



Liberty • Opportunity • Prosperity

Policy Brief

March 2020

Lost in (Sub-Orbital) Space:

Financial Reality vs. and Fantasy at New Mexico's Spaceport Authority

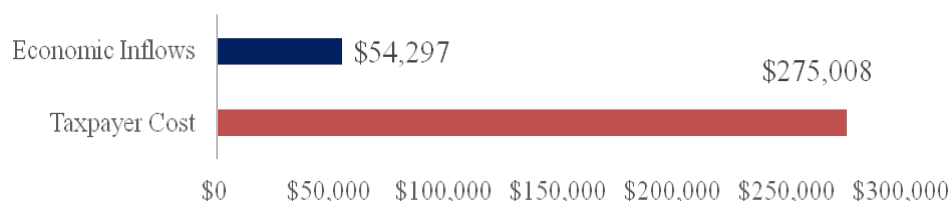
By Daniel Seymour
Analyst, Rio Grande Foundation

Every year, typically in advance of New Mexico's legislative sessions, the folks at Spaceport America begin making claims about the "upcoming launch" from their facility or the need for additional tax dollars to further expand the Spaceport and its supposed capabilities. In 2020 the added "excitement" among the facility's supporters comes from the expectation that 2020 will *finally* be the year¹ during which Richard Branson's Virgin Galactic launches its long-awaited manned tourism flights into space.

To bolster their claims on additional tax money, Spaceport America commissioned a study² released recently by the consulting firm Moss Adams of Albuquerque. The study made headlines with the rather implausible claim that Spaceport America began producing net economic and fiscal benefits for New Mexico as early as 2013. Since its anchor tenant, Virgin Galactic, has yet to launch a single manned space tourism flight, we at the Rio Grande Foundation were skeptical. So, we undertook a detailed critique of these claims, relying on the audited financial statements from the Spaceport Authority and the State's own capital outlay spending records.

Using these publicly-available data along with information from the Moss Adams report which was not previously available (such as estimates of Virgin Galactic's spending on employee relocation), it is clear that Spaceport America remains a drain on New Mexico's resources. In fact, after tallying up the total costs to taxpayers we found that the project has cost New Mexicans \$275 million while generating just \$54.3 million in income for the State over the last 12 years.

Economic Inflows to New Mexico vs. Taxpayer Pay-In,
2008-2020
(in \$000s)



<i>Economic Inflows</i>	<i>Amount (\$000s)</i>
<i>Customer Revenue</i>	\$13,077.10
<i>Virgin Galactic HQ + Ops</i>	\$37,170.00
<i>SA Cup</i>	\$2,030.00
<i>Other</i>	\$2,020.00
Total	\$54,297.10

A more detailed accounting of the Spaceport’s expenditures and inflows in terms of overall revenues can be found below. It is important to note that this \$54.3 million represents *total inflows* into New Mexico- that is, all the spending that Spaceport advocates tout in the media, including Virgin Galactic’s spending on offices, warehouses, employee relocation; film shoots, the SA Cup, hotel rooms and meals, tourism, and all other spending attributable to the Spaceport.

This is the extent of the financial and economic impact created by the Spaceport in the last decade. It doesn’t come close to generating the amount of tax revenue needed for the State of New Mexico or the local jurisdictions that have imposed gross receipts taxes to claim break-even or even positive returns. Rather, the vast majority of spending related to the Spaceport has come from taxpayer funding for capital projects, including buildings, vehicles, roadways, and other infrastructure improvements, plus nearly \$10 million in operational expenditures and nearly \$50 million in outstanding debt.

