UMassAmherst | School of Public Policy

SPP 609 WORKSHOP
ARLINGTON CASE PROFILE
MARCH 2026

Town of Arlington Networked Geothermal

Case profile documenting Arlington's networked geothermal feasibility study, policy context, implementation barriers, and community engagement record.

LOCATION	PROJECT TYPE	CURRENT STATUS
Arlington, Middlesex County, Massachusetts	**Community (HEET Kickstart)**	**Feasibility completed**

LEAD ORGANIZATION	SYSTEM SCALE	ESTIMATED COST
Town of Arlington	**2 buildings served, 153 boreholes at 500 feet, 460 tons**	**$17.1M gross, $9.9M net**

KEY OBSTACLE

No identified construction funding

PROJECT DESCRIPTION

Arlington is studying a networked geothermal system in East Arlington that would serve Thompson Elementary School and the Arlington Housing Authority's Menotomy Manor housing complex.[1] Brightcore's feasibility study concluded that a 153-bore system paired with supplemental cooling equipment could be installed in North Union Park to heat and cool both sites for decades to come.[1]

The site was chosen because the school and housing development serve many low-income families with children, the area sits in a state-designated environmental justice block group, and both facilities are described as ripe for electrification because their gas-based heating systems will need replacement in coming years.[1,5] The record therefore frames Arlington as both a decarbonization project and an equity-oriented public-infrastructure project.[2,5]

KEY ACTORS AND GOVERNANCE

The Town of Arlington leads the project, with a core team including the Sustainability Manager, Environmental Planner/Conservation

TIMELINE

March 5, 2024: Kickstart grant announced by the Town

October 2024: Public "Geo Power" forum

February 24, 2025: Feasibility report delivered

POLICY ANCHOR

Arlington's 2021 Net Zero Action Plan directs the Town to partner with utilities and others to promote pilot neighborhood-scale shared ground source heat pump projects.[8]

NEXT STEP

Agent, and a graduate fellow during the feasibility process.[1,5] Arlington Public Schools and the Arlington Housing Authority are essential institutional partners because they control the two buildings that would be served by the geothermal system, while staff from Planning & Community Development and Diversity, Equity & Inclusion helped shape outreach.[5] HEET administered the Kickstart grant and supported peer learning across municipalities, while Brightcore Energy served as the feasibility consultant selected through competitive procurement.[1,5]

Governance is therefore municipal and partnership-driven rather than utility-led. That distinguishes Arlington from cases such as Framingham and Lowell, where utility structure is more central to the deployment pathway.[4]

FUNDING AND COSTS

The feasibility study estimates a gross project cost of about $17.1 million, including $5.9 million for borefield drilling and ground heat exchanger installation, $2.2 million for lateral piping, $6.5 million for Thompson retrofits, and $2.5 million for Menotomy Manor retrofits.[1] Assuming eligibility for the federal Investment Tax Credit and Mass Save incentives, the report estimates a net cost of about $9.9 million.[1]

Projected annual savings of about $302,000 and annual carbon reductions of 307 tons are calculated against an air-source heat pump alternative, not against continued gas heating, which is an important analytic caveat.[1] The central funding issue is that the $50,000 Kickstart grant paid only for feasibility; construction funding had not been identified in the public record at the time of review.[2,5]

PERMITTING AND APPROVALS

The feasibility report identifies several key approvals: an NPDES permit for drilling discharge, a hydrant permit, a local boring permit, and a street occupancy or trench permit if piping crosses the public right-of-way.[1] No permits have been obtained because the project remains at the feasibility stage.[1]

Arlington is a useful case because it shows an institutional mismatch between existing local procedures and network geothermal scale: the town's boring permit fee structure is written for up to three borings plus added units, not a 153-bore community system.[1] That does not block the project by itself, but it illustrates how local permitting frameworks are not yet designed around this technology.

COMMUNITY ENGAGEMENT AND EQUITY

Secure capital funding and a credible implementation pathway for construction.

