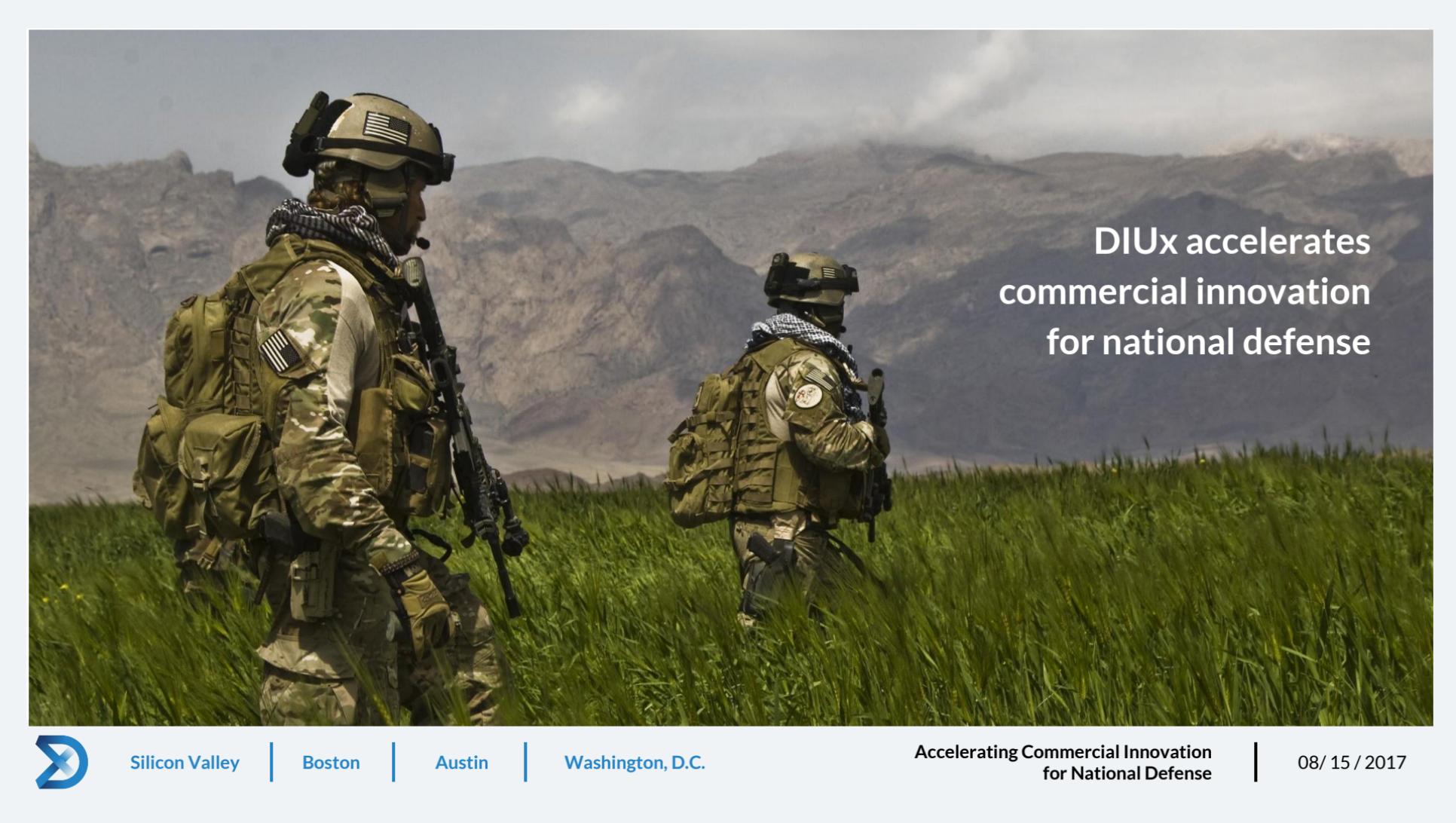




DEFENSE INNOVATION  
UNIT EXPERIMENTAL



DIUx accelerates  
commercial innovation  
for national defense



Silicon Valley

Boston

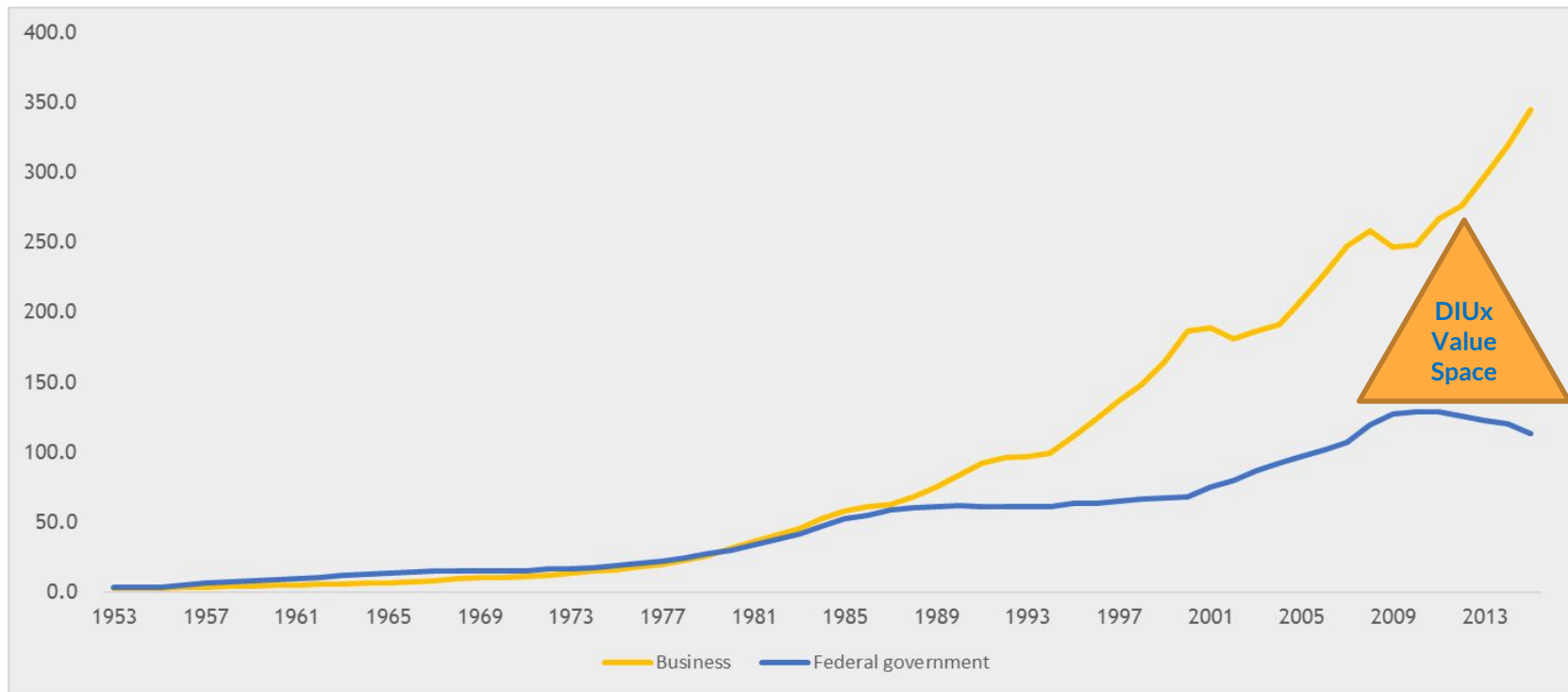
Austin

Washington, D.C.

Accelerating Commercial Innovation  
for National Defense

08/15/2017

