



Concho Valley Council of Governments (CVCOG) – Spaceport Feasibility Study

Public Meeting #1

February 12th, 2026

RS&H

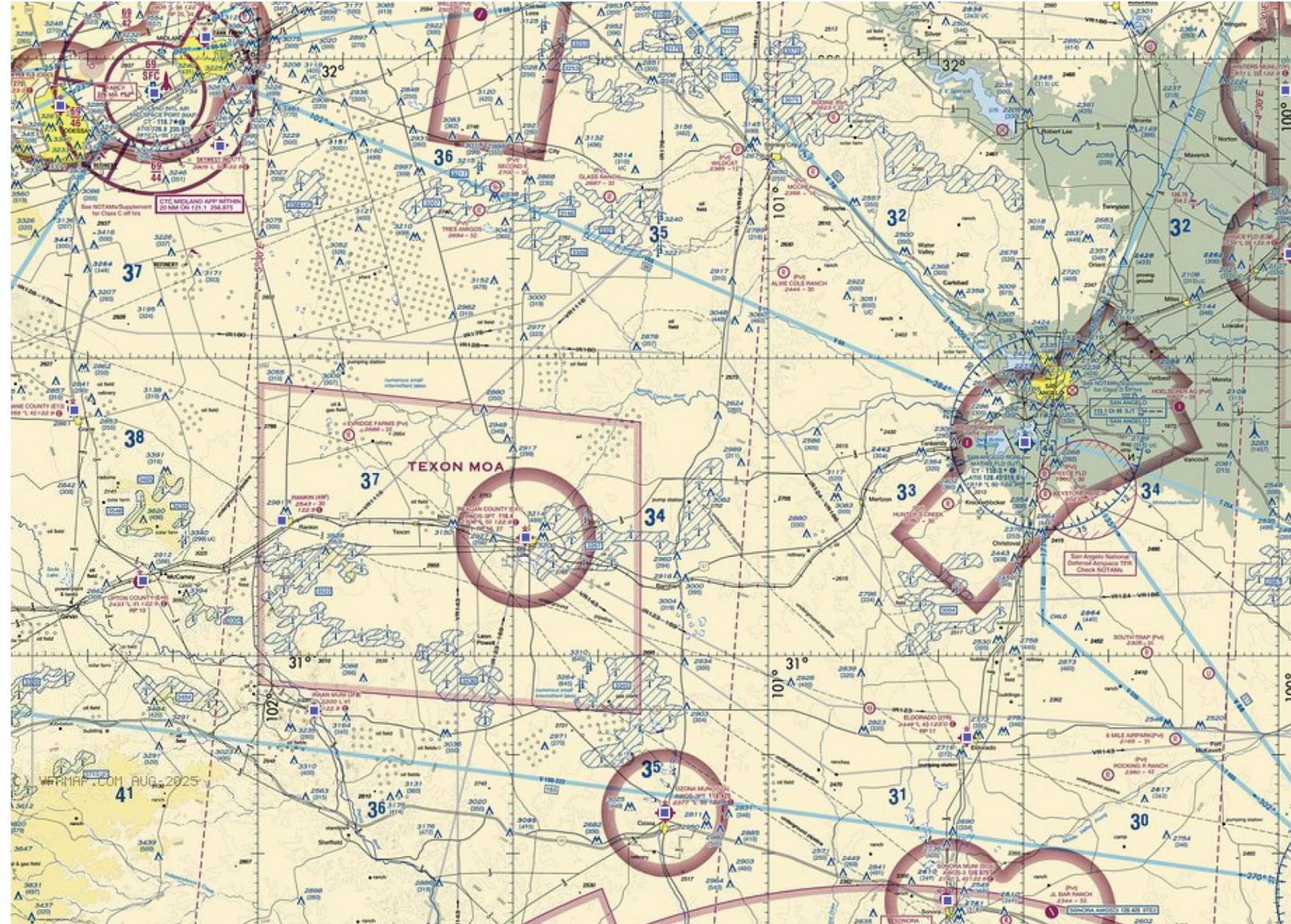


Agenda

- Public Meeting Objectives – Inform the Public, Solicit Feedback
- Project Background
- What is a Spaceport? Spaceport Use Cases
- SWOT – A Group Exercise
- Site Analysis Overview
- Feedback

