Fairwater Labs
Whitepaper

Our View of the World

2025 UPDATE

about us

Who We Are

Fairwater Labs is a company-creation platform accelerating warfighter-focused defense innovation.

What We Do

We rapidly generate, screen, evaluate, and advance business concepts in several clear opportunity areas to build the next generation of dual-use technology companies.

We recruit top-flight teams to launch companies that capitalize on these opportunities and deliver value to investors and end-users in national security and commercial markets.

why we care

A world in transition

We are living in a period of remarkable change in the second quarter of the 21st century, one marked by a rapidly shifting, multipolar geopolitical and economic environment, and the transformation of the post-WWII / post-Cold War world order. Global defense innovation and technology markets are becoming increasingly decentralized, moving beyond the reach of America's former dominance and opening pathways for fresh ideas and partnerships.

New systems, new approaches

While America's adversaries display increased boldness, capability, and impunity, this evolving landscape also presents new avenues for strategic alliances and innovative thinking. Likewise, as alternative economic and social systems gain wider acceptance, opportunities for collaboration, competition, and growth expand.

Change is ubiquitous and accelerating

Although America and many of its long-standing allies maintain significant investments in established organizations such as NATO, a growing inward focus among their populations signals the need for the modernization of these institutions. A less predictable geopolitical climate—more prone to polarization than at any time in recent memory—demands creative solutions to adapt and overcome new challenges.

Facing this global transition, we believe the time is <u>now</u> to forge stronger frameworks and shape a more adaptable, secure future for America and its partners.

how we view the world

We track critical global developments through three frameworks...

Dynamic as the new normal

As global systems and relationships evolve, America must prepare for a less predictable future. This effort requires innovation and agile execution by America's military, business, and technology leaders. Enabling entrepreneurs to build solutions that serve America's military will undoubtedly lead to positive knock-on effects for the American economy and its people and partners. Coupled with potential conflict over Taiwan, conflicts like those in Ukraine and the Middle East demonstrate that now is the time to prepare for instability, and to support our military and America's allies around the world.

