Economic Impact of the Zero Labs Startup Accelerator

Prepared for:

Zero Labs

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Prepared by:

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Zero Labs
Quinton Singleton, Founder
8400 W. Sunset Rd., Suite 300-7300
Las Vegas, NV 89113

Dear Quinton,

The Innovation Group is a global leader in hospitality, gaming, and entertainment consulting, providing insights and strategic guidance to our clients. For over thirty years, we have been a key participant in development projects across the world, with a particular focus on Las Vegas' global economic ecosystem. Our team of professionals works closely with clients to understand the economic impact of their projects and bring their projects and developments to life.

Zero Labs' objective to establish a sustainable and robust ecosystem in Las Vegas for early-stage companies and venture capital represents a unique opportunity for economic development in the region. The innovative startups that Zero Labs is attracting to Las Vegas focus on cutting-edge technology for Nevada's existing and future industries, from aerospace and energy to gaming, hospitality, entertainment, and sports. This aligns perfectly with our expertise and vision for the future of these sectors.

As a key partner to Zero Labs, The Innovation Group brings a wealth of industry knowledge and a proven track record in supporting emerging businesses. Our initiatives, such as the Emerging Leaders of Gaming 40 Under 40 program, demonstrate our commitment to nurturing talent and driving innovation in the industry. We are pleased to present the following report on the potential economic impact to Nevada resulting from Zero Labs' accelerator programs for early-stage companies.

We are excited about the possibilities this collaboration presents and look forward to contributing to the growth and success of Nevada's startup ecosystem. We welcome the opportunity to discuss our findings with you and other stakeholders and to explore how we can further support Zero Labs' mission.

Sincerely,

The Innovation Group
Brian Wyman, Ph.D.
Executive Vice President

Economic Impact of the Zero Labs Startup Accelerator

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Executive Summary

The Innovation Group was commissioned by Zero Labs to assess the potential economic impact of its startup accelerator in Las Vegas. This initiative, a collaboration between Zero Labs, the University of Nevada, Las Vegas' Office of Economic Development (UNLV OED) and the Nevada Governor's Office of Economic Development (GOED), aims to drive innovation and economic diversification by developing a virtuous cycle of innovation by taking early-stage ideas, or 'startups,' to cutting edge, flourishing, hi-tech companies with access to venture capital.

Strategic Collaboration

Zero Labs aims to catalyze Nevada's economic growth by identifying and building high-potential startups. Through the strategic collaboration with UNLV OED and GOED, the accelerator (i) leverages academic resources and research and (ii) aligns with university and state economic initiatives to diversify and develop the state economy.

Methodology

The Innovation Group assessed the potential economic impact on Nevada's economy from this collaboration, focusing on two measurement perspectives: (i) startup valuations (i.e., valuation correlated with venture capital investments) and (ii) the combination of direct, indirect and induced economic effects (i.e., job creation, labor income and GDP contribution).

For the purpose of this report, we analyzed and modeled the potential economic impact by utilizing a theoretical framework assuming a base cohort of 100 startups that participate in the Zero Labs' accelerator for startups. We use the 100-base figure as it allows for factoring the analysis of economic impact in this report upwards or downwards against a larger or smaller real world set of startups. For example, more than 50 startups participated across three Zero Labs' accelerator programs held between January and October of 2024, and, for this group, we could assume a factor of approximately 50% would apply to the analysis of economic impact in this report (subject to the noted assumptions and limitations of the report).

Of note, this report and its estimates of potential economic impact are based on, and subject to the limitations of, available empirical data and is subject to further analysis from additional data received from the future operations of the accelerator program.

Long-Term Economic Impact

Our analysis of the quantifiable impact of the Zero Labs' accelerator and objectives indicates that the accelerator has the potential to transform Nevada's economic landscape in several ways:

1. Diversification: By fostering startups in various high-tech sectors, the program will help reduce Nevada's economic reliance on tourism and gaming.
2. Talent Attraction: A vibrant startup ecosystem will attract, develop and retain skilled labor locally.
3. Education Impact: Increased demand for tech talent could drive enhancements in STEM education programs at all levels.

4. Investment Opportunities: Successful acceleration activities will attract more venture capital to the state, creating a stable base of growth capital.

Economic Highlights

The following are key findings from our report demonstrating the projected economic benefits of the Zero Labs' accelerator and opportunity for significant economic diversification and growth in the region.

Potential Valuation Impact from 100 New Zero Labs' Startups

Utilizing the cohort of 100 Zero Labs startups as a base model and over the lifetime of the startup business life cycle[1], **we estimate the total potential valuation of these companies to be approximately $2.35 billion.**

Potential Economic Impact from 100 New Zero Labs' Startups

In addition to the valuation of these startups, another key measure from the Zero Labs' accelerator is the economic impact from direct, indirect and induced effects. We estimated the following total annual economic impact to Nevada's economy from these effects across the lifetime of the assumed base of 100 startups participating in the Zero Labs' accelerator.