Project Background

Overview

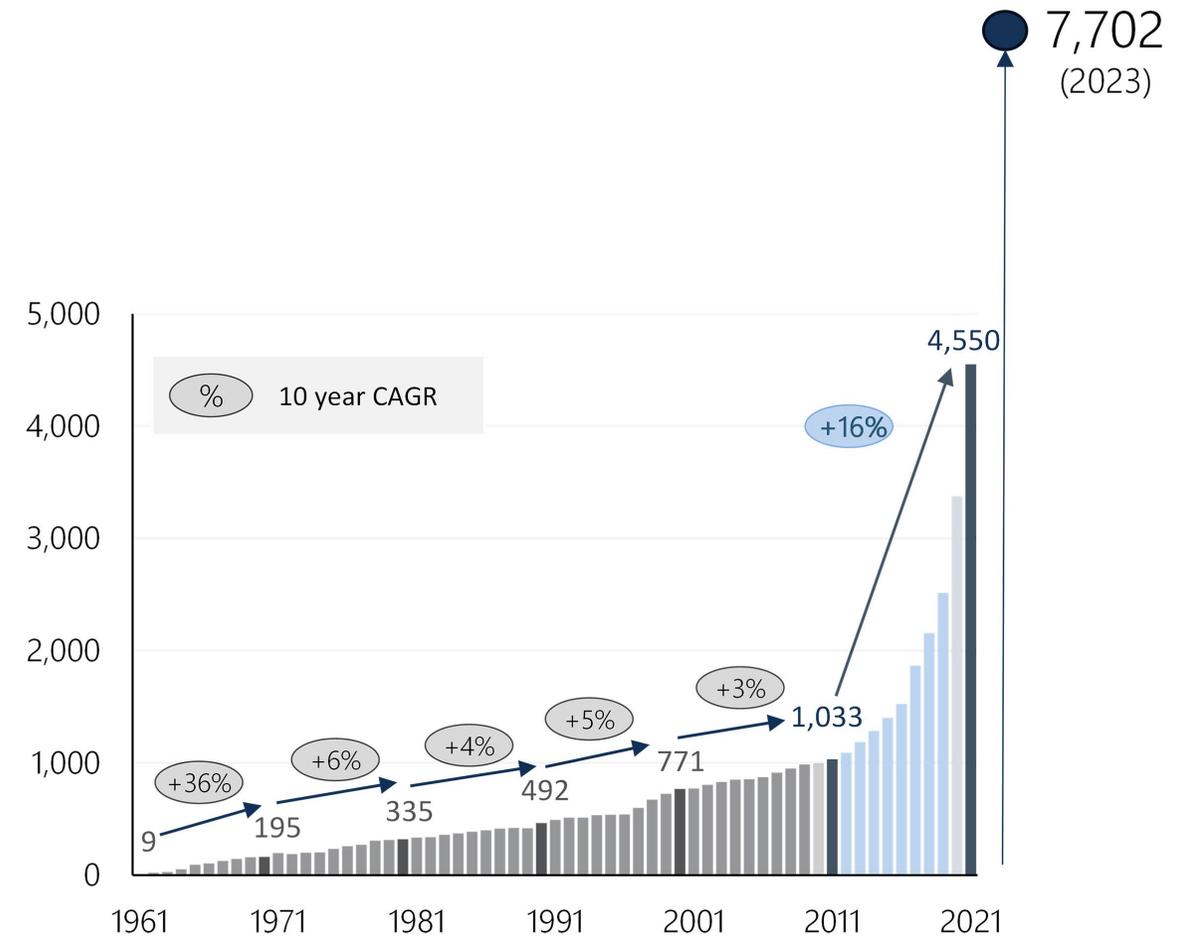
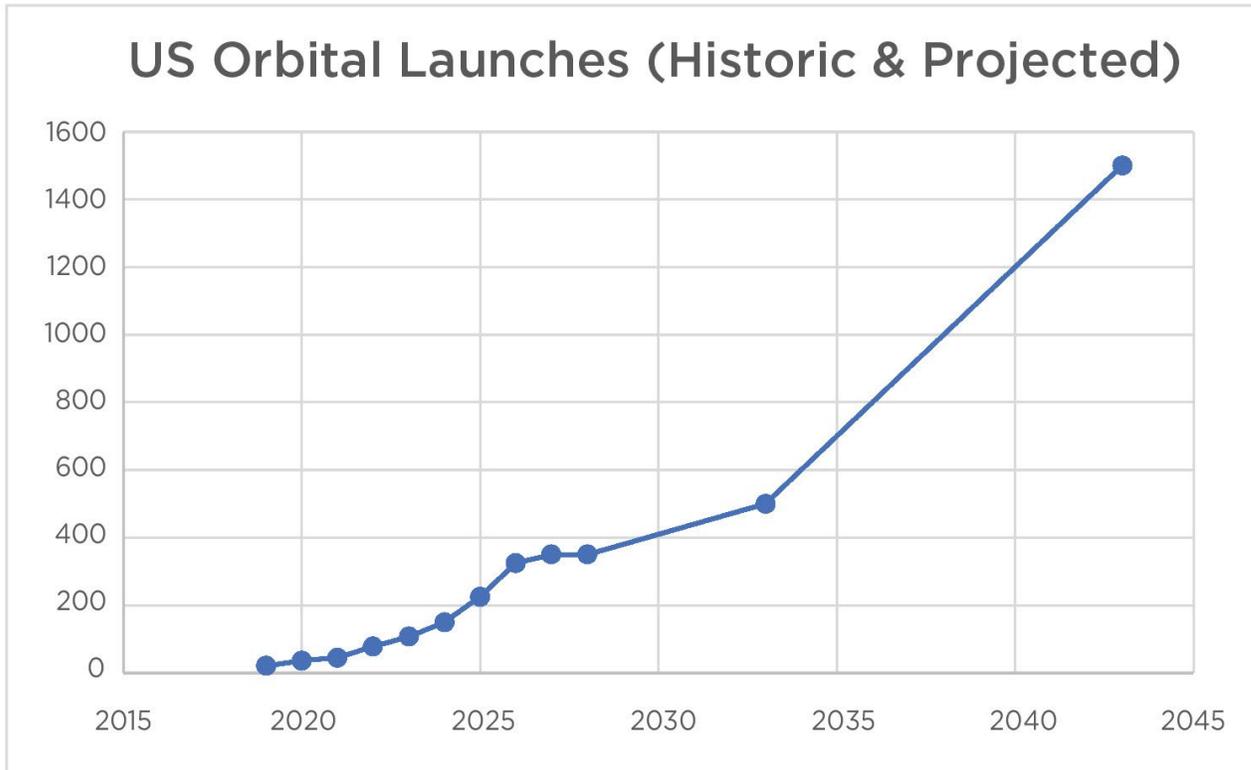


Concho Valley Spaceport Feasibility Study

- LEAD AGENCY: Concho Valley Council of Governments (CVCOG)
- FUNDING: Study Fully Funded by the Texas Space Commission
- STUDY BUDGET: \$500,000 (Grant amount includes CVCOG & Consultants)
- PURPOSE: Assess the feasibility of an inland orbital spaceport
- WHY: Rapid expansion of commercial space driving need for new sites
Reliability improvements and reusability of rockets

Market Drivers (High Level View)

US Launch Forecasts in Out Years Saturate Coastal Sites and Number of Objects Launched Continues to Grow



Project Objectives / Understanding



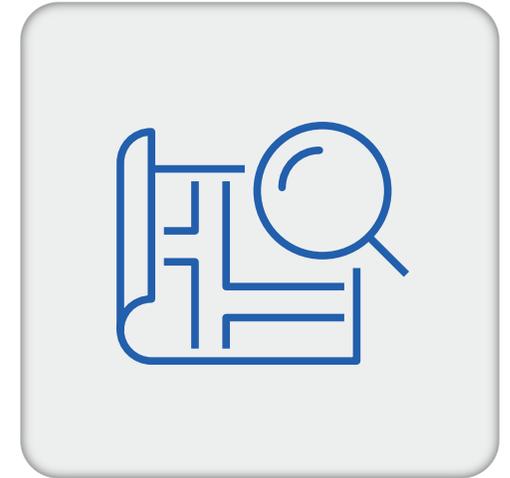
Comprehensive
Feasibility
Study



Launch Site
Operations
Alternatives –
*Suborbital, Orbital,
Vertical, Horizontal
Launch, Landing, Reentry*



