COMMITTEE ON
ENERGY & COMMERCE
CHAIRMAN FRANK PALLONE, JR.

MEMORANDUM

May 18, 2019

To: Energy and Commerce Committee Members and Staff

Fr: Committee on Energy and Commerce Staff

Re: Full Committee Hearing on "LIFT America: Modernizing Our Infrastructure for the Future"

On **Wednesday, May 22, 2019, at 10 a.m. in the John D. Dingell Room, 2123 Rayburn House Office Building**, the Committee will hold a full committee hearing entitled, "LIFT America: Modernizing Our Infrastructure for the Future."

I. BACKGROUND

A. Title I—Broadband and Next Generation 9-1-1 Infrastructure

Despite industry investment and existing government programs, millions of Americans still lack access to high-speed broadband internet service. The most recent revised estimate by the Federal Communications Commission (FCC) indicates that 21.3 million Americans lack access to broadband.[1] Others, however, challenge that figure, asserting that "162.8 million people are not using the internet at broadband speeds."[2]

As part of the Telecommunications Act of 1996, Congress instructed the FCC to provide universal service support based on the principle that "consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high court areas, should have access to telecommunications and information services."[3] In 2018, the FCC's High-Cost program disbursed $4.8 billion to deliver service in rural areas, including broadband.[4] Even with

[1] Federal Communications Commission, *Revised Draft Broadband Deployment Report Continues to Show America's Digital Divide Narrowing Substantially* (May 1, 2019) (https://docs.fcc.gov/public/attachments/DOC-357271A1.pdf).

[2] Microsoft, *It's Time for A New Approach for Mapping Broadband Data to Better Serve Americans* (Apr. 8, 2019) (blogs.microsoft.com/on-the-issues/2019/04/08/its-time-for-a-new-approach-for-mapping-broadband-data-to-better-serve-americans/).

[3] *See* 47 U.S.C. § 254(a)(2); 47 U.S.C. § 254(b)(3).

[4] Universal Service Administrative Company, *Annual Report* (2018) (www.usac.org/_res/documents/about/pdf/annual-reports/usac-annual-report-2018.pdf).

this support, building out the Internet to many parts of the United States is uneconomical. During the previous Administration, the FCC estimated it would cost an additional $40 billion to extend high-speed broadband internet service to 98 percent of the country with another $40 billion being required to reach the remaining two percent.[5]

According to the 911 Implementation and Coordination Office (ICO), the United States needs Next Generation 911 (NG 911) systems "to ensure that every request for emergency help can be received, located, and responded to."[6] Upgrading to NG 911 will make the nation's 911 system more reliable, resilient, and redundant.[7] NG 911 systems will use internet protocol and broadband to make it possible for first responders to receive data to help them respond to emergencies, including streaming video from callers seeking help and even building plans and blueprints.[8] Congress passed the Next Generation 9-1-1 Act of 2012, which instructs the ICO to provide $115 million in grants to implement NG 911 services.[9] However, the ICO estimates that implementing NG 911 nationwide could cost in excess of $12 billion.[10]

B. Title II—Drinking Water Infrastructure

Our nation's public drinking water systems serve over 300 million people, but aging and failing infrastructure threatens access to safe drinking water in communities large and small. Last year, the Environmental Protection Agency (EPA) released its Sixth Drinking Water Infrastructure Needs Assessment, finding that our water systems will require $473 billion for infrastructure repairs over the next 20 years.[11] EPA has also estimated the drinking water infrastructure costs for water systems serving American Indians and Alaska Native Villages would reach $3.8 billion over the next 20 years.[12]

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[5] Paul de Sa, Chief, FCC Office of Strategic Planning and Policy Analysis, *Improving the Nation's Digital Infrastructure* (Jan. 17, 2017) (www.fcc.gov/document/improving-nations-digital-infrastructure).

[6] 911 Implementation and Coordination Office, *Next Generation 911 Cost Estimate,* at ii (October 2018) (www.911.gov/pdf/Next_Generation_911_Cost_Estimate_Report_to_Congress_2018.pdf).

[7] *Id*. at iii.

[8] *Id* at ii.

[9] Middle Class Tax Relief and Job Creation Act of 2012, Public Law 112-96, §6503 (Feb. 22, 2012). *See also* 47 U.S.C. §1457(b)(6).

