

where the old frontier meets the new frontier



**LFC STATUS BRIEFING
JULY 13, 2011**

**Christine Anderson
Executive Director
New Mexico Spaceport Authority**

Agenda

- **Overview**
- **Capital Budget**
- **Operating Budget**
- **Business Plan**
- **Informed Consent Legislation for FY12**

VISION

- **World's premier commercial space launch facility providing first class service to our customers and delighting and inspiring our visitors**

MISSION

- **Provide safe, efficient and effective service for commercial space launch customers**
- **Provide safe, efficient and effective service for aerospace research and development customers**
- **Provide an educational, inspirational and fun experience for visitors**

- **National Space Policy**

- *“The United States is committed to encouraging and facilitating the growth of a U.S. commercial space sector that supports U.S. needs, is globally competitive, and advances U.S. leadership in the generation of new markets and innovation-driven entrepreneurship.”*

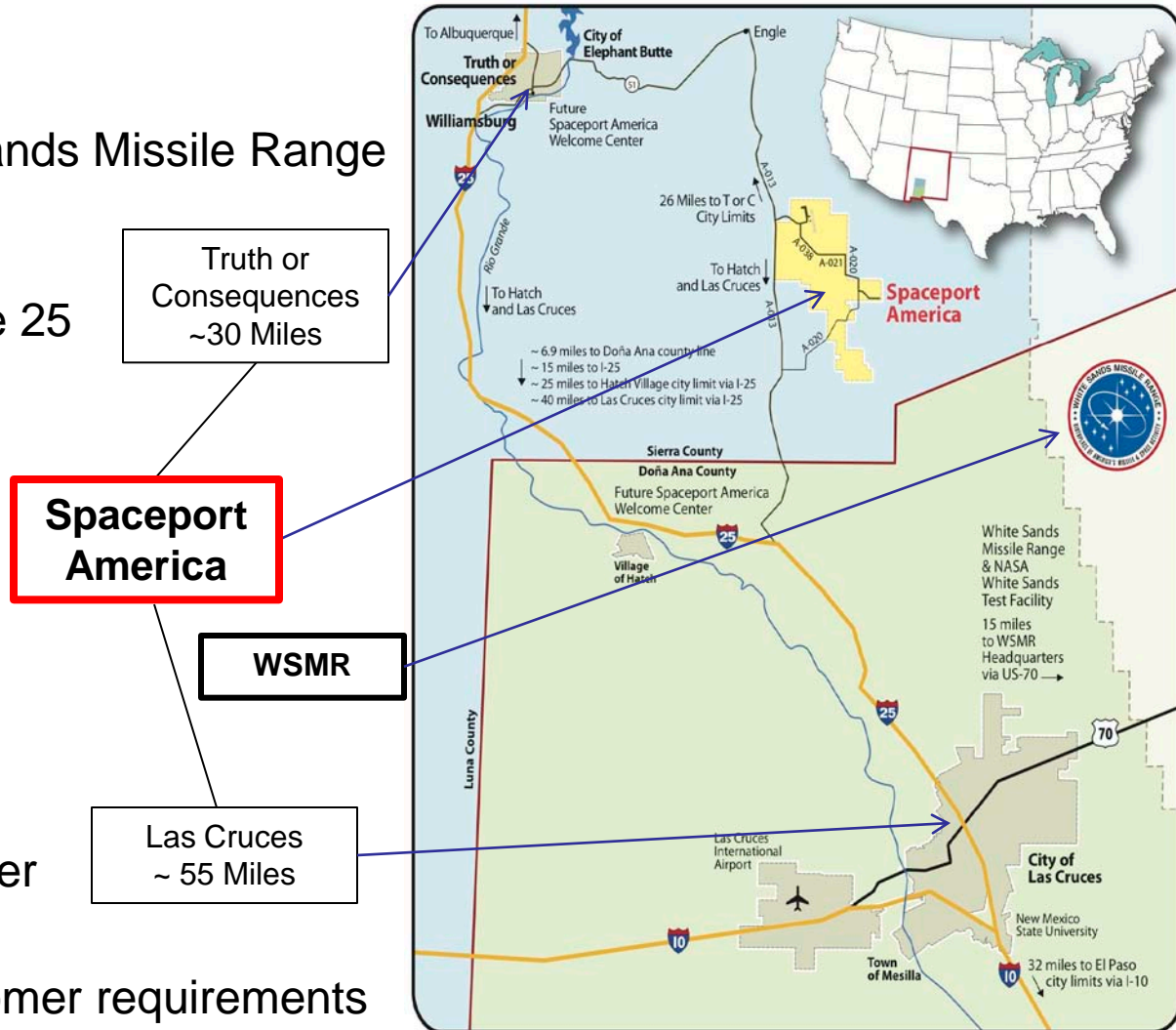
- **Space Shuttle retirement 2011**

- **Military and Civil space investments in technology**

