# **Spaceport America Overview**







Scott McLaughlin
Executive Director
August 12, 2025



THE GATEWAY TO SPACE®

#### **O**UTLINE



- BACKGROUND
- SITE ACTIVITIES
- BUDGET AND STAFFING
- CAPITAL IMPROVEMENTS
- NMSA OUTREACH
- SPACE ECONOMY
- SPACEPORT AMERICA GROWTH



# **BACKGROUND**

#### U.S. FEDERAL AND LICENSED SPACEPORTS





- 14 FAA AST Licensed Commercial Spaceports
- Each has its own governance model and is owned by various entities, such as city, county, or state governments
- Some are on federal ranges, some are near federal ranges
- New proposed spaceports include Yuma, Utah, Las Vegas, Maine, Texas, Puerto Rico, and others

States with Current Spaceports

FAA-Licensed Horizontal Launch Site

FAA-Licensed Vertical Launch Site

FAA-Licensed Horizontal and Vertical Launch Site

P FAA-Licensed Reentry Site

# U.S. Federal Site

Exclusive Use Site

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

## IMPORTANT SPACEPORT AMERICA DATES



- 1984 U.S. Commercial Space Launch Act (amended 1988, 2004)
- 1990-1993 Phase I: Spaceport Startup
  - NM has natural advantages (low population density, high ground elevation, favorable weather, low corrosion, and uncongested airspace)
  - Seed funding for the spaceport development, and started courting capsule landing and space launch
- 1994-2003 Phase II: Southwest Regional Spaceport (SRS)
  - Continued studies and establishment of the NM
     Office of Space Commercialization and eventual
     selection of an area for a spaceport (along with EIS
     and FAA license)
  - Shift to orbital launch site instead of capsule reentry (e.g., LM VentureStar)
  - Started working with WSMR, BLM, FAA, SHPO, ranchers, counties, etc.
  - o The 1996 **X-Prize** is a technology driver

- 2004-present Phase III: Spaceport America
  - Scaled Composites wins \$10M Ansari X-Prize (Oct. 4, 2004)
  - Passage of the NM Spaceport Development Act (2005) and first contact with Virgin Galactic
  - The NM Legislature passed funding authorization (2006), conditional upon: 1) signing a major customer, 2) passage of a tax increase by at least two counties, and 3) securing an FAA license
  - Now design and build a small city
  - 2006 First flight by UP Aerospace
  - 2021 Virgin Galactic sends humans to space from NM

Entirely funded by New Mexico public resources (~\$250 million)

#### NMSA STATUTORY MISSION



#### **New Mexico Spaceport Development Act, 2005**

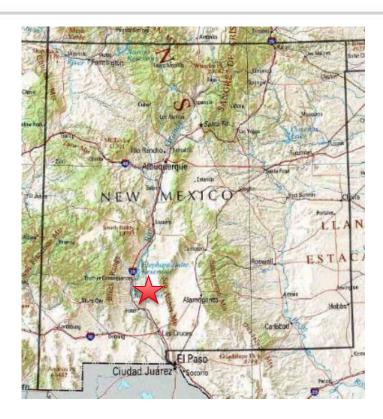
#### The New Mexico Spaceport Authority shall:

- A. Encourage and foster development of the state and its cities and counties by **developing** spaceport facilities in New Mexico;
- B. Actively promote and assist public and private sector infrastructure development to attract new industries and businesses, thereby creating new job opportunities in the state;
- C. Create the statutory framework that will enable the state to design, finance, construct, equip and operate spaceport facilities necessary to ensure the timely, planned and efficient development of a southwest regional spaceport; and
- D. Promote educational involvement in spaceport activities and education and training of the workforce to develop the skills needed for spaceport operations.

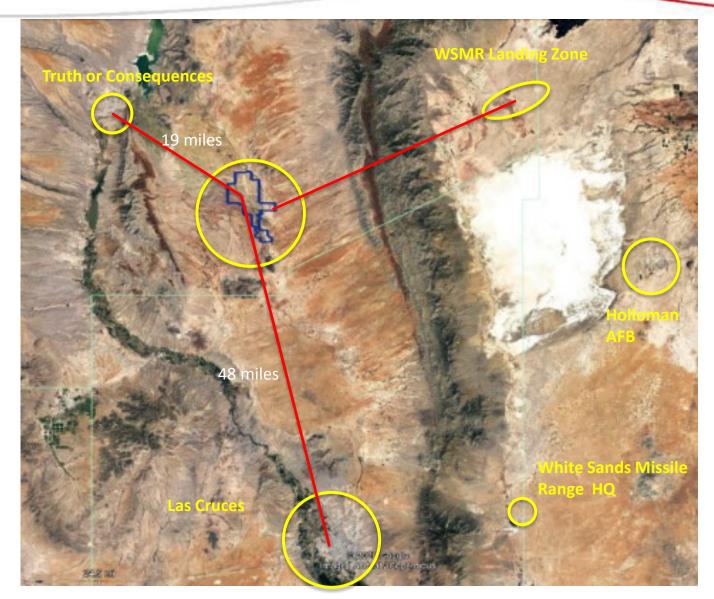
We are open to use by commercial and governmental entities, including from other countries.

