

ENVIRONMENTAL JUSTICE GRANT

Bullet Points

- Title of grant: Using Artificial Intelligence to Reduce Lead Exposure and Promote Environmental Justice.
- Funding Period: October 2020 to October 2022.
- Funding Amount: \$200,000. There is no cost share or match requirement. Our partner and sub-awardee, Blue Conduit, will receive \$120,000 for their work using Artificial Intelligence (AI); Supplies, which include filters, are budgeted at \$30,000; the other sub awardees will receive a total of \$50,000.
- Goal of project: use technology and existing parcel and neighborhood-level data to identify lead service lines (LSLs) with a high degree of probability and use this information to prioritize homes for line replacements, thereby significantly reducing lead exposure. This technology has been successfully implemented in Flint, MI, and other communities in the US and Canada.
- The objective of this project is to generate actionable data (database based on parcel information and a representative sample of homes) that will help the City to accelerate the removal and replacement of lead service lines of drinking water systems, especially in high-risk areas.
- This technology will help DPU to identify which homes should receive targeted education, water filters and ultimately the prioritization of the Lead Service Lines (LSL) replacement program. This project will also include an education component targeted to residents at high-risk with the goal of minimizing resident lead exposure.
- Partners on this project are The City, BlueConduit, Freshwater Future, The University of Toledo, Toledo-Lucas County Health Department and other local partners will work on this project with the goal of reducing lead exposure, through well-tested, data-driven prioritization techniques. It combines the technical task of identifying lead lines, conducted by Blue Conduit, with a community education effort, to be implemented by the non-profit group, Freshwater Future.

Freshwater Future is a catalyst for community action that strengthens policies designed to safeguard the waters of the Great Lakes region. Freshwater Future will engage the residents and leaders in the targeted communities to ensure the messengers, messages, and methods are each best suited to each area. <https://freshwaterfuture.org/>.

- The six communities were selected based on their participation in past sustainability initiatives and activities that DPU has carried out or are on-going. These activities and initiatives include reducing blight, incorporating green infrastructure to reduce flooding, improve water quality and provide habitat for wildlife:
 - Monroe-Auburn
 - Old West End
 - East Toledo
 - Southside Toledo
 - Junction Coalition
 - North River (Vistula Neighborhood)

At the end of this project, we will have a database of home-specific infrastructure generated to locate lead service lines that can be a tool used by the City and the Toledo/Lucas County Health Department to prioritize and evaluate other public health

interventions. The information will also be available to the Department of Neighborhoods for their Lead Program.