## COMMERCIAL R&D OUTPACING FEDERAL R&D: > 3 to 1 (\$bn)



Silicon Valley

Boston

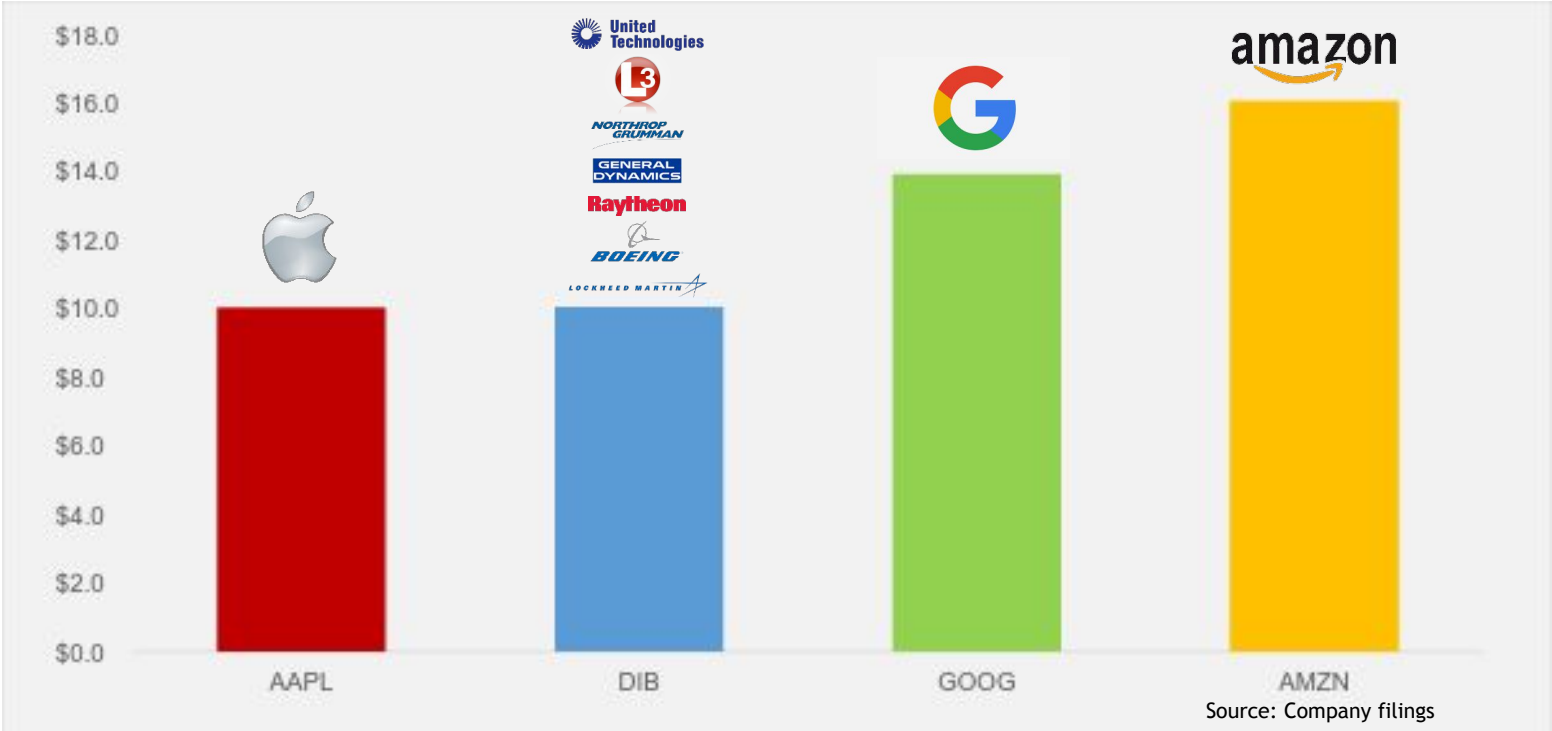
Austin

Washington, D.C.

Accelerating Commercial Innovation  
for National Defense

08/15/2017

# COMMERCIAL R&D: DIB vs. NEW ECONOMY (\$bn)



# BREAKTHROUGH INNOVATIONS RELEVANT TO DoD



Silicon Valley

Boston

Austin

Washington, D.C.

