

# StarNet's Experience in General Aviation Alliances

---

Paul Masson  
Managing Director

On-Demand Mobility Workshop  
October 21-22, 2015

Strategic Alliances Resources Network, LLC  
1806 Belles Street, #8A  
San Francisco, CA 94129  
[www.starnetllc.net](http://www.starnetllc.net)



# Outline

---

- **Who & What:** StarNet Network
- **Types:** Alliances & Partnerships
- **How:** Fundamental Model
- **Aviation:** GA Alliances
- **GA: AGATE** Alliance
- **GA: PATA** Alliance
- **Next Alliance:** NextGen Software



# Network of five specialists organize R&D alliances to innovate technology & business models

---

## ■ Who is in the network?

- Paul M- Organizational Process, Finance, Law
- Keith Gale- Tech Commercialization
- Bill Lennett- Government Contracting & Audit
- Alyson Greenlee- Economic Development
- Josette Ferrer- Intellectual Property

## ■ What do we do?

- Map Innovation Needs
- Design
- Manage
- Administer
- Secure Funding



# Types: Focus on alliances that create “systems” of technologies that can impact industry business models

<b>Types</b>	<b>Equipment &amp; Facilities</b>	<b>Projects</b>	<b>Programs</b>
<b>Commercial</b>	<b>Lab Sharing</b>	<b>Single Project Partnership</b>	<b>Consortium Multiple Tech</b>
<b>National Public/Private</b>	<b>Test Facility</b>	<b>Single Project Partnership</b>	<b>National Scale Public/Partnership</b>
<b>Regional/Local Public/Private</b>	<b>Engineering Facility</b>	<b>Innovation Cluster Sub-Teams</b>	<b>Innovation Clusters</b>
<b>University or Research Institute</b>	<b>R&amp;D Campuses</b>	<b>Project Partnership</b>	<b>Topical Center</b>