Rapidly intensifying technological evolution

Further, today's world bears witness to an incredible technological evolution in areas such as artificial intelligence & machine learning, augmented & virtual reality, blockchain, quantum computing, automation, robotics, and integrated hardware systems. These developments are reshaping industries—and societies—at unprecedented speeds.
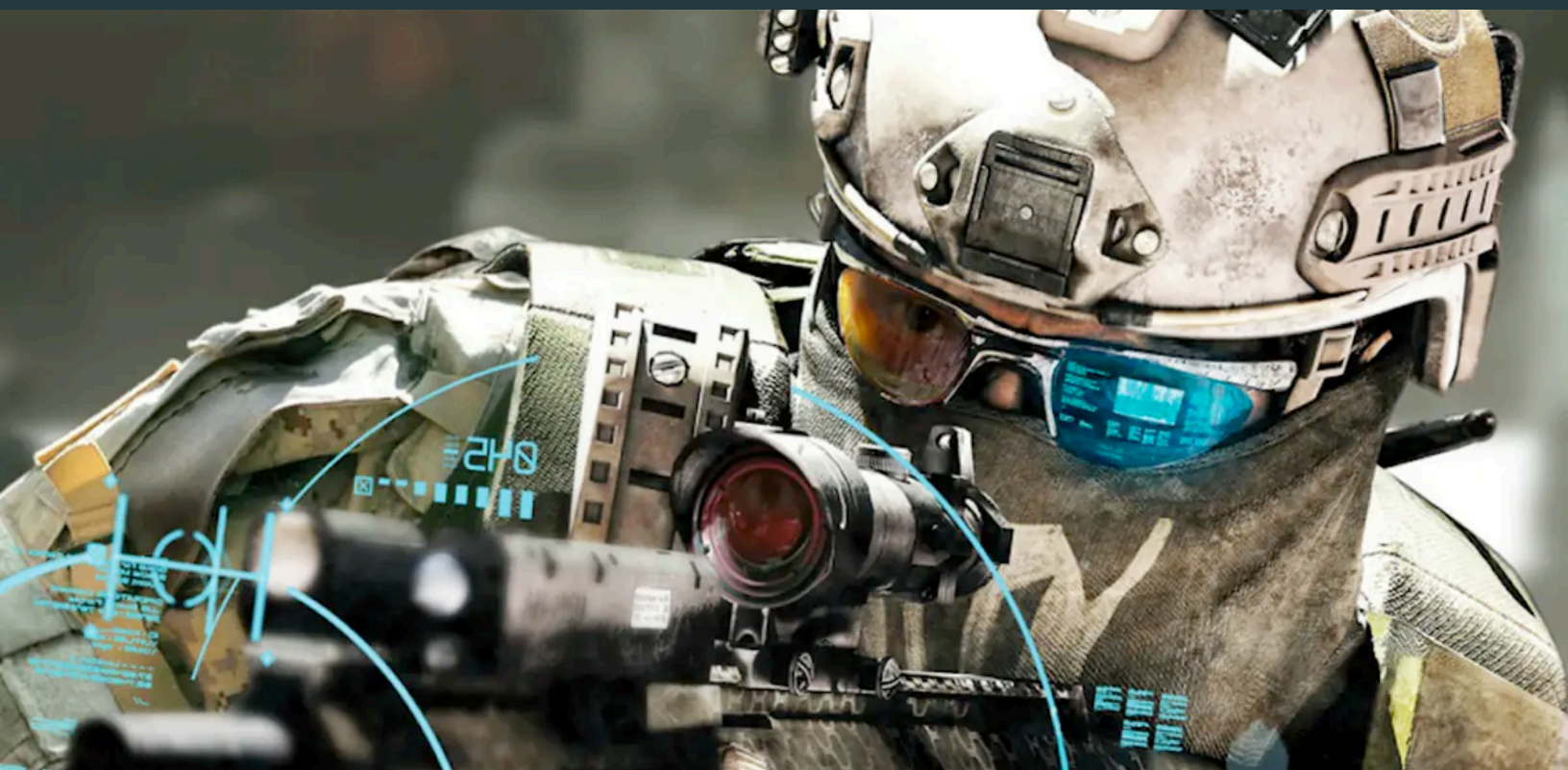
The rapid pace of technological evolution yields often unpredictable but potentially transformative impacts to supply chains, social structures, national security, and the environment. Likewise, the collective impact of today's technological evolutions on personal privacy, the rights of the individual, and perceptions of truth remains an open ethical question. Founded on the rule of law and protection of individual rights, we believe that America and its partners are best positioned to both leverage today's technologies and address the ethical dilemmas that arise from their use.

Data as the new currency

As technology continues to integrate into all facets of society and daily life, the exponential growth of data from diverse sources—e.g. open-source data, biometric data, and integrated hardware—creates both opportunity and complexity. Data siloes and disparate data stores hinder seamless access and utilization, while advances in cyber-physical systems and edge computing amplify the value of real-time data aggregation and analysis.

The vast majority of data collected and stored is not yet harnessed to address challenges, increase efficiencies, democratize capabilities, or accelerate decision making. We believe that advances in artificial intelligence and machine learning will unlock incredible value from data, thereby addressing countless challenges faced by diverse end users across industries.

References: i) Office of the Director of National Intelligence, National Intelligence Council, *Global Trends 2040: A More Contested World*; ii) U.S. Department of Defense, 2022 National Defense Strategy; iii) RAND Corporation, *Hypersonics, AI, and Quantum in the Next Decade: Implications for U.S. Security*; iv) Atlantic Council, Global Tech Forum 2024: US Allies and Emerging Technologies
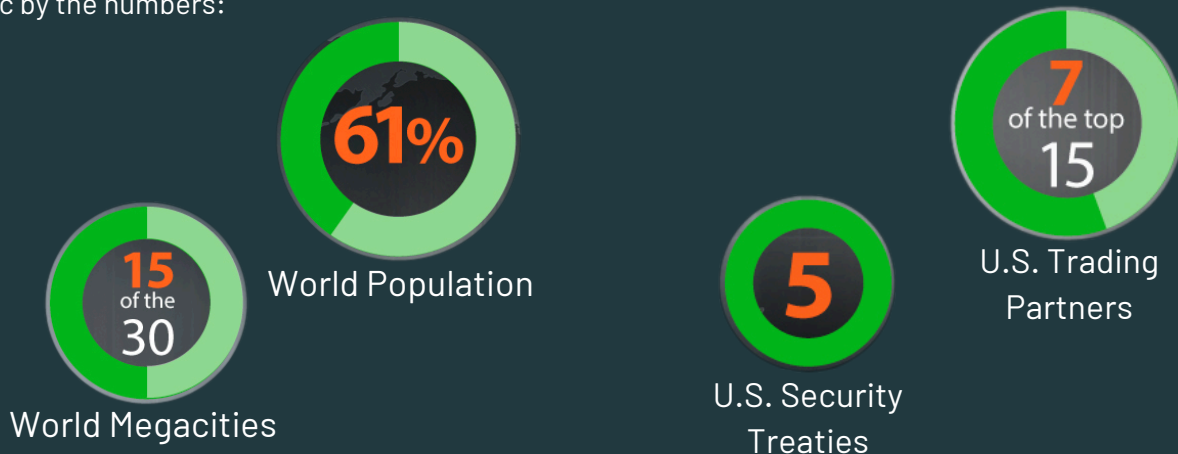
...and further analyze end-user challenges through several lenses:

