

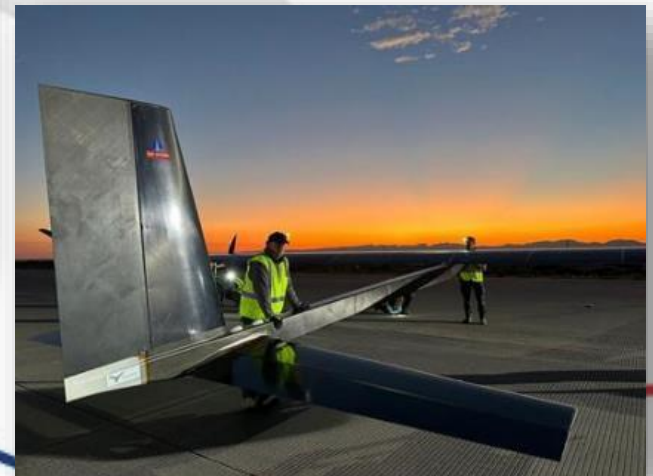
**The GATEWAY TO SPACE®**

# Update on Spaceport America

## Legislative Finance Committee

Wednesday, October 25, 2023

Scott McLaughlin  
Executive Director



**SPACEPORT AMERICA**

**THE SPACE TO BE...**

# Outline

- Activity Review
- Capital Projects and Facilities Maintenance Updates
- Budget and Economic Impact
- Business Development

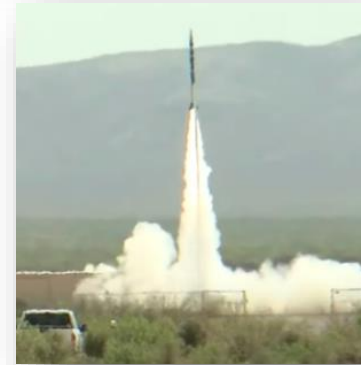
# Activity Review



# Site Activity

- **USAF Thunderbirds** winter training
- Three HAPS (**High Altitude Platform System**) customers have been testing on site
- Liquid engine testing by **Phantom Aerospace**
- **U.S. Military Academy** (West Point) flew student rockets
- **Virgin Galactic** flew to space on May 25<sup>th</sup>, Jun. 29<sup>th</sup>, Aug. 10<sup>th</sup>, Sep. 8<sup>th</sup>, and Oct. 6
- **UP Aerospace Rocket** launch had rare anomaly during May launch, will launch early 2024
- Another **kinetic launch** customer considering operations at SpA
- **Suborbital liquid rocket launch** in early 2024
- Other **small UAV** training and testing
- Continued operations by **SpinLaunch**
- **STEM Outreach** including virtual, site tours/demos etc.
- The **Spaceport America Cup** was held the week of June 20
- **Prismatic** succeeded in first milestone high altitude flight
- Participated in **Dona Ana County intern** program and continuing with other interns
- **Electric car manufacturer** battery testing
- [www.youtube.com/spaceportamerica](https://www.youtube.com/spaceportamerica) has updates and review of activities

# Activity Pictures



# Virgin Galactic Status

- Recommended: <https://investors.virgingalactic.com/events-and-presentations>
- Flights: **U-25** - May 25, **G-01** - Jun. 29, **G-02** - Aug. 10, **G-03** Sep. 8, **G-04** - Oct. 6
- Will fly about every 4 weeks (next flight **G-05** scheduled Nov. 2)
- Significant press worldwide for every flight



