Hangers - PEX (1/2")	34	\$ 24.89	\$ 846.26
Drain Piping - ABS (3")	40	\$ 36.25	\$ 1,450.00	Drain Piping - ABS (3")	32	\$ 36.25	\$ 1,160.00
Drain Fittings - ABS	9	\$ 56.50	\$ 508.50	Drain Fittings - ABS	9	\$ 56.50	\$ 508.50
Drain Excavation	13	\$ -	\$ -	Drain Excavation	13	\$ -	\$ -
Drain Piping - ABS (1")	95	\$ 22.15	\$ 2,104.25	Drain Piping - ABS (1")	85	\$ 22.15	\$ 1,882.75
Drain Fittings - ABS	25	\$ 58.50	\$ 1,462.50	Drain Fittings - ABS	23	\$ 58.50	\$ 1,345.50
Drain Excavation	38	\$ -	\$ -	Drain Excavation	34	\$ -	\$ -
Steel Pipe	24	\$ 14.08	\$ 337.92	Steel Pipe	29	\$ 14.08	\$ 408.32
Steel Fittings	2	\$ 59.00	\$ 118.00	Steel Fittings	3	\$ 59.00	\$ 177.00
Miscellaneous Joints	19	\$ 18.45	\$ 350.55	Miscellaneous Joints	19	\$ 18.45	\$ 350.55
Pipe Insulation	12	\$ 11.65	\$ 139.80	Pipe Insulation	4	\$ 11.65	\$ 46.60
Total			\$ 9,291	Total			\$ 7,701
Incremental Cost for Single Family Compact Hot Water Design							\$ (1,590)

Table 3.2.5. Costs for the Multifamily Compact Hot Water Design Energy Credit

Baseline Design				Compact HW Design			
Installed Unit Costs (2024 RSMeans)				Installed Unit Costs (2024 RSMeans)			
	Quantity	Cost/item	Cost		Quantity	Cost/item	Cost
Supply Piping - PEX (3/4")	87	\$ 1.24	\$ 107.88	Supply Piping - PEX (3/4")	4	\$ 1.24	\$ 4.96
Supply Fittings - PEX (3/4")	4	\$ 29.60	\$ 118.40	Supply Fittings - PEX (3/4")	2	\$ 29.60	\$ 59.20
Supply Joints - PEX (3/4")	3	\$ 47.00	\$ 141.00	Supply Joints - PEX (3/4")	2	\$ 47.00	\$ 94.00
Supply Hangers - PEX (3/4")	12	\$ 28.25	\$ 339.00	Supply Hangers - PEX (3/4")	4	\$ 28.25	\$ 113.00
Supply Piping - PEX (1/2")	78	\$ 0.73	\$ 56.94	Supply Piping - PEX (1/2")	66	\$ 0.73	\$ 48.18
Supply Fittings - PEX (1/2")	13	\$ 27.95	\$ 363.35	Supply Fittings - PEX (1/2")	6	\$ 27.95	\$ 167.70
Supply Joints - PEX (1/2")	13	\$ 30.95	\$ 402.35	Supply Joints - PEX (1/2")	8	\$ 30.95	\$ 247.60
Supply Hangers - PEX (1/2")	12	\$ 24.89	\$ 298.68	Supply Hangers - PEX (1/2")	12	\$ 24.89	\$ 298.68
Drain Piping - ABS (3")	61	\$ 36.25	\$ 2,193.13	Drain Piping - ABS (3")	66	\$ 36.25	\$ 2,392.50
Drain Fittings - ABS	24	\$ 56.50	\$ 1,356.00	Drain Fittings - ABS	24	\$ 56.50	\$ 1,356.00
Drain Excavation	37	\$ -	\$ -	Drain Excavation	38	\$ -	\$ -
Drain Piping - ABS (1")	65	\$ 22.15	\$ 1,439.75	Drain Piping - ABS (1")	39	\$ 22.15	\$ 852.78
Drain Fittings - ABS	12	\$ 58.50	\$ 702.00	Drain Fittings - ABS	15	\$ 58.50	\$ 877.50
Drain Excavation	13	\$ -	\$ -	Drain Excavation	13	\$ -	\$ -
Steel Pipe	27	\$ 14.08	\$ 380.16	Steel Pipe	26	\$ 14.08	\$ 366.08
Steel Fittings	4	\$ 59.00	\$ 236.00	Steel Fittings	3	\$ 59.00	\$ 177.00
Miscellaneous Joints	29	\$ 18.45	\$ 535.05	Miscellaneous Joints	29	\$ 18.45	\$ 535.05
Pipe Insulation	12	\$ 11.65	\$ 139.80	Pipe Insulation	4	\$ 11.65	\$ 46.60
Total			\$ 8,809	Total			\$ 7,637
Savings for SF Crawl/Slab							\$ 1,173

3.2.1.7 R408.2.4(2): 100% of ducts in conditioned space

The energy credit measure for placing 100 percent of ducts in conditioned space is only applied to mixed-fuel, single-family prototypes in climate zones 1 through 4. All multifamily prototypes

already contain 100 percent of the ducts in conditioned space. The duct locations in the baseline single-family prototype buildings aligns with the 2024 IECC R405 standard reference design locations based on the number of stories and the foundation type. This energy credit measure moves all ducts that are in unconditioned space (attic, crawlspace or basement) into the conditioned space. The assumption for the slab, crawlspace and unheated basement prototypes is that a dropped ceiling would be installed to move the ducts from the attic to within the conditioned space. For the heated basement prototype, HVAC was assumed to be in the basement and the ducts were located within the living space and conditioned basement.

According to 2024 RS Means, the cost to construct a dropped ceiling for materials (lumber, air barrier, drywall) and labor is \$8.78 per square foot of dropped ceiling. The dropped ceiling of 139.2 sq ft based on the perimeter of the single-family prototype would be adequate to encapsulate the ducts within conditioned space. The cost of the dropped ceiling to move all ducts into conditioned space is estimated to be \$1,222. These costs are aligned with the California Case Study *Residential Ducts in Conditioned Space/High Performance Attics* (Wei et al, 2015) costs for dropped ceilings.

3.2.1.8 R408.2.4(3): 80% of ducts in conditioned space

Following on the logic above for moving 100 percent of the ducts into conditioned space, 80% of the needed dropped ceiling were installed to encapsulate the ducts in conditioned space. The incremental construction cost to move 80 percent of the ducts into conditioned space is estimated to be \$978.

3.2.1.9 R408.2.5(1): HRV at 75% SRE

The current mechanical ventilation system in the residential prototypes is an exhaust only bathroom fan system running 24 hours per day to meet the IECC ventilation requirements. This energy credit measure installs a heat recovery ventilator (HRV) with a sensible recovery efficiency (SRE) of 75 percent for the all-electric prototypes in climate zone 4C. According to the HVACquick cost website¹, A BROAN™ HRV with 75 percent SRE at the ventilation flow rate needed for the prototype dwelling units (60 cfm for single-family, 45 cfm for multifamily dwelling unit) is estimated to cost \$1,169 with an installation cost according to 2024 RS Means estimated at \$325 providing a final cost of \$1,793 accounting for 20% overhead and profit.

For the mixed-fuel prototypes, the HRV energy credit is used in climate zones 5 through 7. Due to the normative code changes, climate zones 6 & 7 require that an HRV be installed as the mechanical ventilation strategy with an SRE of 65 percent. Mixed-fuel dwelling units in climate zone 5 require the installation of a new HRV at 75 percent SRE while climate zones 6 & 7 need to upgrade the HRV from 65 percent SRE to 75 percent SRE. According to the HVACquick cost website, a BROAN HRV with 65 percent SRE at the flow needed for the prototype buildings is estimated to cost \$989 with an estimated installation cost of \$325 resulting in a final cost of \$1,577 for the installation of an HRV with an SRE of 65 percent (RS Means 2024). As a result, the incremental construction cost for upgrading the SRE is \$216.

¹ <https://www.hvacquick.com/products/residential/HRVs-and-ERVs/Residential-HRV-ERV/Broan-AI-Series-Heat-Recovery-Ventilators-HRV-With-Side-Ports>, May 2024.

3.2.1.10 R408.2.6: ENERGY STAR appliances

The ENERGY STAR appliances energy credit was applied to all prototypes regardless of heating fuel type in climate zones 1 through 4. This energy credit measure replaces the standard efficiency appliances (refrigerator, dishwasher, clothes washer/dryer) with ENERGY STAR rated appliances. According to ENERGY STAR Single-Family New Homes, Version 3.2 (Rev.12) Cost & Savings Estimates (EPA 2023), moving from standard appliances to ENERGY STAR rated appliances (refrigerators, dishwashers, clothes washers/dryers) is estimated to incur an additional cost of \$138.

3.2.2 REPI-028 Fenestration U-Factors

REPI-028 lowers (makes more efficient) the U-factor required for residential fenestration (windows and doors) in climate zones 4C, 5 and 6 from 0.30 to 0.28 Btu/hr-ft²-F for the 2024 IECC. Fenestration U-factor requirements for climate zones 7 & 8 were reduced from 0.30 to 0.27. Skylight U-factor requirements in CZ 0-2 are changed from 0.75/0.65 to 0.60, from 0.55 to 0.53 in CZ 3, 4A and 4B, and from 0.55 to 0.50 in CZ 4C - 8 in Table R402.1.2 and R402.1.3. The PNNL residential prototype models do not contain skylights and are not part of the cost-effectiveness analysis.

The EPA single-family cost and savings estimate report (EPA 2023) shows the cost of moving from a window U-factor of 0.3 to 0.27 is \$0.82/ft² of window area converted to 2024 dollars. For the single-family prototypes, the incremental construction cost to move from a window U-factor of 0.30 to 0.27 is estimated to be \$292 while the multifamily dwelling unit incremental cost is estimated to be \$99.

3.2.3 REPI-033 Ceiling Insulation R-Values/U-Factors

REPI-033 reduces the stringency of ceiling insulation in climate zones 2 through 8. The ceiling insulation requirement in climate zones 2 and 3 is reduced from R-49 to R-38 for the 2024 IECC. The ceiling insulation requirement in climate zones 4 through 8 is reduced from R-60 to R-49. This reverts the ceiling insulation levels in climate zones 2 through 8 back to the levels specified in the 2018 IECC. To determine first cost of decreased ceiling insulation, it was assumed that cellulose insulation would be used as a lower cost alternative to fiberglass.

RS Means 2024 was used to obtain costs for cellulose insulation. RS Means 2024 shows the estimated cost to install R-38 cellulose insulation is \$1.84/ft² of ceiling area. The estimated cost to install R-49 cellulose insulation by extrapolation of data from RS Means 2024 is \$2.32/ft² of ceiling area. Thus, the incremental cost to install R-49 insulation for climate zones 2 and 3 is estimated to be \$0.52/ft² of ceiling area. The estimated cost to install R-60 cellulose insulation by extrapolation of data from RS Means 2024 is \$2.85/ft² of ceiling area. Thus, the incremental cost to install R-60 insulation for climate zones 4 through 8 is estimated to be \$0.52/ft² of ceiling area.

Given that the ceiling insulation is reduced in all climate zones, this will amount to an overall reduction of the construction cost in addition to reducing overall building thermal envelope efficiency. This proposal increases total on-site energy use. For the single-family prototypes, the estimated incremental construction cost is -\$618 and the multifamily dwelling units show an estimated incremental construction cost of -\$624.

3.2.4 REPI-063 Prescriptive Air Leakage (4.0 ACH50, climate zones 0 – 2)

REPI-063 reduces the prescriptive infiltration levels in climate zones 0 through 2 from 5.0 ACH50 to 4.0 ACH50. According to the NREL National Residential Efficiency Measures Database (NREL 2013), reducing air infiltration from 8.0 ACH50 to 5.0 ACH50 is estimated to cost \$0.73/ft² per finished floor area. Reducing air infiltration from 8.0 ACH50 to 4.0 ACH50 is estimated to cost \$0.94/ft² per finished floor area. To reduce the air infiltration from 5.0 ACH50 to 4.0 ACH50 results in an estimated cost of \$0.21/ft² per finished floor area. Converting the 2013 reduction in infiltration cost to 2024 dollars shows the estimated incremental cost at \$0.28/ft² per finished floor area. The total incremental cost for reducing air infiltration for the single-family prototypes is \$665 and the heated basement cost is \$998. The incremental cost for reducing air infiltration for the multifamily prototypes is \$336.

3.2.5 REPI-064 Prescriptive Air Leakage (2.5 ACH50, climate zones 6 – 8)

REPI-064 reduces the prescriptive infiltration levels in climate zones 6 through 8 from 3.0 ACH50 to 2.5 ACH50. According to the NREL National Residential Efficiency Measures Database, reducing air infiltration from 8.0 ACH50 to 3.0 ACH50 is estimated to cost \$1.20/ft² per finished floor area. Reducing air infiltration from 8.0 ACH50 to 2.5 ACH50 is estimated to cost \$1.30/ft² per finished floor area. To reduce the air infiltration from 3.0 ACH50 to 2.5 ACH50 results in an estimated cost of \$0.10/ft² per finished floor area. Converting the 2013 reduction in infiltration cost to 2024 dollars shows the estimated incremental cost at \$0.13/ft² per finished floor area. The incremental cost for reducing air infiltration for the single-family prototypes is \$414 and the heated basement cost is \$621. The incremental cost for reducing air infiltration for the multifamily prototypes is \$209.

3.2.6 REPI-089 Pipe Insulation

The 2024 IECC increases the minimum hot water pipe insulation from R-3 to a thickness of 1" of insulation based on insulation conductivity requirements in Table R403.5.2. This requirement applies across all prototypes and climate zones. For the pricing of pipe insulation, rubber tubing pipe insulation costs in 2024 RS Means were used. For the R-3 pipe insulation, 0.5" insulation was assumed for a 3/4" pipe size at an estimated installed cost of \$7.77/linear foot of pipe. The estimated installed cost of the 1.0" rubber tubing pipe insulation for a 3/4" pipe size is \$11.65/linear foot. This gives an estimated incremental cost of the 1.0" hot water pipe insulation is \$3.88/linear foot. The single-family prototype baseline piping layout has 77 ft of 3/4" pipe and the multifamily prototype baseline piping layout has 87 feet of 3/4" of hot water pipe. The single-family incremental cost is \$209 and multifamily incremental cost is \$299. The reduced cost of the pipe insulation as part of the compact hot water design were considered as part of the compact hot water design costs.

3.2.7 REPI-093 Heat Recovery Ventilation (HRV)

The 2024 IECC adds a requirement that dwelling units in climate zones 6 must be provided with a heat recovery or energy recovery ventilation system. These balanced ventilation systems must operate with a minimum SRE of 65 percent.

According to the HVACquick cost website¹, a BROAN™ HRV with 65 percent SRE at the flow rate necessary for the prototype dwelling units is estimated to cost \$989 with an installation cost according to 2024 RS Means estimated at \$325 would give a final cost of \$1,577 accounting for 20 percent overhead and profit.

3.2.8 RED1-110 Exterior Lighting Power Allowance

REDI-110 reduces the base site allowance from 400 W to 280 W and reduces most of the exterior lighting power density values. The changes in values stem from: Improvements in LED lighting technology, changes in design practices and a realignment in practice resulting in no-net cost increase for these changes.

It is hard to directly calculate the cost of the base site allowance power change because the value is designed to be flexible and cover any application. The 30 percent reduction in base site allowance is driven by changes in more efficient lighting as well design practices. LED lighting efficacy has increased by approximately 10 percent since the 2021 IECC.

Uncovered parking lighting allowance has a 35 percent reduction from the 2021 IECC. In terms of costs on a site, parking lighting with related trenching and bases for poles represents the largest costs on a given site. The parking area for this site is 19,843 ft². A parking space requires 350 ft² of space for the actual space and related drive paths, therefore, this site has 57 parking spaces. A design rule is roughly 1 light fixture per 20 parking spaces. Since using that linear approach would only require 3 fixtures so this analysis assumes 4 fixtures to account for symmetry and parking lot layout. This analysis assumed a design average illuminance of 0.5 fc across the parking lot.

Table 3.2.6 demonstrates that multiple light fixture options exist that allow the site to meet the desired parking lot illuminance within the allowed power requirements. The values in the table are from Grainger.² For the one option in the table that exceeds the parking lot lighting allowance, that lighting power density (LPD) of 0.028 is just slightly larger than the allowed LPD of 0.026. The additional wattage allowance could help offset any potential needed power.

Table 3.2.6. Parking Lot Fixture Prices

Grainger ID	Lumens (lm)	Power (W)	Efficacy (lm/W)	Fixture Price	Installed Power (W)	LPD* (W/ft ²)	Illuminance (fc)
53XH19	12,818	94	136	\$599.71	376	0.019	0.90
53XH20	13,776	94	147	\$599.71	376	0.019	0.97
12C683	10,000	82	122	\$1,178.36	328	0.017	0.70
45C243	8,400	140	60	\$1,422.29	560	0.028	0.59
784K42	11,400	70	163	\$399.78	280	0.014	0.80

* Assumes a CU of 0.82 and LLF of 0.85.

The fact that multiple fixture options exist that can meet the LPD in RED1-110 and a typical lighting design requirement demonstrates that the reduction in LPD from IECC 2024 is cost neutral.

¹ <https://www.hvacquick.com/products/residential/HRVs-and-ERVs/Residential-HRV-ERV/Broan-AI-Series-Heat-Recovery-Ventilators-HRV-With-Side-Ports>, May 2024.

² <https://www.grainger.com/category/lighting/outdoor-lighting/roadway-street-lights?categoryIndex=7>

3.3 Summary of Incremental Costs

Table 10 summarizes the incremental costs for each new code provision of the 2024 IECC evaluated in the present analysis compared to the 2021 IECC.

Table 3.2. Estimated Construction Cost Increase of the New Provisions of the 2024 IECC

Provision	Specifications	Scope	Associated Cost	Incremental Cost Used in Analysis (\$/dwelling unit)
Energy Credit Window U-factors from Table R408.2.1 in climate zone 5	Improve from 0.28 to 0.25 in climate zone 5	All new dwelling units, both single-family and multifamily	\$1.23/ft ² for all prototypes	\$149 for multifamily and \$438 for single-family buildings
Energy Credit: Gas Instant Water Heater UEF=0.95 in climate zone 5	Add gas-fired instantaneous water heater with a minimum uniform energy factor (UEF) of 0.95 in climate zone 5	All new fossil fuel dwelling units, both single-family and multifamily	\$627 for both single-family and multifamily and subtracting \$297	\$330 for single-family and multifamily prototypes
Energy Credit: Integrated HPWH UEF=3.30	Add an integrated heat pump water heater with a minimum uniform energy factor (UEF) of 3.30	All new electric dwelling units, both single-family and multifamily	\$621 for single-family; \$406 for multifamily	\$406 or \$621 based on building type
Energy Credit: Compact HW Distribution	Volume of water in piping from source of hot water to farthest fixture ≤ 16 oz	All new mixed-fuel dwelling units, both single-family and multifamily	-\$1,590 for single-family; -\$1,173 for multifamily	-\$1,173 or -\$1,590 based on building type
Energy Credit: 100% Ducts in Conditioned Space	Moves all ducts in unconditioned space to conditioned space for single-family prototypes in climate zones 1 through 4	All new mixed-fuel dwelling units, single-family	\$8.78/ft ²	\$1,222 for single-family buildings
Energy Credit: 80% Ducts in Conditioned Space	Moves ducts from unconditioned space to conditioned space to meet 80% for single-family prototypes in climate zones 5 through 8	All new electric dwelling units, single-family	\$7.02/ft ²	\$0 for multifamily and \$978 for single-family slab buildings
Energy Credit: High Performance Cooling	Replaces minimum efficiency central air conditioner with a 15.2 SEER2 system in climate zones 1 through 4	All new mixed-fuel dwelling units, both single-family and multifamily	\$498 for single-family; \$634 for multifamily	\$498 or \$634 based on building type
Energy Credit: High Performance Gas Furnace	Replaces minimum efficiency gas furnace with a 95 AFUE furnace in climate zones 4C through 8	All new mixed-fuel dwelling units, both single-family and multifamily	\$847 for single-family; \$952 for multifamily	\$847 or \$952 based on building type

Provision	Specifications	Scope	Associated Cost	Incremental Cost Used in Analysis (\$/dwelling unit)
multifamily				
Energy Credit: HRV with SRE at 75%	Adds a new HRV ventilation unit with SRE at 75% to replace the exhaust system in climate zone 4C for electric prototypes and climate zones 5 through 7 for fossil fuel prototypes	All new dwelling units, both single-family and multifamily	\$1,793 for climate zones 4C and 5, \$216 for climate zones 6 & 7	\$216 or \$1,793 based on climate zone
Energy Credit: ENERGY STAR appliances	Replace standard efficiency appliances in prototypes with ENERGY STAR rated appliances in climate zones 1 through 4	All new dwelling units, both single-family and multifamily	\$138 for both single-family and multifamily	\$138
Fenestration U-factor	Improve from 0.30 to 0.28 in climate zones 4C through 6 and from 0.30 to 0.27 in climate zones 7 & 8	All new dwelling units, both single-family and multifamily	\$0.82/ft ² for all prototypes	\$99 for multifamily and \$292 for single-family buildings
Ceiling Insulation R-Value	Reduce ceiling insulation R-value from R-49 to R-38 in climate zones 2 & 3 or from R-60 to R-49 in climate zones 4 through 8	All new dwelling units, both single-family and multifamily	\$0.52/ft ²	-\$624 for multifamily and -\$618 for single-family buildings
Air Leakage	Reducing air infiltration from 5.0 ACH50 to 4.0 ACH50 in climate zones 0 through 2	All new dwelling units, both single-family and multifamily	\$0.28/ft ²	\$336 for multifamily, \$998 for single-family heated basement buildings and \$665 for single family buildings
Air Leakage	Reducing air infiltration from 3.0 ACH50 to 2.5 ACH50 in climate zones 6 through 8	All new dwelling units, both single-family and multifamily	\$0.13/ft ²	\$209 for multifamily, \$621 for single-family heated basement buildings and \$414 for single family buildings
Heat recovery ventilation	Add heat recovery ventilation to climate zone 6	All new dwelling units, both single-family and multifamily	\$1,577	\$1,577 for each dwelling unit in climate zones 7 and 8
Pipe Insulation	Increasing pipe insulation for ¾" hot water piping from R-3 to 1"	All new dwelling units, both single-family and multifamily	\$3.88/ft ²	\$299 for multifamily and \$338 for single-family buildings
Exterior lighting	Exterior lighting allowances according to Table R404.1	Multifamily dwelling units	\$0.00/ft ²	\$0.00

The total incremental costs for the prescriptive and mandatory provisions of the 2024 IECC compared to those of the 2021 IECC, weighted by foundation and heating system type, are summarized in Table 11.

Table 3.3. Total Construction Cost Increase for the 2024 IECC Compared to the 2021 IECC

Climate Zone	Single Family 2,376 ft ²	Apartment/Condo 1,200 ft ²
1	1,541	1,801
2	921	1,354
3	236	1,067
4	-478	1,083
5	-261	-251
6	1,507	1,432
7	-43	-133
8	-257	-316
National Average	282	949

4.0 Economic Analysis

This section provides an overview of the methodology used in evaluating the cost-effectiveness of the prescriptive and mandatory provisions of the 2024 IECC compared to those of the 2021 IECC. Cost-effectiveness results for life-cycle cost (LCC) savings, simple payback, and cash flow are calculated for each building type in each climate zone; the results are weighted using factors detailed in Section 1.2.3 to aggregate results to the climate zone level.

4.1 DOE Residential Cost-Effectiveness Methodology

DOE developed a standardized methodology for determining the cost-effectiveness of residential energy code changes. The established methodology¹ describes the process of assessing energy savings and cost-effectiveness and is used by DOE in the evaluation of published codes as well as code changes proposed by DOE for inclusion in the IECC (Salcido et al. 2024). The methodology forms the basis of this cost-effectiveness analysis by

- defining an energy analysis procedure, including definitions of two building prototypes (single-family and multifamily), identification of preferred calculation tools, and selection of climate locations to be analyzed
- establishing preferred construction cost data sources
- defining cost-effectiveness metrics and associated economic parameters
- defining a procedure for aggregating location-specific results to state, climate zone, and national levels
- defining strategies for the inclusion of societal benefits (e.g., emissions impacts).

Per the methodology, DOE calculates three metrics from the perspective of the homeowner—LCC, simple payback, and cash flow. LCC is the primary metric used by DOE for determining the cost-effectiveness of an overall code or individual code change. The economic parameters used in the current cost-effectiveness analysis are summarized in Table 4.1. DOE updated the economic parameters following the established methodology to account for changing economic conditions.

¹ See DOE Residential Energy and Cost Analysis Methodology at: https://www.energycodes.gov/sites/default/files/2024-10/residential_methodology_2024.pdf

Table 4.1. Summary of Economic Parameters Used in Cost-Effectiveness Analysis

Parameter	Value
Mortgage Interest Rate	5%
Loan Term	30 years
Down-Payment Rate	10% of home price
Points and Loan Fees	0.9% (non-deductible)
Analysis Period	30 years
Property Tax Rate	0.86% of home price/value
Income Tax Rate	22% federal
Inflation Rate	2.2% annual
Home Price Escalation Rate	Equal to inflation rate

4.2 Fuel Prices and Escalation Rates

Data published by the EIA are used to determine the latest national average fuel prices for the three fuel types considered in this analysis—electricity, natural gas, and fuel oil. To avoid seasonal fluctuations and regional variations in the price of electricity, the analysis used the average annual residential electricity price of 15.98 ¢/kWh (EIA 2024a). The EIA reports a national annual average cost of \$14.406/1,000 ft³ for natural gas and an average heat content of 1,036 Btu/ft³ for natural gas delivered to consumers in 2016 (EIA 2024b, 2024c). The resulting national average price of \$1.391/therm for natural gas was used in this analysis. In addition, the EIA reports a national annual average cost of \$4.1392/gallon for No. 2 fuel oil (EIA 2024d). The heat content of No. 2 fuel oil is assumed to be 138,500 Btu/gallon (EIA 2024b), resulting in a national average price of \$29.89/million Btu for fuel oil.

4.3 Energy Cost Savings

The calculation of cost-effectiveness metrics primarily requires annual energy cost savings and the associated incremental costs. Energy estimates from the simulations are converted to energy costs using the latest fuel prices described in Section 4.2. Table 13 summarizes the first year annual energy cost savings per dwelling unit for the 2024 IECC compared to the 2021 IECC, aggregated over all 32 residential prototype building models using weighting factors described in Section 1.2.3. Energy cost savings stated in the 2024 IECC Determination report (Salcido et al. 2024) are time zero dollars which are not escalated due to inflation or fuel price escalation.

Table 4.2. Average Annual Energy Cost Savings for the 2024 IECC

Climate Zone	Compared to the 2021 IECC (\$/dwelling unit yr)
1	180
2	190
3	140
4	177
5	133
6	191
7	309
8	379
National Average	163

4.4 Life-Cycle Cost

LCC is the primary metric used by DOE to determine the cost-effectiveness of the code or specific code changes. LCC is the total consumer cost of owning a home for a single homeowner calculated over a 30-year period. The economic analysis assumes that initial costs are mortgaged, that homeowners take advantage of the mortgage interest deductions, that short-lived efficiency measures are replaced at end-of-life, and that all efficiency measures with useful life remaining at the end of the 30-year period of analysis retain a residual value at that point.

Table 4.3 shows the LCC savings (discounted present value) per home over the 30-year analysis period for the prescriptive and mandatory provisions of the 2024 IECC compared to those of the 2021 IECC. These savings are aggregated over all 32 residential prototype buildings using weights described in Section 1.2.3.

Table 4.3. Life-Cycle Cost Savings for the 2024 IECC

Climate Zone	Compared to the 2021 IECC (\$/dwelling unit)
1	2,406
2	3,254
3	2,509
4	3,790
5	2,496
6	2,190
7	7,422
8	9,481
National Average	2,954

4.5 Simple Payback

Simple payback is a commonly used measure of cost-effectiveness, defined as the number of years required for the sum of the annual returns on an investment to equal the original investment. Simple payback does not take into consideration any financing of the initial costs through a mortgage or favored tax treatment of mortgages. In other words, simple payback is the ratio of the incremental cost of construction and the first-year energy cost savings. The simple payback is reported for information purposes only and is not used as a basis for determining the cost-effectiveness of the 2024 IECC.

Table 4.4 shows the simple payback period of the 2024 IECC when compared to the 2021 IECC aggregated over all 32 residential prototype buildings using weights described in Section 1.2.3. As seen from the table, the simple payback period for the 2024 IECC compared to that of the 2021 IECC ranges from 0 to 9 years, depending on climate zone.

Table 4.4. Simple Payback Period for the 2021 IECC

Climate Zone	Compared to the 2018 IECC (Years)
1	9
2	5.2
3	2.7
4	0
5	0
6	7.8
7	0
8	0
National Average	2.5

4.6 Cash Flow

Most houses are financed¹, and the financial implications of buying a home constructed to meet the provisions of the 2024 IECC compared to the provisions of the 2021 IECC are important to homeowners. Mortgages spread the payment for the cost of a house or an apartment over a long period of time and the cash flow analysis clearly depicts the impact of mortgages. This analysis assumes a 30-year fixed-rate mortgage and that the homebuyers will deduct the interest portion of the payments from their income taxes.

Table 16 shows the impact of the provisions of the 2024 IECC on a typical consumer's cash flow compared to that of the 2021 IECC aggregated over all 32 residential prototype buildings using weights described in Section 1.2.3. In all climate zones, beginning in year 1, there is a net positive cash flow per year to the customer for the 2024 IECC-compliant home when compared

¹ <https://www.statista.com/statistics/185206/us-house-sales-with-fha-and-va-insured-mortgages-from-2002/>

to the 2021 IECC-compliant home. Positive cumulative savings, including payment of up-front costs, are achieved in 0 to 2 depending on the climate zone.

Table 4.5. Impacts on Consumer Cash Flow from the 2021 IECC

Climate Zone	Compared to the 2018 IECC	
	Net Annual Cash Flow Savings (\$ for Year 1)	Years to Cumulative Positive Cash Flow
1	86	2
2	135	1
3	122	1
4	192	0
5	154	0
6	105	2
7	324	0
8	410	0
National Average	144	1

5.0 Conclusions

As seen from the cost-effectiveness results presented in Section 4.0, residential buildings constructed to the prescriptive and mandatory requirements of the 2024 IECC save homeowners money over the life of their homes compared to those built to the prescriptive and mandatory requirements of the 2021 IECC.

The prescriptive and mandatory provisions of the 2024 IECC are shown to generate an average life-cycle cost savings of \$2,954, an average payback of 2.5 years, and the years to cumulative positive cashflow averaging 1 year for all climate zones. The results illustrate that homeowners can benefit financially from the investment in energy efficiency of the 2024 IECC. The results also show that the higher efficiency of the 2024 IECC can require decreased or increased investment with moderate payback times while remaining cost-effective.

6.0 References

42 U.S.C. 6831 et seq. Chapter 42, U.S. Code, Section 6831. Available at <http://www.gpo.gov/fdsys/granule/USCODE-2010-title42/USCODE-2010-title42-chap81-subchapII-sec6831>.

42 U.S.C. 6833. Chapter 42, U.S. Code, Section 6833. Available at <http://www.gpo.gov/fdsys/pkg/USCODE-2011-title42/pdf/USCODE-2011-title42-chap81-subchapII.pdf>.

ASHRAE 2013. ANSI/ASHRAE Standard 169-2013. *Climatic Data for Building Design Standards*. American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Atlanta, Georgia.

BECP – Building Energy Codes Program. 2024. Status of State Residential Energy Code Adoption as of February 2024. Available at <http://www.energycodes.gov/adoption/states>.

Census. 2020. *Characteristics of New Housing*. U.S. Census Bureau, Washington, D.C. Available at <http://www.census.gov/construction/chars/completed.html>.

DOE – U.S. Department of Energy. 2012. Building Component Cost Community Database. Available at <https://bc3.pnnl.gov/>.

DOE – U.S. Department of Energy. 2014. *Preliminary Determination Regarding Energy Efficiency Improvements in the 2015 International Energy Conservation Code*. Available at <http://www.regulations.gov/#!documentDetail;D=EERE-2014-BT-DET-0030-0001>.

DOE – U.S. Department of Energy. 2015. *Determination Regarding Energy Efficiency Improvements in the 2015 International Energy Conservation Code*. Available at <https://www.regulations.gov/document?D=EERE-2014-BT-DET-0030-0007>.

DOE – U.S. Department of Energy. 2015. DOE Zero Energy Ready Home Savings & Cost Estimate Summary. U.S. Department of Energy, Washington, D.C. <https://energy.gov/eere/buildings/downloads/doe-zero-energy-ready-home-savings-and-cost-estimate-summary>

DOE – U.S. Department of Energy. 2019. *National Cost-Effectiveness of the Residential Provisions of the 2018 IECC*. U.S. Department of Energy, Washington, D.C. [Pending Release](#).

DOE – U.S. Department of Energy. 2024. *EnergyPlus, Version 23.1.0*. U.S. Department of Energy, Washington, D.C. Available at <https://energyplus.net/downloads>.

EIA – U.S. Energy Information Administration. 2024a. Table 5.3. Average Price of Electricity to Ultimate Customers. U.S. Energy Information Administration, Washington D.C. Available at https://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_5_3

EIA – U.S. Energy Information Administration. 2024b. Natural Gas. U.S. Energy Information Administration, Washington D.C. Available at https://www.eia.gov/dnav/ng/ng_pri_sum_a_EPG0_PRS_DMcf_a.htm

EIA – U.S. Energy Information Administration. 2024c. Natural Gas Heat Content. U.S. Energy Information Administration, Washington D.C. Available at https://www.eia.gov/dnav/ng/ng_cons_heat_a_EPG0_VGTH_btucf_a.htm

EIA – U.S. Energy Information Administration. 2024d. Petroleum Marketing. U.S. Energy Information Administration, Washington D.C. Available at https://www.eia.gov/dnav/pet/PET_PRI_WFR_A_EPD2F_PRS_DPGAL_W.htm

EPA – U.S. Environmental Protection Agency. 2018. *ENERGY STAR Multifamily New Construction, Version 1.1 Cost & Savings Estimates*. Washington D.C. Available at <https://www.energystar.gov/sites/default/files/asset/document/ENERGY%20STAR%20MFNC%20Cost%20Savings%20Summary%20Version%201.1.pdf>

EPA – U.S. Environmental Protection Agency. 2023. *ENERGY STAR Single-Family New Homes Version 3.2 (Rev. 12) Cost & Savings Estimates*. Washington D.C. Available at <https://www.energystar.gov/sites/default/files/asset/document/ENERGY%20STAR%20Version%203.2%20Cost%20%20Savings%20Summary.pdf>

ICC – International Code Council. 2011. *2012 International Energy Conservation Code*. Washington, D.C.

ICC – International Code Council. 2014. *2015 International Energy Conservation Code*. Washington, D.C.

ICC – International Code Council. 2017. *2018 International Energy Conservation Code*. Washington, D.C.

ICC – International Code Council. 2021. *2021 International Energy Conservation Code*. Washington, D.C.

ICC – International Code Council. 2024. *2024 International Energy Conservation Code*. Washington, D.C.

Less BD, IS Walker, N Casquero-Modrego and LI Rainer. 2021. *The Cost of Decarbonization and Energy Upgrade Retrofits for U.S. Homes*. Lawrence Berkely National Laboratory. Berkeley, California. Available at https://eta-publications.lbl.gov/sites/default/files/final_walker_-_the_cost_of_decarbonization_and_energy.pdf

RECS – Residential Energy Consumption Survey. 2020. *2020 RECS Survey Data*. U.S. Energy Information Administration, Washington D.C. Available at <https://www.eia.gov/consumption/residential/data/2020/>

RS Means. 2024. *2024 Residential Cost Data*. RS Means Company. Kingston, Massachusetts.

Salcido V. Robert, Y Chen, Y Xie and ZT Taylor. 2021. *Energy Savings Analysis: 2021 IECC for Residential Buildings*. PNNL-31440. Pacific Northwest National Laboratory, Richland, Washington. Available at https://www.energycodes.gov/sites/default/files/2021_07/2021_IECC_Final_Determination_AnalysisTSD.pdf

Salcido V. Robert, Y Chen, Y Xie, YJ Jung, F Feng and C Faulkner. 2024. *Energy Savings Analysis: 2024 IECC for Residential Buildings*. Prepared for the U.S. Department of Energy by

Pacific Northwest National Laboratory, Richland, Washington. Available at https://www.energycodes.gov/sites/default/files/2024-12/2024_IECC_Determination_TSD.pdf

Salcido V. Robert, Y Xie and VR Mendon. 2024. *Methodology for Evaluating Energy Savings, Cost-Effectiveness and Societal Impacts of Residential Energy Code Changes*. Prepared for the U.S. Department of Energy by Pacific Northwest National Laboratory, Richland, Washington. Available at https://www.energycodes.gov/sites/default/files/2024-10/residential_methodology_2024.pdf

Wei J, A Pande, C Chappell, M Christie and M Dawe. 2015. *Residential Ducts in Conditioned Space/High Performance Attics*. Case Report 2016-RES-ENV1-F. TRC Energy Services. Windsor, Connecticut. Available at <https://efiling.energy.ca.gov/GetDocument.aspx?tn=74503>

Wilson E, C Engebrecht Metzger, S Horowitz, and R Hendron. 2014. *2014 Building America House Simulation Protocols*. National Renewable Energy Laboratory, Golden, Colorado. Available at http://energy.gov/sites/prod/files/2014/03/f13/house_simulation_protocols_2014.pdf.

Appendix A – Qualitative Analysis of 2021 IECC

Table A.1. Qualitative Analysis of 2021 IECC Code Changes Affecting Energy Use

Proposal Number ^(a)	Code Section(s) ^(b)	Description of Change(s)	Impact on Energy Efficiency	Included in Energy Analysis	Discussion
REPI-018-21	R401.2, R401.2.1, R401.2.5, R401.3, R405.2, SECTION R408, R408.1, R408.2, TABLE R408.2 (New), R408.2.1, R408.2.1.1 (New), R408.2.1.2 (New), TABLE R408.2.1.2 (New), R408.2.2, R408.2.3, R408.2.4, R408.2.5, R408.2.7 (New), TABLE R408.2.7 (New), R408.2.8 (New)	Changes the Section R408 additional efficiency packages to an energy credit methodology. Each residential building must select at least two energy credit measures to achieve 10 energy credits.	Reduces energy use	Yes	The energy credit methodology provides a path to increase the energy efficiency of a residential building while providing design flexibility. There are a total of 51 energy credit measures for envelope, HVAC, service water heating, duct leakage and location, air leakage and ventilation, demand response, lighting, efficient appliances and on-site renewable energy. Each energy credit represents 1% reduction in total energy savings.
REPI-028-21	TABLE R402.1.2, TABLE R402.1.3	Reduced fenestration U-factors in climate zones 4 and 5 to from 0.30 to 0.28 and reduced all skylight U-factor requirements to 0.6 in CZ 0-2, 0.53 in CZ 3, 4A and 4B, and 0.50 in CZ 4C - 8 in Table R402.1.2 and R402.1.3.	Reduces energy use	Yes	

REPI-063-21	R402.4.1.2, R402.4.1.3, TABLE R405.4.2(1)	Changes the prescriptive air leakage requirements in climate zones 0, 1 and 2 from 5.0 ACH50 to 4.0 ACH50. The air leakage of the standard reference home in Table R405.4.2(1) is set to 4.0 ACH50 in climate zones 0 through 2	Reduces energy use	Yes	
REPI-064-21	R402.4.1.2, R402.4.1.3, TABLE R405.4.2(1), R408.2.5	Changes the prescriptive air leakage requirements in climate zones 3 through 8 from 3.0 ACH50 to 2.0 ACH50. The air leakage of the standard reference home in Table R405.4.2(1) is set to 2.0 ACH50 in climate zones 4 through 8.	Reduces energy use	Yes	The air leakage for this proposal was adjusted to keep the prescriptive air leakage requirements at 3.0 ACH50 for climate zones 3 through 5 and 2.5 ACH50 for climate zones 6 through 8.
REPI-089-21	R403.5.2, TABLE C403.12.3, TABLE R405.2, TABLE R406.2	Increases pipe insulation for hot water piping from R-3 to 1 inch of insulation which applies to all sizes of piping.	Reduces energy use	Yes	One inch of pipe insulation will achieve an R-7 level of insulation.
REPI-093-21	R403.6.1	Dwelling units shall be provided with a heat recovery or energy recovery ventilation system in Climate Zones 5 through 8. The ventilation system shall be balanced with a minimum SRE of 65 percent at 32°F (0°C) at a flow greater than or equal to the design airflow.	Reduces energy use	Yes	The proposal was modified to remove the HRV requirement for climate zone 5 so the final adjustment is to add HRV requirement for ventilation in climate zone 6 on top of the 2021 IECC requirement of HRVs in climate zone 7 and 8.
RED1-110-22	R404.1.2, R404.1.3, R404.1.4, TABLE R404.1	Revises the exterior lighting sections and adds a new lighting power allowance table to match the equivalent requirements in IECC-C. Additional exceptions from IECC-C were added that could apply to the Group R occupancies.	Reduces energy use	Yes	Previously in 2021 IECC, the exterior lighting for low-rise multifamily buildings was required to comply with the commercial exterior lighting provisions.
REPI-033-21	TABLE R402.1.2, TABLE R402.1.3, R408.2, R408.2.1 (New), R408.2.1-R408.2.4	Ceiling insulation in Table R402.1.3 was reduced from R-49 to R-38 in climate zones 2 and 3 and reduced from R-60 to R-49 in climate zones 4 through 8. The associated ceiling U-factors were adjusted for the same climate zones in Table R402.1.2. The new U-factor for	Increase energy use	Yes	This proposal adjusts the ceiling insulation in climate zones 2 through 8 back to the 2018 IECC levels.

climate zones 2 and 3 is 0.030 and 0.026 for climate zones 4 through 8.					
CEPI-082-21 Part II	R403.9, R403.10 (New)	Requires controls for roof and gutter de-icing systems to shut off at temperatures above 40°F through moisture sensors or timer control.	Reduces energy use	No	Roof and gutter deicing systems use energy and are often left running at times that are unnecessary for ice dam prevention. Provides automatic controls that limit the system from running when outdoor temperature is above 40°F. Roof and gutter deicing systems are not included in the residential prototypes and not included in the quantitative analysis.
RECD1-7-22	TABLE R406.5	Updates the newly added Energy Rating Index (ERI) with on-site power production (OPP) targets for Table R406.5.	Reduces energy use	No	The original ERI with OPP targets were set at 40 for all climate zones. The updated ERI with OPP targets were based on ERI analysis.
RECPI-10-21	R408.2.3, Table R408.2.3 (New)	Updates the service water heating equipment list based on system type, fuel and capacity as well as the format of Table R408.2.3 for the SWH energy credit measures.	Reduces energy use	No	This proposal was disapproved by subcommittee and the version of table proposed by AHRI was approved.
RED1-027-22	APPENDIX RG (New), RG101 (New), RG405.2 (New), RG406.5 (New), R406.5 (New), RG408.2 (New)	Adds optional Appendix RG for the 2024 IECC Stretch Code with three compliance paths; prescriptive, total building performance and ERI.	Reduces energy use	No	Appendix RG would require an additional 10% efficiency (on average) to be designed into the home over the baseline 2024 IECC prescriptive requirements. Only reduces energy use if Appendix RG is adopted.
RED1-071-22	R408, R408.1, R408.2, TABLE R408.2, R408.2.1, R408.2.1.1,	Adds a new infiltration measure and language to clarify compliance methodology in Section R408 for additional efficiency requirements.	Reduces energy use	No	The added infiltration measure requires the air leakage rate to not be greater than 2.0 ACH50 but not more than 2.5 ACH50 across all

R408.2.1.2,
R408.2.1.3,
R408.2.1.4 (New)

climate zones. A cost-effective set of energy credits will be part of the quantitative analysis.

RED1-076-22	SECTION 202, TABLE R408.2, R408.2.7, R408.2.8 (New)	Adds off-site renewable power generation to the list of energy credit measure options in Table R408.2.	Reduces energy use	No	To receive energy credit for off-site renewable energy, a renewable energy power purchase agreement would need a 15-year contract at a minimum and offset 80% of the estimated whole-building electric use on an annual basis. The exact credits were determined based on simulation analysis which provided more than enough energy credits for compliance in all climate zones. A cost-effective set of energy credits will be part of the quantitative analysis.
RED1-079-22	TABLE R408.2, R408.2.1.1	Adds three additional envelope energy credit measures of UA improvement options of 15%, 20% and 30% as compared to the prescriptive baseline.	Reduces energy use	No	These new options allow additional energy credits for improved envelope design. There was an option in this proposal to remove some of the original envelope UA measures (2.5%, 5% and 7.5) since they were not differentiated enough. The final decision by committee was to keep the original UA measures and add the new three UA measures. A cost-effective set of energy credits will be part of the quantitative analysis.

RED1-091-22	Appendix RP (New), RP101 (New), RP102 (New), RP103 (New), RP103.1 (New), RP103.1.1 (New), RP103.1.1.1 (New), RP103.2 (New), RP103.1.3 (New), TABLE RP103.1.3 (New); IRCECC: RP103.1.1.1 (New)	Adds optional Appendix RP for on-site renewable energy with new definitions that describes the requirements for prescriptive solar PV to be installed at the time of construction.	Reduces energy use	No	Terms defined for solar zone area, annual solar access and physical renewable energy power purchase agreement. Requires an on-site renewable energy system not less than 2.0 kW for single family homes or not less than 0.75 Watts/ft ² for R-2 and R-4 occupancies. Exceptions are added based on shading, climate zone or existing renewable energy power purchase agreements. Capacity requirements may differ for compliance demonstrated by R405 or R406 ERI compliance. A new set of ERI with OPP targets are defined for all climate zones. Only reduces energy use if Appendix RP is adopted.
RED1-166-22	R408, R408.1, R408.2, TABLE R408.2, R408.2.10 (New)	Adds an additional energy credit measure in Table R408.2 for whole home lighting control and a new Section R408.2.10 to determine the qualification for achieving the energy credits.	Reduces energy use	No	For whole home lighting control energy credit, a home or dwelling unit must have a switch at the main entrance to turn off all permanently installed interior lighting or the same operation with remote control. Lighting studies supplied with the proposal estimated that whole house lighting savings of 11% could be achieved with whole home lighting control. A cost-effective set of energy credits will be part of the quantitative analysis.
RED1-199-22	TABLE R402.1.2, TABLE R402.1.3; IRCECC: TABLE N1102.1.2, TABLE N1102.1.3	Modifies footnote for window U-factors for high elevation or windborne regions in Tables R402.1.3 and N1102.1.3 to align with previously adopted proposals.	Reduces energy use	No	Requires a fenestration U-factor of 0.30 in climate zones 4C and 5-8 for elevations above 4,000 ft or in windborne regions. Prescriptive fenestration U-factors remain unchanged so will not be part of the quantitative analysis.

RED1-263-22	R202 (New), TABLE R408.2, R408.2.10 (New), R502.2.5, R503.1.5, R506.1	Adds new definition for Substantial Improvement, a new energy credit measure for high efficacy lighting and clarifying language for additional efficiency requirements for additions and substantial improvements.	Reduces energy use	No	Adapts the language for alterations and additions to make it compatible with the new energy credits methodology. Section 506 which references the additional efficiency packages was no longer necessary and removed. The energy credit requirements for additions is 5 credits and alterations need 1 credit. The energy credits allow more flexibility in alterations and additions for additional efficiency.
RED1-310-22	R403.5.1.1; IECC: R403.5.1.1.1	Adjusts language for circulation and demand recirculation hot water systems to minimize circulation pump operation by way of control strategies.	Reduces energy use	No	Adds water temperature in the pipe to prevent activation of demand control recirculation pumps to minimize accidental triggers.
RED1-339-22	TABLE R405.4.2(1)	Adds provisions to Table R405.4.2(1) to require ducts to be placed in conditioned space for the standard reference design.	Reduces energy use	No	This proposal was in response to changes in duct location for the standard reference design in Table R405.4.2(1). The 2021 IECC and all previous editions placed the ducts in the standard reference design in the same location as the proposed design. An adopted proposal changed the location to a combination of locations (conditioned and unconditioned) based on number of stories and foundation type. Through consensus, an agreement was made to adjust the duct locations for conditioned basements.
RED1-351-22	R408.2.2, TABLE R408.2	Adds additional HVAC energy credit measures to encourage homeowners and builders to install efficient HVAC products. More energy efficient product options by climate zones matched with potential credits.	Reduces energy use	No	This proposal provides 14 energy credit measures for high efficiency HVAC equipment and aligns the additional HVAC energy credits with the requirements in the Inflation Reduction Act (IRA) for tax credits for high efficiency HVAC and water heating products.