### SPACEPORT AMERICA LOCATION IN NEW MEXICO





- Facilities across 18,000 acres in Sierra County, New Mexico
- Adjacent to U.S. Army White Sands Missile Range (WSMR)
- Easy road access to I-25 and I-10
- No rerouting of air traffic

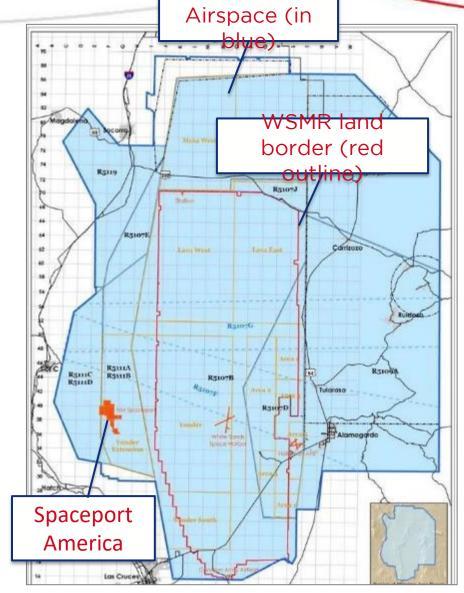


SPACEPORT AMERICA'S BENEFITS

SPACEPORTAMERICA\*

- Good launch weather with 340+ days of sunshine
- High elevation of 4,600 ft MSL is beneficial for launch
- No salt air corrosion
- Remote location with very low population density
- 24/7 security, Fire, and EMS protection
- Access to 6,000 sq. miles of restricted airspace (R5111 and R5107), surface to unlimited
- Available assets from nearby White Sands Missile Range include Radar, Telemetry, Optics, and Meteorological Services

 For more on WSMR, see: https://www.atec.army.mil/wstc/g5sc.html

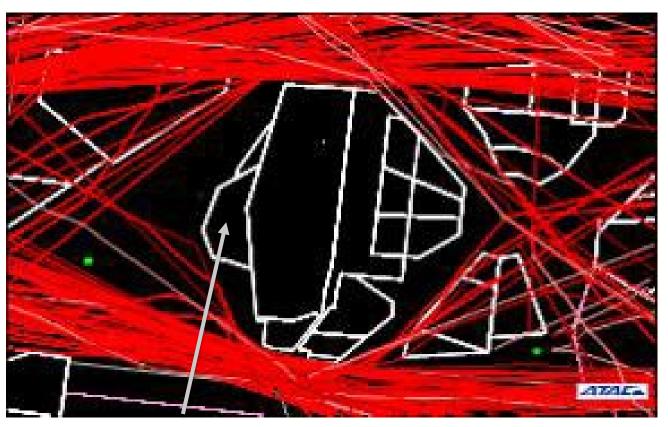


 $\mathsf{WSMR}$ 

#### EXAMPLE AIRSPACE FLIGHT PATTERN



- The 'time lapse' image of commercial air traffic shows how airlines must fly around WSMR airspace, including Spaceport America
- With WSMR's partnership, the airspace allows for considerable flexibility for different flight vehicles and usage
- Note that SpA customers must pay for scheduling of the airspace



**Spaceport America** 

## SPACEPORT AMERICA AREA DESCRIPTIONS



#### **Horizontal Launch Area (HLA)**

- 12,000-ft long, 200-ft wide runway
- Horizontal and air launch operations
- Space tourism
- Conventional aircraft operations
- Unmanned aircraft operations
- High-altitude balloon operations
- → Tenants: Virgin Galactic, HAPS Mobile

#### **Vertical Launch Area (VLA)**

- Suborbital launch vehicles & R&D
- Solid, liquid, and hybrid propellant support
- Rocket motor manufacturing and testing
- Commercial and academic customer support
- Launch from SA, land on WSMR
- Small UAVs
- → Tenants: UP Aerospace, AeroVironment





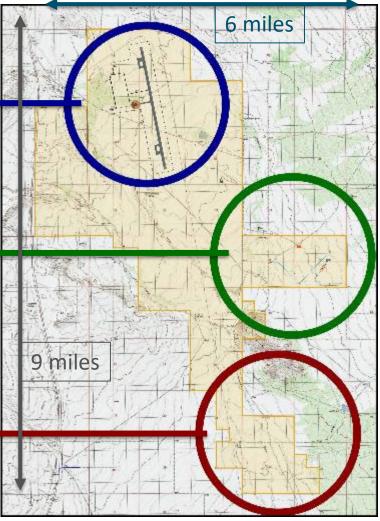






- Emerging technology R&D
- Isolated environment
- → Tenant: SpinLaunch





# HORIZONTAL LAUNCH AREA (HLA)



- Spaceport Operations Center (SOC)
- Spaceport Technology and Reception Center for 2026
- VG and AV operations
- 12,000' x 200' Runway
- In-ground utilities for water, wastewater, electricity, fiber
- Plenty of space for additional hangars or support facilities
- 4,000' x 500' UAS test area n