- **6,900 total jobs**,
- **$500 million in annual labor income**, and
- **$840 million in annual GDP.**

Utilizing the same cohort of 100 startups, we developed a snapshot view of the potential annual economic impact resulting after a 2-year period. For this analysis, we assumed that the base of 100 startups participated in the Zero Labs' accelerator in a single calendar year (e.g., 2024) and analyzed the economic impact that would result after two calendar years (e.g., 2025-26). We estimated the following two-year annual contribution to Nevada's economy by 2027 that could be supported by a year of 100 startups.[2]

- **1,500 total jobs**,
- **$120 million in annual labor income**, and
- **$200 million in annual GDP.**

[1] This base model of 100 startups allows us to project potential economic impacts while providing a scalable framework that can be adjusted as the accelerator program grows or evolves. The full business life cycle for startups is approximately 14 years.

[2] This two-year snapshot represents a theoretical impact after two years and assumes that 100% of startup activity occurs within Nevada. In practice, the actual impact may be lower due to out-of-state and international participants in the Zero Labs accelerator.

Introduction

Zero Labs is a startup accelerator based in Las Vegas, Nevada that (i) works with founders and entrepreneurs at the earliest stages of their startups and funnels them into an aligned ecosystem of programs and services intended to support them to foundationally sound and venture-ready companies, (ii) specifically focuses on early-stage startups in Nevada and globally that are developing technology and solutions that are directly related to Nevada's current and future industries and (iii) attract these startups to launch and grow their companies in Nevada.

These potential industries include, but are not limited to: Aerospace, Autonomous Vehicles, Crypto, Consumer, Defense, Energy, Entertainment, Fintech, Gaming, Hospitality, Infrastructure, Sports, Tourism and Travel.

Zero Labs posits that a startup and venture capital ecosystem in Nevada requires three foundational collaborators:

1. State and Local Government: Policy support and incentives
2. University and Higher Education: Research capabilities and workforce talent
3. Private Sector: Industry expertise and potential investment opportunities

To develop this ecosystem, Zero Labs, the University of Nevada, Las Vegas' Office of Economic Development (UNLV OED) and the Nevada Governor's Office of Economic Development (GOED) established a public-private collaboration. Under this collaboration, they utilize their combined expertise and resources to drive economic development and diversification by organizing and building the ecosystem for startups and venture capital.

Zero Labs, in collaboration with UNLV OED and GOED, is developing programs with the objective to accelerate early-stage startups and attract venture capital to invest in the startups. These programs are based at the BlackFire Innovation Building in the Harry Reid Research & Technology Park, located in Southwest Clark County, and are designed to catalyze growth in early-stage startups by:

- Driving founders and entrepreneurs through real-world, experiential frameworks
- Hands-on mentorship from seasoned entrepreneurs and subject matter experts
- Providing resources for startup-specific challenges
- Access to a curated network of investors and potential customers

Additionally, the Zero Labs' accelerator collaborates with UNLV OED to provide startups with access to additional resources in the broader ecosystem of UNLV programs that support their launch, growth and location (or relocation) in Nevada. These programs include, but are not limited to, the UNLV Innovation Incubator, the Harry Reid Research & Technology Park, RebelWorks, Sports Innovation Institute, Sierra Accelerator for Growth & Entrepreneurship and Small Business Development Center.

This approach combines real-world, startup experience with academic and government support to create a uniquely powerful launchpad for new ventures and ongoing support. Participants are selected for the program through an application process, evaluating factors such as market potential, team capability and alignment with Nevada's economic goals. The program draws participants from two main sources:

1. Faculty, alumni, students and other affiliates of the Nevada System of Higher Education (NSHE); and
2. Non-NSHE affiliated founders and entrepreneurs from Nevada and around the world.

To understand the potential for economic development and diversification impact of the collaboration, Zero Labs engaged our firm, The Innovation Group, to conduct an analysis of the potential economic impact of the Zero Labs' acceleration programs.

This report provides our analysis of the potential economic impact from Zero Labs' participants and how these early-stage startups will contribute to Nevada's economic development and diversification from two perspectives:

1. Economic Impact via Startup Valuations: Analyzing the potential growth in startup valuations
2. Economic Impact via Direct, Indirect and Induced Effects: Analyzing the combined economic effects from job creation, labor income and contribution to gross domestic product

In the following sections of this report, we detail the methodologies and empirical data used to estimate and forecast the potential economic development and diversification impact to the State of Nevada resulting from the Zero Labs, UNLV OED and GOED collaboration. Additionally, we present our findings and explore how this initiative could reshape Nevada's workforce, attracting high-skilled talent and fostering a culture of innovation.