RED1-358-22	TABLE R408.2.3	Provides more energy credits for higher-efficiency service water heating equipment which will encourage homeowners and builders to install efficient water heater products. ENERGY STAR product specifications and Consortium for Energy Efficiency (CEE) are aligned with the efficiency levels for service water heating options in Table R408.2.	Reduces energy use	No	This proposal provides 11 energy credit measures for high efficiency water heating equipment and aligns the additional water heating energy credits with the requirements in the Inflation Reduction Act (IRA) for tax credits for high efficiency HVAC and water heating products.
RED1-360-22	TABLE R408.2.6, R408.2.6; IECC: SECTION 202 (New)	Aligns the high efficiency appliances energy credit measure with ENERGY STAR product specifications to achieve energy credits. This proposal removed all references to the ENERGY STAR program and utilized annual energy consumption requirements.	Reduces energy use	No	Adds an exemption for Group R-2 dwelling units where a dishwasher is not installed can obtain high efficiency appliance energy credit with two appliance types. Common areas need to fully comply with the energy credit requirements.
REPI-004-21	R102.1.1	Changed the envelope efficiency backstop requirement strategy from an earlier code edition (2009 IECC) to a UA methodology - 1.15 x UA of the prescriptive reference design for compliance using above code programs.	Reduces energy use	No	Through simulation analysis, the 1.15 UA of the standard reference design is equivalent to the 2006 IECC or the 2009 IECC in most climate zones.
REPI-020-21	R405.2, R408.2	Increases the stringency of R405 total building performance compliance by requiring that the proposed home have less than or equal to 90% of the annual energy costs of the standard reference design. For any home over 5,000 sq ft, another 5% reduction in energy costs is required. For prescriptive compliance, a home over 5,000 sq ft is required to obtain 15 energy credits.	Reduces energy use	No	This proposal requires and additional 10% efficiency for the total building performance compliance and 15% more for any building over 5,000 sq ft in both prescriptive and performance compliance. ERI compliance includes an size adjustment factor in the RESNET 301 Standard.
REPI-039-21	R202 (New), R402.2.3 (N1102.2.3) (New), R402.2.3.1	Adds new language to define and describe how to address attic knee walls. It also adds this assembly to the list of required assemblies that	Reduces energy use	No	

(N1102.2.3.1) (New), must be detailed in the requirements section of the IECC.
TABLE R405.2

REPI-050-21	TABLE R402.4.1.1	Adjusts the language for HVAC register boots in Table R402.4.1.1 for air barrier, air sealing and insulation installation to require that all supply and return registers be sealed to the surface they are penetrating.	Reduces energy use	No	This proposal aligns the air sealing requirement for HVAC register boots with ENERGY STAR requirements.
REPI-060-21	R402.4.1.2	Increases the maximum tested air leakage rate in Section R402.4.1.2 to 4.0 ACH50 or 0.22 CFM25 / sq ft of dwelling unit enclosure area.	Reduces energy use	No	The proposed air leakage rate change applies to the total building performance compliance and does not change the prescriptive air leakage rates. This change is not part of the quantitative analysis.
REPI-065-21	R402.4.2.1 (N1102.4.2.1) (New), ANSI Chapter 06 (New), CSA Chapter 06 (New)	Adds a new section to specify minimum efficiency levels for gas fireplace heaters at 50%. Also adds two references to Chapter 6 for ANSI and CSA as testing procedures.	Reduces energy use	No	
REPI-068-21	R202 (New), R402.6 (New), TABLE R402.6 (TABLE N1102.6) (New), R402.6.1 (N1102.6.1) (New), TABLE R405.4.2(1), R407.2, R503.1.1, ASTM Chapter 06 (New), CRRRC Chapter 06 (New), TABLE R406.2	Adds new definitions for low/steep sloped roofs and a new Section R402.6 to define the requirements for a cool roof in climate zones 0 - 3 and provides methods to determine the aged solar reflectance. Adds these requirements for tropical climate regions and remodeled building envelope assemblies.	Reduces energy use	No	Reflectance and TE values degrade over time, hence 3-year aged values are used for the performance benchmark referred to as aged solar reflectance (ASR) and TE

REPI-073-21	R403.1.2	Reconfigures heat pump supplementary heat requirements to prevent supplemental heating when the capacity of the heat pump compressor can serve the heating load and describes the times when supplementary heat operation is justified.	Reduces energy use	No	This proposal will prevent operation of electric resistance heaters installed in heat pumps that are configured to operate in conditions where sufficient heating capacity is available from the heat pump alone.
REPI-074-21	R202 (New), R403.1.3 (New), ANSI Chapter 06 (New)	Adds new definitions for pilot light operation and adds a new section for continuously burning pilot lights.	Reduces energy use	No	On-demand, intermittent or interrupted ignition pilot lights (as defined in ANSI Z21.20) are not considered to have a continuously burning pilot light.
REPI-086-21	R403.3, R403.3.5, R403.3.6, TABLE R403.3.6 (New), TABLE R405.2, TABLE R405.4.2(1), TABLE R405.4.2(2), TABLE R406.2	Adjusts duct leakage testing language to clarify testing requirements and allowing duct leakage to outside for compliance procedures of R405 or R406 but cannot be used for total duct leakage testing requirements. Also defines a new Table R403.3.6 defining maximum total duct leakage rates based on conditioned floor area and construction.	Editorial - No energy impact	No	Table R403.3.6 shows the maximum duct leakage rates that existed in R403.3.6 for better clarity of the exact requirements based on air handler installation and construction period.
REPI-091-21	R403.5.4 (New), TABLE R403.5.4 (New)	Adds new code language to determine the water volume in ounces in hot water piping based on pipe length, pipe material and nominal size (inches). New Table R403.5.4 provides the internal volume of various water distribution tubing.	Reduces energy use	No	The water volume determination in hot water piping is used in combination with the compact hot water design energy credit which requires not more than 16 ounces of hot water from the source of hot water to the farthest fixture.
REPI-099-21	R202 (New), R403.7.1 (New), TABLE R405.2, TABLE R406.2	Adds a new definition for zonal heating and a new section for operational requirements of single-family homes with electric resistance zonal heating units in climate zones 4 - 8.	Reduces energy use	No	This proposal adds a requirement for homes with zonal electric heating as the primary heating source to install an additional heat pump unit not less than 6.3 HSPF2 in the largest living zone.

REPI-115-21	R202 (New), R103.2.4 (New), R105.2.5 (New), R404.4 (New), R404.4.1 (New), R404.4.2 (New), R404.4.2.1 (New), R404.4.2.2 (New), R404.4.2.3 (New), R404.4.2.4 (New), TABLE R405.2, TABLE R406.2	Adds a new definition for energy storage system (ESS) and defines the electrical and inspection requirements for an energy storage system readiness and adds the requirements to the mandatory requirements tables in Sections R405 and R406.	Reduces energy use	No	Energy storage systems such as Battery Energy Storage Systems charge during the peak PV generation hours and can discharge in late afternoon and evening as the sun sets. Considering these energy storage systems reduce the back feed into the grid, they help with grid management, as well as provide a financial buffer for differing net energy metering policies by states and utilities. In an ideal case, a home with PV and ESS can be nearly "invisible" to the grid.
REPI-118-21	R405.2	Changes the methodology of the building thermal envelope backstop for total building performance compliance from meeting the provisions of an earlier energy code edition to meeting a specific UA level of the current energy code.	Reduces energy use	No	In the 2021 IECC, the building thermal envelope backstop for total building performance compliance was showing equivalency to the 2009 IECC. Now, a UA analysis must be performed where the design home UA must be not greater than 1.15 x UA of the standard reference design.
REPI-122-21	R401.2.5, R405.2, TABLE R405.4.2(1), TABLE R405.4.2(2), DOE Chapter 06 (New)	Removes the R408 additional efficiency requirements from R405 total building performance compliance, aligns the building thermal envelope backstop requirements to the new UA methodology, and changes the performance compliance for the proposed design to have not more than 80% or 85% of the standard reference home design costs for mixed fuel or all-electric homes respectively. Changes to the R405.4.2(1) tables to specify federal minimum efficiency HVAC and service water heating systems and specific duct locations in the standard reference design.	Reduces energy use	No	The 2021 IECC Standard Reference Design specified HVAC and SWH equipment efficiency and duct location to be the same as the proposed design to prevent envelope trade-offs. This proposal returns the HVAC and SWH equipment efficiencies to the federal minimum efficiency standards and sets defined locations for ducts based on number of stories and foundation type. This change will allow trade-offs with other efficiency measures but does include more stringent compliance requirements to counter these changes for equipment efficiency and duct location.

REPI-126-21	R406.2, R406.3, R406.3.1, R406.3.2, R406.4, R406.5, TABLE R406.5	Adds an optional Energy Rating Index (ERI) target that includes on-site power production (OPP) at 40 for all climate zones. The ventilation adjustment for the ERI Reference Home in Section R406.4 was removed. Provisions were set to specify which ERI target could be used for compliance and the envelope backstop was updated to the UA methodology as approved in previous proposals.	Reduces energy use	No	The ERI with OPP targets can be used for compliance for homes with on-site renewable energy systems. The ERI with OPP targets are optional where a home with a renewable energy section can choose to meet the ERI without OPP targets but cannot use the renewable energy generation as part of the proposed design ERI.
REPI-136-21	R408.2, R408.2.2	Adds additional efficiency package measures for Section R408.2.2 (N1108.2.2) More Efficient HVAC Equipment Performance Options based on central ducted and ductless systems. Updates heat pump efficiency metrics to SEER2 and HSPF2.	Reduces energy use	No	This proposal worked off the 2021 IECC Additional Efficiency Package Options and was approved before the energy credits methodology was considered and approved. The existing measures became part of the new energy credits measures.
REPI-142-21	408.2.6 (New)	Adds a new section R408.2.6 for compact hot water design energy credits. The sections requires not more than 16 ounces of water between the nearest source of heated water and the termination of the farthest fixture in order to gain energy credits.	Reduces energy use	No	This energy credit gives credit for reducing the overall footprint of the hot water piping system as a function of conditioned floor area to generate energy and construction cost savings.
REPI-143-21	R501.7 (New), R502.1, R502.2, R502.3.1, R502.3.2, R502.3.3, R502.3.4, R502.3	Adds new language for existing homes to clarify that any change in space conditioning (unconditioned or low-energy spaces become conditioned) requires full compliance with the code. Removes the old change in space conditioning language while renumbering subsequent sections based on these changes.	Reduces energy use	No	The position of the change in space conditioning language makes it apply to any addition or alteration.
REPI-144-21	R202 (New), R502.3, R502.3.5 (N1110.3.5) (New), R503.1, R503.1.5 (N1111.1.5) (New), SECTION	Adds two new definitions for exterior wall envelope and work area and adds new language to require additional efficiency packages for additions and alterations.	Reduces energy use	No	The additional efficiency measures were changed to energy credit requirements as a result of public comments.

	R506 (N1114) (New), R506.1 (N1114.1) (New)				
REPI-145-21	R502.3.2, R503.1.2, R503.1.2.1 (N1111.1.2.1) (New)	Adds new requirements for existing ductwork serving new equipment in additions and alterations to have duct leakage tests. The code language for exceptions to duct leakage tests were modified for clarity.	Reduces energy use	No	This proposal ensures that any existing duct system that is connected to new HVAC equipment as part of an addition or alteration must perform as required for insulation and total duct leakage based on the duct location.
REPI-150-21	R503.1.1, R503.1.1.1, R503.1.1.2 (N1111.1.1.2) (New), 503.1.1.3 (N1111.1.1.3) (New), R503.1.1.4 (N1111.1.1.4) (New), R503.1.1.5 (N1111.1.1.5) (New), R503.1.1.6 (N1111.1.1.6) (New), SECTION 202 (New), SECTION 202, TABLE R402.1.2, TABLE R402.1.3	Adds new definitions for approved source and construction documents, adds new sections for roof, above-grade wall, floor, below grade wall and air barrier alterations. Updates language for building thermal envelope and fenestration alterations for a balance of practicality and cost-effectiveness.	Reduces energy use	No	Provides criteria to trigger or avoid requirements with flexibility.
REPI-151-21	R503.1.2, R503.1.2.2 (N1111.1.2.2) (New), R503.1.2.1 (N1111.1.2.1) (New)	Adds requirement for new heating and cooling equipment as well as new HVAC ducts as part of an alteration must be sized in accordance with the provisions of Section R403.	Reduces energy use	No	This proposal requires right sizing of both HVAC and duct systems as part of any alteration.
REPI-152-21	R503.1.2.1 (N1111.1.2.1) (New)	Requires any new heating and cooling equipment as part of an alteration to be provided with controls as required in Section R403.1.	Reduces energy use	No	The new heating and cooling equipment must have a programmable thermostat and heat pumps must have supplemental heat pump control.

REPI-163-21	TABLE RC102.2	Reduces the Energy Rating Index not including OPP targets to 42 for all climate zones.	Reduces energy use	No	This proposal increases the energy efficiency of the proposed building to a higher level before renewable energy systems can be employed to meet the ERI target of 0.
RED1-309-22	TABLE R403.3.6	Adds a new duct leakage test level for duct systems located in conditioned space with air-handler not installed at Rough-In for both for all homes regardless of size.	Increases energy use	No	At rough-in, a duct system without an air-handler installed was required to have total duct leakage not more than 3 cfm/100 sq ft. This code change will allow a duct system inside conditioned space to have duct leakage not more than 6 cfm/100 sq ft which will increase energy use in these circumstances.
REPI-021-21	R401.2.5, TABLE R406.2	Removes the R408 additional efficiency requirements from the R406 compliance path.	Increases energy use	No	This proposal removes the requirement for a proposed design using the ERI compliance path to have 5% less energy than the ERI targets in Section R406.
REPI-080-21	R403.3.2	Streamlines the code requirements for ducts located in conditioned space by combining the earlier sections for ducts located in floor and wall assemblies.	Increases energy use	No	This proposal combined the language for ducts located in wall or floor assemblies for easier understanding. The proposal reduced insulation requirements from R-19 to R-10 and added an exception for building assembly cavities containing ducts that have been air-sealed would not need to be insulated.
REPI-085-21	R403.3.5, R403.3.6, R403.3.7 (New), R403.3.7	Adds a new section to define a sampling methodology for duct leakage testing of dwelling units within a multifamily building with not less than eight dwelling units. Exceptions were added to the duct leakage requirements for sampled dwelling units.	Increases energy use	No	The concept of sampling for duct leakage testing can help save time and money over testing of every single dwelling unit duct system in a multifamily building. There is risk of missing poorly sealed duct systems that can show performance and comfort issues for the occupants if missed in the sampling process.

REPI-131-21	R406.4	Removes the ventilation rate adjustment for the ERI Reference Home in Section R406.4.	Increases energy use	No	The purpose of this proposal is to fix an error that was introduced in the 2018 IECC during an effort to coordinate the ERI calculation procedure with the residential ventilation rates. The change in 2018 IECC resulted in a significant increase in the ERI scores. That was never the intent of the change as was confirmed by the original proponent, and it was the result of using terms that were not fully coordinated with the specific terms in Standard 301. Proposals and public comments attempted to fix this issue in 2021 IECC, but in the end none of them were approved. This change aligns the IECC ERI with the RESNET ERI.
CE2D-78-23 Part II	NEMA (New)	Adds NEMA to references for air-sealed boxes for electrical and communication applications.	Administrative	No	
CE2D-95-23-23 Part II	R403.9, R405.5.4.1, R405.5.4.2	Replaces thermal envelope to building thermal envelope to align with commercial code.	Administrative	No	
CEC2D-4-23 Part II	R110 (New)	Editorial change to align ordering of Chapter 1 sections with other I-Codes	Administrative	No	
CEPI-008-21 Part II	R104.1, R104.2, R104.3 (New), R104.3, R104.4, R104.5	Adds editorial changes for the payment of fees and adds a new section for permit valuations.	Administrative	No	
CEPI-015-21 Part II	R202 (New)	Adds a new definition for emittance in IECC	Administrative	No	
CEPI-015-21 Part III	N1101.6, R202 (New)	Adds a new definition for emittance in IRC	Administrative	No	

CEPI-019-21 Part II	R303.1.1, R303.1.2	Adds an exception for insulation mark installation for roof insulation installed above the deck.	Administrative	No
CEPI-024-21 Part II	SECTION 202, SECTION 202 (New), R401.2.2, R403.3.3.1, SECTION R405, R405.1, R405.2, TABLE R405.2, R405.3, R405.3.2.2, R405.4, R502.2, R505.1	Editing definitions of proposed and standard reference designs for R405 performance compliance and adds a new definition for simulated building performance. Updates R405 title to Simulated Building Performance and updates language to reflect new definitions.	Administrative	No
IRCED1-10-22	N1103.2	Replaces oil with liquid fuel for hot water boiler outdoor temperature reset.	Administrative	No
IRCED1-7-22	N1102.5.1.2	Removes third exception for testing in accordance with N1102.5.1.2 due to circular logic.	Administrative	No
IRCED1-8-22	N1108.2.1.3 table	Updates language in Table N1108.2.1.3 for minimum roof reflectance to use Solar Reflectance Index (SRI) and updates the ASTM Standards to determine SRI.	Administrative	No
IRCEPI-1-21	N1102.2.6, TABLE N1102.2.6, Chapter 44 (New)	Re-write of Section N1102.2.6 to require steel-frame ceilings, walls and floor U-factors to be determined by AISI S250 and removes TABLE N1102.2.6 for steel and metal framed walls.	Administrative	No
IRCEPI-3-21	N1101.6	Adds a new definition for duct airflow balancing.	Administrative	No

IRCEPI-4-21	N1103.3.6, N1108.2.4	Adds language for an exception to duct leakage testing for ducts in conditioned space if duct airflow balancing in accordance with ANSI/ACCA 5 QI or other methods shows that individual room airflows are be within the greater of $\pm 20\%$, or 25 CFM of the design/application requirements for the supply and return ducts.	Administrative	No
IRCEPI-6-21	N1103.3, N1103.3.1 (R403.3.1) (New)	Adds language to require duct systems to be designed according to ACCA Manual D	Administrative	No
IRCEPI-7-21	N1103.3.2	Adds requirements for diffusion ports in unvented attics for ducts in the sealed attic to reduce the risk of condensation on duct work.	Administrative	No
RE2D-02-23	R110.4	Removes "without delay" in the administration section for the action a code official must take in accordance with a decision from the board.	Administrative	No
RE2D-03-23	R202	Updates emittance definition to replace "emission" with "release of thermal radiation".	Administrative	No
RE2D-06-23	R202	Adjusts the definitions of Alteration and Repair to align with approved code changes.	Administrative	No
RE2D-08-23	R202	Adjusts the language in the definition for substantial alteration for clarity.	Administrative	No
RE2D-10-23	R402.1	Corrects section numbers for general building thermal envelope based on earlier approved code proposals.	Administrative	No
RE2D-20-23	R404.7.1, R404.7.2, R404.7.5, R404.7.6	Code language updates for EV charging and removes section R404.7.6 based on it being redundant.	Administrative	No

RE2D-21-23	R404.7.6	Rewrite of section R404.7.6 for EVSE installation for clarity on NFPA 70.	Administrative	No	This code proposal was superseded by RE2D-20-23.
RE2D-24-23	R405.2	Updates R405.2 code language to specify the source energy multipliers based on ASHRAE Standards 1056, 189.1 and 240P.	Administrative	No	
RE2D-25-23	R405.3	Adjusts language in section R405.3 for compliance documentation to account for the proposed design and the as-built design.	Administrative	No	The "As-Built" design is the intent behind the proposed design based on inspection testing.
RE2D-26-23	R405.4.2	Adds Appendix RF for proposed building envelope U-factors and slab F-factors for compliance in R405.4.2	Administrative	No	
RE2D-28-23	R405.5.2	Modification to the language for software vendor testing.	Administrative	No	
RE2D-31-23	TABLE R407.1; IRCECC: TABLE N1107.1	Rewrite of low slope roof reflectance and emittance requirements.	Administrative	No	
RE2D-32-23	R407.2; IRCECC: N1107.2	Adds "low slope" language to roof requirements for the tropical climate region.	Administrative	No	
RE2D-33-23	TABLE R407.1	Replaces reference to the commercial code with internal reference to the residential code for roof reflectance requirements.	Administrative	No	
RE2D-37-23	TABLE R408.2, R408.2.1, R408.2.1.1, R408.2.1.4, R408.2.2, R408.2.3, R408.2.4, R408.2.5	Editorial changes to Table R408.2 and envelope, HVAC, SWH, duct systems and air sealing energy credit measures.	Administrative	No	

RE2D-38-23	TABLE R408.2, R408.2.1.3, TABLE R408.2.1.3, R408.2.1.3.1	Updates language for roof reflectance measures in Table R408.2 and updates the solar reflectance requirements (SRI) for energy credits.	Administrative	No
RE2D-40-23	R408.2.11	Changed "switch" to "manual control" for R408.2.11 whole home lighting measure.	Administrative	No
RE2D-42-23	TABLE R408.2.3	Removed redundant hot water heaters in Table R408.2.3 for service water-heating efficiencies.	Administrative	No
RE2D-43-23	R408.2.3.1	Clarifies requirements for demand recirculation water systems for the compact hot water design energy credit measure.	Administrative	No
RE2D-44-23	R408.2.6, TABLE R408.2.6	Adjusts language for R408.2.6 energy efficient appliances to close loopholes from previous approvals.	Administrative	No
RE2D-46-23	R503.1.1.3	Editorial adjustments for above grade wall alterations.	Administrative	No
RE2D-59-23	TABLE R408.2, TABLE R408.2.3	Added all energy credit values in Table R408.2 from PNNL simulation analysis.	Administrative	No
RE2D-66-23	TABLE R408.2 (New), R408.2.2.1 (New)	Updates the energy credits for the high-performance gas furnace and heat pump credits in Table R408.2 and adds new efficiency requirements for gas furnace and heat pump option and the heat pump in Section R408.2.2.1.	Administrative	No
RE2D-67-23	TABLE R408.2 (New)	Reduced the ground source heat pump energy credits in all climate zones in Table R408.2 based on spreadsheet analysis of original GSHP results.	Administrative	No

REC2D-1-23	TABLE R402.1.2, R402.1.3, R402.2.10.2, R402.2.11.2, RF105, RF105.1 (New), TABLE RF105.1 (New), RF106, RF107, RF106.1 (New), TABLE RF106.1 (New)	Adds necessary language and tables that coordinate the proper calculation of F-factors for slabs and ground coupling for crawl space walls and basement walls.	Administrative	No
REC2D-3-23	ACCA (New)	Adding ACCA Manual D-2023 Standard to the Chapter 6 references.	Administrative	No
REC2D-4-23	TABLE R405.4.2(1)	Corrects an error in the reference design for foundation geometry condition and restores to the 2021 code language in Table R405.4.2(1).	Administrative	No
REC2D-6-23	R402.2.1 (New)	Updates ceilings with attics language to align with changes made in Table R402.1.3 in previous code changes.	Administrative	No
REC2D-7-23	R403.6.2, TABLE R403.6.2	Replaces "balanced" with "balanced ventilation system" for whole-dwelling mechanical ventilation system fan efficacy to align with new definition for balanced ventilation system.	Administrative	No
REC2D-8-23	R202 (New), R402.5.1.2, R402.5.1.2.1, R402.5.1.3, R403.3.1, R403.3.9, R403.6.4, TABLE R405.4.2(1)	Adds a new definition for sleeping unit and revised the definition for testing unit enclosure area while adding these definitions to the section on air leakage testing.	Administrative	No

REC2D-10-23	R402.5.1.3, R408.2.1.4, R403.3.7, R503.1.2.3, R403.6.2	Editorial clean up to correct SI units for the updated air leakage requirements.	Administrative	No	
RECD1-1-22	N1103.6.4, (R403.6.4) (New)	Adds a new section for intermittent exhaust control for bathrooms and toilet rooms to align IECC-R with Section C403.8.6.2 in IECC-C.	Administrative	No	
RECD1-2-22	6 AAMA, AAMA Chapter 06, CSA Chapter 06, 6 WDMA, WDMA Chapter 06	Chapter 6 reference updates	Administrative	No	
RECD1-3-22	TABLE R402.5.1.1	Reconciles language in Table R402.5.1.1 with previously approved code proposals.	Administrative	No	
RECD1-4-22	R404.6.1 (New), R404.6.2 (New), R404.6.2.1 (New), R404.6.2.2 (New), R404.6.2.3 (New), R404.6.2.4 (New), R404.6.2.5 (New), R404.6.2.6 (New), R404.6.2.7 (New), R404.6.2.8 (New)	Moves the solar ready requirements from the referenced Appendix CB and copies them into the R404.6.2 section.	Administrative	No	
RECD1-6-22	R405.2	Adjusts the Exception 2 for using annual energy costs for performance compliance to use source energy and restores a single multiplier to be used rather than multiple sections of ASHRAE 105.	Administrative	No	The original ASHRAE 105 Table references offered 6 different site-to-source multipliers for electricity which could lead to unnecessary complexity for the code official and software implementers.

RECD1-8-22	R405.3, R405.3.1, R405.3.2, R405.3.2.1, R405.3.2.2, R405.4, R405.4.1, R405.4.2; IECC: R405.4.3 (New); IECC: R405.5, R405.5.1, R405.5.2, R405.5.3; IECC: R405.5.2 (New), R405.5.3 (New), R405.5.4 (New), R405.5.4.1 (New), R405.5.4.2 (New)	Adds language to align the software requirements for R405 with the requirements in R406.	Administrative	No
RECD1-10-22	R503.1.2, R503.1.2.1	Removes the language from the exceptions that applies to an addition as these sections apply to alterations.	Administrative	No
RECD1-11-22	R402.2.8	Updates language for floors to specify installation requirements for both cavity and continuous insulation.	Administrative	No
RECPI-2-21	TABLE N1105.4.2(1)	Adjusts footnote (h) for Table N1105.4.2(1) to replace "townhouses" with "townhouse units".	Administrative	No
RECPI-8-21	R401.3, R406.7.2.2, ICC Chapter 06	Adds the RESNET CO2 Index to the compliance certificate (R401.3) and the ERI compliance reports.	Administrative	No

RECPI-11-21	R202 (New), APPENDIX RC, SECTION RC101, SECTION RC202 (New), RC101.1, RC102.1, RC401.2 (New), RC401.3 (New), SECTION RC102, RC406.1 (New), RC406.2 (New), RC406.3 (New), RC102.2, RC406.4.1 (New), RC406.5 (New), TABLE RC102.2, RC406.6 (New), RC406.7 (New), ASHRAE Chapter 06 (New)	Adds a general definition for Energy Rating Index (ERI) and adds new definitions for renewable energy agreements and clarity for Appendix RC ERI analysis to align with definitions.	Administrative	No
RED1-001-22	APPENDIX RC, SECTION RC101, RC101.1, RC101.2, RC101.3, RC101.4, SECTION RC 102 (New), RC102, RC103, RC103.1 (New), RC103.1, RC103.2, RC103.3, RC103.3.1, RC103.4, TABLE RC103.3, RC103.5, RC103.6	Adds clean-up language to ensure Appendix RC is using earlier approved proposal for Appendix RC.	Administrative	No
RED1-003-22	R202	Modifies grade plane definition to remove requirements.	Administrative	No

RED1-006-22	AISI Chapter 06	Adds AISI S250 to Chapter 6 References.	Administrative	No
RED1-007-22	RESNET Chapter 06	Updates RESNET 301 Standard to ANSI/RESNET/ICC 301-2022 version in Chapter 6.	Administrative	No
RED1-008-22	R101, R101.1, R101.2, 101.2.1 (New)	Adds a new section R101.2.1 for Appendices to clarify that appendices do not apply unless specifically adopted.	Administrative	No
RED1-009-22	R101, R101.1, R101.2, R101.3, R101.5, R101.5.1, SECTION R102 (New), R101.4, R101.4.1, R108.3, R108.2, R108.1, R108.1.1, R108.1.2, R107.1, SECTION R107, SECTION R108	Adds provisions in Section 101 Scope and General Requirements and Section 102 Applicability to contain the same basic points for better clarity and ease of use.	Administrative	No
RED1-010-22	R103 (New), 103.1 (New), 103.2 (New), 103.3 (New)	Adds new section R103 for the creation of the code compliance agency.	Administrative	No
RED1-011-22	R103.2.2	Adds a provision to section R103.2.2 for a solar ready zone to require the solar-ready system.	Administrative	No
RED1-012-22	R105.2.2, R105.2.3	Removes redundant code provisions for framing and air-barrier rough-in inspections.	Administrative	No
RED1-013-22	R105.2.3, R105.2.4, R105.2.5, R105.2.6	Reorders the inspections so as to remain consistent with the logical order of inspections currently being done by inspectors.	Administrative	No

RED1-014-22	R105.2.4	Adds language to plumbing rough-in inspection for solar-ready zones.	Administrative	No
RED1-016-22	R105.4, R105.4.1 (New); IECC: R105.4.1.1 (New), R105.4.1.2 (New), R105.4.1.3 (New), R105.4.1.4 (New); IECC: R105.4.2 (New)	Adds new sections and language for approved third party inspection agencies in section R105.	Administrative	No
RED1-017-22	R110, R110.1, R110.2, R110.3, R110.4	Adds provisions to coordinate the means of appeals within the I-codes.	Administrative	No
RED1-028-22	APPENDIX RH (New), RH101 (New), SECTION 202 (New), RH102 (New), RH401.2 (New), RH401.3 (New), RH406.2 (New), RH406.7.2.2 (New)	Adds a new definition for CO2e Index based on the RESNET 301 Standard and adds Appendix RH for operational carbon rating and energy reporting.	Administrative	No
RED1-031-22	R202	Revises the definition for simulated building performance to remove language about using a baseline rather than the standard reference design.	Administrative	No
RED1-032-22	TABLE R402.4.1.1 (New)	Modifies the requirements for HVAC register boots in Table R402.4.1.1 to align with earlier proposals.	Administrative	No
RED1-035-22	R405.1, R405.2	Aligns language in R405.1 and R405.2 to align with new definitions for approved sources.	Administrative	No

RED1-043-22	R405.2	Editorial changes to clarify building performance compliance requirements for mixed fuel and all-electric homes.	Administrative	No	
RED1-054-22	TABLE R405.2, R408.1, RE103.1	Removes additional efficiency requirements from Table R401.2.5 to align with approved code proposals.	Administrative	No	
RED1-056-22	TABLE R405.2, TABLE R406.2	Removed the dedicated row for HW pipe insulation and also removed the text "except Section R403.5.2" due to conflict in approved proposals.	Administrative	No	
RED1-065-22	R202, R406, R406.1, R406.2, TABLE R406.2, R406.3, R406.4, R406.5, TABLE R406.5, R406.6, R406.7, R406.7.1, R406.7.2, R406.7.2.1, R406.7.2.2, R406.7.3, R406.7.4, R406.7.5, R406.7.6, CHAPTER 6 [RE], 6 ANSI, ANSI Chapter 06 (New)	Editorial changes for R405 and R406 for clarity that multifamily ERIs are only performed on a dwelling unit and that common spaces are still subject to the other code requirements in R402 through R404. Some edits maintain consistency, use defined terms, and underscore that the as-built dwelling unit is also required to be compliant, not just the 'rated design' ERI.	Administrative	No	For large MF, the average ERI of all dwelling units in the building should be permitted to be used to demonstrate compliance with the maximum ERI (rather than each individual dwelling unit being required to meet the max ERI).
RED1-067-22	R406.5	Editorial changes to replace "appropriate" with "applicable".	Administrative	No	
RED1-073-22	R408.1; IECC: R408.2; IECC: TABLE R408.2, R408.2.3, R408.2.3 (New)	Provides editorial changes for clarity for compliance with R408 requirements and adds an addition electric hot water heating measure to Table R408.2.	Administrative	No	

RED1-089-22	RC103.3, RC103.3.1	Adjusts the renewable energy contract duration from 10 to 15 years.	Administrative	No
RED1-094-22	R103.2.2	Editorial changes to clarify the provisions and align structural load documentation requirements with other ICC codes.	Administrative	No
RED1-107-22	R403.10	Aligns language for roof and gutter deicing controls with the commercial section C403.14.3 which is to have the system off between sunset and sunrise.	Administrative	No
RED1-111-22	R404.2, R404.2.1, R404.2.2	Editorial changes for interior lighting control for clarity and to correct the defined terms.	Administrative	No
RED1-112-22	R404.3	Editorial change to require residential exterior lighting controls comply with IECC-R rather than IECC-C.	Administrative	No
RED1-116-22	R404.5	Editorial change to electric readiness for clarity.	Administrative	No
RED1-128-22	R404.5.1	Editorial change from cooking products to cooking appliances for electric readiness.	Administrative	No
RED1-131-22	R404.5.2	Editorial changes to simplify electric readiness requirements for clothes dryers.	Administrative	No
RED1-137-22	R404.6.1.3	Editorial change to replace future solar electric with future renewable electric for electrical service reserve space for electric readiness requirements.	Administrative	No
RED1-138-22	R404.6.1.4	Editorial changes for electrical interconnections to allow any renewable connection.	Administrative	No

RED1-145-22	R404.7, R404.7.1, R404.7.2, R404.7.3, R404.7.4.1, R404.7.4, R404.7.5.1	Editorial changes to Electric Vehicle Power Transfer Infrastructure for clarity, usability and enforceability.	Administrative	No
RED1-154-22	R404.7.1, R404.7.4	Moves the exceptions for the electric utility's lack of capacity to the quantity section.	Administrative	No
RED1-157-22	R404.7.4	Adjusts the EVSE circuit capacity exception based on installed cost to account for projected inflation in 2023 and 2024.	Administrative	No
RED1-182-22	R202, TABLE R408.2.1.3; IRCECC: SECTION 202, TABLE N1108.2.1.3	Editorial changes for the new defined terms "low-sloped roof" and "steep-sloped roof" to "low slope" and "steep slope".	Administrative	No
RED1-184-22 PI	N1102.5.1.2	Editorial change to move the details of the air leakage testing conditions before the exceptions for air leakage testing.	Administrative	No
RED1-184-22 PII	R402.5.1.2	Editorial change to move the details of the air leakage testing conditions before the exceptions for air leakage testing.	Administrative	No

RED1-185-22	R102.1.1, SECTION 202, R401.3, R402.1.5, R402.2.7, R402.2.9, TABLE R402.5.1.1, R402.5.1.2, R402.5.4, R402.5.6, R403.3.2, R405.2, R405.3.2.1, R405.3.2.2, TABLE R405.4.2(1), TABLE R406.2, R406.3, R406.7.2.1, R406.7.2.2, R408.2.1, R408.2.1.1, R502.2.1, R503.1.1, R503.1.1.4, R503.1.1.6, R503.1.5, R506.1; IRCECC: N1101.4, SECTION 202, N1101.14, N1102.1.5, N1102.2.7, N1102.2.9, N1102.4.5, TABLE N1102.5.1.1, N1102.5.1.2, N1102.5.4, N1102.5.6, N1105.2, N1105.3.2.1, N1105.3.2.2, TABLE N1105.4.2(1), TABLE N1106.2, N1106.3, N1106.7.2.1, N1106.7.2.2, N1108.2.1, N1108.2.1.1, N1108.2.4, N1110.2.1,	Editorial changes to the residential provisions by replacing instances of "building envelope", "thermal envelope" and "envelope" with the defined term "building thermal envelope".	Administrative	No
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N1111.1.1,
N1111.1.1.4,
N1111.1.1.6,
N1111.1.5, N1114.1

RED1-186-22	R102, R102.1.1, SECTION R402, R402.1.5, R402.2.1, R402.2.2, R402.2.5, R402.4.3, R402.4.4, SECTION R405, R405.2, SECTION R406, R406.3, SECTION R408, R408.2, TABLE R408.2, R408.2.1.1	Editorial change to replace Total UA with thermal conductance (TC).	Administrative	No
RED1-189-22	R202	Editorial change to remove "black body" with an emissions scale for the definition of emittance.	Administrative	No

RED1-191-22 PI	R202	Editorial change to account for "non-structural" exterior wall elements in the definition for exterior wall envelope.	Administrative	No	
RED1-191-22 PII	R202	Editorial change to account for "non-structural" exterior wall elements in the definition for exterior wall envelope.	Administrative	No	
RED1-194-22	R303.1.5 (New), R303.1.1, R303.2.2	Adds a new section for air spaces to ensure air space R-values are properly specified and applied for both reflective and non-reflective air spaces.	Administrative	No	Air space R-values can vary by as much as a factor of 8 depending on various conditions of use (see ASHRAE 90.1 Appendix A).
RED1-196-22	R402.1	Editorial change to clarify that there are two options that can be used to demonstrate compliance with the residential prescriptive building thermal envelope provisions.	Administrative	No	
RED1-204-22	TABLE R402.1.2; IECC: TABLE R402.1.3	Editorial change to the footnotes for fenestration U-factors to clarify the conditions based on rows instead of columns and remove the exceptions.	Administrative	No	Footnotes should not contain requirements; they should be explanatory. Since there should be no requirements in footnotes there should be no exceptions. There are no columns for fenestration u-factors or SHGC; there are rows.
RED1-208-22	R402.1.5, R405.2, R405.4.2, TABLE R405.4.2(1), R406.3; IECC: R402.2.10	Editorial changes in the performance and ERI compliance sections to account for the changes in the UA calculation to Thermal Conductance (TC) and updated Table R405.4.2(1) to account for slab-on-grade U-factor and perimeter.	Administrative	No	
RED1-210-22	R402.2.10	Editorial change to remove the language "in contact with the ground" from the section for slab-on grade floors as it was redundant.	Administrative	No	

RED1-211-22	R402.2.11.1	Editorial changes to reformat and clarify crawl space wall insulation installation requirements to align better with the basis of the R-value requirements for crawl space walls.	Administrative	No
RED1-212-22	R402.2.3, R402.2.3.1	Editorial changes to differentiate between wood and steel framing. The title of R402.2.3.1 is changed to differentiate between roof/floor trusses and attic knee-walls	Administrative	No
RED1-217-22	R402.2.9.1	Editorial change to the prescriptive basement wall insulation installation to account for the wall insulation depth of the proposed or rated design in the performance compliance paths.	Administrative	No
RED1-218-22	R402.3	Editorial change to remove the commentary as part of the definition for radiant barriers.	Administrative	No
RED1-222-22	R402.5.1.2, R402.5.1.4	Editorial changes to section on air leakage testing for clarity and to improve organization as well as establishes a cfm/ft2 metric as an alternative to ACH50.	Administrative	No
RED1-224-22 PI	R402.5.1, R402.5.1.2, R402.5.1.3 (New), R402.5.1.3, R402.5.1.4; IECC: TABLE R405.2, TABLE R406.2	Editorial updates to separate the mandatory maximum air leakage rate from the test method section by moving the existing language into a separate section identified as mandatory. This is intended to improve the code readability and the ease of understanding the code.	Administrative	No
RED1-224-22 PII	N1102.5.1, N1102.5.1.2, N1102.5.1.3 (New), N1102.5.1.3, N1102.5.1.4 (New),	Editorial updates to separate the mandatory maximum air leakage rate from the test method section by moving the existing language into a separate section identified as mandatory. This is intended to improve the code readability and the ease of understanding the code.	Administrative	No

TABLE N1105.2, TABLE N1106.2				
RED1-226-22	TABLE R402.5.1.1	Editorial change to remove "sealed" from "sealed air barrier" as part of the air barrier, air sealing and insulation installation requirements.	Administrative	No
RED1-229-22	TABLE R402.5.1.1	Editorial changes to the common walls as part of the air barrier, air sealing and insulation installation requirements.	Administrative	No
RED1-230-22	TABLE R402.5.1.1	Editorial changes to the floors as part of the air barrier, air sealing and insulation installation requirements.	Administrative	No
RED1-231-22	TABLE R402.5.1.1	Editorial changes to the electrical, communication and other equipment boxes as part of the air barrier, air sealing and insulation installation requirements.	Administrative	No
RED1-233-22	TABLE R402.5.1.1	Editorial changes to the showers, tubs and fireplaces as part of the air barrier, air sealing and insulation installation requirements.	Administrative	No
RED1-235-22	TABLE R402.5.1.1	Editorial changes to the knee walls as part of the air barrier, air sealing and insulation installation requirements.	Administrative	No
RED1-237-22	R402.5.1.2	Editorial change relating to water gauge to keep the units consistent with other units in the code section. Also changed the "dwelling unit enclosure area" to italic font is to inform the user	Administrative	No

that “dwelling unit enclosure area” is a defined term in Chapter 2.

