

INNOVATION

Innovate Boldly. Share the Gains.

When the public takes the risk and funds the breakthrough, the public should share in the reward.

PILLAR 6 · INNOVATION WITH PUBLIC RETURN

AT A GLANCE

The problem

The public funds the breakthroughs (\$187B of NIH money behind 354 of 356 drugs^[in-nih]) and the returns flow one way, while data centers shift billions onto ratepayers.

The proposal

Attach the public's terms to public money, cost-causation pricing for giant loads, share the gains.

Cost & funding

Revenue-positive if terms are priced right; the risk is overpricing them.

Evidence strength

Strong on the funding record; return-term effects untested at scale, with the pipeline as named falsifier.

Principal risk

Chilling private development if the public's terms are set too high.

Success looks like

Public returns actually collected; ratepayer cost-shift ended.

Summary

Public investment should produce public return, and innovation should serve human agency rather than erode it. When taxpayers fund the risky early work, they should not watch every dollar of the upside flow to private hands while the bill for the infrastructure, the failures, and the side effects stays public. The record is documented down to the agency and the grant: every technology that makes the iPhone smart was publicly funded before Apple assembled it, and NIH funding contributed to the research behind every single one of the 210 new drugs the FDA approved from 2010 to 2016. The public took the risk. The public rarely saw a dividend.

This brief proposes six planks: attach a public return when public money does the early, risky work, using authority the government has held since Bayh-Dole and almost never uses; pay a citizens' innovation dividend the way Alaska has for forty years; make publicly funded medicine affordable; make big new computing loads pay their own way under the cost-causation principle utility regulators already know; share the gains with the workers automation displaces; and reform patents to keep markets open. This is not an anti-innovation argument. It is the opposite: a country that shares the gains of innovation will invest more in the next breakthrough, not less. Innovate boldly, and share the gains.

The Principle

Public investment should produce public return, and innovation should serve human agency rather than erode it. Those are the two halves of one idea. The first says that when taxpayers fund the risky early work, they should not watch every dollar of the upside flow to private hands while the bill for the infrastructure, the failures, and the side effects stays public. The second says that technology, and artificial intelligence above all, should expand what people can do and decide, not concentrate power in a few hands or treat workers as costs to be removed. AI should handle the paperwork. People should make the decisions.

This is not an anti-innovation argument. It is the opposite. A country that shares the gains of innovation will invest more in the next breakthrough, not less, because the public keeps funding what it can see paying off. Innovate boldly, and share the gains.

The System Failure

The standard story of American innovation is a myth of lone genius and private daring, and the record does not support it. The public built the foundation, took the early risk, and then handed the returns away almost entirely.

Take the device that defines the myth. Every technology that makes the iPhone smart was funded by the public before Apple assembled it. The internet and Siri came out of DARPA, GPS out of the Navy's Navstar program, the multi-touch screen out of grants from the CIA and the National Science Foundation, the lithium-ion battery out of the Department of Energy.¹ Google's search algorithm was seeded by an NSF grant. Tesla's batteries and solar came out of Energy Department support. Steve Jobs' real genius was integration, taking decades of taxpayer-funded research and building something beautiful on top of it. The public took the risk. The public rarely saw a dividend.

Medicine is the sharpest case, because there the public pays twice. NIH funding contributed to the research behind every single one of the 210 new drugs the FDA approved from 2010 to 2016, more than \$100 billion of public money across more than 200,000 grant-years. A follow-on study found \$187 billion of NIH funding behind 354 of the 356 drugs approved over the full decade, an amount comparable to what the pharmaceutical industry itself invested. Since the 1930s, the public has put on the order of \$900 billion into the biomedical knowledge base the entire industry stands on. And then Americans pay about twice the per-capita price for prescription drugs that people in other wealthy countries pay, for medicines their own taxes helped create. Fund the science, then pay monopoly prices on top of the science. That is paying twice, and we have simply gotten used to it.

Operation Warp Speed is the freshest proof of both halves of this argument. Public money and guaranteed public purchases produced safe, effective vaccines in about eleven months instead of the usual decade, government at its most capable, and the leading vaccine was co-developed with NIH scientists on a publicly funded platform. Then the pattern held: taxpayers funded the research, de-risked the manufacturing, and bought the doses, while the companies kept the patents and the pricing power once the emergency ended. The public took the risk twice and the return was priced like it took none. The lesson is not that the program was wrong. It is that public investment this powerful should carry the public's terms.

Two newer failures sharpen the pattern. Artificial intelligence and the data centers behind it are being built at a scale that strains shared public resources. Electricity bills were among the largest drivers of inflation in 2025, and in the regions where data centers cluster the cost pressure is intense: in the largest grid market, PJM, capacity prices jumped roughly elevenfold in two years, the independent market monitor tied 63 percent of the 2025-2026 auction increase to data centers,² and that one auction added \$9.3 billion to the costs recovered from ordinary customers. The honest version of this problem is not that computing uses power. It is that the century-old utility model spreads the cost of new infrastructure across every household, so a single load the size of a city, owned by some of the richest companies on earth, can push its costs onto ordinary ratepayers unless regulators stop it. Meanwhile automation is moving into work faster than our institutions are preparing people for it, and patent thickets and monopoly power are increasingly used to block competition rather than reward invention. Innovation is being captured at exactly the moment its stakes are highest.