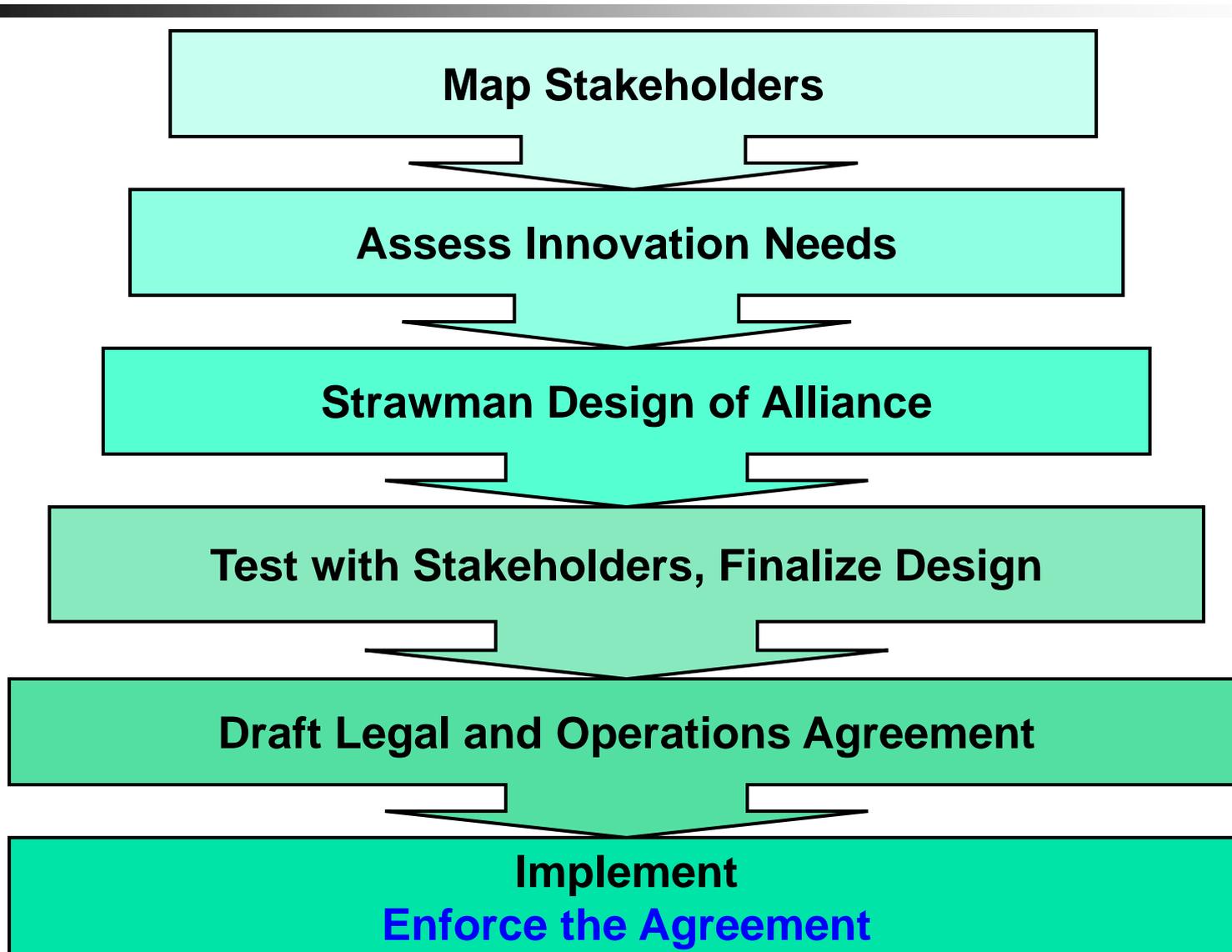


# Scope: Range across different economic sectors

Types	Equipment & Facilities	Projects	Programs
Commercial			City Protocol Society GA: Air Taxi
National Public/Private			Offshore Wind GA: AGATE & SATS
Regional/Local Public/Private		Connecticut and Colorado: Aerospace & Advanced Manufacturing	State of Connecticut: Eight ongoing programs
University or Research Institute	WSU Innovation Campus		



# How: Alliance design is based on needs assessment...like designing any system



# Design: Alliances design is like any system design...such as a vehicle

---

- **Performance:** What want to accomplish?
- **Charter:** What's purpose? Why different other existing groups?
- **Structure:** What are functions, roles, relationships?
- **Governance:** What is representation, mix, decision process?
- **Management:** Who and how manage?
- **Operations:** What are functions of administration?
- **Output:** How to secure, protect and distribute outputs?



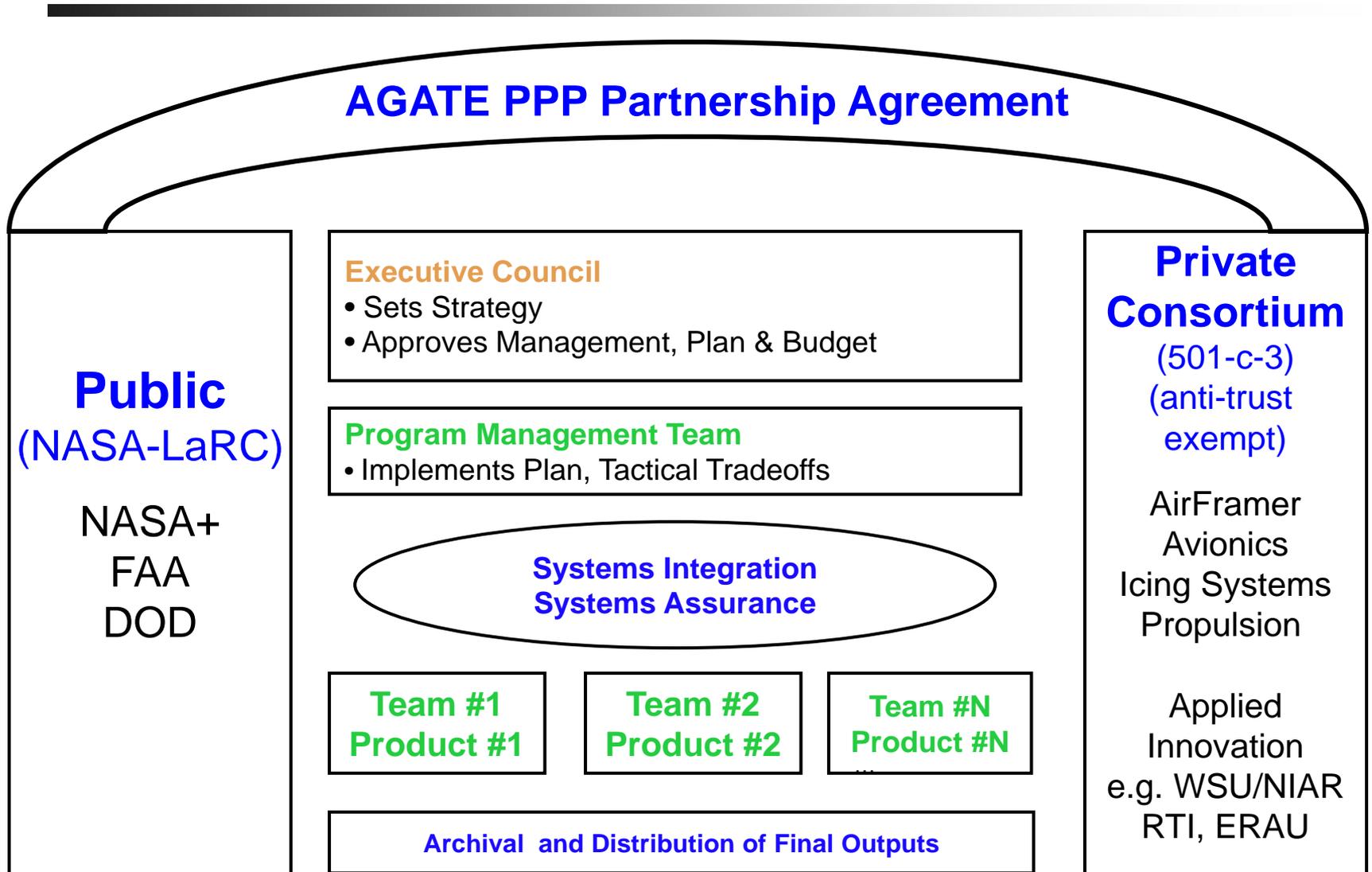
# GA Aviation PPP' s cover a wide range of objectives, incentives, structures and working relationships