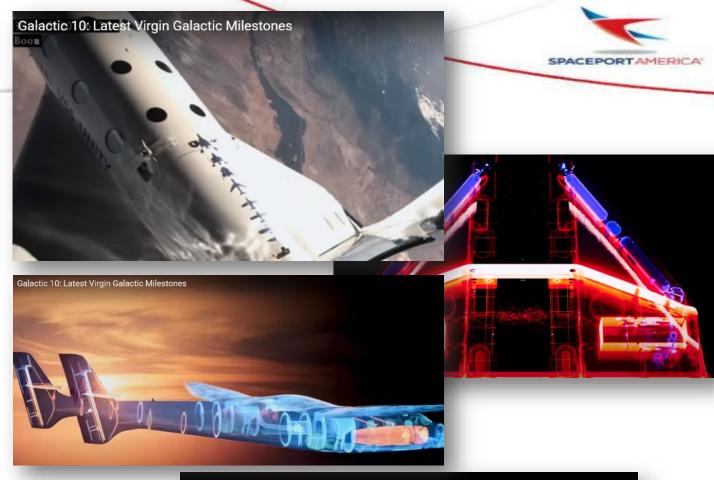


# SPACEPORT AMERICA ACTIVITY



#### VIRGIN GALACTIC STATUS

- Latest updates can be found here:
   https://investors.virgingalactic.com/events-and-presentations, @VirginGalactic
- Eleven spaceflights (32 private astronauts) occurred in New Mexico
- New Delta spaceship(s) will undergo tests and then operations by late 2026
- NMSA and VG are in discussions for a land lease for their new launch hangar
- Example: Two spaceships, 100 flights per year, about 600 private astronauts, about 12,000 visitors to the region, with about 60,000 room nights



#### **UPCOMING KEY MILESTONES**

2025

2026

**SUMMER - FALL - WINTER**Building and Testing

**SPRING**First Glide Test Flight

**SUMMER**First Research Spaceflight

**FALL** First Private Astronaut Flight

## **VG OTHER APPLICATIONS**

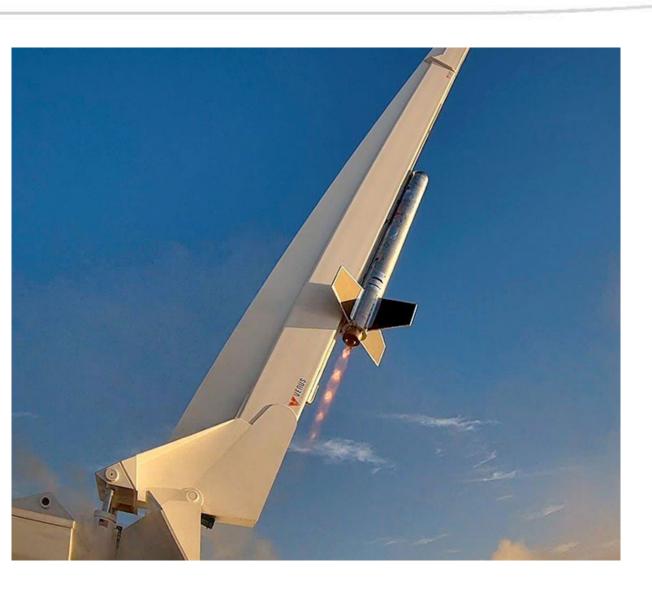




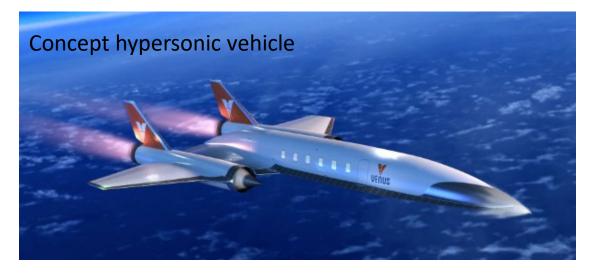
Collaborating with
Lawrence Livermore
National Laboratory on a
feasibility study to assess
opportunities for LV-X

# VENUS AEROSPACE LAUNCH (MAY 14, 2025)





- First U.S. flight test of a next-generation Rotating Detonation Rocket Engine (RDRE)
- Used SpA rocket launch rail built with capital improvement funds
- Good example of "build it and they will come"
- Good press in the aerospace world
- Venus is working on a hypersonic vehicle, and we expect they will be back for further tests
- <a href="https://www.venusaero.com">https://www.venusaero.com</a>



# AEROVIRONMENT HAPS FLIGHT, JUNE 2024





- Partnered with Softbank
- Wing is about 300' (100 m)
- Flies between 60,000 and 80,000 ft AGL
- Goal is flight time of about 6 months
- Powered by solar cells with batteries