## GALACTIC02 RESULTS-AT-A-GLANCE

**17,000+**

**EARNED MEDIA  
PIECES**

**3,814**

**BROADCAST  
HITS**

**36.34B**

**MEDIA  
IMPRESSIONS**

**938**

**B-ROLL HITS**

**92%**

**NEUTRAL TO  
POSITIVE IN TONE**

**45+**

**PRESS ON-SITE**

# New Viewing Lot near Front Gate

- Outside of site security, so public can simply park and watch





# Prismatic/BAE Systems



- Prismatic completed a successful stratospheric test flight of their PHASA-35 HAPS/UAV glider in late June of 2023
- PHASA-35 exceeded **66,000 feet** in test flight
- Potential applications in intelligence, surveillance, recon and communication network delivery
- Successful trial is the first in a series to confirm system performance with the intent of making it available globally
- Prismatic acquired by BAE Systems in 2019. BAE is Great Britain's largest manufacturer and is one of the six largest suppliers to the US Department of Defense

# STEM and Outreach

- 22 STEM Events in FY22, reaching about 1800 students
- So far in FY23 have served about 3,000 students (that includes Dr. Bill Gutman going to every 6<sup>th</sup> grade class in the district, which is about 1,700 students)
- Recent tour events include Central Elementary, Girl Scouts, Lynn Middle School, Roswell HS, Mimbres Valley HS, Socorro HS, Picacho Elementary, and more.
- Participated in Mesa Middle Career Day, NM Workforce Connection, Global Spaceport Alliance Pathways Series, Las Cruces Space Festival Aerospace Industry Night



# 2023 Spaceport America Cup

- 2023 was the largest to date (5,901 participating, with about 1,651 in NM)
- NMSU, UTEP, and NM Tech all participated; NMSU won the Chile Cup
- 17 countries, 38 states, 8.9M earned media impressions, ~115 rocket flights
- Next year: June 17-22, 2024; see: <https://www.youtube.com/@esrarocket>



# 2023 Spaceport America Cup at VLA



# Spaceport America Cup Supporters



**SPACEPORT AMERICA<sup>®</sup> CUP**  
June 19-24, 2023



**20  
23**

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LFC - October 25, 2023

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Thank you sponsors!



# Capital Projects and Maintenance Update

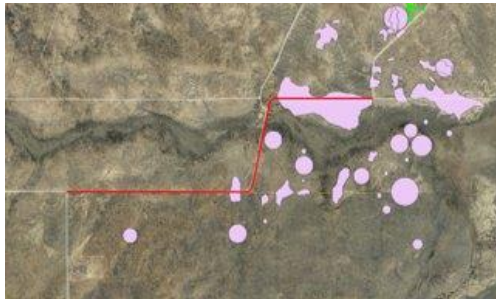


# Infrastructure Improvements

- **SOC Repairs** almost all completed
- **Launch Rail** manufacturing and construction under way
- **Extending electricity** to several locations in VLA (waiting on transformers)
- **Gravel roads in VLA** added and improved
- Working on **repairs for HLA paved roads**
- Design-build contract for **STARC building** awarded to Buffalo Design Architects
- **Master Plan** contract awarded to RS&H, Populous, and Zia Engineering
- **GTS Roof** repairs completed and maintenance plan being developed
- Legislature approved FY24 ICIP\* including \$2M to start work on **taxiway** and \$1.5M for **general infrastructure upgrades**
- **Cell phone tower antenna** with 2 carriers will be on site soon
- VG Replica **Accessibility Improvements** and **Viewing Lot** completed
- Implementing **Facilities Management** software for entire site
- **General purpose hangar** being designed
- Improved **county road from HLA to VLA** under review and development
- Installing **reverse-osmosis system** to prevent continuing corrosion of water system and fire apparatus part

\*Infrastructure Capital Improvement Plan

# Site Maintenance Pictures





# ICIP Request

## **1. Gateway to Space Roof Improvements – 2025**

To plan, design and remodel existing roof at the GTS building (repair or replace).

## **2. Spaceport Technology and Reception Center – 2025**

To plan, design, and construct a new technology and reception center.

## **3. Infrastructure Improvements - 2025**

Improvements and expansion, includes internal roads, parking, utilities (power, water, waste management, telecommunications, internet).

## **4. Taxiway – 2025 / 2029**

Full-length taxiway, runway upgrades, drainage, aprons, aircraft parking areas.