---

- **Vehicle Systems:** Advanced GA Transport Experiments (AGATE)
- **Propulsion:** General Aviation Propulsion Systems (GAP)
- **Transportation Systems:** Small Aircraft Transportation System (SATS)
- **Aviation NetCentric Operations:** Airborne Internet Consortium (AIC)
- **On-Demand, Air Taxi:** Personal Air Transportation Alliance (PATA)



# AGATE: AGATE Alliance was designed for discovery flexibility to develop & certify technology & vehicle systems



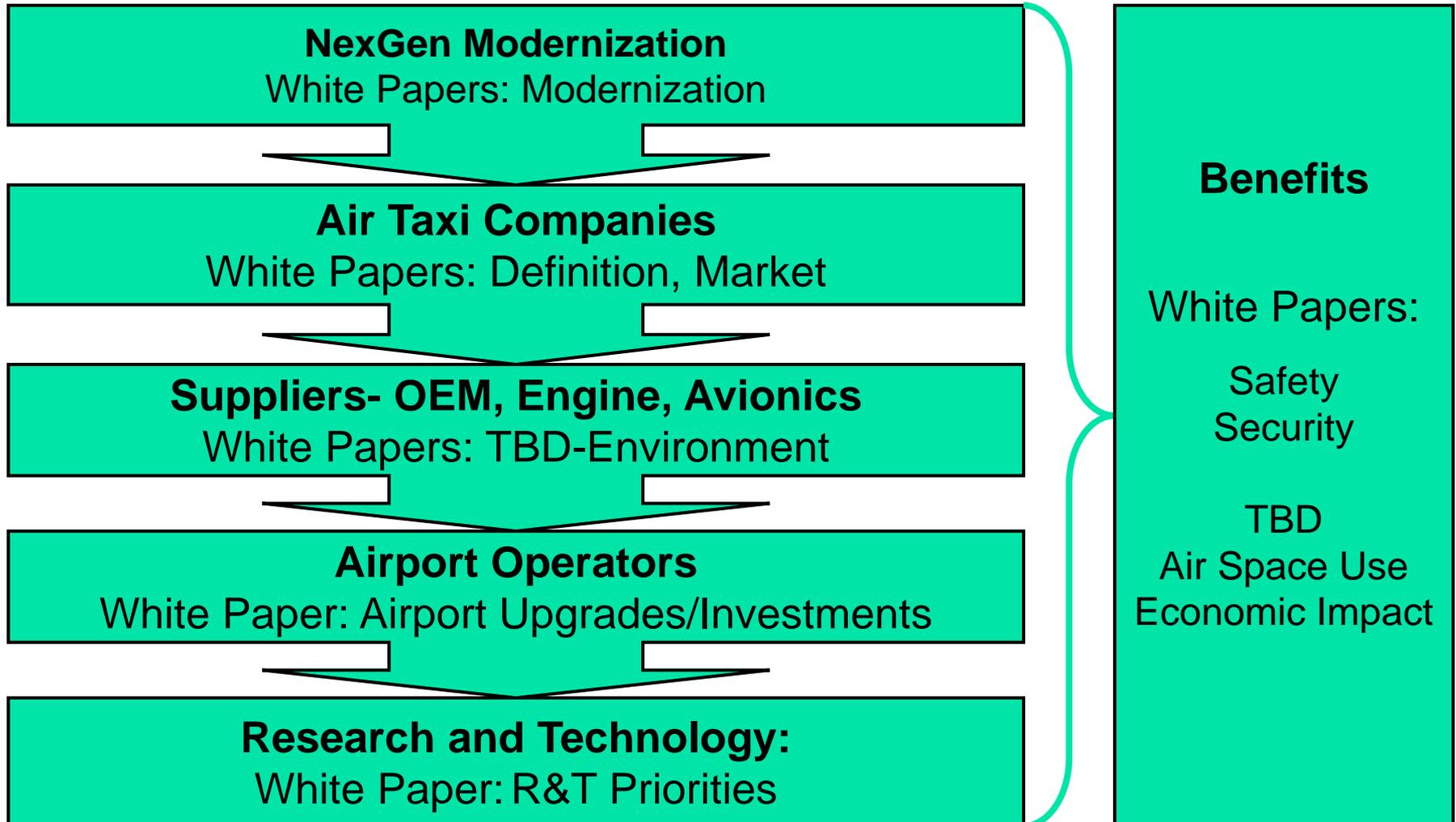
# PATA: An air taxi alliance to promote a business models &, define technology needs