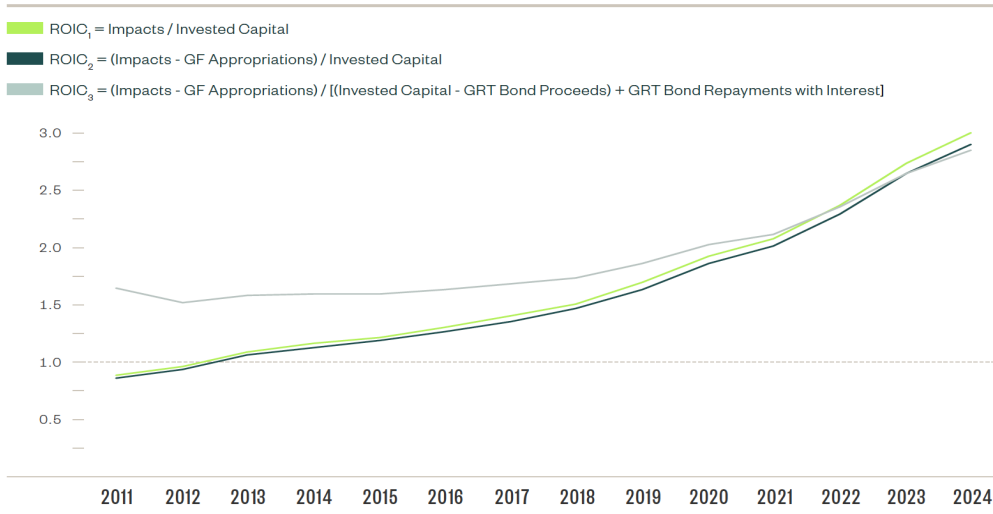
<i>Breakdown of Costs</i>	<i>Amount (\$000s)</i>	<i>Tax Expenditures</i>	<i>Amount (\$000s)</i>
<i>Buildings</i>	\$72,818.70	<i>Gross Receipts Tax</i>	\$65,836.59
<i>Other Capital Improvements</i>	\$84,722.72	<i>State General Fund Appropriation</i>	\$21,397.70
<i>Vehicles</i>	\$1,812.92	<i>Severance Tax Bond Appropriations</i>	\$138,408.47
<i>Equipment and Furniture</i>	\$9,797.99	<i>Remaining Debt Balance</i>	\$49,365.26
<i>Public Roadways</i>	\$24,000.00	Total	\$275,008.02
<i>Contractual Services</i>	\$17,976.16		
<i>Operational Costs</i>	\$9,850.84		
<i>Revenue Bond Repayments</i>	\$49,365.25		
Total	\$270,344.63		

The Spaceport’s audited financial statements do not list *any* revenue other than taxes and transfers from the State government before 2015, making the 2013 breakeven date presented to the media particularly dubious.

In addition, the Spaceport Authority (with support from Virgin Galactic) requested \$57 million of new taxpayer money in the 2020 Legislative session for various projects, including “a welcome center, an information technology facility, and payload and vehicle processing facility for companies using the spaceport.”³ However, only about \$10.5 million (from the General

Fund and Severance Tax Bonds) was approved, bringing the total taxpayer impact to \$285.5 million.

FIGURE 39: Alternative Return on Invested Capital Including GRT Revenue Bond Repayments
FY2016–FY2029



Moss Adams Report, Page 75

While deeply-flawed in its analysis, the Moss Adams report is a significant improvement over the Spaceport Authority’s typical approach of basing economic impact numbers solely on “best guesses” and “professional judgments” not on data or documents.⁴

During a deposition, the Spaceport’s chief financial officer, Zach De Gregorio said that he factored no documents into his analysis that the Spaceport was having a positive impact. De Gregorio said under oath that there was nothing to provide. He said he took no notes while interviewing business owners and didn’t look at any documents to gather data. He characterized the analysis as his ‘best-guess’ of the impact based on his ‘professional judgment,’ saying, ‘I think there’s value in that.’”

“After Spaceport Leases Released, NMPolitics.net Settles Lawsuit”- NMPolitics.net

That being said, the rigor of the Moss Adams report’s research is undermined by a few absolutely absurd conclusions, and the fairly credulous reception it has received in the local media⁵ indicate these claims have largely gone unchallenged.

The chart above shows perhaps the most preposterous finding: that the Spaceport, which has sat idle for much of the last decade, *broke even* on a \$270 million investment shortly after opening in October of 2011. According to one of Moss Adams’ measurements, the Spaceport made back its investment *before it opened*. The report goes into detail on the mathematical reasoning behind the equations it uses to calculate these numbers, but does not provide detailed data points for the resulting chart (above), which is the centerpiece of their argument that the Spaceport broke even and has been a positive revenue generator since.

When we talk about the “return on investment” of a government program, it is critical to be clear about *what* we want to know, and *why*. How much will it cost taxpayers, and what benefits will it provide? No one is under any illusion that government-sponsored programs will generate revenue like the private sector, but we as taxpayers like to know that our money is being appropriated for programs that are well-run, efficient, and accomplish their goals. For some reason, however, policymakers have a quixotic obsession with demonstrating “return on investment” for wildly inefficient government spending programs. An often-used tool for this is something called an “economic impact study”- defined as “a study which is neither ‘economic’ nor impactful.”

The problems with “economic impact studies” have been well documented⁶ by economists⁷, journalists⁸, and analysts⁹ across¹⁰ the¹¹ political¹² spectrum¹³. The Moss Adams study uses economic modeling software known as IMPLAN, a favorite modeling software for lobbyists with widely known flaws¹⁴. IMPLAN has been described by economist Donald A. Coffin as “a “model” designed to generate large impact numbers to please a client who wants to lobby someone.” It is also, unsurprisingly, commonly used in economic impact studies sponsored by the State of New Mexico. IMPLAN models, combined with a flexible use of the language of finance, can make economic data say whatever policymakers need it to say, lending an appearance of solid, empirical science to false or misleading statements.