### **SWIFT ENGINEERING**



- The Swift Ultra Long Endurance (SULE) uncrewed aircraft reached an altitude of 55,904 feet during a 24-hour flight on 29-30 September 2024
- SULE has a 72-foot wingspan and a 15pound payload capacity
- Have almost continuously rented our small (90' x 90') hangar





#### 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 was 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

#### UP AEROSPACE CORP.

- Conducted 2 launches in the last half of 2024: SL-15 on Oct. 1, 2024, and SL-20 on Nov. 8, 2024
- The SL-20 payload was from Los Alamos National Laboratory
- Foundational tenant of SpA since 2006 (15+ launches, motor manufacturing and testing)
- Several suborbital launches planned for the next few years



#### **PRECISION AI**



- Specializes in artificially intelligent drones for fully autonomous farming
- Successful testing of Stratus AirSprayer prototype at site
- https://www.precision.ai/about





# FOURTH YEAR FOR USAF THUNDERBIRDS (2025)



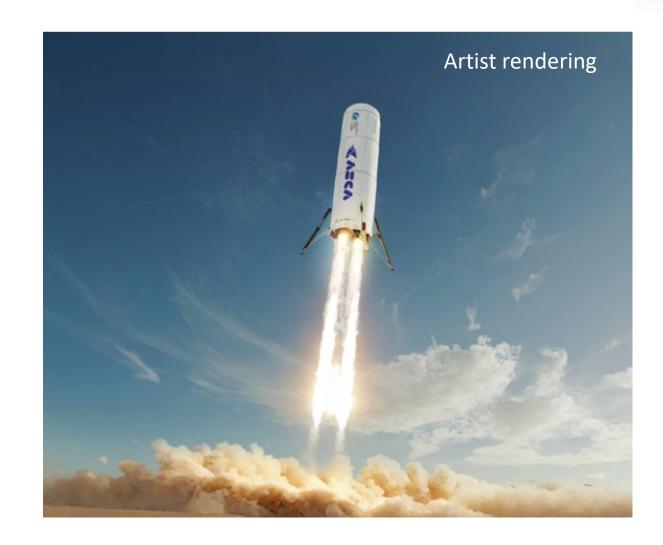


https://www.youtube.com/watch?v=hl23PfGOWoY

## SIRIUS TECHNOLOGIES, INC.



- Innovative Space Carrier Inc. (ISC), a space startup based in Tokyo, Japan, and its United States subsidiary, Sirius Technologies, Inc., will be tenants soon, with vertical tests of a liquid rocket engine prototype
- Development focused on reusability and stable control of the rocket engines and body