[10] *See* note 6 at 46.

[11] U.S. Environmental Protection Agency, *Drinking Water Infrastructure Needs Survey and Assessment* (March 2018) (www.epa.gov/sites/production/files/2018-10/documents/corrected_sixth_drinking_water_infrastructure_needs_survey_and_assessment.pdf).

[12] Id. at 11.

Lead in drinking water also presents a serious public health risk. Lead can enter drinking water through lead service lines, lead solder, and lead fixtures including drinking fountains. EPA is currently working to identify the full inventory of lead service lines nationwide.[13] An estimate by the drinking water industry suggests roughly six million lead service lines are still in use.[14]

The Drinking Water State Revolving Fund (SRF) provides an important funding source to help meet some of these needs. Funds from the SRF are allotted to the states based on a needs survey, with no state receiving less than one percent of the fund.[15] Each state then administers its fund according to an approved intended use plan, providing loans to public water systems at below-market interest rates.

In 2018, Congress passed the America's Water Infrastructure Act of 2018, which reauthorized the drinking water SRF for the first time in more than 20 years and created several additional drinking water infrastructure programs. These programs include targeted assistance for water systems serving American Indians, assistance for drinking water systems to adapt to climate change, and programs targeting lead service lines and fixtures.[16]

C. Title III—Clean Energy Infrastructure

In April 2015, the Department of Energy's (DOE) Quadrennial Energy Review (QER) warned against a "lack of timely investment in refurbishing, replacing, and modernizing components of [U.S. energy] infrastructure that are simply old or obsolete."[17] A subsequent installment of the QER reaffirmed the need to invest in U.S. energy infrastructure, noting, "Grid modernization is the platform for the 21st-century electricity system."[18] The QER recommended numerous measures to address current and foreseeable challenges across the U.S. energy system,

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[13] U.S. Government Accountability Office, *Drinking Water: Approaches for Identifying Lead Service Lines Should Be Shared with All States* (September 2018) (www.gao.gov/assets/700/694648.pdf).

[14] American Water Works Association, *National Survey of Lead Service Line Occurrence* (April 2016) (http://media.mlive.com/news_impact/other/jaw201604cornwell_pr.pdf).

[15] 42 U.S.C. 300j-12.

[16] America's Water Infrastructure Act, Public Law 114-322.

[17] U.S. Department of Energy, *Quadrennial Energy Review: Energy Transmission, Storage, and Distribution Infrastructure* (April 2015).

[18] U.S. Department of Energy, *Transforming the Nation's Electricity System: The Second Installment of the QER* (January 2017) (www.energy.gov/epsa/quadrennial-energy-review-second-installment).

including investing in transportation and building efficiency and electrification, smart grid technology, distributed energy resources, and critical energy infrastructure. DOE found that these and other investments would enhance grid reliability and resiliency, reduce carbon pollution, create high-quality jobs, and lower costs for consumers.[19] That conclusion bolsters findings of the National Academies of Sciences,[20] the International Energy Agency,[21] and the International Renewable Energy Agency,[22] which have each emphasized the need for greater investment in clean energy infrastructure.

D. Title IV—Health Care Infrastructure

Although Americans spend more per capita on health care than any other country,[23] less than three percent of health care spending goes to public health.[24] Research suggests that the imbalance in clinical care compared to public health services leads to inefficiencies in the health system and vulnerabilities for the health and wellbeing of Americans.[25] Public health data systems at the Centers for Disease Control and Prevention (CDC) and in public health departments are antiquated, often relying on phone calls, faxes, and handwritten documents from physicians to communicate urgent information regarding disease outbreaks and other information critical for population health.

Many hospitals face ongoing technological challenges with cybersecurity and are similarly unprepared for natural disasters or catastrophic health events. Meanwhile, the Hill-Burton Act, which provides hospitals and other facilities with construction and maintenance funding in exchange for an agreement to provide free and reduced-cost health care, has not

[19] *See* notes 16 and 17.

[20] National Academy of Sciences, *The Power of Change: Innovation for Development and Deployment of Increasingly Clean Electric Power Technologies* (September 2016).

[21] International Energy Agency, *World Energy Investment 2019* (May 2019).