Moss Adams adopts an unusual definition of “breakeven” and fails to show which data were used to calculate this result. Anyone with experience with finance will point out that “Return on Invested Capital”- supposedly the metric Moss Adams is using- more often sees results like 5%, 10%, perhaps 20% at most- because it is a measure of profit in one year divided by all the invested capital (debt, equity, etc).

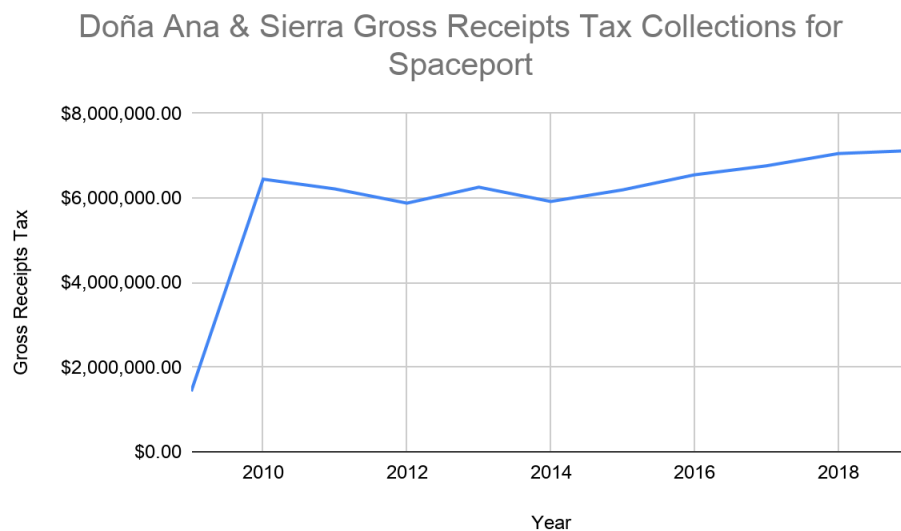
Moss Adams appears to be using the cumulative economic return divided by the cumulative assets invested- and, importantly, it includes money spent on construction as part of its positive economic impact rather than an expense. It also, puzzlingly, attempts to equate tax money paid by Doña Ana and Sierra county taxpayers on their Gross Receipts Tax increment as “equity” in the Spaceport project, despite the fact that those payments are mostly used to pay down debt taken out by the state, and that the term “equity” must be used in an extremely abstract sense since the “equity holders” do not benefit directly in a financial ownership sense (indeed, shareholders of a public company that had repeatedly failed launch expectations might rush to sell and get their money back).

To put it differently, imagine the government spends \$100 million to build a warehouse that sits empty. A business might consider this a write-off loss- \$100 million of money from investors spent that has not generated any return and cannot be easily recovered- an *expense*. The return on investment would be \$0 revenue/ \$100 million in capital investment- a 0% return. Only after the warehouse made \$100 million in income could it be considered “break-even.” You start out \$100 million in the red, then work your way back to \$0 as revenue comes in.

An economic impact analysis, by contrast, will consider that \$100 million of money spent as a *positive economic impact*- because \$100 million was given to construction companies, who may spend it elsewhere. Right away, the project “breaks even,” because you are considering your costs to be, in fact, benefits. Then, imagine that the government imposes a Gross Receipts Tax on the money that it spent building this warehouse, and taxed the construction company 10%. Moss Adams’ modelers would book \$10 million of fiscal impact- *revenue for the government* on top of the \$100 million economic impact. As the report notes:

“These [GRT increments] raise GRT revenue not just on activities taking place at the Spaceport, but also county-wide. The revenue-generating activities are not necessarily related to the Spaceport... but the revenue would not be generated if not for the Spaceport. There’s no sunset clause on the spaceport tax.”

Moss Adams calculates the Gross Receipts Tax collected for the Spaceport in 2019 at \$9.5 million while the Spaceport’s FY 2019 financial statements show \$7.1 million (no explanation for the discrepancy is given).



Data source: Spaceport Authority Financial Statements, 2008-2019

The citizens of Doña Ana county and Sierra County approved the GRT increment by small margins (51% in Doña Ana County), and that was when they were promised spaceflight [in 11-12 months](#)¹⁵. The original purpose of this GRT increment was to pay debt service on bonds issued to construct the Spaceport, but the SPA has often tried to appropriate more of this money to fund operations, to the chagrin of local policymakers¹⁶. Since there is no sunset clause on the bonds, and since the New Mexico Finance Authority has been paying down the principal on the bonds¹⁷, that purpose will almost certainly shift unless policy changes.