Local Insights
and Engagement
with National
Spaceport
Expertise

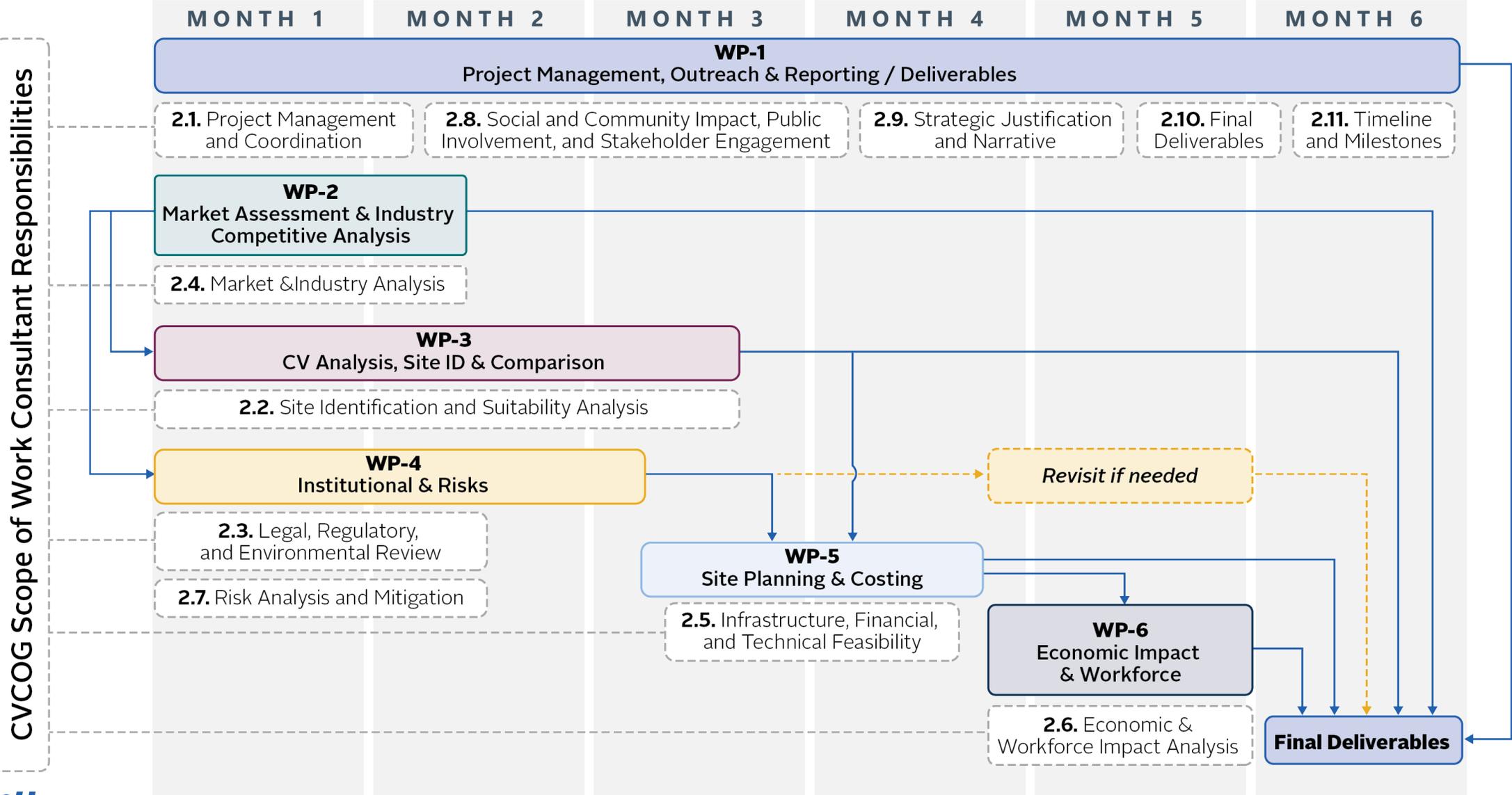


Experienced
Alternatives
and Phased
Development
Analysis

Project Approach

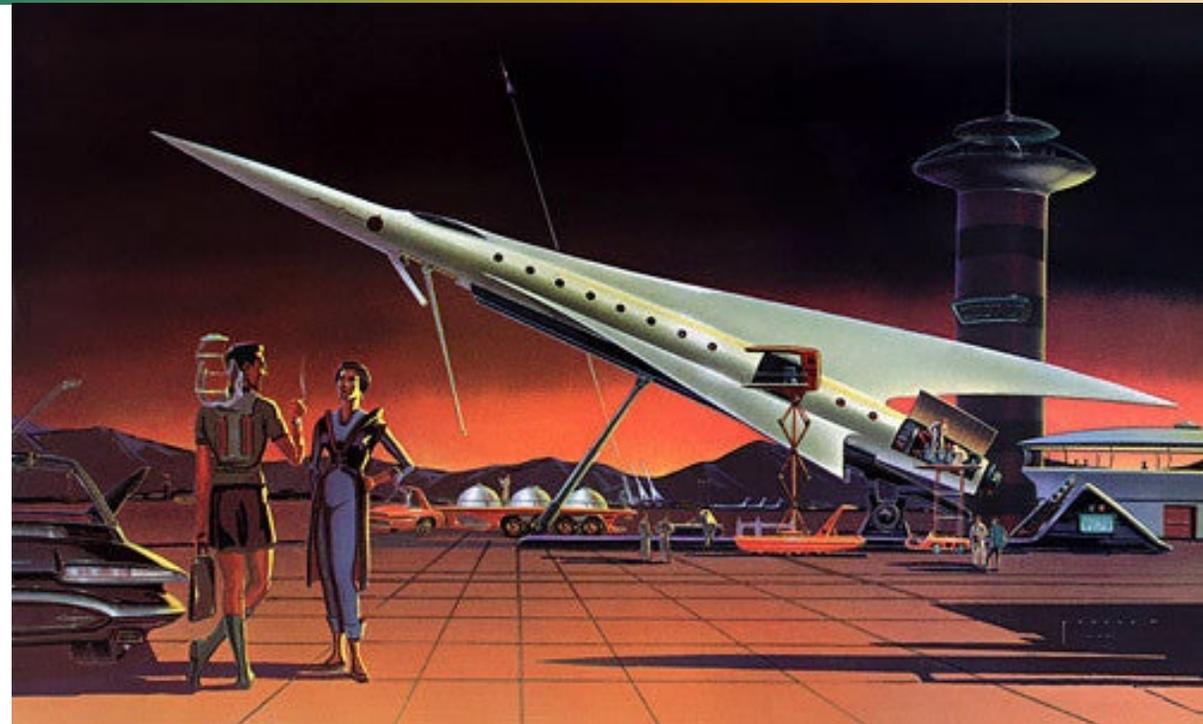
 CVCOG Required Scope of Work Task

 RS&H Proposed Scope of Work Task



What is a Spaceport?

Use Cases



Use Case 1 – Engine Test / Multi-Modal Proving Ground

- Spaceport initially utilized for rocket propulsion development / test
- Multi-modal proving ground operations are envisioned
 - Provides diverse revenue streams for activities attracted by remote site characteristics (low population, secure, safe)
- Energy, Research, & Miscellaneous other activities possible such as
 - AI Data Centers
 - Satellite Uplink/Downlink/Tracking
 - Advanced Solar, Nuclear (Fission & Fusion)
 - Destructive Testing
 - STEM initiatives / Workforce Development