[22] International Renewable Energy Agency, *Global Energy Transformation: A Roadmap to 2050 (2019 Edition)* (April 2019).

[23] World Bank, *Current Health Expenditure Per Capita* (2016) (https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD?most_recent_value_desc=true).

[24] David Himmelstein & Steffie Wolhandler, *Public Health's Falling Share of US Health Spending*, 106 Am. J. Pub. Health 1, 56.

[25] INSTITUTE OF MEDICINE COMMITTEE ON PUBLIC HEALTH STRATEGIES TO IMPROVE HEALTH BOARD ON POPULATION HEALTH AND PUBLIC HEALTH PRACTICE, FOR THE PUBLIC'S HEALTH: INVESTING IN A HEALTHIER FUTURE 9 (2016).

provided maintenance or construction funds to any facilities since 1997.[26] Crumbling health infrastructure is especially prevalent in the Indian Health Service (IHS), where most facilities have reported that "old or inadequate physical environments challenged their ability to provide quality care and maintain compliance" with hospital standards.[27]

E. Title V—Brownfields Redevelopment

The Brownfields program was originally established by EPA in conjunction with the agency's work to implement the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), and was formally authorized in 2002.[28] The program was reauthorized in 2018 through the Brownfields Utilization, Investment, and Local Development (BUILD) Act, which extended the program without raising authorization levels.[29]

EPA and Congress created the program to assist communities with the cleanup of brownfields sites, defined as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."[30] The program primarily focuses on properties that are abandoned or underutilized and are not addressed under other federal remediation authorities.[31]

Cleanup of brownfields sites encourages economic redevelopment and reduces exposure to harmful contaminants. Cleanup of brownfields properties can also increase nearby property values (between $500,000 and $1.5 million for properties within one mile), increase efficiency, and decrease pollution.[32] Every EPA brownfields dollar spent leverages $16.11 on average. As

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[26] Health Resources and Services Administration, *Hill-Burton Free and Reduced-Cost Health Care* (April 2019) (https://www.hrsa.gov/get-health-care/affordable/hill-burton/index.html).

[27] OFFICE OF INSPECTOR GENERAL, DEPT. OF HEALTH & HUMAN SVCS., OEI-06-14-00011, INDIAN HEALTH SERVICE HOSPITALS: LONGSTANDING CHALLENGES WARRANT FOCUSED ATTENTION TO SUPPORT QUALITY CARE (October 2016).

[28] The Small Business Liability Relief and Brownfields Revitalization Act, Public Law 107-118 (2002).

[29] Division N of Consolidated Appropriations Act, 2018 (Public Law 115-141).

[30] *Id*.

[31] Congressional Research Service (CRS), *Comprehensive Environmental Response, Compensation, and Liability Act: A Summary of Superfund Cleanup Authorities and Related Provisions of the Act* (June 14, 2012) (R41039).

[32] U.S. Environmental Protection Agency (EPA), *Brownfields Program Accomplishments and Benefits* (Mar. 30, 2017) (www.epa.gov/brownfields/brownfields-program-accomplishments-and-benefits).

of January 1, 2017, the program has leveraged more than $22.5 billion and more than 117,000 jobs.

At the time the Brownfields Act was adopted, there were an estimated 450,000 brownfields properties. According to EPA figures, more than 25,000 properties have been assessed and nearly 64,000 acres have been revitalized throughout the lifetime of the program.

II. SUMMARY OF H.R. 2741, THE "LEADING INFRASTRUCTURE FOR TOMORROW'S AMERICA ACT" (THE "LIFT AMERICA ACT")

Title I—Broadband and Next Generation 911 Infrastructure

Subtitle A. Broadband Internet Access Service Programs

This subtitle would fund **$40 billion in high-speed broadband internet buildout across the country**. The Federal Communications Commission (FCC) estimates indicate that $40 billion in funding is necessary to complete broadband internet service deployment so that 98 percent of the country has access to high-speed, reliable broadband.

Three-fourths of the funds would be awarded by the FCC through a national reverse auction, a mechanism that ensures efficient distribution of the funds to areas that have no broadband internet service today. By using a reverse auction, the LIFT America Act would deploy high-speed broadband internet service to the largest portion of America at the lowest cost by requiring bidders seeking federal subsidies to compete to serve areas that are not served today.

