

SMART  
AMERICA



**S E R S**

Smart Emergency Response System

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SMART  
AMERICA

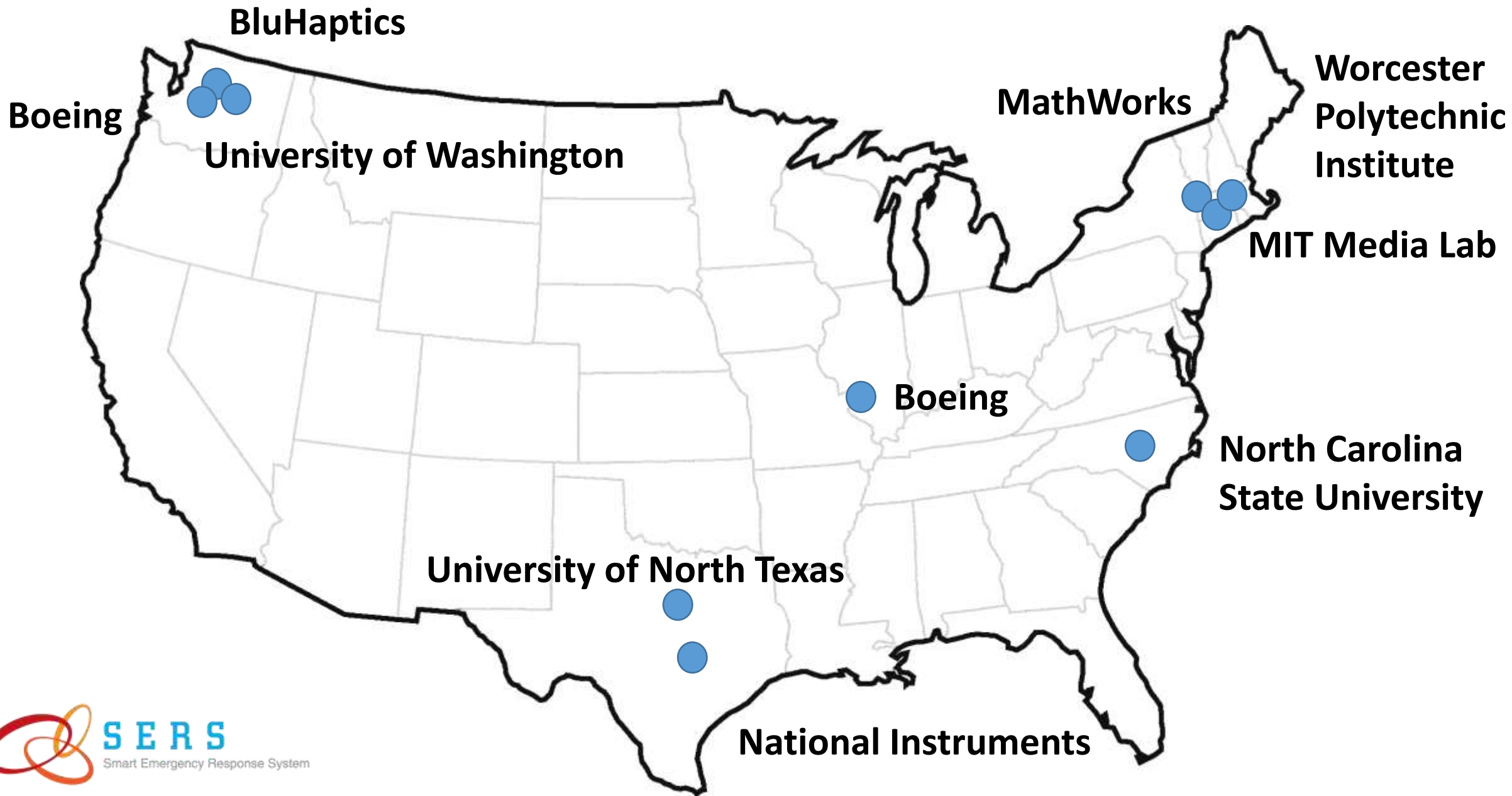


S E R S

Smart Emergency Response System

## Application Areas







# Architecture



WiFi drone



Biobot



KUKA robot



Haptic device



ATLAS

Ground vehicle

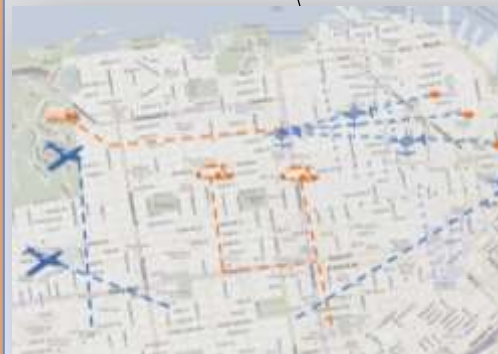
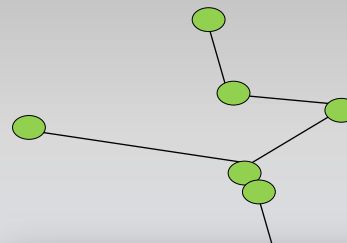
*Simulation*