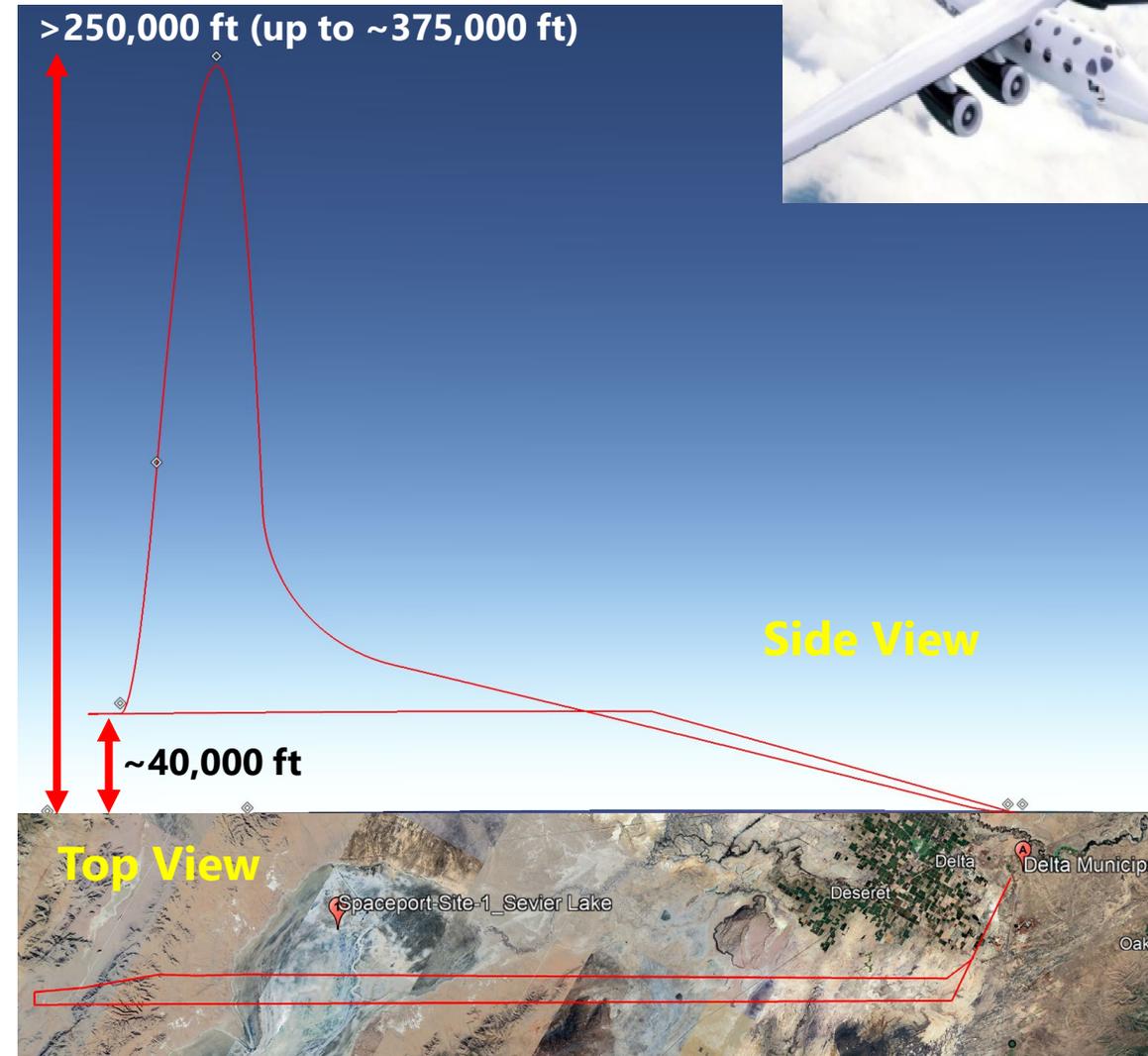
Use Case 2 – Aviation / Autonomous Aerial Operations

- Spaceport / Airport Dual-Use
 - Various aviation test applications
 - Supports STEM/Workforce Development
- Autonomous aerial operations
 - Some require proper runways
 - Others may use basic improved dirt strips
 - Low level and very high alt. ops possible
- Dual-use civil-military ops envisioned
 - Assumes an improved runway is available
 - Less than 5,000 feet runway may suffice for many UAS / UAM testing cases



Use Case 3 – Horizontal Launch & Landing / Suborbital

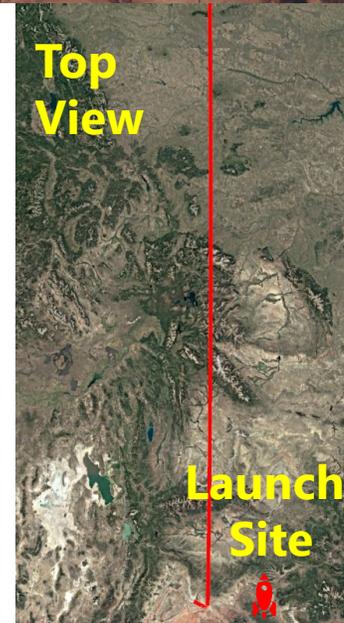
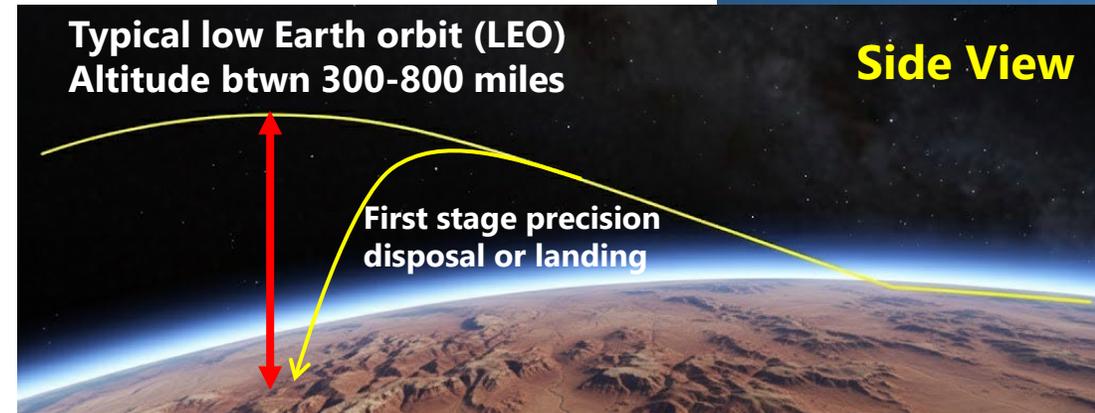
- Launch Vehicle (LV) Assumptions:
 - Virgin Galactic operations with combo of White Knight 2/Spaceship 2 (WK2/SS2)
 - Other example: Dawn Aerospace *
- WK2 Releases ~40,000+ ft
- SS2 Apogee >250,000 ft
- Track length = ~80-90 miles
- Airspace closure space characteristics ~100 x 30 miles box and ~2-4 hours
- Site needs (minimum):
 - Runway ~12,000 feet (concrete) + Apron
 - Hangar ~40,000 sqft
 - Comms/tracking/control/propellant/ARFF
 - Utilities + Roads



Use Case 4 – Horizontal Launch & Landing Orbital

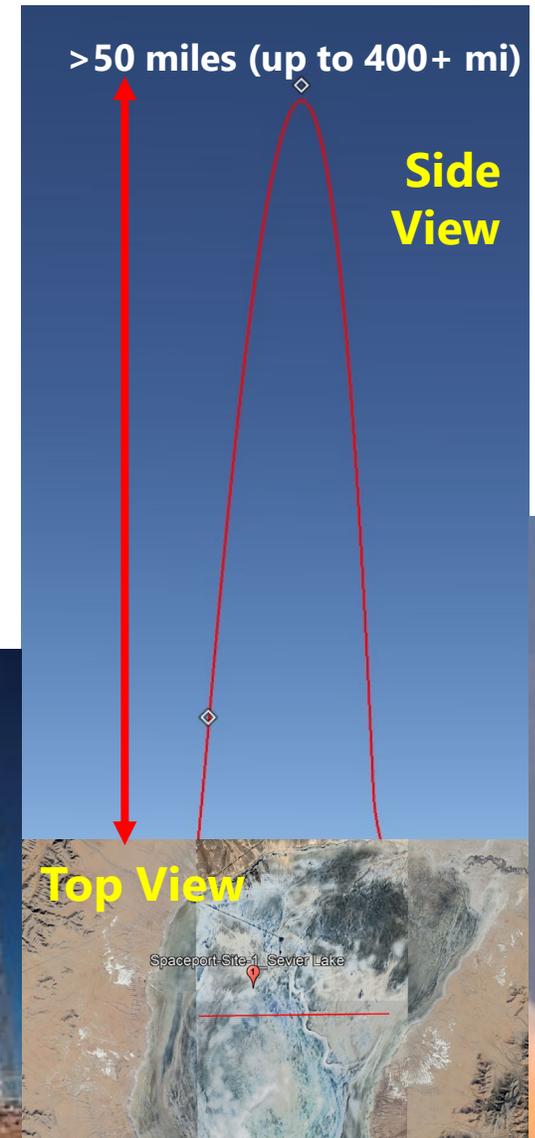


- LV Assumption(s)
 - Virgin Orbit or Stratolaunch CONOPs
 - Takeoff w/rocket, fly to ~40-45K ft, drop multi-stage rocket w/payload, and launch to LEO or other needed orbit.
- Assumes use of extended local municipal runways (up to 12,000 feet).
- Trajectory shown is for polar launch (0-degree north).
- Assumes first stage disposals in remote area and/or landing with a precision parafoil recovery system.
- Airspace closures along first 100-120 miles of trajectory & ~20 miles wide.