The FCC would be required to allocate to states the remaining one-fourth of the funds under Title I, which authorizes the FCC to conduct similar reverse auctions to build out broadband internet infrastructure in unserved areas, or to unserved anchor institutions such as schools or libraries. If a state has no unserved areas, the state may conduct a reverse auction to build out to underserved areas.

Subtitle B. Next Generation 9-1-1

This subtitle would authorize the Next Generation 9-1-1 Implementation Coordination Office to provide **$12 billion in grants over five years for the implementation of Next Generation 9-1-1 services**. Next Generation 9-1-1 service would protect American lives by making 9-1-1 service more resilient and by allowing callers to send text messages, images, or videos to 9-1-1 to help first responders better assess the nature of emergencies and protect callers when they cannot speak to 9-1-1 dispatchers.

Subtitle C. Broadband Infrastructure Finance and Innovation

This subtitle would create the Broadband Infrastructure Finance and Innovation Act (BIFIA) program at the National Telecommunications and Information Administration. This

title would authorize **$5 billion in federal funding for the BIFIA program to make low-interest financing available for broadband infrastructure deployment projects**.

BIFIA is modeled after two similarly authorized infrastructure programs, which were created under the Water Infrastructure Finance and Innovation Act (WIFIA) and the Transportation Infrastructure Finance and Innovation Act (TIFIA), respectively. Under the BIFIA program, a wide range of eligible entities, including State and local governments, private companies, and public-private partnerships that could apply for secured loans, lines of credit, or loan guarantees to finance broadband infrastructure build out projects.

Title II—Drinking Water Infrastructure

Subtitle A. Providing Financial Assistance for Safe Drinking Water Act

This subtitle would amend the Safe Drinking Water Act to require the Environmental Protection Agency (EPA) Administrator to establish, within 180 days of enactment, a program to award grants to water systems affected by contamination from per- or polyfluoroalkyl substances (PFAS) to pay the capital costs associated with eligible treatment technologies. These grants would provide up to **$2.5 billion over five years to affected water systems to combat PFAS contamination**. The legislation further directs the EPA Administrator to create a list of eligible treatment technologies, defined as those that can remove all detectable amounts of PFAS from drinking water.

Subtitle B. Additional Drinking Water Funding

The LIFT America Act includes provisions to extend and increase authorizations of **$18.69 billion for essential drinking water programs** including the Safe Drinking Water State Revolving Loan Fund, the Indian Reservation Drinking Water Program, School and Child Care Program Lead Testing grants, Lead Drinking Fountain Replacement, Community Water System Risk and Resilience grants, and Public Water System Supervision grants to states. This subtitle also extends Buy American requirements for drinking water projects along with the funding extension.

Title III—Clean Energy Infrastructure

Subtitle A. Grid Security and Modernization

This subtitle provides **$4 billion over five years for electric grid infrastructure, focused on grid modernization, security, resiliency, and efficiency**. Funds will support infrastructure improvements to enhance energy security, deployment of smart grid technology, and efficiency upgrades. This subtitle includes funding to establish a strategic transformer reserve, to speed electric grid recovery following extreme weather events. It also includes a study on needs and challenges to expanding interregional transmission.

Subtitle B. Energy Efficiency Infrastructure

This subtitle includes several programs to cut energy usage, benefit consumers, and address climate change. The subtitle provides **$1.85 billion over five years for home and school energy efficiency retrofits**. These retrofits will save consumers and school systems money and remove dangerous lighting containing PCBs from school environments.

This subtitle **reauthorizes the Diesel Emissions Reductions Act, providing $1.25 billion over five years to reduce emissions from older vehicles including school buses**.

The subtitle also provides **$1.75 billion over five years in weatherization grants and programs to promote smart buildings and $15 million for a pilot program to promote energy efficient water distribution systems**.

This subtitle provides grants to states, local governments, and Indian tribes to support their efforts to reduce fossil fuel emissions and conserve energy. The bill **reauthorizes the Energy Efficiency and Conservation Block Grant program to provide $17.5 billion**, including funding to deploy infrastructure for delivering alternative fuels (including electricity). And, it provides **$500 million to support improvements to energy performance of public buildings**.