Accelerating Commercial Innovation  
for National Defense

08/15/2017

# DIUx PORTFOLIOS



Autonomy



Artificial  
Intelligence



Human  
Systems



Information  
Technology



Space



Silicon Valley

Boston

Austin

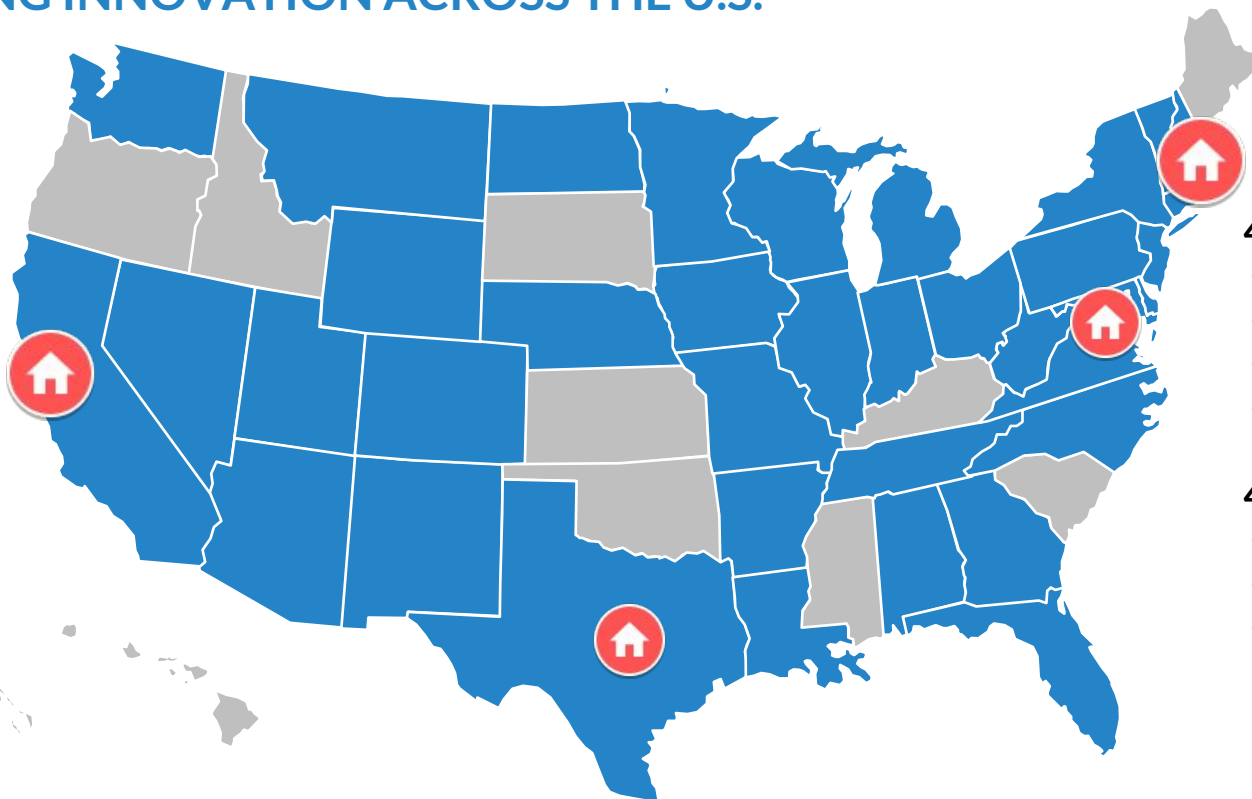
Washington, D.C.

Accelerating Commercial Innovation  
for National Defense

08 / 15 / 2017

## ACCESSING INNOVATION ACROSS THE U.S.

450+ co.'s  
in **39 states**  
competed  
for DIUx  
contracts



- 4 Offices
  - Silicon Valley
  - Boston
  - Austin
  - DC

**48 Staff**  
-11 civilian  
-26 military  
-11 contractors



## Silicon Valley

## Boston

## Austin

## Washington, D.C.

## Accelerating Commercial Innovation for National Defense

08/ 15 / 2017

## HOW DIUx WORKS

**Toughest  
DoD  
Challenges**

**DIUx Experts  
With Diverse  
Backgrounds**

**Prototype and  
Transition  
New Tech**



# COMMERCIAL SOLUTIONS OPENING (CSO) VS. FEDERAL ACQUISITION REGULATIONS (FAR)

## CSO

## FAR

Simple diux.mil solicitation	→	Complicated fbo.gov solicitation
<60 days to award	→	18+ months to award
Negotiable payment milestones	→	Set payment milestones
Negotiable terms/conditions	→	Gov't terms/conditions required
Negotiable IP/data rights	→	Stringent IP/data rights
Commercial accounting standards	→	DCAA accounting standards
Sole source justification for follow on procurement	→	Sole source procurement difficult

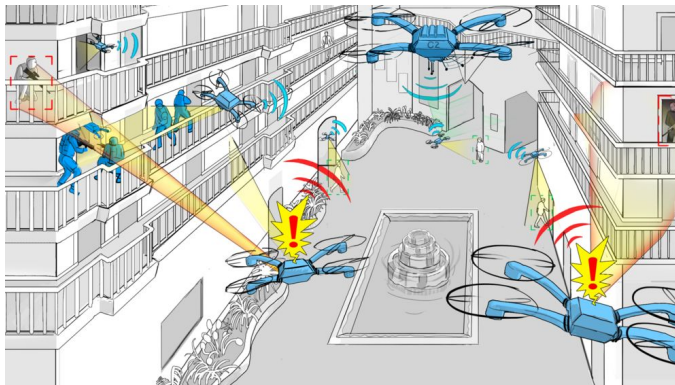
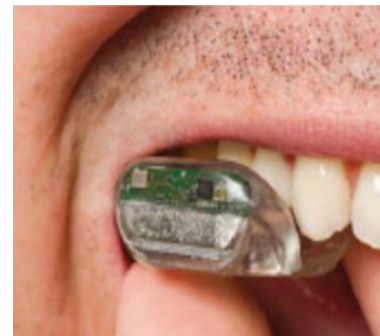


