

A Tiered Framework for Computing Facilities in Oakland

A community proposal for the post-moratorium work plan

About this document. This is a general framework, not finished legislation. It offers a structure the City could start from. Specific thresholds, code language, legal structure, and enforcement details are for City staff, the City Attorney, and utility partners to determine. Communities can adopt it in whole or in part and improve it over time; a workable start is better than waiting for a perfect design.

Summary

On October 6, 2026, the City Council unanimously approved a 45-day moratorium on data center approvals, with the option to extend it, so staff can study impacts and develop regulations. This framework proposes six ideas for that work:

1. **Classify computing facilities by power use**, not by the label "data center."
2. **Offer small facilities a choice of permitting paths**, with a faster path for operators who choose from a flexible menu of community benefits.
3. **Track the community's share as compute credits** on a public record, so every unit can be traced.
4. **Verify compliance with utility data** instead of new inspection programs.
5. **Set clear performance standards** for water, noise, backup generation, and reporting.
6. **Connect community benefits to programs Oakland already has**, including the Responsible AI Activation Zones.

The Problem

Oakland's Planning Code does not distinguish a hyperscale campus that needs new substations from a small computing installation running within an existing building's electrical service. In August, a City spokesperson told The Oaklandside that the proposed data center at 415 20th Street is a permitted use that does not require a conditional use permit. Under current rules, the City has limited ability to review a computing project of any size.

A blanket ban has its own costs. Downtown office vacancy is high, and empty buildings with deferred maintenance drag down the blocks around them. Small computing installations could help bring some of those buildings back into use and onto the tax rolls. And some of the highest-power new uses in Oakland, such as robotics and advanced manufacturing in West Oakland, are not labeled data centers at all. Rules based on actual power use and impacts would treat all of these consistently.

It is also worth being honest about jobs. Computing facilities employ relatively few people for their size, often a few dozen technicians and security staff. Their main product is computing power. If a community is going to share in the value a facility creates, the most direct way is to share in that output.

How Value Reaches the Community

This is how value reaches a community in the new economy: not always directly, as payroll, but through the tools people use to build.

Grid, Land, and Water → Shared Computing Power → Local Colleges and Training → Trained Residents → Jobs and Growing Businesses

A facility uses the community's grid, land, and water. In place of the jobs it does not create, it shares computing power. That computing power goes to local colleges, training programs, and small businesses, which use it to teach residents and adopt new tools. Trained residents find work, and local businesses grow and hire. The facility does not create those jobs itself; it supplies the tool that helps the community create its own.

Progress can be tracked on the public dashboard through measures such as residents trained, small businesses served, and people placed in work.

Part I: Categories Based on Power Use

Facilities would be classified by peak electrical demand and physical impact, regardless of what the operator calls them or who funds them. The thresholds below are illustrative starting points; staff, PG&E, and EBMUD are best placed to set final numbers based on local grid and water capacity.

Category	Illustrative Power Threshold	Examples	Suggested Approach
Neighborhood-scale	Under roughly 3 MW, within the building's existing electrical service, with no service upgrade	Local inference nodes; campus or community computing	Choice of standard review or a streamlined path with a standard community benefit agreement (Part 2)
Mid-scale	Roughly 3 MW to 30 MW	Colocation facilities; leased GPU capacity; high-power robotics or lab uses	Conditional use permit with public hearing, utility impact review, and environmental review
Large-scale	Above roughly 30 MW, or any facility needing a new substation	Hyperscale cloud campuses; large AI training sites	Not permitted in downtown, commercial, mixed-use, or transit-oriented zones; considered only in heavy industrial areas with full review

For scale: one rack of current high-end AI servers can draw roughly 120 to 130 kilowatts, so 1 MW supports about eight such racks. A typical mid-size commercial building has an electrical service of roughly 1 to 3 MW.

Explaining the Categories to Residents

The words "data center" now cover everything from a room of computers in a school basement to a campus the size of an airport. That makes public conversations hard: people hear the words and picture the largest version. A simple, familiar comparison can help the City explain why different sizes need different rules.