Subtitle C. Energy Supply Infrastructure

This subtitle will strengthen existing energy supply infrastructure and expand renewable energy infrastructure to increase climate resiliency and reduce greenhouse gases. To strengthen existing infrastructure, the subtitle provides **$1.5 billion in assistance for low-income communities to support methane pipeline replacement**. It also provides **$4 billion for improvements to the Strategic Petroleum Reserve to make it environmentally sound**. The subtitle also establishes Northeast and Southeast refined product reserves and provides the Secretary authority to establish other regional reserves to mitigate the impacts of extreme weather events on fuel supplies.

To expand renewable energy infrastructure, the subtitle provides **$2.25 billion over five years to create new grant programs for distributed energy systems and solar installations in low-income and underserved communities.**

The subtitle also increases the authorization for the Office of Indian Energy Programs at the Department of Energy to provide additional assistance to ensure reliable, affordable power for Indian communities.

Subtitle D. Smart Communities Infrastructure

This subtitle provides **$850 million over five years to spur the development of Smart Communities infrastructure** through technical assistance, grants, and training. This section authorizes the Department of Energy's proposed Cities, Counties, and Communities energy

program to provide technical assistance and competitive grants for clean energy solutions in development and redevelopment efforts. It also funds technical assistance to be provided by the national labs to cities and towns looking to deploy smart community infrastructure. Lastly, this subtitle expands the Department of Commerce smart cities demonstration project to include small and medium cities and towns.

The subtitle also authorizes the **Clean Cities Coalition Network Program with $300 million over five years** that supports expanded development of alternative fuel infrastructure and expanded use of alternative fuel vehicles.

The subtitle also provides **$625 million over five years to reauthorize the State Energy Program and provides additional funds through this program to support the development of an electric vehicle charging network to facilitate greater use of electricity to fuel the transportation sector**.

The subtitle also includes policy changes to accelerate electrification of the transportation sector. It reauthorizes **$925 million over five years to provide grants to state and local governments to support projects that encourage the use of electric vehicles.**

Title IV—Health Care Infrastructure

Subtitle A. Hospital Infrastructure

The LIFT America Act reauthorizes the Hill-Burton Act to provide **$2 billion over five years for hospital infrastructure**. The reauthorization will expand access to care nationwide and promote security by design for hospital networks, records databases, and interconnected devices. The reauthorization will also ensure the use of American iron and steel in funded projects.

Subtitle B. Indian Health Service Healthcare Infrastructure

This subtitle provides **$1 billion over five years for healthcare infrastructure projects** through the Indian Health Service to continue progress in reducing health disparities across Indian Country.

Subtitle C. Laboratory Infrastructure

This subtitle creates a **pilot program and provides $100 million to support laboratory infrastructure**, including state laboratories involved in combating the spread of infectious diseases.

Subtitle D. Infrastructure for Community Based Care

This subtitle creates a **pilot program and provides $100 million to fund infrastructure development for community-based care**, including teaching health centers and mental health care centers.

Subtitle E. Public Health Infrastructure

This subtitle enhances and modernizes the Center for Disease Control and Protection's (CDC) ability to coordinate with state, local, tribal, and territorial health departments. This includes **$500 million over five years to improve the capabilities of CDC and public health departments relating to information technology, data, and data systems, as well as an additional $3.75 billion over five years to improve core public health infrastructure at CDC and public health departments.** Core public health infrastructure includes workforce capacity and competency, laboratory systems, health information systems, communications, financing, and other relevant components.

Title V—Brownfields Redevelopment

This title provides **$2.7 billion over five years for EPA's Brownfields redevelopment grants**.

III. Witnesses

The following witnesses have been invited to testify:

Ms. Mignon L. Clyburn
Principal, MLC Strategies, LLC

Mr. John Auerbach, MBA
President and CEO
Trust for America's Health

Ms. Jessica Eckdish
Legislative Director
BlueGreen Alliance

The Honorable Brian C. Wahler
Mayor, Piscataway Township, New Jersey
On behalf of the U.S. Conference of Mayors

Mr. Daniel Lyons
Visiting Fellow
American Enterprise Institute (AEI)

Mr. Christopher Guith
Acting President
Global Energy Institute
U.S. Chamber of Commerce