# SUCCESS STORIES

**45** PILOT CONTRACTS

**100** MILLION DOLLARS

**\$1.8bn of VC**



Silicon Valley

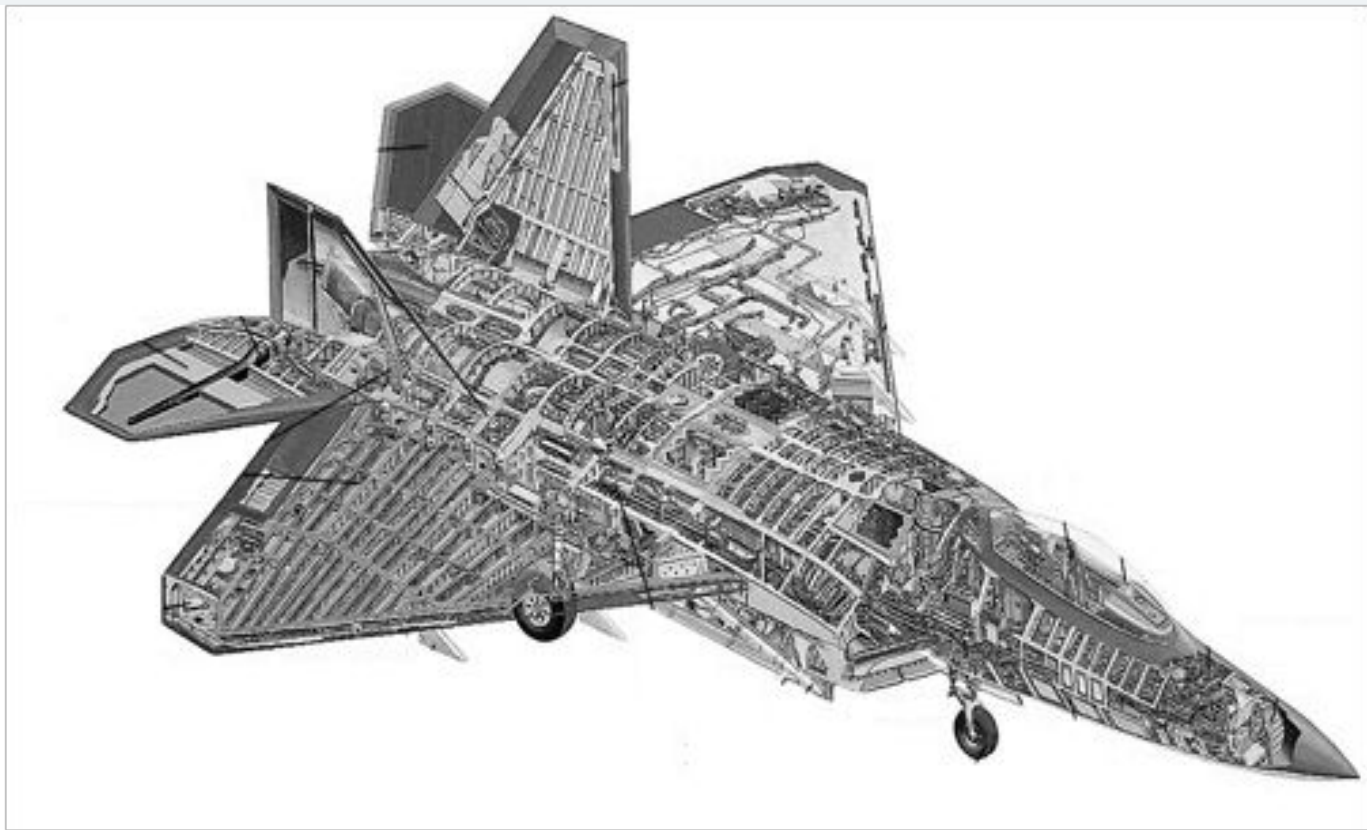
Boston

Austin

Washington, D.C.