After all, given the extravagant promises of an economic boom from commercial spaceflight made to Doña Ana and Sierra County voters back in 2011, they might be surprised

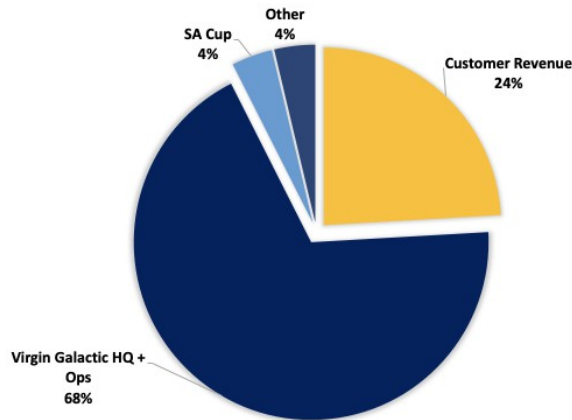
to find out that their taxes are considered “Spaceport revenues.” (Ironically, many of the Spaceport’s principal business areas, like the sales of fuel, are exempt from Gross Receipts Taxes).

Moss Adams estimates total costs for the Spaceport project between 2008 and 2018 at \$270.3 million. This is fairly close to our findings¹⁸, which include numbers from the audited financial statements from the SPA, the New Mexico Capital Outlay database, and the Sunshine Portal. Our estimate does not include an estimated \$35 million of allocated, but unspent, capital outlay funds from 2019 that have not yet shown up on the SPA’s financial statements, bringing the total incurred cost including debt balances to \$310 million. In its most pessimistic forecast, Moss Adams estimates \$81 million of additional funding for the Spaceport, bringing their estimate to \$351 after this legislative session, before a single commercial spacecraft carrying passengers has launched¹⁹.

Leave aside “economic impact,” “multipliers,” and all the jargon used in government planning to make the simple seem complex. How much money has come into this state *because* taxpayers built a Spaceport? That should be the fundamental question of any analysis that seeks to understand the economics of a project in good faith. At a basic level, a company like Virgin Galactic is either paying 1) the Spaceport, for its services, or 2) its employees, contractors, and their bills, for their services. Both of these are (usually) taxable transactions, but for the moment we are only looking at *how much money comes into New Mexico that would not have otherwise been here*, which means for the moment we don’t need to differentiate between money that goes through to the employees versus money paid to the employees that is siphoned off as taxes.

- Moss Adams estimates \$13 million of customer revenue in the same time period, coming out to a little over \$1 million a year. This is in line with our estimates of \$13.1 million based on the Spaceport’s financial statements. This includes revenue from the SA Cup, Virgin Galactic and other companies’ rental agreements, and on-site capital expenditures paid for by those outside companies that come directly to the Spaceport Authority.²⁰
- \$37.2 million estimated impact from horizontal launching, Virgin Galactic’s employees, capex, and direct spend. This includes the impacts of relocating employees to New Mexico, all testing and launches VG has performed, and investments in capital projects such as VG’s headquarters.
- The SA Cup and its related activities generated \$2.03 million. This includes travel expenses, lodging, food, and other amenities for SA Cup participants, in addition to direct revenue from the Cup itself.
- Other Testing Activities, Research + Payload Launch, Suborbital Launches, Project Dev+Operations, and “Other Non-Aerospace Activities” combined to generate \$2.02 million.

Spaceport Direct Impacts, Measured by Money Inflow to State.

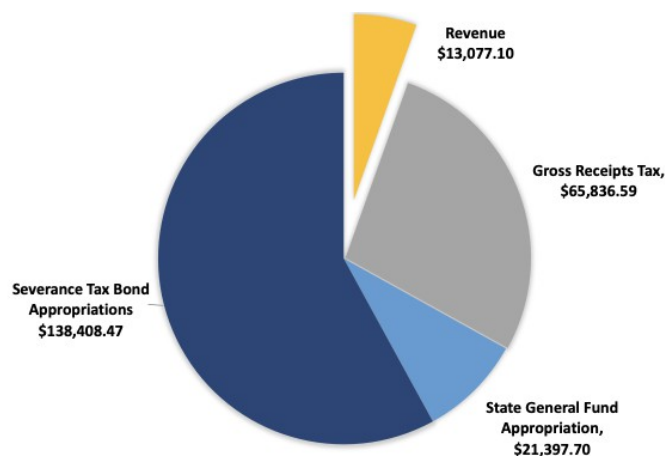


Data Source: Moss Adams Report and SPA financial statements, 2008-2019.