The Indo-Pacific

Following more than a decade of strategic language found in National Defense Authorization Acts, DoD memoranda, and national security symposia, and considering its sheer size and economic weight, we consider the Indo-Pacific to be the area of greatest strategic priority for the United States and its partners for the foreseeable future. The U.S. has been a major pillar in the Indo-Pacific for nearly 200 years, and is both well positioned and has a historical imperative to positively shape the region for its good and the good of all constituent nations. As such, we consider the Indo-Pacific as a unique lens through which we can view the world and uncover compelling opportunities.

Unique regional challenges abound, including but not limited to: logistics / sustainment, command & control, anti-access/area denial, secure communications, allied interoperability, and humanitarian & disaster relief efforts. Military operations are inherently more distributed than anywhere else on earth. And partners in the region depend heavily on U.S. enablement, creating a mutual dependency that risks fragmentation under stress. Skill shortages in critical fields further exacerbate existing vulnerabilities, weakening regional defense capabilities and interoperability.

Indo-Pacific by the numbers:

15 of the **30**
World Megacities

61%
World Population

5
U.S. Security Treaties

7 of the top **15**
U.S. Trading Partners

Efficiency for the Digital Age

Across the whole of government, there is an ongoing and expressly stated goal to increase efficiency, reduce spending, and capture more value from existing systems. Accountability and transparency are watchwords today across all levels of government. We foresee less deference being paid to traditional contractors & employees moving forward.

The commercial sector is likewise focused on maximizing efficiency and value creation in increasingly competitive marketplaces. To that end, there will likely be an ongoing push toward increased automation, reduction of redundancies, and increased employee efficiencies throughout the federal government and public-private enterprise. This push will affect systems, platforms, processes, partnerships, and people across the whole of government and private industry.

The Great Reshoring

The "great reshoring" refers to the strategic shift by American industries and policymakers to bring critical manufacturing and supply chains back to domestic soil or closer to allied nations. This movement aims to reduce dependence on foreign production, energy, and labor for essential goods such as semiconductors, pharmaceuticals, rare earth elements, and advanced manufacturing components.

Reshoring is a critical response to the risks posed by over-reliance on adversarial nations for military and dual-use technologies. In so doing, both American defense and commercial markets reduce supply chain vulnerabilities, enhance their ability to maintain technological superiority, and mitigate the risk of supply disruptions during geopolitical conflicts, trade wars, and/or natural disasters.

References: i) White House – Indo-Pacific Strategy of the United States; ii) U.S. Indo-Pacific Command – Posture Statement 2024; iii) CHIPS and Science Act (2022); iv) Presidential Executive Order 14210: Implementing the President's "Department of Government Efficiency" Workforce Optimization Initiative

opportunity areas

The intersections of these paradigms lead to clear areas of opportunity:

