

Flinn-Brown CivEx

Boots on the Ground

Exploring Arizona's Defense Ecosystem

- Agenda -

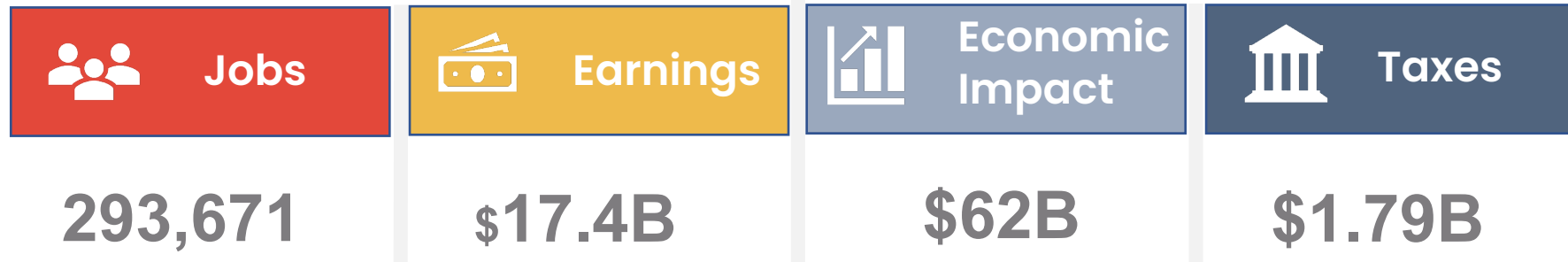
- **Background on AZ Infrastructure and Industry**
- **Comparison (What Are Other States Doing?)**
- **Opportunity for Growth in Arizona**
- **Next Steps**

Background

Arizona Defense Infrastructure and Industry

Economic Impact of Defense In Arizona (Installation + Industry)

Total Contribution:



❑ The presence and economic contribution of the military operation in Arizona have been historically underrecognized as one of the State's most important sources of economic activity.





Arizona Veteran vs Military

- Arizona Department of Veteran Affairs (ADVS) – cabinet level position that oversees the 600,000 veterans throughout Arizona
- Department of Emergency and Military Affairs (DEMA) – Cabinet level position that oversees the Arizona (Air / Army) National Guard
- Department of Defense (federal) installations in Arizona
- Governor has a policy adviser for Military and Public Safety
 - Closely collaborates with ADVS and DEMA
 - **No policy advisor is charged with connecting the federal installations to the economic impact of the state**



Arizona's Defense Infrastructure

- **AZ Defense Infrastructure: \$12B in DoD funding** across 10 major installations with more than 78,000 personnel at \$2.3B in payroll.
 - Arizona's military industry creates thousands of jobs, billions of dollars of economic activity and hundreds of millions of dollars of state and local tax revenue
 - Fort Huachuca, Davis-Monthan AFB and Luke AFB each contribute more than \$2.5B in total economic activity in Arizona every year
 - Three sites for major test and evaluation (FHAZ, YPG, AATC)

 Jobs	 Earnings	 Economic Impact	 Taxes
76,714	\$3.8B	\$12B	\$255.9M



Fort Huachuca



JITC



MQ-1C Gray Eagle

□ **Employment: 21,327**

□ **Impact: \$ 2.9B**

□ Fort Huachuca supports a diverse mission set that spans across Training, Testing and Operations

□ Because of the ideal terrain and topography of southeast Arizona, EPG at Fort Huachuca is the primary location for developmental testing of all the Army's Communication and Electronic Warfare systems.

Yuma Proving Ground (YPG)



NASA testing



Project Convergence

- **Employment: 8,000**

- **Impact: \$1.2B**

- YPG is one of the largest military installations in the western hemisphere at 1,300 square miles in size.

- YPG's principal mission is to ensure the success and dependability of military systems through rigorous test and evaluation.