## LEAP SPACE





Working to sign an agreement for regular suborbital vertical rocket launches

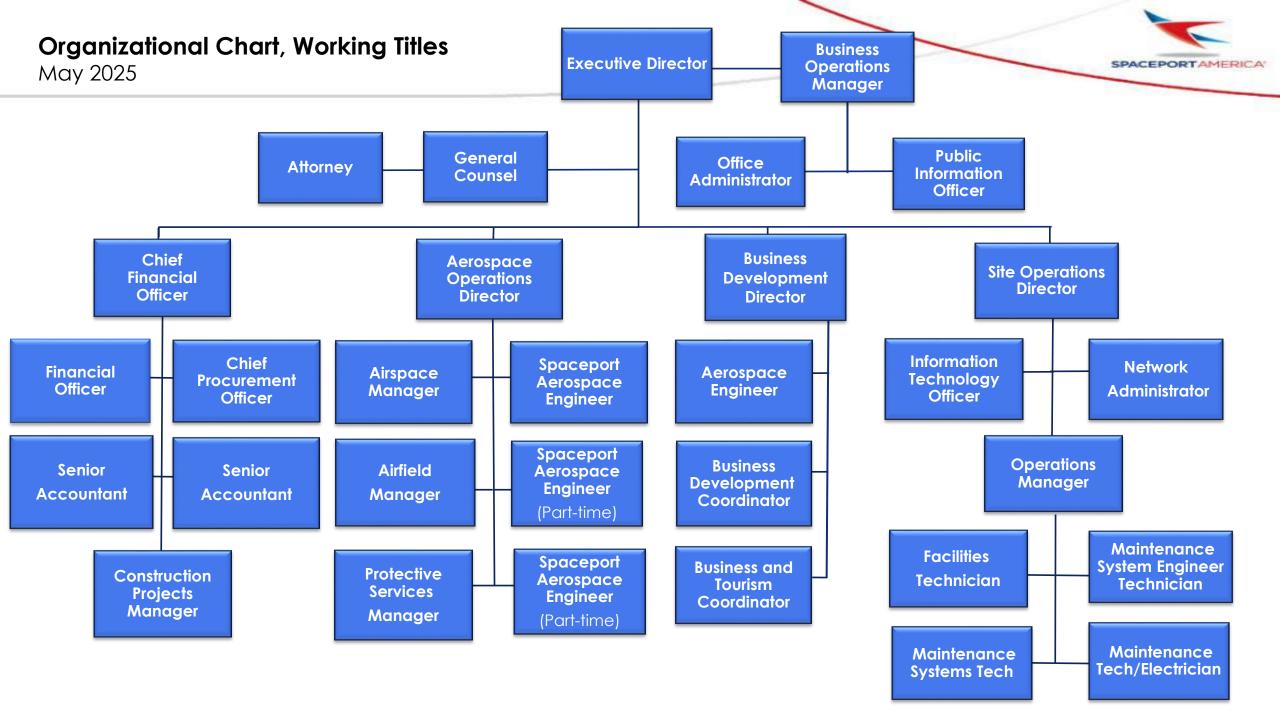
# **BUDGET AND STAFFING**

# NMSA Budget, as of August 9, 2025



|                          | FY24    | FY25        | FY26     |  |
|--------------------------|---------|-------------|----------|--|
|                          | Actual  | Actual      |          |  |
|                          | Audited | Preliminary | Budgeted | Comments                                       |
| <b>Operating Revenue</b> | \$8,895 | \$6,102     | \$7,684  | From customers (fees, leases, utilities, fuel) |
| General Fund             | 4,247   | 4,047       | 4,139    | GF Appropriation & salaries increase           |
| Revenue Total            | 13,142  | 10,149      | 11,823   |  |
| 200 Personal             | 3,189   | 3,767       | 3,657    |  |
| 300 Contract             | 5,074   | 5,525       | 6,553    |  |
| 400 Other Costs          | 2,466   | 2,499       | 2,649    |  |
| Expense Total            | 10,729  | 11,791      | 12,859   |  |
| <b>Fund Transfers</b>    |         | 1,030       |          |  |
| Fund Balance             | 0       | 612         | 1,330    |  |
| Net Result               | \$2,413 | \$0         | \$294    |  |
|                          |         |             |          |  |
|                          |         |             |          |  |
| Footnotes:               |         |             |          |  |

- (1) VG user fees decreased \$1,670M for FY25 & projected decrease \$1,416M FY26.
- (2) FY25 figures are preliminary since still going through closing process.
- (3) Ending Fiscal Year 2025 Fund Balance is \$4,033.047 after transfers.



#### NMSA STAFFING



- Currently have 31 FTEs, but will need 5 additional FTEs to match the growth of spaceport activities (noting that it can take 18 24 months to add personnel)
- It is vital to support Virgin Galactic's operational cadence plus the new tenants and customers
- Asking for FTE creation but will not hire until need is fully realized

STEM / Workforce Coordinator
Facilities Technician
Capital Construction Projects Leader
Contracts Manager
Deputy Director

# PROJECTS UNDERWAY



| Legend           |
|------------------|
| Planning         |
| RFP/Procurement  |
| A/E              |
| Construction     |
| Close-Out/Closed |
|                  |

| ACTIVE PROJECTS  |              |   | FY2<br>5 | _   FY26 |    |    |    |
|--|--------------|---|----------|----------|----|----|----|
| PROJECT  | AMOUNT       | NOTES   | Q4       | Q1       | Q2 | Q3 | Q4 |
| SPA Pavement Maintenance Assessment and Engineering        | \$106,685    | The draft maintenance plan has been reviewed, and now NMSA is pending the final report. |          |          |    |    |    |
| HLA North/NE Road and Utility Improvements Design          | \$117,828    | Roadway layout Design 50%   |          |          |    |    |    |
| Fabric Hangar/Payload Facility Including Apron and Taxiway | \$9,017,196  | ITB (Procurement) Bids Due August 19th  |          |          |    |    |    |
| Site Electrical (Fabric hangar/ Payload Facility )         | \$527,865    | Site Electrical is Underway   |          |          |    |    |    |
| Mechanical/ Plumbing (Fabric hangar/ Payload Facility )    | \$1,082,853  | Design is complete.   |          |          |    |    |    |
| Interior Electrical (Fabric hangar/ Payload Facility )     | \$1,083,493  | Interior electrical design is complete.   |          |          |    |    |    |
| Fire Suppression System(Fabric hangar/ Payload Facility )  | \$937,606    | Fire Suppression design is complete.  |          |          |    |    |    |
| CA Services Material Testing/QA/QC - Hangar                | \$352,068    | PO Complete. Awaiting Project Start Up  |          |          |    |    |    |
| HLA S. Access Road and Water Utilities Extension           | \$2,414,474  | Construction underway   |          |          |    |    |    |
| HLA S. Access Road Electrical Extension                    | \$345,642    | Project is complete. Close out.   |          |          |    |    |    |
| STARC Building Design Build                                | \$16,000,000 | Project Has been awarded  |          |          |    |    |    |
| GTS Roof Design - Architecture and Engineering             | \$164,181    | 100% Design. Procurement Ongoing.   |          |          |    |    |    |
| ACTIVE PROJECTS TOTAL                                      | \$32,149,896 |   |          |          |    |    |    |