That makes approximately \$54.3 million of wealth “brought” to New Mexico over the last 12 years *because* the Spaceport was built. This is it. Every single other dollar involved in this project is recycled tax money, spinning through the money machine²¹. When the Spaceport Authority takes Severance Bonds, or GRT, or General funds to pay contractors to build a new hangar, that is not *new revenue*. It is the government moving money from one set of New Mexicans to another.

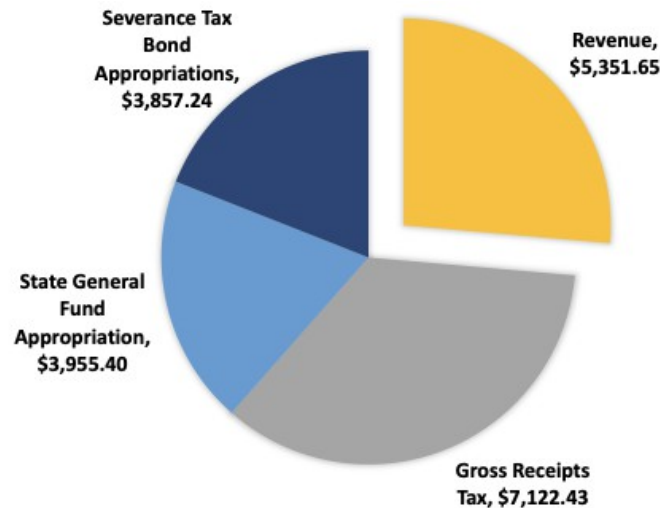
As far as our investigation has shown, there has not been a significant amount of money sent *out* of state, which makes this money machine somewhat less leaky than [other programs which cut checks to companies in California](#)²². It is not revenue generation, only extraction and redistribution. As the Moss Adams report itself admits, it is not entirely accurate to think of this in terms of “return on investment”- though apparently no one passed that message along to the lobbyists and the media.

Spaceport Revenue Sources, 2008-2019



Data Source: Spaceport America Audited Financial Statements, 2008-2019. All numbers in \$1000s.

Spaceport Revenue Sources, FY2019 Only.



Data Source: Spaceport America Audited Financial Statements, 2019. All numbers in \$1000s.

The Moss Adams report accurately states that revenue from customers covers 83% of operational costs. This data point seems to imply that the Spaceport is nearly self-sustaining based on its current revenue stream. However, the Spaceport's financial statements clarify that most of their expenses are considered "non-operational"- that is, capital expenditures to expand the Spaceport and invest in new projects. The cost of such projects is accounted for under a single line-item in the financial statements called "Spaceport Development," and it is not clear whether any of the expenses incurred within are recurring or otherwise inseparable from the Spaceport's operations.

Accounting best practices would, of course, dictate that any expenses that were necessary to operate the business as a going concern should be listed as operational, not capital expenditures. The most *pessimistic* scenario in the Moss Adams model assumes only \$81.25 million of additional (presumably taxpayer-funded) capital expenditures to finance the Spaceport's development in the next few years. Therefore, the implication that the Spaceport is very nearly a self-sustaining going concern because its revenue covers 83% of its operational expenses is misleading. In fact, significant public financing will be necessary for the foreseeable future.

So what about the future business prospects at the Spaceport? The intent of the Spaceport upon its creation was, according to its proponents, being a "first mover" in commercial spaceflight. Commercial spaceflight is a complex industry, and the sources of income are various.

Lost in this discussion is the fact that the most lucrative segment of commercial spaceflight, vertical launching into orbit, is currently impossible for Spaceport-based clients due

to government regulations. In short, the rockets we like to imagine taking off from Cape Canaveral *cannot* launch from the Spaceport. These rockets drop their booster tanks mid-flight, so the FAA requires that they take off near an ocean. This is why Cape Canaveral and the Mid-Atlantic Regional Spaceport dominate commercial space travel.

By comparison, the Virginia spaceport directly and indirectly supports 29,638 jobs with \$53.9 million of public financing per year, compared to Spaceport America's 150 jobs supported by \$14.9 million of public financing in 2019²³. The market for testing, passenger spaceflight, and other related technologies that the Spaceport *can* support does have potential, but it is misleading to present the massive growth potential in commercial spaceflight as a viable market for the Spaceport. Despite the marketing, the Spaceport cannot take part in most of the explosively growing segments of the commercial spaceflight market.