Luke Air Force Base (AFB)



F-16



F-35

☐ **Employment: 15,000**

☐ **Impact: \$2.5B**

☐ Air Force's principal training instillation for F16 / F35

☐ 1.7 million acre Barry M. Goldwater Range (BMGR), 45,000 operations annually flown in BGMR

Marine Corps Air Station (MCAS) Yuma



F-35



MV-22

□ **Employment: 7,800**

□ **Impact: \$900M**

□ MCAS Yuma is the Marine Corps' premier aviation training base. Supports 80% of the Marine Corps aviation training.

□ Approximately 193,000 operations annually make MCAS Yuma the busiest in the Navy.

Davis-Monthan Air Force Base (AFB)



A-10



EC-130H

- ❑ **Employment: 17,000**

- ❑ **Impact: \$2.6B**

- ❑ Three A-10 squadrons, operationally provide worldwide day and night combat capability in Close Air Support.

- ❑ Two EC-130 Compass Call squadrons which comprise the entire US Air Force Electronic Warfare (EW) capability.

Department of Emergency & Military Affairs (DEMA)



UH-60

❑ Personnel: ~8,200

❑ Impact: \$1.2B

Arizona Army National Guard

- ❑ Citizen-Soldiers serving, protecting and defending the nation, the state of Arizona, and the diverse communities within the state

Western Army National Guard Aviation Training Site (WAATS)

- ❑ Field Operating Activity (FOA) for the National Guard Bureau to train helicopter pilots and maintainers

Air National Guard – Tucson International Airport

- ❑ Premier F-16 fighter pilot training unit; more than 70 F-16s have graduated 7,600 fighter pilots since 1969



KC-135

Air National Guard – Phoenix International Airport





- ❑ 800 airmen and eight KC-135R Stratotanker aircraft

Defense & Aerospace Industry

Manufacturing and Research

- **AZ Aerospace and Defense Industry: \$51.5B** in DoD contracts across more than 1,200 A&D companies with top-10 rankings in DoD contracts, A&D manufacturing, aerospace exports and jobs.
 - 3rd largest A&D supply chain contributor
 - 5th largest employment in A&D manufacturing
 - Arizona's engaged, highly skilled, talented aerospace & defense workforce finds new solutions and approaches to the world's largest challenges.



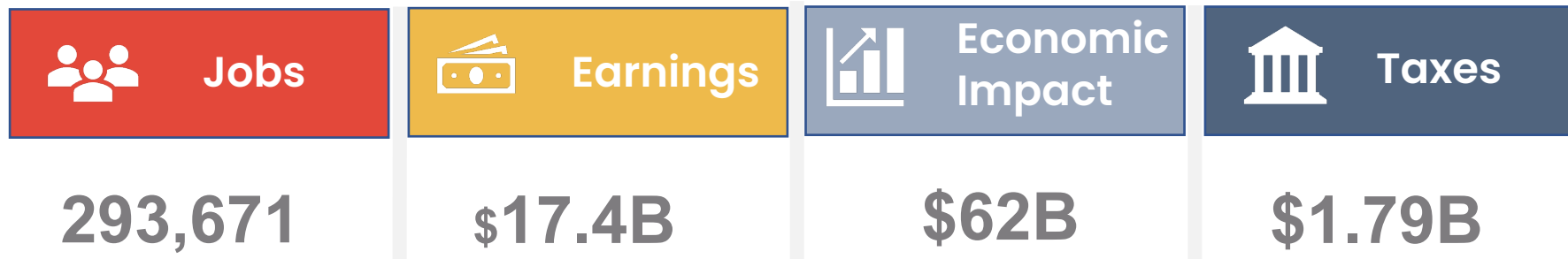
 Jobs	 Earnings	 Economic Impact	 Taxes
216,957	\$13.6B	\$51.5B	\$1.54B

For every 100 direct jobs in aerospace manufacturing, an additional 178 jobs are supported in Arizona.

