Report Analyzing the Allocation of Funding for Lead Service Line Replacement in Northeast and Midwest States Under the Infrastructure Investments and Jobs Act

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The Infrastructure Investments and Jobs Act (IIJA) has added a \$15 billion sub-fund to the preexisting Drinking Water State Revolving Fund (SRF) program specifically for lead service line (LSL) identification and replacement projects. This federal investment promises to help local communities remove these public health threats; however, the current allocation formula could be modified to more effectively direct funding toward states with higher rates of lead pipe presence.

Issue Background

The recently passed IIJA, also referred to as the Bipartisan Infrastructure Law (BIL), created historic funding opportunities for states and local communities to address the public health risks associated with exposure to lead. Those most vulnerable to the neurotoxic effects of this heavy metal include children, who may develop learning and cognitive impairments as well as slowed growth. Adults who are exposed to high rates of lead are at increased risk for fertility, heart, and kidney issues.

Rural and urban communities are at heightened risk for the presence of lead pipes due to their high concentrations of low-income families and older houses. These factors have led to health disparities for these communities, but most LSL removal efforts have failed to address the administrative and financial obstacles which limit the ability for homeowners to replace lead pipes. For example, LSL removal projects have historically focused on providing funds to replace publicly owned lead pipes, leaving residents with the burden of paying for the replacement of LSL's located on private property. For many low income families, these costs are infeasible, leaving them aware of the issue but unable to address it. Additionally, there are many rural and urban communities that lack complete inventories of LSL's present in the community due to the high costs associated with such mapping and cataloging projects.

In comparison to other American regions, the 18 states which represent the Northeast and Midwest are disproportionately overburdened by lead service lines due to aging infrastructure and houses. According to estimates from a <u>survey</u> conducted by the National Resource Defense Council, 8 of the 10 states containing the most LSL's (IL, IN, OH, MI, MN, NJ, NY, WI) are located in the Northeast and Midwest, accounting for up to 65% of the country's total lead pipe inventory. That same study also found that, when considering the number of LSL's per 100k people, 11/15 of the most disproportionately affected states are located in these two regions.

LSL Provisions in the BIL

The Bipartisan Infrastructure Law contains multiple sections specifically pertaining to the topics of LSL mapping, removal, technical training, and public education. One section, for example, addressed the issue of replacing privately owned pipes connected to public service lines. The IIJA now requires municipalities to replace private lead service lines at no additional cost to residents when performing replacements on connected public service lines. The IIJA also expanded project and recipient eligibility criteria for programs such as the Voluntary School and Childcare Lead Testing Grant Program and Grants for Emergencies Affecting Public Water Systems. The former program is slated to receive yearly increasing appropriations, from \$25 million in FY21 to \$50 million in FY26.

The primary mechanism by which the IIJA helps states finance local lead mapping and removal projects is by increasing federal funding for the EPA's State Revolving Fund (SRF) programs, such as the Drinking Water State Revolving Fund (DWSRF). This pool of funds is expected to receive yearly increases over the next four years, increasing from \$1.95 billion in FY21 to \$3.25 billion in both FY25 and FY26. States may choose to use funds from the DWSRF to finance lead related projects, but the IIJA also created a new supplemental fund specifically for LSL projects. The new LSL SRF program, funded at \$3 billion per year for FY22-FY26, grants environmental agencies in each state, D.C., and Puerto Rico funding to provide below market interest rate loans for projects which decrease public lead exposure. These initial EPA capitalization grants typically require states to contribute a 20% match before funds can be accessed, but in order to provide increased flexibility to states, Congress has waived this requirement for FY22-FY26.

SRF Spending Analysis

The Lead Service Line DWSRF program is the main funding mechanism employed by the Bipartisan Infrastructure Law to begin managing the threat of lead pipes. As such, it is important to analyze how this spending is being dispersed among states to ensure equitable benefits for every state and region.

Table 1 lists all fifty states, alongside Puerto Rico and Washington, D.C., in order from greatest to least total funding for the FY22 LSL SRF program. Five of the ten most funded states in this table (IL, MI, NY, OH, PA) are located in the Northeast and Midwest regions. There was a limit of \$28,275,000 set for the lowest amount of funding a state could be allocated for FY22, and six of the Northeast-Midwest states (CT, DE, NH, ME, RI, VT) were allotted that minimum. As such, these six states share a last place rank of 34th in the table.