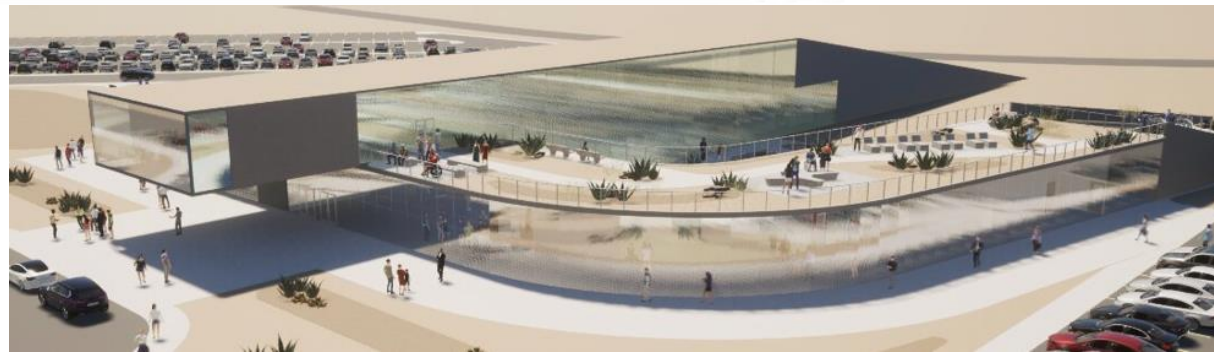
## **5. Aircraft & Vehicle Ops Facility – 2025**

To plan, design and construct a new aircraft, vehicle and equipment hangar.

# UPCOMING CAPITAL PROJECTS

## STARC Project

Spaceport Technology and Reception Center Project.  
Project Budget: ~ \$18 million  
Currently in design phase