Think of it like food. A corner store, a commercial kitchen, and an industrial food plant all handle food, but nobody would regulate them the same way. Computing facilities work the same way.

Size	Think of It As	What It Means
Neighborhood-scale	The corner store	A small setup inside an ordinary building, running on the power the building already has, serving nearby users like schools, researchers, and local businesses.
Mid-scale	The commercial kitchen	Bigger operations that vary a lot, so each one gets a full public review with clear standards for water, noise, and backup generators.
Large-scale	The industrial food plant	Huge campuses that use as much electricity as a small city and large amounts of water. These are the source of most public concern, and dense neighborhoods are not the right place for them.

One question to ask about any proposal: How much power and water will it use, what will neighbors hear and breathe, and what does the community get back?

The City could also consider describing these uses by size in official materials, such as "neighborhood computing node" or "large-scale computing facility," so that public notices and hearings start from what a project actually is.

Part 2: Two Paths for Neighborhood-Scale Facilities

Neighborhood-scale operators would choose between two paths:

Path	What It Offers	What It Requires
Standard path	Normal review and timelines	No community benefit agreement
Streamlined path	Faster, more predictable approval	A standard community benefit agreement, with a benefit equal to roughly 10% of the facility's capacity or its equivalent value

A Menu of Benefits

The benefit should be flexible in form, so it fits different operators and different community needs. The City could offer a menu of pre-approved options, which operators could choose from or combine:

- **Computing time:** GPU hours or time-slices provided free to students, researchers, nonprofits, and local small businesses, scheduled through OFPI or a partner program
- **Dedicated hardware:** a portion of servers set aside full-time for a college, training program, or civic project
- **Ground-floor community space:** a training room, community lab, or public storefront that brings people back to the block
- **Training and hiring:** apprenticeships, internships, or local hiring commitments for technicians and operators
- **Technical support:** staff time to help schools, nonprofits, and small businesses set up and use AI tools

A fixed menu with set equivalent values keeps the option flexible for operators while keeping approvals predictable, because staff check the choice against the menu rather than negotiating each case. The key test is simple: the community receives a real, measurable benefit, reported each year on the public dashboard.

Why Computing Power Instead of Money

- **It is worth more than it costs.** Sharing capacity costs an operator mainly electricity and equipment wear, while the same computing time is worth full retail price to a college or small business that would otherwise rent it.
- **It stays tied to its purpose.** Computing time can only be used for training, research, and building, not redirected into unrelated spending.
- **It is harder to misuse.** Capacity delivered as tracked credits is more difficult to divert than cash.
- **It builds skills.** Paired with training, access to computing turns residents from consumers of AI into people who build with it.

Because the benefit is chosen in exchange for a faster process rather than required, this structure is likely more defensible than a mandatory contribution. Two points for the City Attorney to resolve: whether the streamlined path can use a single standard agreement with fixed terms (which would keep approvals predictable), and whether California's development agreement statute is the right vehicle. Proposition 26 and recent case law on permit conditions should be reviewed either way.

For mid-scale facilities, community benefits would be addressed through the conditional use permit process, tied to each project's actual impacts.

Part 3: Community Compute Credits

The community's share would be tracked as **community compute credits**: units of computing time issued by the operator, assigned to eligible recipients, and redeemed for actual use. Each credit can be followed from the facility to the person who used it.

Issued → Assigned → Redeemed → Recorded

- **Issued automatically.** Operators already meter computing use for billing, so issuing and tracking credits is a small extension of systems they have.
- **Usage recorded by the system.** Redemptions are logged by the computing platform itself, not typed in by people.
- **Rules built in.** Eligibility, limits per organization, and expiration dates, so capacity is used rather than sitting idle.
- **A permanent public record.** Every credit issued, assigned, and redeemed is recorded where no one can quietly alter it. A city could build this with a blockchain-based ledger or a public database with regular audits.

The record only protects the community if what goes into it is accurate, so recipients should be verified before receiving credits, and an outside reviewer should periodically confirm that recorded use matches reality. No system stops every abuse, but one that leaves a clear trail makes misuse hard and easy to catch.