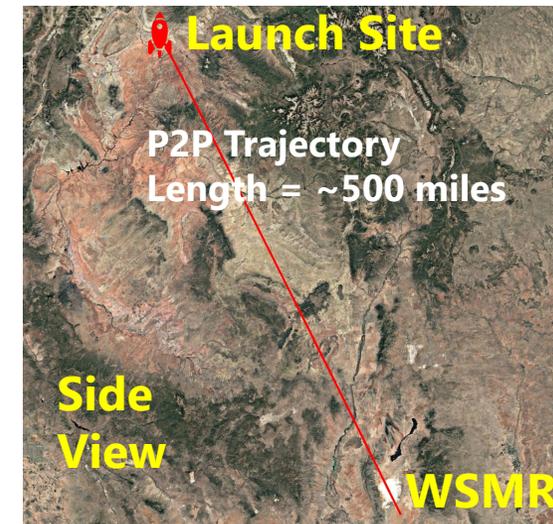
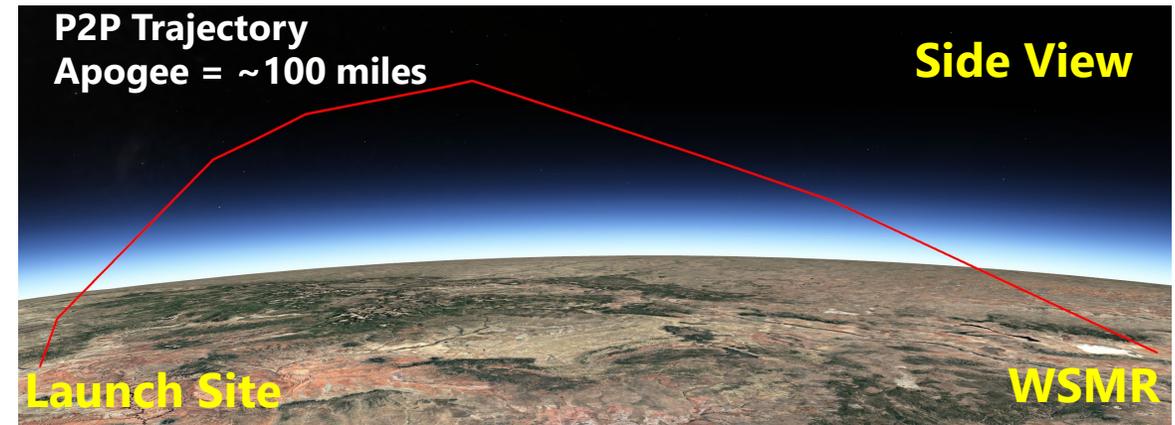
Use Case 5 – Vertical Launch & Landing / Suborbital

- LV Assumptions
 - Traditional Sounding Rocket operations
 - Could be Blue Origin New Glenn operations
- Apogee = 2 (typical 50) < x < 400 miles
- Downrange drift up to 10+ miles
- Airspace closure space characteristics
 - ~50 x 50 miles box and ~2 hours
- Site needs (minimum):
 - Concrete pad(s) + propellant
 - LV & payload prep facilities
 - Comms/tracking/control/propellant/ARFF
 - Utilities + Roads



Use Case 6 – Vertical Launch & Landing Suborbital P2P

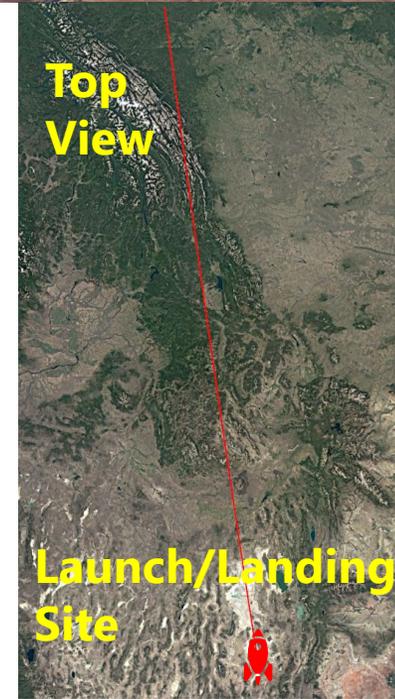
- LV Assumption(s) include:
 - Typical sounding rocket
 - Hypersonic test vehicle (eg., HASTE*)
- CONOPs model from 1970s-1980s tests in Utah under the Athena and Pershing test/training programs
- Launch with landing downrange; today called point to point (P2P)
- Airspace closures along path approximately 20 miles wide (min)
- Site needs like UC-5 plus downrange



Use Case 7 – Vertical Launch & Landing / Orbital



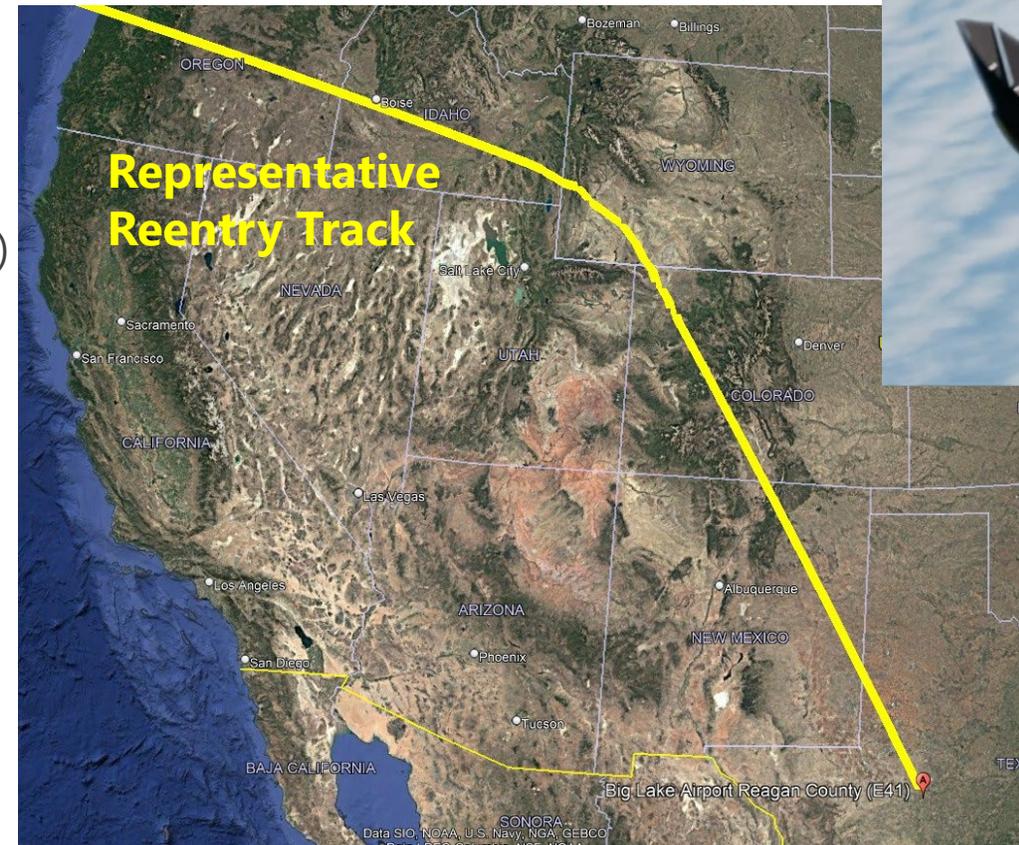
- LV Assumptions
 - Falcon 9 (F9) with RTLS or downrange landing of first stage booster
- Trajectory assumptions
 - Sun synchronous shown from Site 1
 - Either RTLS or downrange booster landing
 - Either site will generally work
- Airspace closures along first 100-120 miles of trajectory & ~20 miles wide (may be greater)
- Various trajectories are possible including northerly, southerly, and southeasterly