## INFRASTRUCTURE CAPITAL IMPROVEMENT PLAN FY27-30



| NO.  | PROJECT   | AMOUNT         |
|------|---|----------------|
| 2027 | Infrastructure, Maint. & Runway Improve & Upgrade | \$ 8,000,000   |
| 2027 | Hangar Pad And Apron Extension                    | \$ 5,000,000   |
| 2027 | GTS chillers replacement                          | \$ 2,000,000   |
| 2027 | Site Wide Water Infrastructure and Improvements   | \$ 15,000,000  |
| 2027 | Spaceport Taxiways and Ancillary Infrastructure   | \$ 34,500,000  |
| 2028 | Customer Leasable Hangar                          | \$ 10,000,000  |
| 2028 | Rancher Mitigation and Fencing Improvements       | \$ 340,000     |
| 2028 | Launch Test Facilities - Vertical Launch Area     | \$ 3,000,000   |
| 2028 | New Fire Truck & Aircraft Rescue Veh. (ARFF)      | \$ 5,000,000   |
| 2028 | AMU Hangar Facility Project                       | \$ 40,000,000  |
| 2029 | North Sanitary Sewer Extension                    | \$ 2,000,000   |
| 2029 | HLA Access Road (VLA to HLA)                      | \$ 3,200,000   |
| 2029 | Fenceline Rd. Re-Construction                     | \$ 1,800,000   |
| 2029 | Leasable Facilities & Premanufactured Structures  | \$ 4,500,000   |
| 2029 | Main Entrance Improve Re-construction             | \$ 1,600,000   |
| 2030 | Aircraft & Vehicle Operations Facility            | \$ 27,370,000  |
| 2030 | Upham/Lewis Rd. Re-Construction                   | \$ 2,500,000   |
| 2030 | Vertical Launch Area - LC4 Connector Road         | \$ 1,000,000   |
| 2030 | HLA SE Roadway and Utility Extension              | \$ 4,500,000   |
| 2030 | Site Fire Alarm and Comms Upgrades                | \$ 1,000,000   |
|      | Total Request                                     | \$ 172,310,000 |

#### ENVIRONMENTAL IMPACT UPDATE



#### Existing EIS

Evaluated the environmental impact of aerospace programs and supporting infrastructure projects at Spaceport America foreseen at the time of its development in 2007-2008.

#### Regulatory Compliance

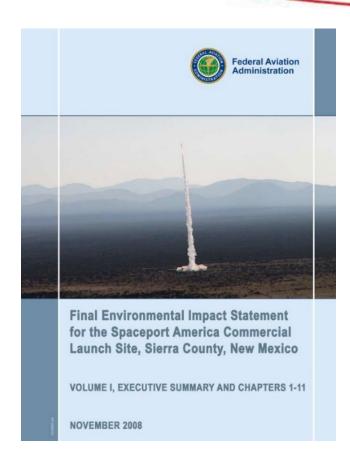
It was required to comply with the National Environmental Policy Act.

#### Mitigation Strategies

Identified environmental impacts of the "major Federal action" of granting Spaceport America a Launch Site Operator License. Mitigation measures to reduce impacts in the area of cultural resource preservation and to promote long-term sustainability were agreed to in a separate Programmatic Agreement.

#### Operational Requirement

Update of the EIS is mandatory for Spaceport America to continue development and maintain ongoing FAA AST licensed operations.



# **NMSA O**UTREACH

Spaceport America Status



# STEM and other Outreach

| April 11, 2025   Dona Ana Community College engineering class      | Association (SWREDA) site visit                                    |
|--|--|
| site visit   | May 8, 2025   SWREDA Plenary Luncheon presentation (Las            |
| April 18, 2025   Middle Rio Grande Economic Development            | Cruces, N.M.)  |
| Association site visit   | May 9, 2025   Fairacres Elementary School Career Fair (Las Cruces, |
| April 22, 2025   New Mexico Museum of Space History leadership     | N.M.)  |
| site visit   | May 9, 2025   New Mexico Institute of Mining & Technology          |
| April 22, 2025   Greater Gallup Economic Development               | engineering class site visit                                       |
| Corporation site visit   | May 16, 2025   Canutillo STEAM Academy Fair and Rocket Launch      |
| April 25, 2025   American Institute of Aeronautics and             | (Canutillo, Texas)   |
| Astronautics (AIAA) New Mexico State University and UTEP           | May 22, 2025   CODER Juarez site visit                             |
| student chapter site visit   | May 28, 2025   Today's Students, Tomorrow's Workforce career       |
| April 27, 2025   The Space Race event (inaugural 5k, 10k, and half | - event (El Paso, Texas)   |
| marathon race held at site)  | May 26, 2025   Grottaglie Spaceport Visit (Italy)                  |
| April 28, 2025   New Mexico Department of Cultural Affairs         | May 29, 2025   Mesilla Park Community School Learning              |
| Cabinet site visit   | Celebration (Las Cruces, N.M.)                                     |
|  |  |
| May 1, 2025   2025 Women in STEM Conference (El Paso, Texas)       | June 6, 2025   Northwest Early College High School site visit      |
| May 2, 2025   Reyes Elementary STEM Expo (El Paso, Texas)          | June 10, 2025   Socorro High School site visit                     |
| May 3, 2025   Truth or Consequences Fiesta (Truth or               | June 12, 2025   Los Lunas Public Library Summer STEM Cohort site   |
| Consequences, N.M.)  | visit  |
| May 7, 2025   Fairacres Elementary School site visit               | June 21, 2025   University of New Mexico Engineering Summer        |
| May 7, 2025   La Clinica de Familia Preschool Program              | Academy site visit   |
| presentation (Las Cruces, N.M.)                                    | June 26, 2025 Teachers in Space site visit                         |
| May 8, 2025   Truth or Consequences Elementary School site visit   | June 28, 2025   Big Bang Festival (Alamogordo, N.M.)               |
| May 8, 2025   Southwest Region Economic Development                |  |