RED1-243-22 PI	R402.5.4	Relocates section for rooms containing fuel burning appliances.	Administrative	No
RED1-243-22 PII	N1102.5.4	Relocates section for rooms containing fuel burning appliances.	Administrative	No
RED1-249-22	R405, R405.1, R405.2, R405.3, R405.3.1, R405.3.2, R405.3.2.1, R405.3.2.2, R405.4, R405.4.1, R405.4.2, TABLE R405.4.2(1), R405.5.1	Editorial changes to clarify that R-2 buildings show compliance at the dwelling unit level where common spaces shall follow the requirements of R401 through R404 and updates HVAC efficiencies to SEER2, HSPF2 and UEF.	Administrative	No
RED1-250-22	TABLE R405.2, TABLE R406.2; IECC: R402.2.10, R402.2.10.1, R402.2.10.2 (New), R402.2.11, R402.2.11.2 (New)	Editorial changes to the slab-on-grade floors and crawl space walls requirements to work better with performance paths to provide flexibility in design while still meeting the mandatory requirements.	Administrative	No
RED1-251-22	TABLE R405.4.2(1)	Adds a 0.25 cfm50/ft2 metric for the air leakage threshold for attached units and smaller homes when using the prescriptive compliance option and adds those same metrics/thresholds to the Standard Reference Design (SRD).	Administrative	No

RED1-252-22	TABLE R405.4.2(1); IRCECC: TABLE N1105.4.2(1)	Editorial change to replace two instances of "solar absorptance" with "solar reflectance" and the associated values to make all uses consistent throughout the residential provisions.	Administrative	No
RED1-253-22	R407.2; IECC: TABLE C402.4	Replaces the IECC-C requirement for Table C402.3 with options from the new Table R407.1.	Administrative	No
RED1-254-22	R408.2	Editorial changes in section R408 for fenestration in order to make the section more usable, improve the accuracy of credits allocated, and improve clarity and consistency.	Administrative	No
RED1-255-22	R408.2.1.3, TABLE R408.2; IRCECC: N1108.2.1.3, TABLE N1108.2	Editorial changes to the cool roof/solar reflectance energy credits to ensure that, when a cool roof is selected, it can be expected to improve energy efficiency.	Administrative	No
RED1-256-22	R408.2.1.3; IRCECC: N1108.2.1.3	Editorial changes to further clarify the roof reflectance criteria options are only required in specific climate zones based upon the "TBD" credits in Table R408.2 (N1108.2).	Administrative	No
RED1-257-22	TABLE R408.2.1.3, R408.2.1.3.1; IRCECC: TABLE N1108.2.1.3, N1108.2.1.3.1; IECC: ASTM Chapter 06 (New)	Editorial changes to clean up the roof reflectance provisions in Section R408 and Section N1108.	Administrative	No
RED1-260-22	R503.1.1	Editorial change to replace "building envelope" to the defined term in Chapter 2, "building thermal envelope", and to italicize the defined terms "building" and "roof recover" in the same code section.	Administrative	No

RED1-261-22	APPENDIX RF, RF 101 (New), RF101	Adds new sections to Appendix RF for the scope and purpose of the appendix and related general requirements important to proper application of the appendix in coordination with the IECC standard and also related IRC building code provisions.	Administrative	No
RED1-264-22	R501.2, R501.4, R501.5, R501.6, R501.7, R503.1.1.2, R503.1.1.3, R503.1.1.5, R505.1, R505.1.1	Editorial changes to clarify the existing chapter 5 language and the new chapter 5 language from public comment draft #1.	Administrative	No
RED1-268-22	R503.1.1, R503.1.1.1, R503.1.1.2, R503.1.1.3, R503.1.1.4, R503.1.1.5, R503.1.1.6, TABLE R402.1.2, TABLE R402.1.3	Coordinates with changes made to Section C503.1 of the commercial provisions based on additional input and review by the commercial subcommittee that occurred after the residential existing buildings and main committees had completed action these sections. The two proposals intended to make the two codes consistent. Primarily editorial and formatting coordination between the IECC-C and IECC-R for alterations.	Administrative	No
RED1-271-22	R503.1.1.3	Editorial changes to improve clarity for use of the IRC for R-2, R-3, and R-4 buildings three stories or less that are regulated by the IECC-Residential Provisions and the IBC.	Administrative	No
RED1-273-22	R503.1.1.3	Editorial changes for above grade wall alterations to address conflicts with vapor retarder and wind resistance requirements.	Administrative	No

RED1-277-22	R503.1.5	Removes the exterior wall envelope definition and replaced with building thermal envelope. Exterior wall envelope was used only once in Section R503.1.5 in the entire IECC-R code.	Administrative	No
RED1-280-22 PI	R202	Removes the zonal heating definition.	Administrative	No
RED1-280-22 PII	N1101.6	Removes the zonal heating definition.	Administrative	No
RED1-281-22	Chapter 6	Updates the reference standards related to air leakage assessment in order to keep the references current.	Administrative	No
RED1-283-22	R202	Changes pilot light definitions with industry terms consistent with the source of the definition.	Administrative	No
RED1-284-22 PI	R202	Changes pilot light definitions with industry terms consistent with the source of the definition.	Administrative	No
RED1-284-22 PII	R202	Changes pilot light definitions with industry terms consistent with the source of the definition.	Administrative	No

RED1-285-22	SECTION 202 (New), SECTION 202, R401.3, R402.2.9, TABLE R402.5.1.1, SECTION R403, R403.3, R403.3.1, R403.3.2, R403.3.3, R403.3.3.1, R403.3.4, R403.3.4.1, R403.3.5, R403.3.6, TABLE R403.3.6, R403.3.7, R403.3.8, TABLE R403.6.2, SECTION R405, R405.3.2.1, TABLE R405.4.2(1), TABLE R405.4.2(2), SECTION R408, TABLE R408.2, R408.2.4, SECTION R502, R502.2.2, SECTION R503, R503.1.2, R503.1.2.1, R503.1.2.3; IECC: R403.3.1 (New)	Updates the duct sections for new construction and existing buildings to better define what is meant with ducts, ductwork and duct systems so to better clarify ducts in conditioned space and components in total duct leakage tests. Reduces use of "rough-in" and "post construction" phrases, adds a test exemption for ductless systems or ducted systems with not more than 10 ft of ductwork when in conditioned space and provides a greater duct leakage allowance with a greater amount of return ductwork.	Administrative	No	This proposal was a massive re-write of sections pertaining to duct systems to clarify definitions and requirements to determine duct location and total duct leakage.
RED1-286-22	R402, R402.5.1, R402.5.2, R402.5.2.1, SECTION R403, R403.1, R403.1.1, R403.1.2, R403.1.3, R403.14 (New), R403.14.1 (New), SECTION R405, TABLE R405.2, SECTION R406, TABLE R406.2, CHAPTER 6 [RE],	Moves the gas fireplace efficiency requirement from the R402.5 Building Thermal Envelope section, into the R403 (Systems) section. The gas fireplace efficiency was also combined with the continuously burning pilot light requirements into a new section.	Administrative	No	

CSA Chapter 06,
ANSI Chapter 06,
R404.1.5 (New)

RED1-287-22	R402.5.2.1	Editorial changes for the section to use the full designation of the referenced standards.	Administrative	No
RED1-290-22	R403.1.2	Editorial change for clarity for heat pump supplementary heat.	Administrative	No
RED1-292-22	R403.1.2; IRCECC: N1103.1.2	Expands the fuel types possible for heat pump supplementary heat.	Administrative	No
RED1-296-22	R403.1.3	Makes editorial changes for continuously burning pilot lights and adds an exception for gas-fired appliances using pilots within a listed combustion safety device.	Administrative	No
RED1-298-22	R403.1.3	Editorial changes to the code language to use proper designation of the referenced standard.	Administrative	No
RED1-299-22	R403.11.2	Editorial updates to the exception language to be consistent with other changes in the code for multiple types of renewable energy systems that can be used for pool heating.	Administrative	No
RED1-302-22	R403.3.2	Editorial change to clarify that the exception applies to duct insulation. The building assembly insulation requirements of Item 3.3 must be met.	Administrative	No

RED1-305-22	R403.3.3	Editorial changes to clarify duct location in ceiling.	Administrative	No	
RED1-313-22	R403.5.4, R408.2.3, R408.2.3.1, R408.2.3.1.1 (New); IECC: TABLE R403.5.4	Editorial changes to the language for compact hot water design which clarify the requirements and moves section for water volume determination to the energy credits section.	Administrative	No	
RED1-315-22	R403.5.5; IECC: Table R403.5.5 (New); IECC: 6 AHRI	Adds AHRI Standard 1430 for demand flexible electric resistance storage and electric heat pump water heaters (HPWH)s capable of load management that policymakers can use, state government, electric utilities, authorized third parties, manufacturers, designers, installers, contractors, and users.	Administrative	No	By providing standardized requirements for Demand Flexible Electric Storage Water Heaters (DFWH), utilities and load management program managers can be assured that DFWHs can communicate using standard hardware and software.
RED1-318-22	R403.6; IRCECC: N1103.6	Editorial changes for mechanical ventilation to include dwelling units.	Administrative	No	
RED1-321-22	TABLE R403.6.2	Editorial modifications to the fan efficacy table to improve clarity and improve alignment with the IECC-C fan efficacy table.	Administrative	No	
RED1-322-22	TABLE R403.6.2	Editorial changes to remove the commercial reference with a residential code reference for the mechanical ventilation system fan efficacy table.	Administrative	No	
RED1-324-22	R403.6.3	Editorial change to remove language for programmable airflow settings in airflow measurement tools since testing is in accordance with ANSI/RESNET/ICC 380 which does not have these limitations.	Administrative	No	

RED1-325-22	R403.7, R403.7.1	Editorial changes for clarity with electric resistance space heating and removal of exceptions.	Administrative	No
RED1-329-22	R403.8; IECC: R403.5.2 (New), R403.9 (New), R403.9.1 (New), R403.9, R403.10, R403.9.4 (New)	Revisions to systems serving multiple units, space heating outside building thermal envelope, and snow and deicing controls to remove all IECC-C references.	Administrative	No
RED1-330-22	R404.1	Editorial changes to lighting equipment to clarify that range hoods are exempt based on concerns for durability and viability of high-efficacy lighting exposed to the elevated temperatures associated with residential cooking.	Administrative	No
RED1-335-22	R404.5.3	Editorial changes intended to make all the sections under R404.5 consistent.	Administrative	No
RED1-336-22	R405.4, R405.4.1, R405.4.2, TABLE R405.4.2(1)	Editorial changes to the Standard Reference Design should be modeled with a 40 gallon electric resistance storage water heater when the Proposed Design is a heat pump water heater. This approach is also the same as that used in the ERI Path and similar to the approach used to calculate points for HPWHs in R408.2.3.	Administrative	No
RED1-337-22	TABLE R405.4.2(1)	Editorial clarification and reorganization to improve usability for air leakage rate, mechanical ventilation rate and fan energy.	Administrative	No
RED1-340-22	TABLE R405.4.2(1)	Editorial changes to use proper terminology for the non-electric energy sources for these space heating appliances.	Administrative	No

RED1-343-22	TABLE R408.2, R408.2.5	Editorial changes for improved air sealing and efficient ventilation measures and adds a fifth efficiency measure for HRV/ERV for buildings meeting prescriptive air leakage rates.	Administrative	No	
RED1-365-22	R403.6.3, R403.6.4 (New)	Adds a methodology for sampling testing of mechanical ventilation systems in dwelling units.	Administrative	No	
REPI-009-21	R105.2, R105.2.1, R105.2.2, R105.2.3 (New), R105.2.3, R105.2.4, R105.2.5	Editorial changes for inspections to separate the inspection of the framing and air-barrier from the insulation and fenestration during rough-in.	Administrative	No	
REPI-011-21	R202 (New), R303.1.1	Adds new definitions for reflective insulation and enclosed reflective air space to define conditions in the building thermal envelope insulation.	Administrative	No	The proposal adds specific requirements similar to those for the other insulation materials (as well as appropriate definitions) for a type of material, (reflective insulation) that has been in the market place for over 35 years and has had nationwide distribution and installation. These products are well established and have two associated ASTM Standards, ASTM C727, Standard Practice for Installation and Use of Reflective Insulation in Building Constructions, and ASTM C1224, Standard Specification for Reflective Insulation for Building Applications.
REPI-013-21	R202 (New), R303.2.2 (N1101.11.2) (New), ASTM Chapter 06 (New)	Adds a definition for radiant barrier and adjusts requirements to clarify that radiant barriers are not required but only when installed.	Administrative	No	

REPI-026-21	R202 (New), TABLE R402.1.2, R402.2.9, R402.1.2, R402.1.3, R402.1.5	Adds new definition for slab F-Factor, clarifies slab on-grade requirements and modifies the equation to the overall UA compliance equation to include slab perimeter multiplied by the F-Factor.	Administrative	No	Residential building energy codes that are based on any version of the International Energy Conservation Code (IECC) typically allow compliance to be demonstrated in several ways, one of which is a component tradeoff approach whereby prescriptive requirements for some building components may be relaxed in trade for corresponding improvements in other components. Calculations for this component tradeoff are based on maintaining a maximum overall building UA value, which is the sum across all building envelope components of the product of each component's U-factor (conductance) and area. For slabs on grade, the component UA is based on an F-factor rather than a U-factor and is multiplied by the slab-edge perimeter length rather than slab area.
REPI-030-21	TABLE R402.1.2, TABLE R402.1.3	Transposes the rows and columns of Tables R402.1.2 and R402.1.3 for consistency with IECC-C format.	Administrative	No	
REPI-035-21	TABLE R402.1.3, R402.2.7	Adds prescriptive R-value options to Table R402.1.3 for floors above unconditioned spaces (e.g., crawlspaces, floor overhangs, etc.) to align with the primary insulation options as done for above-grade walls. The options are cavity insulation only, cavity plus continuous insulation, and continuous insulation only.	Administrative	No	
REPI-037-21	R402.2.10, R402.2.10.1	Offers direction for installation of crawlspace wall insulation installation for performance, clarity and ease of compliance. The standing language does not address insulating from the	Administrative	No	

outside and ambiguously speaks to insulating the rim joist or “the depth of the floor”.

REPI-040-21	R402.2.6, TABLE R402.2.6, AISI (New)	Requires the U-factors for steel-framed ceilings, walls and floor assemblies determined in accordance with AISI S250 but still meet the requirements of Table R402.1.2.	Administrative	No
REPI-042-21	Definition, R402.3 (N1102.3) (New), ASTM Chapter 06	Adds a definition for radiant barrier and adjusts requirements to clarify that radiant barriers are not required but only when installed.	Administrative	No
REPI-043-21	R402.4, R402.4.1.2, ASTM Chapter 06 (New)	Adds an additional reference test method, ASTM E3158 for air leakage testing requirements. This test method has already been included in the list of acceptable test methods for whole building air leakage testing in the IECC-C but was not added to the parallel section of the IECC-R.	Administrative	No
REPI-047-21	TABLE R402.4.1.1	Updates the language for air barrier and insulation installation criteria for ceilings/attics in Table R402.4.1.1	Administrative	No
REPI-051-21	TABLE R402.4.1.1	Updates the language for air barrier and insulation installation criteria for common walls in Table R402.4.1.1	Administrative	No
REPI-052-21	TABLE R402.4.1.1	Updates the language for air barrier and insulation installation criteria for showers, tubs and fireplaces in Table R402.4.1.1	Administrative	No

REPI-053-21	TABLE R402.4.1.1	Updates the language for air barrier and insulation installation criteria for electrical communication and other equipment boxes, housings and enclosures in Table R402.4.1.1	Administrative	No
REPI-054-21	TABLE R402.4.1.1	Updates the language for air barrier and insulation installation criteria for windows, skylights and doors in Table R402.4.1.1	Administrative	No
REPI-055-21	R402.4.1.1, TABLE R402.4.1.1	Clarifies the language for air barrier and insulation installation criteria for rim joists in Table R402.4.1.1	Administrative	No
REPI-057-21	R402.4.1.2	Updates the language for air leakage testing by adjusting the air leakage units and to clarify the code intent and align terminology with the commercial air barrier testing provisions.	Administrative	No
REPI-058-21	R402.4.1.2	Moves the exceptions for dwelling unit air leakage testing within the main exceptions for overall air leakage testing.	Administrative	No
REPI-061-21	R402.4.1.4	Aligns residential code language for dwelling unit sampling with the commercial provisions of the 2021 IECC and RESNET sampling guidelines so that envelope leakage testing requirements for a multi-family (R2 classification) project that is 3 stories or lower in height (and that falls under the Residential provisions of the IECC) will be tested at the same rate as apartment building that is 4 stories or taller in height (and falls under the Commercial provisions of the IECC).	Administrative	No

REPI-066-21	CHAPTER 4 [RE], R402.4.6	Editorial revision to air-sealed electrical and communication boxes by clarifying the requirements only apply where air-sealed boxes are selected as permitted by the table and applies to those boxes that penetrate the thermal envelope thus necessitating the need for an air barrier or air-sealed box.	Administrative	No
REPI-069-21	R202 (New), R403.1 (N1103.1) (New), R403.1, R403.6.1, R403.8, R404.2 (N1104.2) (New), R404.2, R404.3 (N1104.3) (New), R404.3, R404.4 (N1104.4) (New)	Aligns the requirements of multifamily dwelling units between the IECC-R and the IECC-C in terms of system design, control and stringency between a 3-story MF building and a 4-story MF building.	Administrative	No
REPI-078-21	SECTION 202, R403.3.1, TABLE R405.4.2(1)	Adds a new definition for Distribution System Efficiency (DSE) for consistency with language in Table R405.4.2(1).	Administrative	No
REPI-079-21	R403.3.2	Adds requirement for ducts located in sealed attics to contain vapor diffusion ports to reduce condensation on ductwork. The existing IRC language allows sealed attics with vapor diffusion ports.	Administrative	No
REPI-082-21	R403.3.3	Adds requirement for ducts buried within ceiling insulation to have vapor diffusion ports and be in compliance with vapor retarder requirements for climate zones 0A, 1A, 2A and 3A.	Administrative	No
REPI-083-21	R403.3.3.1	Adjusts language to allow any framing dimensions for effective R-Value of deeply	Administrative	No

buried ducts given the language in R403.3.3 is sufficient to fully insulate the ducts.

REPI-087-21	R403.4.1	Clarifies the intent for protection of pipe insulation from weather and to ensure the insulations thermal conductivity energy savings integrity lasts the life of the mechanical system as per the intent of the code.	Administrative	No
REPI-094-21	R403.6.1	Clarifies the requirements for heat or energy recovery ventilation to use the new definition for balanced ventilation system and the term sensible recovery efficiency.	Administrative	No
REPI-095-21	R403.6.2, TABLE R403.6.2, CSA Chapter 06 (New), ASHRAE Chapter 06 (New)	Aligns residential fan efficacy table with the commercial fan efficacy table, the ASHRAE 90.1 fan efficacy table and the ENERGY STAR Ventilation Fans v4.1 specifications.	Administrative	No
REPI-096-21	R403.6.3	Adds new requirement for mechanical ventilation system testing to use the ANSI/RESNET/ICC 380 Standard and updates the exception for kitchen range hoods or for testing where the ventilation system has integrated diagnostic tools used for airflow measurement.	Administrative	No
REPI-101-21	R404.1	Adds an exception for lighting equipment that clarifies the section's intent in regard to lighting that is used for germicidal or antimicrobial purposes and is aligned with the IECC-C Section C405.3.1 exception for antimicrobial lighting.	Administrative	No

REPI-102-21 Part I	R202, R404.1	Editorial change to correct the terminology used to describe lightning equipment and relocates the efficacy criteria from the definition of “high-efficacy light sources” to R404.1 to improve clarity.	Administrative	No
REPI-102-21 Part II	R202, N1104.1	Editorial change to correct the terminology used to describe lightning equipment and relocates the efficacy criteria from the definition of “high-efficacy light sources” to R404.1 to improve clarity.	Administrative	No
REPI-105-21	TABLE R404.1 (TABLE N1104.1) (New), R404.1.1, R404.1.2 (N1104.1.1) (New), R404.1.3 (N1104.1.2) (New), R404.1.4 (N1104.1.3) (New), R404.1.5 (N1104.1.4) (New)	Adds the requirements for exterior lighting power allowance applicable to residential occupancies from the commercial energy provisions and places these requirements directly within the residential code language. Also adds an additional exception intended to cover one- and two-unit R-2 buildings that may fall outside of the scope of the IRC.	Administrative	No
REPI-106-21	R202 (New), R404.2, R404.2.1 (N1104.2.1) (New), R404.2.2 (N1104.2.2) (New)	Adds new definition for Automatic Shut-Off Control and clarifies application of lighting controls in residential occupancies. The revised rule adds a separate lighting control requirement for habitable spaces that includes both automatic and non-automatic control function and adds automatic occupant sensor control only to specific, non-habitable spaces of a residence. The revised language includes provisions to ensure the occupants can manually turn the lighting on and off independently of the occupant sensor control.	Administrative	No

REPI-108-21	R404.2	Clarifies that the control requirements only apply to interior lighting fixtures and removes the language about exterior lighting fixtures to prevent confusion.	Administrative	No	
REPI-117-21	R405.2	Adds exception for the use of energy costs to determine R405 performance-based compliance to use site energy in Btu or Btu/sq ft could be used for all-electric buildings with on-site renewable energy installed.	Administrative	No	
REPI-120-21	TABLE R405.2, TABLE R406.2	Updates the mandatory requirements Tables R405.2 and R406.2 to ensure parity between the performance compliance paths.	Administrative	No	
REPI-121-21	R405.2, CHAPTER 6 [RE], ASHRAE Chapter 06 (New)	Updates the source energy multiplier/conversion factors based on ASHRAE Standard 105 or a data source approved by the code official.	Administrative	No	
REPI-124-21	TABLE R405.4.2(1)	Updates the mechanical ventilation rate for the R405 Standard Reference Design to be adjusted by the design home air leakage rate. Performance Path Ventilation Rate adjustment to B x M in the Standard Reference Design.	Administrative	No	This proposal permits builders and homeowners to increase mechanical ventilation rates to a more reasonable level without imposing an IECC performance path penalty.
REPI-129-21	R406.3.2	Updates the Energy Rating Index (ERI) compliance path in the IECC by updating the mandatory thermal envelope backstop for projects with on-site generation by incorporating a UA trade-off and basing the requirements on the current IECC.	Administrative	No	

REPI-140-21	R408.2.5	Removes a conflict between the HRV/ERV fan efficacy of this section and that of Table R403.6.2 and clarifies that performance values should be the listed values, uses the same SRE reference temperature as is required in Section R403.6.1) and permits recirculation defrost to be used in all climate zones but Climate Zone 8.	Administrative	No
REPI-153-21	APPENDIX RC, SECTION RC101, RC101.1	Simplifies the scope statement of Appendix RC - Zero Energy Appendix.	Administrative	No
REPI-154-21	APPENDIX RC, SECTION RC102, RC102.2	Changes title of Appendix RC from Zero Energy Residential Buildings to Zero Net Energy Residential Buildings.	Administrative	No
REPI-156-21	APPENDIX RC, SECTION RC102, RC102 (New), SECTION RC103 (New), RC102.1, RC102.2, TABLE RC102.2	Reorganizes Appendix RC to improve readability and structure of the language by moving defined words to a definitions portion within the Appendix. Editorial changes to renumber sections based on these changes.	Administrative	No
REPI-157-21	APPENDIX RC, SECTION RC102, R102.2 (New), RC102.2, TABLE RC102.2, ASHRAE Chapter 06 (New)	Adds a reference to ASHRAE Standard 90.2 to allow ERI requirements from ASHRAE 90.2 Table 6-1 for compliance with Appendix RC. Also adjusts the language for on-site power production.	Administrative	No
REPI-158-21	R202, SECTION R404, R404.4 (N1104.4) (New), R406.7.3, RC102.3 (AX102.3) (New)	Adds a definition for Renewable Energy Certificate (REC) and new language to Section R404 to require REC documentation where renewable energy power production is used for compliance.	Administrative	No

REPI-160-21	RC102.2	Changes the renewable energy purchase contract from 15 to 10 years and utilizes the defined term for renewable energy resources.	Administrative	No
REPI-161-21	RC102.2	Adds new definitions for use in Appendix RC and adds options for financial renewable energy power purchase agreement and using the newly defined terms for the off-site renewable power.	Administrative	No
REPI-165-21	TABLE R402.1.2, R402.1.3, APPENDIX RD (New), RD101 (New), RD101.1 (New), TABLE RD101.1 (New), RD101.2 (New), RD101.3 (New), RD102 (New), RD103 (New), RD104 (New), RD105 (New), RD106 (New)	Establishes Appendix RD to expand R-value options for determining compliance with the U-factor criteria prescribed in Section R402.1.2 of the IECC residential provisions.	Administrative	No

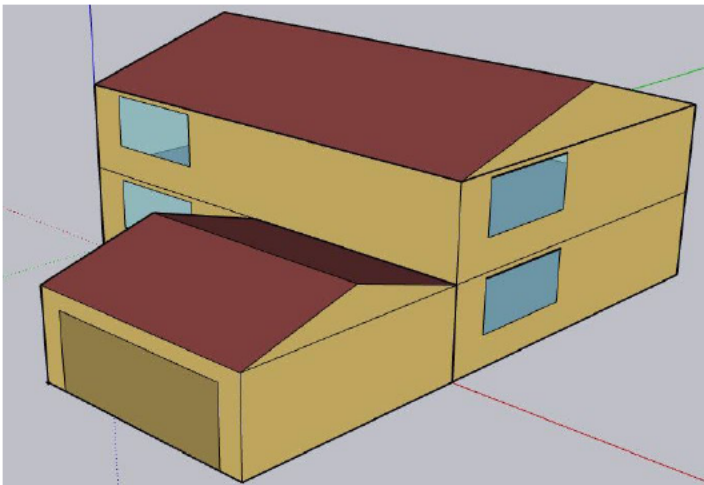
(a) Proposal numbers are as assigned by the ICC (<https://energy.cdpaccess.com/live/cah/>).

(b) Code sections refer to the 2021 IECC. Sections may be renumbered by the ICC in the 2024 IECC.

Appendix B – Prototype Building Model Description

B.1 Single-Family Prototype Model

	Item	Description	Data Source
General			
	Vintage	New Construction	
	Locations	See under Section 1.2.2	Reference: Methodology for Evaluating Cost-Effectiveness of Residential Energy Code Changes
	Available fuel types	Natural Gas/Electricity/Fuel Oil	
	Building Type (Principal Building Function)	Residential	
	Building Prototype	Single-family detached	
Form			
	Total Floor Area (ft ²)	2,376 (29.8' x 39.8' x 2 stories)	Reference: Methodology for Evaluating Cost-Effectiveness of

	Item	Description	Data Source
General			
	Building shape		Residential Energy Code Changes
	Aspect Ratio	1.33	
	Number of Floors	2	
	Window Fraction (Window-to-Floor Ratio)	Average Total: 15.0% divided equally among all facades	Reference: Methodology for Evaluating Cost-Effectiveness of Residential Energy Code Changes
	Window Locations	All facades	
	Shading Geometry	None	
	Orientation	Back of the house faces North (see image)	
	Thermal Zoning	The house is divided into three thermal zones: 'living space', 'attic' and 'crawl space', 'heated basement', 'unheated basement' when applicable	
	Floor to ceiling height	8.5'	

	Item	Description	Data Source
General			
Architecture			
	Exterior walls		
	Construction	Wood-Frame Walls (2x4 16" O.C. or 2x6 24" O.C.) 1" Stucco + Building Paper Felt + Insulating Sheathing (if applicable) + 7/16" Oriented Strand Board + Wall Insulation + 1/2" Drywall	
	U-factor (Btu / h * ft ² * °F) and/or R-value (h * ft ² * °F / Btu)	IECC Requirements Residential; Walls, above grade, Wood Frame	IECC
	Dimensions	Based on floor area and aspect ratio	
	Tilts and orientations	Vertical	
	Roof		
	Construction	Asphalt Shingles	
	U-factor (Btu / h * ft ² * °F) and/or R-value (h * ft ² * °F / Btu)	IECC Requirements Residential; Roofs, Insulation entirely above deck	IECC
	Tilts and orientations	Gabled Roof with a Slope of 4/12	
	Window		
	Dimensions	Based on window fraction, location, floor area and aspect ratio	
	Glass-Type and frame	Hypothetical window with the exact U-factor and SHGC shown below	
	U-factor (Btu / h * ft ² * °F)	IECC Requirements Residential; Glazing	IECC
	SHGC (all)		
	Operable area	100%	
	Skylight		
	Dimensions	Not Modeled	
	Glass-Type and frame	NA	
	U-factor (Btu / h * ft ² * °F)		
	SHGC (all)		

	Item	Description	Data Source
General			
	Visible transmittance		
	Foundation		
	Foundation Type	Four Foundation Types are Modeled- i. Slab-on Grade ii. Vented Crawlspace Depth 2' iii. Heated Basement - Depth 7' iv. Unheated Basement- Depth 7'	Reference: Methodology for Evaluating Cost-Effectiveness of Residential Energy Code Changes
	Insulation level	IECC requirements for floors and basement walls	IECC
	Dimensions	Based on floor area and aspect ratio	
	Internal Mass	8 lb/ft ² of floor area	IECC 2024 Table R405.4.2(1)
	Infiltration (ACH)	2006 IECC: 8 Air Changes/Hour at 50 Pa (8 ACH50) 2009 IECC: 7 Air Changes/Hour at 50 Pa (7 ACH50) 2012-2021 IECC: 5 or 3 Air Changes/Hour at 50 Pa (5 or 3 ACH50) depending on climate zone 2024 IECC: 4, 3 or 2.5 Air Changes/Hour at 50 Pa (5, 3 or 2.5 ACH50) depending on climate zone	
HVAC			
	System Type		
	Heating type	Four Heating System Types are Modeled- i. Gas Furnace ii. Oil Furnace iii. Electric Furnace iv. Heat Pump	Reference: Methodology for Evaluating Cost-Effectiveness of Residential Energy Code Changes

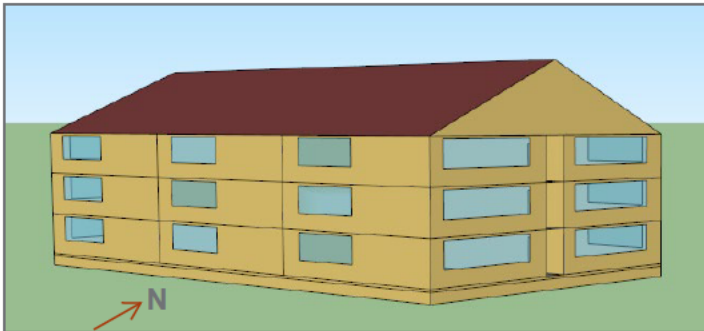
	Item	Description	Data Source
General			
	Cooling type	Central DX Air-Conditioner/Heat Pump	
HVAC Sizing			
	Cooling	Autosized to design day	
	Heating	Autosized to design day	
HVAC Efficiency			
	Air Conditioning	13.4/14.3 SEER2 based on state	Federal minimum efficiency
	Heating	AFUE 80% / HSPF2 7.5	Federal minimum efficiency
HVAC Control			
	Thermostat Setpoint	75°F Cooling/72°F Heating	2024 IECC Table R405.4.2(1)
	Thermostat Setback	No setback	
	Supply air temperature	Maximum 110 F, Minimum 52 F	
	Ventilation	60 CFM Outdoor Air; Continuous Supply	2015 IRC
Supply Fan			
	Fan schedules	See Appendix B.3	
	Supply Fan Total Efficiency (%)	Depending on the fan motor size	Residential Furnaces and Centralized Air Conditioners and Heat Pumps Direct Final Rule Technical Support Document ¹
	Supply Fan Pressure Drop	Depending on the fan supply air cfm	

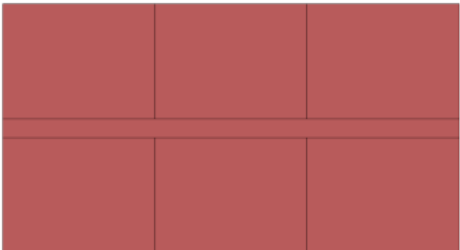
¹ Residential Furnaces and Central Air Conditioners and Heat Pumps Direct Final Rule Technical Support Document – Chapter 7 ‘Energy Use Characterization’

http://www1.eere.energy.gov/buildings/appliance_standards/residential/pdfs/hvac_ch_07_energy-use_2011-04-25.pdf

	Item	Description	Data Source
General			
	Domestic Hot Water		
	DHW type	Individual Residential Water Heater with Storage Tank	
	Fuel type	Natural Gas/Electricity/Oil	
	Thermal efficiency (%)	EF = 0.59 for Gas-fired Water Heaters EF = 0.917 for Electric Water Heaters EF = 0.62 for Oil Water Heaters	Federal minimum efficiency
	Tank Volume (gal)	40 for Gas-fired Water Heaters 52 for Electric or Oil Water Heaters	Reference: Building America Research Benchmark
	Water temperature setpoint	120 F	
	Schedules	See Appendix B.2	
Internal Loads and Schedules			
	Lighting		
	Average interior power density (W/ft²)	Living space: Lighting Power Density is 0.68 W/ft² (For interior lighting) Lighting loads for Garage and Exterior Lighting have also been included	Reference: 2014 Building America House Simulation Protocols
	Interior Lighting Schedule	See Appendix B.3	
	Internal Gains		
	Load (Btu/day)	17,900 + 23.8 x CFA + 4104 x Nbr See Appendix B.4 for the detailed calculations	Reference: IECC 2024 Table R405.4.2(1)
	Internal gains Schedule(s)	See Appendix B.3	
	Occupancy		
	Average people	800 ft2/per person for conditional total and 1601 ft2/per person for total	
	Occupancy Schedule	See Appendix B.3	

B.2 Multifamily Prototype Model

	Item	Description	Data Source
General			
	Vintage	New Construction	
	Location	See Section 1.2.2	Reference: Methodology for Evaluating Cost-Effectiveness of Residential Energy Code Changes
	Available Fuel Types	Natural Gas/Electricity/Fuel Oil	
	Building Type	Residential	
	Building Prototype	Low-rise Multifamily	
Form			
	Total Floor Area	Whole Building- 23,400 ft ² Each Dwelling Unit - 1200 ft ²	
	Building Shape		Reference: Methodology for Evaluating Cost-Effectiveness of Residential Energy Code Changes
	Aspect Ratio	Whole Building- 1.85 Each Dwelling Unit - 1.33	
	Number of Floors	3	
	Number of Units per Floor	6	
	Orientation	Back of the house faces North (see image)	
	Dimensions	Whole Building - 120' x 65' x 25'6" Each Dwelling Unit - 40' x 30' x 8'6"	

	Item	Description	Data Source
	Conditioned Floor Area	Each Dwelling Unit- 1200 ft ²	
	Window Area (Window-to- Exterior Wall Ratio)	23% WWR (Does not include breezeway walls)	
	Exterior Door Area	Each Dwelling Unit - 21 ft ² Whole Building - 378 ft ²	
	Shading Geometry	None	
	Thermal Zoning	Each floor has six dwelling units with a breezeway in the center. Each dwelling unit is modeled as a separate zone. The other thermal zones are: attic, breezeway and foundation (basements and crawlspace only)	
			
	Floor to ceiling height	8.5'	
Architecture			
	Exterior walls		
	Construction	Wood-Frame Walls (2x4 16" O.C. or 2x6 24" O.C.) 1" Stucco + Building Paper Felt + Insulating Sheathing (if applicable) + 7/16" Oriented Strand Board + Wall Insulation + 1/2" Drywall	
	U-factor (Btu / h * ft ² * °F) and/or R-value (h * ft ² * °F / Btu)	IECC Requirements Residential; Wood-Frame Wall R-value	IECC
	Dimensions	Each Dwelling Unit: 40' x 8'6" and 30' x 8'6"	
	Tilts and orientations	Vertical	

	Item	Description	Data Source
	Roof		
	Construction	Built-up Roof: Asphalt Shingles+ 1/2 in. OSB	
	U-factor (Btu / h * ft ² * °F) and/or R-value (h * ft ² * °F / Btu)	IECC Requirements Residential; Ceiling R-value	IECC
	Tilts and orientations	Gabled Roof with a Slope of 5/12	
	Window		
	Dimensions	Based on window fraction, location, glazing sill height, floor area and aspect ratio	
	Glass-Type and frame	Hypothetical window with the exact U-factor and SHGC shown below	
	U-factor (Btu / h * ft ² * °F)	IECC Requirements Fenestration U-factor and SHGC	
	SHGC (all)		
	Operable area	100%	
	Skylight		
	Dimensions	Not Modeled	
	Glass-Type and frame	NA	
	U-factor (Btu / h * ft ² * °F)		
	SHGC (all)		
	Visible transmittance		
	Foundation		
	Foundation Type	Four Foundation Types are Modeled- i. Slab-on Grade ii. Vented Crawlspace Depth 2' iii. Heated Basement - Depth 7' iv. Unheated Basement- Depth 7'	Reference: Methodology for Evaluating Cost-Effectiveness of Residential Energy Code Changes
	Insulation level	IECC Requirements for floors, slabs, and basement walls	
	Dimensions	Based on floor area and aspect ratio	

	Item	Description	Data Source
	Internal Mass	8 lb/ft ² of floor area	IECC 2024 Table R405.4.2(1)
	Infiltration (ACH)	2006 IECC: 8 Air Changes/Hour at 50 Pa 2009 IECC: 7 Air Changes/Hour at 50 Pa 2012-2021 IECC: 5 or 3 Air Changes/Hour at 50 Pa depending on climate zone 2024 IECC: 4, 3 or 2.5 Air Changes/Hour at 50 Pa (5, 3 or 2.5 ACH50) depending on climate zone	
HVAC			
	System Type		
	Heating type	Four Heating System Types are Modeled- i. Gas Furnace ii. Oil Furnace iii. Electric Furnace iv. Heat Pump	
	Cooling type	Central DX Air-Conditioner/Heat Pump (1 per unit)	
	HVAC Sizing		
	Cooling	Autosized to design day	
	Heating	Autosized to design day	
	HVAC Efficiency		
	Air Conditioning	13.4/14.3 SEER2 based on state	Federal Minimum Equipment Efficiency for Air Conditioners and Condensing Units
	Heating	AFUE 80% / HSPF2 7.5	Federal Minimum Equipment Efficiency
	HVAC Control		
	Thermostat Setpoint	75°F Cooling/72°F Heating	
	Thermostat Setback	No setback	
	Supply air temperature	Maximum 110 F, Minimum 52 F	
	Ventilation	45 CFM Outdoor Air per dwelling unit; Continuous Supply	2021 International Residential Code (IRC)
	Supply Fan		
	Fan schedules	See Appendix B.3	

	Item	Description	Data Source
	Supply Fan Total Efficiency (%)	Fan efficiency 50%; Motor efficiency 86% (PSC motor)	Residential Furnaces and Centralized Air Conditioners and Heat Pumps Direct Final Rule Technical Support Document ¹
	Supply Fan Pressure Drop	1.6" w.g.	
	Service Water Heating (SWH)		
	SWH type	Individual Residential Water Heater with Storage Tank	
	Fuel type	Natural Gas / Electricity/Oil	
	Thermal efficiency (%)	EF = 0.59 for Gas-fired Water Heaters EF = 0.917 for Electric Water Heaters EF = 0.62 for Oil Water Heaters	Federal Minimum Equipment Efficiency
	Tank Volume (gal)	40 for Gas-fired Water Heaters 52 for Electric or Oil Water Heaters	
	Water temperature setpoint	120 F	
	Schedules	See Appendix B.3	
	Internal Loads and Schedules		
	Lighting		
	Average power density (W/ft ²)	Apartment units: Lighting Power Density is 0.82 W/ft ² (For interior lighting) Lighting loads for Garage and Exterior Lighting have also been included	2014 Building America House Simulation Protocols
	Interior Lighting Schedule	See Appendix B.3	
	Internal Gains		
	Internal Gains (Btu/day per Dwelling Unit)	17,900 + 23.8 x CFA + 4104 x N _{br} See Appendix B.4 for the detailed calculations	2024 IECC Table R405.4.2(1)

¹ Residential Furnaces and Centralized Air Conditioners and Heat Pumps Direct Final Rule Technical Support Document: Chapter 7 'Energy Use Characterization.' Residential Furnaces and Centralized Air Conditioners and Heat Pumps Direct Final Rule Technical Support Document

	Item	Description	Data Source
	Internal Gains Schedule(s)	See under Appendix B.3	
	Occupancy		
	Average people	2 people/apartment unit	
	Occupancy Schedule	See Appendix B.3	

B.3 Schedules

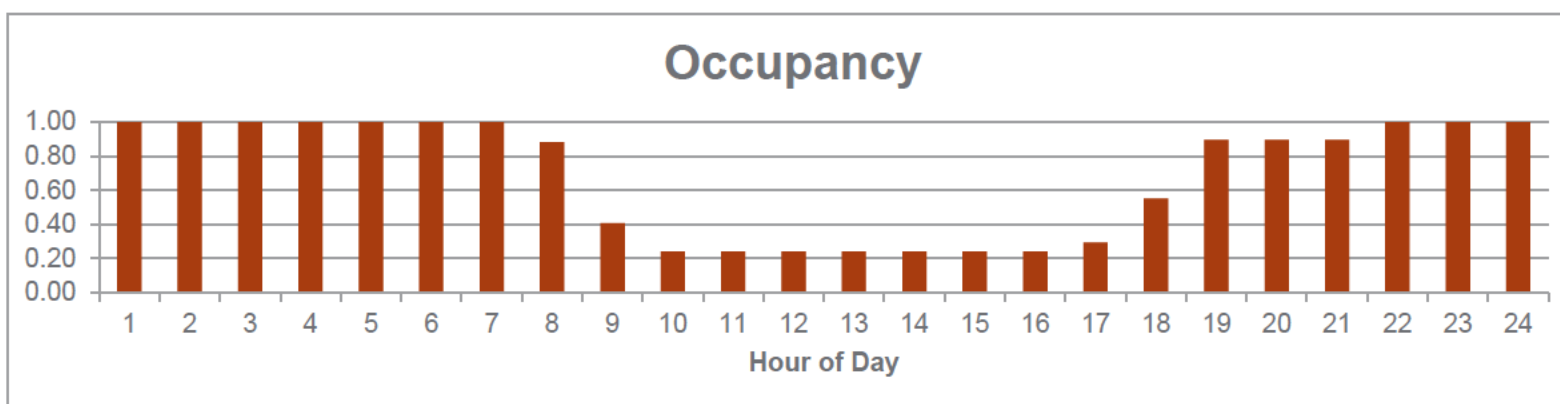


Figure B.1. Occupancy Schedules

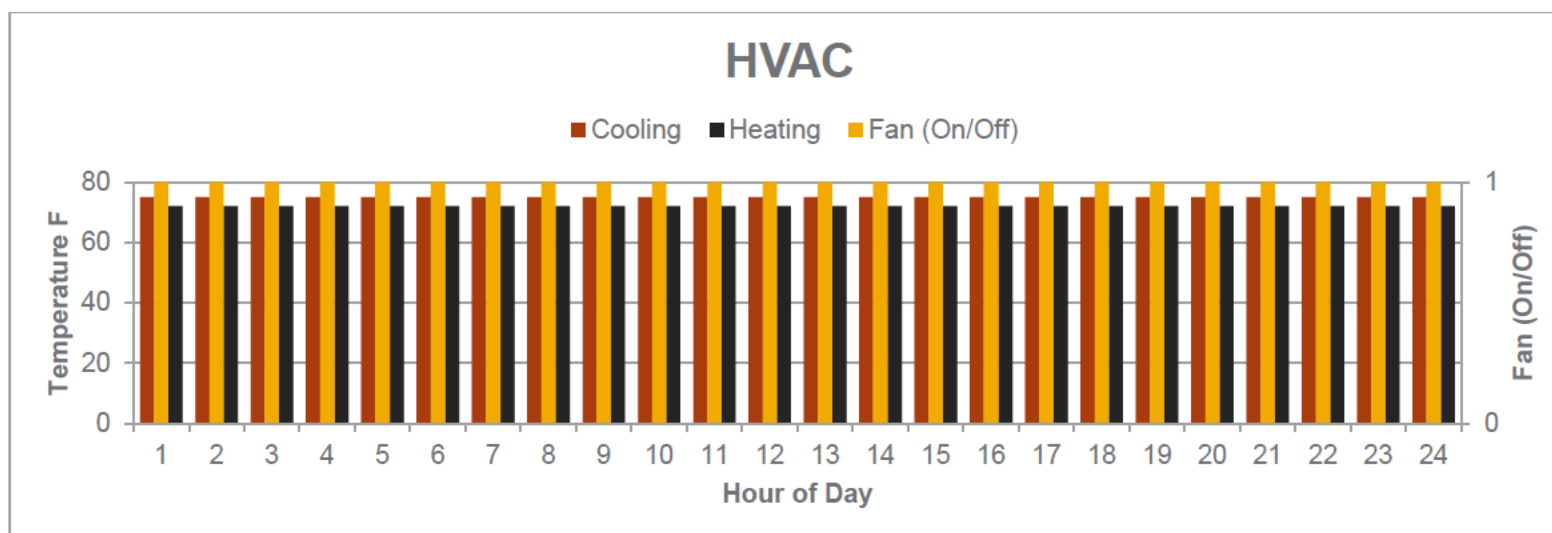


Figure B.2. HVAC Temperature Schedule

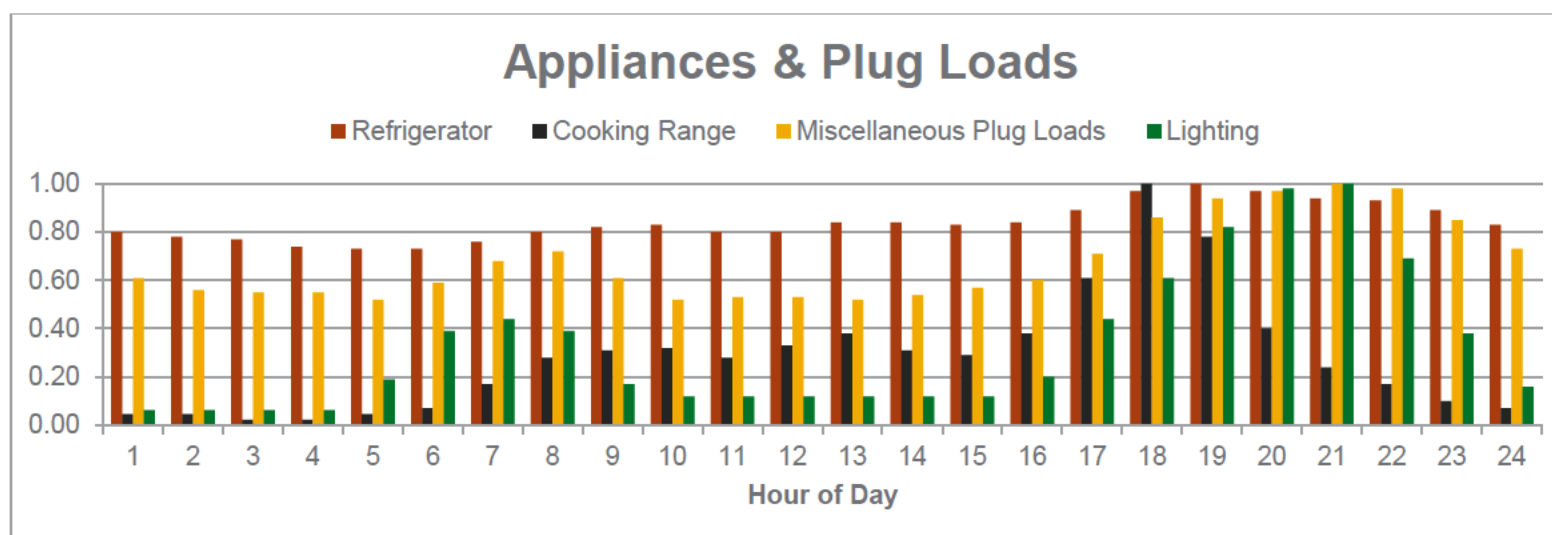


Figure B.3. Lighting and Appliance Schedules

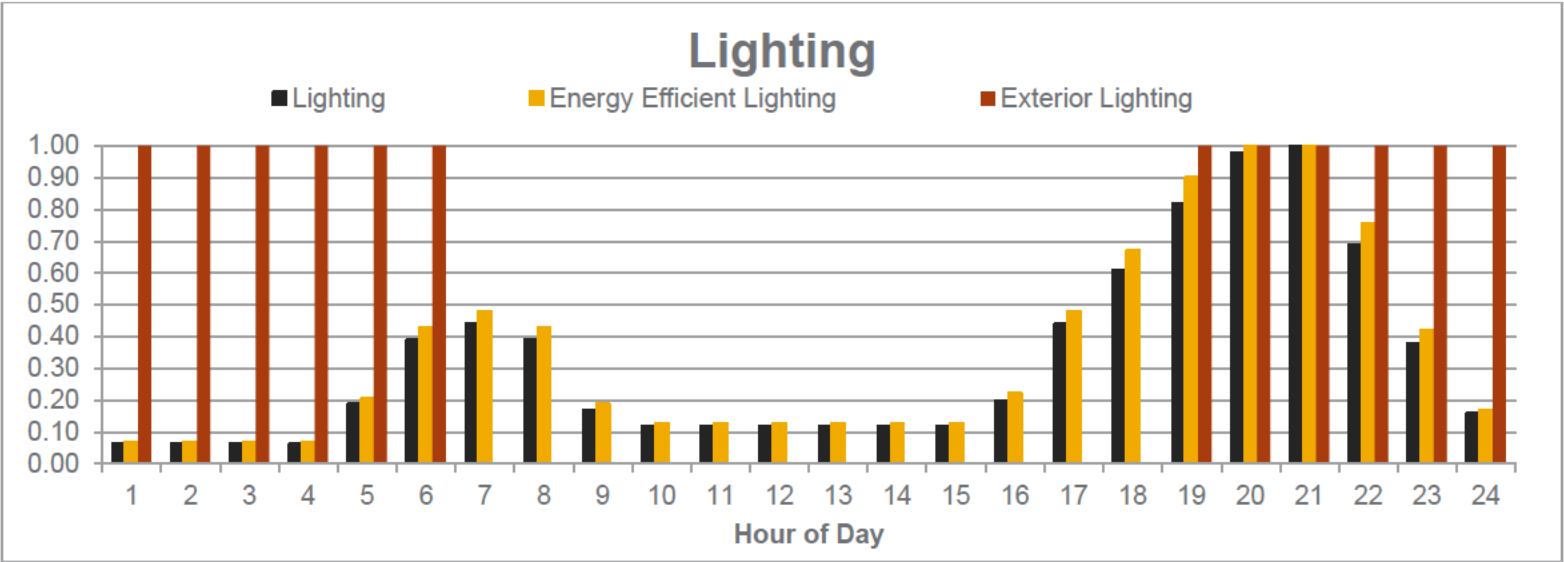


Figure B.4. Interior and Exterior Lighting Schedules

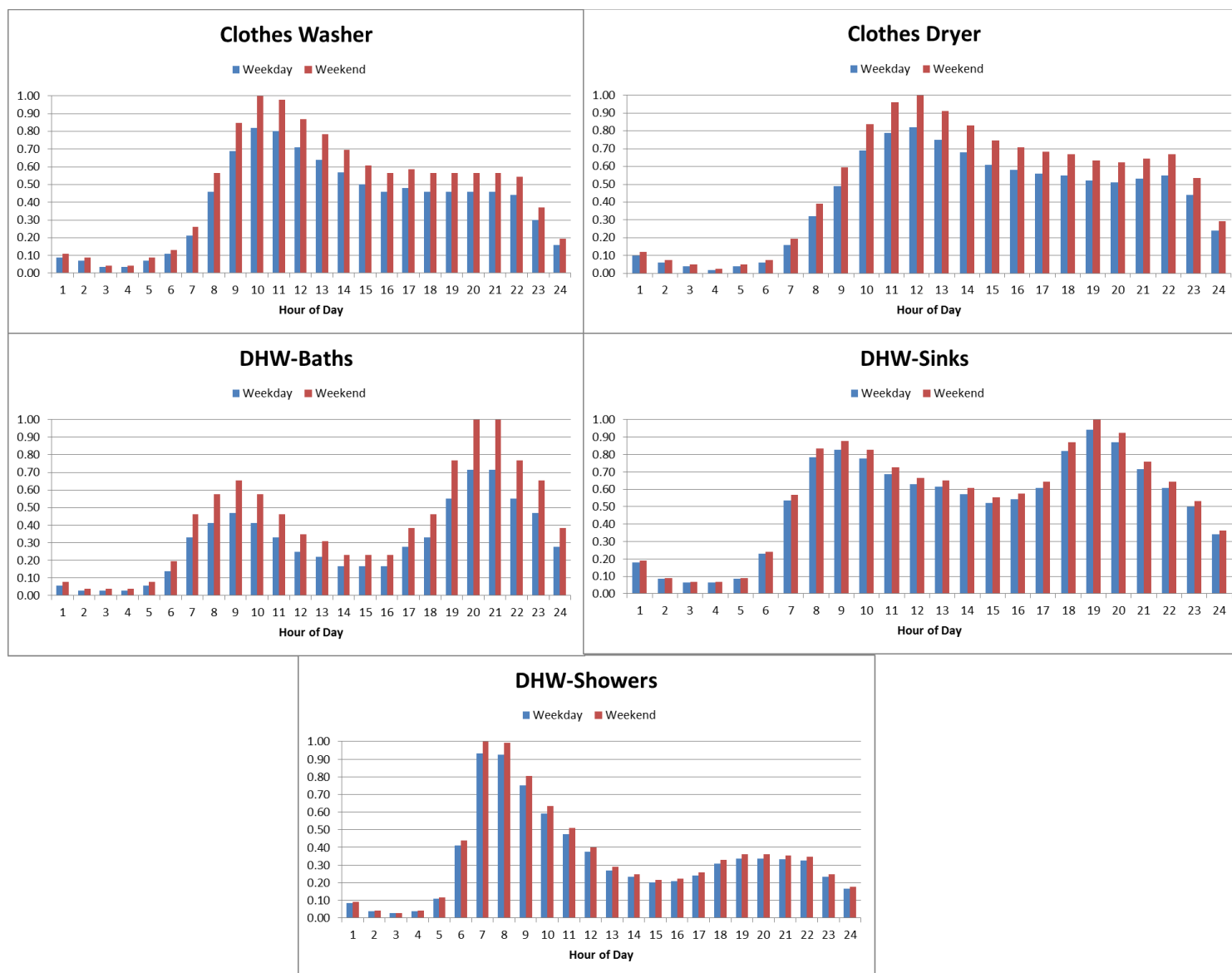


Figure B.5. Service Hot Water Demand Schedules

B.4 Internal Gains Assumptions

Table B.1. Total Internal Gains for the Single-Family Prototype for the 2012 through 2024 IECC

					Fraction of Electricity Use Not Turned into Heat	Internal Heat Gains (kWh/yr)		
Appliance	Power	Total Electricity (kWh/yr)	Fraction Radiant	Fraction Latent		2012 IECC	2015 IECC	2018-2024 IECC
Refrigerator	91.06 W	668.67	1.00	0.00	0.00	669	669	669
Clothes Washer	28.48 W	105.15	0.80	0.00	0.20	84	84	84
Clothes Dryer	213.06W	833.27	0.15	0.05	0.80	125	125	125
Dishwasher	65.70 W	205.90	0.60	0.15	0.25	124	124	124
Range	248.15 W	604.09	0.40	0.30	0.30	242	242	242
Misc. Plug Load	567.46 W	3358.05	0.69	0.06	0.25	2317	2317	2317
IECC Adjustment Factor	340.85 W	2017.01	0.41	0.06	0.25	1392	1392	1392
Lighting			1.00	0.00	0.00	1345	1164	1164
Occupants	3 Occupants					2123	2123	2123
Total					kWh/yr	8420	8239	8239
					kBtu/yr	28729	28112	28112
					Btu/day	78711	77019	77019

Table B.2. Total Internal Gains for the Multifamily Prototype for the 2012 through 2024 IECC (per dwelling unit)

Appliance	Power	Total Electricity (kWh/yr)	Fraction Sensible	Fraction Latent	Fraction of Electricity Use Not Turned into Heat	Internal Heat Gains (kWh/yr)		
						2012 IECC	2015 IECC	2018-2024 IECC
Refrigerator	91.06 W	668.67	1.00	0.00	0.00	669	669	669
Clothes Washer	23.73 W	87.63	0.80	0.00	0.2	70	70	70
Clothes Dryer	177.60 W	694.56	0.15	0.05	0.8	104	104	104
Dishwasher	54.75W	171.60	0.60	0.15	0.25	103	103	103
Range	206.73 W	503.24	0.40	0.30	0.3	201	201	201
Misc. Plug Load	440.55 W	2607.04	0.69	0.06	0.25	1799	1799	1799
IECC Adjustment Factor	29.23 W	172.98	0.41	0.06	0.25	119	119	119
Lighting			1.00	0.00	0	405	351	351
Occupants	2 Occupants					1416	1416	1416
						kWh/yr	4886	4832
Total						kBtu/yr	16673	16489
						Btu/Day	45680	45175

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Department of Energy

FY 2026 Congressional Justification



Budget in Brief

Department of Energy

FY 2026 Congressional Justification



Budget in Brief

May 2025

Office of the Chief Financial Officer



Printed with soy ink on recycled paper

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FY 2026 President's Budget for DOE

Budget in Brief Overview

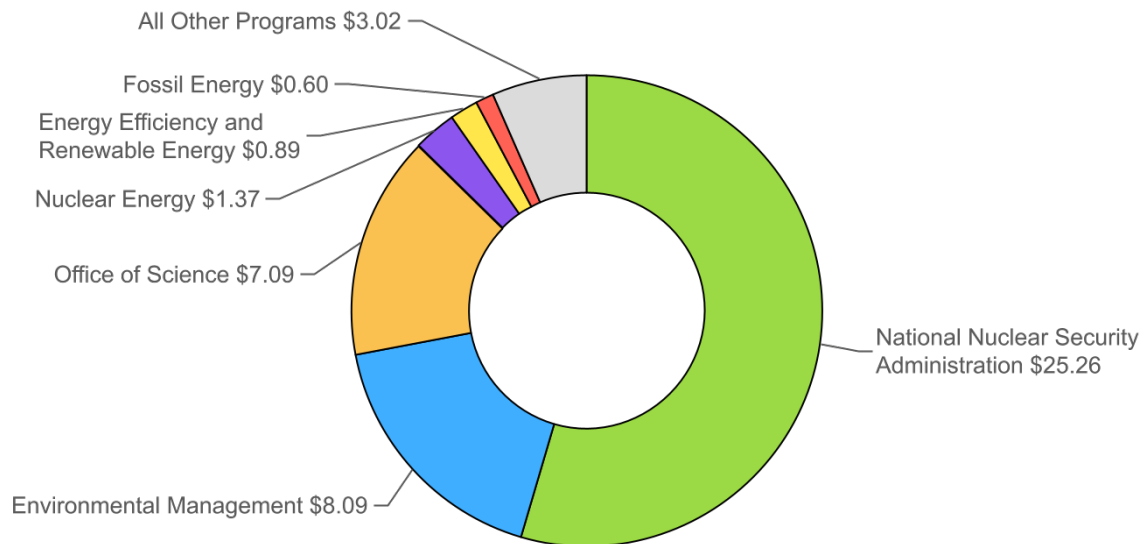
DOE Department-Wide Discretionary Budget (\$ Billions)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request
Defense (050)	32.95	32.97	33.84
Non-Defense (non-050)	17.05	16.83	12.48
Total Budget Authority	50.00	49.81	46.32

NNSA Budget, including Reconciliation Resources (\$ Billions)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request
National Nuclear Security Administration, including Reconciliation Resources	24.04	24.04	30.04

FY 2026 DOE Discretionary Budget Request by Program (\$B)



Discretionary Total = \$46.32 Billion¹

¹ Discretionary total does not include \$4.782 billion in Reconciliation resources for NNSA.