Economic Impact of Defense In Arizona (Installation + Industry)

- The presence and economic contribution of the military operation in Arizona have been historically underrecognized due to the **general isolation of the operation from typical commerce, the physical separation for security reasons of many of the facilities, or the methods typically used to collect and report economic and employment statistics.**
- Whatever the reasons for the historical oversight, the military operations within Arizona represent a **substantial and valuable industry in the State** that should be recognized and listed among the State's most important sources of economic activity.
- **Recession Proof**

Total Contribution:



1 - Economic Impact of Arizona's Principal Military Installations - <http://aemaguire.com/MilitaryStudy.pdf>

2 - 2021 Arizona Aviation Economic Impact Study - <https://azdot.gov/sites/default/files/media/2021/10/ADOT2021ArizonaAEISExecutiveSummary.pdf>

Base Realignment and Closure (BRAC)



- ❑ BRAC is a formal process to reduce excess infrastructure and realign bases to meet changing force structure needs.
- ❑ Last BRAC was 2005, and it was the largest, most complex, and costliest. 23 bases closed and 2,500 bases were realigned as part of the 2005 BRAC
- ❑ Proposed in 2016, thwarted by Senator McCain
- ❑ In response, other more industrious states work to poach missions

Community Support Organizations



**SOUTHERN ARIZONA
DEFENSE ALLIANCE**
LOCAL STRENGTH ★ NATIONAL DEFENSE



Reactive VS Proactive

Arizona Guard boss battles to keep Apache helicopter unit



Dennis Wagner

The Republic | azcentral.com

Published 6:42 p.m. MT Jan. 12, 2018

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A Boeing AH-64E Apache attack helicopter lands after a maintenance test flight at the Boeing manufacturing facility in Mesa on March 9, 2016. The Republic

Air Force proposes cutting most A-10s from Davis-Monthan

David Wichner May 29, 2021 Updated Jul 3, 2022



A U.S. Air Force Air Force A-10 Thunderbolt II in-flight over Afghanistan on Oct. 7 2008. USAF

Comparison

What are other states doing?



Texas

❑ Texas Military Preparedness Commission (TMPC), established in 2003 to preserve, protect, expand, and attract new military missions, assets, and installations in the state of Texas. Additionally, the TMPC encourages defense related businesses to expand or relocate to Texas.

- Defense Economic Adjustment Assistance Grant (DEAAG), \$30M annual fund for new missions

- Texas Military Value Revolving Loan Fund (TMVRLF), \$205M bond authority to lend to defense communities

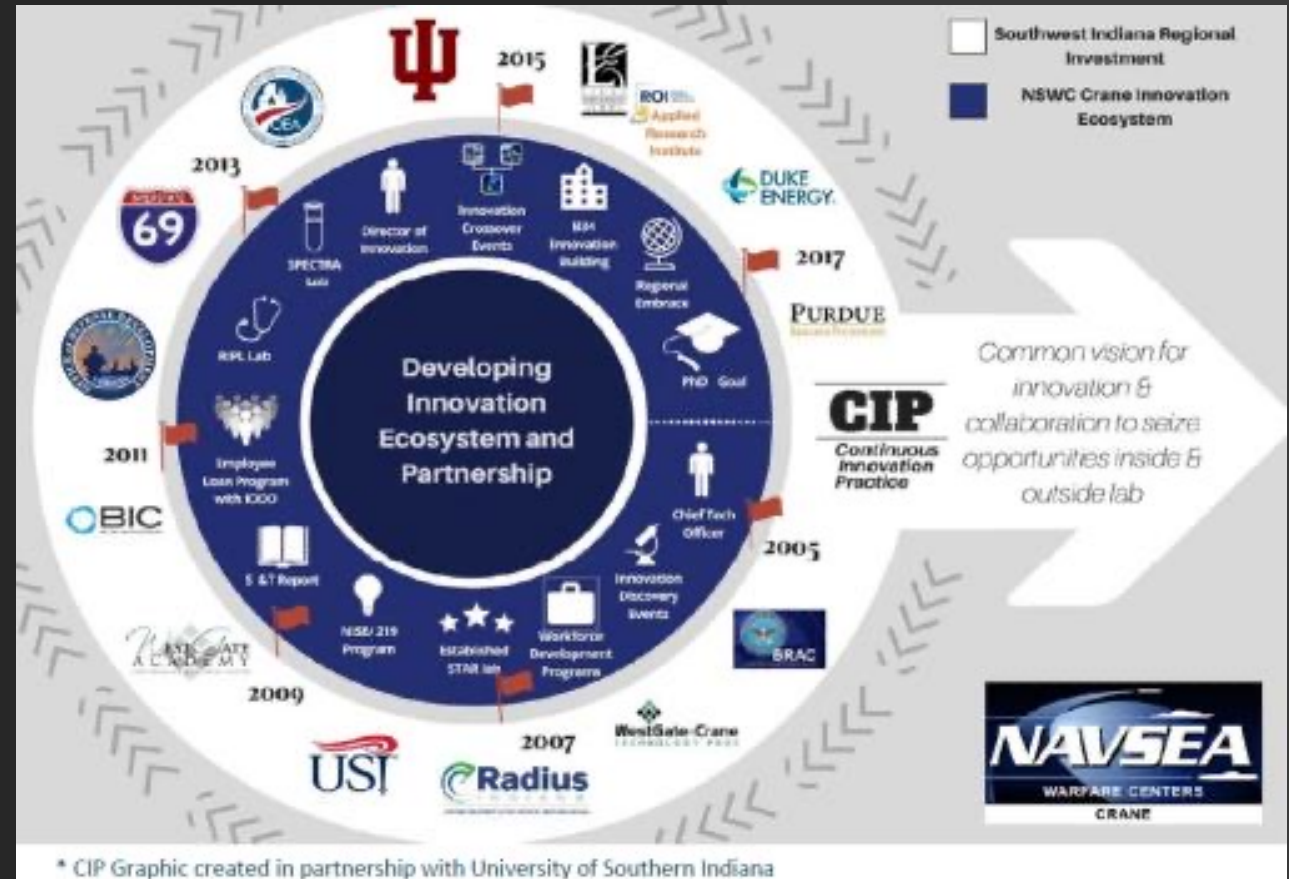
❑ Army Futures Command (AFC) establishes new command in 2018 through the coordination of the State of Texas, the University of Texas System, and the City of Austin