Considering the region as a whole, Table 3 indicates that the 18 Northeast-Midwest states, which make up approximately 35% of the 52 included states, received 34.63% of the total national funding for the lead pipe SRF. This shows that, on an aggregate basis, the

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¹ Approximately \$125 million are also allocated between Guam, American Samoa, and the American Virgin Islands. As such, \$2,785,087,000 is used to calculate percentages for states, Puerto Rico, and D.C., but \$3 billion is quoted for ease of discussion

Northeast-Midwest region as a whole has received a proportional share of the funds. Furthermore, the average Northeast-Midwest state was allocated \$53,578,833, only slightly higher than the national average of \$53,559,365 per state. It should again be noted that there is great variability of funding for individual states within the region.

Table 2 analyzes the states of the Northeast and Midwest regions more closely to consider their funding on a per capita basis, as well. When adjusted for population, we see many of the states that initially ranked lowest for total aggregate spending lead the nation for dollars invested per person. For example, five states (DE, ME, NH, RI, VT) that received the national minimum total amount are among the 10 highest funded states per capita. This is due to the fact that the majority of these small states are less populated, thus meaning that the benefits of the EPA's grant are split amongst fewer people.

To contrast this hopeful finding in some states, the same population-based adjustment resulted in 6 Northeast-Midwest states (IN, MI, NJ, NY, OH, PA) being ranked among the ten lowest funded states per capita. It is highly alarming that so many of these states are not receiving an equitable distribution of funds based on population, especially given the fact that an already disproportionate number of residents are being impacted by lead service lines. Table 3 also indicates that the per capita allotment for residents of all 18 Northeast-Midwest states is \$13.31, slightly below a national average of \$13.63

Policy Recommendations

Supplemental funding established under the BIL for the Drinking Water State Revolving Fund program is set to last through FY26. While this temporary boost to the program is sure to create positive impacts on water infrastructure in all states, there are steps which federal, state, and local governments alike can take to ensure that the lead service line replacement sub-fund effectively prioritizes heavily impacted communities.

Consider States' Share of LSL Burden During Funding Process

The formula which the EPA employed to calculate each state's funding for the FY22 LSL SRF program failed to account for the fact that some states are more heavily impacted by lead service lines than others. In 2022, each state was automatically allotted approximately 1.57 times their allocated DWSRF amounts in supplemental funding to finance LSL removal projects. States' DWSRF allocations, however, were based off of a 2018 Infrastructure Needs Survey and Assessment which did not require states to report how many lead service lines were present in their municipalities. As a result, there is no accounting for each state's share of the national burden of lead pipes in the formulas which determine how much funding they receive for LSL removal.

Adjust the LSL State Revolving Fund Allocation Formula for FY 23-26

It is crucial for the federal government to revise the LSL SRF formula to account for the number of lead pipes present in each state. This report by the Metropolitan Planning Council—a non-profit organization located in the heavily burdened Chicagoland region—reassesses the amount of money each state should be receiving under the new LSL SRF based on the state's

estimated total number of lead pipes. This assessment finds that a number of Northeast and Midwest states are currently being underfunded by the BIL given current needs. If the \$3 billion per year in LSL removal funds were redistributed based on need, ten Northeast and Midwest states would receive allotments larger than what they received in 2022 (IA, IL, IN, MA, MI, MN, NJ, NY, OH, WI). Some state officials like Kim Biggs, spokeswoman for the Illinois Environmental Protection Agency, have expressed concern over this disparity, stating that the office is "advocating to U.S. EPA for a more proportionate distribution of the funds." A number of officials in other states, however, remain unaware of the issue and how it could impact their own LSL removal efforts.

Prioritize State and Local LSL Inventory Projects

Local and state governments can do their part in efficiently directing LSL removal funds to communities in need by prioritizing lead pipe inventory and mapping projects. A major barrier to lead service line removal projects and equitable funding allocation is incomplete knowledge on the exact quantity and location of lead pipes. By creating local and state maps of LSL locations, the EPA will be able to make more well-informed decisions that prioritize funding for states and communities with increased rates of lead exposure. States will also be able to reference these resources when selecting which projects to prioritize for DWSRF funds.

Useful Resources

<u>NEMWI Report on Lead</u>—This report attempts to capture the response to the Flint water crisis in the Northeast-Midwest region.

<u>EPA's BIL SRF Memorandum</u>—Outlines a strategy for collaborative implementation with state, local, and Tribal partners.

White House IIJA Homepage—A hub for resources pertaining to all aspects of the Infrastructure Investment and Jobs Act.