While the full economic impact will unfold over time, our analysis projects significant benefits within the first five years of operation, with further compounding exponential growth potential. The Zero Labs' accelerator represents an opportunity for Nevada to position itself as a hub for innovation and entrepreneurship, potentially transforming the state's economic landscape for future generations.

Major Assumptions

To conduct our analysis of the potential economic impact of the Zero Labs' acceleration programs, The Innovation Group relied on several key assumptions to model the potential economic outcomes while accounting for the inherent variability in startup development.

The Innovation Group relied on the following major assumptions for our analysis of the potential economic impact of the Zero Labs' acceleration programs for early-stage startups in the state of Nevada.

Startup Cohorts and Performance

- We utilized a base of 100 startups to measure the potential economic impact and assume that: (1) they are in the early stages of the business life cycle and progress over time through the full business life cycle based on empirical data and (2) the startups will be participants in the Zero Labs' accelerator.
- We assumed these accelerator-supported startups' performance and fundraising activities will be in-line with empirical data on startup and early-stage growth companies.

Economic Effects and Spending

- We assumed 40.0% of all startup spending is allocated to labor-related costs while the remaining 60.0% of total expenditures are allocated to all other operating expenses. This spending allocation results in an average salary per employee of roughly $107,000 based on average employee counts as summarized later in this report. We believe this is a reasonable estimated average annual salary based on empirical data recently reporting that the median annual salary was $102,600 for startups valued between $1 million and $10 million as of 2022.[3]
- We assumed the total economic impact generated by the base cohort of 100 startups benefits Nevada (e.g., by locating their operations in Nevada) and do not distinguish between the geographic location(s) for such impact. In other words, to simplify the analysis, we assume that the economic impact applies to a single geographic region (i.e., Nevada).

Additional assumptions specific to certain aspects of our analysis are detailed in the relevant sections of this report.

This report also has certain limitations that should be acknowledged. First, the sample size of early-stage startups is based on an assumed number of startups proceeding through the accelerator program and analyzing a limited set of publicly available data on the historical performance of startups from other geographic regions to forecast the potential economic impact in Nevada, which may limit the generalizability of the findings. Future longitudinal studies and research should consider real-world data from the accelerator program and larger, more diverse samples to enhance external validity. Second, the success of early-stage companies often relies upon access to venture capital, the availability of which will depend on multiple economic factors that may differ from the ones present in the comparative company set.

[3] "The state of startup compensation, H1 2022," Carta, accessed August 23, 2024, at https://carta.com/blog/compensation-report-h1-2022/#median-salary-by-valuation.

Modeling the Startup Ecosystem Valuation Impact

We examine two main perspectives in this report through which to measure the economic development and diversification impact resulting from the startup ecosystem collaboration.

The first perspective examines the startup life cycle and associated valuations as a key measure to assess the potential economic impact of the accelerator. The second perspective examines the tangible effects of startups on Nevada's economy.

This section of the report examines the first perspective:

Economic Impact via Startup Valuations

Through this perspective, the potential economic impact of startups participating in the Zero Labs' accelerator is measured by utilizing empirical data to model their valuations at each stage of the business life cycle, including the normalized attrition of startups as they progress through the business life cycle.

Startup valuations provide insight into the economic impact created by a startup ecosystem. Much like the market capitalization of a publicly traded company, the value of a startup enterprise (i.e., a private company) is an important economic impact measure reflecting the value generated by a startup ecosystem, which is an economic impact measure additional to the direct, indirect and induced economic impacts examined later in this report.

As startups progress through each stage of the business life cycle, demonstrating increased business maturity, growth and economic utility from one stage to the next, a normalized expectation across a cohort of startups is that startup valuations increase over time in correlation with fundraising investments at each stage. For example, a startup's enterprise value should increase over time as it achieves success in the market, such as selling goods and services.[4]

We developed a framework for the nine stages of the business life cycle and the associated distinct, progressive fundraising rounds for startups (e.g., pre-seed, seed, Series A, et seq.), which is grouped into three larger phases that describe the relative level of business maturity (e.g., early, growth and late). (See Table 1.) The fundraising (or investment) rounds for each stage correlates with the valuation of startups in that stage, and, in the late phase, the business life cycle may ultimately result in an initial public offering (IPO).[5] (See Table 2 and Chart 1.)

Additionally, we examined the probability of startups progressing over time through the business life cycle, beginning with the initial idea generation stage through each stage of the early, growth and late phases of the business life cycle, and the correlated, progressive fundraising stages to establish an average expected startup valuation by stage of the startups participating in the Zero Labs' accelerator. (See Tables 3 and 4 and Chart 2.)

[4] Startup valuations are subject to startup-specific factors and external factors, such as target industry, macro-economic environment, state of the venture capital ecosystem, geographic location, and, generally, startup success

[5] An initial public offering is the process through which a private company offers its shares to the public for the first time, allowing it to raise capital from public investors. The economic impact from IPO valuations is not modeled in this report given the variability of that potential outcome.