UNLEASHING A GOLDEN ERA OF ENERGY DOMINANCE AND ENERGY INNOVATION AND PROTECTING THE NATION

The Department of Energy's (DOE) Fiscal Year (FY) 2026 discretionary Budget Request provides \$46.3 billion in budget authority for FY 2026, a decrease of \$3.5 billion, or 7 percent, from the FY 2025 Enacted Level. Including Reconciliation resources, the Budget for the National Nuclear Security Administration (NNSA) provides \$30.0 billion, an increase of 25 percent. The Budget delivers results for the American people in a fiscally responsible way. It unleashes America's energy dominance through funding for nuclear energy and fossil energy; unleashes America's energy innovation through investments at our National Laboratories while prioritizing fusion and artificial intelligence; and delivers on the President's call for Peace Through Strength by making historic investments in the Nation's nuclear security programs and investing in cybersecurity. DOE is uniquely prepared to continue and expand on this urgent work.

To ensure DOE program activities and resources align with the Administration's highest priorities, while at the same time eliminating wasteful spending, the Budget request proposes cancelling a total of \$15.2 billion of unobligated balances from the Infrastructure Investments and Jobs Act, \$6.5 billion of which are comprised of FY 2026 advanced appropriations.

UNLEASHING AMERICA'S ENERGY DOMINANCE

America's central position in the global energy system is as a leading producer, consumer, and innovator. Access to domestic sources of affordable and reliable energy will underpin a prosperous, secure, and powerful America for decades to come. Affordable energy is central to modern life. The Nation must take advantage of abundant domestic resources to promote competitiveness across industries. Utilizing the Nation's energy resources of coal, natural gas, petroleum, and nuclear, stimulates the economy and builds a foundation for future growth and will allow us to unleash America's energy dominance.

A vital area of focus is expanding commercial nuclear power across the country. America must lead the commercialization of affordable and abundant nuclear energy, and so DOE will focus on the rapid deployment of next-generation nuclear technology, including small modular reactors and advanced reactors. The FY 2026 Budget includes \$1.37 billion for the Office of Nuclear Energy and \$750 million of credit subsidy for the Loans Program Office to accelerate the innovation and deployment of commercial nuclear technologies.

The FY 2026 Budget also provides \$595 million for the Office of Fossil Energy, restoring the office's central function of supporting the production of fossil energy, including coal, oil, gas, and critical minerals for the U.S.

UNLEASHING AMERICA'S ENERGY INNOVATION

The FY 2026 Budget unleashes America's energy innovation, with the DOE National Laboratory network serving as the engines that drive research and development to further this aim. When it comes to our National Labs, we are capable of doing more with less. We can both increase efficiency and drive innovation. We will prioritize earlier-stage research that supports true technological breakthroughs to maintain America's global competitiveness.

The Budget funds the Office of Science at \$7.1 billion to support cutting-edge basic research in the physical sciences. These investments support identifying and accelerating critical and emerging technologies to strengthen the connection between advances in fundamental science and technology innovation. This Budget supports research focused on Administration priorities, including fusion energy, quantum information sciences, high speed computing, and artificial

intelligence (AI) and machine learning, which bolsters U.S. leadership in science, technology, and innovation and supports the Department's national security mission.

PROTECTING THE NATION

Within the National Nuclear Security Administration (NNSA), the Budget provides a historic investment of over \$30 billion (including \$4.8 billion in Reconciliation resources) in the Nation's nuclear security enterprise to modernize the Nation's nuclear deterrent and protect the American people. The Budget supports a safe, secure, reliable, and effective nuclear stockpile and makes necessary investments to reduce global nuclear threats, provide safe and effective integrated nuclear propulsion systems for the U.S. Navy, and modernize the Nuclear Security Enterprise, including recapitalizing essential scientific and production facilities.

The FY 2026 Request includes \$25 billion to support the current nuclear stockpile, warhead modernization programs, production facilities and capabilities modernization efforts, the scientific tools necessary to execute these efforts, and recapitalization of physical infrastructure and essential facilities to ensure the deterrent remains viable.

The Budget provides funding to address nuclear threats by preventing the proliferation of nuclear weapons or weapons-usable materials, countering efforts to acquire such weapons or materials, and responding to nuclear or radiological incidents. The Budget includes \$2.3 billion for DOE's Naval Nuclear Propulsion Program to ensure safe and reliable operation of reactor plants in nuclear-powered submarines and aircraft carriers, advance Naval Reactors infrastructure modernization, and invests in research to deliver new technologies to the Navy and maintain America's advantage over its adversaries.

The Budget also includes \$8.09 billion for the Environmental Management program and reflects this Administration's strong commitment to clean up and protect communities that supported defense production programs and government-sponsored nuclear energy research, including \$3.07 billion to continue cleanup progress at the Hanford site in Washington. As the largest environmental cleanup program in the world, Environmental Management plays a key role in contributing to national security priorities, investing in the future, and aiding community efforts to build strong economies and grow jobs. This investment will enable the Department of Energy to treat radioactive tank waste, take down contaminated buildings, ship and dispose of legacy waste and clean soil and groundwater across EM sites.

The Budget also includes \$200 million for the Office of Legacy Management to protect human health and the environment by providing long-term management solutions at over 100 World War II and Cold War era sites where the federal government operated, researched, produced, and tested nuclear weapons and/or conducted scientific and engineering research.

The threats to America's energy infrastructure are also evolving at an unprecedented pace. Cyber adversaries and physical attacks are no longer isolated challenges – they are converging to create a complex and persistent threat landscape. The Budget provides \$150 million for the Office of Cybersecurity, Energy Security, and Emergency Response to enhance the security of energy technologies and the energy supply chain. The amount also includes assistance to States, local governments, Tribes, and Territories for emergency planning and preparation.

An additional \$219 million is provided for operation and maintenance of the Strategic Petroleum Reserve and Naval Petroleum and Oil Shale Reserves. The Budget proposes to sell the assets of the under-utilized Northeast Home Heating Oil Reserve, generating an estimated revenue of \$100 million.

CONCLUSION

The Department of Energy's FY 2026 President's Budget Request provides for America's future by unleashing a golden era of American energy dominance, progressing scientific research, and protecting the Nation. The Budget demonstrates fiscal discipline and commitment to an efficient and effective Federal government. To that end, DOE will focus spending in areas with the highest return on investment of taxpayer dollars. The President's Budget supports the critical role the Department of Energy has in energy dominance and innovation, and the safety and security of the Nation. The Department appreciates the support of Congress and looks forward to continuing to work together.

DEPARTMENT OF ENERGY
FY 2026 Appropriation Summary
(\$K)

FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
			\$	%

Department of Energy Budget by Appropriation

Energy Efficiency and Renewable Energy ¹	3,460,000	3,460,000	888,000	-2,572,000	-74%
Electricity	280,000	280,000	193,000	-87,000	-31%
Cybersecurity, Energy Security and Emergency Response	200,000	200,000	150,000	-50,000	-25%
Strategic Petroleum Reserve	213,390	213,390	206,325	-7,065	-3%
Naval Petroleum and Oil Shale Reserves	13,010	13,010	13,000	-10	0%
SPR Petroleum Account	100	100	100	0	0%
Northeast Home Heating Oil Reserve	7,150	7,150	3,575	-3,575	-50%
Total, Petroleum Reserve Accounts	233,650	233,650	223,000	-10,650	-5%
Nuclear Energy (270) ²	1,525,000	1,525,000	1,210,000	-315,000	-21%
Fossil Energy	865,000	865,000	595,000	-270,000	-31%
Uranium Enrichment Decontamination and Decommissioning (UED&D)	855,000	855,000	814,380	-40,620	-5%
Energy Information Administration	135,000	135,000	135,000	0	0%
Non-Defense Environmental Cleanup	342,000	342,000	322,371	-19,629	-6%
Science	8,240,000	8,240,000	7,092,000	-1,148,000	-14%
Office of Technology Commercialization ³	20,000	20,000	—	-20,000	-100%
Office of Clean Energy Demonstrations	50,000	50,000	—	-50,000	-100%
Grid Deployment ⁴	60,000	60,000	15,000	-45,000	-75%
Office of Manufacturing & Energy Supply Chains ⁵	—	—	15,000	+15,000	N/A
Advanced Research Projects Agency - Energy	460,000	460,000	200,000	-260,000	-57%
Nuclear Waste Disposal Fund	12,040	12,040	12,040	0	0%
Departmental Administration	286,500	286,500	174,926	-111,574	-39%
Indian Energy Policy and Programs	70,000	70,000	50,000	-20,000	-29%
Inspector General	86,000	86,000	90,000	+4,000	+5%
Title 17 Innovative Technology Loan Guarantee Program	58,719	(121,000)	682,588	+803,588	-664%
Advanced Technology Vehicles Manufacturing Loan Program	13,000	13,000	9,500	-3,500	-27%
Tribal Energy Loan Guarantee Program	6,300	6,300	(12,000)	-18,300	-290%

¹ The Office of Energy Efficiency and Renewable Energy funding levels for FY 2024 Enacted and FY 2025 Enacted included the Offices of State and Community Energy Programs, Federal Energy Management Program, and Manufacturing and Energy Supply Chains.

² Naval Reactors and Nuclear Energy (050) amounts do not reflect the mandated transfer of \$92.8 million in FY 2024 and FY 2025 from Naval Reactors to the Office of Nuclear Energy for operation of the Advanced Test Reactor

³ The Office of Technology Commercialization, formerly known as the Office of Technology Transitions, is funded in the Departmental Administration appropriation in FY 2026 at \$10 million.

⁴ Funding for the Grid Deployment account in FY 2026 will support OE programs and projects, with close coordination with CESER, that increase generation and transmission capacity and strengthen grid security.

⁵ Funding for the MESC account in FY 2026 will support EERE and FE activities to address supply chain vulnerability areas, to include critical minerals and materials. The Office of Manufacturing and Energy Supply Chains was funded at \$19 million in the Energy Efficiency and Renewable Energy appropriation in both FY 2024 Enacted and FY 2025 Enacted.

(\$K)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
				\$	%
Total, Credit Programs	78,019	-101,700	680,088	+781,788	-769%
Energy Projects	83,724	—	—	0	N/A
Critical and Emerging Technologies	—	—	2,000	+2,000	N/A
Total, Energy Programs	17,341,933	17,078,490	12,861,805	-4,216,685	-25%
Weapons Activities ¹	19,108,000	19,293,000	24,856,400	+5,563,400	+29%
Defense Nuclear Nonproliferation	2,581,000	2,396,000	2,284,600	-111,400	-5%
Naval Reactors ²	1,946,000	1,946,000	2,346,000	+400,000	+21%
Federal Salaries and Expenses	500,000	500,000	555,000	+55,000	+11%
Total, National Nuclear Security Administration	24,135,000	24,135,000	30,042,000	+5,907,000	+24%
Defense Environmental Cleanup	7,285,000	7,285,000	6,956,000	-329,000	-5%
Other Defense Activities	1,080,000	1,107,000	1,182,000	+75,000	+7%
Defense Uranium Enrichment D&D	285,000	285,000	278,000	-7,000	-2%
Total, Environmental and Other Defense Activities	8,650,000	8,677,000	8,416,000	-261,000	-3%
Nuclear Energy (050)	160,000	160,000	160,000	0	0%
Total, Atomic Energy Defense Activities	32,945,000	32,972,000	38,618,000	+5,646,000	+17%
Southeastern Power Administration	—	—	—	0	N/A
Southwestern Power Administration	11,440	11,440	10,400	-1,040	-9%
Western Area Power Administration	99,872	99,872	63,372	-36,500	-37%
Falcon and Amistad Operating & Maintenance Fund	228	228	228	0	0%
Total, Power Marketing Administrations	111,540	111,540	74,000	-37,540	-34%
Total, Energy and Water Development and Related Agencies	50,398,473	50,162,030	51,553,805	+1,391,775	+3%
Excess Fees and Recoveries, FERC	-9,000	-9,000	-9,000	0	0%
Title XVII Loan Guar. Prog Section 1703 Negative Credit Subsidy Receipt	-6,493	-61,106	-65,805	-4,699	+8%
UED&D Fund Offset	-285,000	-285,000	-278,000	+7,000	-2%
Sale of Northeast Gasoline Supply Reserve	-98,000	—	—	0	N/A
Sale of Northeast Home Heating Oil Reserve	—	—	-100,000	-100,000	N/A
Total Funding by Appropriation	49,999,980	49,806,924	51,101,000	+1,294,076	+3%
Total Discretionary Funding	49,999,980	49,806,924	46,319,000	-3,487,924	-7%
DOE Budget Function	49,999,980	49,806,924	51,101,000	+1,294,076	+3%
<i>NNSA Defense (050) Total</i>	<i>24,135,000</i>	<i>24,135,000</i>	<i>30,042,000</i>	<i>+5,907,000</i>	<i>+24%</i>
<i>Non-NNSA Defense (050) Total</i>	<i>8,810,000</i>	<i>8,837,000</i>	<i>8,576,000</i>	<i>-261,000</i>	<i>-3%</i>
Defense (050)	32,945,000	32,972,000	38,628,000	+5,646,000	+17%
<i>Science (250)</i>	<i>8,240,000</i>	<i>8,240,000</i>	<i>7,092,000</i>	<i>-1,148,000</i>	<i>-14%</i>
<i>Energy (270)</i>	<i>8,814,980</i>	<i>8,594,924</i>	<i>5,391,000</i>	<i>-3,203,924</i>	<i>-37%</i>
Non-Defense (Non-050)	17,054,980	16,834,924	12,483,000	-4,351,924	-26%

¹ FY 2026 Requested Funding includes \$4.782 billion in mandatory Reconciliation resources for NNSA Weapons Activities.

DOE Program Office Details

National Nuclear Security Administration

(\$K)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
				\$	%
Federal Salaries and Expenses	500,000	500,000	555,000	+55,000	+11%
Weapons Activities	19,108,000	19,293,000	24,856,400	+5,563,400	+29%
Defense Nuclear Nonproliferation	2,581,000	2,396,000	2,284,600	-111,400	-5%
Naval Reactors ¹	1,946,000	1,946,000	2,346,000	+400,000	+21%
Total, National Nuclear Security Administration	24,135,000	24,135,000	30,042,000	+5,907,000	+24%

¹Naval Reactors amounts do not reflect the mandated transfer of \$92.8 million in FY 2024 and FY 2025 to the Office of Nuclear Energy for operation of the Advanced Test Reactor.

NNSA Overview

The National Nuclear Security Administration (NNSA) FY 2026 Budget Request is \$30.0 billion to fund NNSA's mission to support the security and safety of our Nation. NNSA's FY 2026 Budget Request pursues five major national security endeavors:

- Maintain a safe, secure, reliable, and effective nuclear weapons stockpile;
- Reduce global nuclear threats and keep materials out of the hands of terrorists and adversaries;
- Provide safe and effective integrated nuclear propulsion systems for the U.S. Navy;
- Strengthen key science, technology and engineering capabilities to support all missions; and,
- Modernize the Department of Energy's Nuclear Security Enterprise.

Key to all these efforts is providing effective federal oversight for growing mission requirements.

Federal Salaries and Expenses - NNSA

(\$K)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
				\$	%
Federal Salaries and Expenses	505,827	527,169	555,000	+27,831	+5.3%
Use of Prior Year Balances	-5,827	-27,169	0	+27,169	+100%
Federal Salaries and Expenses	500,000	500,000	555,000	+55,000	+11%

Appropriation Overview

The **National Nuclear Security Administration (NNSA) Federal Salaries and Expenses (FSE)** appropriation provides funding for the specialized Federal workforce that is responsive to the dynamic geopolitical environment providing programmatic direction, leadership, and oversight for development and delivery of a modernized nuclear deterrent, nonproliferation and counterterrorism programs, foundational science capabilities, and recapitalization of the nuclear security enterprise infrastructure. It does not include funding for the federal staff supporting the Weapons Activities (WA) Secure Transportation Asset program or the Naval Reactors account which are supported by separate Program Direction accounts.

NNSA federal staff are located throughout the United States, reflecting NNSA's work with the nuclear security enterprise. NNSA's federal workforce is in Washington, DC; Germantown, Maryland; Albuquerque, New Mexico; and at eight federal field offices: Kansas City Field Office (Missouri); Lawrence Livermore Field Office (California); Los Alamos Field Office (New Mexico); Nevada Field Office (Nevada); Pantex Field Office (Texas); Y-12 Field Office (Tennessee); Sandia Field Office (New Mexico); and Savannah River Field Office (South Carolina).

NNSA also manages the Department of Energy's (DOE) Overseas Presence business line in the DOE Working Capital Fund (WCF), including 24 Full-time Equivalents (FTEs), 22 DOE FTEs in 21 diplomatic missions and two Headquarters FTEs for transition to and from overseas locations. NNSA supervises both federal employees and locally employed staff overseas and reimburses the Department of State for International Cooperative Administrative Support Services and Capital Security Cost Sharing charges.

Program Highlights

The \$555 million Request reflects a 5.3 percent increase in overall planned spending in the FSE account. This increase supports a federal staff of 2,003 Federal FTEs, including funding for FTEs at the Savannah River Operations Office funded in FY 2025 by Defense Environmental Cleanup, reflecting the transfer of responsibility for management of the Savannah River Site (SRS) from DOE's Office of Environmental Management. Additional increases reflect the escalation of benefit costs, partial restoration of mission-essential travel and mandatory training, and a larger share of overall Department space and occupancy and Working Capital Fund expenses.

NNSA will re-shape its workforce consistent with the principles of the Executive Order (EO) on Implementing the President's "Department of Government Efficiency" Workforce Optimization Initiative. NNSA will use attrition, reductions, and stream-lined mission support to allow for limited, targeted growth in its federal staffing to support nuclear modernization programs. The FSE budget will ensure NNSA remains fully capable of supporting its vital national security missions.

Weapons Activities - NNSA

(\$K)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
				\$	%
Total, Weapons Activities	19,108,000	19,293,000	24,856,400	+5,563,400	+29%

Appropriation Overview

Programs funded within the Weapons Activities appropriation support the Nation's nuclear stockpile and its attendant nationwide infrastructure of science, technology, engineering, and production capabilities. The FY 2026 Request supports the current nuclear stockpile, warhead modernization programs to include life extension programs (LEP) and modifications, production facilities and capabilities modernization efforts, the scientific tools and workforce necessary to support the stockpile, and recapitalization of physical infrastructure and essential facilities to ensure the deterrent remains viable. Weapons Activities provides for the maintenance and refurbishment of nuclear weapons to continue sustained confidence in their safety, reliability, and military effectiveness without resuming nuclear explosive testing; continued investment in scientific, engineering, and manufacturing capabilities to enable production and certification of the enduring nuclear weapons stockpile; and manufacture of nuclear weapon components. Weapons Activities also provides for continued maintenance and investment in the National Nuclear Security Administration (NNSA) nuclear complex to be more responsive and resilient.

NNSA's laboratories, plants, and sites employ approximately 65,500 people across the Nuclear Security Enterprise, primarily at eight geographical sites, to execute these programs managed by a Federal workforce composed of civilian staff supplemented with a small number of military assignees.

The FY 2026 Budget Request funds execution of six simultaneous warhead modernization programs, including the warhead for the nuclear-armed sea-launched cruise missile (SLCM-N) and the B61-13 variant, while coordinating with DoD to plan for future systems; continue restoring and refurbishing production capability, including the capability to produce 80 pits per year as close to 2030 as possible; and enhance Stockpile Research, Technology, and Engineering capabilities— including design, certification, and assessment infrastructure – that are used every day to execute NNSA programs.

Program Highlights

Stockpile Management

The mission for the Stockpile Management program is to maintain a safe, secure, reliable, and effective nuclear weapons stockpile. The Stockpile Management program encompasses five major subprograms that directly support the Nation's nuclear weapons stockpile. In FY 2026, Stockpile Modernization will close out the B61-12 Life Extension Program (LEP) and W88 Alteration (ALT) 370 (funded with carryover) and transfer program management to stockpile sustainment; transition the B61-13 to Phase 6.6 (Full Scale Production); continue Phase 6.4 (Production Engineering) activities for the W80-4 LEP; continue Phase 6.3 (Development Engineering) activities for the W87-1 Modification Program; continue Phase 2A (Design Definition and Cost Study) for the W93; and transition SLCM-N to Phase 6.3 (Development Engineering). Stockpile Sustainment will execute the activities necessary to sustain a safe, secure, reliable, and effective stockpile. Additionally, Stockpile Sustainment will support planning, provisioning, and LLC (Limited Life Component) production activities, including initial activities for service life extensions, an increase in Joint Test Assembly (JTA) design and production to support extended flight testing schedules, activities to support the transition of the B61-12 and W88 ALT 370 to Stockpile Sustainment, and the expansion of Nuclear Security Enterprise (NSE)-wide digital engineering activities. Weapons Dismantlement and Disposition (WDD) will recover critical components and materials for existing weapon programs, major modernizations, and Naval Reactors. The program will provide safe and secure dismantlement of nuclear weapons while increasing legacy component disposition improving NNSA efficiency by removing excess materials and components from constrained storage areas across the complex. Production Operations (PO) will provide site-specific, production-enabling capabilities that are required for weapons production activities across the Nuclear

Security Enterprise. Production Operations ensures the necessary weapons production capabilities, including equipment, trained workforce, and tools, are available, maintained, and qualified. Nuclear Enterprise Assurance (NEA) will prevent, detect, and mitigate potential consequences of subversion, both to the stockpile and to the associated capabilities to design, produce, and test nuclear weapons. NEA will apply a System Security Engineering (SSE) approach that will address current and evolving adversarial threat and risks to nuclear weapons that enable responsible adoption of leading-edge technologies.

Production Modernization

The Production Modernization portfolio focuses on the production capabilities for nuclear weapons components critical to weapon performance, including primaries, secondaries, radiation cases, and non-nuclear components. Production Modernization funds the equipment, facilities, and personnel required to reestablish the Nation's capability to produce 80 pits per year (ppy). FY 2026 funding will support Plutonium Pit Production at both Los Alamos National Laboratory and the Savannah River Site. Production Modernization also supports qualification of explosive, pyrotechnic, and propellant materials for the NNSA's nuclear security enterprise across five sites; implements the program necessary to produce tritium in support of the nuclear weapons stockpile and other national programs; funds modernization of uranium operations, delivery of canned subassemblies and components needed to maintain the stockpile, as well as support to the U.S. nonproliferation and naval nuclear propulsion programs; supports the restart and modernization of lapsed depleted uranium (DU) alloying and component manufacturing capabilities for meeting short- and long-term mission requirements; maintains production of the Nation's enriched lithium supply; and provides funding to modernize production of non-nuclear components and warhead assembly/disassembly operations required for both the active stockpile and warhead modernization programs.

Stockpile Research, Technology, and Engineering (SRT&E)

Stockpile Research, Technology, and Engineering (SRT&E) conducts the nuclear weapons design, certification and assessment activities of the NNSA. The program provides the foundation for science-based stockpile decisions; delivers advanced capabilities to support Department of Defense (DoD) requirements and counter emerging threats; and innovates across the nuclear security enterprise (NSE) to improve productivity, efficiency, and responsiveness. These activities ensure confidence in the nuclear stockpile of today and tomorrow. Key activities supported by the SRT&E science-based include the annual assessment and report to the President and Congress regarding the condition of the United States nuclear weapons stockpile. It supports experimental facilities, modeling and simulation codes and computational hardware, and subject matter expertise to design new systems, conduct analysis of foreign systems, and support Stockpile Management programs of record and stockpile surveillance. Material and component innovation and maturation provides the basis for a responsive enterprise and enables the development and maturation of new materials, physics and engineering models, technologies, and processes to modernize our nuclear systems and production complex. Rapid capability development is essential to provide timely delivery of advanced systems and capabilities to meet DoD emerging requirements. Key activities include integrating design and production across the NSE under the stockpile responsiveness program and with the integrated demonstrator program, delivering new capabilities to Stockpile Management that have been tested and evaluated under relevant environments in a system context. The SRT&E funding also supports Phases 1 and 2 of the nuclear weapon development cycle. Finally, SRT&E capabilities support all nuclear security missions, including the nuclear deterrent, nonproliferation, and counterterrorism. They are leveraged across the interagency as well by partners in the DoD, the intelligence community, homeland security, and the State Department.

The subprograms are:

1. Assessment Science (AS)
2. Engineering and Integrated Assessments (EIA)
3. Inertial Confinement Fusion (ICF)
4. Advanced Simulation and Computing (ASC)
5. Weapon Technology and Manufacturing Maturation (WTMM)

Academic Programs

Academic Programs enables robust science, technology, engineering, and mathematics (STEM) research for educational communities through a variety of methods (i.e., grants, fellowships, collaborations, user access). Investments in consortia

and centers of excellence provide collaborative groups to address important scientific and technical questions related to NNSA mission areas. Research efforts leverage multi-disciplinary approaches, and preeminent scientists in relevant fields.

Infrastructure and Operations (I&O)

The Infrastructure and Operations program maintains, operates, and modernizes the NNSA infrastructure in a safe, secure, and cost-effective manner to support all NNSA programs. The program also plans, prioritizes, and constructs mission-enabling facilities and infrastructure to support all NNSA programs. Infrastructure and Operations consists of the following programs: Operations of Facilities, Safety and Environmental Operations, Maintenance and Repair of Facilities, Recapitalization, and Line-Item Construction Projects. The Operations of Facilities program provides the funding required to operate NNSA facilities in a safe and secure manner. Operations of Facilities is fundamental to achieving NNSA's plutonium, uranium, tritium, lithium, high explosives, and other mission objectives. The Safety and Environmental Operations program provides funding to support the Department's Nuclear Criticality Safety Program (NCSP) subprogram, Nuclear Safety Research and Development (NSR&D) subprogram, Packaging subprogram, Nuclear Materials Integration (NMI) subprogram, and Environmental Operations (EO) subprogram.

The Maintenance and Repair of Facilities program (Maintenance) provides direct-funded maintenance activities across the NNSA enterprise for the recurring day-to-day work required to sustain and preserve NNSA facilities. These efforts include predictive, preventive, and corrective maintenance activities to maintain facilities, property, assets, systems, roads, and vital safety systems. The Recapitalization program is key to modernizing NNSA's infrastructure. The Recapitalization program modernizes NNSA infrastructure by prioritizing investments including the acquisition of new facilities or discrete projects to improve the condition and extend the life of structures, capabilities, and systems. Recapitalization investments help achieve operational efficiencies and reduce safety, security, environmental, and program risk. Infrastructure and Operations line-item construction projects are critical to revitalizing the infrastructure. These projects will replace obsolete, unreliable facilities and infrastructure to reduce safety and program risk while improving responsiveness, capacity, and capabilities.

Secure Transportation Asset (STA)

The Secure Transportation Asset (STA) supports safe, secure transport of the Nation's nuclear weapons, weapon components, and special nuclear material throughout the NSE. Nuclear weapon life-extension programs, limited-life component exchanges, surveillance, dismantlement, nonproliferation activities, and experimental programs rely on STA activities to ensure safe, secure, and on-schedule transport. The FY 2026 Request supports modernizing and sustaining STA transportation assets, including life extension of the Safeguards Transporter until it is replaced by the Mobile Guardian Transporter; vehicle sustainment; replacement armored tractors, escort, and support vehicles; upgrades of the Tractor Control Unit to improve communications and security; and continued development and testing of the Mobile Guardian Transporter. The first Mobile Guardian Transporter production unit is planned for completion as close to FY 2029 as possible and will begin a phased in approach to replace the current Safeguard Transporter. Program Direction resources in this account provide salaries and expenses for the secure transportation workforce, including Federal Agents.

Defense Nuclear Security (DNS)

The Office of Defense Nuclear Security (DNS) leads, develops, and implements the NNSA security program to enable its nuclear security enterprise (NSE) missions. DNS protects NNSA personnel, facilities, nuclear weapons, and special nuclear materials from a full spectrum of threats, ranging from minor security incidents to acts of terrorism, at its national laboratories, production plants, processing facilities, and the Nevada National Security Site. Employing more than 2,200 Protective Force officers, DNS secures more than 6,000 buildings and protects more than 65,500 personnel. Today, the program is charting a course of transformative change necessary to ensure DNS's mission-enabling function keeps pace with the increasing work scope across all elements of the NNSA mission set into future years.

The FY 2026 request includes the transfer of Savannah River Site's Safeguards and Security (S&S) mission to NNSA from the Office of Environmental Management (DOE-EM), and funding to support key security programs across all S&S functional areas to implement a risk-based, layered protection strategy at sites. It supports increased security needs

from known mission growth across the NSE, including pit production at Los Alamos National Laboratory (LANL), Kansas City expansion efforts, and Uranium Processing Facility testing and transition to operations. In addition, the request continues to support the initiative to replace the aging Argus system with a modern security system (Caerus), continuous improvement initiatives through the Center for Security Technology, Analysis, Response, and Testing (CSTART) and Physical Security Center of Excellence (PSCOE) activities, and capability to adapt to rapidly evolving technologies. This request also includes funding for continued efforts to recapitalize security infrastructure through Security Infrastructure Revitalization Program (SIRP) expense projects, addressing critical security systems and related security infrastructure and equipment refresh needs.

Information Technology (IT) and Cybersecurity

The IT and Cybersecurity program supports IT and cybersecurity services and solutions, which include continuous monitoring, cloud-based technologies, and enterprise security technologies (i.e., identity, credential, and access management). The program ensures and enables the availability of a secure infrastructure for mission activities and information sharing for NNSA and its mission partners. The FY 2026 Request enables the development and execution of integrated IT initiatives that provide an effective and secure technology infrastructure across the enterprise.

Defense Nuclear Nonproliferation - NNSA

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	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
				\$	%
Total, Defense Nuclear Nonproliferation	2,581,000	2,396,000	2,284,600	-111,400	-5%

Appropriation Overview

The National Nuclear Security Administration's (NNSA) nonproliferation, counterproliferation, and counterterrorism activities are critical to realizing President Trump's agenda to make the United States safer, stronger, and more prosperous. NNSA's programs help reduce the dangers posed by nuclear weapons and keep the threats from reaching the U.S. Homeland. These programs help prevent adversaries from acquiring nuclear weapons or weapons-usable materials, technology, and expertise; countering efforts to acquire such weapons or materials; and responding to nuclear or radiological incidents and accidents domestically and abroad. NNSA uses the unique technical and scientific knowledge that underpins the NNSA Defense Programs' Stockpile Stewardship Program for a range of nonproliferation, counterproliferation, and counterterrorism missions, from assessing foreign weapons programs and potential terrorist devices to enhancing security and safeguards for civil nuclear applications to help reinvigorate the nuclear industrial base. By limiting the number of nuclear-capable states and preventing terrorist access to materials and technology that can threaten the United States and our allies, NNSA plays a critical role in enhancing U.S. strategic deterrence, maintaining global stability, and constraining the range of potential threats facing the nation, our allies, and partners.

This appropriation funds six programs that prevent or limit the spread of weapons of mass destruction (WMD)-related materials, technology, and expertise; develop technologies to detect nuclear proliferation and steward foundational nonproliferation capabilities; secure or eliminate at-risk inventories of nuclear weapons-related materials and infrastructure; and sustain technically trained emergency management personnel to respond to nuclear and radiological threats, incidents, and accidents domestically and abroad.

Program Highlights

Material Management and Minimization (M3)

The Material Management and Minimization (M3) program mission is to prevent nuclear terrorism at home and abroad by reducing and, when possible, eliminating weapons-usable nuclear materials in civilian applications while reducing risks in the materials that remain to advance DNN's nuclear security and nonproliferation mission. This includes removing surplus plutonium from the state of South Carolina to fulfill DOE's legal commitment to South Carolina, as noted in the President's Executive Order on Reinvigorating the Nuclear Industrial base. The M3 program makes America safer by partnering with U.S. industry and DOE's National Laboratories to develop innovative technical solutions to (1) minimize the availability of highly enriched uranium (HEU) and plutonium for malign actors, (2) remove or eliminate nuclear materials internationally, permanently reducing the risk that they could be used in an improvised nuclear device, and (3) managing excess nuclear material in the United States to achieve cost, storage, and material management efficiencies within the NNSA enterprise while simultaneously helping unleash American Energy Dominance.

Global Material Security (GMS)

The Global Material Security (GMS) program directly contributes to U.S. national security by securing and preventing the smuggling of radioactive and nuclear (R/N) materials before they can be used in an attack against the United States, its interests, or allies. The GMS program makes America safer and stronger by preventing threats far from U.S. borders and advancing U.S. leadership and influence on nuclear security. The program also makes America more prosperous by protecting U.S. international investments from a costly R/N incident, by supporting the competitiveness and exportability of U.S. advanced reactor technology and by deploying U.S. technologies and security solutions. The FY 2026 Budget Request refocuses the GMS program activities on those that have the greatest impact in making America safer, stronger, and more prosperous, advancing U.S. leadership and influence on nuclear security, supporting the Administration's energy dominance agenda, and increasing burden sharing with counterparts. This includes prioritizing efforts that provide permanent risk reduction by eliminating radioactive materials and sources, working with the U.S. nuclear industry to export safe, secure, and reliable nuclear facilities, and engaging with law enforcement in high priority regions to counter smuggling of R/N materials, and shifting program models to increase efficiency and burden sharing with domestic and foreign counterparts.

Nonproliferation and Arms Control (NPAC)

The Nonproliferation and Arms Control (NPAC) program enhances U.S. national security and facilitates peaceful civil nuclear cooperation by reducing global nuclear proliferation threats. The NPAC program protects American international investments and America's civil nuclear infrastructure and associated, critical supply chains and implements regulatory and statutory requirements to advance U.S. civil nuclear technologies globally and empower trade relationships that benefit U.S. businesses. It strengthens America's global leadership in international nuclear safeguards, export control, and nuclear verification, directly supporting U.S. national security by preventing the illegal diversion of dangerous nuclear materials and WMD related commodities and technologies to prevent threats before they reach the U.S. border.

Defense Nuclear Nonproliferation Research and Development (DNN R&D)

The Defense Nuclear Nonproliferation Research and Development (DNN R&D) program directly contributes to national security as a key component for the innovation of U.S. technical capabilities to detect and characterize nuclear detonations; foreign nuclear weapons programs' activities; and the presence, movement, or diversion of special nuclear materials. The program also sustains and develops foundational nonproliferation technical capabilities to provide the technical agility needed to support a broad spectrum of U.S. nonproliferation missions and anticipate threats. Finally, the program also funds capabilities at the DOE/NNSA National Laboratories to enable rapid decision-making during nuclear or radiological incidents and help determine the origin of interdicted materials or nuclear devices. The FY 2026 Budget Request supports planned R&D activities for early detection of proliferation and supports production of nuclear detonation detection satellite payloads. The FY 2026 Budget Request also expands the research, development, demonstration, and validation of U.S. space monitoring capabilities to address emerging challenges in the space environment; and it supports efforts to sustain and develop foundational nonproliferation technical capabilities by providing targeted, long-term support for enabling infrastructure, science and technology, and an expert workforce, including new efforts with uranium enrichment technologies and uranium production and weaponization processes.

Nuclear Counterterrorism and Incident Response Program (NCTIR)

Counterterrorism and Counterproliferation (CTCP)

The CTCP subprogram supports major national security priorities across its diverse mission set upholding emergency preparedness and response, counter nuclear terrorism, and counter nuclear proliferation. CTCP provides the Nation's technical capability to understand, attribute, and defeat nuclear devices, including improvised nuclear devices and lost or stolen foreign nuclear weapons. This knowledge in turn informs U.S. Government policies, regulations, activities, and cooperation among key interagency and international mission partners on terrorist and proliferant state nuclear threats. In support of this mission, the FY 2026 Request for CTCP supports programs to manage and deploy the DOE/NNSA Nuclear Emergency Support Team (NEST), comprised of scientific personnel trained and equipped to respond rapidly to nuclear or radiological incidents and accidents worldwide; maintain a nuclear forensics capability to attribute the source of nuclear material outside of regulatory control or used in a nuclear attack; and to educate, through training and exercises, domestic and international partners to respond effectively to nuclear or radiological threats, incidents, and accidents. The FY 2026 Request also sustains a DOE/NNSA effort to assess the ways in which increasingly sophisticated Artificial Intelligence (AI) models could assist in the proliferation of sensitive nuclear weapons information or technologies. CTCP also integrates DOE/NNSA policy, planning, and operations on counterproliferation priorities, supporting urgent needs and proactively pursuing opportunities to address novel nuclear threats, mitigate future nuclear security threats and develop technologies to apply to the counterproliferation mission.

Emergency Management (EM)

The EM subprogram provides both the structure and processes for a comprehensive and integrated approach to emergency management and continuity functions. The continued readiness of the DOE Emergency Management System and the Nuclear Security Enterprise (NSE) on a programmatic and performance level is critical for effective DOE and NNSA response to incidents. The EM subprogram promotes unity of effort, a culture of preparedness, and continuous improvement to advance the resilience of the Department and the Nation. The EM subprogram coordinates plans and procedures for preparedness, mitigation, and response to, and recovery from incidents impacting DOE and NNSA. In addition, the FY 2026 Budget Request supports Continuity of Operations, Continuity of Government, and Enduring Constitutional Government programs to advance the National Continuity Policy and the continued performance and delivery of essential lines of business and services under any circumstances. The FY 2026 Budget Request also provides for 24/7/365 Headquarters Emergency Operations Center to leverage technologies for enhanced communications and coordination support to the DOE/NNSA Emergency Management Enterprise, the NSE, and Departmental Senior Leadership.

Naval Reactors - NNSA

(\$K)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
				\$	%
Total, Naval Reactors¹	1,946,000	1,946,000	2,346,000	+400,000	+21%

¹Funding does not reflect the mandated transfer of \$92.8 million in FY 2024 and FY 2025 to the Office of Nuclear Energy for operation of the Advanced Test Reactor.

Appropriation Overview

The Naval Reactors (NR) appropriation includes funding for U.S. Navy nuclear propulsion work, beginning with reactor plant technology development and design, continuing through reactor plant operation and maintenance, and ending with final disposition of naval spent nuclear fuel.

Program Highlights

Funding for the program supports continued safe and reliable operation of the Navy's nuclear-powered fleet (64 submarines, 11 aircraft carriers, and four research, development, and training platforms). The Program's development work consists of refining and improving existing technology to ensure that the U.S. Navy's nuclear propulsion plants are increasingly efficient and effective and will be capable of meeting future threats to national security.

In addition to supporting the existing nuclear fleet, NR has three major DOE initiatives—the Columbia-Class Reactor System Development, the Spent Fuel Handling Recapitalization Project, and the Naval Examination Acquisition Project.

NR supports national security with the continued development of the reactor plant system for the Columbia-Class submarine and stewardship of naval nuclear infrastructure. Ensuring the continuity of a sea-based strategic deterrent, the President's FY 2026 Budget provides for the research, design, and development of the reactor plant system for the Columbia-Class submarine, to include the development of a life-of-ship reactor core. The budget further provides funding for the Spent Fuel Handling Recapitalization Project, supporting the capability to refuel and defuel aircraft carriers and submarines, which is critical to maintaining the nuclear fleet's operational availability for national security missions. Also, the budget provides funding for the Naval Examination Acquisition Project to recapitalize the capability for examining naval spent nuclear fuel that currently exists in the Expended Core Facility and its support facilities, which is critical to supporting new weapons systems and operational capabilities in naval combatants by designing new and more capable reactors using the data obtained from examinations.

Naval Reactors Operations and Infrastructure

The FY 2026 Request enables execution of work associated with the operation of one land-based nuclear prototype and the defueling and lay-up of one land-based nuclear prototype, facility and systems maintenance and regulatory requirements across the Program's four DOE sites, environmental remediation, and necessary minor construction projects to recapitalize deteriorating infrastructure and equipment.

Naval Reactors Development

The FY 2026 Request supports the unique technologies used in naval reactors that are crucial to delivering superior navy fleet operations and dominance in the maritime domain to counter the increasing threats from our global adversaries.

Columbia-Class Reactor Systems Development

The FY 2026 Request is consistent with the project's planned Department of Energy-funded profile. Lead ship reactor plant components have been delivered on schedule and the reactor core remains on track to support lead ship delivery. This budget request enables execution of production, analysis, and test support.

Program Direction

The FY 2026 Request supports NR executing its mission to provide federal oversight of the Naval Nuclear Laboratory.

Construction

The FY 2026 Request supports the funding profiles for the Spent Fuel Handling Recapitalization Project, the Naval Examination Acquisition Project, and the East Side Office Building at the Knolls Laboratory.

Science (\$K)

	FY 2024 Enacted	FY 2026 Request
Advanced Scientific Computing Research	1,016,000	1,016,000
Basic Energy Sciences	2,625,625	2,241,000
Biological and Environmental Research	900,000	394,920
Fusion Energy Sciences	790,000	744,780
High Energy Physics	1,200,000	1,112,836
Nuclear Physics	804,000	767,860
Isotope R&D and Production	130,193	162,330
Accelerator R&D and Production ¹	29,000	—
Other Science Programs	518,351	425,443
Program Direction	226,831	226,831
Total, Office of Science	8,240,000	7,092,000

Appropriation Overview

The Office of Science (SC) is the nation's largest Federal supporter of basic research in the physical sciences. The SC portfolio has two thrusts: direct support of scientific research, and direct support of the design, development, construction, and operation of unique, open-access scientific user facilities. The SC basic research portfolio includes grants and contracts supporting over 22,000 researchers located at over 300 institutions and 17 DOE national laboratories, spanning all 50 states, the District of Columbia, and U.S. territories. The SC portfolio of 27 scientific user facilities serves over 39,000 users per year. SC programs invest in basic research to advance energy technologies, transform our understanding of nature, and strengthen the connection between advances in fundamental science and technology innovation.

The SC Request increases funding for Administration priorities including artificial intelligence (AI) and machine learning (ML), Quantum Information Sciences (QIS), basic research on critical minerals/materials, microelectronics, and accelerating fusion development to close key science and technology gaps. The SC Request also supports the establishment of domestic critical isotope supply chains to reduce U.S. dependency on foreign supply and increase U.S. resilience. SC's core research programs promote the discovery and design of new chemical, physical, and biological processes that provide a critical foundation for breakthroughs in energy technologies to ensure our nation's future energy, economic, and national security. SC's core research programs also support discovery and innovation to decode the quantum realm, unveil the hidden universe, and explore novel paradigms of physics.