- \$33B budget with \$11B in S&T
- Venture Capital funding followed



Indiana

- ❑ **Opportunity:** 2005 Base Realignment and Closure
- ❑ **Resources:** Region reinvested DOD Office of Economic Adjustment funds and Disaster Relief funds
- ❑ **Key elements:** Federal lab, universities, philanthropic and in-kind funds and purposeful collaboration led to partnerships
- ❑ **Results:** Today – over **\$250M** invested
 - Two separate tech parks created that **employ more than 1200 people**
 - IP portfolio: **573 inventions**
 - Tech Transfer – **201 active agreements** to deliver rapid innovation on mission critical warfighter solutions



Opportunity for Growth in Arizona



Cultural Shift within the DoD

❑ **Future Fight:** The battlefield and future conflict is shifting from the Middle East to the South Pacific.

- Arizona is geographically positioned to benefit

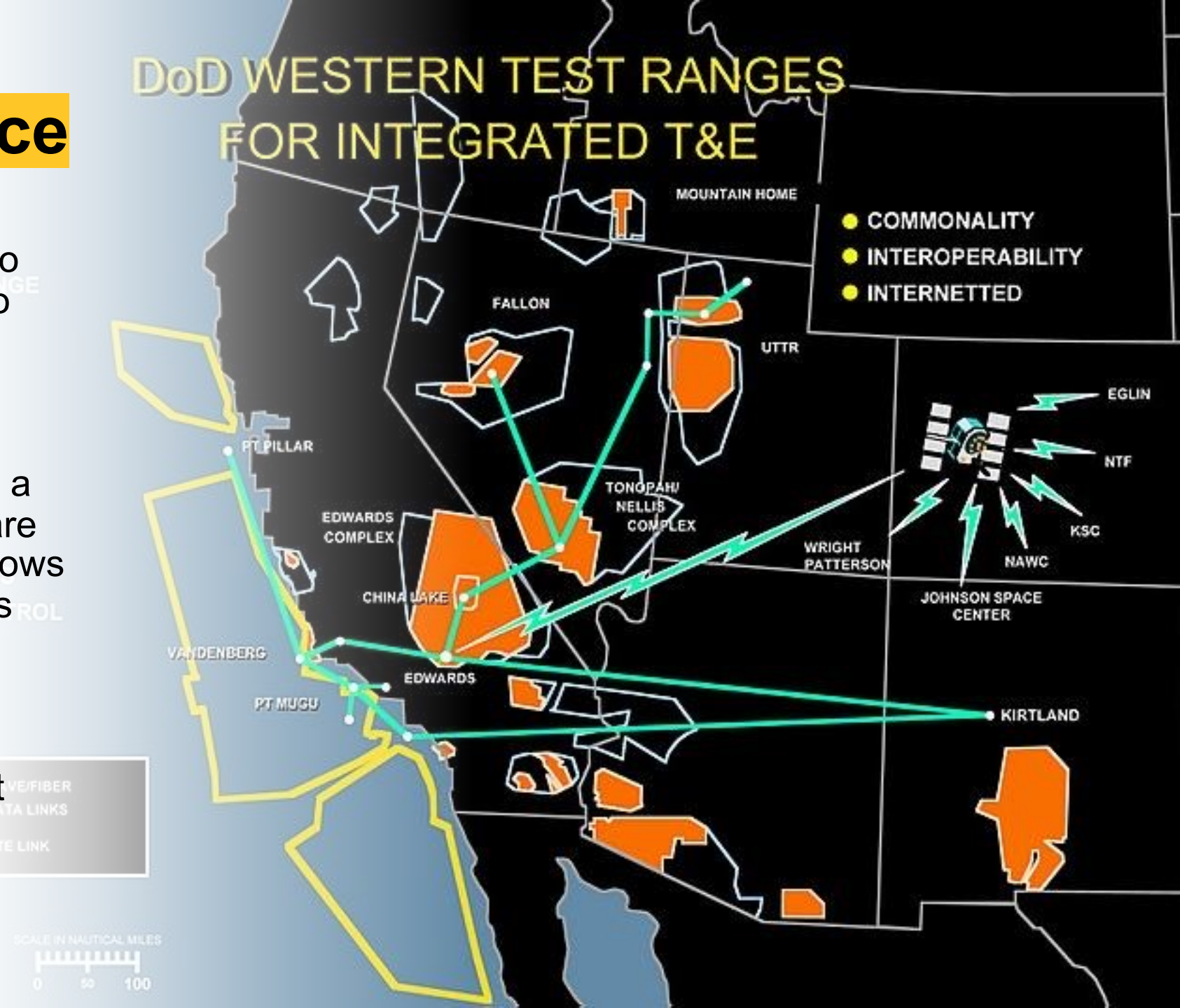
❑ **DOD Modernization:** The United States' technological leadership is not assured which is a threat to our national security.

- The speed at which the DoD needs innovation is changing how it interacts with academia, small business and venture capital



Opportunity: Leverage Our Place

- ❑ Installations will need to have to modernize the way they train to prepare for future fights
- ❑ Range access and weather are a premium – the western states are the only place in the US that allows for large-scale joint experiments and training activity.
- ❑ This confluence of requirement and need has the potential to concentrate DoD mission and infrastructure

