Quantum Exchange, a bunch of universities and industry partners, housed at UChicago Governor JB Pritzker City of Chicago, especially Mayor Brandon Johnson **DARPA/Department of Defense** 

What's the projected timeline?

-Projected early 2025: Construction starts -early 2026: "Phase 1" construction complete (offices) -late 2026: "Phase 1" workforce training programs have begun

-early 2027: "Phase 2" construction complete (the actual computer, including the cryogenic chamber) -late 2027: Complete and operating

Where is the site? -on the former U.S. Steel South Works site

Get connected with Futures, Fags, and Friends Against Quantum: faqs@mortemale.org

Check out these groups: Southside Together | @southsidetogether Southeast Environmental Taskforce | @se taskforce No Killer Quantum | @nokillerquantum Environment, Transportation, Health and Open Space of South Shore (ETHOS) | ethosblocksouthshore@gmail.com

**Quantum Campus:** of Defense testing ground coming to the South Side in 2025



## the \$9 billion Department

The U.S. Department of Defense and the State of Illinois announced in July 2024 plans to build a \$9,000,000,000 'quantum campus' at the former South Works steel mill site on the Southeast Side. This quantum campus is a collaboration between the DOD, Pritzker, Brandon Johnson, and the Chicago Quantum Exchange (a group based at the University of Chicago and including local institutions UIC and Northwestern, Israeli universities Technion – Israel Institute of Technology and the Weizmann Institute of Science, as well as corporate partners Boeing, IBM, Microsoft, JP Morgan, and many more). Plans show a 128 acre campus, with potential to expand another 300 acres, directly on the lakefront and near the Calumet River.

It will house quantum technology companies attempting to create the first quantum computer, as well as the IL-DARPA (a research division of the DOD) Quantum Proving Ground, a space to 'prototype and test' quantum technology. This kind of work has immense energy and cooling needs, requiring a temperature of about -270 degrees Celsius (-450 degrees Farenheit) for the quantum technology it will house. Water from the lake and river will be used to cool the facility. resources to keep their inv 'safe'.

What is quantum computing? We already know where data that is large and complicated enough to require a quantum computer comes from, and what it's used for. Main uses would be encrypted data, machine learning and AI development, financial modeling (like investment and stock predictions), and satellite data, used for weather modeling but also in a military capacity for aircraft flight paths. Quantum computers can be used for any data-intensive simulation, but quantum computing is in no way a benefit to the public. It's just a new billion dollar defense industry promising corporations more profit.

We don't want a DOD testing ground on the South Side. The city is keeping the project under wraps and relying on lack of technical knowledge to ignore people's concerns, so talk to your neighbors, ask if they've heard about it, share the info.

Who are the key players? PsiQuantum, quantum company from California

## resources to keep their investments in the south side

Instead, the site will bring those scientists into South Chicago, pay them salaries significantly higher than the average salary of the area, and drive up the land costs around the facility. We all know how gentrification goes. With a decreased tax rate as a part of the incentive, the wealth generated by these companies will not be going to the community around them. Previous plans for the former Steel Works site included public space, housing, community facilities, and all of those are taken away by this project. Brandon Johnson is also pulling \$5 million from its housing and economic development bond to put towards the quantum site.

5. More police, more security, more violence. The world's first quantum computer, on a DOD facility, will absolutely bring a massive increase in police and security to the area. Silicon valley-esque tech companies, and their employees, will set up shop here, violently changing the shape and demographics of the neighborhood to fit the image of the new 'silicon valley of quantum' they're trying to create. The tech's primary audience is government, military, and law enforcement, and those are the people who will be working at this 'campus'. Silicon valley capitalists in partnership with the DOD, with billions on the line, will use those

The first company to announce that it will be housed in this Illinois Quantum Park is PsiQuantum, a California start-up. PsiQuantum is receiving about \$200 million in financial incentives like tax breaks, low-interest loans, and grants to come to the Quantum Park, and has announced that it will create about 150 jobs over five years. These jobs are primarily for people with PhDs in quantum physics, as well as jobs in engineering, software development, and technical lab work.

Plans outline a 2025 construction start, and the facility becoming operational by 2027.

This shit is bad news. What will quantum computing bring?

1. The end of encryption. Nothing will be encrypted anymore, expect for the DOD's data. Quantum computing is an urgent interest of the DOD because it has immediate military applications. Current encryption technologies rely on the fact that our computers are too slow to mathematically solve encryption. Quantum computers are much faster, and can break all of our current encryption forms. At the same time, quantum computers (and only quantum computers) can encrypt information in a truly unbreakable way. Only those with access to quantum computers will be able to encrypt information, meaning only the DOD and their subcontractors. PsiQuantum plans to build the world's first quantum computer in the Quantum campus. We know the DOD has been gathering encrypted data, waiting for quantum computers to become viable, so anything in the past that was encrypted will also be accessible by the DOD. Quantum start-ups like Bloch Quantum have already been working with the FBI in Chicago to get law enforcement ready to use quantum resources.

2. More accurate sensing, more accurate bombing. Quantum sensing is the other primary government interest - a new, highly accurate form of sensing usable for geolocation, target tracking, and bombing, amongst many other things.

3. Unprecedented environmental impact. They claim this will be a carbon-neutral facility (which is definitely bullshit) - but their positioning of the facility by

the lake almost certainly means they'll be pulling in and

using lake and river water the help with the cooling of the facility. Quantum computers and other pieces of quantum technology need to be kept at -270 degrees Celsius (-450 degrees Farenheit), which requires immense amounts of energy, and water is used as a part of this cooling process. Traditional computing data centers generate toxic electronic waste, can draw an amount of power equivalent of that used by tens of thousands of homes. Like other types of computers, quantum computers rely on specific materials, including copper. Quantum will likely continue the legacy of exploitative and extractive material sourcing. At the end of the day, we have no idea what the environmental impact could be on the communities around the site or on the land - even to the DOD, this is just a 'testing ground'.

4. Jobs for the wealthy, displacement for the South Side. PsiQuantum, the first company to commit to housing their work at the campus, has promised only 150 jobs, all of which will be for people with specific doctoral qualifications already working or doing research in a computing or quantum field. In a highly technical and experimental, DOD-funded facility, the likelyhood of having any entry-level jobs is almost zero.