The FY 2026 Request supports 27 SC scientific user facilities, which are unique resources stewarded by DOE for the nation and made available to the scientific community free of charge, based on merit review to support the best scientific ideas. The Atmospheric Radiation Measurement (ARM) user facility completes all field campaigns and is closed. In FY 2026, DOE estimates that over 39,000 researchers will access these cutting-edge tools to push the frontiers of science and technology (S&T), including research supported by the National Science Foundation, National Institutes of Health, National Aeronautics and Space Administration, and Department of Defense, as well as from industry and academic institutions. These facilities have delivered extraordinary breakthroughs, such as helping usher new battery technologies to the marketplace. Further, these facilities are often the portal through which the next generation of researchers begin their careers, providing invaluable opportunities for developing the scientific workforce our country needs to meet the major economic and national security challenges ahead.

¹ Starting in FY 2026, the Accelerator R&D and Production program activities are merged into the High Energy Physics program.

Program Highlights

Advanced Scientific Computing Research (ASCR)

ASCR advances science and U.S. competitiveness through investments in computational science, applied mathematics, computer science, networking, and software research as well as development and operation of multiple, large, high performance and leadership computing and high-performance networking user facilities. The Request funds:

- Critical basic research investments in applied mathematics and computer science to combine the power of exascale computing and artificial intelligence for a new era of American innovation, and next-generation computing paradigms to ensure U.S. leadership at the forefront of computing.
- Extended frontiers in AI for science, security, energy innovation, and technology that leverages the unique capabilities of the DOE ecosystem to expand U.S.'s global domination in AI and advanced computing technologies.
- Advanced research and development (R&D) in quantum information science (QIS) technologies, including quantum computing and networking, for the next generation distributed quantum computing systems.
- Building of scalable integrated national capabilities that accelerate the convergence of quantum, AI, and high-performance classical computing.
- Next-generation user facilities by maintaining facility operations and building upgrade projects to deliver first-of-a-kind high-uptime high-performance computing, data, and networking infrastructure as an integrated ecosystem to meet the requirements of extreme scale DOE science in the AI era.
- Engagement of U.S. microelectronics vendors to advance DOE goals for next generation HPC including continued improvements in performance, usability, and interoperability for a wide range of use cases, including AI.

Basic Energy Sciences (BES)

BES supports fundamental research to understand, predict, and ultimately control matter and energy at the electronic, atomic, and molecular levels to provide the foundations for novel technologies critical to the DOE missions in energy, economic, and national security. The Request funds:

- Core research activities in condensed matter and materials physics, chemistry, geosciences, and aspects of biosciences that establish the foundation of knowledge required to advance Administration Priorities in AI/ML, critical materials, microelectronics, and QIS.
- Continued support for use-inspired basic research through multi-disciplinary, multi-institutional team science—including the Energy Frontier Research Centers, Microelectronics Science Research Centers, and the computational materials and chemical sciences programs.
- Support for transformational QIS research, including a robust core research portfolio and complimentary multi-disciplinary research at the National QIS Research Centers, to drive disruptive innovation in quantum computing, sensing, and communication, and advance the use of quantum technologies for fundamental scientific discovery.
- Research to accelerate the development and integration of emerging AI/ML capabilities that will accelerate the pace of fundamental scientific discoveries in materials science and chemistry, enhance operation of scientific user facilities, and advance the interpretation of massive data sets.
- Operation of BES scientific user facilities: five x-ray light sources, two neutron scattering sources, and five research centers for nanoscale science. The support will balance high priority activities required for safe and reliable operations while maintaining strong user support.
- Four construction projects to advance the state-of-the-art in X-ray and neutron light source and to provide critical supporting infrastructure: the Linac Coherent Light Source-II High Energy, the Second Target Station, the Advanced Light Source Upgrade, and the Cryomodule Repair and Maintenance Facility.

Biological and Environmental Research (BER)

BER supports transformative science and scientific user facilities to harness the genomic potential found in nature, achieve a predictive understanding of complex systems, and provide the fundamental research leading to solutions for the Nation's energy and national security challenges. BER activities in environmental system sciences, atmospheric

system research, earth system modeling, data management, and the Atmospheric Radiation Measurement User Facility are terminated. The Request funds:

- Fundamental Genomic Science as the core basic research effort accelerating the development of non-medical plant- and microbial-based biotechnologies, focused on bioenergy, chemical and biomaterial synthesis, bioproducts and critical mineral recovery.
- Integration of AI systems into research to enable discoveries, accelerate predictive understanding, automate laboratory systems and processes, and rapidly advance biosystems design capabilities.
- New bio-inspired research to design microorganisms and plants with enhanced abilities to extract, separate and concentrate critical minerals and materials.
- New explorations in quantum-enabled technology for non-destructive imaging of biological systems and vastly enhanced sensing of biochemical reactions.
- Continued operation of the Joint Genome Institute and the Environmental Molecular Sciences Laboratory as central scientific user facilities driving BER science.
- Continuation of the Microbial Molecular Phenotyping Capability project as a core capability to accelerate characterization of platform organisms for biotechnology.

Fusion Energy Sciences (FES)

FES supports research to understand matter at very high temperatures and densities and to build the scientific foundation needed to develop a commercial fusion reactors capable of sustained net energy gain. The Request is aligned with the recommendations of the recent Long-Range Plan (LRP) developed by the Fusion Energy Sciences Advisory Committee (FESAC) and funds:

- Fusion Innovation Research Engine Collaboratives: multi-institutional, multi-disciplinary R&D centers to address critical science and technology (S&T) gaps outlined in the FESAC LRP, supporting public and private fusion efforts.
- Partnerships with the private sector to advance commercial fusion reactors through the Milestone program, the Innovative Network for Fusion Energy (INFUSE) program, and the Private Facilities Research (PFR) program.
- An initial investment to explore a Public-Private Consortium Framework (PPCF) model to support public-private partnerships towards developing and building small-to-midscale infrastructure.
- DIII-D national fusion facility: Characterize and exploit innovative heating and current drive sources relevant for power plants including development of high-confinement, steady-state operating scenarios.
- National Spherical Torus Experiment-Upgrade: Continue with collaborative research at other facilities while recovery and repair activities are ongoing, installation of remaining diagnostics, commissioning in preparation for plasma operation, and prioritization of strategic FM&T initiatives.
- U.S. Contributions to ITER project focusing on the design, fabrication, and delivery of in-kind hardware components.
- One Major Item of Equipment (MIE): the Material Plasma Exposure eXperiment project.

High Energy Physics (HEP)

The HEP program is dedicated to unraveling the mysteries of the universe by exploring the fundamental building blocks of matter and energy. Through groundbreaking scientific discoveries in particle physics and the management of top-tier scientific facilities, HEP plays a crucial role in advancing R&D. By ensuring the timely completion of significant projects and maintaining state-of-the-art facilities, HEP contributes to positioning the U.S. as a key player in global particle physics research and collaboration. The Request funds:

- AI/ML to extract signals of signature particle physics from HEP data with increasingly high volumes and complexity and to improve accelerator and detector operations in real-time and in extremely high data rate environments.
- QIS co-development of quantum information, theory, and technology aligned with HEP science drivers and exploring new capabilities in quantum sensing and computing.
- Microelectronics to accelerate R&D into sensor materials, detector devices, advances in front-end electronics, and integrated sensor/processor architectures.

- Core research activities, with emphasis on the physics of the Higgs boson, neutrinos, dark matter, and dark energy; exploring the unknown; and enabling early and visible scientific results from HEP project investments.
- Operations for the Fermilab Accelerator Complex, the Facility for Advanced Accelerator Experimental Tests II, and the Accelerator Test Facility, including critical upgrades, improvements, and deferred maintenance.
- Continuing support for two construction projects: Long Baseline Neutrino Facility/Deep Underground Neutrino Experiment and Proton Improvement Plan II; and three MIE projects: Accelerator Controls Operations Research Network, and the High Luminosity Large Hadron Collider ATLAS and CMS Detector Upgrade Projects.

Nuclear Physics (NP)

NP supports experimental and theoretical research to discover, explore, and understand all forms of nuclear matter. The Request funds:

- High priority world-class nuclear physics research and core competencies in quantum chromodynamics, nuclei and nuclear structure and nuclear astrophysics, and fundamental symmetries at universities and laboratories.
- Operations of all NP user facilities including: the Relativistic Heavy Ion Collider; the 12 GeV Continuous Electron Beam Accelerator Facility; the Argonne Tandem Linac Accelerator System; and the Facility for Rare Isotope Beams.
- Support for QIS research efforts to create radiation tolerant qubits, support paths towards realizing nuclear clocks, enable precision NP measurements, and development of quantum sensors based on atomic-nuclear interactions, and development of quantum computing algorithms.
- Expanded support for AI/ML research aimed at the automated optimization of accelerator availability and performance, as well as software enabling data-analytics-driven discovery.
- Continued support for the Electron-Ion Collider construction project.

Isotope R&D and Production (DOE IP)

DOE IP supports fundamental research in nuclear and radiochemistry, chemical separations, accelerator and reactor physics, and isotope enrichment to produce priority radioactive and stable isotopes in short supply and are not produced commercially by domestic entities; a priority is to reduce U.S. dependence on foreign isotope supply chains. The Request funds:

- Targeted core research activities to develop innovative isotope production, chemical processing, and enrichment technologies, including domestic supply chains of isotopes required to support Administration Priorities on fusion energy, microelectronics, and QIS.
- Increased AI/ML research to promote efficiencies and automation in isotope science and advanced manufacturing.
- Support for mission readiness of facilities to produce isotopes in short supply or otherwise not available.
- Modernization and refurbishment activities to increase safe, robust, and reliable operations across production sites to better tackle growing gaps in isotope supply chains.
- The University Isotope Network to produce research and “boutique” radioisotopes.
- Routine operations of new capabilities introduced in FY 2025, including the Stable Isotope Production Facility MIE as the first domestic large scale gas centrifuge cascade to produce Xe-129 for polarized lung imaging, the Medical Isotope Research Producer Facility for cancer treatments and isotopes for fundamental research, FRIB Isotope Harvesting, and new units of electromagnetic ion separators to enrich stable isotopes in short supply.
- Continued support for two construction projects: Stable Isotope Production and Research Center and Radioisotope Processing Facility.

Accelerator R&D and Production (ARDAP)

In 2024, SC realigned the ARDAP program activities into a new division under the HEP program. Starting with the FY 2026 Request, funding for the former ARDAP activities is requested within the HEP Program. This shift aims to consolidate expertise and capabilities in accelerator R&D, fostering efficiency and effectiveness in SC investments in this crucial field.

Program Direction (PD)

PD supports the Federal workforce that plans, develops, and oversees SC investments in world-leading basic research and scientific user facilities, and provides critical oversight to 10 of DOE's national laboratories. The Request funds Salaries, Benefits, Travel, Support Services, Other Related Expenses, and the Working Capital Fund.

Energy Efficiency and Renewable Energy

(\$K)

	FY 2024 Enacted	FY 2026 Request
Vehicle Technologies	450,000	25,000
Bioenergy Technologies	275,000	70,000
Hydrogen and Fuel Cell Technologies	170,000	0
Subtotal, Sustainable Transportation & Fuels	895,000	95,000
Renewable Energy Grid Integration	22,000	0
Solar Energy	318,000	0
Wind Energy	137,000	0
Water Power	200,000	90,000
Geothermal Technologies	118,000	150,000
Subtotal, Renewable Energy	795,000	240,000
Advanced Materials & Manufacturing Technologies Office	215,000	70,000
Industrial Efficiency & Decarbonization Office	237,000	80,000
Building Technologies	332,000	20,000
Subtotal, Buildings & Industry	784,000	170,000
Program Direction	186,000	183,000 ¹
Strategic Programs	21,000	0
<i>Operations and Maintenance</i>	102,370	96,450
<i>Facility Management</i>	57,630	49,550
<i>21-EE-001-Energy Materials and Processing at Scale (EMAPS)</i>	50,000	54,000
Subtotal, Facilities and Infrastructure	210,000	200,000
Subtotal, Corporate Support	417,000	383,000
Total, EERE Organization	2,891,000	888,000
Total, Energy Efficiency and Renewable Energy	2,891,000	888,000
Total, State and Community Energy Programs	493,000	0
Total, Manufacturing and Energy Supply Chains	19,000	0
Total, Federal Energy Management Program	57,000	0
Total, EERE Appropriation	3,460,000	888,000
Total, Manufacturing and Energy Supply Chains²		15,000

Appropriation Overview

EERE advances America's security and prosperity through the research and development (R&D) of affordable, secure, innovative, and integrated energy technology solutions across multiple sectors of the economy – transportation, buildings, industry, and electricity. In support of Trump Administration priorities, this budget request focuses on cost efficiencies and fiscal constraint and focuses EERE resources on the energy technologies that are best positioned to support American Energy Dominance – reliable, firm power that Americans can depend on and unleashing American energy innovation.

EERE research focuses on the following key outcomes:

- Reducing costs and increasing efficiency to drive improvements in energy affordability;

¹ Program Direction includes \$8 million for Federal Energy Management Program.

² Manufacturing and Energy Supply Chains is funded at \$15M in FY 2026 and the account will be used to support EERE and Fossil Energy to address supply chain analysis of vulnerable areas such as critical minerals and materials.

- Securing domestic supply chains for critical materials and components for energy technologies;
- Growing the competitiveness of U.S. industries, science, and technology;
- Strengthening America's industrial sector;
- Ensuring the reliability, security, and modernization of the electricity grid;
- Promoting affordability and consumer choice in home appliances; and
- Using robust data collection, model development, and objective, transparent analysis to inform energy decisions.

As such, in accordance with Administration and Departmental priorities, the FY 2026 EERE budget request prioritizes research of emerging geothermal and hydropower technologies, as well as biofuels, industrial efficiency, critical minerals and materials, and advanced manufacturing technologies. It provides minimal support for efficiency standards, specifically for work needed to repeal inefficient standards and/or meet statutory requirements. This request provides for program direction funds needed to foster efficient and effective program management, and facilities and infrastructure funds to support core operation of the National Renewable Energy Laboratory, including the next construction segment of the Energy Materials and Processing at Scale (EMAPS) facility.

In FY 2026, funding for Manufacturing and Energy Supply Chains (MESC) will support EERE and Fossil Energy to sustain analysis in manufacturing, energy products, and critical minerals and materials.

Program Highlights

Transportation & Fuels supports R&D to increase access to domestic, affordable fuels and other transportation technologies. The request prioritizes cost reductions and data collection for bioenergy resources and conversion, and a limited amount of research to support secure, domestic supply chains and offroad, marine and aviation technologies.

Renewable Energy supports R&D to reduce the costs and improve the reliability of firm, non-intermittent energy generation technologies as part of a least cost, secure, and resilient electricity and energy system. The request prioritizes continued advancements in geothermal power and heat production, including demonstrations of enhanced geothermal technologies, as well as maintaining the nation's critical hydropower resources.

Buildings and Industry supports R&D make the nation's homes, buildings, and industrial facilities more affordable, drive the next generation of American manufacturing, and secure a robust domestic supply of critical materials. The request focuses on R&D for critical materials processing, limited amount of AI-driven domestic manufacturing, reducing the cost of industrial energy systems, and promoting consumer choice.

Corporate Support Programs prioritize Program Direction and Facilities and Infrastructure. Program Direction allows EERE to maintain its remaining workforce and provide a minimum level of support for program and project management, oversight activities, and contract administration, as well as data management and baseline IT and systems functionality. Program Direction totals \$183 million, to include \$8 million for the Federal Energy Management Program (FEMP) to wind down activities.

Facilities and Infrastructure ensures that EERE fulfills its role as steward of the National Renewable Energy Laboratory (NREL), maintaining core operations, maintenance, and facilities management activities. The request prioritizes NREL's EMAPS line-item construction project. Initiated in 2019, EMAPS (when complete) will provide multi-disciplinary research capability in critical materials and process integration.

Fossil Energy (\$K)

	FY 2024 Enacted	FY 2026 Request
Advanced Energy Systems	91,000	75,000
Transport and Storage	93,000	50,000
Conversion and Value-Added Products	122,500	34,000
Point-Source Capture	127,500	50,000
Subtotal, Coal and Carbon Utilization	434,000	209,000
Advanced Production Technologies	53,000	40,000
Natural Gas Infrastructure and Hydrogen Technologies	78,000	40,000
Mineral Production and Processing Technologies	70,000	100,000
Subtotal, Oil, Gas, and Critical Minerals	201,000	180,000
University Training, Research, and Recruitment	11,000	6,000
Program Direction	70,000	65,000
NETL Infrastructure	55,000	55,000
NETL Research and Operations	89,000	80,000
Interagency Working Group	5,000	0
Total, Fossil Energy	865,000	595,000

Appropriation Overview

The Office of Fossil Energy (FE) advances technologies related to affordable, reliable, and secure use of fossil fuels that are important to our Nation's security and economic prosperity while developing technological solutions for the prudent and sustainable development of our domestic coal, oil, gas, and critical mineral resources. FE conducts cutting-edge research, development and demonstration (RD&D) that focuses on promoting energy security, sustaining American leadership and innovation through early-stage RD&D, and developing breakthrough technologies that will ultimately lower American energy costs.

The Budget restores the name and function of the Office of Fossil Energy to its original purpose, which is funding for the research of technologies that could produce an abundance of domestic fossil energy and critical minerals. Activities funded through this account focus on 1) strengthening the reliability of our energy system and bolstering America's competitiveness and supply chain security through demonstrating advanced energy systems; 2) advancing mineral production and processing technologies; 3) accelerating oil, natural gas, and coal conversion into value added products and promoting carbon capture, transport and storage with a focus on enhanced oil and gas recovery; 4) natural gas infrastructure and blue hydrogen technologies; and 5) advanced oil and gas production technologies. These activities are pursued in partnership with the National Energy Technology Laboratory (NETL), the only DOE government-owned, government-operated National Laboratory dedicated to advancing the Nation's energy future by creating innovative solutions that strengthen the security, affordability and reliability of energy systems and natural resources, which also receives funding from this account.

In FY 2026, funding for Manufacturing and Energy Supply Chains (MESC) will support FE and EERE to sustain analysis in manufacturing, energy products, and critical minerals and materials.

Program Highlights

Advanced Energy Systems

In FY 2026, the primary focus of these programs is on power systems, efficiency improvement, and fuel flexibility. Improvements to these technologies are also applicable to other energy systems, such as nuclear and the chemical industry. Improvements to new and existing plants will also support their efforts to allow these assets to provide low-cost baseload power and resilient flexible grid services. These activities align with the Administration's priority of unleashing the great abundance of American energy required to power modern life and to achieve a durable state of American energy dominance.

Office of Oil, Gas, and Critical Minerals

The Oil, Gas, and Critical Minerals program works to ensure American Energy and Mineral Dominance through the development of our Nation's abundant domestic fossil energy and minerals potential. The program's research, development, and demonstration (RD&D) could enable affordable, reliable and secure fossil energy resources and robust domestic supply chains for critical minerals and materials (CMM).

Advanced Production Technologies

The Advanced Production Technologies program focuses on developing technologies and solutions that accelerate oil and natural gas exploration and production. The program will conduct RD&D to increase oil and natural gas production, water management, and offshore efficiency, safety, and spill prevention. In addition, the program will conduct research using field laboratories to explore carbon dioxide enhanced oil and gas recovery in unconventional reservoirs.

Natural Gas Infrastructure and Hydrogen Technologies

The Natural Gas Infrastructure and Hydrogen Technologies program will conduct research to develop technologies and solutions to improve the reliability, safety, and security of oil and natural gas pipelines. This research will include advanced materials, innovative sensors, and innovative more efficient compressors, drive engines, and infrastructure components. Additionally, the program will utilize existing natural gas infrastructure for high volume hydrogen and blended fuels transport, and demonstrate large-scale underground hydrogen storage capabilities.

Mineral Production and Processing Technologies

The Mineral Production and Processing Technologies program will support American minerals dominance by advancing technologies to support development of the domestic supply chain networks required for the economically sustainable and geopolitically secure production and processing of critical minerals and materials (CMM). This mission will be accomplished by prioritizing research on the use of unconventional resources such as coal, coal production and combustion wastes, and other waste streams such as acid mine drainage, mine tailings, and produced water from oil and gas production for domestic CMM and rare earth elements; and through research to create products such as graphite from coal. The program will also focus on utilizing waste materials from currently mined and previously mined resources outside of traditional thermal and metallurgical markets. The program will also develop advanced mining technologies and solutions that can enable more "laparoscopic" approaches to mining, which will enable at least a tenfold reduction in the amount of waste material produced on the surface at a mine site.

Program Direction

The Request of \$65 million for Program Direction provides funding for salaries and benefits for federal staff and associated costs to support the overall direction and execution of the Office of Fossil Energy (FE), including oversight and administration, monitoring activities for the FE's research, development, and demonstration (RD&D) portfolio. Funding also supports the National Energy Technology Laboratory (NETL) technical staff who perform acquisition, finance and legal functions, and federal staff for management of the laboratory. PD also funds the contractor support for budget, communications, workforce management, mission Information Technology (IT) and cybersecurity, and workforce Environment, Safety, Security and Health (ESS&H) activities.

National Energy Technology Laboratory

NETL Infrastructure

The FY 2026 Budget Request of \$55 million supports the fixed costs of maintaining NETL's lab footprint in three geographic locations: Morgantown, WV; Pittsburgh, PA; and Albany, OR. The footprint of these sites is approximately 240 acres, including 165 research laboratories. The Request provides funding for general plant projects to maintain research capabilities and combat deferred maintenance, the lease of NETL's high performance computer and for information technology development, modernization, and enhancement.

NETL Research and Operations

The Request of \$80 million supports the salaries, benefits, travel, and other employee costs for the federal NETL staff of scientists, engineers and technical professionals who conduct onsite research and project management activities for FE programs. The Request also funds partnership, technology transfer, and other collaborative research activities and supports the variable operating costs of NETL's research sites.

Nuclear Energy

(\$K)

	FY 2024 Enacted	FY 2026 Request
University and Competitive Research Programs	140,000	128,841
Reactor Concepts RD&D	136,812	100,000
Fuel Cycle R&D	428,500	320,500
Nuclear Energy Enabling Technologies	88,264	92,100
Advanced Reactors Demonstration Program	315,424	154,559
Infrastructure	326,000	326,000
Idaho Sitewide Safeguards and Security	160,000	160,000
Program Direction	90,000	88,000
Total, Nuclear Energy	1,685,000	1,370,000

Appropriation Overview

Nuclear Energy (NE) supports the civilian nuclear energy programs of the U.S. Government to research and develop nuclear energy technologies, including generation, safety, and security technologies, to assist in unleashing energy dominance through strategic, innovative research, development, demonstration, and deployment.

Program Highlights

University and Competitive Research Programs

The Request provides for Nuclear Energy University Programs including university-led competitive research and development; university infrastructure support; and university research reactor fuel services. This program also provides NE's full legally required participation in the Small Business Innovation Research (SBIR), Small Business Technology Transfer (STTR), and the Technology Commercialization Fund, as well as university-led research and development to the maximum extent practicable.

Reactor Concepts Research, Development and Demonstration

Activities include support for Light Water Reactor Sustainability through cost-shared efforts to extend the life and improve the economic competitiveness of the existing commercial nuclear reactor fleet through research in the areas of materials aging and degradation, safety margin characterization, safety technologies, and instrumentation and controls; research into other Advanced Reactor Technologies, such as fast reactor technologies and high temperature reactor technologies for the production of electricity and high temperature process heat to improve the economic competitiveness and flexibility of nuclear energy as a resource capable of meeting the Nation's energy goals; and Integrated Energy Systems.

Fuel Cycle Research and Development

The Request supports R&D on advanced fuel cycle technologies that have the potential to accelerate progress on managing and disposing of the nation's spent fuel and high-level waste, including efforts to improve resource utilization and energy generation, reduce waste generation, and limit proliferation risk. Advancements in fuel cycle technologies support the enhanced availability, economics, and security of nuclear-generated electricity in the United States, further enhancing U.S. energy independence and economic competitiveness. This program also contributes to the Department's policies and programs for ensuring a reliable and economic nuclear fuel supply including the availability of High-Assay Low-Enriched Uranium (HALEU), with funding provided in the Inflation Reduction Act of 2022 (IRA). Also included in this program are R&D efforts investigating options for the permanent disposition of spent nuclear fuel.

Nuclear Energy Enabling Technologies

The Request supports R&D and strategic investments in research capabilities to develop innovative and crosscutting nuclear energy technologies essential for nuclear energy to be a major contributor to unleashing America's energy dominance. This program funds high-priority R&D on advanced manufacturing methods, fabrication, and instrumentation technologies that includes strong investments in modeling and simulation tools and provides access to unique nuclear energy research capabilities through its Nuclear Science User Facilities and the Gateway for Accelerated Innovation in Nuclear (GAIN) initiative (sub-program).

Advanced Reactor Demonstration Program

The Advanced Reactor Demonstration Program focuses Departmental and non-federal resources on expediting development, demonstration, and deployment of commercial reactor technologies. The program partners with U.S. based teams to address technical, operational, and regulatory challenges to enable commercialization of a diverse set of advanced nuclear reactor designs. \$20 million is included for two existing demonstration projects.

Infrastructure and Idaho National Laboratory Sitewide Safeguards and Security

The Request supports the secure and effective availability of Idaho National Laboratory to support nuclear energy as well as other DOE and U.S. government research requirements. The Idaho National Laboratory Facilities Operations and Management subprogram continues investments at the Advanced Test Reactor (ATR) and Advanced Test Reactor Critical Facility (ATRC) to improve reliability and availability of the ATR and continue operations at the Transient Reactor Test Facility (TREAT), unique capabilities that fulfill the acute needs of our existing, future, and naval reactor fleets.

The Idaho Sitewide Safeguards and Security program will continue to implement efficiencies to contain the increased cost of labor and focus on cost recovery and investments in security system technology and enhanced cybersecurity program capabilities to adequately secure site assets.

Nuclear Waste Fund Oversight

(\$K)

	FY 2024 Enacted	FY 2026 Request
Nuclear Waste Fund Oversight	12,040	12,040
Total, Nuclear Waste Fund Oversight	12,040	12,040

Appropriation Overview

The Nuclear Waste Fund Oversight program supports the Department's responsibilities for managing the Nuclear Waste Fund (NWF), administering the Standard Contract, and maintaining the security of the Yucca Mountain site.

Program Highlights

The Nuclear Waste Fund Oversight program's FY 2026 Budget Request activities include:

- Implementation of an appropriate investment strategy and prudent management of the NWF investment portfolio;
- Administration of the Standard Contract for the disposal of spent nuclear fuel (SNF) and high-level radioactive waste (HLW) between contract holders and the government;
- Provision of legal services for activities related to nuclear waste disposal, including but not limited to interim storage;
- Management of the physical security requirements for the Yucca Mountain site under DOE Order 473.3A as well as site maintenance and fulfillment of environmental requirements;
- Execution of the annual agency financial report and audit; and
- Operation and maintenance costs for Yucca Mountain legacy licensing and data management system.

These funds are inclusive of program direction activities and management and technical costs necessary to carry out the program's mission.

Electricity (\$K)

	FY 2024 Enacted	FY 2026 Request
Transmission Reliability & Resilience	33,000	27,500
Energy Delivery Grid Operations Technology	31,000	31,000
Resilient Distribution Systems	53,000	25,000
SecureNet	15,500	10,500
Total, Grid Controls & Communications	132,500	94,000
Energy Storage	92,500	50,000
Transformer Resilience & Advanced Components	22,500	22,500
Applied Grid Transformation Solutions	13,500	7,500
Total, Grid Hardware, Components, & Systems	128,500	80,000
Program Direction	19,000	19,000
Total, Office of Electricity	280,000	193,000
Total, Grid Deployment¹		15,000

Appropriation Overview

A reliable, resilient, and secure power grid is vital to our national security, economic security, and the services Americans rely upon. Working closely with its private and public partners, the Office of Electricity (OE) leads DOE's RD&D programs to strengthen and modernize our Nation's power grid. These efforts will reinforce, transform, and improve energy infrastructure so every American home and business has reliable access to affordable energy and the U.S. sustains its global economic and technological leadership.

America's energy security, economy, and sustained global leadership are anchored in a robust power grid. Through interdisciplinary research and in partnership with the private and public sectors, OE harnesses innovation to drive a more resilient, reliable, affordable, and secure North American energy system while maintaining energy independence.

The ability to securely move affordable electricity from where it is produced to where and when it is needed is the cornerstone of a reliable electric grid. The electricity delivery system must ensure reliable, resilient grid operations under extreme conditions. OE leads the Department's efforts in developing new technologies to strengthen, transform, and improve electricity delivery infrastructure so new generation and loads can be fully integrated into the energy ecosystem and consumers have access to resilient, reliable, secure, and clean sources of electricity.

A dramatic structural transformation of the electricity delivery system is underway. America's grid is transforming into a more dynamic and structurally complex system, with bidirectional power flows and rapidly changing generation and load characteristics. Managing this transition will require significant reengineering and advancements in grid technology and system architectures.

In FY 2026, funding for Grid Deployment will support OE programs and projects, in close coordination with CESER, that increase generation and transmission capacity and strengthen grid security.

Program Highlights

Grid Controls & Communications focuses on U.S. electric grid reliability and resilience through RD&D on critically needed system monitoring and diagnostics, advanced data analytics, and robust control technologies to assess and enhance electricity system reliability and performance, mitigate large-scale blackouts, prepare for and respond to natural disaster impacts, and adapt to evolving system needs, emerging risks, and interdependencies. This includes the North America Energy Resilience Model (NAERM), a hybrid data/model platform for the assessment of significant interdependencies within the energy sector that could affect reliability and resilience. Additionally, activities include RD&D that develops grid technologies, tools, and techniques needed to maintain power to end users and coordinate information and control across system segments (transmission, distribution, the "grid edge",

¹ Funding for Grid Deployment account in FY 2026 will support OE programs and projects, with close coordination with CESER. OE will execute funding for Grid Deployment activities.

microgrids, etc.) as well as modernizing communications and control systems to support end-to-end information security for real time operations.

Grid Hardware, Components and Systems facilitates the development of next generation grid assets that identify and address issues facing the electricity delivery system due to emerging large electrical loads, global competition for resources, and the necessity for components that can withstand system transients as well as disruptive physical events. This program also tests and validates innovative grid technologies prior to their deployment in the field, increases awareness of advanced grid solutions that can meet pressing industry needs, and fills critical gaps in grid R&D. This will provide industry with the data, insights, and support to inform grid transformation, infrastructure investments, and future R&D needs.

Grid Deployment activities support projects that will increase transmission capacity assurance and resource adequacy to assure that electricity is available when and where Americans need it. Grid Deployment activities will support engagement in strategic partnerships with the national laboratories and energy stakeholders from government and industry to enable successful program implementation. These activities will focus on identifying and designating parts of the country to be the focus of grid infrastructure development.

Program Direction supports OE's team of experts as they share their technical, analytical, and policy expertise with offices throughout DOE and with energy transition stakeholders across the country. Continued program direction support is crucial to sustain a talented workforce to facilitate the Administration's goal of providing a reliable, resilient, secure, and affordable 21st century power grid for the American people.

Critical and Emerging Technologies

(\$K)

	FY 2024 Enacted	FY 2026 Request
Critical and Emerging Technologies	0	2,000
Total, Critical and Emerging Technologies	0	2,000

Appropriation Overview

The Critical and Emerging Technologies function has primary responsibility for coordinating efforts across the Department of Energy programs and its 17 national laboratories to ensure a unified Departmental voice on issues related to artificial intelligence and machine learning, quantum information science, and other critical and emerging technologies. CET also houses the Department's Chief AI Officer, who is responsible for driving development and implementation of AI-related federal directives and strategies, supporting AI governance, and foster collaboration across the DOE complex.

DOE houses world-class expertise, facilities, and capabilities in critical and emerging technology; however, these competencies are spread across numerous departmental elements and laboratories. CET leads coordination across these diverse elements to ensure efficient implementation of any legislative and administration directives including Executive Orders and National Security Presidential memoranda. CET will work with other federal agencies, the Executive Office of the President (EOP), national and international organizations and institutions, industry, and other external stakeholders to leverage the capabilities and expertise of the Department.

CET will be staffed by an interdisciplinary team of experts with the requisite technical and communication skills to formulate a coherent vision and strategy to ensure that DOE's capabilities in critical and emerging technology are leveraged across the Department, the interagency, and external stakeholders.

Program Highlights

In FY 2026, activities will include but are not limited to: coordinating across program elements to advance progress in executing administration directives; leveraging expertise from program offices and national laboratories to develop coordinated responses to White House data calls and policy processes; engaging external stakeholders and building strategic partnerships; supporting DOE leadership on engagements related to critical and emerging technologies; and convening stakeholders to ensure the Department is mobilizing its collective resources to support the Administration priorities.

Environmental Management

(\$K)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
				\$	%
Carlsbad/Waste Isolation Pilot Plant (WIPP)	474,613	504,829	426,774	-78,055	-15%
Idaho National Laboratory	489,705	492,511	472,521	-19,990	-4%
Oak Ridge	694,292	694,965	635,812	-59,153	-9%
Paducah	333,976	343,617	332,327	-11,290	-3%
Portsmouth	579,611	593,264	582,007	-11,257	-2%
Richland	1,145,866	1,133,564	970,514	-163,050	-14%
River Protection	1,890,000	1,937,377	2,100,427	+163,050	+8%
Savannah River	1,811,994	1,819,061	1,684,764	-134,297	-7%
Lawrence Livermore National Laboratory	36,879	1,879	1,955	+76	+4%
Los Alamos National Laboratory	292,479	304,479	280,937	-23,542	-8%
Nevada	73,352	63,377	64,835	+1,458	+2%
Sandia National Laboratories	2,264	2,264	1,030	-1,234	-55%
Separation Process Research Unit	15,300	1,300	950	-350	-27%
West Valley Demonstration Project	95,745	97,688	97,868	+180	0%
Energy Technology Engineering Center	18,000	10,000	10,000	0	0%
Moab	67,000	74,420	64,265	-10,155	-14%
Subtotal, Environmental Management Sites	8,021,076	8,074,595	7,726,986	-347,609	-4%
Closure Sites Administration	3,023	1,350	500	-850	-63%
Lawrence Berkeley National Laboratory	6,000	0	0	0	N/A
Science Excess Facilities	5,935	0	0	0	N/A
Subtotal, Environmental Management Other Sites	14,958	1,350	500	-850	-63%
Program Direction	326,893	326,893	312,818	-14,075	-4%
D&D Fund Deposit	285,000	285,000	278,000	-7,000	-2%
Mission Support	83,504	43,593	36,435	-7,158	-16%
Technology Development	35,569	35,569	16,012	-19,557	-55%
Subtotal, Environmental Management	8,767,000	8,767,000	8,370,751	-396,249	-5%
D&D Fund Offset	-285,000	-285,000	-278,000	+7,000	-2%
Subtotal, Receipts and Offsets	-285,000	-285,000	-278,000	+7,000	-2%
Total, Environmental Management	8,482,000	8,482,000	8,092,751	-389,249	-5%

Appropriation Overview

The Office of Environmental Management (EM) supports the Department of Energy (DOE) to meet the challenges of the nation's Manhattan Project and Cold War legacy responsibilities. EM was established in 1989 and is responsible for the cleanup of millions of gallons of liquid radioactive waste, thousands of tons of spent (used) nuclear fuel and nuclear materials, disposition of large volumes of transuranic and mixed/low-level waste, huge quantities of contaminated soil and water, and deactivation and decommissioning of thousands of excess facilities. This environmental cleanup program results from six decades of nuclear weapons development and production and Government-sponsored nuclear energy research. It involves some of the most dangerous materials known to mankind. To date, EM has completed cleanup activities at 92 sites in 30 states and in the Commonwealth of Puerto Rico. EM is currently responsible for cleaning up the remaining 15 sites in 11 states.

Program Highlights

Savannah River

The FY 2026 Budget Request supports the Liquid Waste Program, to achieve additional risk reduction by stabilization and immobilization of high activity radionuclides through vitrification into canisters at the Defense Waste Processing Facility and disposition of decontaminated salt solution in Saltstone Disposal Units. To reach the end state of the Savannah River Site Liquid Waste Mission, the Savannah River Site will accelerate risk reduction by optimizing the fully integrated Liquid Waste system. This will initially be performed by processing higher curie salt feed batches through the Salt Waste Processing Facility and then implementing the Next Generation Solvent at the Salt Waste Processing Facility to increase throughput if needed. Additionally, the Savannah River Site will prioritize the closure of Tank 9, 10, and 11 which reside below the water table. These tanks carry the highest liability to the Liquid Waste Mission and will be accelerated to reduce this risk as early as possible.

The FY 2026 Request also supports continued risk reduction of the Nuclear Materials Program missions to store, stabilize, and disposition EM-owned nuclear materials and spent nuclear fuel, as well as support the necessary mission for maintaining the safe and environmental compliant state of excess nuclear processing facilities until their future decommissioning. The Nuclear Materials Program missions at the Savannah River Site includes operations of H-Canyon, L-Basin, and the surveillance and maintenance of excess nuclear facilities in F-Area. The FY 2026 request maintains the safe and environmentally compliant state of the Savannah River Site excess nuclear facilities.

The FY 2026 Request funds operations, maintenance and utilities for the Savannah River National Laboratory.

The decrease from the FY 2025 Enacted level is attributed to a reduction in funding for Saltstone Disposition Unit construction, a reduction in utilities cost for F/H lab, and the transfer of site responsibilities to the National Nuclear Security Administration to include transfer of K-Area facilities, site infrastructure and land management activities, community and regulatory support and safeguards and security activities, and Payments in Lieu of Taxes (PILT) to local counties.

Office of River Protection

The FY 2026 Budget Request represents continued progress toward important cleanup required by the Amended Consent Decree and Tri-Party Agreement. The Department is working to complete and operate the treatment facilities to safely immobilize and dispose of tank waste at Hanford. The request is designed to maintain safe operations of the tank farms to protect workers, the public, and the environment; enable the development and maintenance of infrastructure necessary to enable waste treatment operations; and progress single shell tank retrievals. The budget request also focuses on the Waste Treatment and Immobilization Plant High-Level Waste Facility to advance facility engineering and design. The mission of the Waste Treatment Plant Project is to construct a treatment facility to blend waste from the tank farms with molten glass, which is placed into stainless steel canisters suitable for long-term storage of high-level waste and disposal of low-level waste.

The increase from the FY 2025 Enacted level supports Hot Commissioning activities of the Low-Activity Waste Vitrification Facility, and operations of the Waste Treatment and Immobilization Plant Analytical Laboratory, the Balance of Facilities, and the Effluent Management Facility. Additionally, the increase supports a ramp up of tank farms and Direct Feed Low Activity Waste operations, including Tank-Side Cesium Removal, AP-Farm activities, and campaigns at the 242-A Evaporator and the Effluent Treatment Facility. Long-lead procurements and construction activities associated with the Advanced Modular Pretreatment System (15-D-409-02) and the 200 West Area Risk Management Project (23-D-403), as well as completion of the Interim Surface Barrier at T Tank Farm are part of the increase as well.

Richland

The FY 2026 Budget Request continues important cleanup progress required by the Tri-Party Agreement. Cleanup activities include soil and groundwater remediation, facility decontamination and decommissioning, and disposition of waste other than the tank waste. It will maintain safe operations; perform Hanford site-wide services; support Direct Feed Low-Activity Waste startup and commissioning; and conduct critical site infrastructure projects. The budget request also supports progress in modifications to the Waste Encapsulation and Storage Facility for transfer of the cesium-strontium capsules to dry storage, continued groundwater treatment progress, accelerated Resource Conservation and Recovery Act compliance well drilling, additional groundwater treatment implementation, and completion of 105KW Fuel Storage Basin above and below water debris disposition and deactivation activities.

The decrease from the FY 2025 Enacted level reflects completion of upgrades at the Solid and Liquid Waste operational facilities; a reduction of activities to support the Transuranic disposition program; and completion of the excavation of

Supercell 11 in FY 2025; progression of decision documentation remedial action infrastructure activities; a reduction of infrastructure support and the maintenance zero emissions project; and completion of demobilization from the Central Plateau. The decrease also represents the completion of progress on the 100K Area ancillary facility demolition and waste site remediation with follow-on activities scheduled following 105KW Basin demolition at a future date; and progress toward 324 Building deactivation with the completion of regulatory documentation, planning and non-intrusive characterization activities.

Oak Ridge

The FY 2026 Budget Request continues cleanup activities at the Oak Ridge site, including slab and soil remediation at the East Tennessee Technology Park; addressing high-risk excess contaminated facilities at Oak Ridge National Laboratory (ORNL) and Y-12 National Security Complex, disposition of U-233 material and transuranic waste; design for the On-Site Waste Disposal Facility to support cleanup of ORNL and Y12; and continued investment in mercury characterization and remediation technologies.

The decrease from the FY 2025 Enacted level reflects a ramp-down of cleanup activities at East Tennessee Technology Park, completion of some ongoing cleanup activities and sequencing of D&D activities to address contamination to support the mission of the Oak Ridge National Laboratory, and resequencing of D&D and soil activities to address contamination and to support the mission of the Y-12 National Nuclear Security Complex and enable a subproject approach for the Onsite Waste Disposal Facility which will support future cleanup activities at the site.

Idaho

The FY 2026 Budget Request continues progress in characterizing, packaging, and shipping stored contact-handled and remote-handled transuranic waste. The request also furthers processing, characterizing, packaging, and shipping mixed low-level radioactive waste and remote-handled mixed low-level radioactive waste to off-site disposal facilities. The FY 2026 Request continues the deactivation and decommissioning activities at the Radioactive Waste Management Complex as part of Resource Conservation and Recovery Act closure activities and continues dismantlement and demolition activities making progress toward the capping of the Subsurface Disposal Area. The funding request continues hot operation of the Integrated Waste Treatment Unit to treat the sodium-bearing tank waste. In addition, activities continue to complete construction of the Product Storage Building expansion to store treated sodium bearing waste. This request supports the continuation of construction for the Idaho Comprehensive Environmental Response, Compensation, and Liability Act Disposal Facility Landfill Disposal Cell and Evaporation Pond Project. This request also supports surveillance and maintenance and risk reduction related activities for spent nuclear fuel and completes Peach Bottom Fuel transfers. Continued design and engineering work for an interim spent fuel staging project is ongoing.

The decrease from the FY 2025 Enacted level reflects completion of the 1st generation to 2nd generation vault transfers and nominal support for the spent nuclear fuel packaging demonstration scope and forward funding the additional Idaho Comprehensive Environmental Response, Compensation, and Liability Act Disposal Cell and Evaporation Pond construction project in FY 2025 negating the need for funding in FY 2026. The decrease also reflects continued completion of decontamination and demolition of Accelerated Retrieval Project ancillary facilities resulting in a ramp down of demolition and dismantlement in preparation for Subsurface Disposal Area Cap construction.

Carlsbad

The FY 2026 Budget Request continues key operations at the Carlsbad Field Office. The Carlsbad Field Office is responsible for managing the National Transuranic Waste Program and the Waste Isolation Pilot Plant (WIPP), the Nation's only mined geologic repository for the permanent disposal of defense-generated transuranic waste. This budget request supports disposal facility operations, regulatory and environmental compliance actions, the Central Characterization Project to perform transuranic waste characterization/certification activities to maintain progress toward legacy transuranic waste related milestones at generator sites, transuranic waste transportation capabilities, continued progress on repairing or replacing infrastructure, and modernizing the Hoisting Capability Project (21-D-401).

The decrease from the FY 2025 Enacted level is attributed to completion of the Safety Significant Confinement Ventilation System and Utility Shaft projects, and a reduction in weekly shipments. The Hoisting Capability Project has not yet achieved CD-1 and overall funding requirements are still being determined.

Paducah

The FY 2026 Budget Request supports activities to continue environmental remediation and further stabilize the gaseous diffusion plant. Stabilization activities include non-destructive assay characterization, hazardous materials

removal, and surveillance and maintenance. This budget request also supports the safe operation of the Depleted Uranium Hexafluoride Conversion facility.

The decrease from the FY 2025 Enacted level reflects the completion of a one-time seismic study conducted by the University of Kentucky Research Foundation, contract transitions that will be completed in FY 2025, as well as the reduction of oxide cylinder disposition and infrastructure activities that will provide the capability to ramp-up oxide and heel/empty cylinder shipments.

Portsmouth

The FY 2026 Budget Request continues progress on decontamination and decommissioning activities. This budget request also supports the safe operation of the Depleted Uranium Hexafluoride Conversion facility. The FY 2026 budget request includes funding for the On-Site Waste Disposal Facility, Line-Item Capital Project #2 (20-U-401) to receive the debris from the X-333 Process Building. The request also supports funding the On-Site Waste Disposal Facility, Line-Item Capital Project #3 (25-U-401) to receive the debris from the X-330 Process Building. The mission of these projects is to construct an on-site facility for the disposal of debris generated from the demolition of the Portsmouth Gaseous Diffusion Plant and associated facilities.

The decrease from the FY 2025 Enacted level is due to the completion of On-Site Waste Disposal Facility Capital Project #2 (20-U-401) fieldwork partially offset by other increases, including electrical distribution reconfiguration cost and initiation of construction of On-Site Waste Disposal Facility Capital Project #3.

Los Alamos National Laboratory

The FY 2026 Budget Request continues to focus on the removal of legacy waste, conduct of soil and groundwater investigations and remediation where needed, and protection of surface water at the Los Alamos National Laboratory. Consistent with the priorities established with the New Mexico Environment Department in the 2016 Consent Order, cleanup activities will continue to focus on groundwater and soil remediation and surface water protection. The Chromium Plume Control Interim Measure to control migration of a hexavalent chromium plume beneath Mortandad and Sandia Canyons will continue. Additionally, Plume-Center Characterization activities will continue to investigate and develop a corrective measure for remediation of the hexavalent chromium plume. Characterization and risk assessment for the Royal Demolition Explosives (RDX) groundwater plume in Cañon de Valle will continue. Implementation of the individual storm water permit will continue, and investigation and cleanup of several aggregate areas will be completed. Characterization and cleanup at Technical Area 21 will continue as well as retrieval and repackaging of the below-grade transuranic waste to include readiness activities and infrastructure needs to manage the processing and packaging of the waste at Area G.

The decrease from the FY 2025 Enacted level reflects reduction in funding for planning the future waste retrieval at Pit 9 at Area G; a decrease in Excess Facilities D&D due to planned project execution.

Departmental Administration

(\$K)

	FY 2024 Enacted	FY 2026 Request
Office of the Secretary	6,642	6,642
Congressional & Intergovernmental Affairs	5,000	5,000
Chief Financial Officer	63,283	62,000
Chief Information Officer	220,000	196,362
Industrial Emissions and Technology Coordination	3,500	0
<i>Subtotal, Departmental Administration</i>	<i>298,425</i>	<i>270,004</i>
Management	68,403	51,678
Project Management	14,000	9,950
Chief Human Capital Officer	37,682	27,000
Office of Small & Disadvantaged Business Utilization	4,400	2,973
General Counsel	37,000	37,500
Office of Policy	23,950	13,000
Public Affairs	6,000	5,025
International Affairs	31,000	19,000
Minority Economic Impact	30,000	0
Office of Technology Commercialization ¹	0	10,000
Statutorily Required Civil Rights and EEO Functions	0	4,000
<i>Subtotal, Other Departmental Administration</i>	<i>252,435</i>	<i>180,126</i>
Strategic Partnership Projects (SPP)	40,000	40,000
Total, Departmental Administration (Gross)	590,860	490,130
Defense-Related Administrative Support (DRAS)	-203,782	-214,626
<i>Subtotal, Departmental Administration</i>	<i>387,078</i>	<i>275,504</i>
Revenues associated with SPP	-40,000	-40,000
Other Revenues	-60,578	-60,578
<i>Subtotal, Miscellaneous Revenues</i>	<i>-100,578</i>	<i>-100,578</i>
Total, Departmental Administration (Net)	286,500	174,926

Appropriation Overview

The Departmental Administration (DA) appropriation funds several management and mission support functional organizations that have enterprise-wide responsibility for administration, accounting, budgeting, contract and project management, human resources management, congressional and intergovernmental liaison, energy policy, information management, life-cycle asset management, technology commercialization, legal services, energy jobs, civil rights, equal employment opportunity, ombudsman services, small business advocacy, Arctic energy coordination, and public affairs.