Startup Business Life Cycle Framework

The framework for understanding the startup business life cycle is, generally, composed of nine stages and can be grouped into three business life cycle phases.

The following table provides the startup business life cycle framework with the defined phases and associated fundraising stages that were utilized in our examination and this report.

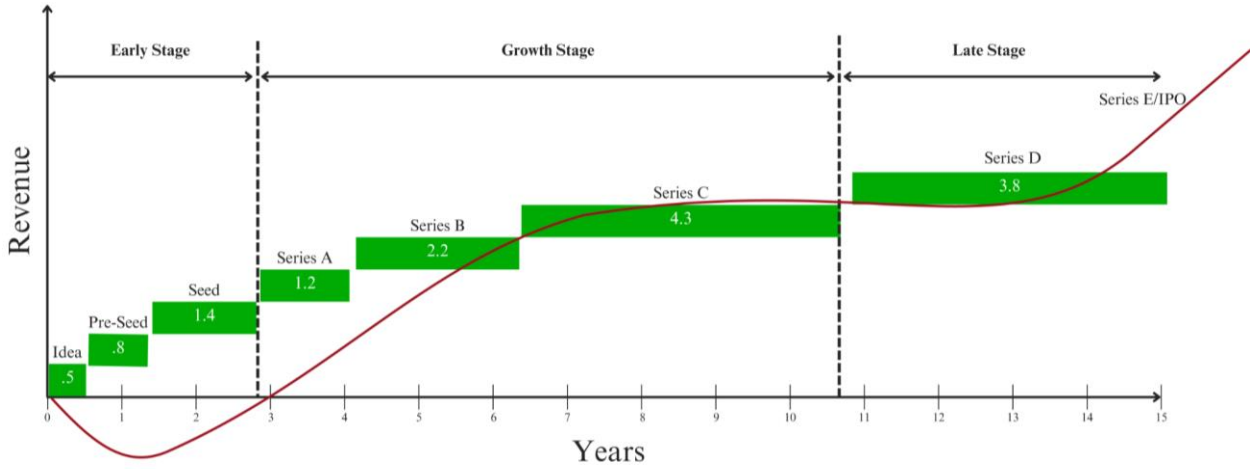
Table 1: Startup Business Life Cycle Framework

Phase	Fundraising Stage	Description
Early	Idea Pre-Seed Seed	This phase includes the initial development of the startup idea and securing early investment to, for example, create a prototype, refine the business model and find product-market fit.
Growth	Series A Series B Series C	This phase includes startups that have a proven business model and securing investments to, for example, scale operations and expand their market presence.
Late	Series D Series E IPO	This phase includes startups that are mature operating businesses and securing investments to, for example, further scale the business, enter new markets or develop new products.

Using this framework as a foundation, we examined empirical data to understand how early-stage startups typically progress through the business life cycle. This approach allows us to create a model that estimates how startup valuations are likely to develop over time. Our model accounts for the normal patterns and probabilities of how early-stage startups advance through each stage of growth.

The following chart illustrates the phases and stages of the startup business life cycle framework over time with estimated ranges of the time periods for each stage of the life cycle.[6]

Chart 1: The Life Cycle of a Startup



Startup Progression Through the Business Life Cycle

At each stage of the startup business life cycle, there are, generally, four potential outcomes for startups.

The following table provides a framework for these outcomes that were utilized in our examination and this report.

Table 2: Startup Business Life Cycle Framework - Stage Outcomes

Outcome	Description
1	Progress forward to the next stage (e.g., securing the next round of fundraising and business growth)
2	Exit the business (e.g., via acquisition by another company)
3	Stabilizes as an operating business without needing additional outside capital
4	Fails to secure one of the three above outcomes, which leads to ceasing operations

[6] It is important to note that in practice, the actual time a startup takes to progress from one stage to the next varies based on startup-specific factors, such as target industry, macro-economic environment, geographic location and, generally, startup success.

As noted above, this section of the report focuses on the economic development and diversification impact based on modeling the valuations of startups at each stage of the business life cycle. In this modeling, we account for startups that progress through each stage of the life cycle (Outcome 1).[7]

As startups progress, their probability of advancing to the next stage of the business life cycle typically decreases, and, therefore, the number of startups progressing from one stage to the next decreases. This reflects the increasing challenges and higher standards for business maturity and growth at each subsequent stage.

The following table provides the probability of progression by startups at each stage of the business life cycle and, as noted above, utilizes a base cohort of 100 startups to illustrate the corresponding number of startups that would be expected to progress stage-by-stage. For example, for every 100 startups at the initial idea stage, 38 startups are likely to progress to the pre-seed stage, and approximately 7 startups are expected to reach Series A funding and beyond.