## OUTREACH AND STEM, EXAMPLES





Dr. Bill and classroom visits



Col. Alvin Drew Space Camp



New Mexico 4-H State Conference Site Visit





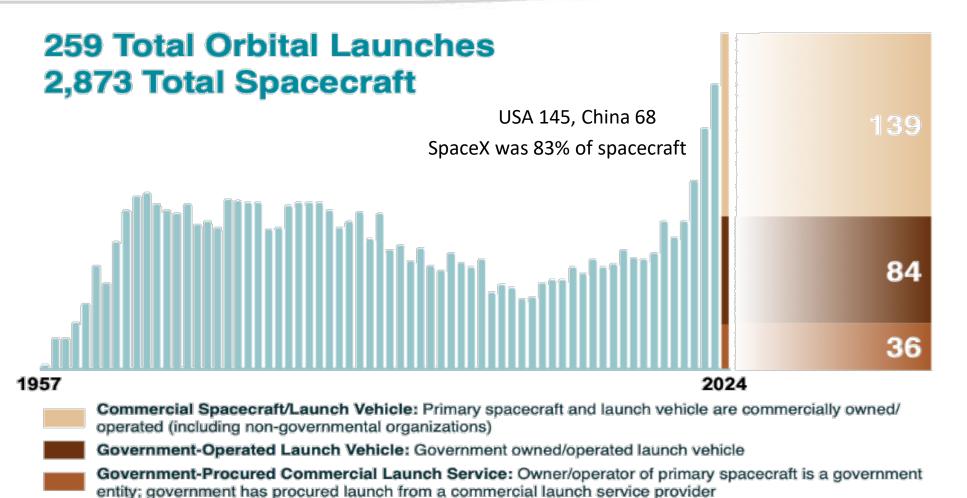
2024 Open House

# SPACE ECONOMY

Spaceport America Status

## WORLD ORBITAL LAUNCHES





From 2024 Bryce
Tech Report:
<a href="https://brycetech.com/re">https://brycetech.com/re</a>
<a href="ports/report-documents/global-space-launch-activity-2024">ports/report-documents/global-space-launch-activity-2024</a>

From various sources, the space economy growth is 7 to 8% annual growth

Counts include unsuccessful launches. Launches are attributed to home country of launch provider, not launch site.

SpaceX Starship launches not counted here as all test flights were suborbital.

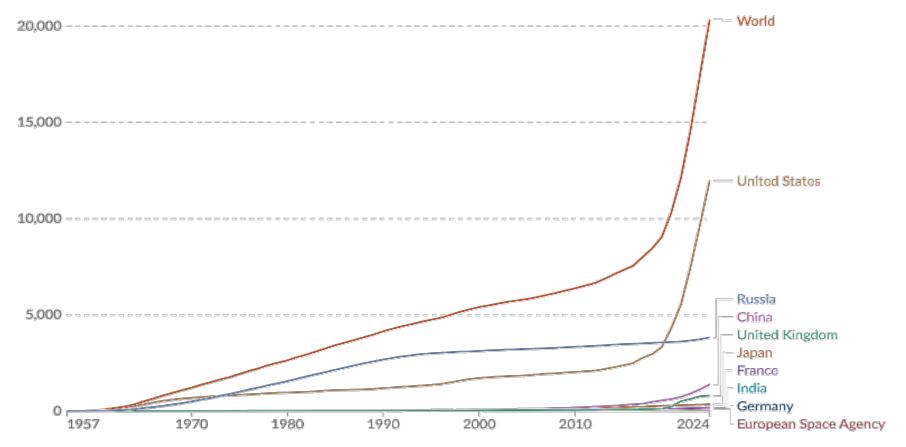
## **OBJECTS IN SPACE**



#### Cumulative number of objects launched into space



This includes satellites, probes, landers, crewed spacecrafts, and space station flight elements launched into Earth orbit or beyond.



Data source: United Nations Office for Outer Space Affairs (2025)

OurWorldinData.org/space-exploration-satellites | CC BY

Note: When an object is launched by a country on behalf of another one, it is attributed to the latter.