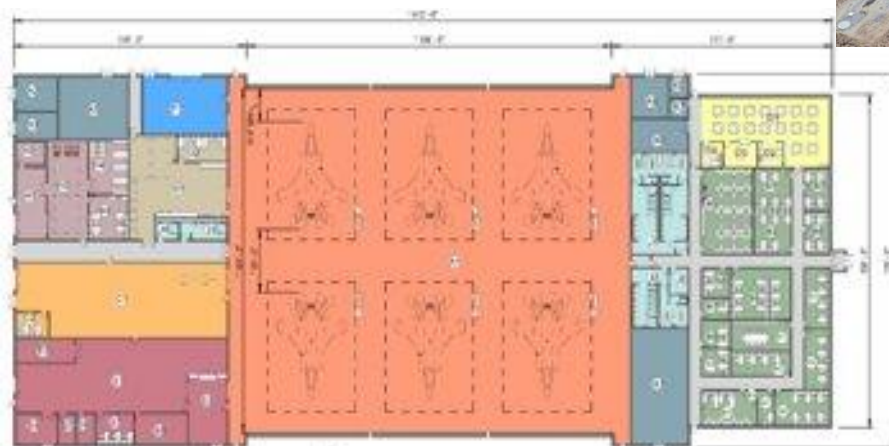
## Spaceport Taxiway Addition

And runway maintenance upgrades.  
Project Budget: \$25 million



## General Purpose Hangar

Spaceport General Purpose Aviation Hangar  
Project Budget: \$7-10 million



# NMSA Budget



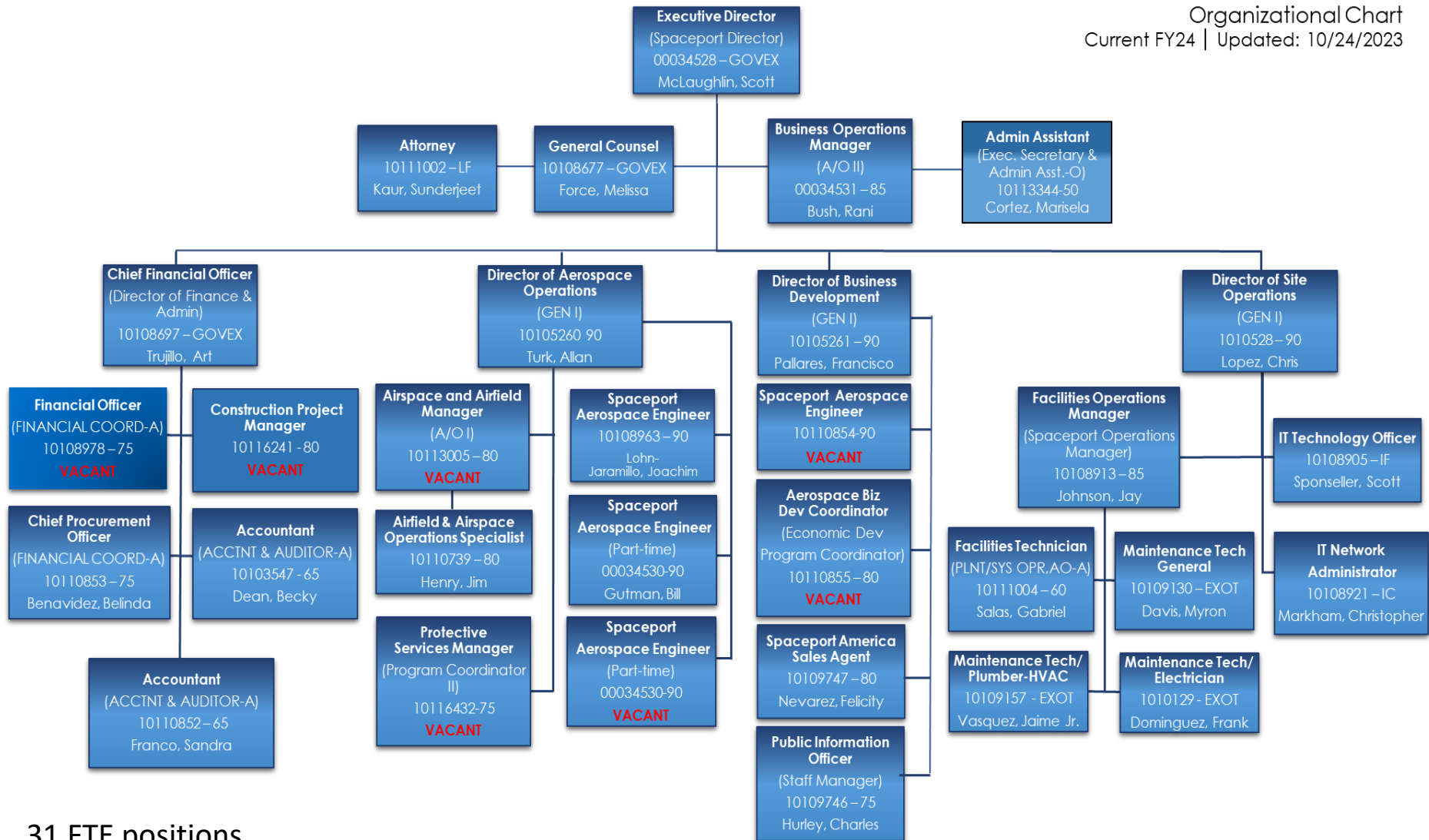
# NMSA Budget Notes

- Balancing increased operations, business development, and infrastructure improvements has been challenging; two new positions were authorized in 2023: 1) Manager of Infrastructure, 2) Manager of Protective Services;
- SpA is about **65% self-funded** for operations, but variability in customer revenue and expenses (e.g., maintenance and repairs)
- Customer **revenue recognition** takes up to 18 months before it can be used to support operations, presenting unique challenges in providing services and balancing the current year budget

Performance Measures	CY22-23	Met (goal)
Jobs due to SpA	811	Yes (400)
No. Aero. Cust.	28	Yes (20)
Events Held	26	Yes (12)
Visitors to SpA	48,022	Yes (25,000)

