The Space Industry Opportunity for GA

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The Space Industry Opportunity for GA.

Space Ind. Market Size

"Where's the Money" in Space Industry

How GA Can WIN in the Space Industry

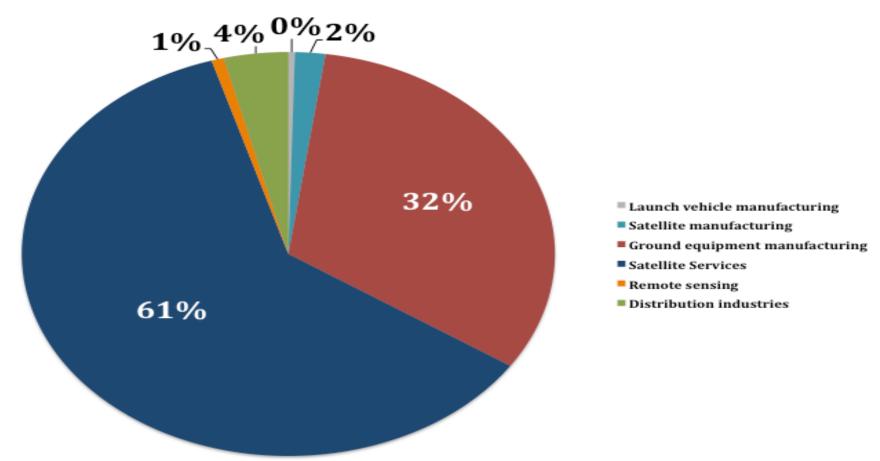
Oversight issues

The Space Industry Market Size

Five <u>Product</u> Segments - Sat. <u>Mfg.</u>, Launch Veh. <u>Mfg.</u>,
 Ground Eq. <u>Mfg.</u>, Sat. Services, & Eng. Services

- 2014 Global Mkt.= \$323-330B, up 9.7%
 - High Paying STEM Jobs- >\$100K average wage
- GA. <1/2 of 1% of US, < 1/10 of 1% Global Space Mkt.</p>

Distribution of Economic Impact



<u>Distribution of total economic activity impacts resulting from CST&EI,</u> 2009-FAA

How we WIN-GA Advantages

- GA has 3 significant advantages:
- "Location, Location, Location"
 - Spaceport Camden site
 - Southern Latitude
 - Launch to the East over Water
 - Port/barge access close to FL Launch

How GA WINS Against Other States?

- GA Advantages:
 - GA Tech AE's and Eng. = Robust Pipeline
 - RTW state CA, WA, CO are NOT
 - Camden Spaceport site -"Best on East Coast,"
- Mkt. Strategy=The <u>cards are stacked in GA's</u> <u>favor...Yes, GA CAN WIN</u> against other states!

A Way Forward for GA

Serious Market Opportunity = A <u>serious</u> effort that matches the size of the opportunity:

- <u>Every 1%</u> of additional Mkt. share is: (\$3B+) of incremental GA Space Ind. Revenue/yr. and 2,300 direct employees...every +1%
- □ Times 2-3 FAA multiplier for <u>economic impact</u>

A Way Forward for GA

Public/Private <u>Partnerships</u> to Develop Space Ind. Market in GA.

- Target Private sector Beneficiaries-
 - Travel & Entertainment
 - Logistics & Transportation,
 - Utilities,
 - Developers
 - Venture Capital

A Way Forward for GA

How to Develop The Space Ind. In GA.

- Target <u>Anchor</u> Space Industry companies to GA. (Launch, Payload, Subsystem)
- Leverage Logistics Location advantage in GA
- Visit <u>Tier I and II</u> Space Co. -NOW to ID current/future facility plans

Oversight Issues

- Please Review Business Dev. Roles
 - "We answer the door when customers knock?"
 - Should we proactively Target key industry players? Other states do!
 - Business Development Inside/outside?
 - Support Budgets for Camden Spaceport?
 Ad, PR, Trade Shows, Social Media

Backup Slides

Additional Information

The Timing is Right!

- NASA handoff to private sector LEO Launch
- Emerging Space Tourism and Small Sat's
- Cost Competitive industry = enhances value of lowering Transportation costs
- Space X (+others) seriously interested in CC site