HUMAN PERFORMANCE

WINNING THE INFORMATION SPACE
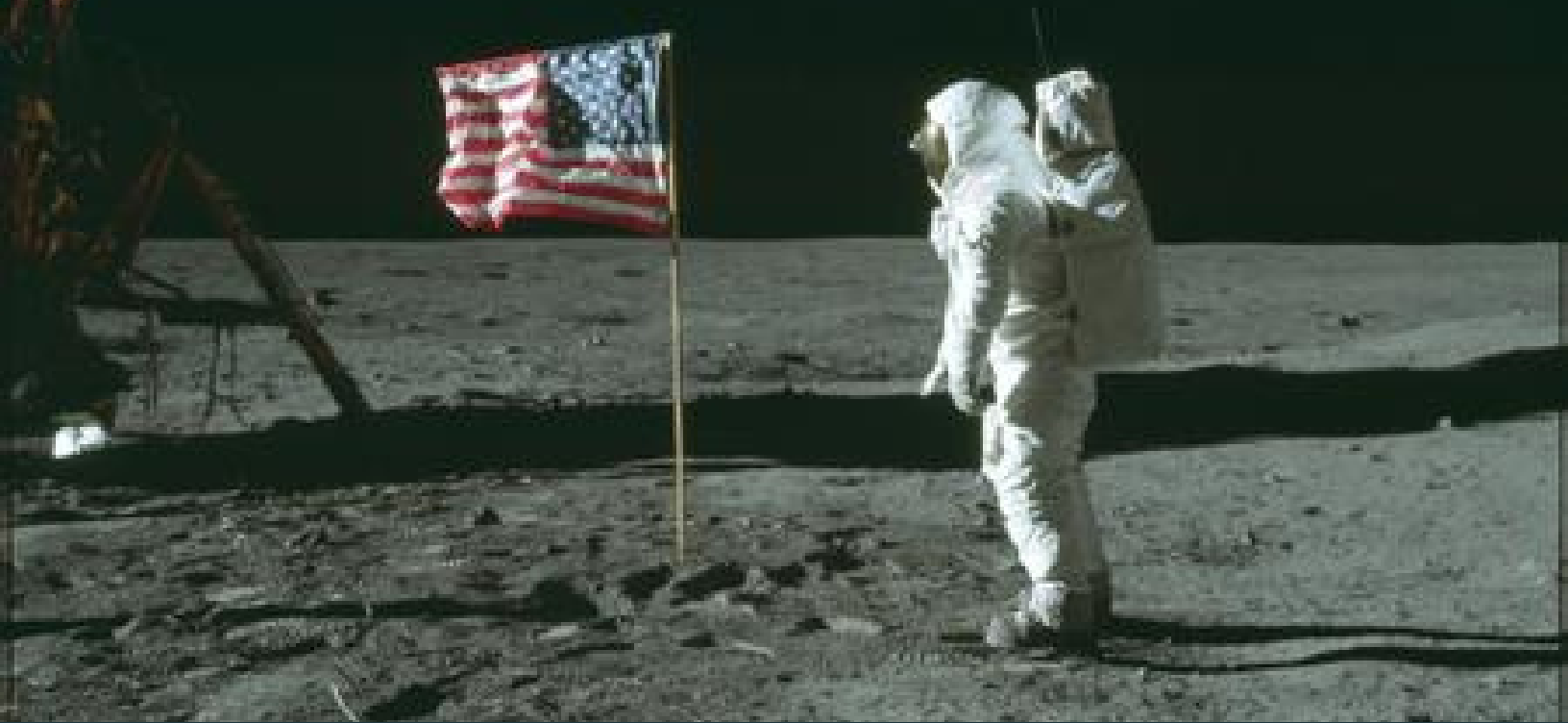
CYBERSECURITY

UNMANNED SYSTEMS

ECOSYSTEM OPTIMIZATION

*"We will rebuild our military by matching threats to capabilities. This means reviving our defense industrial base, reforming our acquisition process, passing a financial audit, and **rapidly fielding emerging technologies**."*

- Secretary of Defense Pete Hegseth

As we frame the world in these terms and identify opportunity areas, we see a compelling case for dual-use business models—those focusing first on national security applications, and then on commercial analogs—to address challenges, capitalize on opportunities, and yield strategic advantage while delivering value to society writ large. An ecosystem of partners and catalysts has emerged to support the development of dual-use ventures today, as it did to great effect during the Cold War of the 20th century: DARPA gave us the internet; GPS laid the groundwork for today's real-time mapping applications.

Fairwater Labs was born from this brainstorm: a company-creation platform focused on harnessing today's cutting edge technologies to mitigate risk and solve the problems of today.

the time is now

…to Build Businesses
    that Protect
        our Personal Freedoms
        and Free Market System
            by Securing Peace through Deterrence

And in the Event of Conflict,
        Ensure Success for our Warfighters.