Use Case 8 – Orbital Reentry Operations



- LV Assumptions
 - Capsule or Winged “lifting body”
 - Precision landing capabilities
 - Horizontal glide to runway
 - Precision (parafoil) reentry (~50 yards CEP)
- Trajectory assumptions
 - West to east approach
 - Northern track with turn to south into Concho Valley
- Airspace closures along last 100-120 miles track & ~20 miles wide (may be greater)
- Various west-to-east reentry tracks are possible including from north or south



SWOT

Industry Competitiveness



2024 Space Economy Valuation



CV Characteristics Driving Market Opportunities / Activities

- Remoteness
- Security
- Safety
- "Freedom to Operate"
- Low Population Density

CV Characterization / Competitive Assessment Framework

- General CV characterization (pros and cons exist)
 - Remoteness (double edged sword – specific potential sites TBD)
 - Low population density
 - Constrained water resources
- Initial environmental / species / cultural resources assessment
 - Generally good weather with ~250 days of sunshine / year
 - Limited environmental concerns
 - Limited concerns with state /federal listed species
- Infrastructure characterization
 - Existing road network is generally competitive versus other remote spaceport areas (e.g., Spaceport America, Mojave, Oklahoma)
 - Power/comms capacity generally good; specific sites need to be assessed for improvements
- Potential orbital flight corridors exist (North, South, Southeast)
 - More assessments to be performed

Initial CV Competitiveness Assessment – SWOT

STRENGTHS

- Weather (clear days, low humidity, non-salt env.)
- Remoteness (low population, privacy) and large open land masses for operations/development
- Generally good infrastructure (roads, rail, aviation, comms) with some reserved airspace
- Historic aviation and current high-tech presence

OPPORTUNITIES

- Rising launch demand w/coastal site saturation
- Improved reliability of fully reusable rockets
- Increased demand for reentry/down-mass
- Advanced aviation ops/testing sites (UAS/UAM)
- Hypersonics/P2P growth – regional test corridors
- Leverage Texas' University Lands in CV (TBD)
- Texas' support of Texas Space Commission

WEAKNESSES

- Lack of test range instrumentation/infrastructure
- Limited convenient international connections
- CV space-centric workforce is limited
- Ability to make major investments in infrastructure w/o Fed, State and private sources

THREATS

- Other inland spaceports (e.g., TX, OK, NM)
- Re-emergence of maritime launch
- Too late to the opportunity?
- Are there enough “real” opportunities to attract companies/operations to a CV site
- Timeline to inland orbital launch too long

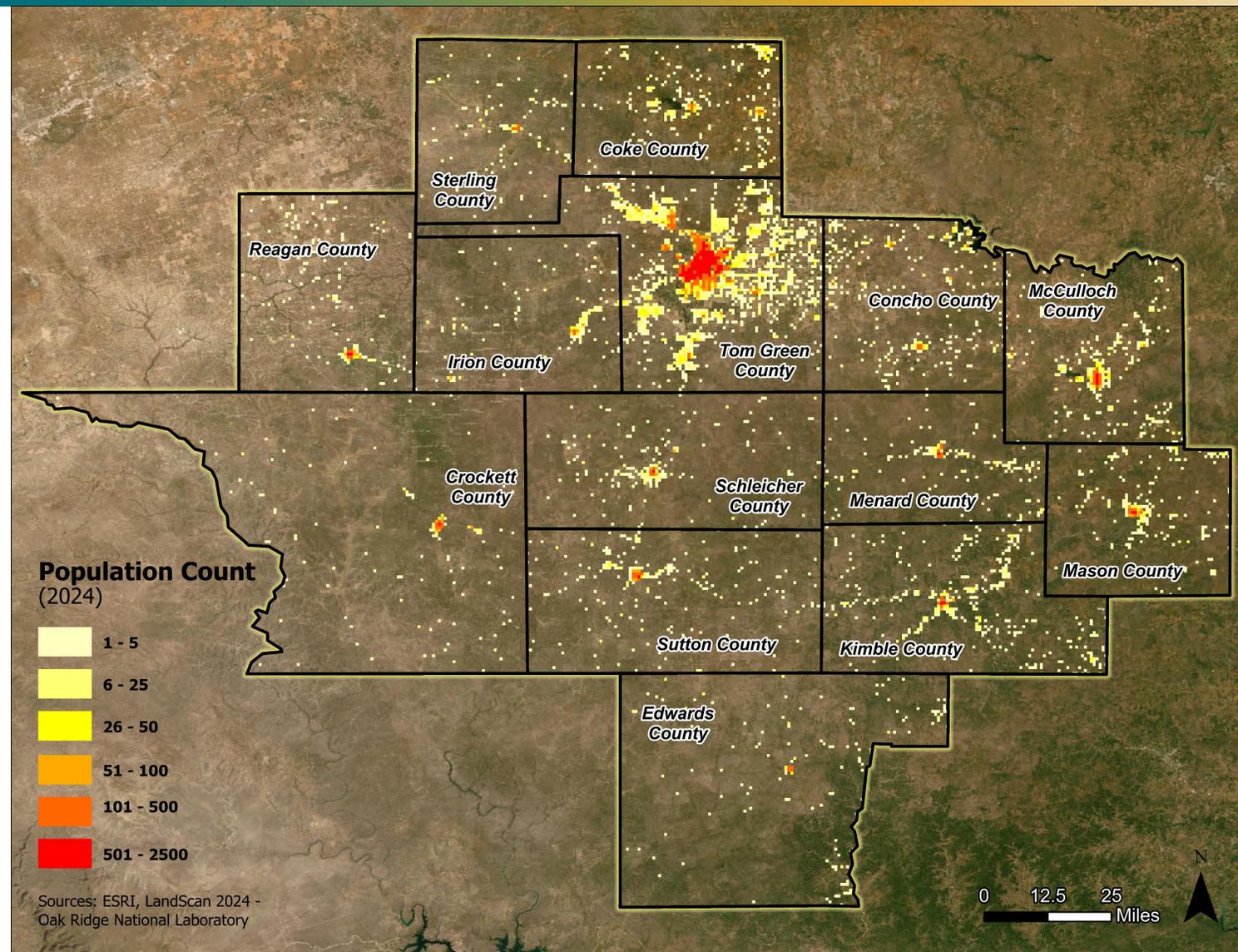
CV Primary, Secondary, & Opportunistic Markets (Initial View)

- There are multiple space and space-adjacent markets that rural inland spaceports pursue
- The Initial designation of focus for CV Market Opportunity by Primary, Secondary, and Opportunistic reflects near term market dynamics
- Additional assessments confirm this initial view of potential space-adjacent and space market opportunities.