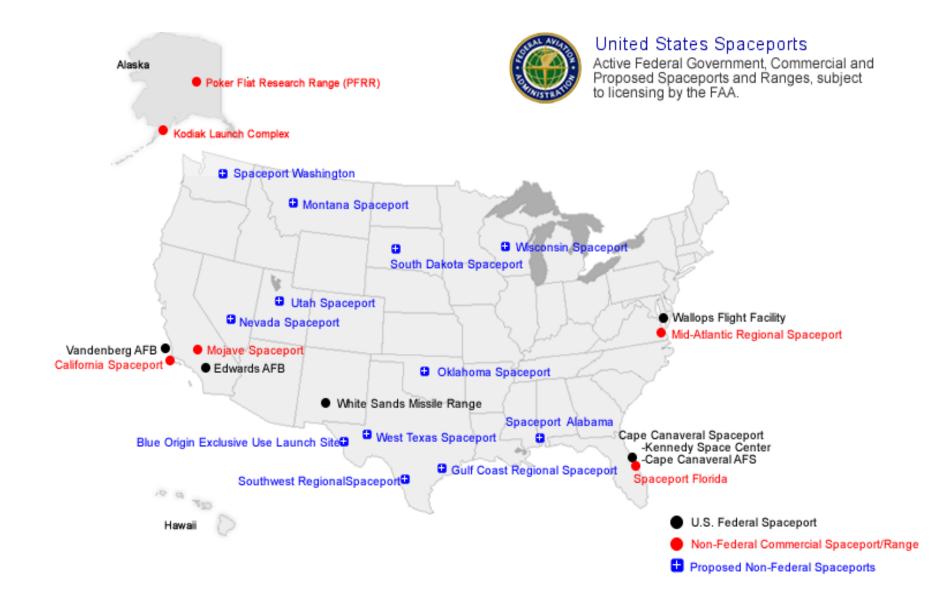
Licensed and Proposed Spaceports

U.S. Spaceports

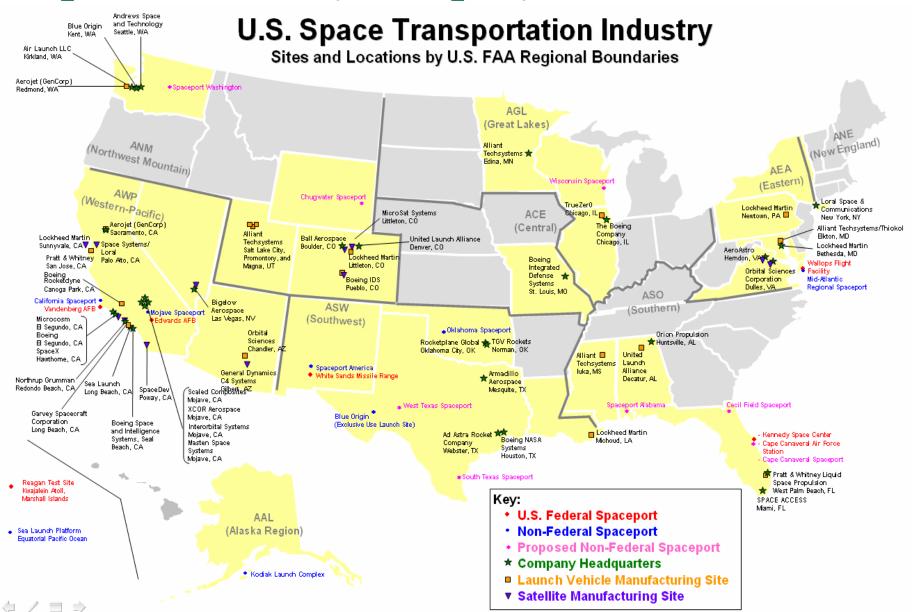
Commercial and Government Active and Proposed Launch Sites



US Proposed (Blue) Spaceports



Space Industry Employers



Enabling Technologies Time Line (FAA)

Transformation Era

Responsive Space Launch and Human Exploration Era

	Built-in Test Equipment S/W wrappers for legacy systems	Self-diagnostic systems		
Self-Healing	Modeling and simulation to predict failures		Integrated, autonomous	
Systems	New/smart sensors—MEMS, nano-, bio-technologies		system health monitoring an self-healing	
	Interoperable protocols	Automated configuration	Self-flealing	
	Remote repair capability	Tele-operations, tele-presence		
	Integrate voice, video, data			
	Protocol Development	The second second	Management of the Control of the Con	
	Next-generation Internet		Global Information Grid	
Network & Data	Human-computer interfaces, Human factors research			
Handling	Advanced displays, Automatic virtual environments			
	Standard interfaces and plug-n-play algorithms		CONTROL STREET, AND	
	Data fusion (rule-based)	Data fusion (fuzzy logic)	Data fusion (expert systems)	
	High-productivity and other advanced computing technologies			
	Patterned magnetic media; Fast readout optic	al storage, Hybrid optical/magnetic	media	
itegrated Software				
Planning &	Rule-based automated tools	Autonomoustools	Knowledge-based tools	
Scheduling	Automated deconfliction Tools	Autonomous tools	Autonomous D&A	
Modeling & Simulation	Improved environmental, vehi de breakup inputs data			
	Improved space and air traffic prediction models Reactive guidance, navigation, and control			
			The state of the s	
	Automated air traffic collision avoidance systems			
	Fixed Sensors	UAV Sensors		
Weather	Remote Sensors (space-based, etc)		The state of the s	
Measurement	Blended System Models			
WAY THE WAY TO SEE THE PARTY OF	Mesoscale models			
& Forecasting	Fusion and Assimilation Tools			
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