Arlington's engagement record is relatively strong for a feasibility-stage project. Initial outreach involved one-on-one and small-group conversations with town staff, Arlington Public Schools, the Arlington Housing Authority, and the Recreation Department, followed by tabling at the Electrify Arlington Fair, summer Farmers Markets, National Night Out, Town Day, a public "Geo Power" forum, and a community education class on geothermal.[5]

HEET's summary reports that those engaged were generally highly interested, while institutional stakeholders focused on two practical concerns: who would pay for the project and whether operating costs would increase.[5] Project materials also note that Thompson and Menotomy Manor are both public entities, which could simplify ownership and operation relative to a mixed-ownership neighborhood buildout.[1,5] Equity is not incidental in this case. The project was framed around an environmental justice neighborhood, affordable housing residents who pay their own utility bills, and a public school serving local families.[5]

WHY THIS CASE MATTERS

Arlington shows how a municipality can move networked geothermal from policy goal to defined feasibility-stage project. The Town's Net Zero Action Plan provides the policy basis, and the proposed system links a public school and affordable housing site in an environmental justice neighborhood.[8,5] The record also shows sustained engagement during the study and continued interest from the Town, Arlington Public Schools, and the Arlington Housing Authority after the feasibility report was delivered.[5] It does not yet show a public commitment to fund or build the system.

Sources

1. Brightcore Energy LLC, "Town of Arlington Networked Geothermal Feasibility Study: Final Report," February 24, 2025. PJ1_Feasibility_01.pdf
2. Town of Arlington, "Arlington Awarded $50K Grant to Study Networked Geothermal," March 5, 2024. PJ1_Town_Press_Release_03.pdf — https://www.arlingtonma.gov/Home/Components/News/News/13983/16
3. Kim Haase, "Arlington wins $50k grant to study networked geothermal systems," *YourArlington*, March 31, 2024. PJ1_News_Article_04.pdf — https://yourarlington.com/2024/03/energy-30724/
4. Catherine Brewster, "Networked geothermal energy — what it is, where it might someday be, why it matters," *YourArlington*, July/August 2024. PJ1_News_Article_05.pdf — https://yourarlington.com/2024/08/geothermal-070824/
5. HEET, "Kickstart Project Summaries — Arlington," 2025. PJ1_HEET_Kickstart_Summary_06.pdf — https://www.heet.org/kickstart-project-summaries
6. HEET, "13 Massachusetts Communities Kickstart New Geothermal Networks with $450,000 in Funding from MassCEC," February 29, 2024. PJ1_HEET_Blog_Post_08.pdf — https://www.heet.org/blog-items/13-massachusetts-communities-kickstart-new-geothermal-networks-with-450-000-in-funding-from-masscec
7. HEET, "Kickstart Massachusetts Communities Provide their Thermal Energy Feasibility Studies to HEET," March 12, 2025. PJ1_HEET_Blog_Post_07.pdf — https://www.heet.org/blog-items/kickstart-massachusetts-communities-provide-

their-thermal-energy-feasibility-studies-to-heet

8. Town of Arlington, *Net Zero Action Roadmap*, 2021. PJ1_NZAP_09.pdf — https://www.arlingtonma.gov/home/showdocument?id=53494
9. Town of Arlington DPCD, "DPCD Update," September 12, 2024. PJ1_DPCD_Update_10.pdf — https://www.arlingtonma.gov/Home/Components/News/News/14476/
10. Town of Arlington Clean Energy Future Committee, Meeting Minutes, September 27, 2024. PJ1_CEFC_Minutes_15.pdf (URL not yet located)
11. Town of Arlington Select Board, Meeting Minutes and Agenda/Packet, October 7, 2024. PJ1_Select_Board_Minutes_13.pdf / PJ1_Select_Board_Agenda_14.pdf (URL not yet located)
12. Town of Arlington Clean Energy Future Committee, Meeting Minutes, May 23, 2025. PJ1_CEFC_Minutes_11.pdf — https://www.arlingtonma.gov/home/showpublisheddocument/74814
13. Town of Arlington Clean Energy Future Committee, Meeting Minutes, June 27, 2025. PJ1_CEFC_Minutes_12.pdf — https://www.arlingtonma.gov/home/showpublisheddocument/75029/638890425504557087
14. Town of Arlington, "24-20 Networked Geothermal FS ADDENDUM 3," April 19, 2024. PJ1_RFP_Addendum_16.pdf (URL not yet located)

Sources still needed: Arlington Housing Authority board materials on the proposal (AHA website has no minutes posted publicly); any municipal capital appropriation for construction funding (2024 and 2025 Town Meeting warrants searched — no geothermal item found); any post-February 2025 implementation update.
