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Dutchtown Owns Dutchtown

A neighborhood-owned, sovereign AI infrastructure proposal for South St. Louis. *By the people. For the people.*

Executive summary

The AI infrastructure boom is repeating an old pattern. Hyperscale data centers follow the same siting logic as fossil-fuel plants and waste facilities — cheap land, weak zoning, less political power to refuse. Northern Virginia’s data centers used nearly two billion gallons of water in 2023. By 2030, projections put data-center load at 8–12 percent of all U.S. electricity. Pacific, Missouri is fighting one of these proposals right now. South St. Louis fits the pattern. A 120 MW hyperscale was proposed for the historic Armory site in our own neighborhood, without a binding community-benefit agreement, without a real environmental-justice analysis, and without consent from the people who live around it. The proposal was paused — not canceled — after coalition organizing collected more than 13,000 signatures.

Our response is two parallel tracks. **Track one:** we are building a distributed, neighborhood-owned AI mesh in Dutchtown — small workstation-class nodes, each roughly 1 kilowatt, hosted at trusted community spaces, running open-source software, governed by a Community Data Governance Council of residents. **Track two:** we are publishing a non-negotiable set of conditions for any hyperscale data center attempting to build in Missouri. The Dutchtown model is small enough that none of those demands apply to us. They apply to everyone else.

This document is a living plan, currently at version four. It exists to make the work legible to neighbors, to council members, to potential funders, to allied organizations, and to anyone in another neighborhood asking how to do the same thing on their block.

The forest, not the tree

Most discussion of AI infrastructure imagines a single large object — a data center. We propose a different shape entirely: a forest of small, independent nodes, connected by community governance the way trees in an old-growth forest are connected by mycelium underground. The forest survives by distribution. No single tree has to carry the whole ecosystem. When one tree falls, the others remain. The mycelium routes nutrients, signals, and information laterally, peer to peer, without a central authority deciding what is allowed to grow.

Our nodes are workstation-scale: roughly one kilowatt each, fan-cooled, plug-in, hosted in libraries, churches, schools, community-college labs, and small-business closets. Each runs open-source models — Llama, Mistral, Qwen, Gemma, Phi — on consumer-grade GPUs in the RTX 4090 / RTX 5090 class. Each is governed locally and connected through a community-controlled mesh. The result is closer to a public broadband co-op than to a corporate data center — and the difference is not rhetorical. It shows up in the load profile, the land-use footprint, the labor profile, the governance model, and the relationship to the block.

We are not a data center

The phrase *data center* gets applied too loosely. Compute happens at five very different scales. **Community Compute**, where we sit, is roughly one kilowatt per node — kitchen-appliance class. **Micro data centers** are around fifty kilowatts — single-rack edge cabinets and retail-scale shelves. **Edge data centers** are around one megawatt — regional CDN and latency-critical workloads. **Colocation and enterprise facilities** sit in the five-to-thirty megawatt range — substation-scale loads, not neighborhood-compatible footprints. **Hyperscale** facilities run from one hundred megawatts to a gigawatt or more — AWS, Azure, Google, Meta megacampuses. The Armory proposal was 120 megawatts. One Dutchtown node is approximately $^{1}/_{120}$,000th of that load. Different scale, different governance, different relationship to the block, different labor profile, different category.

The Ten Demands are aimed at the four larger tiers. They are not aimed at us, and we are not asking to be exempted from them.

Cognitive sovereignty as public health

Information environments shape neighborhoods the way water and air quality shape neighborhoods. The right to think clearly — free of attention extraction, manipulation, and forced fragmentation — is a public-health concern. Our local AI is designed around this from the start. Local-first interfaces with no engagement metrics, no infinite scroll, no recommendation rabbit holes. Tools that finish the job and let you go. Bilingual and multilingual by default — Spanish, Vietnamese, Bosnian, more as the neighborhood needs. Environmental health relationships are studied through standard public-health methodology in partnership with academic institutions, IRB-reviewed where appropriate, with wellness services and research kept structurally separate by policy. The infrastructure answers to a community council, not a vendor or a department head.

Five dimensions of data sovereignty

Real ownership has five dimensions, and a system that misses any one of them is not sovereign. **Possession** means the bits live on hardware that the community physically holds. **Operation** means the community decides what is run, how, when, and on whose behalf. **Inspection** means every layer is open to audit by residents — source, logs, models, documentation. **Benefit** means surplus value returns to the community. **Refusal** means the right to say no — to delete data, to retire a model, to decline a use case, to shut a node down. Vendor cloud gives you Inspection, sometimes. It does not give you Possession, Operation, Benefit, or Refusal. Four out of five missing is not sovereignty.