Table 3: Probability of Startup Progression

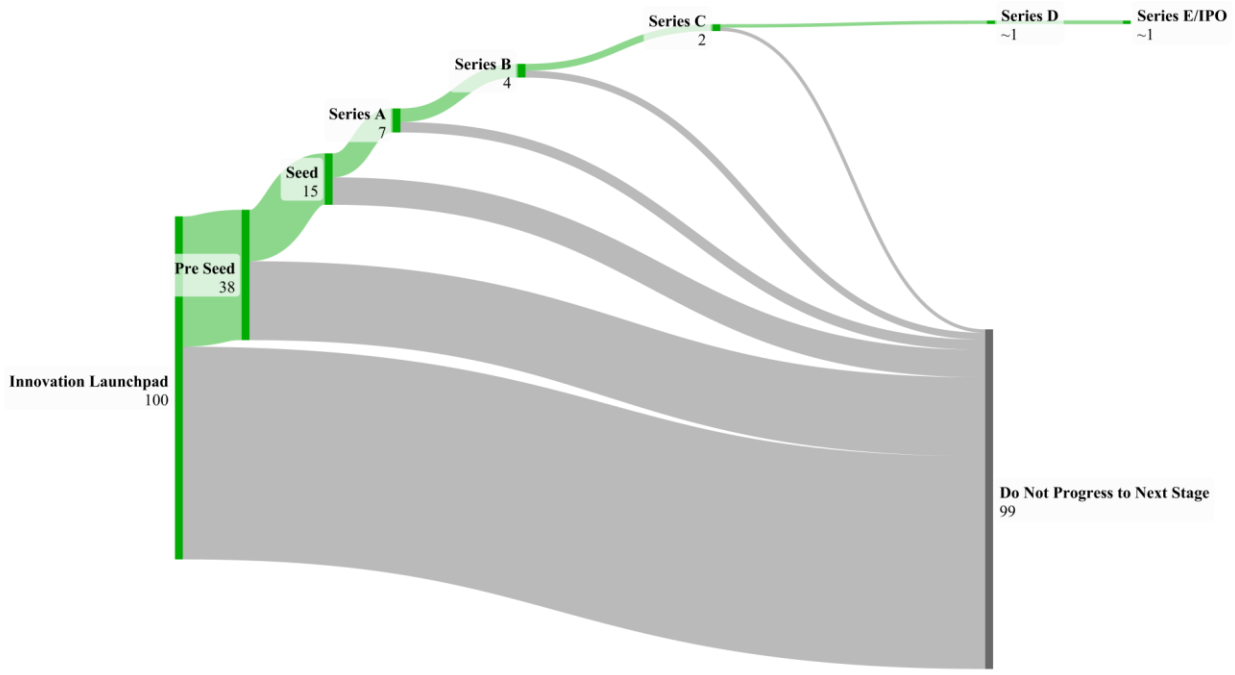
Stage	Probability by Stage	Number of Startups
Idea	100.00%	100.00
Pre-Seed	38.00%	38.00
Seed	15.20%	15.20
Series A	6.99%	6.99
Series B	4.27%	4.27
Series C	2.21%	2.21
Series D	0.84%	0.84
Series E/IPO	0.28%	0.28

Source: The Innovation Group

[7] Given the variability of Outcomes 2 and 3 as they relate to each startup and that the empirical data used in this report does not provide sufficient data to develop a model for valuations of startups that result in these two outcomes, this economic impact, although positive, was not considered for this report.

The following Sankey chart illustrates this startup progression model and how we expect 100 startups to progress through the successive stages of the startup business life cycle.

Chart 2: Progression of 100 Companies Through the Start Up Business Lifecycle



Potential Valuation Impact from Zero Labs Startups

Based on this data and methodology, we calculate the following measure of the economic impact resulting from startup valuations:

1. Average Expected Startup Valuation by Stage

The following table provides the Average Expected Startup Valuation by Stage, which reflects the valuation of a startup in each stage modified by the probability that the startup reaches that stage. This startup valuation metric is measured at each stage of the life cycle and is composed of a per-startup valuation (i.e., the expected valuation of each startup by stage), the probability of startups progressing through each stage and a weighted valuation for each stage (i.e., probabilistic weighted number of startups at each stage multiplied by the per-startup valuation).

Table 4: Average Startup Valuation

Stage	Valuation by Stage	Probability by Stage	Weighted Valuation
Idea	$0	100.00%	
Pre-Seed	$5,700,000	38.00%	$2,166,000
Seed	$11,723,089	15.20%	$1,781,910
Series A	$36,000,000	6.99%	$2,516,400
Series B	$84,985,858	4.27%	$3,628,896
Series C	$214,696,585	2.21%	$4,744,795
Series D	$500,000,000	0.84%	$4,200,000
Series E/IPO	$1,592,850,829	0.28%	$4,459,982
Average Expected Startup Valuation Across Stages			**$23,497,983**

Source: Pitchbook, CB Insights, The Innovation Group

Our analysis calculates that each startup has an expected valuation across its lifetime of approximately $23 million, which equates to an aggregate expected valuation for 100 startups of $2.3 billion.