---

- Industry-led
- Mutual benefit innovation alliance, not a trade association
- Support common approaches to expand air transportation with focus on small airports and aircraft serviced by air taxi
- Pool information, support and facilitate research

**Personal Air Transportation Alliance  
(PATA)**

# PATA members agreed to compile information under NDA to prepare white papers



# PATA was asked to forecast the on-demand, air taxi impact on national transport



- **Members Survey:** Five largest air taxi
- **Aircraft:** 500 within 3 years
- **Altitude:** 21K to 28K feet
- **Airports:** Community airports outside urban areas with only one exception for approximately five planes over next two years
- **Update:** Semiannual
- **Expanded Survey:** Four new air taxi for a total of Nine



# PATA pooled operator information to identify market demand

---

- **Sector:** Outside hub-and-spoke
  - Only one PATA member intends to base or even offer hub airport coverage
- **Need:** Provide time and travel disruption savings
- **Market:** Business travelers (80%) of small to medium sized businesses
- **Volume:** Total size in 2006 @ 240,000 trips per annum or 1.5% of total 200 to 1000 mile business trips
  - Key Range: 195 to 450 miles
- **Growth:** Est. 4 to 5% per annum



# StarNet is evaluating the feasibility of launching a NextGen software development alliance

---

- **Objective:** Shared software architectures and code
- **Organizers:** StarNet and WSU/NIAR
- **Analysis Sponsors:**
  - FAA Tech Center
  - CISCO Transportation Group
- **Next Meeting:** NBAA, November 17 in the afternoon, room and time to be announced



# Questions?

---

**Paul Masson**

Managing Director

Strategic Alliances Resources Network, LLC

[paul\\_masson@starnetllc.net](mailto:paul_masson@starnetllc.net)

[www.starnetllc.net](http://www.starnetllc.net)

White Papers on Website

Fundamentals of Innovation Alliances

1806 Belles Street, Suite 8A

San Francisco, CA 94129

Ph: 415-668-6373



# Appendices

---



# Public/private partnership is a term that encompasses four concepts about public vs. private sector economic activity

---

## ■ Two political concepts

- **What role...** government vs. private sector
- **What issues...** infrastructure, innovation, job growth

## ■ Two organizing concepts

- **What scope...** government, private corporation, academia, bridge organizations
- **What structure....** advisory, consortia, university programs, research institutes



# Public/private partnerships normally take the form of specific conjoint programs, projects & ongoing operations....

Level	Description
<b>Political</b>	<b>National and regional needs</b> ; national and regional interests; political organizations; think tanks; special purpose councils, etc...
<b>Policy</b>	<b>Areas and policy positions</b> for energy, transportation, innovation, fiscal (tax), sector regulations, etc.
<b>Program</b>	<b>Continuing topical areas of activity</b> impacting economics regarding energy, transportation, research, development, testing, standards, etc.
<b>Project</b>	<b>One time activities</b> intended to achieve a specific outcome such as a specific ethanol test, vehicle test of biodiesel, aircraft flight efficiency test, etc.
<b>Ongoing Operations</b>	<b>Operating functions</b> where public organizations and private vendors constantly coordinate such as transportation system development, IT security, etc.