# NMSA Organization Chart

Organizational Chart  
Current FY24 | Updated: 10/24/2023



31 FTE positions

7 are vacant, 6 being currently filled

# NMSA Budget vs Actual (thousands)

As of 10/23/23

	FY24 Budgeted	FY24 Projected	FY25 Request	Notes
<b>Operating Revenue</b>	\$7,330	\$7,330	\$8,681	Customer fees, leases, utilities, fuel
<b>General Fund</b>	4,247	4,247	4,626	
<b>Revenue Total</b>	11,577	11,577	13,307	
<b>200 Personal Services</b>	3,538	3,538	3,881	
<b>300 Contract Services</b>	5,655	5,655	6,065	
<b>400 Other Costs</b>	2,384	2,384	3,361	
<b>Expense Total</b>	11,577	11,577	13,307	
<b>Fund Balance Transfer<sup>2</sup></b>	0	0	0	
<b>Net Result</b>	\$0	\$0	0	

# Economic Impact 2022

- Study completed by **NMSU Center for Border and Economic Development** (<https://cbcd.nmsu.edu/>)
- Released on Friday, August 25, 2023
- Impacts include tenant employment (direct, indirect, induced), privately funded construction, out of state visitor spending, and spaceport customer revenues.

**Table 14 - Total Economic Impact, Spaceport America, 2022**

<b>Impact</b>	<b>Employment</b>	<b>Labor Income</b>	<b>Value Added</b>	<b>Output</b>
1 - Direct	548	\$30,608,919	\$35,615,913	\$87,880,353
2 - Indirect	144	\$9,294,889	\$12,911,142	\$25,980,079
3 - Induced	118	\$5,193,673	\$10,421,659	\$18,254,754
<b>Total</b>	<b>810</b>	<b>\$45,845,649</b>	<b>\$60,435,345</b>	<b>\$138,080,756</b>