Accelerating Commercial Innovation  
for National Defense

08/15/2017



Silicon Valley

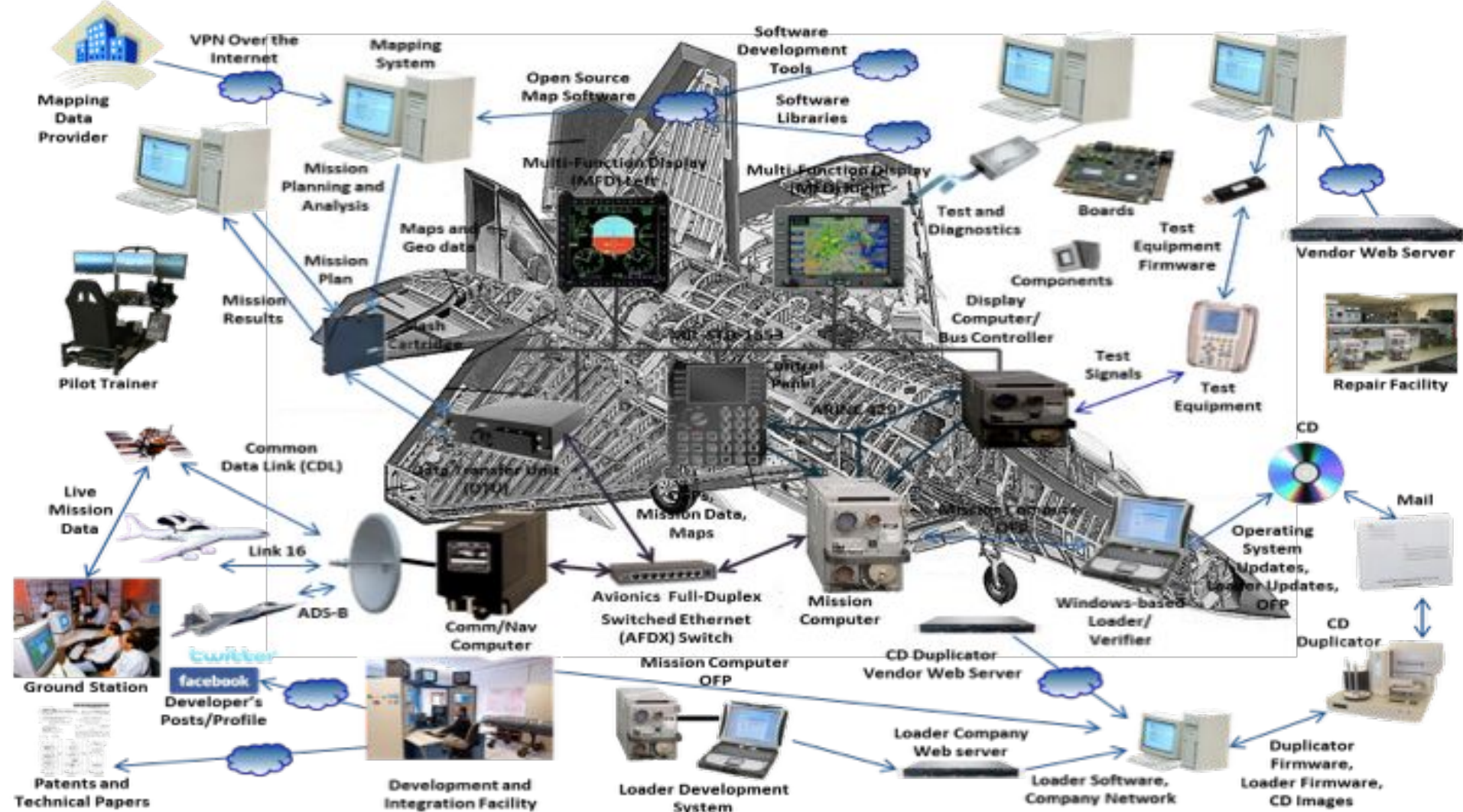
Boston

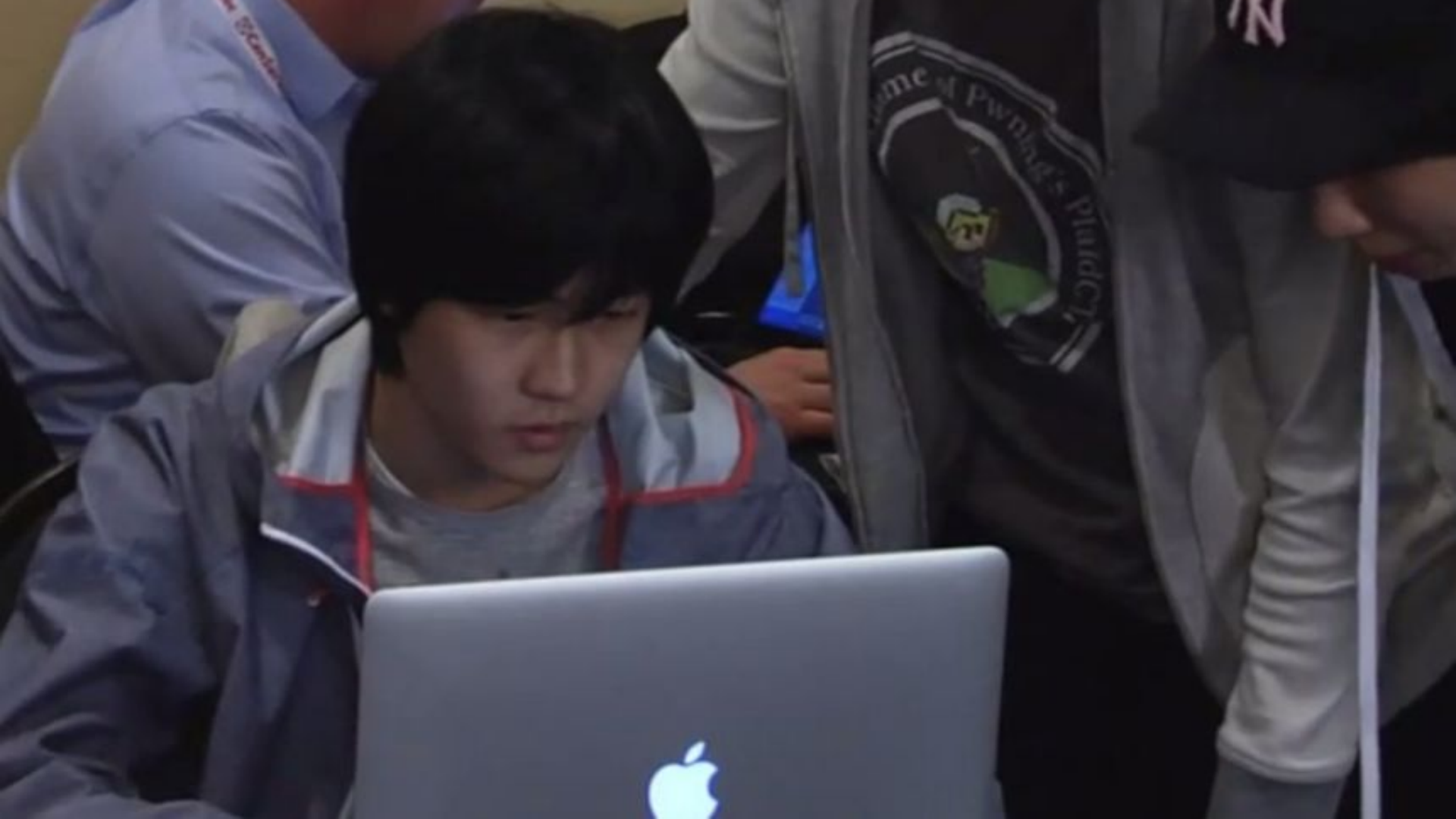
Austin

Washington, D.C.