The DA appropriation also budgets for Strategic Partnership Projects (SPP) expenses and offsetting collections and for Miscellaneous Revenues that offset the costs of the overall program of work. Additionally, the DA program of work

¹ The Office of Technology Commercialization, formerly known as the Office of Technology Transitions, was funded as a standalone account at \$20 million in FY 2024 Enacted.

operates by executing Defense Related Administrative Support (DRAS) funding appropriated within Other Defense Activities (ODA) to account for the support DA programs provide for the defense portion of DOE.

Program Highlights

In FY 2026, the DA Request reflects a reduction from previous years and aims to strengthen enterprise-wide management and mission support functions, per the Administration's priorities, as the highlights below outline:

- Office of the Secretary (OSE): Funding will continue to support leadership and policy direction at the Department.
- Office of the Chief Financial Officer (CFO): Funding ensures the effective management and financial integrity of DOE programs, activities, and resources by developing, implementing, and monitoring DOE-wide policies and systems in the areas of budget administration, finance and accounting, internal controls and financial policy, corporate financial systems, and strategic planning. The Request supports Evidence Act Implementation.
- Office of International Affairs (IA): Funding supports the strategic implementation of U.S. international energy policy and supports DOE's mission to ensure America's security and prosperity by addressing its energy challenges through innovative science and technology solutions. IA develops and leads the Department's bilateral and multilateral research cooperation, connecting DOE's program offices to advantageous international relationships.
- Office of the Chief Information Officer (OCIO): Funding supports OCIO's continued modernization of DOE's IT infrastructure and IT services to provide the capacity, flexibility, and resiliency required of a modern and secure enterprise. Proposed modernization initiatives will continue to reduce the threat of attacks to both DOE's IT and operational technology assets through automation, scale capacity commensurate with demand, and establish IT enterprise capabilities. Cyber vulnerabilities will continue to be addressed through funds specifically dedicated to cyber response and recovery management in this Request.
- Office of General Counsel: Provides for legal advice and support to DOE's administrative and program offices, field activities, and participation in, or management of, both administrative and judicial litigation. GC will lead DOE's Freedom of Information Act (FOIA) response function beginning in FY 2026.
- Office for Human Capital (HC): Funding supports operational levels and maintains HC's vital customer service mission. Further, the Request supports ongoing initiatives related to developing more agile, cost-effective operations and modernized hiring practices to improve the DOE workforce's ability to deliver mission outcomes.
- Office of Policy (OP): Funding supports energy policy and analysis work as an essential function to support urgently needed technology, economic, and energy-related goals; and capabilities to provide statistical analysis and dashboard tracking and reporting related to economic and security goals to be used across the government. Funding also supports the Arctic Energy Office.
- Office of Technology Commercialization (OTC): Funding catalyzes the commercialization of energy, industrial and manufacturing technologies that build a vibrant economy. OTC serves a multi-faceted role across the research, development, demonstration, and deployment continuum to support the transition of novel technologies to the market by providing public-private partnering support, technology transfer policy leadership, market-informed analytics, commercial adoption risk assessments, and Departmental expertise in innovative funding instruments.

Environment, Health, Safety and Security

(\$K)

	FY 2024 Enacted	FY 2026 Request
Environment, Health, Safety and Security Mission		
Support	144,705	141,908
Program Direction	86,558	90,555
Total, Environment, Health, Safety and Security	231,263	232,463

Appropriation Overview

The Office of Environment, Health, Safety and Security (EHSS) is the Department of Energy's (DOE) central organization with enterprise-level responsibilities for health, safety, environment, and security, providing corporate-level leadership and strategic vision to establish, sustain, coordinate and integrate these vital programs. EHSS is responsible for policy development and technical assistance, safety analysis, and corporate safety and security programs. The Director, Office of Environment, Health, Safety and Security advises DOE elements and senior Departmental leadership, including the Deputy Secretary on all matters related to environment, health, safety and security across the complex.

EHSS enables the DOE mission and protects DOE workers, the public, the environment, and national security assets through corporate leadership and strategic approaches. This is accomplished by maintaining corporate-level policies and standards, providing implementation guidance, sharing operating experience, lessons learned, and best practices, and offering assistance and support services to line management, all with the goal of mission success as DOE's environment, health, safety, and security advocate.

Program Highlights

In FY 2026, the Request proposes to:

- Support DOE's resource and energy efficiency, environmental compliance, and sustainable management of natural and cultural resources through policy development, performance tracking, coordination with external agencies, and the development of guidance and tools for environmental protection and emergency response.
- Develop cost-effective solutions for achieving best-in-class safety performance through integrated safety management and concepts such as safety culture and environmental management systems.
- Honor the national and Departmental commitment to current and former workers through cost-effective implementation of the former worker medical screening program and support to the Department of Labor for the Energy Employees Occupational Illness Compensation Program Act.
- Develop comprehensive, reasonable, and cost-effective security policies and operational guidelines to secure the Nation's nuclear and energy assets, as well as DOE personnel and facilities, from insider and external threats.
- Implement Trusted Workforce 2.0 by successfully identifying the uncleared population for the Department's Headquarters facilities/sites, enrolling this population into mandated data services, and continually monitoring incoming vetting results for all personnel.
- Manage DOE's classification program to protect national security interests and develop advanced computer tools to decrease the cost and increase the accuracy of derivative classifier work throughout the DOE/NNSA complex.

Advanced Research Projects Agency-Energy (\$K)

	FY 2024 Enacted	FY 2026 Request
ARPA-E Projects	420,000	160,000
Program Direction	40,000	40,000
Total, Advanced Research Projects Agency – Energy	460,000	200,000

Appropriation Overview

ARPA-E will identify and promote revolutionary advances in energy, translating scientific discoveries and cutting-edge inventions into technological innovations. It will focus on technologies promoting reliable, firm power that Americans can depend on. It will also accelerate transformational technological advances in areas where industry by itself is not likely to invest due to technical and financial uncertainty. ARPA-E focuses on novel early-stage energy technology research and development that can be meaningfully advanced with a small investment over a defined period of time. ARPA-E coordinates its work with DOE's basic research and applied programs and other Federal research agencies to ensure work is not duplicated.

Program Highlights

ARPA-E has established a nimble, effective management structure and developed a portfolio of technical programs that is delivering innovative, investable opportunities to the commercial sector. ARPA-E will continue to deliver value to the U.S. economy with continued emphasis on maintaining a healthy and varied portfolio of energy projects. These projects cover a broad range of topics, with a growing focus on additional scale-up of the most promising technologies that have demonstrated success in technical development, project management, and definition of commercial pathways and yet still need assistance to approach commercial readiness.

FY 2026 Focused FOA Strategic Direction:

- Continue to fund and direct the discovery of outlier energy technologies that ensure American-made energy.
- Support the Administration's goal of restoring U.S. energy dominance.
- Further the Secretary's commitments to advance energy abundance by increasing the energy available to power modern life and unleash American energy innovation to maintain America's global competitiveness.

ARPA-E will also continue its stand-alone Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) program to provide additional support to small businesses beyond the significant number of awards to small businesses via ARPA-E's standard non-SBIR/STTR solicitations.

U.S. Energy Information Administration

(\$K)

	FY 2024 Enacted	FY 2026 Request
National Energy Information System	135,000	135,000
Total, U.S. Energy Information Administration	135,000	135,000

Appropriation Overview

The U.S. Energy Information Administration (EIA) is the statistical and analytical agency within the U.S. Department of Energy. EIA collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment. EIA is the nation's premier source of energy information, and, by law, its data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. government.

Program Highlights

EIA conducts a wide range of data collection, analysis, forecasting, and dissemination activities to ensure that its stakeholders, including Congress, federal and state governments, the private sector, the public, and the media, have ready access to timely, reliable, impartial, and relevant energy information. EIA's data and analysis inform important energy-related decisions, such as policy development; the availability of energy sources; and government, business, and personal investment decisions.

To accomplish its mission, EIA delivers a comprehensive range of energy data and analysis. Examples of key information products on which EIA stakeholders rely include:

- Weekly petroleum and natural gas inventory reports.
- Monthly short-term forecasts of energy markets.
- Long-term outlooks for U.S. and global energy production and consumption.
- Residential, commercial, and manufacturing energy consumption trends and characteristics.

FY 2026 funding will enable EIA to initiate the next Commercial Buildings Energy Consumption Survey (CBECS), a complex, multi-year survey that provides the only comprehensive, statistically reliable source of information on energy consumption, expenditures, and end uses in U.S. commercial buildings. Funding will also enable EIA to continue to advance its modeling systems to better represent future energy pathways and issues, improve energy demand modeling capabilities, and explore the best approach to model and forecast the use of critical minerals in energy technologies.

Office of Enterprise Assessments

(\$K)

	FY 2024 Enacted	FY 2026 Request
Enterprise Assessments	30,022	30,022
Program Direction	64,132	59,132
Total, Office of Enterprise	94,154	89,154

Appropriation Overview

The Office of Enterprise Assessments (EA) supports the Department's mission priorities and strategic plan for the secure, safe, and efficient operation of the Department's science and energy research, environmental cleanup activities, and nuclear weapons complex by conducting independent assessments of security and safety performance throughout the Department, taking enforcement action for contractor violations of security and safety regulations, and providing training programs that institutionalize enterprise security and safety lessons learned.

EA reports directly to the Office of the Secretary and is independent of the DOE programs that develop and implement security and safety policy and programs and therefore is better able to provide objective and timely information to DOE senior leadership, contractor organizations, and other entities on the methods to appropriately protect national security material and information assets and on whether Departmental operations provide for the safety of its employees and the public. EA activities evaluate the Department's effectiveness in promoting protection strategies that are based on informed risk management decisions. EA is designated to implement statutorily authorized contractor enforcement programs pertaining to classified information security, nuclear safety, and worker safety and health. EA also operates the DOE National Training Center (NTC) in Albuquerque, New Mexico, to enhance the proficiency and competency of the Department's security and safety personnel, and to support DOE workforce development through other programs including safety culture improvement.

Program Highlights

- Conducting comprehensive independent security performance assessments and follow-up assessments at DOE National Security / Category I Special Nuclear Material sites, using limited notice safeguards and security performance tests to provide accurate, up-to-date assessments of DOE site security response capabilities; and evaluating actions to detect insider threats from individuals who may seek to compromise national security and/or the ability of the Department to meet its mission;
- Enhancing the methods and tools used to conduct comprehensive and threat-informed independent cybersecurity assessments, including unannounced red team performance testing, to identify vulnerabilities in the Department's National Security, Intelligence, scientific, and other information systems against external and internal attacks;
- Conducting nuclear safety, worker safety and health, and emergency management independent performance assessments of the Department's operations including high hazard nuclear construction projects and operations
- Enhancing the effectiveness of the DOE enforcement function that holds contractor organizations accountable for noncompliance with worker safety and health, nuclear safety, Unclassified Controlled Nuclear Information, and classified information security regulations;
- Providing training programs that promote the competency and proficiency of DOE federal and contractor employees and performing other related functions via the DOE National Training Center in Albuquerque, NM, to institutionalize security and safety data analysis and safety lessons learned in support of improved DOE security and safety performance, advance strong safety culture across the enterprise; and
- Using risk-informed and fact-based analysis to identify emerging trends in safety, security, and cybersecurity within the Department.

Legacy Management

(\$K)

	FY 2024 Enacted	FY 2026 Request
Legacy Management	173,680	177,716
Program Direction	22,622	22,542
Total, Legacy Management	196,302	200,258

Appropriation Overview

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) protects human health and the environment by providing long-term management solutions at over 100 remediated sites where the federal government operated, researched, produced, and tested nuclear weapons and/or conducted scientific and engineering research. While these sites were remediated and placed in a safe condition, residual hazards remain after cleanup due to technical or physical limitations of the remedial work. As a result, DOE maintains a post closure obligation to protect human health and the environment after cleanup is completed. LM fulfills this obligation by providing long-term stewardship (LTS) of these sites.

The LM request provides funding for its core LTS activities including Long-Term Surveillance and Maintenance (LTS&M) at its current sites. Funding also supports determination of the condition, and risk posed by physical, radiological, and chemical hazards at abandoned Defense-Related Uranium Mine (DRUM) sites. Funding further enables the Archives and Information Management program, assures post-retirement benefits to former contractor workers, and executes the Department's Uranium Leasing Program. Other functions include asset management, as well as providing education, communication, and outreach to many affected State, Native American, and local communities.

Program Highlights

The request supports LM's mission capabilities and its core LTS activities mentioned above. Approximately \$87,833,000 will support LTS&M activities for sites currently under custodianship, support transition activities for over 20 new sites coming to LM over the next five years and accelerate major maintenance and repair projects at sites and field offices. This will also support inventorying, risk screening, and safeguarding of DRUM sites on public, Tribal, and private lands and in Native American communities. Lastly, it supports appropriate implementation of mitigating actions at LM sites to enhance their resilience.

The remaining \$112,425,000 supports legacy benefits for former DOE Contractor workers; deployment and implementation of enhancements to address the increased number and complexity of Known Exploited Vulnerabilities; execution of beneficial land reuse activities at DOE properties to revitalize land and assets; extensive community interaction and outreach to support the LTS mission; salaries, benefits and overhead for civilian employees.

Office of Hearings and Appeals

(\$K)

	FY 2024 Enacted	FY 2026 Request
Office of Hearings and Appeals	4,499	4,499
Total, Office of Hearings and Appeals	4,499	4,499

Appropriation Overview

Office of Hearings and Appeals (OHA) is the central administrative adjudicatory body for the Department of Energy. OHA's jurisdiction includes conducting evidentiary hearings to determine an employee's eligibility for a security clearance, deciding Freedom of Information Act and Privacy Act appeals, investigating and conducting hearings on certain contractor whistleblower complaints, and ruling on requests for relief from DOE regulations and orders, such as regulatory relief from the appliance energy efficiency standards. OHA also offers alternative dispute resolution services such as mediation for a variety of matters.

Program Highlights

In FY 2026, the budget request proposes to:

- Continue to lead the federal government in being a good steward of American taxpayers' dollars.
- Fund all OHA's program direction activities.
- Continue to demonstrate timeliness, efficiency and responsiveness with all matters that come before it.
- Continue to conduct almost all hearings and other matters coming before it virtually, in order to eliminate or significantly reduce the need for travel.
- Continue to maintain low case processing times in all its areas of jurisdiction.

Office of the Inspector General

(\$K)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
				\$	%
Office of the Inspector General	86,000	86,000	90,000	+4,000	+5%
Total, Office of the Inspector General	86,000	86,000	90,000	+4,000	+5%

Appropriation Overview

The Office of the Inspector General (OIG) reviews the integrity, economy, and efficiency of Department of Energy (DOE) programs and operations, including the National Nuclear Security Administration (NNSA) and the Federal Energy Regulatory Commission (FERC). The OIG has the authority to inquire into all DOE programs and actions as well as related activities. Audits, inspections, investigations, and other reviews are used to detect and prevent fraud, waste, abuse, and violations of the law.

In addition, the Federal Information Security Modernization Act of 2014 directs the OIG to conduct an annual evaluation of DOE's information security systems. The OIG is also required to conduct an evaluation of DOE's implementation of the Cybersecurity Information Sharing Act of 2015 every two years. The OIG is further charged with reviewing the Department's efforts to eliminate improper payments, in conformance with the Payment Integrity Information Act of 2019. The OIG routinely conducts reviews of the most significant management challenges facing the Department, to include its Environmental Management program. In addition, the OIG addresses alleged violations of law that impact Department programs, operations, facilities, and personnel.

Program Highlights

The OIG will utilize these resources to accomplish its mission. The OIG's focus includes:

- *Investigations.* The OIG's Investigative function focuses on the detection and investigation of improper and illegal activities involving programs, personnel, and operations. The Office of Investigations projects to surpass its prior years' casework in FY25, with a noted increase in criminal investigations particularly related to grant fraud, contract fraud and cybercrimes. The Office of Investigations' work and partnerships with other law enforcement entities over the past year has resulted in significant cost savings to the Department and funds put to better use, as well as the return of over \$130 million to the Department. The OIG expects these trends to continue in FY26 as well as the significant outcomes of our criminal investigations. Our criminal investigations have led to a significant increase in sentencings and punishments for offenders, including a cybercrimes investigation involving a former Senior Executive Service employee being sentenced in a U.S. District Court to 10 years' incarceration for violations of Coercion and Enticement of a Minor. The Office of Investigations continues its proactive case work in fraud detection and information sharing with Data Analytics, as well as collaborating with Departmental partners. The Office of Investigations will also continue to address allegations received through the OIG's Hotline and Whistleblower Investigations section, which have increased significantly in the last four years.
- *Audits.* The OIG performs audits of Departmental programs and operations that help identify and support recommendations for corrective actions to address management and administrative deficiencies which create conditions for existing or potential instances of fraud, waste, abuse or violations of law. The OIG's audit coverage includes financial, technology, cybersecurity, and program and operational performance, as well as the cost incurred under the Department's management and operating contracts. Audits provide substantial deterrence and detection capabilities over taxpayer funds and give Departmental management and Congress a well-informed perspective.
- *Cybersecurity Oversight Efforts.* The OIG is responsible for the audit and evaluation of the Department's systems. The Department's unclassified cybersecurity environment includes over 450 systems, including several high value assets used to manage areas such as the Department's adjudication of security clearance, as well as the transmission of electricity within the bulk electric system. Annually, the OIG's evaluation of the cybersecurity program touches less than 10% of the total systems within the unclassified environment. In prior years, not only has the Department experienced substantial problems with cybersecurity, but the OIG's reviews have uncovered

significant weaknesses. As the Department's expenditures increase, it will become increasingly important to secure its systems from vulnerabilities that could result in the loss of billions of dollars' worth of innovative or sensitive technologies developed using taxpayer dollars; impact the refurbishment of the nuclear stockpile; or impact customers receiving electricity from the various Power Marketing Administrations. The Department is also responsible for managing a classified network. The OIG will undertake efforts to assess the need for additional oversight in this area.

- *Incurred Cost Audits of Management and Operating (M&O) Contracts.* The OIG will continue conducting audits of incurred costs for Department M&O contracts, which were valued at approximately \$32.3 billion in FY 2024. These audits will include real-time testing of labor costs and reviews to ensure the adequacy of Disclosure Statements. The OIG will also begin conducting audits to verify compliance of Disclosure Statements and real-time testing of material costs.
 - *NNSA Modernization Efforts.* NNSA has undertaken a modernization effort that involves major projects such as the weapons complex transformation. The OIG will conduct audits, inspections, reviews, and assessments to identify opportunities to improve the efficiency and effectiveness of these modernization efforts.
 - *Environmental Management.* The Department's environmental cleanup and disposal liabilities of \$544,500,000,000 remains on the Government Accountability Office's Biennial High Risk List. The OIG will continue its efforts to review the efficacy of the Department's environmental programs to prevent fraud, waste, and abuse.
- *Technology/Data Analytics.* The OIG will strengthen investments in human capital, technical infrastructure, policy and stakeholder engagement, data acquisition, and data management and integration, to support scaling data analytics capabilities, including integration of artificial intelligence (AI). In FY 2026, the OIG plans to build a high side data analytics capability for more efficient oversight of the Department's classified programs and operations. Additionally, the OIG continues to address information technology solutions to the problem of the OIG operating on a multitude of networks, resulting in delays, missed communications, and a daily loss of productivity in OIG operations.
 - *Facilities.* The OIG has moved forward with a full-time in-office presence for its employees. The OIG will continue its efforts to assess strategic locations at Department sites to ensure sufficient oversight presence as provided by the OIG's auditors, investigators, analysts, and other support staff. Additionally, the OIG will continue working to acquire the necessary sensitive compartmented information facility.

Cybersecurity, Energy Security, and Emergency Response

(\$K)

	FY 2024 Enacted	FY 2026 Request
Preparedness, Policy, and Risk Analysis	26,500	27,000
Risk Management Technology and Tools	113,000	74,000
Response and Restoration (270)	32,500	26,000
Program Direction	28,000	23,000
Total, Cybersecurity, Energy Security, and Emergency Response	200,000	150,000

Appropriation Overview

The Office of Cybersecurity, Energy Security, and Emergency Response (CESER) leads the Department's efforts to secure the U.S. energy infrastructure against all hazards, reduce the risks of and impacts from cybersecurity and other disruptive events, and leads response and restoration activities. CESER is the designated head Office for DOE's responsibilities as lead agency for Emergency Support Function #12 (Energy), or ESF #12, under the National Response Framework. CESER is also the Sector Risk Management Agency (SRMA) for national efforts to enhance preparedness, resiliency, and recovery of the U.S. energy infrastructure. The U.S. energy sector powers and fuels the economy, national security, and the daily lives of Americans. With critical energy infrastructure facing evolving threats and hazards, especially from significant natural hazards and rapidly evolving cybersecurity threats, CESER divisions and programs coordinate with electricity and oil and natural gas infrastructure owners and operators; State, Local, Tribal, and Territory (SLTT) governments; and Federal agencies to understand and mitigate risk, develop guidance and tools to mitigate risk and enhance resilience and security, and respond when incidents do occur. CESER leads, coordinates, and provides technical expertise across DOE in implementing its cybersecurity-by-design strategy, in which cybersecurity considerations are incorporated into new energy technologies as they are developed through the support of other DOE offices.

Program Highlights

Preparedness, Policy, and Risk Analysis (PPRA) is focused on providing day-to-day sector risk management and preparedness through cultivating strong partnerships with the energy sector community – including electric utilities and oil and natural gas owner/operators, State, Local, Tribal, and Territorial (SLTT) governments, vendors and commercial providers, and the Federal Interagency, with insights and support from threat and intelligence sources and academia and laboratory partnerships to identify, assess, and actively manage cyber, physical security, and natural risks and threats to our Nation's energy infrastructure. PPRA works to strengthen the security and resilience of critical energy infrastructure and surrounding communities through threat- and intelligence-informed risk analysis, exercises, training and workforce development, and policies and standards developed in partnership with other Federal entities, regulators, and States. These efforts reduce the current and future risk to and provide a more resilient system for our critical energy infrastructure.

Risk Management Tools and Technologies (RMT) is responsible for leading CESER's effort to research, develop, demonstrate, and deploy tools and technologies that address the growing risks to U.S. energy infrastructure against all hazards. RMT develops tools, technologies, and techniques to broadly address cyber, cyber-supply chain, electromagnetic pulse, geomagnetic disturbance, natural hazards (e.g., wildfires hurricanes, flooding), and physical threats in partnership with the DOE National Laboratories, energy sector owners and operators, manufacturers, and academia. As the energy sector continues to evolve with new and increasing intersections between operational and information technologies, RMT is focused on reducing the risk of energy disruptions from all hazard events through a threat- and intelligence-informed position to ensure it addresses current, emerging, and evolving threats and risks. Working closely with energy sector, academia, and National Laboratories, the FY 2026 Budget Request supports a more economically competitive, secure, and resilient U.S. energy infrastructure. RMT is focused on reduced risks to the electricity, oil, and natural gas systems through threat-informed research, development, and demonstration of next generation tools and technologies providing U.S. energy companies cutting-edge protection, monitoring, detection, response, containment, forensics, and recovery capabilities. U.S. energy systems are evolving rapidly to meet customer expectations for reliability and resiliency, and to ensure safety and efficiency. CESER will invest in tools and technologies

to keep pace with those systems, work with States and communities on hardening measures and support grid owners and operators to mitigate physical security threats.

Response and Restoration (R&R) coordinates a national effort to maintain awareness of cyber, physical, and natural hazards threats and impacts to the U.S. energy sector and support an effective and efficient response from those incidents. This involves close partnership with the industry, State, and interagency partners with response and restoration activities. R&R delivers a range of capabilities to ensure the effective restoration of energy systems in an all-hazards environment (including cyber); provides near real-time situational awareness and energy sector monitoring to identify threats and risks, improve sector risk management, increase resilience through risk reduction activities, and rapidly respond to incidents, events, and hazards impacting or potentially impacting the sector. The FY 2026 Budget Request will enhance the robust all-hazards emergency response capabilities with cybersecurity-specific staffing, training, tools, threat analysis, and incident response protocols and build upon its regional response approach to include targeted recruitment, staffing, and operational/collaboration facilities in strategic U.S. regions including Puerto Rico and the U.S. Virgin Islands. Additionally, R&R is focused on expanding CESER's cyber situational awareness capabilities and enabling collaboration between industry and government to address current, emerging, and evolving threats through the Energy Threat Analysis Center to enable operational collaboration between industry and government to address cyber threats from nation-states and cyber criminals.

Office of Petroleum Reserves

(\$K)

	FY 2024 Enacted	FY 2026 Request
Strategic Petroleum Reserves	213,390	206,325
Naval Petroleum & Oil Shale Reserves	13,010	13,000
SPR - Petroleum Account	100	100
Northeast Home Heating Oil Reserves	7,150	3,575
Total, Office of Petroleum Reserves	233,650	223,000

Appropriation Overview

The Office of Petroleum Reserves consists of emergency petroleum security/supply programs, a Strategic Petroleum Reserve (SPR) modernization program, and post-sale remediation activities at the Naval Petroleum and Oil Shale Reserves (NPOSR) Nos. 1 and 3. The SPR storage sites are located at four government-owned Gulf Coast locations with oversight from the Project Management Office in Harahan, Louisiana, and Headquarters in Washington, DC. The Northeast Home Heating Oil Reserve (NEHHOR) consists of government-owned refined petroleum products stored in leased commercial storage in terminals in the Northeast. Legacy environmental cleanup/remediation continues at the previously sold NPOSR No. 1 (Elk Hills, CA), and landfill monitoring and closure continues as part of post-sale activities at NPOSR No. 3 (Casper, WY).

Program Highlights

Strategic Petroleum Reserve

The SPR Program provides strategic and economic security against foreign and domestic disruptions in oil supplies via an emergency stockpile of crude oil. The program fulfills United States' obligations under the International Energy Program, which avails the U.S. of International Energy Agency assistance through its coordinated energy emergency response plans and provides a deterrent against energy supply disruptions. The SPR Program will perform sustainment and construction activities, as well as cavern wellbore testing and remediation activities to ensure the availability of the SPR's crude oil inventory and capacity. Additional funding is included to the Major Maintenance Program for required upgrades to the West Hackberry site.

SPR Petroleum Account

The SPR Petroleum Account Program funds SPR petroleum acquisition, transportation, and drawdown activities. The Program will be used as a source of funding for drawdown costs related to crude oil movements from the SPR.

Naval Petroleum and Oil Shale Reserves

Following the 1998 sale of the Government's interests in the NPOSR-1 (Elk Hills, CA), environmental cleanup/remediation activities under the Corrective Action Consent Agreement with the State of California Department of Toxic Substances Control (DTSC) began. Of the 131 areas of concern (AOCs) for which DOE is responsible for environmental cleanup, as of August 2023, 111 AOCs have received no further action certification from California's DTSC. The remaining 20 AOCs require remediation.

Northeast Home Heating Oil Reserve

The Northeast Home Heating Oil Reserve (NEHHOR) is a one-million-barrel supply of ultra-low sulfur distillate (diesel) stored in three Northeast commercial storage terminals. The Budget proposes the sale and closure of the NEHHOR in FY 2026, which has never been used for its intended purpose, with receipts from the sale intended for deficit reduction. Funding is requested to close out lease contracts and to prepare for sale and closure of the reserve.

Energy Security and Infrastructure Modernization Fund

The FY 2026 President's Budget Requests no appropriation for the Energy Security and Infrastructure Modernization Fund (ESIM). The ESIM fund was established in Section 404 of the Bipartisan Budget Act of 2015 to finance modernization of the SPR. Sales of SPR crude oil will be used to fund the completion of the Life Extension Phase II (LE2)

project needed to ensure the SPR can maintain its operational readiness capability, meet its mission requirements, and operate in an environmentally responsible manner. The CARES Act (Pub. L. 116-136, Section 14002) provided the Department flexibility to conduct the final sale into FY 2022 to raise funding for the SPR Modernization Program, in accordance with Section 404 of the Bipartisan Budget Act of 2015 (Pub. L. 114-74). As a result, Section 404 sales of SPR oil were concluded in FY 2021.

Indian Energy Policy and Programs

(\$K)

	FY 2024 Enacted	FY 2026 Request
Indian Energy Policy and Programs	56,000	40,000
Program Direction	14,000	10,000
Total, Indian Energy Policy and Programs	70,000	50,000

Appropriation Overview

The Office of Indian Energy Policy and Programs (IE) offers financial and technical assistance to Indian Tribes, including Alaska Native villages, and eligible Tribal entities for advancing electrification and energy development and deployment on Indian lands, reducing energy costs, and assisting economic development in Tribal communities where unemployment and poverty rates far exceed national averages. Through financial assistance and technical assistance, IE catalyzes American Indian and Alaskan Native nations to lead the development of reliable, firm power in Indian Country. These efforts advance energy abundance, help to restore American energy dominance, and address energy access challenges in Indian Country. Programs will not support work on solar, wind, or battery technologies. The FY 2026 Budget Request will focus on the following priorities:

- Expand reliable, firm energy development in Indian Country.
- Leverage IE's grant making authority to fund energy infrastructure planning and deployment.
- Provide expert assistance to Tribes for productive engagement with project developers to unleash new American energy.
- Improve energy access for Tribes.

Program Highlights

Financial assistance to increase affordable, reliable and secure power: IE provides competitive funding opportunities for energy infrastructure deployment to American Indian and Alaska Native federally recognized Tribes across the Nation. The FY 2026 budget continues supporting Tribes to deliver affordable, reliable, and secure energy across Indian Country. Programs will not support work on solar, wind, or battery technologies.

Technical Assistance to overcome energy development barriers: IE provides technical assistance at no cost to Indian Tribes to develop a tangible product or specific deliverable to address a need or barrier and move energy projects forward, and to enable a competitive business environment for energy development in Indian Country. The FY 2026 budget request enables IE to continue this assistance which leverages DOE's network of subject matter experts and partner organizations to unleash Tribal energy development.

The FY 2026 Budget Request streamlines the Office of Indian Energy's technology focus but proposes to expand energy development in Indian Country. IE will continue to prioritize expanding access to abundant, affordable, reliable, and secure energy across Indian Country to reduce overall energy costs for consumers and create employment opportunities.

Title 17 Innovative Technology Loan Guarantee Program (\$K)

	FY 2024 Enacted	FY 2026 Request
Administrative Expenses	70,000	35,000
Title XVII Loan Guarantee Credit Subsidy	0	750,000
Offsetting Collections	-11,281	-91,753
Rescission of Prior Year Balances (Credit Subsidy)	0	-10,659
Total, Title 17 Innovative Technology Loan Guarantee Program	58,719	682,588

Appropriation Overview

Under the Title 17 Innovative Technology Loan Guarantee Program (Title 17), as authorized under Title XVII of the Energy Policy Act of 2005, Department of Energy can finance projects in the United States that support innovative energy deployment and energy infrastructure reinvestment. The Title 17 Program is organized in four categories: 1) Innovative Energy, financing for projects that deploy New or Significantly Improved Technology that is technically proven but not yet widely commercialized in the United States; 2) Innovative Supply Chain, financing for projects that employ a new or significantly improved technology in the manufacturing process for a qualifying energy technology or for projects that manufacture a new or significantly improved technology; 3) State Energy Financing Institution (SEFI)-supported, financing for projects that support deployment of qualifying energy technology and receive meaningful financial support or credit enhancements from an entity within a state agency or financing authority; and 4) Energy Infrastructure Reinvestment (EIR), financing for projects that retool, repower, repurpose, or replace energy infrastructure that has ceased operations or upgrade operating energy infrastructure to avoid, reduce, utilize, or sequester air pollutants or greenhouse gas emissions.

The Title 17 Program supports efforts to promote energy infrastructure reinvestment and energy deployment by providing access to debt capital for large-scale, high-impact energy and supply chain projects that help energy technologies deploy at scale and advance America's energy and economic future.

Program Highlights

The FY 2026 Budget Request proposes \$750 million in credit subsidy funding to support financing for the construction of small modular reactors and advanced nuclear reactors, an immediate priority, in order to ensure firm, reliable baseload power for the country. Additionally, the Budget Request allows LPO to underwrite new loans in other priority sectors such as geothermal power and critical minerals supply.

The Budget requests \$35 million, wholly offset by an estimated \$91.7 million in collected fees, for administrative expenses for the Loan Programs Office (LPO) Title 17 Program. Proposed funding will support monitoring of the existing portfolio, as well as new underwriting activities, for all Title 17 projects.

Applicant interest in the Title 17 Program remains strong. As of April 30, 2025, the Program currently has \$216.7 billion in requested financing across 122 applications. The Department expects to obligate approximately \$11 billion of currently available Title 17 Section 1703 loan authority in FY 2025 and approximately \$16 billion in FY 2026. For Title 17 Section 1706, the Department expects to obligate approximately \$45 billion in FY 2025 and approximately \$24 billion in FY 2026.

Advanced Technology Vehicles Manufacturing Direct Loan Program

(\$K)

	FY 2024 Enacted	FY 2026 Request
Administrative Expenses	13,000	9,500
Loan Subsidy Cancellation ¹	0	-2,289,915
Total, Advanced Technology Vehicles Manufacturing Loan Program	13,000	-2,280,415

Appropriation Overview

The FY 2026 Budget Request provides \$9.5 million for administrative expenses and rescinds \$2,289.915 million in unobligated credit subsidy balance appropriated by the Consolidated Security Disaster Assistance, and Continuing Appropriations Act, 2009. LPO obligated approximately \$14.7 billion in new loans in FY 2025 and expects to obligate \$5.25 billion in FY 2026 utilizing loan authority made available by the Inflation Reduction Act of 2022 (IRA).

Program Highlights

The Advanced Technology Vehicles Manufacturing (ATVM) Direct Loan Program supports the manufacturing of advanced technology vehicles and associated components in the United States. ATVM provides loans for the cost of re-equipping, expanding, or establishing manufacturing facilities in the United States to produce advanced technology vehicles or qualified components and for associated engineering integration costs. The program has primarily subsidized the financing of electric vehicle and related components manufacturing projects in a manner inconsistent with Executive Order 14154, Unleashing American Energy. Therefore, the Budget proposes to eliminate non-expiring, discretionary credit subsidy balances.

¹ The FY 2026 Budget proposes to cancel \$2.29 billion in unobligated balances appropriated by the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009 (P.L. 110-329).

Tribal Energy Loan Guarantee Program

(\$K)

	FY 2024 Enacted	FY 2026 Request
Administrative Expenses	6,300	1,000
Rescission of Prior Year Balances (admin expenses)		-2,500
Loan Subsidy Cancellation ¹		-10,500
Total, Tribal Energy Loan Guarantee Program	6,300	-12,000

Appropriation Overview

The Tribal Energy Loan Guarantee Program (TELGP) is authorized by Section 2602 of the Energy Policy Act of 1992, as amended, to help finance tribal investment in energy projects that can support economic development and tribal sovereignty. The Consolidated Appropriations Act, 2022, enacted a change for that fiscal year, which was subsequently made permanent by the Inflation Reduction Act of 2022, to broaden TELGP authority to allow applicants to apply for direct loans financed by the United States Treasury Federal Financing Bank and guaranteed by the Department, in addition to partial loan guarantees of other eligible lenders. The FY 2026 Budget Request proposes \$1 million in administrative expenses, rescinds \$2.5 million in administrative expenses carried over from the prior year, and cancels \$10.5 million in unobligated balances from previously appropriated credit subsidy.

Program Highlights

TELGP provides debt capital to tribal borrowers and organizations installing energy projects that lead to economic development or modernizing power generation and distribution that benefit tribal communities. The Budget proposes to eliminate non-expiring credit subsidy balances while utilizing available IRA authorities, which expire in FY 2028, to support Tribal energy projects.

¹ The FY 2026 Budget proposes to cancel \$10.5 million from prior appropriations acts under section 2602(c) of the Energy Policy Act of 1992 (25 U.S.C. 3502(c)).

Power Marketing Administrations

(\$K)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
				\$	%
Southeastern Power Administration	94,468	94,468	105,030	+10,562	+11%
Alternative Financing/Offsetting Collections	-94,468	-94,468	-105,030	-10,562	+11%
Total, Southeastern Power Administration	0	0	0	0	N/A
Southwestern Power Administration	189,737	189,737	201,887	+12,150	+6%
Alternative Financing/Offsetting Collections	-178,297	-178,297	-191,487	-13,190	-7%
Total, Southwestern Power Administration	11,440	11,440	10,400	-1,040	-9%
Western Area Power Administration (CROM)	1,140,994	1,100,214	1,182,707	+82,493	+7%
Alternative Financing/Offsetting Collections (CROM)	-1,041,122	-1,000,342	-1,119,335	-119,993	+12%
Subtotal, Western Area Power Administration (CROM)	99,872	99,872	63,372	-36,500	-37%
Operation and Maintenance	8,297	8,110	10,582	+2,472	+30%
Alternative Financing/Offsetting Collections	-6,197	-6,197	-9,282	-3,085	+50%
Use of Prior Year Balances	-1,872	-1,685	-1,072	+613	-36%
Subtotal, Falcon and Amistad O&M Fund	228	228	228	0	0%
Spending Authority from Offsetting Collections	535,238	584,231	451,681	-132,550	-23%
Offsetting Collections	-535,238	-584,231	-451,681	+132,550	-23%
Subtotal, Colorado River Basins Power Marketing Fund	0	0	0	0	N/A
Mandatory Authority	8,400	9,730	9,991	+261	+3%
Mandatory Offsetting Collections	-8,400	-9,730	-9,991	-261	+3%
Discretionary Authority	6,600	6,698	6,473	-225	-3%
Discretionary Offsetting Collections	-6,600	-6,698	-6,473	+225	-3%
Subtotal, Transmission Infrastructure Program Fund (TIP)	0	0	0	0	N/A
Total, Western Area Power Administration	100,100	100,100	63,600	-36,500	-36%
Total, Power Marketing Administrations	111,540	111,540	74,000	-37,540	-34%

Appropriation Overview

The four Power Marketing Administrations (PMAs) sell electricity primarily generated by federally owned hydropower projects. Preference in the sale of power is given to public entities and electric cooperatives. Revenues from the sale of Federal power and transmission services are used to repay all related power and transmission costs.

Program Highlights

Southeastern Power Administration

Southeastern markets and delivers all available Federal hydroelectric power from 22 U.S. Army Corps of Engineers (Corps) multipurpose projects to preference customers in an eleven-state area in the southeastern United States. Southeastern does not own or operate any transmission facilities, and contracts with regional utilities that own electric transmission systems to deliver the Federal hydropower to Southeastern's customers. Southeastern's use of receipts and alternative financing offsets its appropriations resulting in a net-zero balance for the program.

Southwestern Power Administration

Southwestern markets and delivers Federal hydroelectric power from 24 Corps multipurpose projects to preference customers in a six-state area and participates with other water resource users in an effort to balance diverse interests with power needs. To deliver power to its customers, Southwestern maintains 1,381 miles of high-voltage transmission lines, 26 substations/switching stations, and 51 microwave and VHF radio sites. To maintain the infrastructure and modernize systems to increase the reliability, efficiency, and use of Federal assets, Southwestern utilizes appropriations, Federal power receipts, and alternative financing. Of these, 93% is derived from use of receipts and alternative financing, resulting in a net appropriation of only \$10.4 million.

Western Area Power Administration

Western Area Power Administration (WAPA) markets and transmits Federal power to a 1.3-million-square-mile service area in 15 central and western states from 57 Federally-owned hydroelectric power plants operated by the Bureau of Reclamation (the Bureau), the Army Corps of Engineers (the Corps), and the International Boundary and Water Commission. WAPA's capital program, conducted in close coordination with preference customers, continues to emphasize replacement, upgrade, and modernization of the electric system infrastructure to bring continued reliability, improved connectivity, and increased flexibility and capability to the power grid. Through extensive partnering efforts, WAPA has obtained significant stakeholder and customer participation in financing much of the capital program. Through transparency WAPA demonstrates the value of its efficient operations that preference customers enjoy. WAPA will continue to make significant efforts to be open, transparent, and inclusive of customers and stakeholders in its operational choices and capital planning efforts. WAPA is strengthening its Asset and Risk Management to further ensure capital investments are sufficient and wisely deployed for our Nation and for our customers.

Bonneville Power Administration

Bonneville operates under a business-type budget under the Government Corporation Control Act, 31 U.S.C 9101-10 and on the basis of the self-financing authority provided by the Federal Columbia River Transmission System Act of 1974 (Transmission Act) (Public Law 93-454). Authority to borrow from the U.S. Treasury is available to Bonneville on a permanent, indefinite basis.

Section 40110 of the Infrastructure Investment and Jobs Act (Public Law 117-58), enacted by the President on November 15, 2021, provides Bonneville \$10 billion in additional permanent borrowing authority "to assist in the financing of construction, acquisition and replacement of the Federal Columbia River Power System and to implement the authority of the Administrator of the Bonneville Power Administration." The amount of Bonneville U.S. Treasury borrowing authority outstanding at any one time cannot exceed \$17.7 billion.

Bonneville is responsible for meeting the net firm power requirements of requesting customers through a variety of means, including energy conservation programs, acquisition of renewable and other resources, and power exchanges with utilities both in and outside the region. Bonneville provides electric power, transmission, and energy services to a 300,000-square-mile service area in eight states in the Pacific Northwest. Bonneville wholesales the power produced at 31 Federal projects operated by the Corps and the Bureau and from certain non-Federal generating facilities. Bonneville operates and maintains over 15,100 circuit-miles of high voltage transmission lines and 262 substations. From these revenues, Bonneville funds the expense portion of its budget and the power operations and maintenance costs of the Bureau and the Corps in the Federal Columbia River Power System (FCRPS). The capital portion of the budget is funded primarily through borrowing from the U.S. Treasury at market rates for similar projects and with some non-Federal financing.

Bonneville is self-financed and receives no direct annual appropriations from Congress. In FY 2026, estimated total requirements of all Bonneville programs of \$6,366 million include estimated budget obligations of \$5,711 million and estimated capital transfers of \$655 million. Estimated obligations include operating expenses of \$3,473 million, capital investments of \$2,041 million, revenue financing of \$162 million and \$36 million in projects funded in advance. These investments provide electric utility and general plant requirements associated with the FCRPS's transmission services, capital equipment, hydroelectric projects, conservation, and capital investments to mitigate impacts on the environment, fish, and wildlife.

Federal Energy Regulation Commission

(\$K)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
				\$	%
Just and Reasonable Rates, Terms and Conditions	232,093	233,033	233,390	+357	+0%
Safe, Reliable, and Secure Infrastructure	174,913	170,138	173,073	+2,935	+2%
Mission Support through Organizational Excellence	112,994	116,829	113,537	-3,292	-3%
FERC Revenues	-520,000	-520,000	-520,000	0	0%
Subtotal, Federal Energy Regulatory Commission	0	0	0	0	N/A
Fees and Recoveries in Excess of Annual Appropriations	-9,000	-9,000	-9,000	0	0%
Total, Federal Energy Regulatory Commission	-9,000	-9,000	-9,000	0	0%

Organization Overview

The Federal Energy Regulatory Commission (FERC or the Commission) is authorized by statute to ensure the cost-effective and reliable transmission and wholesale sale of electricity and natural gas in interstate commerce, as well as the transportation of oil by pipeline in interstate commerce. FERC also reviews for potential approval proposals to build interstate natural gas pipelines, natural gas storage projects, and liquefied natural gas (LNG) terminals, and licenses non-federal hydropower projects. Congress assigned these responsibilities to FERC in various laws, including the Federal Power Act (FPA), originally enacted over 100 years ago; the Natural Gas Act (NGA); and the Interstate Commerce Act (ICA). In addition, as part of the Energy Policy Act of 2005, Congress gave FERC additional responsibilities to protect the reliability and cybersecurity of the Bulk-Power System through the establishment and enforcement of mandatory reliability standards, as well as additional enforcement authority. Regulated entities pay fees and charges sufficient to recover the Commission's full cost of operations. The Commission deposits this revenue into the Treasury as a direct offset to its appropriation, resulting in a net appropriation of zero.

Program Highlights

Ensure Just and Reasonable Rates, Terms, and Conditions

FERC's regulations and orders ensure just and reasonable rates, terms, and conditions for jurisdictional services. In carrying out its regulatory role, FERC uses a range of ratemaking activities, as well as market oversight and enforcement. FERC's ratemaking activities leverage both regulatory and market means and involve the issuance of orders and the establishment of rules and policies. FERC will fulfill these statutory responsibilities by both acting promptly on electric utility filings and reviewing policies that affect the cost of electric power for consumers, as well as by identifying and addressing unnecessary regulations and guidance. FERC's enforcement activities include both increasing compliance and detecting and deterring market manipulation.

Ensure Safe, Reliable, and Secure Infrastructure

Infrastructure for which FERC approval is required includes interstate natural gas pipelines and storage projects, LNG facilities, and non-federal hydropower projects. FERC's regulatory role in reviewing proposed infrastructure projects involves balancing the benefits of a proposed project with its potential adverse impacts. FERC will undertake measures to continue to streamline its processes to ensure efficient permitting of needed energy infrastructure while continuing to issue legally durable authorizations.

Additionally, FERC considers the minimization of risks to the public in the operation of jurisdictional energy infrastructure. To promote safe, reliable, and secure infrastructure, FERC ensures the sustainability and safety of non-federal hydropower projects and LNG facilities throughout their entire life cycle. FERC further oversees the development and review of, as well as compliance with, mandatory reliability and security standards for the Bulk-Power System. FERC will take action to make timely determinations on such proposed standards. In addition, in collaboration with the ERO,

FERC will conduct joint reviews of major system events, as needed. The Commission also protects jurisdictional energy infrastructure through collaboration and sharing of best practices.

Provide Mission Support Through Organizational Excellence

The public interest is best served when the Commission operates in an efficient, responsive, and transparent manner. The Commission pursues this goal by maintaining processes and providing services in accordance with governing statutes, authoritative guidance, and prevailing best practices. FERC addresses internal needs and enables organizational excellence by providing processes and services that help office leadership prioritize resource allocations, make prudent investments that directly benefit the agency's mission, and use Commission resources in an efficient manner. FERC will streamline operations with the deployment of modernized information technology (IT) applications and target additional IT investments that will reduce its operating requirement.

The Commission promotes transparency, open communication, and a high standard of ethics to facilitate trust and understanding of FERC's activities. FERC supports these goals by maintaining legal and other processes in accordance with the principles of due process, fairness, and integrity. FERC's communication with stakeholders fosters awareness and understanding of the Commission's activities. The Commission also promotes understanding, participation, and engagement with the public, stakeholders, and regulated entities.

FY 2026 Request Highlights

The Commission's FY 2026 Request includes the necessary resources to support its programmatic strategic goals and priorities. The request supports 1,474 FTE, a decrease of 65 FTE below the FY 2025 enacted level. The Commission conducted a review of its functions and assessed their alignment with governing statutory requirements and reviewed current operations to identify specific opportunities to lower costs while improving organizational capacity. The result is an optimized workforce that requires fewer resources to execute its statutory obligations and a personnel compensation savings of approximately \$10.4 million. The FY 2026 FTE level will maintain the Commission's ability to promote a reliable power grid to avoid devastating power outages and regulate wholesale electric markets to protect consumers from excessive power costs. Moreover, this optimized workforce prioritizes the Commission's responsibilities to review and approve needed energy infrastructure.

The Commission's request also includes \$165.5 million in FY 2026 to support IT investments. This is an increase of \$13.1 million, or 8.6 percent, over the FY 2025 enacted level. This increase provides additional funding to support IT investments for mission delivery, IT infrastructure, cybersecurity, and data analytics capabilities. In FY 2026, the Commission will continue modernizing its major business applications and is introducing Artificial Intelligence in support of its significant workload. As a result, Commission business processes are expected to become more streamlined, and staff will have greater capacity to address workload associated with thousands of filings that the Commission receives each year from regulated entities and stakeholders. In addition, the Commission will continue to execute Federal mandates for IPv6 requirements, zero trust cybersecurity principles, and quantum cryptography, as well as invest in cloud native security technologies and cybersecurity monitoring capabilities that ensure proactive identification of threats and vulnerabilities impacting mission systems. In addition, FERC will continue maturing its data infrastructure by evolving its data analytics capabilities, pursuant to the requirements of the Evidence Act and Federal Data Strategy Action Plans. This evolution supports data-driven decision making and offers a public facing data infrastructure in response to Open Data requirements.