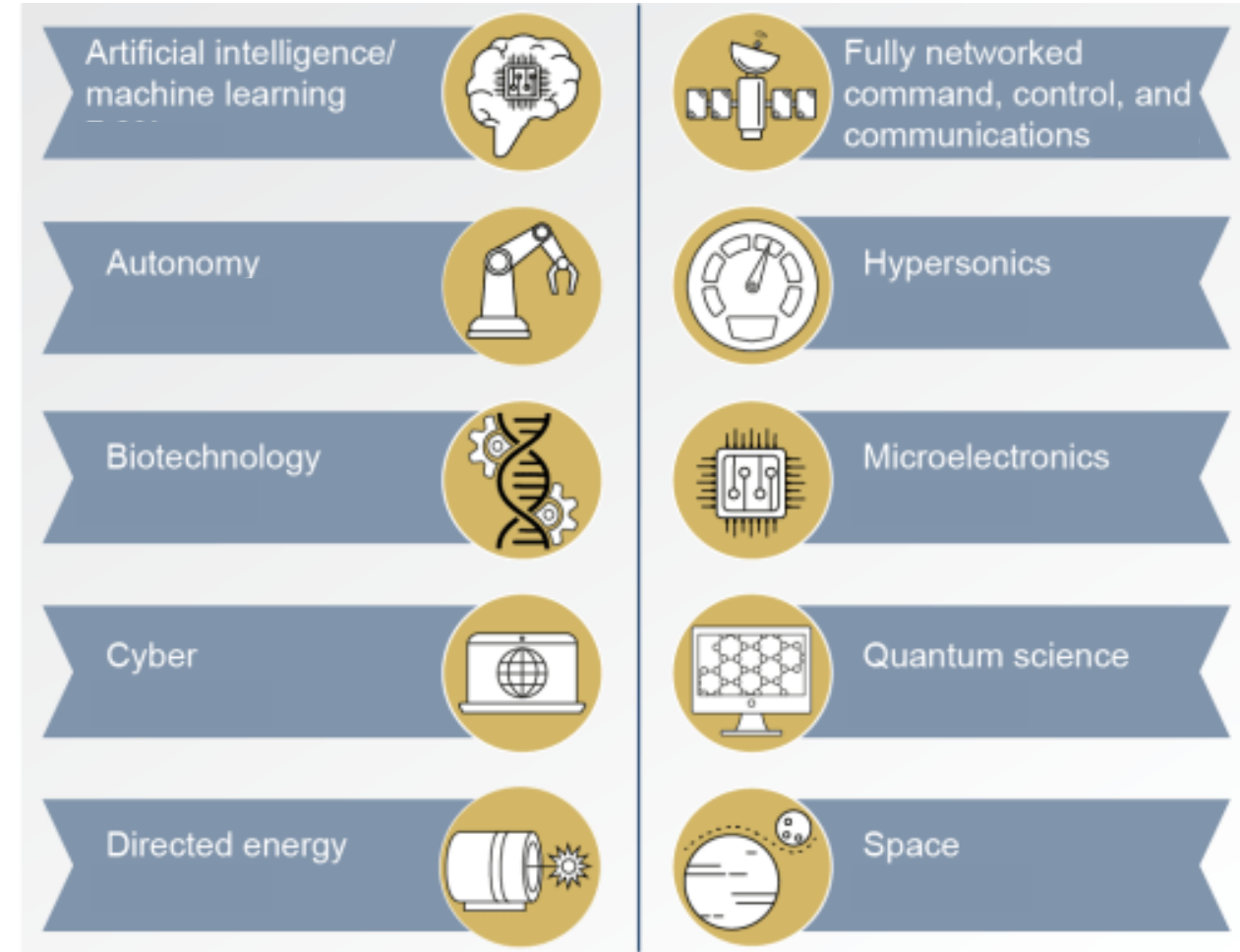


DoD Modernization through Industry Alignment

A changing strategic environment threatens the technological superiority which threatens our military's strategic and operational advantages.