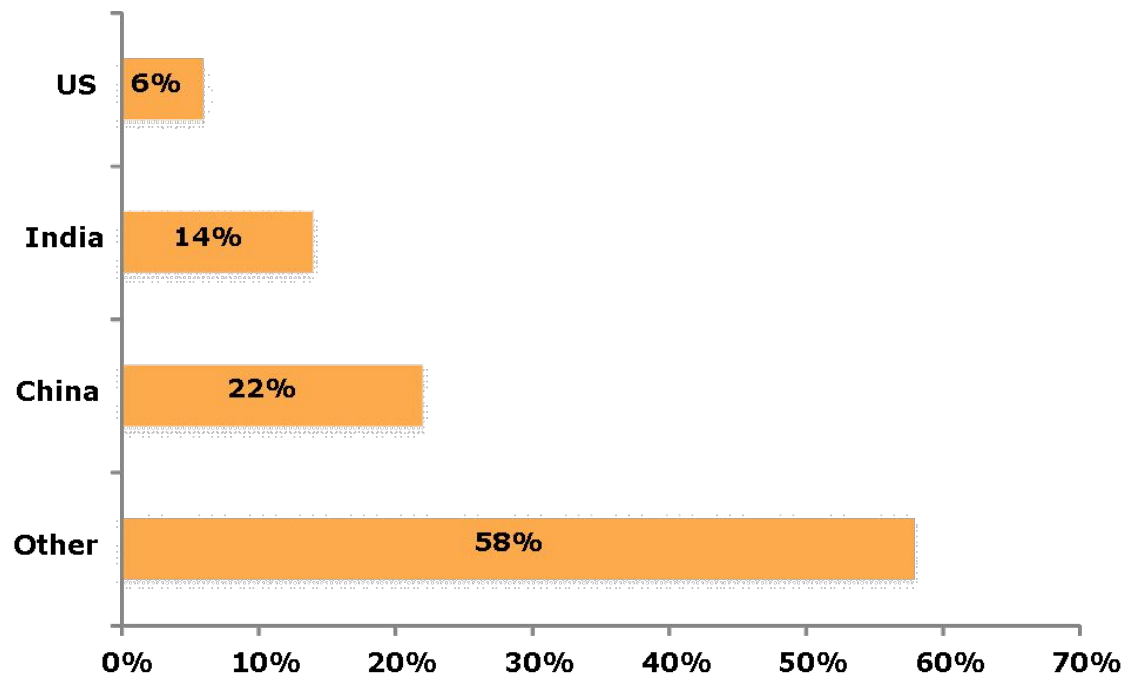
Accelerating Commercial Innovation  
for National Defense

08/15/2017

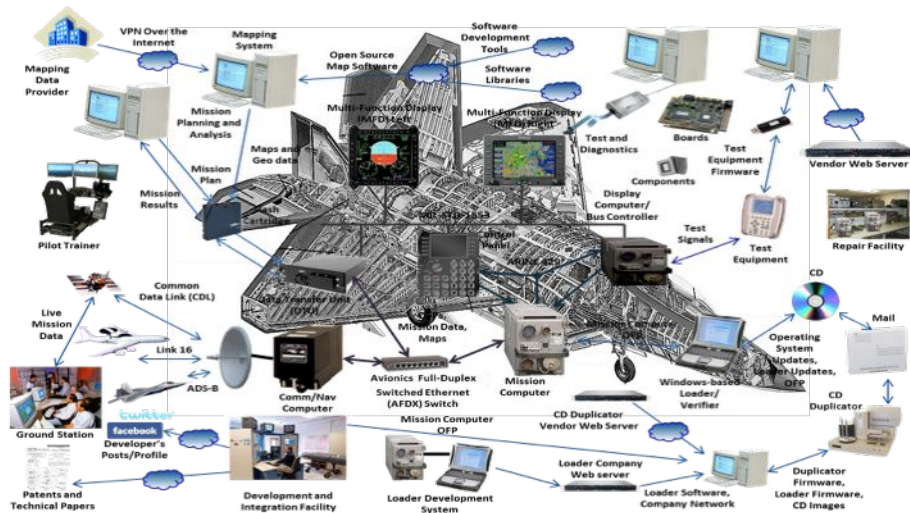




# NATIONS AS PERCENT OF WORLD POPULATION



# DEMAND FOR CYBER EXPERTISE



Silicon Valley

Boston

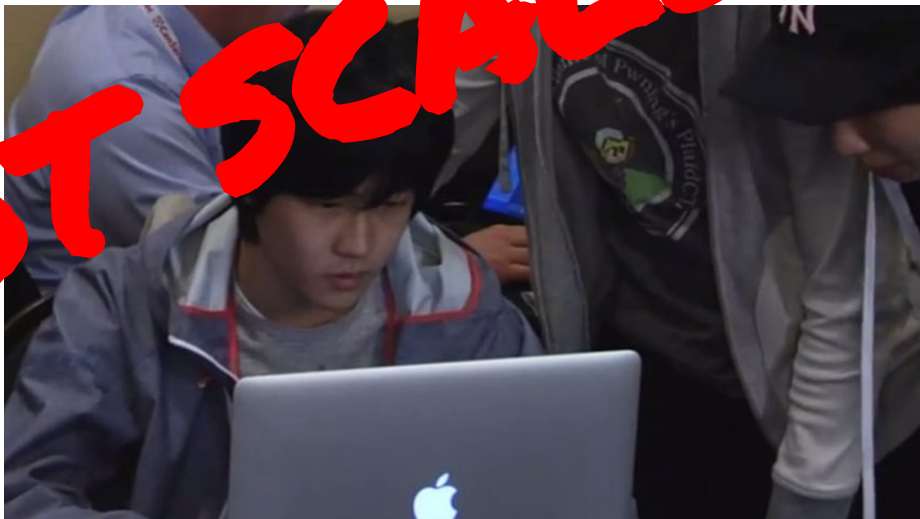
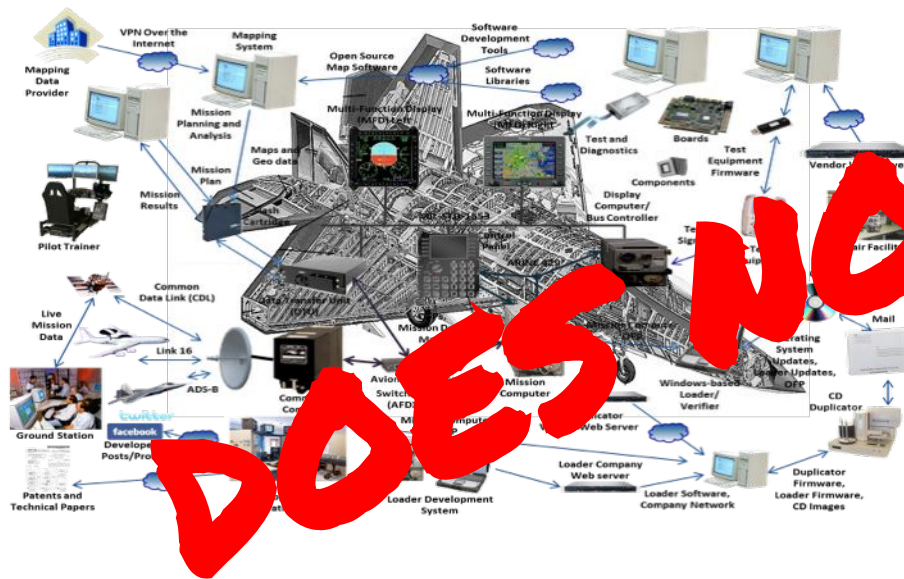
Austin