UAV

Help request App



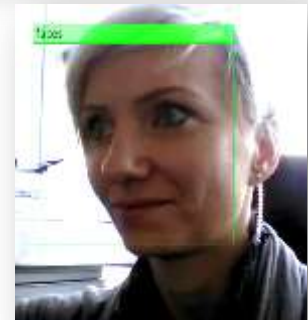
Mission Command and Control



Google Earth visualization



Video stream analysis



Human Machine Interface





# SERS

Smart Emergency Response System

BluHaptics

Boeing

Massachusetts Institute of Technology

MathWorks

National Instruments

North Carolina State University

University of North Texas

University of Washington

Worcester Polytechnic Institute



**Rich Rovner**  
**Vice President of Marketing**  
**at MathWorks**

Government

# 9 million STEM jobs by 2022

Industry

Academia

**Cyber  
aspects**

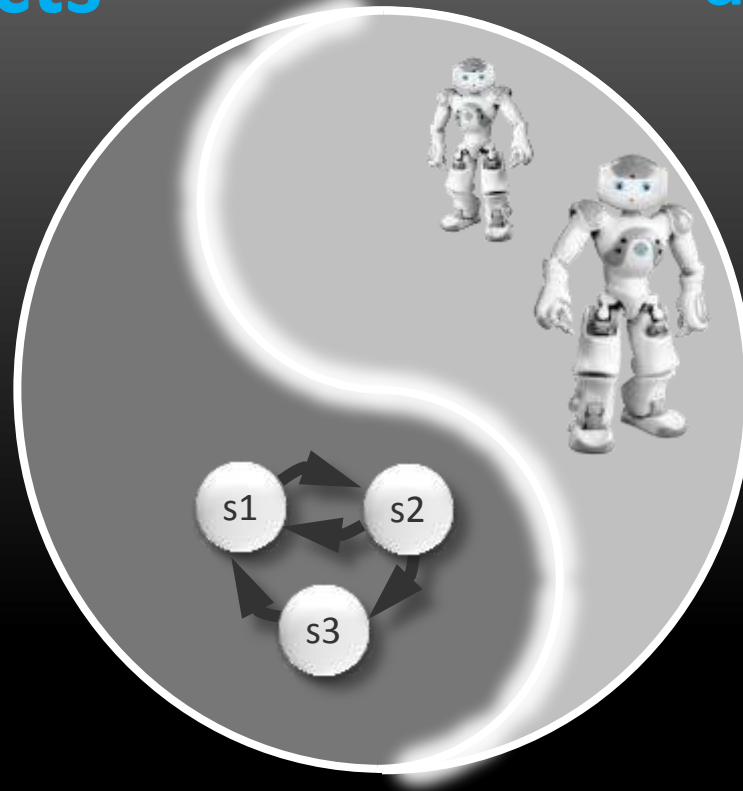
**Physical  
aspects**

Open  
design

Deployment

Trusted  
platform

Systems  
collaboration



**Human in the Loop**

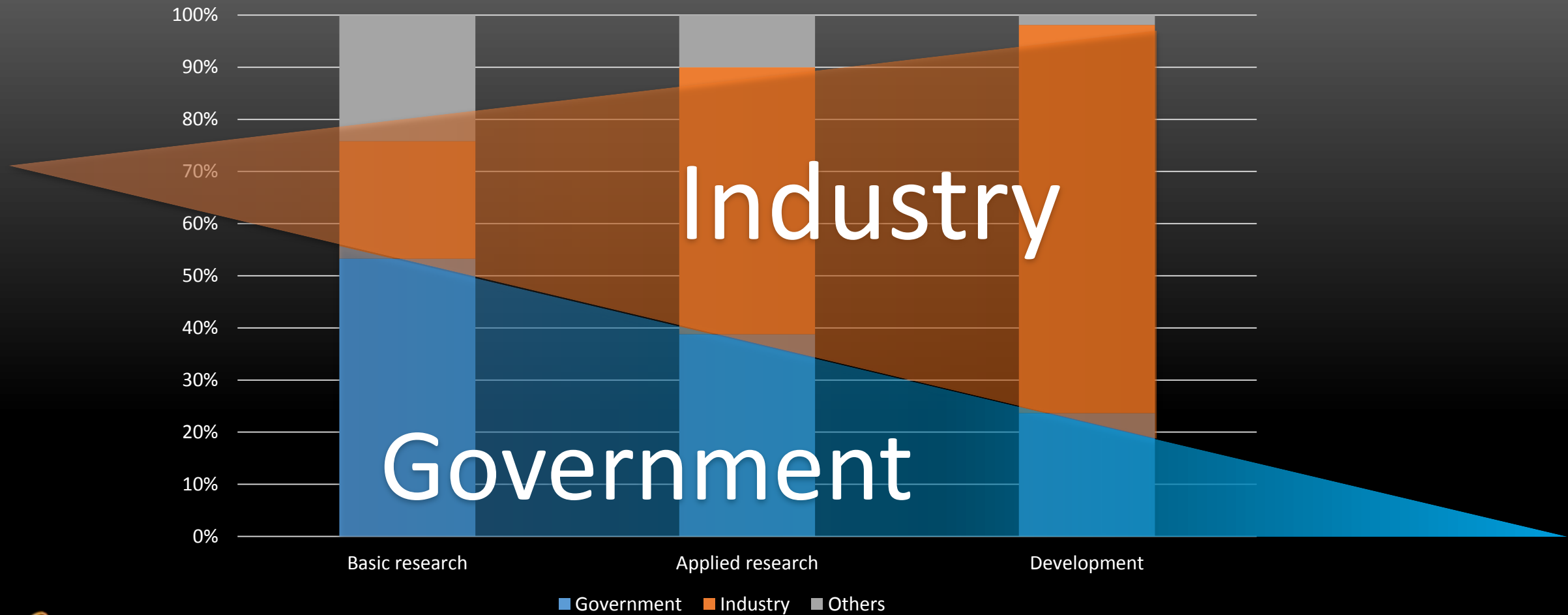


Annual firefighting expenses:  
**\$329 billion**

This constitutes **2.1%**  
of the U.S. GDP