The Spaceport Authority's revenue projections and Moss Adams' economic forecasts do not accurately capture the potential downside risks of the Spaceport's major customers. The most pessimistic scenario in the Moss Adams report appears to forecast the Spaceport making five times its current revenue in two years. The fact that its largest source of non-government revenue, Virgin Galactic, is a "risky" company with a history of underperforming expectations in New Mexico does not enter into Moss Adams' calculations. As noted above, 68% of the Spaceport's financial and economic impact in New Mexico is directly tied to Virgin Galactic's operation.

The presence of this anchor tenant has not prevented the SPA from diversifying its revenues: there are no exclusivity clauses in Virgin's contracts with the Spaceport Authority. The fact stands that after a decade, there is only one major tenant at Spaceport America, whose future success or failure underlies more than 2/3rds of projected revenue and impact for the foreseeable future.

Bloomberg news writes²⁴ that Virgin currently has enough cash on hand to cover its expected losses for two years, after which it will need to seek additional funding or downsize operations, and it does not expect to be profitable until 2023 (the company's calculation, which merits caution). Virgin Galactic's projections for its own profitability (a flight every 32.5 hours, profitable in year 2, hypersonic passenger flights by 2023) have not been audited and come with significant legal disclaimers- not to mention being wildly optimistic given Virgin's history.

Amusingly, Virgin Galactic's SEC filings note²⁵ that "Nothing herein shall be deemed to constitute investment, legal, tax, financial, accounting, or other advice," something New Mexico policymakers would be wise to heed before pouring even more money into publicly-financed projects to support Virgin Galactic. Virgin Galactic's history of breaking promises has been well-documented²⁶, so I won't belabor the point here. It is worth considering for oneself, however, that the most "Pessimistic" scenario imaginable in the Moss Adams analysis assumes only "\$81.25 million in capital expenditures" at the Spaceport and that "Virgin Galactic will be successful in pioneering the market for space tourism- but it will not be successful in achieving its flight schedule as quickly as planned."

Only some very creative accounting can turn nearly \$300 million in expenses into a net profit, but no one has ever faulted paid proponents of more government spending for a lack of creativity. The report seems timed to gather support for a significant hike in tax dollars appropriated for the Spaceport. This is how the money machine works. Pass a law to take tax money from a large group of people, spend it on a project that benefits a few, ignore the costs to others, and change the definition of words like “expenses” and “revenue” to make the project appear profitable.

When the public hears John Tysseling say that the SPA is a “revenue generator” for New Mexico, their idea of what that word means may be far different from the economic and fiscal realities on the ground. People who work in business or have experience balancing their own finances may hear that the project has generated “return on investment” for New Mexico and be seriously misled as to what that means in the context of this project.

Depending on the purpose of the project, this might sound like a perfectly acceptable deal. The key thing to understand is this is an argument about ideals, not economics. How often does a government feel the need to commission an “economic impact report” for roads, or homeless shelters, or payment for police and firefighters? All of those things have real economic impact (and real “multiplier effects”), but we are more honest in that we admit the decision to build a homeless shelter is about compassion, not ROI.

Plug the numbers for Universal Basic Income, drug treatment programs, or even a Smith’s grocery store into an IMPLAN model and you will likely see stunning predictions of economic benefits. Dressing spending decisions in the language of economics is a slippery slope to what Hayek called “scientism” and others call “mathiness”: using arguments that sound empirical to justify ideological decisions- *especially* when special interests and lobbyists are involved. The John Locke Foundation sums up the process well, worth quoting at length:

“The formula is *simple, predictable, and effective*. A special interest group that stands to benefit from the project funds an economic impact study that purports to provide hard numbers on the number of jobs, the increase in wages, and the additional output that will be generated by the project or subsidy, and it will do this on an industry-by-industry basis. It makes grandiose claims about how much overall economic growth will be enhanced for the state or region generally. Once the report is completed, the special interest group that paid for the study will tout these results in press releases that will be picked up by the largely uncritical media establishment, ensuring that the political decision makers and others who determine the fate of the project receive political cover.”²⁷

A state government with a balanced budget requirement cannot “create” new money, nor does it typically have projects that generate positive profits. It can only extract money from many people and give it to a few, in the hopes that economies of scale for those few can indirectly benefit the taxpayers who paid for it. When done correctly, this can create incalculable economic benefits- roads, hospitals, and (yes, New Mexico) subsidies for Permian

Basin shale producers all use taxpayer money to produce products and services more highly valued than their inputs, leading to the creation of wealth and economic benefits helping lift people out of poverty and want.