The Proposal

Keep the part that works, bold public investment in research. Fix the part that does not, the one-way flow of the gains. Six planks.

1. **Attach a public return when public money does the early, risky work.** When public funding, public research, or public data is behind a commercial product, attach a return as a condition of the deal: an equity stake, revenue sharing, open or reasonable-cost licensing, affordability requirements, or clawbacks, scaled to the size of the public contribution. This is not a new power. The government already has the authority to put strings on its own money and its own research, including the march-in and licensing rights it has held since the Bayh-Dole Act of 1980 and almost never uses. The job is to use it consistently and predictably across agencies rather than handing the entire upside away by default, and to keep the terms proportionate so they reward the public without punishing the private development that turns research into products.
2. **Pay a citizens' innovation dividend.** Direct the returns the public earns, from equity, royalties, and licensing, into a fund that pays back to the people, whether as a direct dividend, as reinvestment in the next round of research, or as support for the workers and communities most exposed to technological change. This is not utopian. Alaska has paid its residents an annual dividend from the returns on a public asset for over forty years, and Norway turned its public resource wealth into a fund that works for its citizens. The point is that people can see and feel their stake in the innovation their taxes made possible.
3. **Make publicly funded medicine affordable.** Where public research or public dollars helped develop a drug, attach reasonable-price and access conditions, so Americans are not charged monopoly prices for medicine they already paid to create. Pair it with the drug-price negotiation and the crackdown on pharmacy middlemen in the foundations agenda. This is the clearest case of paying twice, and the easiest to fix, and the evidence that the public funded the underlying science for essentially every recent drug is the argument that wins it.

4. **Make big new computing loads pay their own way.** Set the rule that the build-out of AI and the data centers powering it serves the public rather than billing the public. The fix is a principle utility regulators already know, cost causation: the party that causes a cost should pay it. Require that massive new loads cover the full cost of the generation, transmission, and grid upgrades needed to serve them, through dedicated rates and contracts, rather than smearing those costs across households that never agreed to subsidize them. Voluntary pledges from tech companies to cover their own power are welcome but not sufficient, because utilities and state regulators, not the companies, decide who ultimately pays. Put the protection in the rules. Pair it with public-interest investment in AI that improves public services, and with transparency and a right to contest high-stakes automated decisions, so consequential calls about people stay accountable and humane.
5. **Share the gains with the workers automation displaces.** As automation spreads, fund retraining, redeployment, and income support, give workers a real voice in how new technology is introduced, and treat the goal as augmenting human work and freeing people from drudgery rather than simply cutting headcount. Productivity gains built on public research should lift the workers who help generate them, not just the shareholders. AI should handle the paperwork. People should make the decisions.
6. **Reform patents and keep markets open.** Tighten patent quality and curb the abuses, the thickets, the evergreening, the strategic litigation used to block competition rather than reward invention, and use competition policy to keep the gains of innovation from hardening into permanent monopoly. Reward real creation while keeping the door open for the next innovator.

Lead the AI Transition Publicly, and Make Citizens Shareholders

The internet is this brief's founding story: a government project, built as public infrastructure, that corporations then implemented and brought to consumers, creating trillions in value on a public foundation. Artificial intelligence inverted that order, corporations leading, the public reacting, and this platform's position is to put it back. AI is the culmination of accumulated human knowledge; the models are trained on the public's collective writing, science, art, and code, which makes AI a shared economic engine by its very construction, not a private invention that owes the public nothing. So: public leadership of the trajectory, through public research capacity, public compute, procurement power, and a federal evaluation capability that understands frontier systems as well as their makers do. Public terms on the money, the same Bayh-Dole logic this brief already applies, extended to AI: where public funding, data, infrastructure, or the public's accumulated knowledge underwrites commercial AI, the public holds a stake, and its returns flow into the citizens' dividend this brief already proposes, so every American is a shareholder in the technology their civilization trained. And the floor that already exists here holds: transparency, liability that stays with the deployer, workers sharing the gains of the automation they absorb, and AI handling the paperwork while people make the decisions. We are not against AI; this platform is partly built with it, and says so. We are against the future's most important technology being governed by the few companies that got there first.

Implementation Pathway

The public-return standard is established by federal statute and applied through the agencies that already fund research and buy first products, building on authority the government has but rarely exercises. The citizens' dividend is created in the same legislation that defines where the returns go. Medicine affordability runs through the terms of federal research funding and procurement and through drug-pricing law. The AI and large-load rules run partly through federal policy and heavily through state utility regulators, who hold the pen on who pays for new energy demand, so this is a federal-and-state fight, with live vehicles already moving at both levels. The transition fund is federal, and patent and competition reform run through patent law and antitrust enforcement. Most of this is less about new spending than about the conditions placed on spending and research the country already does.