60,000 by 2030?

https://ourworldindata.org/grapher/c umulative-number-of-objectslaunched-into-outer-space

## SPACE ECONOMY GROWTH



- McKinsey & Company: We estimate that the global space economy will be worth \$1.8 trillion by 2035 (accounting for inflation), up from \$630 billion in 2023, <a href="https://tinyurl.com/2c6ckkq8">https://tinyurl.com/2c6ckkq8</a>
- **Morgan Stanley:** Space economy will surpass \$1T by 2040, <a href="https://www.morganstanley.com/ideas/thoughts-on-the-market-space">www.morganstanley.com/ideas/thoughts-on-the-market-space</a> (2022)
- **CNBC**: The space economy grew at fastest rate in years to \$469 billion in 2021, report says (<a href="https://tinyurl.com/23wgr8mz">https://tinyurl.com/23wgr8mz</a>)
- CNBC: Space economy worth \$424B in 2020, and is rapidly expanding (<a href="https://tinyurl.com/y2px717x">https://tinyurl.com/y2px717x</a>)
- **PNAS**: Space exploration and economic growth: New issues and horizons; <a href="https://tinyurl.com/yfjp5rop">https://tinyurl.com/yfjp5rop</a> (October 2023)
- **AP Article**: 60 years since 1st American in space: Tourists lining up, <a href="https://tinyurl.com/yjq9k8bf">https://tinyurl.com/yjq9k8bf</a> (May 2021)
- **Brookings Institute**: How space exploration is fueling the Fourth Industrial Revolution, <a href="https://tinyurl.com/47mwe8ny">https://tinyurl.com/47mwe8ny</a> (March 2023)

## OPPORTUNITY AND

## COMPETITION





Launch Commercial Opinion Sponsored More ♥ Advertise ♥

The next space race starts at our spaceports

Bryce Kennedy and Greg Autry May 1, 2023



**SPACENEWS** 

Space Force looks at options for relieving Cape Canaveral launch congestion

Jeff Foust May 19, 2023

#### Houston Spaceport Reaches for the Stars with Transformative **Expansion Project**

Published Feb 23, 2024 by Hallea Schultz.

With three new cutting-edge anchor tenant facilities and its second phase of development underway, the Houston Spaceport has undergone a full transformation since the city first vowed to reshape Ellington Airport into an

In 2018, the Houston City Council approved nearly \$20 million in funding for

infrastructure development at the Spaceport, marking the beginning of a



#### 3... 2...1...liftoff! Yuma looks to build Arizona's first 'spaceport'

The project would put a launchpad in the Yuma County desert for small rockets to launch satellites

By: Adam Klepp

Posted 5:55 AM, Mar 28, 2025 and last updated 10:40 AM, Mar 28, 2025





**Paso Robles Spaceport** 



#### Midland wins \$5M grant for commercial vertical rocket launch site

By Luke Dias, Staff Writer July 25, 2025

Reporter-Telegram



## development makes strides

#### **≜** DeseretNews

#### Utah ready to take one giant step toward a rocket launching pad

State came up short 50 years ago, but the business of space is a whole new game

Published: July 20, 2025, 9:00 p.m. MDT

#### THE WALL STREET JOURNAL.

#### There's a Traffic Jam Forming at U.S. **Rocket Launchpads**

The nation's busiest spaceports are fielding record demand, spurring new efforts to develop launch sites in landlocked states and even at sea

By Rosh and Recompleted A Mover than International Anticath Waidenberg Follow

Jan. 5, 2025 5:30 am ET

#### **SPACENEWS**

The Space Economy to Reach \$944 Billion by 2033: Novaspace Unveils Key Insight





#### BlackStar Orbital signs letter of intent with City

Post Date:

03/20/2025 2:16 PM

BlackStar Orbital President and CEO Chris Jannette and Sierra Vista City Manager Chuck Potucek recently signed a letter of intent for the

# SPACEPORT AMERICA FUTURE

Spaceport America Status

## PATH FORWARD - NEXT FIVE YEARS



- Continue to work with Virgin Galactic to maximize the economic impact of space tourism flights and their operations
- Focus on *regional* ecosystem growth, including working with economic development organizations (EDOs) throughout Space Valley
- Continue with infrastructure improvements to be site-ready for new customers
- Acquire FAA orbital reentry license and work toward orbital launch capability, including point-to-point tests and operations
- Watch new technologies, find new tenants, and develop other revenue streams from a diversity of customers

## ORBITAL REENTRY



- An **FAA orbital reentry license** will enable Spaceport America to accommodate various reentry vehicles, including crewed and uncrewed (i.e., orbital manufacturing), while encouraging customers to develop onsite processing and refurbishment facilities.
- In consultation with the FAA, the license is expected in 2027 (our FAA Launch Site
  Operator license already supports vertical and horizontal suborbital/orbital launch –
  but we need an EIS Update)
- An orbital reentry can occur on the runway or other parts of the spaceport