This life cycle and valuation analysis provides a structured framework for understanding the potential economic impact of the Zero Labs' accelerator. By mapping out how startups typically progress and how their valuations change over time, we can better estimate the possible economic benefits to Nevada's economy. However, it's important to view these projections as part of a range of potential outcomes, acknowledging both the opportunities and uncertainties inherent in startup development.

Modeling the Startup Ecosystem Economic Impact

We examine two main perspectives in this report through which to measure the economic development and diversification impact resulting from the startup ecosystem collaboration.

As described above, the first perspective examines startup valuations as a measure of the economic impact of a startup ecosystem and the second perspective examines the tangible effects of startups on Nevada's economy.

This section of the report examines the second perspective:

Economic Impact via Direct, Indirect and Induced Effects

Through this perspective, the potential economic impact of startups participating in the Zero Labs' accelerator is developed utilizing three main components:

1. **Startup Spending Analysis**: Understanding how much capital startups have to spend, which forms the basis for all additional economic impact calculations. This includes examining both investment capital and revenue sources.
2. **Economic Effect Mechanisms**: Defining the mechanisms by which startups can impact their local economy, including direct, indirect and induced effects. This will provide a framework for understanding how startup activities cascade through the broader economy.
3. **Economic Impact Modeling**: Using the inputs from the startup spending analysis and the economic effects, model the potential economic impact of startups in the Zero Labs accelerator ecosystem using IMPLAN software to generate comprehensive economic impact projections.

Understanding the direct, indirect and induced effects, likewise, provides additional insight into the economic impact created by a startup ecosystem. By analyzing these factors, we can provide a view towards how the Zero Labs accelerator could contribute to Nevada's economic growth and diversification and understand both the potential scale of economic activity and the pathways through which startups can drive broader economic benefits.

As with our valuation analysis, we utilized a base of 100 startups to measure the potential economic impact under this second perspective. This consistent baseline allows for direct comparisons between valuation potential and economic impact projections.

Startup Resources and Spend

To develop the three types of economic impact via direct, indirect and induced effects, the first step in the analysis is to determine how much startups are spending, as this cascades through the economic impact of the startup ecosystem. There are two primary sources for startups to acquire money to spend:

1. **Investment Capital**: Money raised from investors.
2. **Revenue**: Cash generated through the startup's operations.

Investment Capital

Investment capital is crucial for developing a startup, especially in the early stages. This money is raised from investors and can vary significantly based on the startup's track record and growth stage. Early-stage startups typically receive smaller investment amounts compared to those further along in their development, which is a function of startup valuation and a startup's stage in the business life cycle.

Of note, the Zero Labs, UNLV OED and GOED collaboration bring investment capital resources to the startups that include, but are not limited to, access to venture capital, grants and non-dilutive capital and capital-efficient resources. Capital-efficient resources are resources that reduce startup spend (and thus provide benefits at reduced cost that otherwise would require investment capital for spend), such as access to university resources and expertise, corporate benefits and accelerator partners providing discounted services to startups.

Using empirical data, we calculated the average amount raised at each funding stage and the average time spent between these stages. This data helps us calculate an annualized amount raised per startup.

Revenue

Revenue is the cash generated by the startup through its operations. As startups progress through their development stages, they typically begin to generate increasing amounts of revenue. That is, startups in the early stages of development generate lower amounts of revenue compared to those that are more established and further along in their growth.

Using empirical data, we calculated the average annual revenue for each stage of the business life cycle (i.e., each funding stage). By combining these figures with the annualized amount raised, we derived the "Annualized Total Raised + Revenue," which forms the basis for our yearly startup spending estimates. These estimates are adjusted for the probability of startups progressing through each stage.

The following table provides the Annualized Total Raised + Revenue by startup by stage.

Table 5: Annualized Total Raised, Revenue by Stage

Stage	Median Raised by Stage	Time to Next Stage (Years)	Annualized Total Raised	Annual Revenue by Stage	Annualized Total Raised+Revenue
Idea	$0	0.5	$0	$0	$0
Pre-Seed	$600,000	0.81	$738,617	$950,000	$1,688,617
Seed	$3,000,000	1.44	$2,089,695	$1,953,848	$4,043,543
Series A	$4,350,000	1.17	$3,718,384	$6,000,000	$9,718,384
Series B	$15,018,765	2.25	$6,677,039	$14,164,310	$20,841,349
Series C	$22,844,436	4.25	$5,372,564	$35,782,764	$41,155,328
Series D	$42,732,804	3.82	$11,178,981	$83,333,333	$94,512,314
Series E/IPO	$58,979,076	-	-	$265,475,138	$265,475,138

Source: Pitchbook, NYU Stern, The Innovation Group

Understanding how much capital startups raise and generate revenue by stage allow us to create the two inputs needed for the direct, indirect and induced economic impact modeling:

1. **Weighted Annual Startup Spend**: The combined amount of capital resources available for startups to spend in a given year, adjusted by the probability of reaching that stage.
2. **Weighted Employees Per Startup**: The expected number of employees for a startup in a given stage.