Washington, D.C.

Accelerating Commercial Innovation  
for National Defense

08/15/2017

## DEMAND FOR CYBER EXPERTISE



# THE MANDATE

## **FY2016 National Defense Authorization Act (NDAA), Section 1647**

“...complete an evaluation of the cyber vulnerabilities of each major weapon system of the Department of Defense by not later than December 31, 2019”

## **FY2017 NDAA Addition**

Directed DoD to “...develop tools to improve the detection and evaluation of cyber vulnerabilities”

## **Senate Appropriations Committee-Defense Report on FY2017 NDAA**

Recognizes “the value of automated exploit generation and vulnerability identification technologies for rapidly identifying security-critical vulnerabilities in off-the-shelf systems, such as those exemplified in the Cyber Grand Challenge”

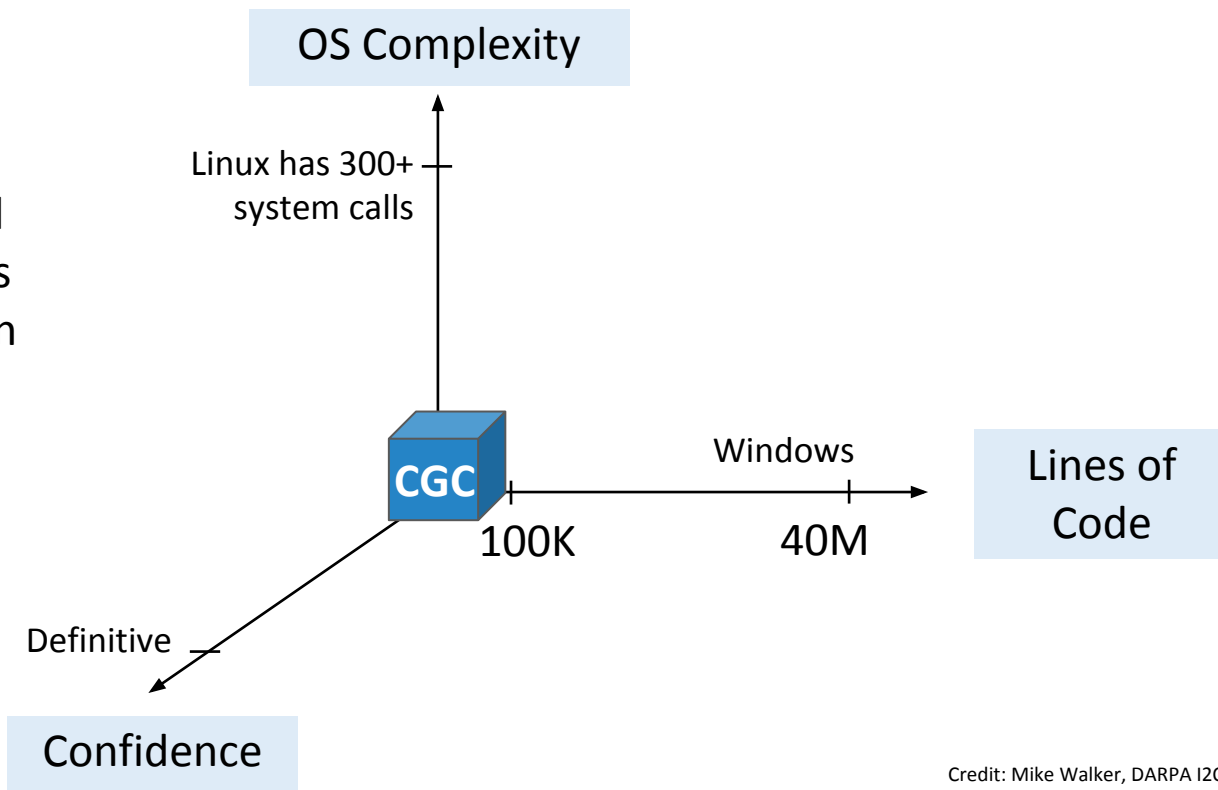


# WORLD'S FIRST MACHINE-ONLY HACKING COMPETITION



## CGC EVOLUTION

VOLTRON seeks to leverage the commercial marketplace to bring this “zero second” innovation into the DoD for use against weapon systems



Credit: Mike Walker, DARPA I2O



Silicon Valley

Boston

Austin

Washington, D.C.