In FY 2026, the Commission will complete its plans to terminate leases of its regional offices, which includes New York City, New York; Atlanta, Georgia; Chicago, Illinois; Portland Oregon; San Francisco, California; and Houston, Texas. Staff in these locations will be converted to mobile employees, as they perform annually more than 1,000 inspections of jurisdictional hydroelectric facilities and LNG terminals, as well as assisting facility operators when related concerns arise.



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

THE DIRECTOR

May 2, 2025

The Honorable Susan Collins
Chair
Committee on Appropriations
United States Senate
Washington, D.C. 20510

Dear Chair Collins:

This letter provides President Trump's recommendations on discretionary funding levels for fiscal year (FY) 2026. They are being provided in advance of the President's full fiscal plan to reach balance and restore confidence in America's fiscal management, so that your Committee may commence with debate and consideration of appropriations bills for the upcoming fiscal year.

The recommended funding levels result from a rigorous, line-by-line review of FY 2025 spending, which was found to be laden with spending contrary to the needs of ordinary working Americans and tilted toward funding niche non-governmental organizations and institutions of higher education committed to radical gender and climate ideologies antithetical to the American way of life.

We also considered, for each program, whether the governmental service provided could be provided better by State or local governments (if provided at all). Just as the Federal Government has intruded on matters best left to American families, it has intruded on matters best left to the levels of government closest to the people, who understand and respect the needs and desires of their communities far better than the Federal Government ever could.

Cutting such spending from the discretionary budget leads to significant savings: the President is proposing base non-defense discretionary budget authority \$163 billion—22.6 percent—below current-year spending, while still protecting funding for homeland security, veterans, seniors, law enforcement, and infrastructure. Over 10 years, this restraint would generate trillions in savings, necessary for balancing the budget.

At the same time, the Budget proposes unprecedented increases for defense and border security. For Defense spending, the President proposes an increase of 13 percent to \$1.01 trillion for FY 2026; for Homeland Security, the Budget commits a historic \$175 billion investment to, at long last, fully secure our border. Under the proposal, a portion of these increases—at least \$325 billion assumed in the budget resolution recently agreed to by the Congress—would be

provided through reconciliation, to ensure that our military and other agencies repelling the invasion of our border have the resources needed to complete the mission. This mandatory supplement to discretionary spending would enable the Departments of Defense and Homeland Security, among others, to clean up the mess President Trump inherited from the prior administration and harden the border and other defenses to protect America from foreign invasion. Providing these resources through reconciliation ensures that the money is available when needed, and not held hostage by Democrats to force wasteful non-defense discretionary spending increases as was the case in the President's first term.

The attached tables provide overviews of the discretionary request, in total and by major agency, and a detailed listing of the specific recommended changes that will be incorporated into forthcoming appropriations bill language.

I look forward to working with you to achieve significant budgetary savings for the American people within the spending programs under your jurisdiction.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Vought', with a long horizontal stroke extending to the right.

Russell T. Vought
Director

Enclosure

Major Discretionary Funding Changes

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Department of State and U.S. Agency for International Development (USAID)		
<i>Increases</i>		
America First Opportunity (AIOF) Fund	+2,900	The Budget includes \$2.9 billion for a new America First Opportunity (AIOF) Fund. This Fund would focus on strategic investments that make America safer, stronger, and more prosperous. The AIOF would be able to: support some of America's most enduring and critical partners such as India and Jordan; support activities critical to keeping American safe, such as repatriations; counter China and other near-peer rivals; and fund new activities to strengthen America's national security priorities.
Development Finance Corporation (DFC)	+2,820	The Budget increases the U.S. International DFC to support U.S. national security and American interests through billions in loans and guarantees that would generate returns to the taxpayer and reduce reliance on foreign aid. This investment includes \$3 billion for a new revolving fund to allow DFC to recycle any realized returns from its initial investments without further appropriation.
<i>Cuts, Reductions, and Consolidations</i>		
Economic Support Fund, Development Assistance, Democracy Fund, and Assistance for Europe, Eurasia, and Central Asia	-8,326	U.S. economic and development aid has been funneled to radical, leftist priorities, including climate change, diversity, equity, and inclusion (DEI), and LGBTQ activities around the world. The Budget eliminates funding for these programs and combines duplicative accounts into the single AIOF, which supports the foreign programs that serve American interests and advance the President's objectives abroad. The Budget simultaneously strengthens the DFC to shift America's global posture from handouts to investments, returning a profit for the taxpayer while making America safer, stronger, and more prosperous.
International Disaster Assistance, Migration and Refugee Assistance, and Emergency Refugee and Migration Assistance (ERMA)—International Humanitarian Assistance (IHA)	-3,207	The Budget reduces unaffordable levels of disaster assistance far in excess of what other countries contribute. The Budget provides \$1.5 billion in ERMA for the President to use at his discretion and consolidates wasteful and duplicative accounts into a new \$2.5 billion IHA account to fund disaster relief when it fulfills the President's foreign policy aims.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
State and USAID Operations	-2,462	Consistent with Executive Order 14169, "Reevaluating and Realigning United States Foreign Aid," the Budget ensures that foreign aid spending is efficient and consistent with U.S. foreign policy under the America First agenda. The Budget reorganizes USAID into the Department of State to meet current needs and eliminates non-essential staff that were hired based on DEI and preferencing practices, inconsistent with Executive Order 14151, "Ending Radical and Wasteful Government DEI Programs and Preferencing."
International Narcotics Control & Law Enforcement (INCLE)	-1,160	The majority of INCLE funds go to reforming criminal justice systems in foreign governments, rather than to narcotics enforcement, which is primarily undertaken by: Drug Enforcement Administration (DEA); Central Intelligence Agency; Federal Bureau of Investigation (FBI); Department of Homeland Security (DHS); and Department of Defense (DOD) elements. The Budget eliminates failed rule-of-law programs in distant countries, while providing \$125 million to fund programs that support the counter-drug, organized crime, and border security missions that directly impact the United States.
Peacekeeping Missions	-1,614	The Budget does not provide funding for wasteful United Nations (UN) and other peacekeeping missions due to recent failures and high level of assessments. The United States has a history of paying for more than its fair share of international peacekeeping activities. Further, UN peacekeepers have been accused of narcotics trafficking across multiple continents, especially in the Central African Republic where peacekeepers smuggled gold, diamonds, and drugs.
Assessed and Voluntary Contributions to International Organizations	-1,716	The Budget pauses most assessed and all voluntary contributions to UN and other international organizations, including for the UN Regular Budget, UN Educational, Scientific and Cultural Organization, and the World Health Organization. This is consistent with Executive Order 14199, "Withdrawing the United States From and Ending Funding to Certain United Nations Organizations and Reviewing United States Support to All International Organizations." To preserve maximum negotiating leverage, the President can choose to fund these international organizations out of the AIOF if he chooses.
Educational and Cultural Exchanges	-691	Inspector General reports have documented insufficient monitoring for fraud and inefficient, wasteful programming at the expense of U.S. taxpayers. Foreign students receiving technical and high-demand training leave to take those skills overseas, including back to near-peer rivals, having deprived American students of places to acquire those skills. This program is no longer affordable.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Transition Initiatives (TI)	-75	TI funds short-term assistance that aims to shape political outcomes in distant countries with no practical impact on U.S. security. It often results in further destabilization and funds a wasteful tangle of non-governmental organizations (NGOs) and partisan cutouts pushing a leftist agenda around the world. The Budget eliminates the TI account.
Complex Crisis Fund	-55	The Complex Crisis Fund is a catch-all slush fund for nation-building projects and political interference. Rather than offering life-saving assistance or creating beneficial ties for the United States, it has been weaponized to mandate DEI and LGBTQ policies be implemented in recipient countries as a condition of aid to small businesses with no connection to the United States. The Budget eliminates this woke, ill-structured account and redirects crisis funding to the IHA and ERMA accounts, where they would further the President's America First objectives around the world.
National Endowment for Democracy (NED)	-315	Under the Biden Administration and at the start of the Russia/Ukraine war, the NED blocked public access to its grant details after having never provided disclosure in the manner required by Federal law. In March 2025, it was discovered that NED funded the Ukraine disinformation organization that doxed U.S. journalists called for prosecutions of allies of the President, and attacked the Vice President, Joe Kent, and others as "foreign propagandists of the Russian Federation." NED also funded the now-infamous Disinformation Index Foundation that targeted and blacklisted conservative media outlets like Federalist, Newsmax, TAC, the Blaze, NYP, etc. The Budget eliminates funding for NED.
Global Health Programs/Family Planning	-6,233	The United States is the largest global contributor to programs that provide so-called family planning services through liberal NGOs, and have funded abortions. This stands in direct conflict with the President's action reinstating the "Mexico City Policy." The Budget protects life and prevents a pro-abortion agenda from being promoted abroad with taxpayer dollars. The Budget focuses on life-saving assistance and preventing infectious diseases from reaching the United States. The U.S. President's Emergency Plan for AIDS Relief funding is preserved for any current beneficiaries.
Food for Peace (Title II)	-1,619	The Food for Peace program spends \$1.6 billion to ship food overseas, which often takes a year or more to arrive at its intended destination, resulting in about one-third loss and waste. The program also distorts and undermines local and regional markets where the aid often could be purchased for less and with less waste. There are far more efficient food aid programs that the Budget preserves.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Other International Programs		
Contribution to the Global Environmental Facility and Climate Investment Funds	-275	The Budget proposes to eliminate contributions to the Global Environment Facility and the Climate Investment Funds, which promote woke Green New Deal policies that are misaligned with Administration priorities.
Contributions to Multilateral Development Banks (African Development Bank, African Development Fund)	-555	Consistent with Executive Order 14169, "Reevaluating and Realigning United States Foreign Aid," the Budget proposes to eliminate contributions to the African Development Fund, which is not currently aligned to Administration priorities. The Budget also includes \$3.2 billion over three years for the U.S. Government contribution to the International Development Association 21, where other donors and institutions should take on more of the burden sharing. This fulfills the President's promise to no longer dole out foreign aid dollars with no return on investment for the American people.
Other Treasury International Reductions	-86	The Budget likewise proposes to eliminate several of the Department of the Treasury's international assistance programs, including the Debt Restructuring account, and contributions to the International Fund for Agricultural Development and the Global Agriculture and Food Security Program. This proposal fulfills the President's promise to put America first and eliminate wasteful foreign aid spending.
Department of Education (ED)		
<i>Increases</i>		
Charter Schools	+60	According to this year's National Assessment of Educational Progress, 70 percent of 8th graders are below proficient in reading, and 72 percent are below proficient in math. Federal control has replaced local decision-making, creating a one-size-fits-all system that is decimating student achievement. This centralized approach has weakened States' ability to deliver quality education and eroded parents' direction of their children's education. More local school options are needed, so the Budget invests \$500 million, a \$60 million increase, to expand the number of high-quality charter schools, which have a proven track record of improving students' academic achievement and giving parents more choice in the education of their children.
<i>Cuts, Reductions, and Consolidations</i>		
Preserve Title I and Streamline K-12 Programs	-4,535	The Budget provides streamlined, flexible funding directly to States so that they have the discretion to support those activities that make the most sense for their respective communities. This long-overdue consolidation would lower substantially the costs of both administration and compliance,

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
		and ensure that a greater proportion of the funds provides support for students and their families. The K-12 Simplified Funding Program consolidates 18 competitive and formula grant programs into a new \$2 billion formula grant designed to reduce ED's influence on schools and students and reduce bureaucracy. At the same time, the Budget delivers on the President's promise by preserving full funding for Title I, the supplemental Federal financial assistance to school districts for children from low-income families. This new, simplified funding structure requires fewer Federal staff and empowers States and districts to make spending decisions based on their needs, consistent with the recent reduction in workforce and Executive Orders. The new approach allows States and districts to focus on the core subjects—math, reading, science, and history—without the distractions of DEI and weaponization from the previous administration.
Special Education Simplified Funding Program	--	The Budget delivers on the President's promise to preserve special education funding, while simplifying the workload to reduce the Federal footprint. The Special Education Simplified Funding Program consolidates seven Individuals with Disabilities Education Act (IDEA) programs to provide States and school districts greater flexibility to support students with special education needs, maintaining funding at the 2025 level. The consolidation furthers the Administration's goal of limiting the Federal role in education by reducing the number of programs at ED, the number of staff needed to administer them, and the administrative burden on States so more dollars go to students instead of bureaucrats. Parents of students with disabilities would remain empowered to direct these funds because the Federal IDEA law would remain in place; maintaining a base set of Federal funds means they can also be withdrawn from States and districts who flout parental rights.
TRIO programs and Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP)	-1,579	TRIO and GEAR UP are a relic of the past when financial incentives were needed to motivate Institutions of Higher Education (IHEs) to engage with low-income students and increase access. The lack of action by IHEs also meant that States and local school districts needed additional support to prepare low-income students for college. Today, the pendulum has swung and access to college is not the obstacle it was for students of limited means. IHEs should be using their own resources to engage with K-12 schools in their communities to recruit students, and then once those students are on campus, aid in their success through to graduation. A renewed focus on academics and scholastic accomplishment by IHEs, rather than engaging in woke ideology with Federal taxpayer subsidies, would be a welcome change for students and the future of the Nation.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Federal Work-Study (FWS)	-980	The Budget returns FWS to the States and IHEs that financially benefit from it—consistent with the Administration’s efforts to move decisions closer to students and reduce the Federal footprint. In its current form, FWS is a handout to woke universities and a subsidy from Federal taxpayers, who can pay for their own employees. Reform of this poorly targeted program should redistribute remaining funding to institutions that serve the most low-income students and provide a wage subsidy to gain career-oriented opportunities to improve long-term employment outcomes of students.
Supplemental Educational Opportunity Grants (SEOG)	-910	SEOG contributes to rising college costs that IHEs have used to fund radical leftist ideology instead of investing in students and their success. It is duplicative of, and less targeted than, Pell Grants. For example, undergraduate students with higher family incomes receive a larger award on average than similarly situated undergraduates with the lowest family income level (\$1,019 compared to \$891). In addition, nearly 40 percent of SEOG aid is awarded through private institutions who have their own agendas and fewer low-income students, compared to the only 19 percent awarded through public, two-year colleges, which serve the highest proportion of low-income students. This program is ineffective, poorly targeted, and inconsistent with the Administration’s priorities.
English Language Acquisition	-890	To end overreach from Washington and restore the rightful role of State oversight in education, the Budget proposes to eliminate the misnamed English Language Acquisition program which actually deemphasizes English primacy by funding NGOs and States to encourage bilingualism. The historically low reading scores for all students mean States and communities need to unite—not divide—classrooms using evidence-based literacy instruction materials to improve outcomes for all students.
Adult Education	-729	K-12 outcomes will improve as education returns to the States, which would make remedial education for adults less necessary. The Budget redirects resources to programs that more directly prepare students for meaningful careers. This reallocation would also better support the innovative, workforce-aligned, apprenticeship-focused activities the Department seeks to promote through strategic investments in the current fiscal year. Further, this program has dismal results—in the most recent reported year, only 43 percent of participants had any measurable skills gains.
Migrant Education and Special Programs for Migrant Students	-428	The Budget eliminates programs that work to the detriment of children’s academic success by encouraging movement from, rather than stability and consistency in, a single location. These programs have not been proven effective, are extremely costly, and encourage ineligible non-citizens to access U.S. IHEs, stripping resources from American students.
ED Program Administration	-127	As the Department winds down its operations and reduces its workforce, the Budget provides \$293 million for program administration, a reduction of \$127 million, or 30 percent. Although this

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
		amount does reflect the considerably reduced need for staff, costs remain. Program Administration funding is needed for: personnel compensation and benefits for staff retained; fixed and variable costs in non-personnel categories; and costs from deferred resignations, voluntary retirements, and reductions in force.
Fund for the Improvement of Postsecondary Ed (FIPSE) and Graduate Assistance in Areas of National Need	-195	IHEs and States—not the Federal Government—should be responsible for funding institutional reforms and innovative programs. These additional resources have allowed colleges and universities to fund ideologies instead of students, while still raising tuition costs. The Congress has also abused FIPSE by using it to fund initiatives unrelated to students or institutional reforms, including earmarking \$1.2 million for San Diego Community College’s LGBTQIA+ PRIDE Center staffing.
Strengthening Institutions	-112	Again, IHEs with their States and local communities—not the Federal Government—should be responsible for fiscal health of an institution and promoting student success. These funds have been used to promote DEI, inconsistent with the Administration’s priorities and Executive Orders. It is not the responsibility of Federal taxpayers to support a new “Guided Pathways Village, expanding the current Learning Communities and creating a new Ethnic and Pride Inclusion Center for historically underserved students, including LGBTQ+ students.”
Teacher Quality Partnerships	-70	The Budget proposes to end Federal taxpayer dollars being weaponized to indoctrinate new teachers. Institutional and nonprofit grantees have used these taxpayer funds to train teachers and education agencies on divisive ideologies. Training materials included inappropriate and unnecessary topics such as: Critical Race Theory; DEI; social justice activism; “anti-racism”; and instruction on white privilege and white supremacy. In addition, many of these grants included teacher and staff recruiting strategies implicitly and explicitly based on race. Examples from the grant applications included: • requiring practitioners to take personal and institutional responsibility for systemic inequities (e.g., racism) and critically reassess their own practices; • receiving professional development workshops and equity training on topics such as “Building Cultural Competence,” “Dismantling Racial Bias,” and “Centering Equity in the Classroom”; • acknowledging and responding to systemic forms of oppression and inequity, including racism, ableism, “gender-based” discrimination, homophobia, and ageism;

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
		• building historical and sociopolitical understandings of race and racism to interrupt racial marginalization and oppression of students in planning instruction relationship building discipline and assessment; • providing “targeted practices in culturally relevant and responsive teaching abolitionist pedagogies and issues of diversity in classroom management;” and • providing spaces for critical reflection to help educators confront biases and have transformative conversations about equity. Eliminating this program would allow States and districts to have more control of teacher preparation, recruitment, and retention based on their local context.
Training and Advisory Services—Equity Assistance Centers	-7	The Budget eliminates Equity Assistance Centers that have indoctrinated children. Funds have been weaponized to force local districts to implement Washington-directed DEI practices against their will. Consistent with the Administration’s priority to return control of education to States and districts, ending this program would restore rightful merit-based practices at school and ensure districts do not have to implement weaponized, woke policies. The program is also ineffective and has continuously failed to meet most performance measures.
Child Care Access Means Parents in School (CCAMPIS)	-75	The Budget proposes to eliminate CCAMPIS because subsidizing child care for parents in college is unaffordable and duplicative. Funding can instead be secured through the Child Care Development Block Grant. Further, IHEs could offer to accommodate this need among their student population, and many do.
Howard University	-64	The Budget reduces funding for Howard University to the 2021 Budget level to more sustainably support the Nation’s only federally-chartered Historically Black College and University (HBCU). The 2025 enacted amount included the conclusion of a one-time \$300 million, multiyear Federal commitment to the construction of their new hospital.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Office for Civil Rights (OCR)	-49	To refocus away from DEI and Title IX transgender cases, the Budget provides OCR with \$91 million, a reduction of \$49 million, or 35 percent, compared to the 2024 enacted level. After clearing through a massive backlog in 2025, this rightsizing is consistent with the reduction across the Department and an overall smaller Federal role in K-12 and postsecondary education. At this funding level, OCR would continue to ensure that schools and other institutions that receive Federal financial assistance for education programs and activities comply with Federal civil rights laws and Presidential Executive Orders while removing their ability to push DEI programs and promote radical transgender ideology.
Department of Health and Human Services (HHS)		
<i>Increases</i>		
Make America Healthy Again (MAHA)	+500	Building on the work of the President's Make America Healthy Again (MAHA) Commission and Executive Order 14212, "Establishing the President's Make America Healthy Again Commission," the Budget provides \$500 million for the MAHA initiative, which would allow the Secretary to tackle nutrition, physical activity, healthy lifestyles, over-reliance on medication and treatments, the effects of new technological habits, environmental impacts, and food and drug quality and safety across HHS.
<i>Cuts, Reductions, and Consolidations</i>		
LIHEAP	-4,025	This Administration is committed to lowering energy costs for American families by unleashing energy production. The Low Income Home Energy Assistance Program (LIHEAP) is unnecessary because States have policies preventing utility disconnection for low-income households, effectively making LIHEAP a pass-through benefitting utilities in the Northeast. Further, LIHEAP rewards States like New York and California, two of the top recipients for LIHEAP funding, which have implemented anti-consumer policies that drive up home energy prices. The Government Accountability Office (GAO) has raised significant program integrity concerns related to fraud and abuse in LIHEAP. In 2010, GAO investigators audited seven States and found names of 11,000 dead people and hundreds of prisoners used as applicants for funds. More than 1,000 Federal employees whose Federal salary exceeded maximum income threshold received benefits and, in several cases, people living in million-dollar houses received benefits. The Budget proposes to end this program and to instead support low-income individuals through energy dominance, lower prices, and an America First economic platform.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Refugee and Unaccompanied Alien Children Programs (UAC)	-1,970	Refugee arrivals have dropped significantly under Executive Order 14163, “Realigning the United States Refugee Admissions Program,” and those who do arrive should not expect American taxpayers to support them. Further, these funds were weaponized by the Biden-Harris Administration to give cash handouts, medical services, and job training to illegal immigrants. The Budget proposes eliminating these programs. The Budget also re-focuses the UAC program on its core mission of sheltering unaccompanied alien children while also protecting them from child trafficking and labor exploitation. As the <i>New York Times</i> exposed, the Biden-Harris Administration operated this program like an assembly line, prioritizing the quick release of children to insufficiently vetted sponsors over the children’s safety. An employee at an HHS Services Office testified in 2024 about human trafficking at the southern border. She was horrified to discover that “children were being trafficked with billions of taxpayer dollars by a contractor failing to vet sponsors and process children safely, with government officials complicit in it.”
Community Services Block Grant (CSBG)	-770	The Budget proposes to eliminate dollars that flow to Community Action Agencies who carry out their own agendas. These grants are laden with equity-building and green energy initiatives, such as the California Community Action Partnership, that focus its efforts on bringing “DEI to the forefront,” by “offering focus groups, extensive training opportunities, and engaging in fruitful partnerships,” on “how we could transform the systems and structures that hold these inequities in place, looking at policies and resource flows, power dynamics and really mental models that we need to shift in order to change the system.” According to HHS, a Community Action Agency in Wisconsin used “CSBG funds to combine clean energy with affordable housing in the pursuit of both economic and environmental justice.” Americans in need of job-training and a helping hand would be better served by programs funded at the Departments of Labor and Agriculture. According to GAO’s 2019 study of the program, HHS “cannot assure the Congress and the American public that the funding is meeting its intended purpose to reduce the causes of poverty.”
Preschool Development Grants (PDG)	-315	Consistent with the Administration’s priority to return education to the States, which are best equipped to fund and tailor education programs to the needs of their residents, the Budget eliminates PDG. PDG literally does not fund any preschool for children and their families. It funds “capacity building and strategic initiatives.” These unproductive funds have been weaponized by the Biden-Harris Administration to extend the Federal reach and push DEI policies on to toddlers. As an example, the Minnesota Department of Education’s “guiding principles,” for implementation of its PDG program include “intersectionality” and “racial equity.”

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Health Resources and Services Administration (HRSA) Consolidations	-1,732	The Budget consolidates a variety of programs that were formerly part of HRSA, including the Ryan White HIV/AIDS program activities that do not focus on core healthcare and support services directly to patients, such as: education and training (-\$74 million); multiple Maternal and Child Health programs (-\$274 million), which are duplicative of other Federal programs or could be addressed through block grant funding; multiple Health Workforce Programs (-\$1 billion) which provide scholarships and support for individuals to enter high-paying medical careers; and family planning programs (-\$286 million), which use taxpayers funds to nonprofits that are not aligned with several Administration policies. The Budget maintains \$6 billion for priority activities that were formerly part of HRSA.
Centers for Disease Control and Prevention (CDC) Programs	-3,588	The Budget refocuses CDC's mission on core activities such as emerging and infectious disease surveillance, outbreak investigations, and maintaining the Nation's public health infrastructure, while streamlining programs and eliminating waste. The Budget proposes merging multiple programs into one grant program and giving States more flexibility to address local needs. Specifically, the Budget proposes consolidating funding for Infectious Disease and Opioids, Viral Hepatitis, Sexually Transmitted Infections, and Tuberculosis programs into one grant program funded at \$300 million. The Budget eliminates duplicative, DEI, or simply unnecessary programs, including: the National Center for Chronic Diseases Prevention and Health Promotion; National Center for Environmental Health; National Center for Injury Prevention and Control; the Global Health Center; Public Health Preparedness and Response, which can be conducted more effectively by States; and the Preventive Health and Human Services Block Grant, the purposes for which can be best funded by States. The Budget refocuses CDC on emerging and infectious disease surveillance, outbreak investigations, preparedness and response, and maintaining the Nation's public health infrastructure. The Budget maintains more than \$4 billion for CDC.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
National Institute of Health (NIH)	-17,965	The Administration is committed to restoring accountability, public trust, and transparency at the NIH. NIH has broken the trust of the American people with wasteful spending, misleading information, risky research, and the promotion of dangerous ideologies that undermine public health. While evidence of the origins of the COVID-19 pandemic leaking from a laboratory is now confirmed by several intelligence agencies, the NIH's inability to prove that its grants to the Wuhan Institute of Virology were not complicit in such a possible leak, or get data and hold recipients of Federal funding accountable is evidence that NIH has grown too big and unfocused. Further, the NIH has been involved in dangerous gain-of-function research and failed to adequately address it, which further undermines public confidence in NIH. The NIH has also promoted radical gender ideology to the detriment of America's youth. For example, the NIH funded a study titled "Psychosocial Functioning in Transgender Youth after 2 Years of Hormones," in which two participants tragically committed suicide. The Budget proposes to reform NIH and focus NIH research activities in line with the President's commitment to MAHA, including consolidating multiple overlapping and ill-focused programs into five new focus areas with associated spending reforms: the National Institute on Body Systems Research; National Institute on Neuroscience and Brain Research; National Institute of General Medical Sciences; National Institute of Disability Related Research; and National Institute on Behavioral Health. The Budget also eliminates funding for the National Institute on Minority and Health Disparities (-\$534 million), which is replete with DEI expenditures, the Fogarty International Center (-\$95 million), the National Center for Complementary and Integrative Health (-\$170 million), and the National Institute of Nursing Research (-\$198 million). NIH research would align with the President's priorities to address chronic disease and other epidemics, implementing all executive orders, and eliminating research on climate change, radical gender ideology, and divisive racialism. This new structure retains the Advanced Research Projects Agency for Health. The Budget maintains \$27 billion for NIH research.
Substance Abuse and Mental Health Services Administration (SAMHSA) Eliminations	-1,065	This Administration is committed to combatting the scourge of deadly drugs that have ravaged American communities. Unfortunately, under the previous administration, SAMHSA grants were used to fund dangerous activities billed as "harm reduction," which included funding "safe smoking kits and supplies" and "syringes" for drug users. The Budget proposes to refocus activities that were formerly part of SAMHSA and reduces waste by eliminating inefficient funding for the Mental Health Programs of Regional and National Significance, Substance Use Prevention Programs of Regional and National Significance, and the Substance Use Treatment Programs of Regional and National Significance. These programs either duplicate other Federal spending or are too small to have a national impact. These eliminations also promote federalism as these services are also

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
		supported by mental health and substance use disorder block grant funding. The Budget maintains \$5.7 billion for activities that were formerly part of SAMHSA.
Agency for Healthcare Research and Quality (AHRQ)	-129	AHRQ is supposed to support research to examine the quality, safety, and affordability of healthcare delivery from the perspectives of patients, caregivers, and clinical professionals. However, much of its research is wasteful or duplicative of research conducted elsewhere in the Department, such as NIH. The Budget eliminates funding for duplicative and wasteful grants and contracts, including those not aligned with the Administration's priorities. The previous administration used AHRQ to publish information wholly unrelated to MAHA, including a document titled, "Reducing Healthcare Carbon Emissions: A Primer on Measures and Actions to Mitigate Climate Change." AHRQ has also pushed radical gender ideology onto children, funding a project at the Seattle Children's Hospital titled, "Using Telehealth to Improve Access to Gender-Affirming Care for BIPOC and Rural Gender-Diverse Youth." The Budget increases accountability by prioritizing AHRQ's statistical work, eliminates the digital health portfolio, ends new grants, and offloads contracts and interagency agreements not associated with statistical activities. In the Budget, consistent with the recent announcement of HHS reorganization, AHRQ's functions are now a part of the new HHS Office of Strategy.
Centers for Medicare and Medicaid Services (CMS) Program Management	-674	This cut will have no impact on providing benefits to Medicare and Medicaid beneficiaries. The Budget eliminates funding that had been used to carry out non-statutory, wasteful, and woke activities while maintaining funding for core Medicare and Medicaid operations, such as ending unnecessary DEI and support contracts. It eliminates health equity-focused activities and Inflation Reduction Act-related outreach and education activities.
Administration for Strategic Preparedness and Response (ASPR) Hospital Preparedness Program	-240	The Budget eliminates funding for ASPR's Hospital Preparedness Program, which has been wasteful and unfocused. This proposal remedies those flaws by allowing States and Territories to properly scope and fund hospital preparedness.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Administration for a Healthy America— Sexual Risk Avoidance Program and Teen Pregnancy Prevention Program, HHS Office on Women’s Health, HHS Office of Minority Health	-180	The Budget eliminates the Sexual Risk Avoidance Program, which serves less than one percent of youth nationwide, and is duplicative of the mandatory Sexual Risk Avoidance Education program administered by the Administration for Children and Families (ACF). The Budget also eliminates the Teen Pregnancy Prevention program which is similar to the mandatory Personal Responsibility Education program administered by ACF. The Budget also reduces funding levels for the HHS Office of Minority Health and Office on Women’s Health to promote efficiency and invest in areas that align with Administration priorities. These programs were previously under the Office of Assistant Secretary of Health. Consistent with the recently announced HHS reorganization, the Budget relocates these programs within the newly formed Administration for Healthy America.
Environmental Protection Agency (EPA)		
<i>Increases</i>		
Drinking Water Programs	+9	The Budget provides \$124 million in funding for the critical drinking water mission at EPA, protecting Americans, and especially children, from unsafe or contaminated water. The \$9 million increase from the 2025 enacted level is to properly equip EPA with funds to respond to drinking water disasters, directly helping people on the ground recover from such emergencies.
Indian Reservation Drinking Water Program	+27	The Budget increases funding for Tribes to retain access to critical funding for drinking water and wastewater infrastructure on their lands, with a total level of \$31 million for the grant program. While the Budget rightfully returns responsibility for State infrastructure to the States, it also prioritizes funding for Tribes to be able to maintain their water infrastructure.
<i>Cuts, Reductions, and Consolidations</i>		
Clean and Drinking Water State Revolving Loan Funds	-2,460	EPA’s State Revolving Fund (SRF) was designed decades ago to give money to States via formula allocation for seed money to set up their own water infrastructure loan programs without continued annual appropriations. When it comes to water infrastructure, the States should be responsible for funding their own water infrastructure projects. Contrary to that design, in practice, the program has been heavily earmarked by the Congress for projects that are ultimately not repaid into the program and bypass States’ interest and planning. In addition, the SRFs are largely duplicative of the EPA’s Water Infrastructure Finance and Innovation Act (WIFIA) program and the Department of Agriculture’s (USDA) Water and Wastewater Loan and Grant program, and they received a massive investment in the Infrastructure Investment and Jobs Act (IIJA). The Budget proposes to return the SRFs to their intended structure of funds revolving at the State level, and therefore provides the

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
		decreased funding level of \$305 million total to allow States to adjust to alternative funding sources for their water infrastructure.
Categorical Grants	-1,006	EPA’s Categorical Grant programs have become a crutch for States at the expense of taxpayers—many of whom receive no benefit from these grants. With a majority of these statutes having been on the books for several decades, States and local governments should be capable and empowered to fund their own programs in order to comply with the law. As such, the Budget includes the elimination of 16 categorical grants, and maintains funding at 2025 enacted levels for Tribes. These reductions promote federalism by allowing States to achieve primary enforcement authority for these programs, while also encouraging States to innovate and find more efficient ways to meet their responsibilities under delegated authority.
Hazardous Substance Superfund	-254	EPA’s Superfund program is charged with cleaning up contaminated areas and responding to emergencies, such as oil spills and natural disasters. The Congress imposed large taxes in IIJA and the Inflation Reduction Act to help finance the Superfund program. Between these \$1.6 billion in taxes estimated to be available in 2026 and litigation recoveries from responsible parties, there is no need for additional funding for Superfund cleanup, which is reflected in the Budget.
Office of Research and Development	-235	The President is committed to Making America Healthy Again. This framework includes ensuring that the American people have clean air and water, and is making investments that benefit human health. The Budget puts an end to unrestrained research grants, radical environmental justice work, woke climate research, and skewed, overly-precautionary modeling that influences regulations—none of which are authorized by law. Instead, the Budget provides \$281 million for statutorily required research in support of core mission areas that help the American people.
Environmental Justice	-100	EPA’s environmental justice program is eliminated in line with the vision the President set forth in Executive Order 14151, “Ending Radical and Wasteful Government DEI Programs and Preferencing,” and Executive Order 14173, “Ending Illegal Discrimination and Restoring Merit-Based Opportunity,” terminating radical preferencing and restoring and protecting civil rights for all Americans. This elimination would put an end to taxpayer funded programs that promote divisive racial discrimination and environmental justice grants that were destined to go to organizations that advance radical ideologies.
Diesel Emissions Reduction Act (DERA) Grants	-90	DERA grants distort the market by subsidizing select technologies, picking winners and subverting consumer choice. This program is a waste for taxpayers and should be eliminated.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Atmospheric Protection Program	-100	The Atmospheric Protection Program is an overreach of Government authority that imposes unnecessary and radical climate change regulations on businesses and stifles economic growth. By prioritizing climate change over job creation and energy independence, the program has burdened American industries with costly mandates, ultimately hurting consumers and taxpayers. This program is eliminated in the 2026 Budget.
Department of Homeland Security (DHS)		
<i>Increases</i>		
DHS	+43,800	Amounts for DHS in the 2026 Budget complement amounts that the Administration has requested as part of the reconciliation bill currently under consideration in the Congress. Reconciliation would allocate more than \$175 billion in additional multiyear budget authority to implement the Administration's priorities in the homeland security space of which at least an estimated \$43.8 billion would be allocated in 2026. Reconciliation funding in 2026 would enable DHS to fully implement the President's mass removal campaign, finish construction of the border wall on the Southwest border, procure advanced border security technology, modernize the fleet and facilities of the Coast Guard, and enhance Secret Service protective operations. Reconciliation would also provide funding to bolster State and local capacity to enhance security around key events and facilities, and prepare for upcoming special events like the 2026 World Cup and 2028 Olympics.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
<i>Cuts, Reductions, and Consolidations</i>		
Non-Disaster Federal Emergency Management Agency (FEMA) Grant Programs	-646	The Budget reduces wasteful and woke FEMA grant programs, refocusing the agency on sound emergency management. FEMA under the previous administration made “equity” a top priority for emergency relief and declared that DEI was mandatory. The Budget would end activities such as webinars promoting the distribution of disaster aid based on “intersectional” factors like sexual orientation and prioritizing “investment in diversity and inclusion efforts...and multicultural training” over disaster prevention and response. FEMA will no longer “instill equity as a foundation of emergency management.” FEMA discriminated against Americans who voted for the President in the wake of recent hurricanes, skipping over their homes when providing aid. This activity will no longer be tolerated. Programs like “Targeting Violence and Terrorism Prevention” were weaponized to target Americans exercising their First Amendment rights. Other eliminated programs, such as National Domestic Preparedness Consortium lack authorization from the Congress and duplicate the efforts of existing Federal and State programs. FEMA’s Preparedness Grants Portfolio, as well as State-level programs, are better suited to dealing with this range of issues. The Budget reduces bloat and waste while encouraging States and communities to build resilience and use their unique local knowledge and ample resources in disaster response.
Cybersecurity and Infrastructure Security Agency (CISA)	-491	The Budget refocuses CISA on its core mission—Federal network defense and enhancing the security and resilience of critical infrastructure—while eliminating weaponization and waste. The Budget also removes offices that are duplicative of existing and effective programs at the State and Federal level. The Budget eliminates programs focused on so-called misinformation and propaganda as well as external engagement offices such as international affairs. These programs and offices were used as a hub in the Censorship Industrial Complex to violate the First Amendment, target Americans for protected speech, and target the President. CISA was more focused on censorship than on protecting the Nation’s critical systems, and put them at risk due to poor management and inefficiency, as well as a focus on self-promotion.
Shelter and Services Program	-650	The Budget proposes eliminating the Shelter and Services Program, which disburses grants used to facilitate mass illegal migration. This program and its predecessor, the Emergency Food and Shelter Program—Humanitarian, funded radical leftist NGOs, who spent funding to facilitate mass illegal migration into the interior of the Nation, as America saw during the previous administration. Democrat-run cities and States use these grants to undermine the rule of law by transporting and sheltering illegal migrants, weakening the United States from within, taking resources away from American citizens, and promoting crime and decay in America’s cities. The funds explicitly serve “noncitizen migrants” released from DHS custody.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Transportation Security Administration (TSA) Screening	-247	The Budget reduces Transportation Security Officer levels, consistent with the President’s goal to reduce wasteful Government spending and abuse of Government programs. Despite constant budget increases since their inception, TSA has consistently failed audits while implementing intrusive screening measures that violate Americans’ privacy and dignity. During the previous administration, the agency was also abused to facilitate mass illegal migration by allowing illegal migrants to fly into the interior without proper documentation.
Department of Justice (DOJ)		
<i>Cuts, Reductions, and Consolidations</i>		
Reduce Duplicative and Unnecessary State and Local Grant Programs	-1,019	While preserving and bolstering effective public safety programs, the Budget proposes to eliminate nearly 40 DOJ grant programs that are duplicative, not aligned with the President’s priorities, fail to reduce violent crime, or are weaponized against the American people. Specifically, the Budget eliminates programs that manipulate the legal system on ideological grounds, such as Community Based Approaches to Advancing Justice, as well as programs that focus on so-called hate crimes in clear violation of the First Amendment. Further, the Budget shuts off the spigot that awards taxpayer-backed grants to radical organizations like the National Center for Restorative Justice, which encourages no cash bail and other extreme proposals that put U.S. communities in harm’s way. This also includes elimination of grants that provided \$6 million to an organization that focuses on “equity and liberation resources for Black, Indigenous, and People of Color, and White Allies,” \$2 million to a Puerto Rican nonprofit that focuses on addressing “structural racism and toxic masculinities,” \$1.5 million to the radical Vera Institute for Justice, and \$1 million to the National Opinion Research Center to “investigate the social ecological context of anti-LGBTQ+ hate crime reporting.” Further, the Budget realigns Violence Against Women Act funding with its original core mission to combat violence against women and directly serve victims—eliminating extraneous programs that divert resources from these core functions. For example, grant funding from the Office on Violence Against Women (OVW) had been offered for biological men. In addition, OVW’s Rural Program grants were sent to train community-based Fa’afafine advocates—an organization of biological men that describes themselves as a “third-gender.”