- **Market demand strong and growing**

Why Spaceport America?

- South central New Mexico
- Close proximity to White Sands Missile Range
 - Use of restricted airspace
- Easy access from Interstate 25
- Approx 18,000 acres
- Sparse population
- 4600 ft above sea-level
 - Less fuel, more payload
- Excellent year-round weather
- Operations tailored to customer requirements



Spaceport America Customers



Horizontal Launch Customers



Vertical Launch Customers



Spaceport America



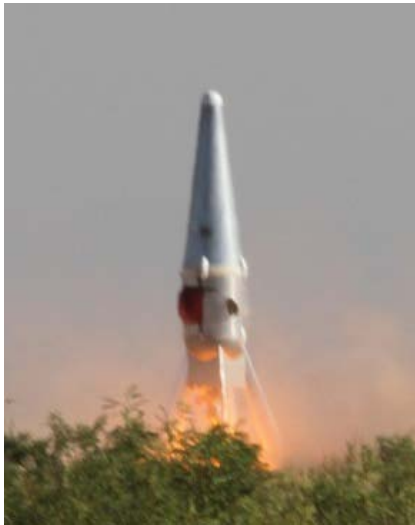
Students



Tourists

Flight activity highlights

- **Armadillo Aerospace conducted their first launch on May 14; second on June 11**
- **Boeing has been conducting flight testing of a helicopter avionics system from May 15 – July 15**
- **Student launch on May 20; 800+ students involved**
- **12 vertical launches to date**
 - Lockheed Martin, UP Aerospace, Armadillo Aerospace, etc.



Economic Engine Contributor

Spaceport America Preview Tours



- **Service started May 13**
- **National, international media coverage**
- **Hundreds of reservations in first month**
- **T or C retail store planned**