By weighting our previous estimates of Annualized Total Raised + Revenue by the probability a startup reaches a given stage, we develop 'expected spend' estimates of startups by stage. Because startups are capital intensive businesses that seek to grow rapidly, we assume that startups in the Zero Labs' accelerator will spend 100% of their annualized total raised and 100% of their revenues until they reach viability.

The following table provides the Weighted Annual Startup Spend as a function of Annualized Total Raised + Revenue and the probability of startups progressing from stage-to-stage. The sum of Weighted Annual Startup Spend for all stages represents the cumulative probability-weighted spend per startup across its life cycle, and we use this figure to drive our economic impact assessments.

Table 6: Weighted Annual Startup Spend

Stage	Annualized Total Raised + Revenue	Probability by Stage	Weighted Annual Startup Spend
Idea		100.00%	
Pre-Seed	$1,688,617	38.00%	$641,674
Seed	$4,043,543	15.20%	$614,619
Series A	$9,718,384	6.99%	$679,315
Series B	$20,841,349	4.27%	$889,926
Series C	$41,155,328	2.21%	$909,533
Series D	$94,512,314	0.84%	$793,903
Series E/IPO	$265,475,138	0.28%	$743,330
Total Startup Spend			**$5,272,300**

Source: Pitchbook, CB Insights, The Innovation Group

Likewise, using empirical data of employment estimates for a given startup in a given stage, we calculate the expected number of employees per startup, weighted by the probability that the startup will make it to a given stage.

The following table provides the Weighted Average Number of Employees per startup across its life cycle. The sum of these weighted averages represents the cumulative probability-weighted number of employees per startup across its life cycle, and we use this figure to drive our economic impact assessments.

Table 7: Weighted Average No. of Employees per Startup

Stage	No. of Employees	Probability by Stage	Weighted Average No. of Employees
Idea	0	100.00%	
Pre-Seed	5	38.00%	1.9
Seed	10	15.20%	1.5
Series A	50	6.99%	3.5
Series B	100	4.27%	4.3
Series C	200	2.21%	4.4
Series D	320	0.84%	2.7
Series E/IPO	500	0.28%	1.4
Total Employees per Startup			**19.7**

Source: Oak's Labs, CB Insights, The Innovation Group

The total Weighted Annual Startup Spend and the total Weighted Average Number of Employees per Startup inputs form the basis for our economic impact modeling, detailed below.

Direct, Indirect and Induced Economic Effects of Startups

The Innovation Group performed an analysis of prospective accelerator-supported startups utilizing impact analysis for planning data and software (IMPLAN).[8] The economic impact of an industry consists of three key effects:

1. **Direct Effects**: The immediate economic activity within the industry itself.
2. **Indirect Effects**: The impact on other businesses that supply goods and services to the industry.
3. **Induced Effects**: The additional economic activity generated by spending from employees in the industry.

Direct effects are the economic activity that occurs within the industry itself. For example, the people employed by startups and the spending by the startups. For these startups, direct effects are defined as employees of or direct expenditures by front-line industry entities or customers of front-line entities. Direct expenditures include operating expenses and average annual capital expenditures.