Funding and Public-Value Logic

This pillar is designed to be largely self-financing, generating revenue over time rather than consuming it, a design claim carried as intent on The Ledger until it is scored. The returns that fund the citizens' dividend come from value the public helped create and would otherwise have surrendered entirely. Affordability conditions on publicly funded medicine save public health programs and households real money, given that Americans currently pay roughly double what other wealthy countries pay. Making large computing loads pay their own way protects ordinary ratepayers from subsidizing the infrastructure of the most profitable companies on earth. The public value is twofold: a fairer split of the gains from innovation, and a public that, seeing it shares in the upside, stays willing to fund the bold research that produces the next breakthrough.

Risks and Guardrails

The first risk is that public-return conditions, set badly, discourage the very investment they are meant to reward. The guardrail is honesty about the division of labor. The evidence is clear that public money does the foundational, high-risk basic science, more than 90 percent of that NIH funding was research on the underlying biology, not the final drug, while the private sector usually does the applied invention and commercialization that turns science into a product. Both are real. So the return has to be proportionate to the public contribution, predictable, and designed to keep the United States the best place in the world to build, not a penalty on success. Claiming the public invents everything would be as false as the myth that it invents nothing, and the credible position rejects both.

The second risk is capture, where the conditions get bent to serve incumbents, which is why transparency and independence matter. On AI and ratepayers, the honest caveat is that steady demand growth does not automatically raise everyone's bills, and in some cases spreading fixed costs over more usage lowers them; the real problem is the speed and scale of these loads and a cost-allocation model that lets them shift costs onto households, so the fix is targeted cost-causation, not a blanket claim that computing gouges the public. And worker protection has to be funded rather than promised, because a transition fund that exists only on paper is not protection at all.

Metrics for Success

Judge the agenda on returns, access, and fairness.

- Public returns generated from publicly funded innovation, and the size of the citizens' dividend or reinvestment they support.
- Prices and access for medicines developed with public funding, measured against what the public spent to develop them.

- The share of new energy and infrastructure costs from large computing loads borne by those loads rather than by ordinary ratepayers, and the direction of residential bills in data-center regions.
 - Worker outcomes in automating sectors: retraining, redeployment, and wages relative to the productivity gains.
 - Competition and patent-quality measures, and the rate of new entrants in innovative markets.
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Opposition and Responses

Some will say public-return conditions will strangle innovation and chase investment away. The conditions apply only where public money did the early work, and they scale to that contribution. Asking a fair return on the public's own investment is what any investor would do, and a public that shares the gains funds more research, not less. The country already attaches strings to its money everywhere else; it simply forgets to when the upside is largest.

Some will say this is the government picking winners. It is the reverse. The government is already funding the research and buying the first products. This asks for a return on investments it already makes, rather than handing the entire upside away by default. Picking winners would be new. Getting paid for the bets we already place is just prudence.

Some will say AI rules will leave America behind. The rules target who pays for the build-out and how high-stakes systems treat people, not whether the country innovates. Protecting ratepayers and workers and keeping consequential decisions accountable is how you build the public support that sustains a technology over the long run.

Some will say drug-pricing conditions will end medical research. Most of the basic science already runs on public funding, for essentially every recent drug, and asking fair prices on what the public paid to develop strengthens the case for that funding rather than weakening it. The pharmaceutical industry is right that its applied development and its patents are real and necessary; the answer is a proportionate return, not a claim that industry does nothing.

Some will say the public didn't really build all this. The record says otherwise on the foundations, from the internet and GPS to the biology behind modern medicine, and it is documented down to the agency and the grant. The honest claim is not that the public invents everything, but that it funds the risky foundation and deserves a share of what gets built on it.

What Would Change Our Position

The public-return agenda could over-reach, and the falsifier is the pipeline: if attaching returns to public funding measurably chilled drug development or commercialization in early implementations, companies declining public money and patients losing therapies, the terms were priced wrong and get lightened toward the tools with the least drag. If cost-causation rates pushed compute loads offshore while ratepayers saved nothing, the rate design failed its own test. The platform's bet is that the public can be a demanding investor without being a destructive one; where a specific term breaks that balance, the term goes, not the principle.

Public-Facing Language

Here is the short version. The internet, GPS, the touchscreen in your pocket, the science behind your medicine, all of it was built with public money. You took the risk. You rarely got the reward. That should change. When your taxes fund the breakthrough, you should share in what it earns, through a dividend, through lower drug prices, or through investment in the next discovery. And as AI arrives, it should make your life easier and your work better, not stick you with the power bill for a data center and take your job. Innovate boldly. Share the gains.

SOURCES

1. Peer-reviewed analysis of public funding behind smartphone core technologies (the agency-by-agency lineage documented in the entrepreneurial-state literature) ↩
2. IEEFA on PJM capacity-auction increases attributed to data-center growth ↩