## Hearing Before the U.S. Senate Committee on Commerce, Science, and Transportation "Winning the AI Race: Strengthening U.S. Capabilities in Computing and Innovation" May 8, 2025

## Testimony of Sam Altman,

Co-Founder and CEO, OpenAl

Thank you, Chairman Cruz, Ranking Member Cantwell, and Members of the Committee.

I'm Sam Altman, Chief Executive Officer of OpenAI. It is an honor to return to the Senate and share our view of where AI is today and where we see it going.

OpenAl is not a normal company and never will be.

Our mission is to ensure that artificial general intelligence – AGI – benefits all of humanity. AGI is a weakly defined term, but generally speaking we mean it to be a system that can tackle increasingly complex problems, at human level, in many fields. When we formed OpenAI more than 10 years ago, we stared at each other around a kitchen table, wondering how to get started. Al then was a niche tool for researchers, not the general public.

In 2016, Chairman Cruz convened his first AI hearing, and my co-founder, Greg Brockman, testified that AGI models were probably between 10 and 100 years away. Today, the science of AI has advanced so significantly that we are now confident that we'll reach that milestone during President Trump's time in office.

Throughout history, people have crafted tools to scale our abilities—and we believe AGI will be the most powerful tool ever created. It will enable people to build incredible things for each other and improve their quality of life.

But AGI's full potential won't be realized unless it's safe. The same capabilities that will enable AGI to support scientific breakthroughs and accelerate human progress will also create new risk areas. That's why we red-team relentlessly and lead the industry in transparency.

Ultimately, I believe the good will outweigh the bad by orders of magnitude, and that AGI will help bring us into what I call the Intelligence Age – an era when everyone's lives can be better than anyone's life today.

This future can be almost unimaginably bright, but only if we take concrete steps to ensure that an American-led version of AI, built on democratic values like freedom and transparency, prevails over an authoritarian one.

The stakes could not be higher—and Congress is right that the United States must lead the way.

At OpenAI, we're committed to the path of democratic AI, and we are humbled that ChatGPT is being used by more than 500 million people each week to create, discover, and achieve breakthroughs that were once out of reach.

America is a nation of innovators, and we want to supercharge people's ability to use our technology to make their lives better.

We want to open source very capable models.

We want to give our users a great deal of freedom in how they use our tools, and let them personalize ChatGPT to best meet their needs.

We want to build a brain for the world and make it super easy for people to use it, with common-sense restrictions to prevent harm.

And the truth is that AI is already changing the world for the better.

Scientists at the US National Laboratories – including Oak Ridge National Laboratory, Los Alamos National Laboratory, Argonne National Laboratory, the Princeton Plasma Physics Laboratory, and the Pacific Northwest National Laboratory – are using our reasoning models to accelerate breakthroughs in areas like energy.

In Pennsylvania, ChatGPT is helping state employees do administrative tasks more quickly, freeing up more time to improve the delivery of public services.

And universities in states like Texas, North Carolina, and California are putting ChatGPT in the hands of students and educators to build an Al-ready workforce.

Al will be vitally important to ensuring that today's students are ready for tomorrow's jobs. In the US, more than one-third of college-aged young people use our models, mainly for learning and tutoring. Around the world, most ChatGPT users are under age 35.

We're proud to offer free access to a technology that is doing so much for so many people, but AI's biggest gains are still to come.

Our work at OpenAl suggests that as Al advances, progress accelerates and becomes increasingly affordable, as reflected in these three scaling principles:

**Investing more in AI will continue to make it better and more capable.** The intelligence of an AI model roughly equals the log of the resources used to train and run it. Until recently, scaling progress has primarily come from training compute and data, but we have shown how

to make intelligence scale from inference compute, as well. The scaling laws that predict these gains are incredibly precise over many orders of magnitude. It follows that further investment will lead to further gains, and further benefits to society: We believe that the socioeconomic value of linearly increasing intelligence is super-exponential in nature.

The cost to use a given level of Al capability falls by about 10x every 12 months, and lower prices lead to much more use. We saw this in the change in token cost between GPT-4 in early 2023 and GPT-40 in mid-2024, where the price per token dropped about 150x in that time period. Moore's Law predicted that the number of transistors on a microchip would double roughly every two years; the decrease in the cost of using Al is even more dramatic.

The amount of time it takes to improve an Al model keeps decreasing. Put another way, Al models are catching up with human intelligence at an increasing rate. The typical time it takes for a computer to beat humans at a given benchmark has fallen from 20 years after the benchmark was introduced, to five years, and now to one to two years—and we see no reason why those advances will stop in the near future.

So what does that mean practically?

I believe we'll see many major advances over the next three years, but here are some examples.

**In 2025**, we will release AI-powered tools that can handle sophisticated software engineering, and AI agents that can handle real-world tasks like making doctor's appointments and helping to run a business. These agents will be super assistants who can collaborate with workers in every industry, doctors in all specialties, and scientists in every field of research.

**In 2026**, AI may unlock a new wave of scientific breakthroughs by designing experiments to tackle America's toughest challenges in climate, health, and national security.

**And in 2027**, AI-powered robotics could push AI-driven productivity gains into the physical world, handling routine tasks so people can spend more time on the work and activities they enjoy.

As AI systems become more capable, people will want to use them even more. Meeting that demand requires more chips, training data, energy, and supercomputers.

Infrastructure is destiny, and we need a lot more of it.

Earlier this year I joined President Trump and the CEOs of Oracle and SoftBank to announce the Stargate Project, a \$500 billion dollar investment in American AI infrastructure.

Since launching Stargate, governments around the world have asked about bringing Al infrastructure to their countries and how we can ensure that democratic Al systems become the global standard.

In response, we're offering a new kind of partnership — OpenAl for Countries — to help these countries build up their data center capacity and ecosystems of Al start-ups and developers. In exchange, these countries would invest in the Stargate Project – and thus in continued US-led Al leadership and a global, growing network effect for democratic Al.

To close on a personal note, I grew up in St. Louis, part of a close-knit and competitive family that played 20 Questions to guess what we were having for dessert. When I was eight, my parents bought me a Mac LC II. The computer was a literal dividing line in my life. There was the time before I had a computer, and there has been the time after. I believe that AI will play a similarly formative role for kids across the country, including my own.

I want to thank Chairman Cruz, Ranking Member Cantwell, and the members of this Committee for your continued leadership on Al. I appreciate the opportunity to testify today and look forward to answering your questions.