www.ftstours.com



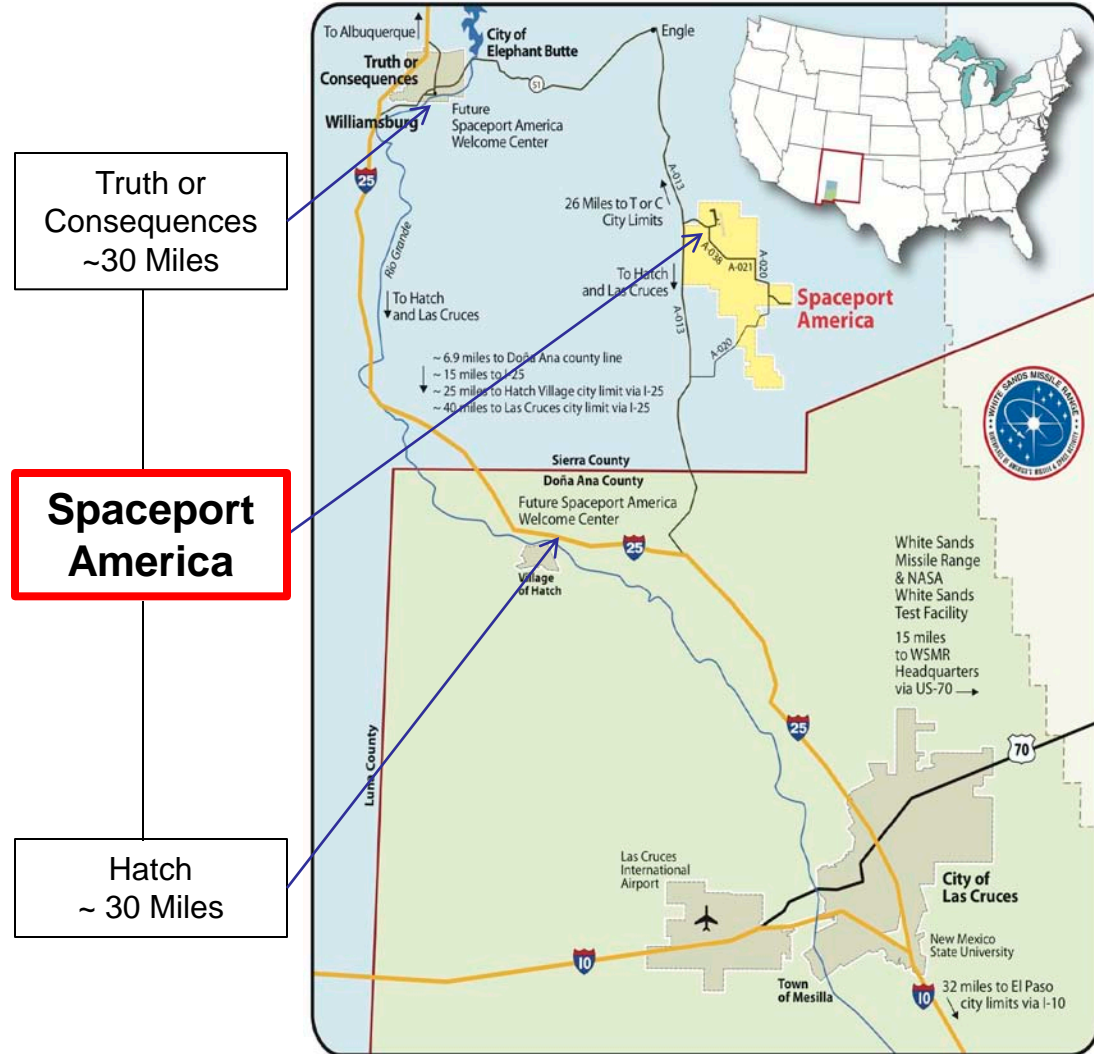
Visitor Experience – coming June 2013

- **Locations**

- **Two welcome centers off I-25 (approximate areas near T or C and Hatch)**
- **Onsite visitor center**
- **Guard station/entrance**
- **4000 sq ft in the THF**

- **A Typical Visitor Day**

- **Immersive exhibits**
- **“Edutaining” Activities**
- **Launch Viewing**
- **Shopping and Dining**



Tons of fun and technical dazzle!

Spaceport Overall Status



- **Phase 1 Construction 87% complete**
- **Phase 2 Construction / Pre-operations start up 15% complete**
- **Bonds “expire” June 2012, December 2013**
- **Seeking more launch customers**
- **Seeking private investors and partnerships**
- **Ramping-up tourism**

Transitioning from State-funded agency to self-sustaining enterprise

Phase 1 Construction



Project Name		% Complete
SP-001	Cultural Resource Mitigation (Zia Engineering)	100%
	Construction Management (Gerald Martin)	90%
SP-002	Site Enabling Works (FNF New Mexico)	91%
SP-003	Airfield (David Montoya Construction)	98%
SP-004	Wastewater System (AUI)	100%
SP-005	On-site Electrical Distribution (McDade Woodcock)	99%
SP-006	Fencing (Apache/Valley Fence)	82%
SP-008	Internal Roadways (CMC Construction)	95%
SP-009	Water Distribution System (Smithco)	99%
SP-010	Apron (David Montoya Construction)	97%
SP-011	SOC / Grounds Maint. Building (Bateman-Hall)	80%
SP-012	Fuel Storage (FNF New Mexico)	96%
SP-013	Terminal Hangar Facility (Summit West)	88%
SP-014	Communications / Systems Integration	1%
	Off-site Power	50%
	Total % Complete	87%

Respect for the Environment

- **LEED* Gold Certified facility (target)**
- **Year-round wildlife water supply**
- **Coexistence with working ranches**
- **Cultural and archaeological mitigation**