Perhaps lawmakers have finally run out of patience with the Spaceport's funding requests, as the Legislature only voted to approve \$10.5 million in new funding for the Spaceport against \$57 million requested²⁸. Despite the "critical" new infrastructure going underfunded, Virgin Galactic relocated its Space Ship Two craft and began preparations for flight²⁹, thus lending credence to the decades-old argument that giving corporate welfare subsidies is giving away taxpayer money to companies to convince them to do things they would have done anyway³⁰. It would be wise for our lawmakers to remember this the next time the Spaceport Authority, Virgin Galactic, or any other corporations talk of a "critical need" for taxpayer dollars.

Projects like the Spaceport's educational outreach may bring significant benefits that can't be quantified- perhaps the next Elon Musk is a schoolchild in Doña Ana county. But it is important to be honest about how the money machine works, and not to muddy the waters by talking about "return on investment." The government does not exist to generate returns, it exists to spend money, and we as taxpayers have the right to say how that money is spent. We are the shareholders who decide how government will spend their money; we are not "sources of revenue." It is up to us to decide if spending \$300 million to create several hundred STEM jobs is worth it.

Daniel Seymour is a policy analyst at the Rio Grande Foundation, an independent, nonpartisan, tax-exempt research and educational organization dedicated to promoting prosperity for New Mexico based on principles of limited government, economic freedom and individual responsibility.

Bibliography

1 Davenport, C. (2019, October 2). *How much does a ticket to space cost? Meet the people ready to fly.* Retrieved from The Washington Post: <https://www.washingtonpost.com/technology/2019/10/02/how-much-does-ticket-space-cost-meet-people-ready-fly/>

2 Moss Adams Consulting. (2020, January). *Spaceport America: Economic and Fiscal Analyses.* Retrieved from Spaceport America: <https://www.spaceportamerica.com/wp-content/uploads/2020/01/Spaceport-Full-Report-Final.pdf>

3 Gersetein, M. (2020, February 25). *Virgin Galactic to relaunch spaceflight ticket sales.* Retrieved from The Santa Fe New Mexican: https://www.santafenewmexican.com/news/local_news/virgin-galactic-to-relaunch-spaceflight-ticket-sales/article_373c50e8-5828-11ea-b9b9-63d4c1ff5a9e.html

4 Haussamen, H. (2019, October 17). *After spaceport leases released, NMPolitics.net settles lawsuit.* Retrieved from NMPolitics.net: <https://nmpolitics.net/index/2019/10/after-spaceport-leases-released-nmpolitics-net-settles-lawsuit/>

5 Robinson-Avila, K. (2020, January 20). *\$1B in Spaceport impact projected by FY2024.* Retrieved from Albuquerque Journal: <https://www.abqjournal.com/1415203/1b-in-nm-spaceport-impact-projected-for-fy-2024.html>

6 John Locke Foundation Editorial Board. (2017, March 30). *Economic Impact Studies: The Missing Ingredient Is Economics.* Retrieved from The John Locke Foundation: <https://www.johnlocke.org/research/economic-impact-studies-the-missing-ingredient-is-economics/>

7 Tuerck, D., Murphy, R., & Bachman, P. (2013, April 1). *Peer Review of "The Economic, Utility Portfolio, and Rate Impact of Clean Energy Development in North Carolina".* Retrieved from The John Locke Foundation: <https://www.johnlocke.org/research/peer-review-of-the-economic-utility-portfolio-and-rate-impact-of-clean-energy-development-in-north-carolina/>

8 Rose, J. (2011, July 14). *Economic Impact Studies: Legitimate Or 'Voodoo'?* Retrieved from WFAE 90.7: <https://www.wfae.org/post/economic-impact-studies-legitimate-or-voodoo#stream/0>

9 Meter, K., & Phillips Goldenberg, M. (2015). *Critical Analysis of Economic Impact Methodologies.* Retrieved from CRCWorks: <https://www.crcworks.org/econimpacts.pdf>

10 Coolidge, J. (2018, May 30). *A professional critique of the purported benefits of Amazon HQ2 to Montgomery County, MD.* Retrieved from DailyKos: <https://www.dailykos.com/stories/2018/5/30/1768204/-A-professional-critique-of-the-purported-benefits-of-Amazon-HQ2-to-Montgomery-County-MD>

11 Beaufort Observer. (2014, July 9). *Another example of bogus "economic impact" studies.* Retrieved from Beaufort Observer: <http://www.beaufortobserver.net/Articles-NEWS-and-COMMENTARY-c-2014-07-09-273670.112112-Another-example-of-bogus-economic-impact-studies.html>

12 Rousu, M. (2014, July 10). *Jon Sanders offers good critique of economic impact studies.* Retrieved from Matthew Rousu's Economics Blog: <http://paeconomist.blogspot.com/2014/07/john-sanders-offers-good-critique-of.html>