Accelerating Commercial Innovation  
for National Defense

08 / 15 / 2017

# DIUx PROJECT VOLTRON



Silicon Valley

Boston

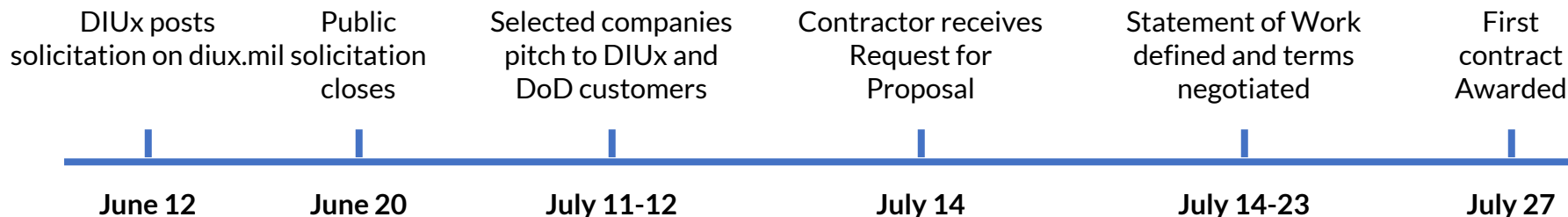
Austin

Washington, D.C.

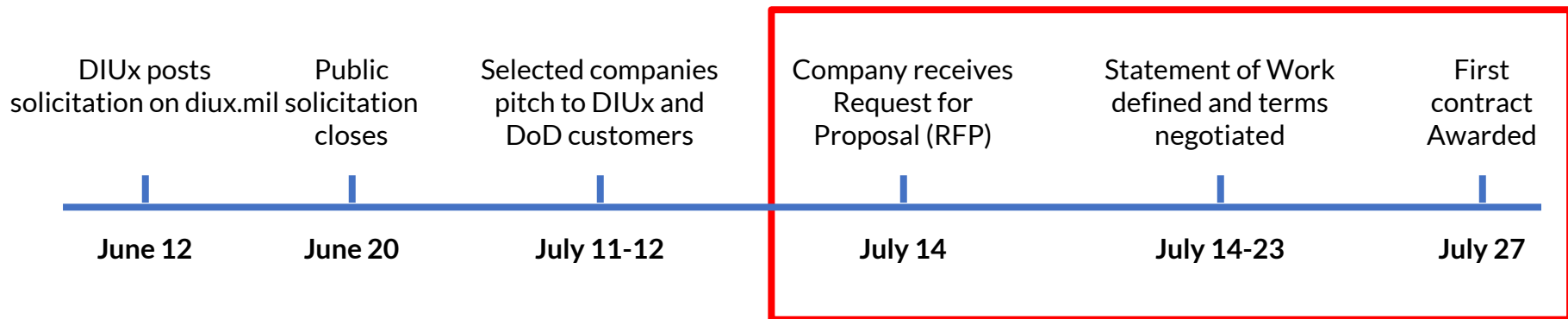
Accelerating Commercial Innovation  
for National Defense

08/15/2017

## FROM CGC TO CONTRACT IN 26 DAYS



## FROM CGC TO CONTRACT IN 26 DAYS



**9 Business Days from RFP to Award**



Silicon Valley

Boston

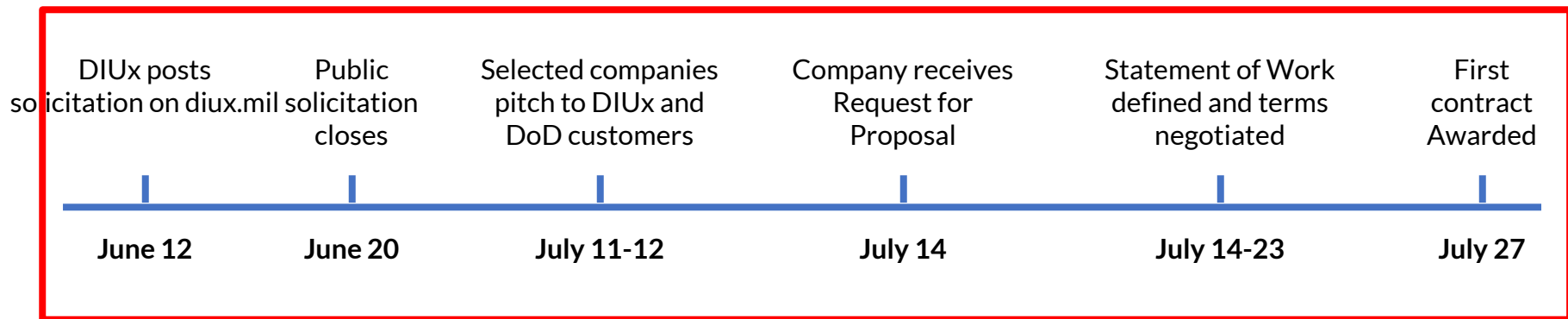
Austin

Washington, D.C.

Accelerating Commercial Innovation  
for National Defense

08/15/2017

## FROM CGC TO CONTRACT IN 26 DAYS



**26 Business Days from Public Solicitation to Award**



## DIUx IMPACT

**45** PILOT CONTRACTS

**100** MILLION DOLLARS

\$1.8bn of VC



Silicon Valley

Boston

Austin

Washington, D.C.

Accelerating Commercial Innovation  
for National Defense

08 / 15 / 2017

## DIUx IMPACT

45 PILOT CONTRACTS

100 MILLION DOLLARS

\$1.8bn of VC

DOES SCALE



Silicon Valley

Boston

Austin

Washington, D.C.

Accelerating Commercial Innovation  
for National Defense

08/15/2017



## QUESTIONS?

[questions@diux.mil](mailto:questions@diux.mil)

## WORK WITH US

[diux.mil](http://diux.mil)



Silicon Valley

Boston

Austin

Washington, D.C.

Accelerating Commercial Innovation  
for National Defense

08 / 15 / 2017

## DIUx + TRADITIONAL DEFENSE COMPANIES

At least one nontraditional defense company participating by any of the following:

- Supplying key technology or products
- Accomplishing significant amount of the effort
- Causing a material reduction in the cost or schedule or increase in performance

OR

One-third cost share (contributions of cash or non-cash items)

- IRAD may count towards this requirement