*Leadership in Energy and Environmental Design by US Green Buildings Council

Terminal Hangar Facility (THF) from the Apron



Spaceport Operations Center



Spaceport Utility Infrastructure



Wastewater Treatment Plant



Fuel Storage Depot



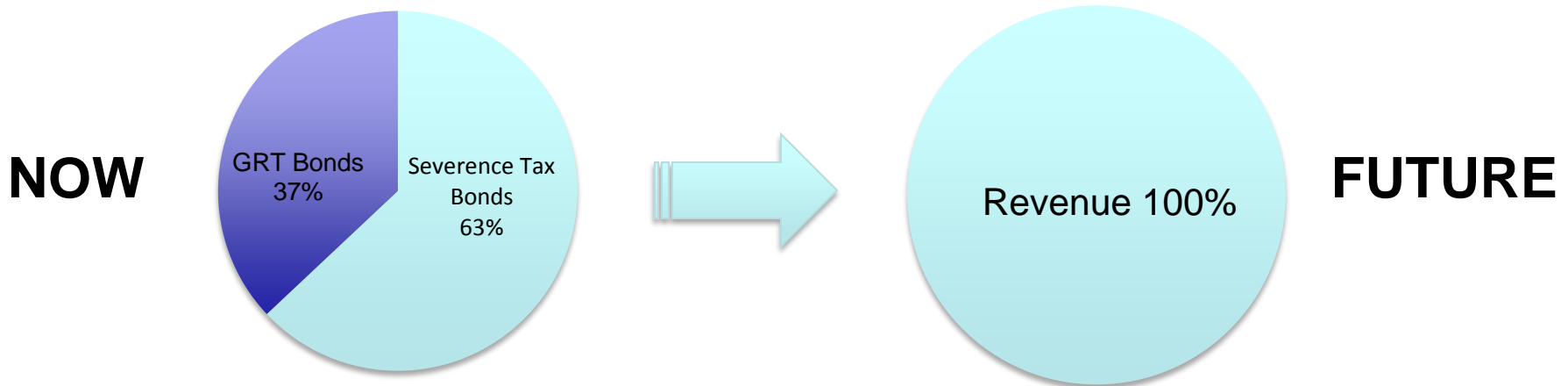
1.3M gal Water Storage & Booster Station

- **Protective Services** (*Board award approved*)
 - Asset protection / emergency response, health, and safety management
- **Technical Services** (*in source selection*)
 - Mission operations / IT support
- **General Services** (*in source selection*)
 - Building maintenance, ground support, fuel storage
- **Visitor Experience Development** (*in source selection*)
 - Tourism exhibits / immersive attractions / educational opportunities
- **Internal roads build-out**
- **Vertical Launch area build-out**
- **Southern Road**
 - Doña Ana County partnership / December 2012

Spaceport Capital Budget

Spaceport Capital Budget

Part A	Phase I	Pre-construction (Fixed)	\$46,161,765
Part B	Phase I	Construction (Fixed)	\$114,737,416
Part C	Phase II	Pre-operation (Fixed)	\$48,253,085
Total			\$209,152,166



Goal: Self-sustaining Spaceport

Spaceport Budget: Pre-Construction



Cost Codes	Part A --- Project Costs 2004 - December 31, 2010	Actual and Planned	Actual \$	Planned and Contingency \$
01-100 / 01-200	FY 2004-2007 Technical Contracts	\$2,635,000	\$2,635,000	\$0
01-300	DMJM Programming and Preliminary Design	\$3,344,400	\$3,344,400	\$0
01-300	FY 2007-2009 Other Technical Contracts	\$5,255,600	\$5,255,600	\$0
01-400 & 01-600	URS THF Design	\$6,242,301	\$6,242,301	\$0
01-600	AECOM Infrastructure Design (Active)	\$13,314,439	\$13,314,439	\$0
01-400	FY 2009-2011 Technical Contracts	\$1,232,125	\$1,232,125	\$0
01-500	NMDOT - Northern Road	\$10,000,000	\$10,000,000	\$0
01-600 & 700	FY2009 - 2011 Capital contracts / expenditures - non-construction (Active)*	\$4,137,900	\$3,937,900	\$200,000
	TOTAL Part A - Project Costs	\$46,161,765	\$45,961,765	\$200,000