13 Sherman, A. (2013, March 14). *Dolphins lobbyist says Super Bowl L is a '\$500 million economic impact' to Florida.* Retrieved from Politifact: <https://www.politifact.com/factchecks/2013/mar/14/ron-book/dolphins-lobbyist-says-super-bowl-50-everybodys-es/>

14 Sanders, J. (2013, May 14). *Iron Man? No, the Real Hero is the Super Multiplier.* Retrieved from Carolina Daily Journal: <https://www.carolinajournal.com/opinion-article/iron-man-no-the-real-hero-is-the-super-multiplier/>

15 Moreno, A. (2017, December 8). *Some Question Heavy Taxpayer Investment In Spaceport America.* Retrieved from NM State KRWG: <https://www.krwg.org/post/some-question-heavy-taxpayer-investment-spaceport-america>

16 Oxford, A. (2017, June 22). *Finance authority grants spaceport limited use of tax revenue for operations.* Retrieved from Santa Fe New Mexican: https://www.santafenewmexican.com/news/local_news/finance-authority-grants-spaceport-limited-use-of-tax-revenue-for/article_7921be4f-bedd-5df6-b2ae-01c61139c372.html

¹⁷ New Mexico Finance Authority. (2019, August 1). *PPRF 2009C Bond Redemption Notice*. Retrieved from New Mexico Finance Authority: <https://www.nmbondfinance.com/new-mexico-finance-authority-investor-relations-nm/documents/view-file/i1204?mediald=361891>

¹⁸ [Author's Calculations](#)

¹⁹ Including the aforementioned “allocated but unspent” capital outlay funds, this number would \$391 million in public financing past and proposed. However, it is unclear in public messaging and presently available budgets how much of that additional \$81 million is actually *new* financing, or what fraction of that amount may simply be the provisioning of previously allocated funds. As lawmakers have noted (Gould, 2020), the capital outlay process is obscure and complex. In light of this, we decided to err on the side of caution in estimating that all \$35 million is unspent and fully included in the \$81 million request and estimate for the next several years, and added that \$81 million to the \$270 million that has definitely been accrued to date.

^{19a}. Gould, e. (2020, February 2). *New Mexico’s capital outlay process is often a crazy mess, lawmakers say*. Retrieved from NMPolitical Report: <https://nmpoliticalreport.com/2020/02/02/new-mexicos-capital-outlay-process-is-often-a-crazy-mess-lawmakers-say/>

²⁰ Before 2016, the Spaceport booked transfers from their Severance Tax bond fund as “program revenue.” It is unclear if this practice continued 2016- present, but it is no longer denoted as such on the financial statements.

²¹ In 2017, some federal grant funds in the amount of \$728,399 came in as well.

²² New Mexico Film Office. (2020). *Welcome Letter*. Retrieved from NMFilm: <https://nmfilm.com/new-film-prod-tax-credit/>

²³ Data on the Mid-Atlantic public spend and employment from the footnotes in Moss Adams Report. Data on Spaceport America’s employment includes SPA employees, Virgin Galactic FTE, and other contract and FT employees supported by the Spaceport as of 2019, gathered from Moss Adams report. Total public spend is calculated from the SPA FY2019 financial statements.

²⁴ Bryant, C. (2019, October 28). *Richard Branson’s Virgin Galactic Is a Huge Financial Risk*. Retrieved from Bloomberg News: <https://www.bloomberg.com/opinion/articles/2019-10-28/virgin-galactic-takes-a-bunch-of-hedge-funds-into-outer-space>

²⁵ Social Capital Hedosophia Holdings Corp. (2019). *Social Capital Hedosophia Holdings Corp 8-K*. Retrieved from United States Securities and Exchange Commission: <https://sec.report/Document/0001193125-19-238293/>

²⁶ Burrington, I. (2018, March 2). *New Mexico’s Sad Bet on Space Exploration*. Retrieved from The Atlantic: <https://www.theatlantic.com/technology/archive/2018/03/new-mexicos-sad-bet-on-space-exploration/554243/>

²⁷ John Locke Foundation Editorial Board, 2017. See Note 6, above.

²⁸ Gerstein, 2020. See Note 3, above.

²⁹ Roston, B. (2020, February 16). *Virgin Galactic’s VSS Unity relocated to Spaceport America in New Mexico*. Retrieved from SlashGear: <https://www.slashgear.com/virgin-galactics-vss-unity-relocated-to-spaceport-america-in-new-mexico-16609945/>

³⁰ Laird, F. (2001, December 19). *Controversy: The Rhetoric of “Corporate Welfare*. Retrieved from The American Prospect: <https://prospect.org/economy/controversy-rhetoric-corporate-welfare/>