**Relevant because PPP's are the mechanism to build economic growth, supply chain development and profitability....**

---

## ■ **Examples...**

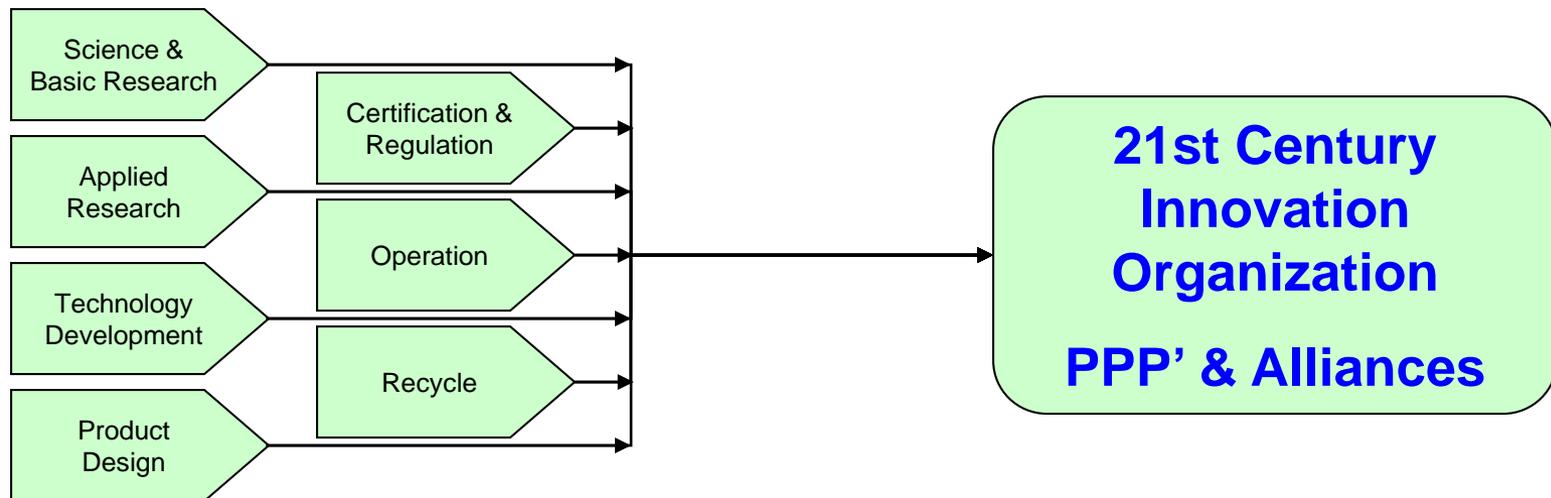
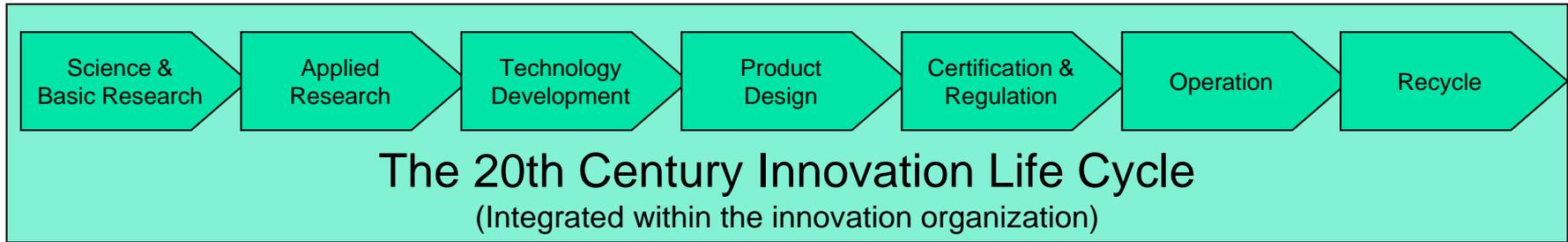
- **Transport:** NACA-annual event, rail and auto consortiums
- **Agriculture:** USDA university funded farm extension
- **Energy:** USGS surveys used by petroleum syndicates

## ■ **Common Industry Values from PPP**

- **Co-Development of Standards**
- **Lowered Cost of Capital**
- **Skills/Workforce Development**
- **Public Infrastructure for Commerce**



# Innovation partnerships create organizations that span the full spectrum of technology development and beyond..the scope expands and structure is formalized



The 21st Century model for innovation requires new organizational processes.