*\$200,000 reserved for Art in Public Places

Spaceport Budget: Construction



2008 – 30 June 2011			Current Budget	Actual Cost +/- Change Orders	Contingency Amount
Cost Codes	Part B --- Phase I Construction Costs				
01-400 /01-600	SP-001	Construction Mgmt Services (Gerald Martin)	\$4,327,875	\$4,327,875	\$0
01-600	SP-002	Site Enabling Works (FNF New Mexico)	\$3,395,231	\$3,095,231	\$300,000
02-100	SP-003	Airfield (David Montoya Const)	\$29,889,066	\$29,589,066	\$300,000
02-100	SP-004	Waste Water System (AUI)	\$2,504,450	\$2,304,456	\$199,994
02-100	SP-005	On-site Electrical Distribution (McDade)	\$3,906,681	\$3,706,681	\$200,000
01-600	SP-006	Fencing (Apache/Valley Fence)	\$1,174,631	\$996,148	\$178,483
02-100 / 01-700	SP-008	Internal Roadways (CMC Construction)	\$3,706,919	\$3,611,159	\$95,760
02-100	SP-009	Water Distribution System (Smithco)	\$6,976,750	\$6,890,087	\$86,663
01-600	SP-010	Apron (David Montoya Const)	\$6,168,889	\$6,118,889	\$50,000
01-600	SP-011	SOC (Bateman-Hall)	\$3,297,754	\$3,042,997	\$254,758
02-100	SP-012	Fuel Storage (FNF New Mexico)	\$853,173	\$778,173	\$75,000
01-600	SP-013	THF (Summit West)	\$36,102,939	\$33,462,230	\$2,640,709
01-600	SP-014	Communications / Systems Integration	\$6,393,970	\$5,754,573	\$639,397
01-600	Permanent Power (Sierra Electric Co-op)		\$6,039,088	\$5,539,088	\$500,000
TOTAL Part B - Phase I Construction Costs			\$114,737,416	\$109,216,653	\$5,520,763

Spaceport Budget: Pre-operational



Cost Codes	Part C --- Project Costs Phase II (2011 – 2013)	Actual and Planned	Actual	Contingency
	Southern Road/Safety Zones	\$14,120,000	\$13,000,000	\$1,120,000
	Visitor Experience	\$15,000,000	\$15,000,000	\$0
	Vertical Launch Area	\$3,060,000	\$2,550,000	\$510,000
	Infrastructure (Roads, lighting, security fences, etc.)	\$4,873,870	\$4,465,870	\$408,000
	SOC Furniture/Fitout/Equipment	\$4,497,910	\$4,497,910	\$0
	Archaeological Mitigation	\$3,187,305	\$3,187,305	\$0
	Pre-Operations/Commissioning	\$3,514,000	\$3,514,000	\$0
	TOTAL Part C - Project Costs	\$48,253,085	\$46,215,085	\$2,038,000
	Parts A, B and C	\$209,152,266	\$201,393,503	\$7,758,763

Current Total Available Funding (as of 6/30/11)	\$209,152,266
--	----------------------

Net Remaining Available Funding:	\$0
---	------------

NMSA Operating Budget

FY12 NMSA Operating Budget (HB2)



- **FY11** **\$1,129,400**
- **FY12** **\$500,000 + \$200,000 from VG lease**

- **Issue – Virgin Galactic Lease does not begin until:**
 - **Terminal Hangar Facility is completed**
 - All CID (Construction Industries Division) inspections complete
 - Punch list has been prepared and approved by NMSA and VG
 - NMSA prepared to provide VG all essential services
 - **All NMSA permits issued, including FAA Horizontal Launch License**
 - Dependent on VG spaceship completion
 - **+60 days**

Dilemma – Don't know exact date when lease starts

FY12 NMSA Operating Budget



PROJECTED BUDGET

\$500,000	Appropriated funds
\$222,000	FY11 Ops budget rollover funds <i>(pending end of year closeout and DFA final confirmation)</i>
\$200,000	Pre-FY11 Ops budget rollover funds <i>(pending DFA final determination)</i>
\$922,000	

PROJECTED EXPENSES

\$649,000	Category 200	(Personal Svcs) – 7 FTE Staff
\$107,000	Category 300	(Contractual Svcs) – Legal, Audit contracts
\$166,000	Category 400	(Other) – Office space, utilities, DoIT, supplies, BOD costs
\$922,000		