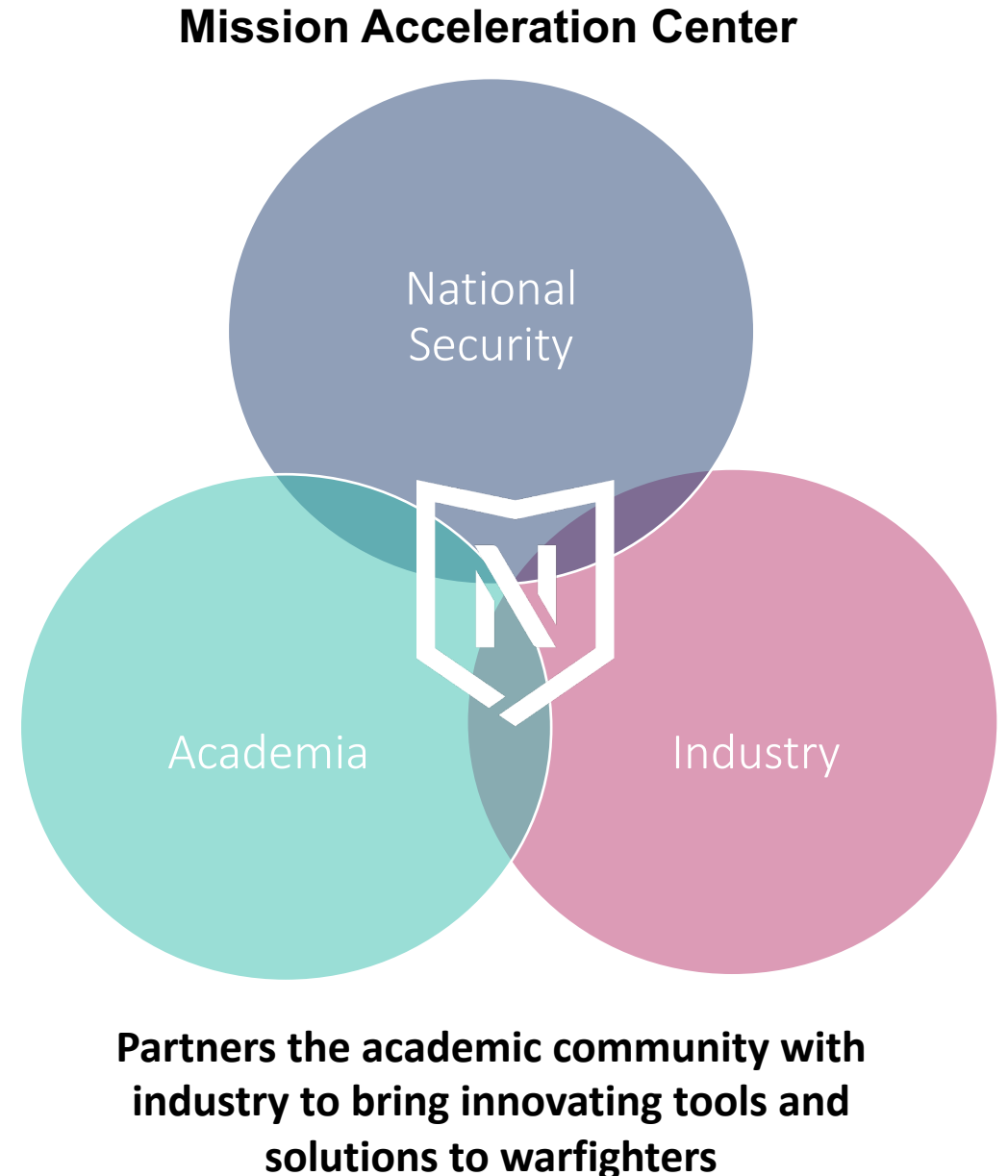
- ☐ For the first time DoD priorities align with the desired industries in Arizona
- ☐ Align economic interests to DoD mission needs
- ☐ Cultivate innovation ecosystem that support industries and workforce of the future

DoD S&T Priorities



Opportunity: Innovation Ecosystem

- ❑ Need to develop and deliver breakthrough and transformational technology.
- ❑ Non-traditional problem solvers to increase the speed of innovation.
- ❑ The MAC will create an interconnected and collaborative defense innovation network of entrepreneurs, venture capitalists, academia, and local and federal partners in support of the DoD and regional economic development



Next Steps

Challenges:



- ❑ Arizona **lacks the fundamental leadership** required to establish the vision Arizona needs.
 - State level to determine priorities
 - Manage across a myriad of state, local, and federal agencies
 - Installations have parochial stovepipes
 - Focus on federal engagement
- ❑ Other States are looking to poach Arizona Missions.
- ❑ DoD wants applied technology
 - Universities incentive structure not aligned

Call to Action & Recommendations

- ☐ Military Affairs Commission – Recharter, Refocus, Expand Membership and Fund
- ☐ Establish a new state-level advisor focused on Congressional and Executive Process
- ☐ Get involved in DoD Community Support Organizations
- ☐ Get involved with Mission Acceleration Center



Questions?