From NMSU Spaceport America 2022 Economic Impact Study

# BUSINESS DEVELOPMENT





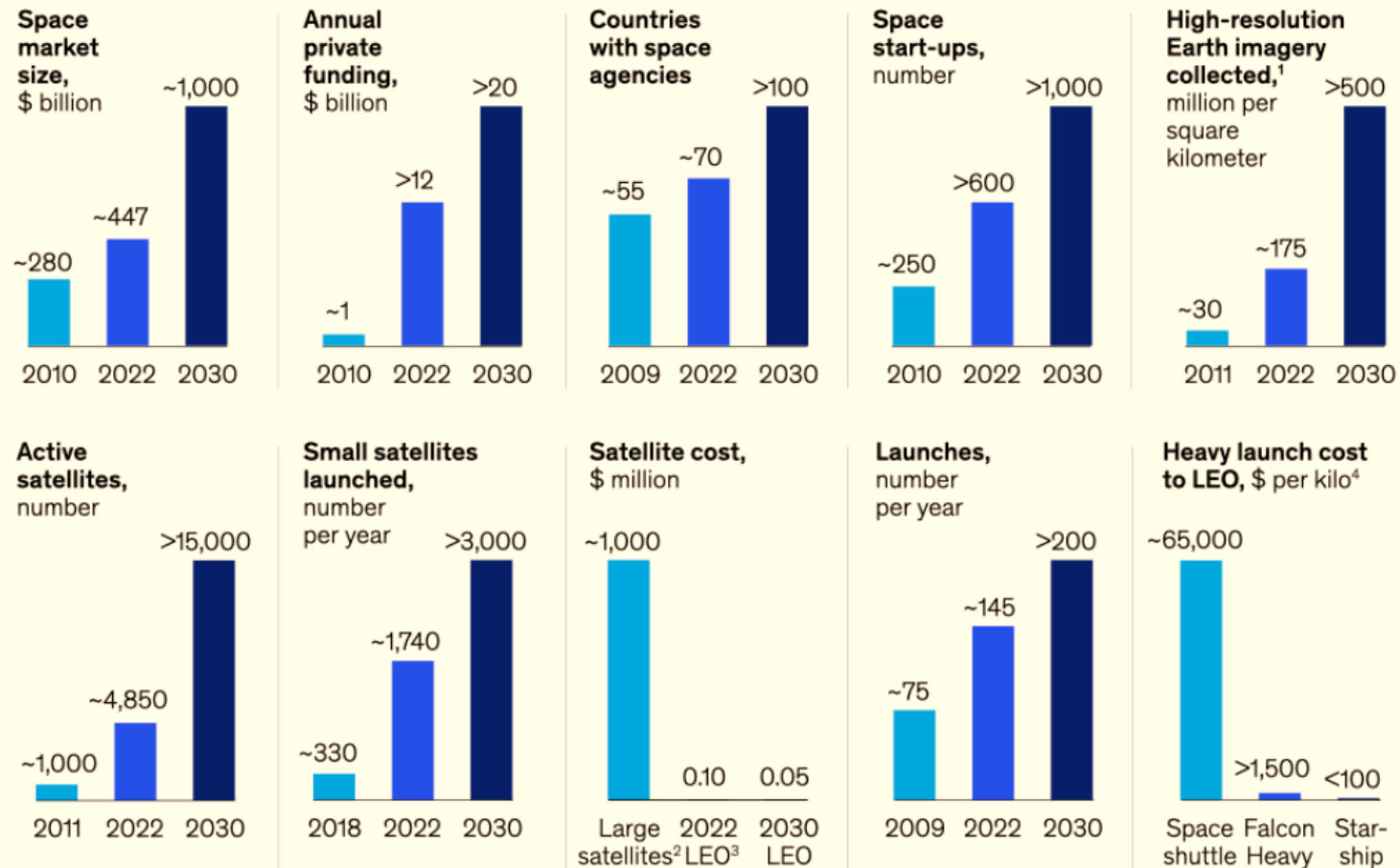
# Business Development

- Working on **FAA reentry license**, to support companies like Sierra Space and other orbital return customers
- Working with **Commercial Spaceflight Federation (CSF)** for federal funding for commercial spaceport (bill introduced by Sen. Lujan and Sem Hickenlooper)
- Attend and market at various **aerospace conferences**
- Have seen increasing use by **UAV customers**
- **Planning agreements** in place with various companies
- Increasing interest from **horizontal launch** developers, especially regarding future need for space cargo
- The commercial **space economy** continues to grow:  
(<https://tinyurl.com/2qh2ns64>)

# Headed to \$1T by 2030

The space sector has come a long way and seems poised for future growth.