FY12 Budget appears to be executable with non-reverting funds

Draft NMSA Business Plan 2012 - 2016



STRATEGIC GOALS

- **Self-sustaining and profitable**
- **Robust economic engine for local area and State**
- **Efficient and effective operations for all customers**

DRAFT

Near-Term (now – 2012) Unsustained Growth

- **Construction, architecture, management jobs**
- **Increased hotel occupancy and rentals**

Mid-Term (2013 – 2014) Fluctuating Growth

- **Limited spaceport operations jobs**
- **Tourism start-up**
- **Fluctuation in launch customers**
- **VG reaches initial ops capability**

Far-Term (2015 –) Sustained Growth

- **Spaceport operations jobs**
- **Increased home sales, hotel occupancy, retail sales, restaurant patronage**
- **Ancillary spaceport start-up businesses**
- **Increased sustained vertical launch customers**
- **At least one new major tenant**
- **VG reaches full ops capability**

Budget Projection Assumptions

- **FY12**
 - Complete Phase 1 Construction
 - Severance tax bonds “expire”
 - Start Phase 2 Construction
 - 1,500 visitors @ \$75 spend with 15% margin
- **FY13**
 - 2009 GRT bonds “expire”
 - 3,000 visitors @ \$75 spend with 15% margin
- **FY14**
 - Complete Phase 2 Construction
 - 2010 GRT bonds “expire”
 - VG Lease begins
 - VG User Fees @ 75% of VG projections
 - One additional tenant
 - 140,000 visitors @ \$55 spend with 15% margin
- **FY15/16**
 - VG User Fees @ 50% of VG projections
 - Steady state of visitors, then 8% growth starting in FY16

5 Year Ops Budget Projection



FISCAL YEAR	2012	2013	2014	2015	2016
-------------	------	------	------	------	------

Operating Income

<i>Total Virgin Galactic Revenue</i>	-	-	5,296,500	6,004,000	6,770,250
User Fees, THF Lease and Rent					
<i>Total Other Operating Revenue</i>	30,563	67,413	1,256,750	1,222,338	1,502,295
Other customers' User Fees & Lease Fees, Fuel sales, Visitor revenue					
General Fund Appropriations	500,000	922,020	-	-	-
Prior FY Appropriations	422,020	-	-	-	-
<i>Total State of NM Operating Income</i>	922,020	922,020	-	-	-

Operating Expenses

Core Operation Expenses	-	-	5,171,185	5,365,322	5,567,491
NMSA Agency Expenses	922,020	922,020	1,174,500	1,229,702	1,287,497
<i>Total Expenses</i>	922,020	922,020	6,345,685	6,595,024	6,854,988
<i>Total Expected Capital Reinvestment</i>	24,450	53,930	166,052	505,051	1,134,045
Assumes 80% reinvestment in facilities and equipment					
Total Net Operating Cashflow	\$6,113	\$13,483	\$41,513	\$126,263	\$283,511

5 Year Capital Budget Projection



FISCAL YEAR	2012	2013	2014	2015	2016
-------------	------	------	------	------	------

Capital Income Sources

Severance Tax Bonds	15,235,976	-	-	-	-
Gross Receipt Tax Bonds	14,592,109	13,818,750	4,606,250	-	-
<i>Total Capital Income Sources</i>	29,828,085	13,818,750	4,606,250	-	-

Capital Expenses

Pre-Operational/Start-up Expenses	1,314,000	2,200,000	-	-	-
Phase 2 Construction	28,487,085	11,618,750	4,606,250	-	-
<i>Total Capital Expenses</i>	29,828,085	13,818,750	4,606,250	-	-

Major Business Sectors

- **Commercial Space**
- **Federal Government Space**
- **Tourism**
- **Education**

DRAFT

Goal: Attract current and future commercial space customers to foster the commercial space industry in New Mexico.