Party	What It Gets
Operators	A faster path and proof their contribution reached the community
The City	A benefit program without new staff or software, especially if a small share of the contribution covers administration by a partner such as OFPI
Residents	Real computing power and full visibility into where it goes

Part 4: Verification Through Utility Data

Each year, facility operators would submit their electric billing summary, or authorize the utility to share it, showing peak demand for the prior year. The City would review only that one number. It would not inspect tenants, software, or business information.

- **If peak demand stays within the facility's approved category**, compliance is confirmed for the next year.
- **If it exceeds the category**, the operator receives notice and an opportunity to reduce load or apply for the appropriate permit, with the usual right to a hearing and appeal.

A public dashboard could show aggregate power use by category and the total computing capacity provided to community programs, so residents and officials can judge impacts from data rather than speculation.

Part 5: Performance Standards

Standards could apply to every category, scaled to size:

- Low-water or closed-loop cooling, with reporting of annual water use
- Noise limits measured at the property line
- Limits on diesel backup generators, with cleaner alternatives preferred, given air-quality concerns in West Oakland and downtown
- Annual reporting of energy and water use

Staff should also review how the State's recently signed data center laws on electricity and water use interact with local standards.

Part 6: Connecting to Existing Programs

Oakland already has a home for community benefits. The Town Alive program established Responsible AI Activation Zones, with programming at Laney College, the Unity Council's Unity Tech Hub, and Mills College at Northeastern University, managed by the Oakland Fund for Public Innovation (OFPI). The program's FY27 budget for the AI zones relies on outside fundraising.

Computing capacity from streamlined-path agreements could be routed to those zones through OFPI, supporting workforce training, student internships, civic technology pilots, and small business AI adoption, without new City spending. Over time, this could grow into publicly or cooperatively governed computing capacity that serves Oakland's students, public agencies, and small businesses.

Protecting Against Favoritism

Who receives credits should be protected from favoritism:

- Administered by an independent partner, not City Hall, with a community advisory board of schools, small businesses, and neighborhood representatives setting priorities
- Open eligibility criteria and a public application process
- Conflict-of-interest rules for anyone involved in allocation decisions
- Every allocation published on the public dashboard, with an annual independent review

Additional Options Communities Can Consider

- **Protect household bills:** large facilities pay the full cost of grid upgrades they require, so residents' electric rates do not rise to serve them.
- **Grid support:** facilities agree to reduce power use during heat waves and peak demand, and their backup batteries help power a neighborhood resilience center during outages.
- **Heat reuse:** server heat piped into nearby buildings, pools, or greenhouses, as some European cities already do.
- **Emergency capacity:** a portion of local computing made available to emergency services during disasters.
- **End-of-life responsibility:** a plan or bond for recycling equipment and restoring the building if the operator leaves.
- **Start with a pilot:** try the approach in one district for two years, with a built-in review.

Questions for City Staff to Resolve

- Final power thresholds for each category, based on grid and water capacity by district
- How to create a separate activity classification for computing facilities in the Planning Code, distinct from research and development or business services
- How each category is treated in the downtown zones, which prioritize housing, active ground floors, and foot traffic
- The form of the community benefit agreement and who administers the computing allocation
- How the compute credit record is built, who can view it, and how recipients are verified
- The enforcement process for facilities that exceed their category
- Whether existing high-power uses, such as robotics and manufacturing, should fall under the same power-based rules

A Starting Point

The concern behind this framework is that fear of very large facilities could lead to rules that also shut out small, local infrastructure that would bring education and opportunity to Oakland. This framework is offered as a starting point. Please use, change, or set aside any part of it.

Related Reading

- [*Not Every Data Center Is the Same*](#) — the plain-language essay behind this framework

Sources

- The Oaklandside, "Oakland data center moratorium approved" (Oct. 7, 2026): oaklandside.org
- The Oaklandside, City statement on permitted use at 415 20th Street (Aug. 17, 2026): oaklandside.org
- Town Alive: Economic Activation Zones, City Council agenda report (Councilmember Rowena Brown, Nov. 13, 2025)