<u>FACT SHEET: The Biden-Harris Lead Pipe and Paint Action Plan</u>—This fact sheet outlines the current administration's goals for reducing lead exposure in American water and homes.

Table 1-LSL SRF Allotments by State

Table 1-Lot o	2022 LSL	2022 Per		2022 LSL SRF	2022 Per Capita
	<u>SRF</u>	<u>Capita</u>		Allotment (\$)	Allotment (\$)
<u>State</u>	Allotment (\$)	Allotment (\$)	State cont.	<u>cont.</u>	<u>cont.</u>
California	249,447,000	6.36	Louisiana	42,321,000	9.15
Texas	221,567,000	7.50	Oklahoma	40,085,000	10.05
New York	115,475,000	5.82	Oregon	37,201,000	8.76
Florida	111,306,000	5.11	South Carolina	36,618,000	7.05
Illinois	106,681,000	8.42	Kansas	32,804,000	11.18
Pennsylvania	87,065,000	6.72	Nevada	32,777,000	10.43
North Carolina	86,831,000	8.23	Mississippi	30,438,000	10.32
Ohio	71,111,000	6.04	Alaska	28,275,000	38.59
Michigan	69,409,000	6.91	Connecticut	28,275,000	7.84
Georgia	66,632,000	6.17	Delaware	28,275,000	28.18
Massachusetts	65,609,000	9.39	D.C.	28,275,000	42.20
Washington	63,168,000	8.16	Hawaii	28,275,000	19.614
Alabama	60,953,000	12.09	ldaho	28,275,000	14.87
Colorado	55,866,000	9.61	Maine	28,275,000	20.60
Maryland	51,797,000	8.40	Montana	28,275,000	25.61
Arizona	50,851,000	6.99	Nebraska	28,275,000	14.40
Missouri	49,848,000	8.08	New Hampshire	28,275,000	20.36
Tennessee	49,113,000	7.04	New Mexico	28,275,000	13.36
New Jersey	48,257,000	5.21	North Dakota	28,275,000	4.95
Wisconsin	48,191,000	8.17	Puerto Rico	28,275,000	8.66
Kentucky	46,593,000	10.33	Rhode Island	28,275,000	25.81
Virginia	46,134,000	5.34	South Dakota	28,275,000	31.58
lowa	44,794,000	14.03	Utah	28,275,000	8.47
Indiana	43,219,000	6.35	Vermont	28,275,000	43.80
Minnesota	43,161,000	7.56	West Virginia	28,275,000	15.86
Arkansas	42,540,000	14.06	Wyoming	28,275,000	48.85

^{*}States are listed in descending order of total aggregate funding

Table 2-LSL SRF Allotments for Northeast-Midwest States

NEMW State	2022 LSL SRF Allotment (\$)	National Rank 1-34 (total funding)	2022 Per Capita Allotment (\$)	National Rank 1-52 (Per Capita Funding)
Vermont	28,275,000	34	43.80	2
Delaware	28,275,000	34	28.18	6
Rhode Island	28,275,000	34	25.81	7
Maine	28,275,000	34	20.60	9
New Hampshire	28,275,000	34	20.36	10
lowa	44,794,000	23	14.03	16
Massachusetts	65,609,000	11	9.39	25
Illinois	106,681,000	5	8.42	30
Maryland	51,797,000	15	8.40	31
Wisconsin	48,191,000	20	8.17	33
Connecticut	28,275,000	34	7.84	36
Minnesota	43,161,000	25	7.56	37
Michigan	69,409,000	9	6.91	42
Pennsylvania	87,065,000	6	6.72	43
Indiana	43,219,000	24	6.35	45
Ohio	71,111,000	8	6.04	47
New York	115,475,000	3	5.82	48
New Jersey	48,257,000	19	5.21	50
TOTAL	964,419,000			

^{*}States are listed in descending order of per capita funding

Table 3-Comparison of Northeast-Midwest States to National Averages

Avg Allotment per State (U.S.):	(U.S. Total / 52 States)	\$53,559,365.38
Avg Allotment per State (NEMW):	(Sum of NEMW States / 18 States)	\$53,578,833.33
Avg Allotment Per Capita (U.S.):	(U.S. Total / U.S. population)	\$13.63
Avg Allotment Per Capita (NEMW):	(NEMW total / NEMW Population)	\$13.31
NEMW Portion of Total:	(NEMW total / U.S. Total)	34.63%

Additional References:

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