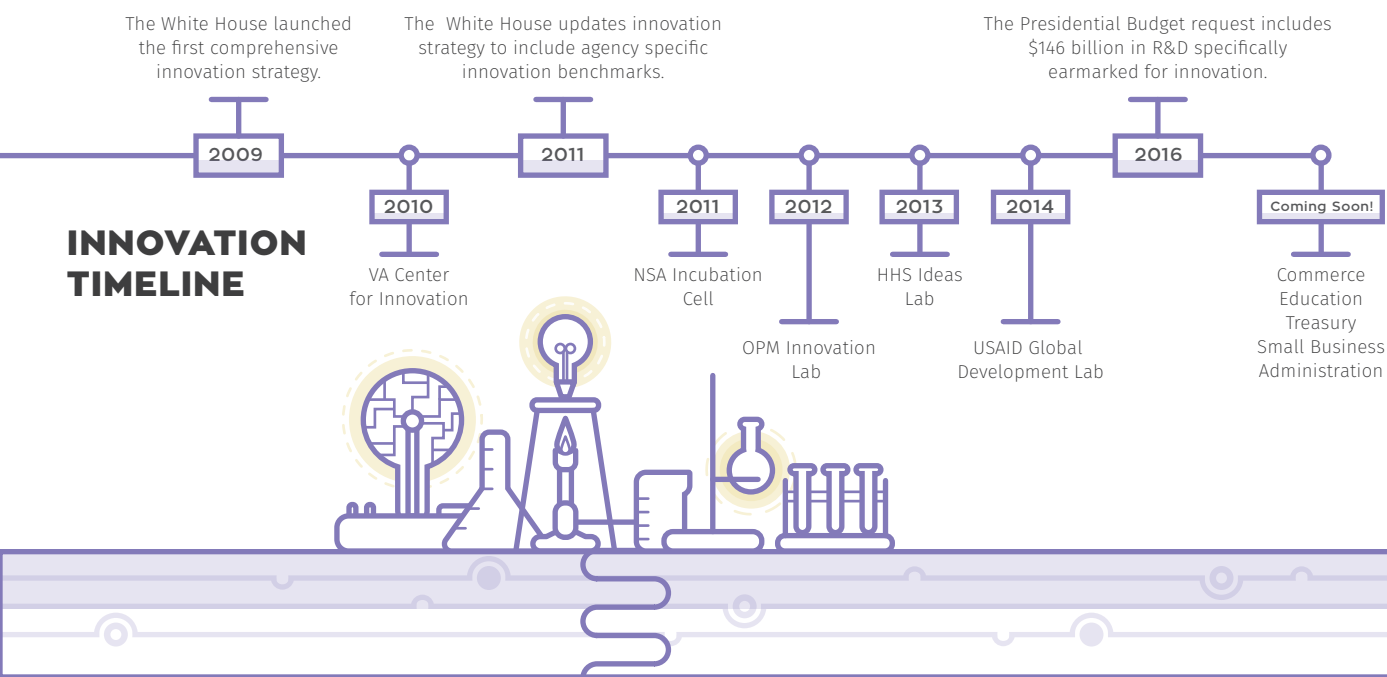




In October of 2015, the White House unveiled their update to the Strategy for American Innovation – aka the innovation doctrine for government.

The Strategy makes the case for the key innovation investments to advance the important emerging technologies it identifies.



## 6 AREAS OF INNOVATION EXPANSION

### 1 Precision Medicine \$215 Million

Most medical treatments are designed to treat the average patient. The House will give \$215 billion to precision medicine research. That will provide clinicians with tools to better understand the complex mechanisms underlying a patient's health, disease, or condition, and better predict which treatments will be most effective.

### 2 Neuroscience \$300 million

The BRAIN Initiative has the potential to do for neuroscience what the Human Genome Project did for genomics by enabling a dynamic understanding of brain function. A deepened knowledge of how brains work will help scientists and doctors diagnose and treat diseases more incisively, educate children more effectively, and develop novel technologies and devices to help alleviate the burdens of illness and injury.