The Ten Non-Negotiable Demands

For any hyperscale data center proposing to build in Missouri, we publish ten conditions: a binding Community-Benefit Agreement, a contractual water cap that survives technology shifts, a real grid-impact study, a cumulative environmental-justice analysis, a sworn decommissioning bond posted up-front, a real local taxable footprint with no PILOT shell games, refusal of speculative and extractive workloads, open environmental and operational reporting with public dashboards, living-wage local hiring with real

apprenticeship pathways, and a community shut-off clause enforceable in state court. Each is detailed in *The Ten Non-Negotiable Demands* one-pager.

The 90-day sprint (May–August 2026)

The first ninety days exist to convert plan into proof. **May:** expand Phase 1A with a second node hosted at a partner community space; complete the cybersecurity hardening pass (locked-room baseline, full-disk encryption with LUKS, backup rotation); finalize Council bylaws draft; submit NSF Civic Innovation Challenge Stage 1 letter of intent. **June:** open public Council nominations; publish the Bill of Rights poster and Ten Demands one-pager; begin the IRB-approvable environmental study (Phase 1 of the three-phase Armory study); negotiate first binding host-site MOU. **July:** seat the first Community Data Governance Council; deploy node three; submit NSF Stage 1 full proposal; publish first quarterly transparency report. **August:** review and revise the master plan to v5 based on Council feedback; publicly report 90-day outcomes; prepare the Phase 1B funding stack. We deliberately do *not* commit to a specific community node siting before partnership agreements are in writing, do not deploy any model class outside the open-source families, and do not host workloads that violate Demand 7.

Money — conservative and aspirational

The conservative funding arc is 750 thousand to 2 million dollars over five years, drawn from six streams: (1) Foundation seed capital and small-dollar individual donations to the Solara Frequency Foundation 501©(3); (2) public infrastructure grants including NSF Civic Innovation Challenge and NEH Digital Humanities; (3) civic-tech and community-broadband funders; (4) consulting revenue from helping other neighborhoods adopt the model; (5) a legislatively-contingent municipal Community Compute allocation (which we will not bank on until law is passed); and (6) earned revenue from training and certification programs run through BioPhi Research Institute. The aspirational arc — 4 to 15 million dollars — assumes meaningful state and federal civic-tech investment that we are not promising and that we will not be paralyzed without. Either path is structured inside the 501©(3) so private inurement is prohibited; the work cannot be quietly turned into a personal asset and sold.

Anti-displacement is a design constraint

Civic infrastructure has a habit of arriving in a neighborhood right before the rents do. We are designing this so that the people here today are still here tomorrow, and so that the value the work creates returns to them. The Community Stabilization Fund — at least ten percent of every grant and revenue stream — is reserved by policy for direct anti-displacement spending: property-tax assistance, emergency rent stabilization, home-repair micro-grants for long-time households. Where we hold or partner on real estate we partner with community land trusts and use deed restrictions that hold long-term affordability. The Community Data Governance Council seats long-time residents, recent immigrants, working-class neighbors, youth, and elders, with documented composition rules including ≥50 percent BIPOC representation. We hire from the block — maintenance, training, translation, council coordination, and community-research jobs are filled from Dutchtown first, with apprenticeship pathways to local high schools and community colleges. We refuse hosting, training, or selling capacity to AI workloads whose business model is mass labor displacement, predictive policing, biometric surveillance, eviction-scoring, or generative substitution of local creative work.

Safeguards and governance

The 12 to 15 member Community Data Governance Council is grounded in OCAP, CARE, and Te Mana Raraunga frameworks for community-data sovereignty. It approves data uses, model deployments, partner agreements, and the Ethical Use Policy. The cybersecurity posture is split into a current baseline and a build-out: today the baseline is a locked-room deployment with LUKS full-disk encryption, signed-image boot, rotated offline backups, and physical-access logs; the Phase 1B build-out adds SSO, VPN, and structured key management; Phase 2 adds SIEM, scheduled penetration testing, and continuous compliance monitoring. We run a dual-track A/B vetting model: every new model class and every new use case is shadow-deployed in a research track with no live community data before being promoted to a production track. The 501©(3) firewall is structural, not aspirational — it is in the bylaws.

Loss case is still a win

Even if Phase 2 expansion does not get federal funding, even if no other neighborhood adopts the model in year one, even if the Ten Demands move slowly through state and

municipal politics, the Phase 1A and 1B Dutchtown deployment alone is success. A community that wanted to be asked, asked itself. A neighborhood that wanted to govern the infrastructure on its block, governed it. A foundation that wanted to publish a real Bill of Rights, published it. The forest grows in increments. We are planting the first trees.

How to participate

Pledge support, volunteer your skills, contribute hardware or space, take the model to your own block, or simply spread the document. Donations are made to the Solara Frequency Foundation, 501©(3), EIN 33-4532002. Volunteer interest, contribution offers, and press inquiries are routed through the contact form at *dutchtownownsdutchtown.org*. The wider mission lives at *solarafrequencyfoundation.com* and *frequencyforthepeople.org*.

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