OBJECTIVES

- **Sign one more major tenant by 2015**
- **Full operational capability for vertical launch by 2015**
- **Initial operational capability for horizontal launch by 2013**
- **Full operational capability for horizontal launch by 2015**

RISKS

- **VG experiences major delay**
- **Commercial space industry is slow to develop**
- **Lack of robust Informed Consent legislation in NM**

STRATEGIES

- **Diversify customer base**
- **Network and participate in industry to gain customers**
- **Incentivize select customers**
- **Promote revision of Informed Consent legislation in 2012**

Goal: Position Spaceport America as a strategic national asset by supporting federal government space research and development.

OBJECTIVES

- **Host four Air Force R&D flights by 4Q 2014**
- **Host five NASA R&D flights by 4Q 2012**

RISKS

- **Uncertainty of federal government funding**
- **International Traffic in Arms Regulations (ITAR) concerns**

STRATEGIES

- **NASA/Ames Space Act Agreement in 2011**
- **AFRL MOA in 2011**
- **Strong federal government space advocacy**
- **Hire ITAR consultant to draft procedural guidelines**

Goal: Globally recognized as unique, exciting tourist destination.

OBJECTIVES

- **Become the #1 tourism destination in New Mexico by 2018**
- **Attract over 140,000 visitors/year in 2014**
- **Develop supporting infrastructure for Visitor Experience by 2013**
- **Grow Preview Tour operation to 3,000 visitors in 2013**
- **Generate a profit from visitor services in the first full year of operation**

RISKS

- **Sluggish economy**
- **Underfunded and/or poorly marketed Visitor Experience**

STRATEGIES

- **Hire world-class visitor experience development contractors**
- **Increase outside investment with \$10M in pre-opening partnerships**
- **Encourage local community preparation for mass tourism**

Goal: Inspire US students to embrace science, technology, engineering and math (STEM).

OBJECTIVES

- >35% of visitors under the age of 18 per year
- Develop strong spaceport STEM education and workforce development plan by 2012
- Develop robust internship/co-op program, supporting >20 interns by 2014
- Host >5 student-focused events per year by 2013

RISKS

- Poorly targeted exhibit and interpretive content for students
- Lack of coordination with related existing educational services and programs
- Lack of public education support for field trips

STRATEGIES

- Hire world-class visitor experience development contractors
- Support FAA Center of Excellence (9 University participants)
- Incentivize student attendance through targeted admission pricing
- Support annual student launch event NMSGC

Goal: Maintain infrastructure at a level commensurate with being the premier commercial space launch facility.

OBJECTIVES

- **Reinvest initial revenues to build-out the spaceport operational capability in 2014-2015**
- **Reinvest at least 50% of earnings back into respective business sectors in 2016+**

RISKS

- **Commercial industry is slow to develop**
- **Sluggish economy**

STRATEGIES

- **Build and maintain two years' worth contingency fund for operating expenses**
- **Proactively seek and sign on new customers**
- **Proactively maintain existing customers**
- **Continually refresh and enhance visitor experience**

- **New Mexico Space Flight Informed Consent Act of 2010**
 - Indemnifies operators, but not suppliers
 - Contains sunset clause in 2018

- **TX, FL, VA have passed more robust legislation in 2011**
 - Indemnifies operators and suppliers
 - No sunset clause

- **NM must pass similar robust legislation in 2012 to be competitive**

Legislation is essential to success of Spaceport America

Media Coverage May - July 2011

- ✓ Associated Press
- e-Canada Now
- ✓ London Times
- ABC NEWS ONLINE
- CBS NEW ONLINE
- Atlanta News Constitution
- Dayton Ohio Daily News
- Seattle Times
- The Republic, Columbus Indiana
- ✓ SpaceNews.com
- ✓ CNN
- MSNBC ONLINE
- ✓ Discovery Channel
- ✓ Discover Magazine
- U.S Army News Online

- ✓ NPR Weekend Edition
- ✓ SPACE.COM
- ✓ Airport International Magazine
- ✓ Business Week Magazine
- ✓ Nat Geo Channel
- Smithsonian Channel
- Al Jazeera (News TV)
- ✓ Las Cruces Sun-News
- ✓ Albuquerque Journal
- ✓ Las Cruces Bulletin
- AAA Travel Magazine
- USA Today/Travel
- ✓ CNBC

- ✓ NMSA direct contact

Questions?

SPACEPORT AMERICA