## Projections for space activities



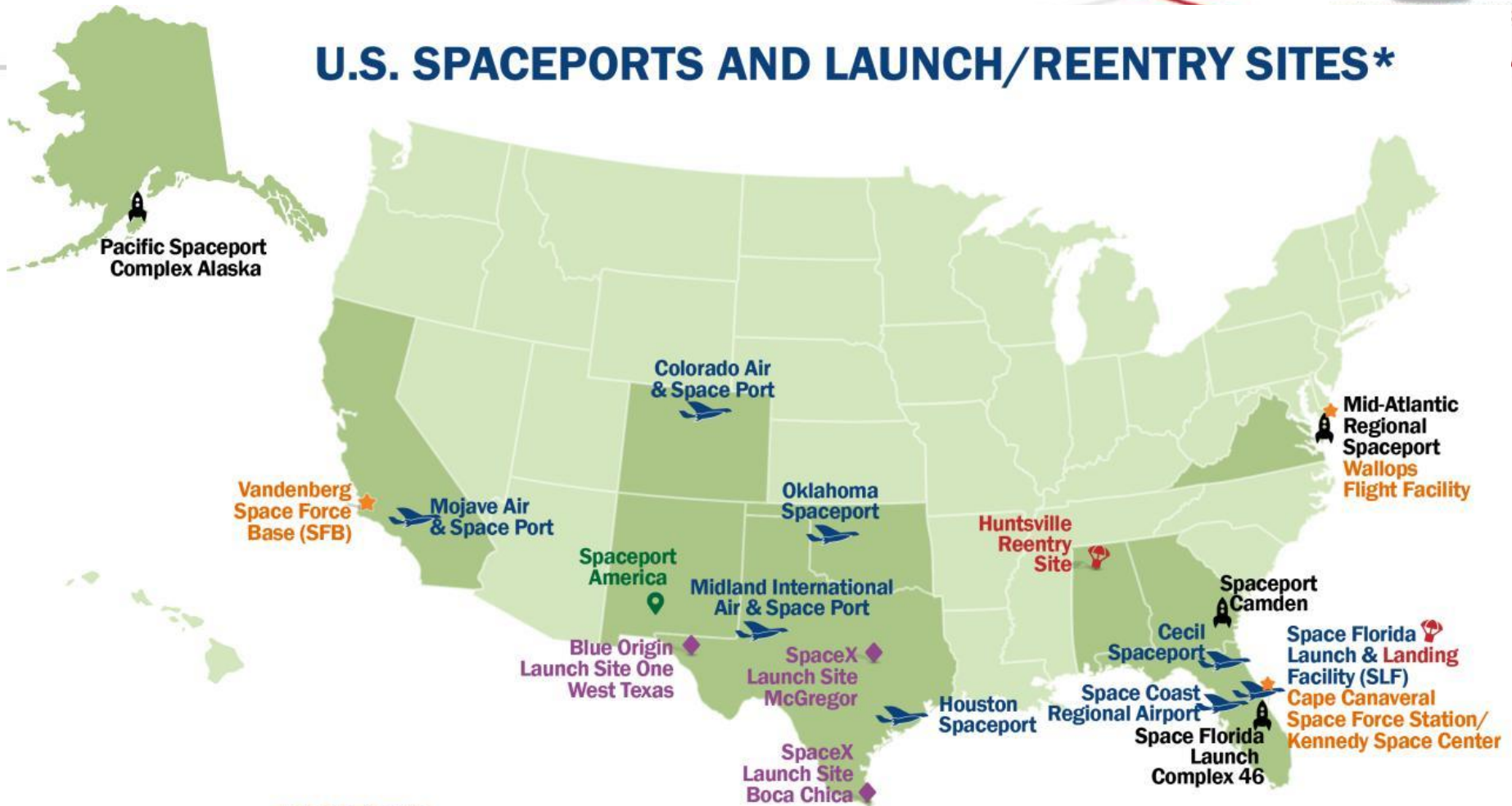
From McKinsey, and Co. (<https://tinyurl.com/2ls39tgw>)

# New Mexico Space Valley

- NM has an opportunity to connect and grow “Los Alamos to El Paso” into **Space Valley**, as an economic region (like Silicon Valley, etc.)
- The goal is to enable a **complete aerospace ecosystem** to include research and development, entrepreneurs, funding, manufacturing, workforce development, test, and operations.
- This is possible since NM has **Los Alamos National Laboratory, Sandia National Laboratories, USAF Research Laboratory, White Sands Missile Range (WSMR), USSF Space Rapid Capabilities Office, and US Army Ft. Bliss.** And significant design and manufacturing exist in Albuquerque and El Paso, there are 100+ aerospace companies in the region, and 4 universities with very good aerospace programs.
- Uniquely, the region also has an **active spaceport**, which is acting to tie many of these activities and entities together.