# Research and Development Funding in the USA in 2011 (report of Fiscal Year 2014)

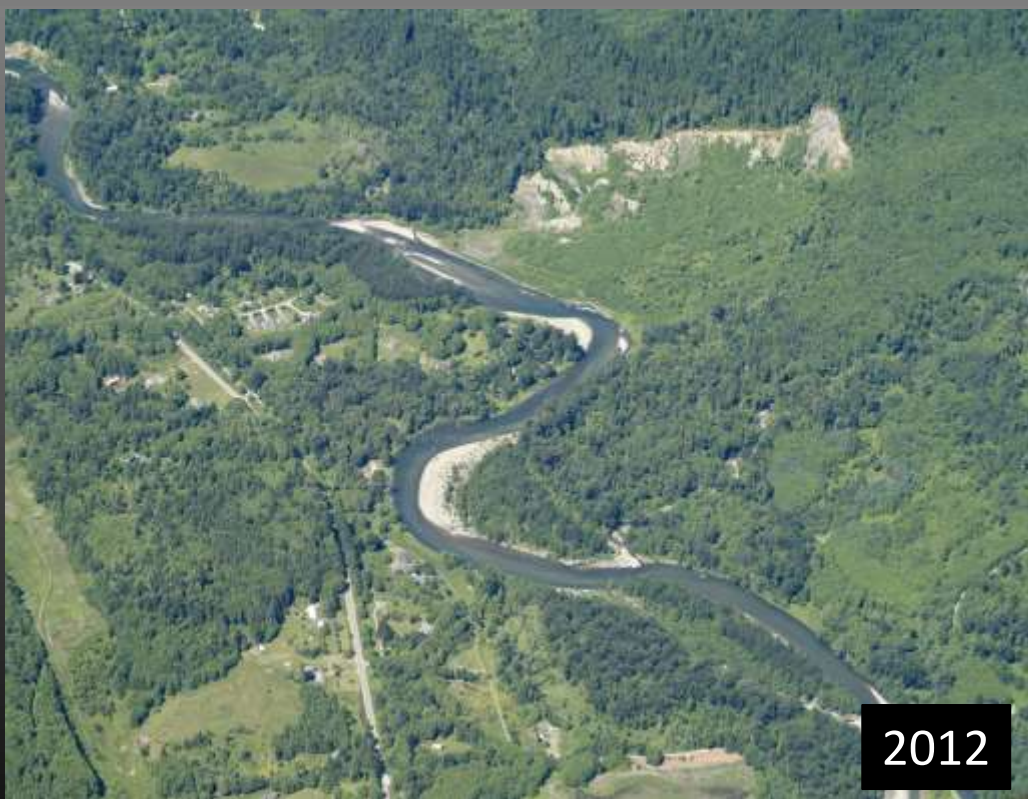


**Together**  
**For humanitarian cause**  
**To live better and smarter**



**Ray Almgren**  
**Vice President of Marketing**  
**National Instruments**





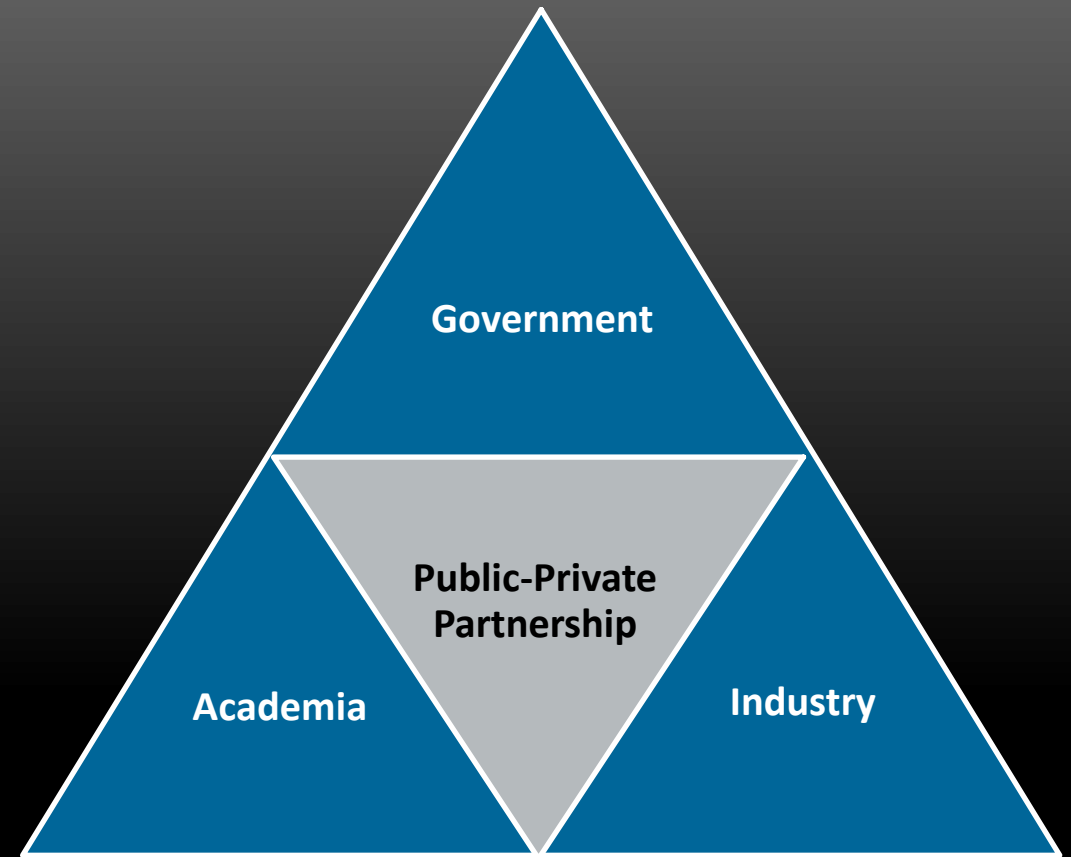
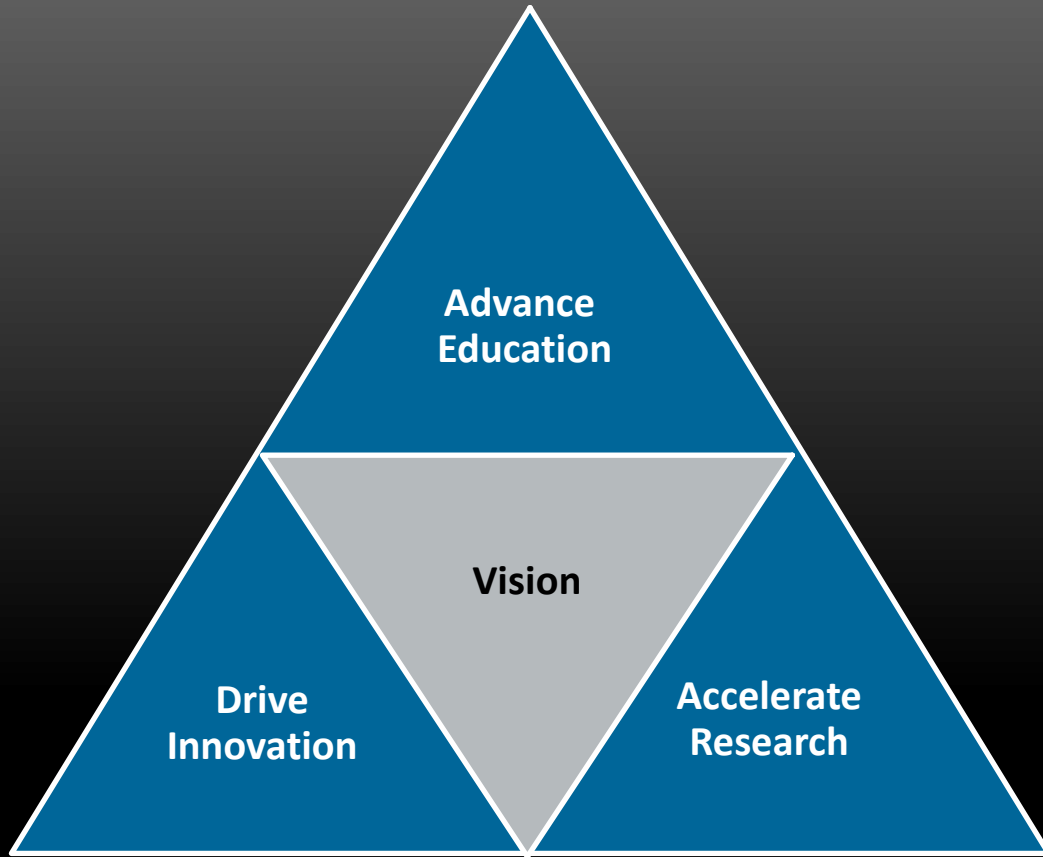
2012



2014









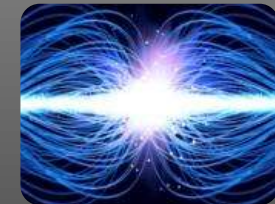
Advance health informatics



Engineer the tools of scientific discovery



Reverse-engineer the brain



Provide energy from fusion



Engineer better medicines



Provide access to clean water



Enhance virtual reality



Restore and improve urban infrastructure



Develop carbon sequestration methods



Advance personalized learning



Make solar energy economical



Prevent nuclear terror



Secure cyberspace



Manage the nitrogen cycle

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