MARKET/PRIORITY	PRIMARY	SECONDARY	OPPORTUNISTIC
SPACE	Suborbital Launch	Orbital Launch	Low Earth Orbit (LEO) CL Ground Testing
	Orbital Reentry	P2P / Hypersonics	Earth Observation Calibration
	Satellite Comms	Tracking / SSA-STM	Lunar / Mars Analogues
	Component/System Testing *		
AVIATION	HAPS	Electrified Aircraft (A/C)	Hydrogen Powered A/C
	Training	UAM	EMP Testing
	UAS (Traditional)	UAV (eVTOL, VTOL)	ATC/ATM-Space Launch Integration
	Component/System Testing *		
SURFACE / STEM / VENUE	Data Centers	Energy Systems (Solar & Small Fission)	Fusion R&D
	Events/STEM/ Venue (Mission)	National Security	Autonomous Vehicles
	Media	Rail	Venue (Off-Mission)
	Component/System Testing *		

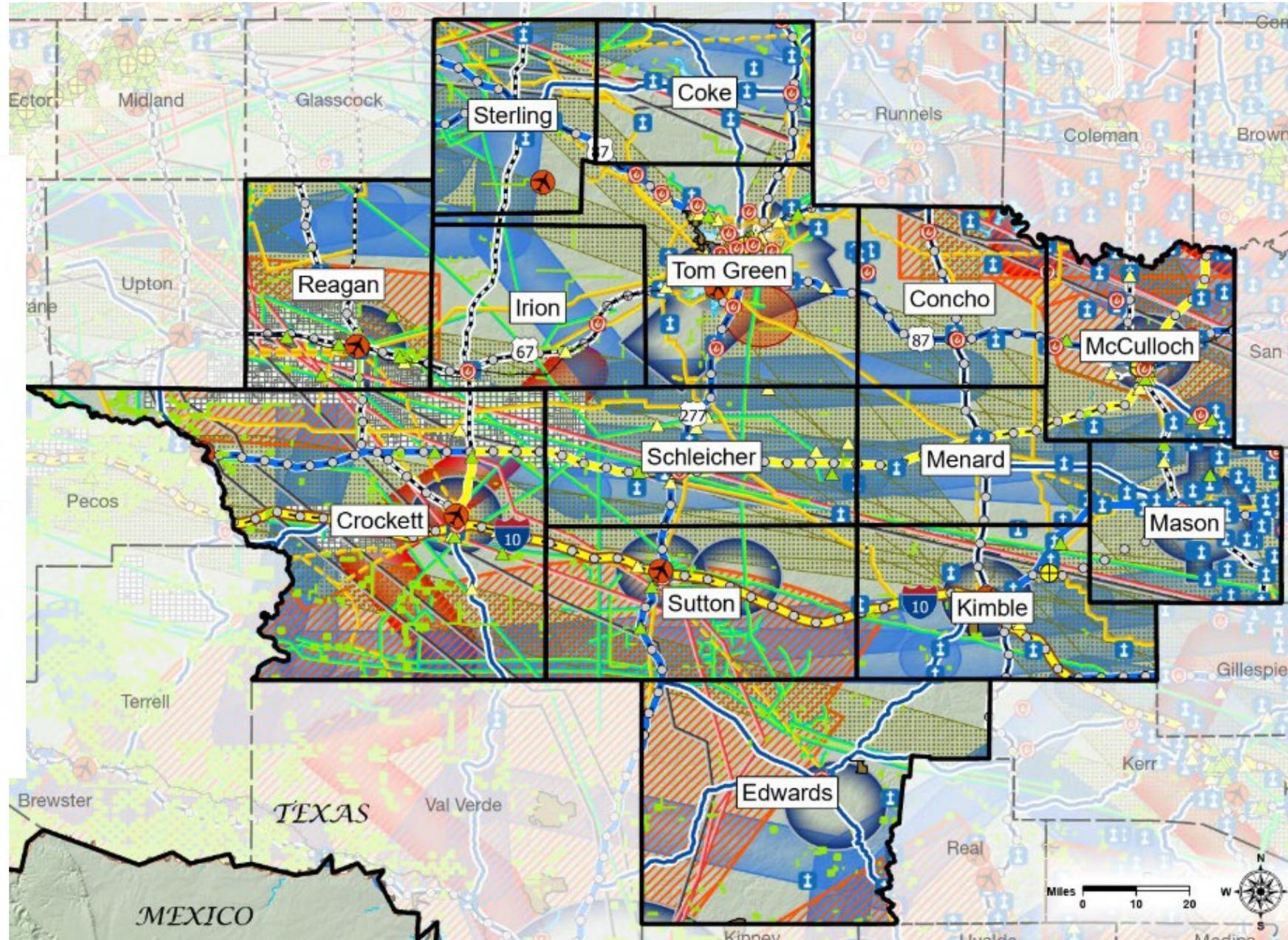
WP 3

CV Assessment / Site ID Status Update



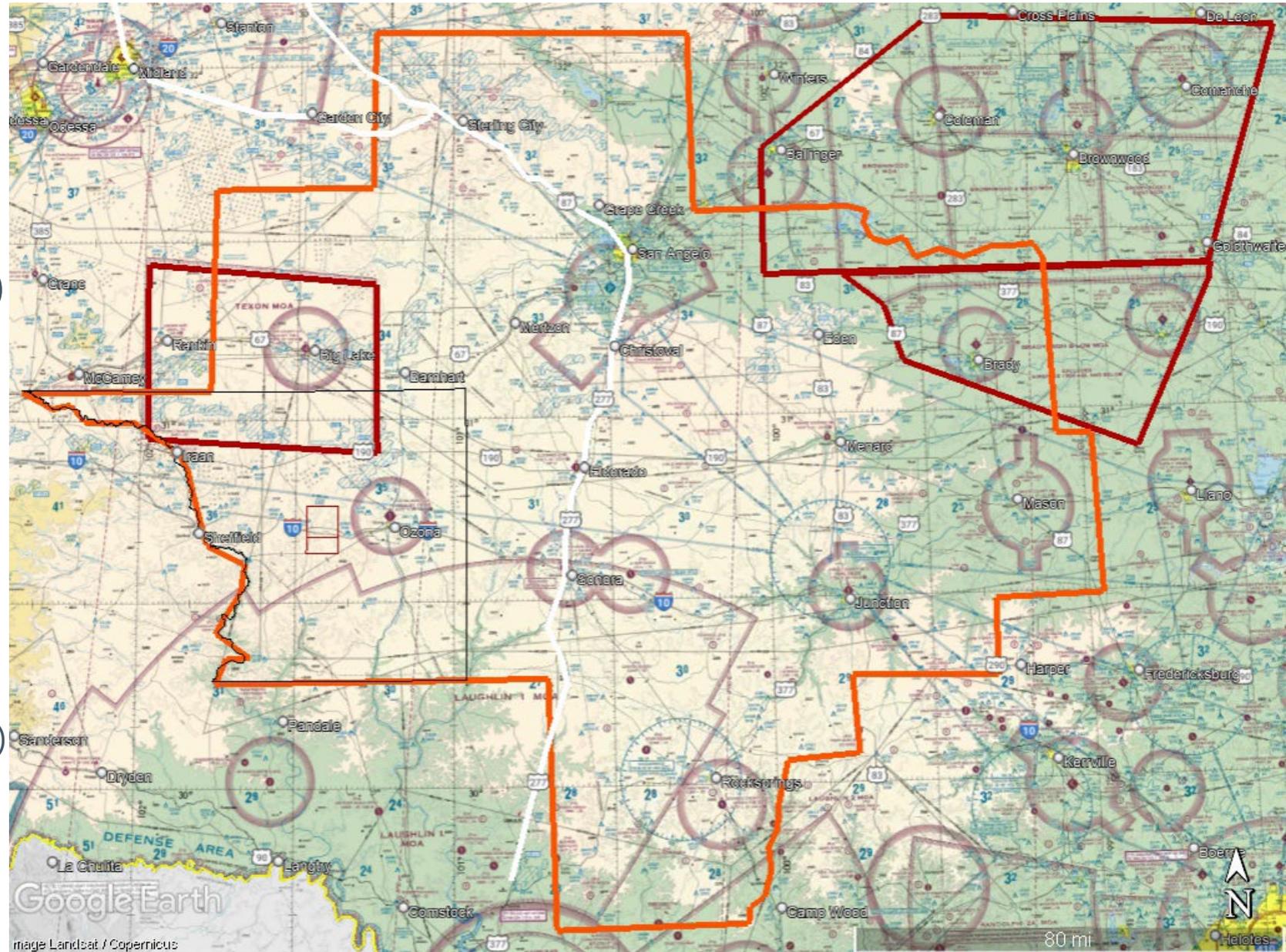
Population Density in the CVCOG Member Counties (2024)

CV Site Assessment



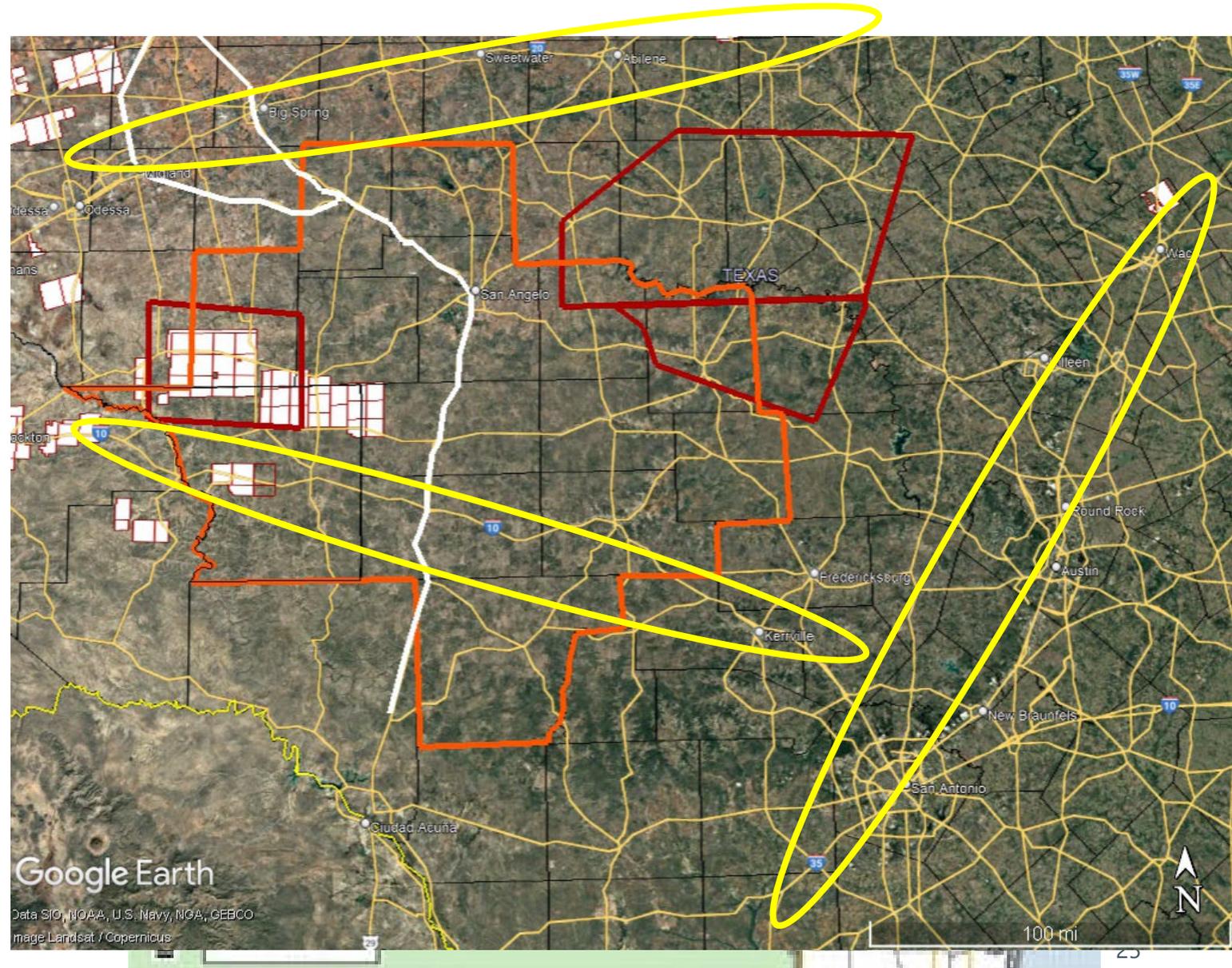
CV Airspace Opportunities & Airports (Initial Indicators)

- CV has three MOAs (partial)
 - TEXON (west)
 - Brownwood & Brady (east)
- San Angelo (SJT) airport (>8k ft)
 - Helpful for UAS & maybe reentry
 - Horizontal orbital and suborbital w/RW extension may be possible (more eval needed)
- Many (smaller) airports ($\leq 6k$ ft)
 - E41 (Big Lake / Reagan County)
 - 27R (Eldorado / Schleicher County)
 - T50 (Menard County Airport)
 - OZA (Ozona Muni, Crockett County)
 - JCT (Kimball County Airport)



Other Site Considerations

- Criteria for Assessment
 - Trajectory limitations (N, S, and SE)
 - Overflight of populations, major routes
 - Terrain ruggedness
 - Lack of, or presence of, other key elements / characteristics
 - Population density locally
 - Challenging terrain
 - Lack of infrastructure
 - Flood zones
 - Aquifer access
- Many layers of data being assessed



Where else may be good?

- Feedback ...

THANK YOU!

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