# U.S. SPACEPORTS AND LAUNCH/REENTRY SITES\*



## MAP LEGEND

- States with Current Spaceports
- FAA-Licensed Horizontal Launch Site
- FAA-Licensed Vertical Launch Site
- FAA-Licensed Horizontal and Vertical Launch Site
- FAA-Licensed Reentry Site
- ★ U.S. Federal Site
- ◆ Exclusive Use Site (Non-FAA Licensed)

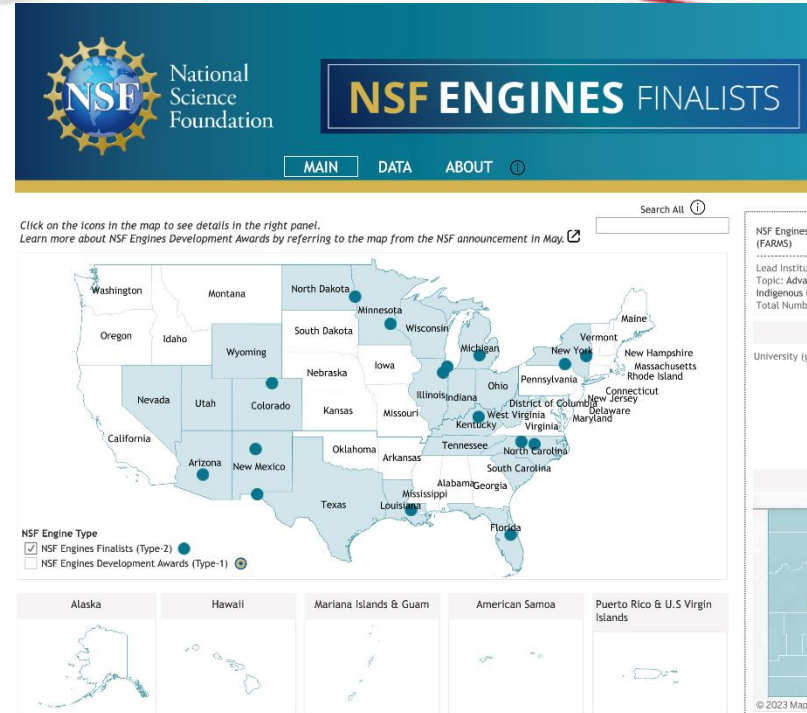
\* Locations licensed by the FAA or currently hosting FAA-licensed activity.

Source: FAA/AST September 2022

# SVC, EDA, AND NSF



- **Space Valley Coalition -**  
<https://spacevalley.org/>
- **EDA BBB** (<https://tinyurl.com/2hk3ot49>)
- **NSF Regional Innovation Engines Grants**  
(<https://tinyurl.com/2dmswnvl>)
  - 1) **Paso del Norte Innovation for Defense and Aerospace (IDEAL) Engine** (El Paso and UTEP)
  - 2) **Space for Earth, Space for All: Space Valley's Role in Securing America's Economic and Political Future** (Albuquerque and SVC Partners)



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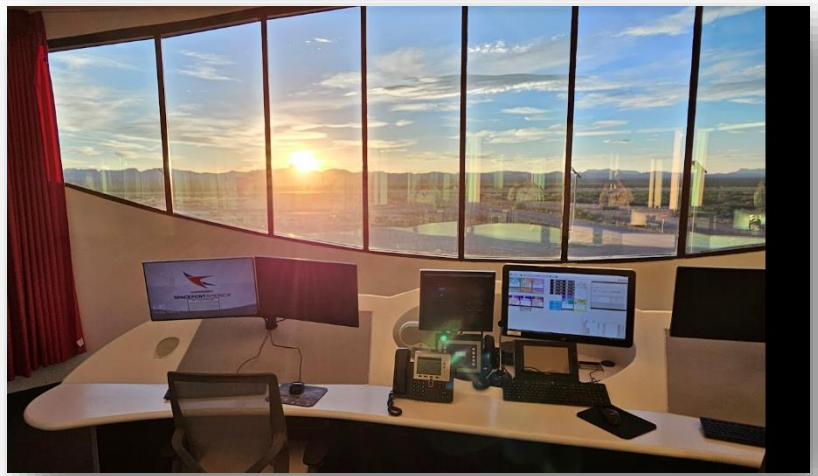


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