### 3 Advanced Vehicles \$30 Million

More than 90 percent of crashes involve human error. To correct the issue the government wants to invest in autonomous vehicle technology research to develop performance and safety standards for autonomous, connected, and self-driving vehicles on public roads and to comprehensively pilot these technologies in cities, on highways, and in commercial environments.

### 4 Smart Cities \$160 Million

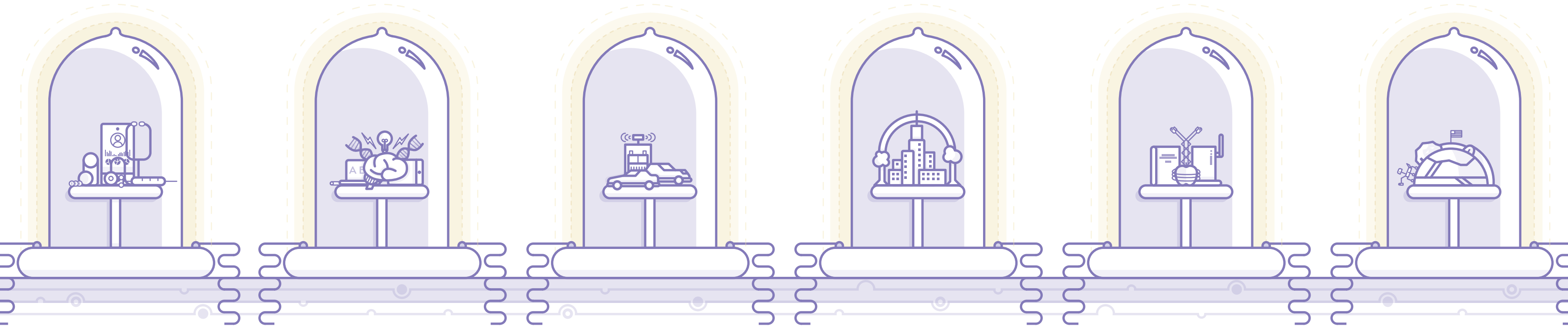
An emerging community of civic leaders, data scientists, technologists, and companies are joining forces to build "Smart Cities"—communities that are building an infrastructure to continuously improve the collection, aggregation, and use of data. More than 20 cities are participating in new collaborations that will help local communities tackle key challenges such as reducing traffic congestion, fighting crime and fostering economic growth.

### 5 Educational Technology \$50 Million

Currently, a large gap remains between the relatively modest impact that technology has had on education, particularly in grades K-12, and the transformative impact that technology has had on other parts of our lives. Through the President's ConnectED Initiative, the United States is now on the path to give 99 percent of students access to high-speed broadband by 2018.

### 6 Space \$725 Million

NASA is increasing its support for longer-term research projects with ambitious goals, such as protecting astronauts from radiation in space, developing advanced propulsion systems, and allowing humans to "live off the land" by producing fuel, oxygen, and water on other planets. These investments will create the foundations for a space-faring civilization and a future human mission to Mars.



## 5 KEYS TO INNOVATION LAB SUCCESS

- Diversity:** Members should cross disciplines and include employees at different levels of the organization. The team should be a blend of both disruptive innovators and the people who have the relationships and means to move things forward.
- Resources:** Successful Innovation Labs support their teams through providing appropriate funding, training, toolkits, test environments, and data and information. However, the most important resources won't be money or tools, but people and their time.
- Incentives:** It's important to recognize that innovation takes time away from everyday activities. This is why incentives, such as monetary rewards, recognition amongst peers, the opportunity to work on grand challenges, team competitions, and even simply the ear of the agency director are necessary to drive innovation.
- Stability:** Innovation Labs need to be insulated as much as possible from the insecurities of the budgeting process, such as Continuing Resolutions and shutdowns, and leadership changes, which can have disruptive and irreversible effects on innovation. As political appointees may change, it becomes even more pressing to ensure there is buy-in and commitment from the agency.
- Follow-through and measurement:** Building credibility is necessary to the long-term success of an Innovation Lab. Metrics need to be established to determine the success of each initiative.