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Reform and Streamline the FBI	-545	The Budget reflects the President’s priority of reducing violent crime in American cities and protecting national security by getting FBI agents into the field by cutting FBI D.C. overhead and preserving existing law enforcement officers. Importantly, the Administration is committed to undoing the weaponization of the FBI that pervaded the previous administration, which included targeting peaceful pro-life protesters, concerned parents at school board meetings, and citizens opposed to radical transgender ideology. Therefore, the Budget reflects a new focus on counterintelligence and counterterrorism, while reducing non-law enforcement missions that do not align with the President’s priorities. Examples of these reductions include DEI programs, pet projects of the former administration, and duplicative intelligence activities that are already effectively housed in other agencies.
DEA International Capacity in Non-Focus, Wealthy Countries	-212	The Administration is committed to putting an end to deadly drug trafficking, which starts with secure borders and a commitment to law and order. That is why the Budget prioritizes DEA resources on traffickers of fentanyl and other dangerous drugs that are driving America’s overdose crisis. Further, the Budget targets DEA’s foreign spending to regions with criminal organizations that traffic significant quantities of deadly drugs into the United States—Mexico, Central America, South America, and China—while reducing the Agency’s presence in places that are equipped to counter drug trafficking on their own, such as Belgium, England, France, Austria, and Poland.
Refocus ATF Enforcement and Regulatory Priorities	-468	The Budget bolsters the Second Amendment by cutting funding for ATF offices that have criminalized law-abiding gun ownership through regulatory fiat. The previous administration used the ATF to attack gun-owning Americans and undermine the Second Amendment by requiring near-universal background checks; subjecting otherwise lawful gun owners to up to 10 years in prison for failing to register pistol braces that make it possible for disabled veterans to use firearms; the imposition of excessive restrictions on homemade firearms; and the revocation of Federal Firearms Licenses, which shut down small businesses across the Nation. The Budget re-prioritizes resources toward illegal firearms traffickers fueling violent crime and crime gun tracing that State and local law enforcement need to track down dangerous criminals, such as MS-13 gang members.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
General Legal Activities	-193	The Budget reflects the President’s priorities by focusing funding for General Legal Activities on funding for the Civil Division (\$441 million), and due to its focus on immigration litigation, the Criminal Division (\$220 million). However, the Budget reduces funding for the Civil Rights Division, which the previous administration weaponized against States implementing election integrity measures, local police departments, and pro-life Americans. Further, it reduces funding for the Environment and Natural Resources Division, which served as the legal arm of the previous administration’s radical environmental and climate agenda, and developed DOJ’s discriminatory “environmental justice strategy.”
Department of Defense (DOD)		
DOD Topline	+113,300	The Budget delivers on the President’s promise to achieve peace through strength by providing the resources to rebuild America’s military, re-establish deterrence, and revive the warrior ethos of America’s Armed Forces. In combination with \$113 billion in mandatory funding, the Budget increases Defense spending by 13 percent, and prioritizes investments to: strengthen the safety, security, and sovereignty of the homeland; deter Chinese aggression in the Indo-Pacific; and revitalize the U.S. defense industrial base. Specifically, the Budget: • ends wasteful spending of taxpayer dollars on woke climate and DEI programs and redirects resources to support the warfighter; • makes a down-payment on the development and deployment of a Golden Dome for America, a next-generation missile defense shield that would protect the U.S. from missile threats coming from any adversary; • expands U.S. shipbuilding capacity by investing in America’s shipyards and industrial base, increasing wages, and modernizing infrastructure; • supports U.S. space dominance to strengthen U.S. national security and strategic advantage; • funds the F-47 Next Generation Air Dominance platform, the world’s first crewed sixth-generation fighter aircraft and the most advanced, capable, and lethal aircraft ever built; • protects America’s homeland from threats at the border and the ongoing invasion of the U.S.; • modernizes the Nation’s nuclear deterrent; and • recognizes America’s servicemembers’ sacrifice to the Nation with a 3.8 percent pay raise.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Department of Energy		
<i>Cuts, Reductions, and Consolidations</i>		
IIJA Cancellation	-15,247	The Budget cancels over \$15 billion in Green New Scam funds committed to build unreliable renewable energy, removing carbon dioxide from the air, and other costly technologies burdensome to ratepayers and consumers. The Budget also ends taxpayer handouts to electric vehicle and battery makers and cancels the Carbon Dioxide Transportation Infrastructure Finance and Innovation Act—a Biden Administration program of so little interest that not a single dollar has been awarded to date. This amount consists of unplanned and unobligated balances, meaning the cancellation would not impact any currently awarded projects.
Energy Efficiency and Renewable Energy (EERE)	-2,572	The Budget reorients EERE programs to early-stage research and development programming, eliminating funding for Green New Scam interests and climate change-related activities like the Biden Administration’s Justice40. EERE has also been responsible for a slew of unpopular regulations, harmful to Americans in their day-to-day lives, such as banning gas stoves and incandescent light bulbs. This proposal would support technologies that promote firm baseload power and other priorities established in relevant Executive Orders, such as bioenergy.
Office of Science	-1,148	The Budget reduces funding for climate change and Green New Scam research. The Budget maintains U.S. competitiveness in priority areas such as high-performance computing, artificial intelligence, quantum information science, fusion, and critical minerals.
Environmental Management (EM)	-389	The EM program performs activities at 14 active cleanup sites and operates a geologic disposal facility (Waste Isolation Pilot Plant near Carlsbad, New Mexico). The EM topline is being reduced by \$389 million, which reflects a reduction of about \$178 million for the transfer of responsibility from the EM program to the National Nuclear Security Administration for the Savannah River site in South Carolina, where plutonium pit production capabilities would be developed. The Budget maintains the Hanford site in Washington at the 2025 enacted level but reduces funding for various cleanup activities at other sites.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Advanced Research Project Agency–Energy (ARPA-E)	-260	The Budget reduces funding for ARPA-E, to a fiscally responsible level for high risk, high reward research advancing reliable energy technologies and other critical and emerging technologies. Green New Scam technologies are not supported. Examples of previous ARPA-E projects include \$4 million for a “wearable thermal regulatory” system to regulate body temperatures to reduce use of air conditioning units and heaters, and \$2 million for virtual reality experiences to eliminate the need for travel on the claim that every roundtrip trans-Atlantic flight emits enough carbon dioxide to melt 30 square feet of Arctic ice. ARPA-E also spent more than \$55 million on “Plants Engineered to Replace Oil,” a program to eliminate the use of food crops in the production of transportation fuels.
Office of Nuclear Energy	-408	The Budget reduces funding for non-essential research on nuclear energy to focus on what is truly needed to achieve national dominance in nuclear technology. This includes developing innovative concepts for nuclear reactors, researching advanced nuclear fuels, and maintaining the capabilities of the Idaho National Laboratory.
Office of Fossil Energy	-270	The Budget restores the name and function of the Office of Fossil Energy to its original purpose, which is funding for the research of technologies that could produce an abundance of domestic fossil energy and critical minerals.
Department of Transportation		
Increases		
Federal Aviation Administration (FAA) Operations	+359	The Budget reflects the Administration’s commitment to safe and efficient air travel by providing robust funding for FAA operations, requesting an increased amount of \$13.8 billion. This funding level would support the Administration’s air traffic controller hiring surge and salary increases, which are critical to addressing the air traffic controller shortage, as well as FAA’s ongoing updates to its outdated telecommunications systems.
FAA Facility and Radar Upgrades	+824	The Budget delivers an historic \$5 billion investment in the modernization of the systems and facilities that comprise U.S. National Airspace System (NAS). In addition to a previously-provided \$1 billion advance appropriation, the Budget requests an additional \$4 billion for NAS upgrades including a \$450 million down-payment on a multiyear, multi-billion-dollar radar replacement program. A substantial amount will also be requested as mandatory funding through reconciliation.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Infrastructure for Rebuilding America Program (INFRA)	+770	The Budget provides \$770 million, on top of the \$1.5 billion in provided by IIJA, for the INFRA grants program, which uses rigorous benefit-cost analysis to assist nationally-significant highway, port, and freight rail projects on a competitive basis. This funding level would make America an even better place to do business, promoting innovation and supporting the President's Made in America economy.
Rail Safety and Infrastructure Grants	+400	The Administration is committed to improving the safety, efficiency, and reliability of passenger and freight rail network. The tragic disaster in East Palestine, Ohio, which the previous administration failed to adequately respond to, illustrated the need for a significant investment in this sector. Therefore, the Budget provides \$500 million for Rail Safety and Infrastructure grants, a 400-percent increase over 2025 levels, to improve the safety of America's railways and to protect their neighboring communities.
Shipbuilding and Port Infrastructure	+596	The Administration recognizes the urgent need to reinvigorate the U.S. shipbuilding and maritime industries, which are vital to growing the role of the United States in a global Maritime Transportation System that manages over \$5.4 trillion in goods and services annually. This system is indispensable for U.S. national and economic security, facilitating robust trade and the seamless movement of goods across domestic and international markets. That is why the Budget provides an unprecedented \$105 million for the Assistance to Small Shipyards program to jumpstart America's domestic shipbuilding supply chain from the bottom up. Also unprecedented, the Budget delivers \$550 million for the Port Infrastructure Development Program which, when combined with the previously-provided \$450 million advance appropriation, would drive \$1 billion in maritime infrastructure projects at ports coast to coast.
<i>Cuts, Reductions, and Consolidations</i>		
Essential Air Service (EAS) Discretionary Funding	-308	The EAS program funnels taxpayer dollars to airlines to subsidize half-empty flights from airports that are within easy commuting distance from each other, while also failing to effectively provide assistance to most rural air travelers. Spending on programs is out of control, more than doubling between 2021 and 2025. The Budget reins in EAS subsidies by proposing a mix of reforms to adjust eligibility and subsidy rates to help rural communities' air transportation needs in a more sustainable manner. This would save American taxpayers over \$300 million from the 2025 level.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Department of Commerce		
<i>Increases</i>		
Fair Trade and Trade Enforcement	+134	The Budget includes \$134 million in targeted investments to strengthen trade enforcement and aggressively protect American innovation. This includes an additional \$122 million for the Bureau of Industry and Security, a more than 50-percent increase, to protect the Nation’s technological competitiveness and counter threats from China. These new funds would also address unfair and unbalanced trade through increased antidumping and countervailing duty investigations, and build the analytical tools necessary to address supply chain and sourcing risks and revive the industrial and manufacturing base essential for America’s economic and national security.
<i>Cuts, Reductions, and Consolidations</i>		
Economic Development Administration (EDA) and Minority Business Development Agency (MBDA)	-624	EDA programs are not simply wasteful, they have been hijacked and operate as spending earmarks for politicians’ favored projects as well as subsidies for ideologues who prioritize “racial equity” and the radicalized climate agenda. EDA has funded projects like resurrecting dead comedians as holograms at the National Comedy Center in New York, constructing a “Pride Plaza” in Portland, Oregon, and supporting Evergreen Climate Innovations, a “decarbonizing” group in Chicago. As part of the President’s federalism agenda, eliminating EDA would drive economic decision-making out of Washington and to States and localities. The Economic Development Assistance Program had significant funding increases in the last administration that have not been spent. The Budget proposes to rescind these unobligated balances, enhancing accountability and reducing waste. MBDA violates the Civil Rights Act and maintains a lengthy history of inserting “equity” and other DEI practices into its programs. In fact, last year, a U.S. District Court found MBDA’s “social disadvantage based on race or ethnicity” in its funding decisions to be unconstitutional. Discriminatory DEI practices are the core mission of MBDA, and the agency is fully eliminated.
National Oceanic and Atmospheric Administration (NOAA)—Operations, Research, and Grants	-1,311	The Budget terminates a variety of climate-dominated research, data, and grant programs, which are not aligned with Administration policy-ending “Green New Deal” initiatives. For example, NOAA’s educational grant programs have consistently funded efforts to radicalize students against markets and spread environmental alarm. NOAA has funded such organizations as the Ocean Conservancy and One Cool Earth that have pushed agendas harmful to America’s fishing industries. These NOAA grants were funding things such as: George Mason University’s “Policy Experience in Equity Climate and Health” fellowship, a workshop for “transgender women, and those who identify as non-binary,” and NOAA Climate Adaptation Partnerships, which funded webinars that promoted a children’s book “designed to foster conversations about climate anxiety” as therapy.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
NOAA—Procurement of Weather Satellites and Infrastructure	-209	The Budget rescopes NOAA’s Geostationary and Extended Observations satellite program to achieve nearly \$8 billion in lifecycle cost savings, and cancels contracts for instruments designed primarily for unnecessary climate measurements rather than weather observations. The Budget empowers NOAA to directly negotiate contracts for satellites, eliminating unnecessary layers of bureaucracy and promoting innovation, while continuing to modernize core weather-monitoring capabilities and maintaining first launch in 2032.
National Institute of Standards and Technology (NIST)	-325	NIST has long funded awards for the development of curricula that advance a radical climate agenda. NIST’s Circular Economy Program pushes environmental alarmism with its university grants.
International Trade Administration (ITA)—Global Markets	-145	To advance the America First Trade Policy, the Budget refocuses ITA’s footprint to align with key geostrategic interests, including: countering China’s malign and predatory market influence in developing nations; securing access to critical energy and mineral resources; building affordable, resilient, and sustainable supply chains; and facilitating and accelerating investments that create American jobs.
Department of Housing and Urban Development (HUD)		
<i>Cuts, Reductions, and Consolidations</i>		
State Rental Assistance Block Grant (Tenant-Based Rental Assistance, Public Housing, Project-Based Rental Assistance, Housing for the Elderly, and Housing for Persons with Disabilities)	-26,718	The Budget empowers States by transforming the current Federal dysfunctional rental assistance programs into a State-based formula grant which would allow States to design their own rental assistance programs based on their unique needs and preferences. The Budget would also newly institute a two-year cap on rental assistance for able bodied adults, and would ensure a majority of rental assistance funding through States would go to the elderly and disabled. A State-based formula program would also lead to significant terminations of Federal regulations. In combination with efforts related to opening up Federal lands, this model would incentivize States and the private sector to provide affordable housing. This proposal would encourage States to provide funding to share in the responsibility to ensure that similar levels of recipients can benefit from the block grant. The Budget includes \$25 million in housing grants for youth aging out of foster care.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Community Development Block Grant (CDBG)	-3,300	The Budget proposes to eliminate the CDBG program, which provides formula grants to over 1,200 State and local governments for a wide range of community and economic development activities. CDBG is poorly targeted, and the program has been used for a variety of projects that the Federal Government should not be funding, such as improvement projects at a brewery, a plaza for concerts, and skateboard parks. This type of a program is better funded and administered at the State and local level. For example, the Town of Greenwich in Connecticut's famously affluent "Gold Coast" does not need Federal grants, yet it received nearly \$4 million in CDBG funding in the last five years and spent it on wasteful projects like theater arts programming for students and public swimming pool renovations.
HOME Investment Partnerships Program	-1,250	The Budget eliminates HOME, a formula grant that provides State and local governments with funding to expand the supply of housing. The Federal Government's involvement increases the regulatory burden of producing affordable housing. State and local governments are better positioned to address comprehensively the array of unique market challenges, local policies, and impediments that lead to housing affordability problems.
Native American Programs and Native Hawaiian Housing Block Grant	-479	The Budget streamlines housing assistance for Native Americans by eliminating competitive grant programs and focusing available resources on the main formula grant to Tribes. Consistent with similar Budget proposals eliminating housing programs, the Budget eliminates the Native Hawaiian Housing Block Grant. The program has large balances and only one grantee, which would be more appropriately funded by the State of Hawaii.
Homeless Assistance Program Consolidations	-532	The Budget consolidates the Continuum of Care and Housing Opportunities for Persons with AIDS programs into a more targeted Emergency Solutions Grant (ESG) program that provides short- and medium-term housing assistance, capped at two years, to homeless and at-risk individuals. The Budget delivers on the President's pledge to eliminate street homelessness by quickly connecting homeless individuals to shelter, recognizing that State and local governments are better positioned to coordinate homeless assistance, and proposing a formula change to better target the ESG formula to areas where homelessness needs are most severe.
Surplus Lead Hazard Reduction and Healthy Homes Funding	-296	This set of programs has unobligated balances that should be depleted prior to receiving further appropriations.
Self-Sufficiency Programs	-196	HUD's "Self-Sufficiency Programs" are supposed to promote self-sufficiency among housing assistance recipients. In reality, these programs are duplicative in purpose and struggle to achieve or track program outcomes. Such programs like these would be better left to State and local governments that are better suited to support these individuals.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Pathways to Removing Obstacles (PRO) Housing	-100	Consistent with the Executive Order 14151, “Ending Radical and Wasteful Government DEI Programs and Preferencing,” the Budget proposes to eliminate PRO Housing, which was used by the previous administration to advance “equity” under the guise of an affordable housing development program. Instead, the Budget proposes allowing States and local governments to address affordable housing and development challenges within their communities.
Fair Housing Grants	-60	The Budget eliminates the Fair Housing Initiatives Program (FHIP), which provides competitive grants to public and private fair housing organizations to advocate against single family neighborhoods and promote radical equity policies inconsistent with the Administration’s efforts to eradicate DEI programs. The Budget also eliminates the National Fair Housing Training Academy, which provides training for Fair Housing Assistance Program (FHAP) and FHIP professionals as well as funding to translate HUD materials to languages other than English. The Budget, however, maintains support for FHAP, which funds State and local enforcement agencies that collectively process about 80 percent of the Nation’s fair housing complaints under the Fair Housing Act.
Department of Labor (DOL)		
<i>Cuts, Reductions, and Consolidations</i>		
Make America Skilled Again (MASA) Grant Consolidation	-1,640	Consistent with the Administration’s efforts to promote the full range of post-secondary education and training options, the Budget proposes to give States and localities the flexibility to spend workforce dollars to best support their workers and economies, instead of funneling taxpayer dollars to progressive non-profits finding work for illegal immigrants or focusing on DEI. Under the last administration, these grant programs funded things such as: certifying Minnesota employers that were “committed to advancing DEI in their workplace cultures and communities”; promoting the hiring of illegal aliens and migrants; sometimes providing them subsidized housing in addition to a job; and green jobs in California. States would now have more control and flexibility to coordinate with employers and would have to spend at least 10 percent of their MASA grant on apprenticeship, a proven model that trains workers while they earn a paycheck and offers a valuable alternative to college.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Job Corps	-1,584	The Budget eliminates Job Corps, which has been a failed experiment to help America's youth—and, in some cases, has harmed them. The program has been plagued by a culture of violence, assault, sex crimes, drug infractions, and death. A 2017 GAO report found there were nearly 50,000 reported safety violations and 265 deaths in just 10 years of the program. Not only is Job Corps financially unsustainable, with an exorbitant per-graduate cost (some centers spend more than \$400,000 per graduate), it fails to give young people the start they need in their careers. In fact, an audit of Job Corps from DOL's Office of Inspector General (OIG) found program graduates made less than the poverty threshold. This program has often made participants worse off, which is severely misaligned with the President's priority to improve job opportunities and economic growth for all Americans.
Senior Community Service Employment Program (SCSEP)	-405	SCSEP purports to provide job training and subsidized employment to low-income seniors, but fails at its goal: to move seniors to unsubsidized, gainful employment. In reality, it is effectively an earmark to leftist, DEI-promoting entities like the National Urban League, the Center for Workforce Inclusion, and Easter Seals. It also is duplicative of Supplemental Nutrition Assistance Program Employment and Training and DOL's Workforce Innovation and Opportunity Act funding, including the new MASA grant program. Seniors would be better served by programs operated by State and local governments, with proven track records of increasing wages.
Department of the Interior (DOI)		
<i>Cuts, Reductions, and Consolidations</i>		
Bureau of Reclamation and the Central Utah Project	-609	The Budget provides \$1.2 billion for the Bureau of Reclamation and the Central Utah Project. The Budget reduces funding for programs that have nothing to do with building and maintaining water infrastructure, such as habitat restoration. Instead, the Budget focuses Reclamation and the Central Utah Project on their core missions of maintaining assets that provide safe, reliable, and efficient management of water resources throughout the western United States.
Operation of the National Park System	-900	The National Park Service (NPS) responsibilities include a large number of sites that are not "National Parks," in the traditionally understood sense, many of which receive small numbers of mostly local visitors, and are better categorized and managed as State-level parks. The Budget would continue supporting many national treasures, but there is an urgent need to streamline staffing and transfer certain properties to State-level management to ensure the long-term health and sustainment of the National Park system.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
NPS Historic Preservation Fund	-158	Many historic preservation projects have matching funds from State, local, and private sources, rendering the Historic Preservation Fund highly duplicative. Further, the projects are often of local, rather than national, significance. The Budget would continue funding projects in partnership with HBCUs, which have a unique history.
NPS Construction	-73	The Biden Administration wasted Federal funding on construction projects at sites that are more appropriately managed at the local level. This reduction complements the Administration's goals of federalism and transferring smaller, lesser visited parks to State and tribal governments. At the same time, the Budget allows NPS to prioritize larger projects at the Nation's crown jewel parks. The President's deregulatory agenda will ensure that the Great American Outdoors Act funding for construction would go further than ever before.
NPS National Recreation and Preservation	-77	Many National Recreation and Preservation grants are already supported by State, local, and private sector efforts, including large amounts of mandatory funding through the Land and Water Conservation Fund Stateside Grants. Further, these projects are not directly tied to maintaining national parks or public lands, which have a large backlog of maintenance and are more important to address than community recreation initiatives.
Bureau of Indian Affairs Programs that Support Tribal Self-Governance and Tribal Communities	-617	The Budget focuses on core programs for tribal communities. The Budget eliminates the Indian Guaranteed Loan program for tribal business development because it is duplicative of several other programs across the Federal Government that offer loans to small businesses and which tribal businesses are eligible for and receive. The Budget also terminates the Indian Land Consolidation Program, which has received bipartisan criticism for being ineffective. In addition, the Budget also reduces funding for programs that directly fund tribal operations such as roads, housing, and social services in order to focus on core priorities for tribal communities, such as law enforcement.
Bureau of Indian Affairs (BIA) Public Safety and Justice	-107	The Budget streamlines the tribal law enforcement program to reduce redundancies and inefficiencies with other law enforcement agencies. The Budget would encourage BIA's law enforcement program to improve accountability and reform its service to tribal communities. Further, tribal governments can apply for grants from DOJ and DHS for law enforcement and emergency services.
Bureau of Indian Education Construction	-187	The Bureau of Indian Education Construction account has been plagued by poor program management, cost overruns, and delays in school construction and repairs. The reduction of inefficient projects from this account would accompany a renewed effort to improve the program's performance.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
U.S. Geological Survey (USGS) Surveys, Investigations, and Research programs	-564	USGS provides science information on natural hazards, ecosystems, water, energy and mineral resources, and mapping of Earth's features. The Budget eliminates programs that provide grants to universities, duplicate other Federal research programs and focus on social agendas (e.g., climate change) to instead focus on achieving dominance in energy and critical minerals.
Bureau of Land Management Conservation Programs	-198	The Obama Administration and the Biden Administration abused the Antiquities Act to designate vast swathes of land and water as off-limits to any development, recreation, grazing, hunting, mining, etc. This has hamstrung development of valuable energy and mineral resources. The Budget proposes deep reductions to undo these excessive designations. The Budget also reduces the Wildlife and Aquatic Habitat Management program to reduce funds given to left-wing environmental non-profits that work against development of energy and mineral resources and have other sources of funding for their projects.
U.S. Fish and Wildlife Service (USFWS) State, Tribal, and NGO Conservation Grant Programs	-170	These non-essential USFWS grant programs fund conservation of species managed by States, Tribes, and other nations, wasting taxpayer dollars on species better managed by local or international interests. These dollars are also duplicative of other Federal programs in USDA and the Department of Commerce, as well as the large amounts of mandatory funding available through the Land and Water Conservation Fund.
Renewable Energy Programs	-80	The Budget proposes to eliminate support for Green New Deal technologies. The elimination is consistent with the President's first-day executive actions, including Executive Order 14154, "Unleashing American Energy," and a Presidential Memorandum pausing all onshore and offshore wind leasing and permitting.
USFWS Ecological Services	-37	USFWS' Ecological Services program and NOAA's National Marine Fisheries Service Office of Protected Resources are jointly responsible for administering the Endangered Species Act and the Marine Mammal Protection Act. The Budget consolidates these two programs into a single program housed within DOI, consistent with the President's efforts to improve performance and reduce the Federal bureaucracy, as well as his deregulatory agenda.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Federal Wildland Fire Service (consolidation of USDA and DOI Wildland Fire Management programs under a unified agency within DOI)	--	Federal wildfire risk mitigation and suppression responsibilities currently are split across five agencies in two departments: the U.S. Forest Service in USDA and BIA, Bureau of Land Management, USFWS, and NPS in DOI. This dispersed nature of the Federal mission creates significant coordination and cost inefficiencies that result in sub-optimal performance. The Budget reforms Federal wildland fire management to create operational efficiencies by consolidating and unifying the Federal wildland fire responsibilities into a single new Federal Wildland Fire Service at DOI, including transferring USDA's current wildland fire management responsibilities. The new service would be distinct in command and appropriations from existing wildland firefighting agencies and would streamline Federal wildfire suppression response, risk mitigation efforts, and coordination with non-Federal partners to combat the wildfire crisis.
Department of Agriculture (USDA)		
<i>Increases</i>		
Food Safety Inspection Service (FSIS)	+15	FSIS inspects meat, poultry, and egg product plants to ensure food safety nationwide. Several States have their own equivalent inspection program, and FSIS shares in the cost of these programs. Increases are needed to support increased production and demand for services.
Rental Assistance Grants	+74	The Budget provides funding to renew the rental assistance grant contracts at \$1.7 billion. This prevents the default of the \$9 billion in USDA underwritten multifamily housing direct loans, that depend on the rental assistance grants for the debt service.
<i>Cuts, Reductions, and Consolidations</i>		
National Institute of Food and Agriculture (NIFA)	-602	The Budget eliminates wasteful, woke programming in NIFA, such as activities related to climate change, renewable energy, and promoting DEI in education that were prioritized under the Biden Administration. In addition, the Budget reduces funding for formula grants because they generally do not achieve the same results as competitive programs. Instead, the Budget focuses on the President's goal of advancing the competitiveness of American agriculture through the merit-based Agriculture and Food Research Initiative. The Budget protects funding to youth and K-12 programs such as 4-H clubs, tribal colleges, and universities. This investment would help prepare future generations of farmers. It also ensures HBCUs are amply funded.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Agricultural Research Service (ARS) and USDA Research Statistical Agencies	-159	The Administration is committed to prioritizing research that supports American agriculture. However, many of the current ARS facilities are in disrepair. The Budget reduces funding for research sites across the Nation that have exceeded their ideal lifespan and reduces funding for research projects that are not of the highest national priority. The Budget also makes small reductions to the Economic Research Service and National Agricultural Statistics Service to stop climate-politicized additional scopes added by the Biden Administration while ensuring all critical analysis and data collection continues.
Natural Resource Conservation Service (NRCS)—Private Lands Conservation Operations	-754	The Budget eliminates discretionary funding for conservation technical assistance because it has historically received over a billion dollars in mandatory funding, in addition to funding at the State and local levels. While funding has helped producers deploy conservation practices on their lands, many have been forced to participate in the program in order to comply with State environmental regulations such as California’s Irrigated Lands Regulatory Program, which regulates agricultural runoff. These cost drivers should be connected to the resource demands they impose.
NRCS Watershed Operations	-16	The Budget eliminates funding to renovate locally owned dams in the NRCS Watershed Programs. Funding for this type of activity is the responsibility of the local dam owners. In addition, these programs received an enormous influx of funding through IIJA. Currently, there is over \$100 million in unobligated balances between the two programs.
Rural Development Programs	-721	USDA’s Rural Development programs are streamlined to focus on programs that have demonstrated efficient results and are an appropriate Federal role. Infrastructure loans are prioritized for aging rural water and wastewater systems, as well as technical assistance through the “Circuit Rider” program balanced with reductions in the grants. Other specialty water grants and earmarks are not funded except where the tax base cannot support loans, including maintaining funding for Native American Tribes. Community facility grants are eliminated, as the Congress has eroded these grants by earmarking nearly 100 percent of them. No new USDA funding is needed for broadband expansion, as existing balances and other Federal resources are meeting planned growth. The Budget would also eliminate programs that are duplicative, too small to have macro-economic impact, costly to deliver, in limited demand, available through the private sector, or conceived as temporary. These include rural business programs, single family housing direct loans, self-help housing grants, telecommunications loans, and rural housing vouchers. Rural Development salaries and expenses are reduced commensurately.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Farm Service Agency (FSA) Salaries and Expenses: Farm Production and Conservation-Business Center (FPAC-BC)	-358	The first Trump Administration streamlined services to farmers by placing the FSA, NRCS, and Risk Management Agency under one umbrella: FPAC-BC. The staff-heavy FSA struggles with hiring due in part because of labor market competition. Staff shortages have left leased premises underutilized, resulting in waste. The Budget reduces funding in order to reflect the Agency's plans for efficiencies, which include improving online services so that farmers are receiving top-notch service to meet their needs.
National Forest System Management	-392	The Budget reduces salaries and expenses by \$342 million, and saves an additional \$50 million by eliminating funding for the Collaborative Forest Landscape Restoration program, and reducing funding for recreation, vegetation and watershed management, and land management regulation. The Budget fully supports the President's bold actions in Executive Order 14225, "Immediate Expansion of American Timber Production," to improve forest management and increase domestic timber production, and the Administration's goal of restoring federalism by empowering States to assume a greater role in managing forest lands within their borders. The requested funding level supports the highest priorities in forest management, including timber sales, hazardous fuels removal, mineral extraction, grazing, and wildlife habitat management.
Forest Service Operations	-391	The Budget reduces funding for expenses including salaries and facility leases to streamline the Agency's management structure and rightsize their real property footprint. This is in line with the President's goal of restoring federalism, by increasing State authority over land management within their borders.
State, Local, Tribal, and NGO Conservation Programs	-303	The Budget reduces grant programs that subsidize management of State and privately-owned forests. This program has been plagued by oversight issues, including allegations of impropriety by both the Agency and State governments. While the Budget provides robust support for Federal wildland fire management activities alongside States and local partners, these partners should be encouraged to fund their own community preparedness and risk mitigation activities.
Forest and Rangeland Research (Except Forest Inventory and Analysis)	-300	The President has pledged to manage national forests for their intended purpose of producing timber. The Budget reduces funding for the Forest and Rangeland Research program because it is out of step with the practical needs of forest management for timber production, but maintains funding for Forest Inventory and Analysis, a longstanding census of forest resources and conditions.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Commodity Supplemental Food Program (CSFP)	-425	CSFP was established to ensure that low-income seniors over 60 meet their daily nutritional needs. To further improve the health of seniors consistent with the President's MAHA initiative, the Budget ends CSFP (which has been misused for DEI and logrolling) and replaces it with MAHA food boxes. The MAHA food boxes remove administrative middlemen to provide higher-quality food directly to seniors. Unlike the current approach using food banks, which provide those in need with shelf-stable foods that are high in sodium and other harmful ingredients, MAHA boxes would be filled with commodities sourced from domestic farmers and given directly to American households. This approach of boxing commodities was highly successful at the end of the first Trump administration as a COVID pandemic response.
McGovern-Dole Food for Education Program	-240	The McGovern-Dole Food for Education program buys agricultural commodities from U.S. farmers and donates them in the form of foreign aid. Only a small portion of the program's funding goes toward purchasing U.S. commodities, given the high transportation costs and large portion of funding provided for technical assistance. While these donated commodities totaled only \$37 million in 2023 (0.01 percent of all U.S. crop sales), they undercut commodity prices in markets abroad. USDA has numerous programs that support farmers in difficult times, but this program is neither necessary nor efficient as support for U.S. farmers. In addition, years of empirical data from GAO and the USDA OIG show high costs with dubious results overseas. The elimination of this program is consistent with the elimination of other in-kind international food donation programs in the Budget, including Food for Progress and Food for Peace Title II Grants.
Department of the Treasury		
<i>Increases</i>		
Rural Financial Award Program	+100	The Budget furthers investment in rural communities by creating a new \$100 million award program that would provide access to affordable financing and spur economic development in rural America. This new program would require 60 percent of Community Development Financial Institutions' (CDFIs') loans and investments to go to rural areas, and would leverage existing administrative resources within the Department of the Treasury's CDFI Fund to increase access to capital, infrastructure financing, and main street business development.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
<i>Cuts, Reductions, and Consolidations</i>		
Internal Revenue Service (IRS)	-2,488	The Budget ends the Biden Administration’s weaponization of IRS enforcement, which targeted conservative groups and small businesses. The elimination of certain complex tax credits and technology improvements would increase IRS efficiency. The reduction would protect functions in Taxpayer Services.
CDFI Fund Discretionary Awards	-291	Consistent with the President’s goal of reducing the Federal bureaucracy, the Budget recommends eliminating CDFI Fund discretionary awards. Past awards may have made race a determinant of access to loan programs to “advance racial equity,” funded products and services that built so-called “climate resiliency,” and framed American society as inherently oppressive rather than fostering unity. The CDFI industry has matured beyond the need for “seed” money and should at this point be financially self-sustaining. Remaining funding supports oversight and closeout of prior awards, maintaining CDFI certification, and support for New Markets Tax Credit administration and the zero-cost Bond Guarantee Program.
Department of Veterans Affairs (VA)		
<i>Increases</i>		
Medical Care	+3,309	The Budget provides increased funding for healthcare services tailored to U.S. veterans’ needs both at VA medical centers and in the community. This funding level, in combination with mandatory funding from the Toxic Exposures Fund of \$50 billion, would ensure that the Nation provides the world-class healthcare to America’s veterans that they deserve. In addition, veterans who qualify for access to care with local community providers would be empowered to make the choice to see them, rather than having to drive in some cases hours to access the nearest VA facility. Of this total, the Budget provides a \$1.1 billion increase for the President’s commitment to ending veterans’ homelessness. This new funding and authorities would empower VA to be directly responsible for programs and financial support helping homeless and at-risk veterans with rental assistance, augmenting VA’s existing case management and support services, to help veterans get back on their feet.
Electronic Health Record Modernization (EHRM)	+2,173	VA’s EHRM effort is moving the Department from a decades-old legacy system to a modern system that is interoperable with DOD and other Federal partners, as well as participating community care providers, allowing clinicians to easily access a veteran’s full medical history anywhere they seek care. The Secretary has made accelerated VA EHRM rollout—which had stalled under the Biden Administration—a top priority effort.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
<i>Cuts, Reductions, and Consolidations</i>		
Information Technology (IT) Systems	-493	VA has over 1,000 distinct IT systems, including many legacy systems, some of which are decades old. The President has directed the U.S. DOGE Service to work with Agency Heads to improve the quality and efficiency of Government software and IT systems. The Budget protects VA's core mission systems that deliver healthcare, benefits, and cemetery services to America's veterans, while reducing spending on duplicative legacy systems and pausing procurement of new systems until VA and the U.S. DOGE Service team can conduct a full review.
General Administration	-37	These targeted cuts eliminate DEI programing, reduce nonessential outreach activities, and institute a reduction in force to cut bureaucratic overhead in line with the President's Executive Order 14210, "Implementing the President's 'Department of Government Efficiency' Workforce Optimization Initiative." This level provides funding for the critical VA missions providing healthcare, benefits, and cemetery services for America's veterans.
Corps of Engineers—Civil Works (Corps)		
<i>Cuts, Reductions, and Consolidations</i>		
Harbor Maintenance Trust Fund (HMTF) Surplus	-1,071	The Administration supports investments in the Nation's infrastructure. In particular, Federal navigation channels serve an important role in facilitating domestic and international commerce. The HMTF, whose funding is subject to annual appropriations, finances operation and maintenance projects for the Nation's water channels. However, HMTF's scope has grown far beyond its original mission. Spending out of the HMTF has increased from \$1.7 billion in 2020 to \$2.8 billion in 2025. Of the \$2.8 billion appropriated in 2024, \$1.4 billion remained unobligated in the first quarter of 2025. There is no need to request more funding than necessary, which is why the Budget reduces funding for HMTF. In this request, spending on projects that are not a Federal responsibility (e.g., dredging of berths) is limited, whereas projects like maintaining commercial navigation on Federal channels are prioritized.
Corps WIFIA program	-7	The Corps WIFIA program provides direct loans and loan guarantees for non-Federal dam safety projects. The Budget eliminates this program because there is no demonstrated need in the private market for Federal financial assistance for these types of projects. In addition, the program is duplicative of other programs, such as FEMA's National Dam Safety Program and the EPA's WIFIA Program. In addition, this program is arguably outside of the Corps' mission, which is to provide engineering expertise for military construction and civil works projects—not serve as a creditor to private entities.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
National Aeronautics and Space Administration (NASA)		
<i>Increases</i>		
Human Space Exploration	+647	By allocating over \$7 billion for lunar exploration and introducing \$1 billion in new investments for Mars-focused programs, the Budget ensures that America's human space exploration efforts remain unparalleled, innovative, and efficient.
<i>Cuts, Reductions, and Consolidations</i>		
Space Science	-2,265	In line with the Administration's objectives of returning to the Moon before China and putting a man on Mars, the Budget would reduce lower priority research and terminate unaffordable missions such as the Mars Sample Return mission that is grossly overbudget and whose goals would be achieved by human missions to Mars. The mission is not scheduled to return samples until the 2030s.
Mission Support	-1,134	The Budget refocuses NASA on beating China back to the Moon and putting the first human on Mars. To achieve these objectives, it would streamline the workforce, IT services, NASA Center operations, facility maintenance, and construction and environmental compliance activities.
Earth Science	-1,161	The Budget eliminates funding for low-priority climate monitoring satellites and restructures the gold-plated, two-billion-dollar Landsat Next mission while NASA studies more affordable ways to maintain the continuity of Landsat imagery, which is used by natural resource managers, States, and industry.
Legacy Human Exploration Systems	-879	The Budget phases out the grossly expensive and delayed Space Launch System (SLS) rocket and Orion capsule after three flights. SLS alone costs \$4 billion per launch and is 140 percent over budget. The Budget funds a program to replace SLS and Orion flights to the Moon with more cost-effective commercial systems that would support more ambitious subsequent lunar missions. The Budget also proposes to terminate the Gateway, a small lunar space station in development with international partners, which would have been used to support future SLS and Orion missions.
Space Technology	-531	The Budget reduces Space Technology by approximately half, including eliminating failing space propulsion projects. The reductions also scale back or eliminate technology projects that are not needed by NASA or are better suited to private sector research and development.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
International Space Station	-508	The Budget reflects the upcoming transition to a more cost-effective commercial approach to human activities in space as the space station approaches the end of its life cycle. The Budget reduces the space station's crew size and onboard research, preparing for a safe decommissioning of the station by 2030 and replacement by commercial space stations. Crew and cargo flights to the station would be significantly reduced. The station's reduced research capacity would be focused on efforts critical to the Moon and Mars exploration programs.
Aeronautics	-346	The Budget eliminates climate-focused "green aviation" spending while protecting the development of technologies with air traffic control and defense applications, producing savings.
Office of Science, Technology, Engineering, and Mathematics (STEM) Engagement	-143	NASA's primary role is space exploration and, similar to prior generations that were inspired by the Apollo lunar landings, NASA will inspire the next generation of explorers through exciting, ambitious space missions, not through subsidizing woke STEM programming and research that prioritizes some groups of students over others and have had minimal impact on the aerospace workforce.
National Science Foundation (NSF)		
<i>Cuts, Reductions, and Consolidations</i>		
General Research and Education	-3,479	The Budget cuts funding for: climate; clean energy; woke social, behavioral, and economic sciences; and programs in low priority areas of science. NSF has fueled research with dubious public value, like speculative impacts from extreme climate scenarios and niche social studies, such as a grant to the University of Nebraska to create "affinity groups" for bird watchers and a \$15.2 million grant to the University of Delaware to develop and evaluate policy interventions to "achieve sustainable equity, economic prosperity, and coastal resilience in the context of climate change." Similarly, Columbia University received \$13.8 million to "advance livable, safe, and inclusive communities." Funding for Artificial Intelligence and quantum information sciences research is maintained at current levels.
Broadening Participation	-1,130	NSF "Broadening Participation" programs have funded projects such as: "Reimagining Educator Learning Pathways Through Storywork for Racial Equity in STEM"; "addressing White Supremacy in the STEM profession"; and preparing "the next generation of DEI leaders to promote long-term, sustainable racial equity initiatives." These efforts would no longer receive Federal dollars and all DEI-related programs at NSF are eliminated.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
Agency Operations and Awards Management	-93	The Budget reduces non-essential programs in NSF, and this reduction to operations aligns with the Agency's reduced size.
Small Business Administration (SBA)		
<i>Cuts, Reductions, and Consolidations</i>		
Entrepreneurial Development Programs (EDP) Consolidation	-167	The Administration is committed to supporting small businesses throughout the United States through tax cuts, deregulation, and responsible, targeted support. However, reforms at SBA are clearly warranted, as the previous administration unconstitutionally used the SBA to advance its divisive agenda, awarding billions in funding to certain businesses based solely on race and gender. Therefore, the Budget ends 15 specialized and duplicative programs, leaving only the Small Business Development Centers (SBDCs) program. Eliminated programs include, "Women's Business Centers" and SCORE, which in 2023 posted "Six Ways to Support LGBTQIA-Owned Businesses," and provided resources based on race. SBDCs would be directed to provide any of the appropriate services previously offered by the eliminated programs in a manner that is consistent with the Administration's priorities. Importantly, the SBDC request includes a \$10 million increase to ensure there is not a disruption in business technical assistance services for veteran-owned small businesses.
Salaries and Expenses (S&E)	-111	The Budget provides \$250 million for SBA's S&E, which would rightsize SBA's 34 percent S&E budget growth since 2021. The reduced S&E request also reflects a reduction in staffing costs associated with reimagining and consolidating the Agency's EDP.
Small Agency Eliminations		
<i>Cuts, Reductions, and Consolidations</i>		
• 400 Years of African American History Commission • Corporation for National and Community Service (operating as AmeriCorps) • Corporation for Public Broadcasting • Federal Mediation and Conciliation Service • Institute of Museum and Library Sciences	-3,586	The Budget includes the elimination of, or the elimination of Federal funding for, the following small agencies—consistent with the President's efforts to decrease the size of the Federal Government to enhance accountability, reduce waste, and reduce unnecessary governmental entities. Past Trump Administration Budgets have also supported these eliminations. Remaining funds account for costs of orderly shutdowns.

Program Name	\$ Change from 2025 Enacted (in millions)	Brief Description of Program and Recommended Reduction or Increase
• Inter-American Foundation • Marine Mammal Commission • National Endowment for the Arts • National Endowment for the Humanities • Neighborhood Reinvestment Corporation • U.S. African Development Foundation • U.S. Agency for Global Media • U.S. Institute of Peace • U.S. Interagency Council on Homelessness • Woodrow Wilson Center • Presidio Trust		
• Delta Regional Authority • Denali Commission • Northern Border Regional Commission • Southeast Crescent Regional Commission • Southwest Border Regional Commission • Great Lakes Authority		Consistent with the Administration’s efforts to restore federalism, eliminate taxpayer waste, and reduce the Federal role in local economic development initiatives, the Budget eliminates six small regional commissions. Elimination removes an unnecessary layer of bureaucracy in an already bloated grant-making system to achieve greater efficiencies. Once established, these entities are perpetually funded by taxpayers to cater to geographic special interests. States and local governments are better positioned to fund and address unique regional and geographic economic development challenges. Unlike the smaller, unnecessary commissions, the Budget continues funding for Appalachian Regional Commission’s (ARC) operations at \$14 million, while grantmaking is funded through balances and IJA funds, which saves taxpayers \$186 million compared to the 2025 enacted level. ARC serves a region uniquely hard-hit by the loss of good coal mining jobs and the opioid crisis.
Office of Navajo and Hopi Indian Relocation (ONHIR)	-2	ONHIR began over 50 years ago to facilitate the relocation of Navajo and Hopi people living on each other’s land. The statute directs that ONHIR “shall cease to exist when the President determines that its functions have been fully discharged” and the Congress has already directed ONHIR to begin planning for Office closure. An orderly closure of this office and transfer of residual responsibilities to other agencies is long overdue.

Table 1. Proposed 2026 Discretionary Request by Discretionary Category

(Budget authority in billions of dollars)

	2025	2026	2026 Request Less 2025 Enacted	
	Enacted ¹	Request	Dollar	Percent
Base Discretionary Funding.....	1,613.1	1,450.0	-163.1	-10.1%
<i>Defense</i>	892.6	892.6	---	---
<i>Non-Defense</i> ²	720.5	557.4	-163.1	-22.6%
<i>Pending Reconciliation Resources Affecting Base Discretionary Funding:</i> ³				
<i>Defense</i>	---	119.3	+119.3	---
<i>Non-Defense.....</i>	---	43.8	+43.8	---
Base Discretionary, including reconciliation resources.....	1,613.1	1,613.1	---	---
<i>Defense</i>	892.6	1,011.9	+119.3	+13.4%
<i>Non-Defense</i> ²	720.5	601.2	-119.3	-16.6%
Non-Base Funding: ⁴				
Emergency Funding.....	117.7	-2.3	-120.0	-101.9%
Program Integrity.....	2.5	3.1	+0.6	+22.6%
Disaster Relief.....	22.9	26.6	+3.7	+16.3%
Wildfire Suppression.....	2.8	2.9	+0.1	+3.6%
Infrastructure Investment and Jobs Act.....	66.1	43.7	-22.5	-34.0%
Other Exempted appropriations.....	5.9	4.0	-1.8	-31.4%
Total, Non-Base Funding.....	217.8	78.0	-139.9	-64.2%
Total, Discretionary including reconciliation resources.....	1,830.9	1,691.1	-139.9	-7.6%

Please note: some totals may not add due to rounding.

¹ The 2025 enacted column reflects OMB scoring of appropriations enacted in the Full-Year Continuing Appropriations Act, 2025 (division A of Public Law 119-4) and the Disaster Relief Supplemental Appropriations Act (division B of Public Law 118-158). This level does not include \$2.9 billion in emergency funds provided for 2025 by the Congress that were not designated as emergency by the President since those amounts are not available for obligation.

² The base non-defense total for 2025 includes \$9.4 billion in emergency funds that are considered to be for base activities.

³ H. Con. Res. 14, the Concurrent Resolution on the Budget for Fiscal Year 2025, as passed by the House and Senate includes instructions to provide additional funding for defense, homeland, and law enforcement activities. The Administration assumes at least \$325 billion (\$175 billion for border security/non-defense and \$150 billion for defense) will be enacted in a reconciliation bill later this year to meet these instructions and the funds will supplement discretionary resources for the Departments of Defense and Homeland Security, as well as the National Nuclear Security Administration in the Department of Energy for fiscal years 2026-2034. For 2026, the Administration assumes approximately \$163.1 billion of these funds will be spent with \$119.3 billion for defense activities and \$43.8 billion for border/non-defense activities.

⁴ Non-base funding reflects appropriations for anomalous or above-base activities such as emergency requirements, program integrity, disaster relief, and wildfire suppression, or amounts that have been explicitly exempted from counting for budget enforcement in authorization Acts. These amounts continue to be presented outside of base allocations.

Table 2. 2026 Discretionary Request by Major Agency

(Budget authority in billions of dollars)

	2025	2026	2026 Request Less	
	Enacted ¹	Request	2025 Enacted	
			Dollar	Percent
Base Discretionary Funding: ²				
Cabinet Departments:				
Agriculture ^{3,4}	27.3	22.3	-5.0	-18.3%
Commerce:				
<i>Commerce, excluding Nonrecurring Expenses Fund rescission</i>	10.2	8.5	-1.7	-16.5%
<i>Nonrecurring Expenses Fund rescission</i>	-9.6	---	+9.6	-100.0%
Defense, including reconciliation resources ⁵	848.3	961.6	+113.3	+13.4%
Education.....	78.7	66.7	-12.0	-15.3%
Energy (DOE).....	49.8	45.1	-4.7	-9.4%
<i>National Nuclear Security Administration (NNSA)</i>	24.0	24.0	---	---
<i>Other DOE, excluding NNSA</i>	25.8	21.1	-4.7	-18.2%
<i>NNSA, including reconciliation resources ⁵</i>	24.0	30.0	+6.0	+25.0%
Health and Human Services (HHS) ⁶	127.0	93.8	-33.3	-26.2%
Homeland Security, including reconciliation resources ⁵	65.1	107.4	+42.3	+64.9%
Housing and Urban Development (HUD):				
<i>HUD program level</i>	77.0	43.5	-33.6	-43.6%
<i>HUD receipts</i>	-6.7	-10.3	-3.6	N/A
Interior ⁴	16.8	11.7	-5.1	-30.5%
Justice.....	36.0	33.2	-2.7	-7.6%
Labor.....	13.3	8.6	-4.6	-34.9%
State and International Programs ^{3,7}	58.7	9.6	-49.1	-83.7%
<i>State and International, excluding rescissions and cancellations</i>	59.6	31.2	-28.4	-47.7%
Transportation.....	25.2	26.7	+1.5	+5.8%
Treasury ⁷	14.2	11.5	-2.7	-19.0%
Veterans Affairs.....	129.2	134.6	+5.4	+4.1%
<i>Veterans Affairs, including Toxic Exposures Fund</i>	159.7	187.2	+27.6	+17.3%
Major Agencies:				
Corps of Engineers.....	5.9	5.0	-0.9	-15.2%
Environmental Protection Agency.....	9.1	4.2	-5.0	-54.5%
General Services Administration.....	-0.9	0.5	+1.3	N/A
National Aeronautics and Space Administration.....	24.8	18.8	-6.0	-24.3%
National Science Foundation.....	8.8	3.9	-4.9	-55.8%
Small Business Administration.....	0.9	0.6	-0.3	-33.2%
Social Security Administration (SSA) ⁶	12.7	12.7	---	---
Changes in mandatory program offsets ⁸	-36.0	-34.0	+2.0	-5.4%
Other Agencies.....	27.0	21.0	-6.0	-22.2%
Subtotal, Base Discretionary, including reconciliation resources.....	1,613.1	1,613.1	---	---

Table 2. 2026 Discretionary Request by Major Agency

(Budget authority in billions of dollars)

	2025	2026	2026 Request Less	
	Enacted ¹	Request	2025 Enacted	
			Dollar	Percent
Non-Base Discretionary Funding: ⁹				
Emergency Requirements:				
Agriculture.....	40.2	---	-40.2	N/A
Commerce.....	2.5	---	-2.5	N/A
Defense.....	11.8	---	-11.8	N/A
Energy.....	0.1	-2.3	-2.4	N/A
Homeland Security.....	30.8	---	-30.8	N/A
Housing and Urban Development.....	12.0	---	-12.0	N/A
Interior.....	3.1	---	-3.1	N/A
Transportation.....	8.1	---	-8.1	N/A
Corps of Engineers.....	1.5	---	-1.5	N/A
Environmental Protection Agency.....	3.3	---	-3.3	N/A
Small Business Administration.....	2.2	---	-2.2	N/A
Other Agencies.....	2.0	---	-2.0	N/A
Subtotal, Emergency Requirements.....	117.7	-2.3	-120.0	-101.9%
Program Integrity:				
Health and Human Services.....	0.6	0.6	---	---
Labor.....	0.3	0.4	+0.1	+29.2%
Social Security Administration	1.6	2.1	+0.5	+30.3%
Subtotal, Program Integrity.....	2.5	3.1	+0.6	+22.6%
Disaster Relief: ¹⁰				
Homeland Security.....	22.5	26.5	+4.0	+17.6%
Small Business Administration.....	0.4	0.1	-0.2	-61.8%
Subtotal, Disaster Relief.....	22.9	26.6	+3.7	+16.3%
Wildfire Suppression:				
Agriculture ⁴	2.4	2.5	+0.1	+3.8%
Interior ⁴	0.4	0.4	+	+2.8%
Subtotal, Wildfire Suppression.....	2.8	2.9	+0.1	+3.6%
Infrastructure Investment and Jobs Act Funding: ¹¹				
Agriculture.....	0.9	0.9	---	---
Commerce.....	1.1	*	-1.1	-99.5%
Energy.....	10.8	-6.2	-17.0	-157.0%
Health and Human Services.....	0.8	0.7	-0.1	-12.5%
Homeland Security.....	1.1	1.0	-0.1	-8.9%
Interior.....	2.3	2.3	-0.0	-0.2%
Transportation.....	36.8	32.7	-4.1	-11.1%
Environmental Protection Agency.....	12.0	12.0	---	---
Other Agencies.....	0.2	0.1	-0.1	-25.9%
Subtotal, Infrastructure Investment and Jobs Act Funding.....	66.1	43.7	-22.5	-34.0%

Table 2. 2026 Discretionary Request by Major Agency

(Budget authority in billions of dollars)

	2025 Enacted ¹	2026 Request	2026 Request Less 2025 Enacted	
			Dollar	Percent
Other Exempted Funding: ¹¹				
Education.....	0.2	0.2	---	---
Health and Human Services.....	0.4	0.2	-0.1	-36.0%
Justice.....	0.3	0.3	---	---
Corps of Engineers.....	2.8	1.7	-1.1	-39.9%
Environmental Protection Agency.....	2.2	1.6	-0.6	-26.8%
Subtotal, Other Exempted Funding.....	5.9	4.0	-1.8	-31.4%
Subtotal, Non-Base Discretionary Funding.....	217.8	78.0	-139.9	-64.2%
Total, Discretionary Budget Authority, including reconciliation resources.....	1,830.9	1,691.1	-139.9	-7.6%

Please note: some totals may not add due to rounding.

* \$50 million or less.

¹ The 2025 enacted column reflects OMB scoring of appropriations enacted in the Full-Year Continuing Appropriations Act, 2025 (division A of Public Law 119-4) and the Disaster Relief Supplemental Appropriations Act (division B of Public Law 118-158). This level does not include \$2.9 billion in emergency funds provided for 2025 by the Congress that were not designated as emergency by the President since those amounts are not available for obligation.

² Base funding for 2025 includes \$9.4 billion in emergency funds that are largely considered for base activities.

³ Funding for Food for Peace Title II Grants is included in the State and International Programs total. Although the funds are appropriated to the Department of Agriculture, the funds are administered by the U.S. Agency for International Development (USAID).

⁴ The Full 2026 Budget will reflect a proposal to consolidate and unify the Federal wildland fire responsibilities into a single new Federal Wildland Fire Service at the Department of the Interior, including transferring Agriculture's current wildland fire management resources and responsibilities.

⁵ The Administration assumes enactment of a reconciliation bill later this year that will include at least \$325 billion in additional resources (including \$175 billion for border/non-defense and \$150 billion for defense) to supplement certain discretionary activities. For 2026, the Administration assumes a total of \$163.1 billion will be allocation with \$113.3 billion going to the Department of Defense, \$43.8 billion for the Department of Homeland Security, and \$6 billion for NNSA.

⁶ The SSA total includes funding for administrative expenses from the Hospital Insurance and Supplementary Medical Insurance trust funds. Although the funds are appropriated to HHS, the costs are incurred by SSA in support of the Medicare program.

⁷ The State and International Programs total includes funding for the Department of State, USAID, Treasury International, and 11 international agencies while the Treasury total excludes Treasury's International Programs.

⁸ The limitation enacted and proposed in the Justice Department's Crime Victims Fund program, rescissions enacted in the Internal Revenue Service in 2025, and cancellations enacted and proposed in the Children's Health Insurance Program in HHS make up the bulk of these offsets.

⁹ Non-base funding reflects appropriations for anomalous or above-base activities such as emergency requirements, program integrity, disaster relief, and wildfire suppression, or amounts that have been explicitly exempted from counting for budget enforcement in authorization Acts. These amounts continue to be presented outside of base allocations.

¹⁰ The Balanced Budget and Emergency Deficit Control Act of 1985 had authorized an adjustment to the discretionary spending caps for appropriations designated by the Congress as being for "disaster relief" provided those appropriations are for activities carried out pursuant to a determination under the Robert T. Stafford Disaster Relief and Emergency Assistance Act. The 2026 Blueprint maintains the same methodology for determining the funding ceiling for disaster funding for 2026 and OMB currently sets its request at the estimated ceiling of \$26.6 billion.

¹¹ The Infrastructure Investment and Jobs Act funds and Exempted funds are amounts that are not counted for purposes of budget enforcement and are therefore counted as part of non-base funding. The exempted funds include 21st Century Cures appropriations in HHS, the Bipartisan Safer Communities Act advance appropriations, certain revenues provided for the Environmental Protection Agency's Superfund program, and Harbor Maintenance Trust Fund appropriations in the Corps of Engineers.