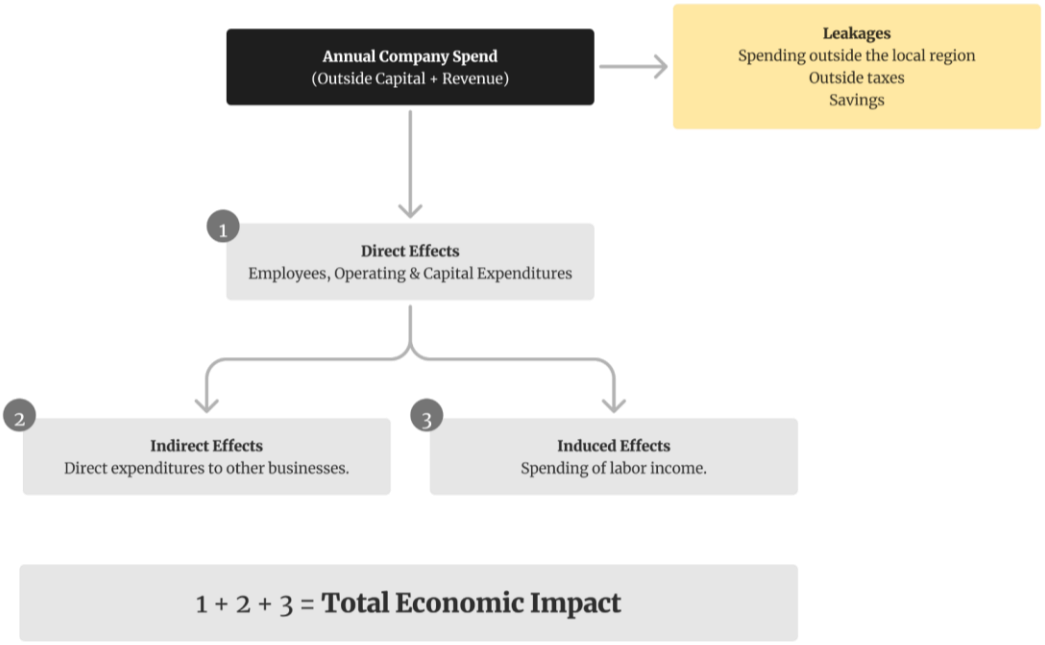
Indirect effects are the effects of the direct expenditures on other business sectors. For example, in a hardware startup these would be the suppliers who provide input materials. Indirect effects reflect the economic spin-off that is made possible by the direct purchases of the startup. Third party providers of goods and services to startups have incomes partially attributable to these startups.

Induced effects result from the spending of labor income. For example, startup employees use their income to purchase goods and services in the local community. As household incomes are affected by direct employment and spending, this money is recirculated through the household spending patterns causing further local economic activity.

[8] To calculate these economic impacts, we use IMPLAN, an industry-standard economic modeling software. IMPLAN uses comprehensive databases and economic multipliers to estimate how money flows through a regional economy. This tool allows us to quantify not just the direct impact of startups, but also the indirect and induced effects on the broader economy.

The following flowchart illustrates how the economic impact model operates.

Chart 3: Economic Impact Model



Determining the direct economic impact is the first step in conducting the total economic impact analysis for direct, indirect and induced effects. The direct impact of the startups in the Zero Labs accelerator is unique, because the startups span multiple industries and the nature of a given startup's spend depends on the stage of development that business has attained in the business life cycle (e.g., "seed," "Series A").

The following section describes our approach towards modeling the direct spend of companies by funding stage.

Economic Impact Modeling

The IMPLAN tools utilized to model the direct effects varied according to the type of data collected for each input segment. There are five types of economic activity changes that IMPLAN is designed to model for: industry, commodity, labor income, household income and institution (government) spending. To model the economic impacts for startups participating in the Zero Labs accelerator, we utilized the industry spending pattern and employee compensation functions within IMPLAN.

Based on the weighted average annual spending and employee counts summarized above, The Innovation Group made assumptions as to what percentage of startup spending was allocated to labor (40.0%) and all other operating expenses (60.0%).

The following table sets out the inputs utilized in the economic impact model in IMPLAN and is based on the assumption that 100 accelerator-supported startups are participants in the Zero Labs' accelerator.

Table 8: IMPLAN Economic Impact Model Inputs

Industry Spending Pattern & Labor Change	Expenditures ($MM)	Employment	Labor Income ($MM)
Industry Spending Pattern*	$316.30		
Employment & Compensation		1,969	$210.90

Source: IMPLAN Group, LLC; The Innovation Group

*Spending impacts based on Sector 468 (Tech-related) in IMPLAN

Potential Economic Impact from Zero Labs Startups

The direct effects from the previous section in this report were used as inputs in the IMPLAN modeling software to generate an estimate of the indirect and induced effects and the total annual economic impact on the Nevada economy from the assumed base of 100 startups participating in the Zero Labs' accelerator.

As noted above, to remove complexities from the analysis in developing an estimate of the total annual economic impact, we assumed the total economic impact generated by the base cohort of 100 startups benefits Nevada (e.g., by locating their operations in Nevada) and do not distinguish between the geographic location(s) for such impact. In other words, to simplify the analysis, we assume that the economic impact applies to a single geographic region (i.e., Nevada).

The results from measuring each component of direct, indirect and induced effects are inputs to the estimated total annual economic impact across Employment, Labor Income, Value-Added and Output.

Employment is measured in IMPLAN and by the U.S. Census as headcount; that is, the number of full and part-time workers supported by an economic activity.

Labor Income is compensation to all workers, both employees and owners, in terms of wages and salaries, as well as benefits and payroll taxes. Profits from self-employed businesses can also be included in this category as compensation to the owner. These are known as employment compensation and proprietor income in IMPLAN.

Value-Added is measured by the industry or business' contribution to Gross Domestic Product (GDP). It consists of labor income (as described above), taxes on production and other property income (such as corporate profits, rent payments and royalties). It is the difference between an industry's or business' total sales and the cost of all input materials or intermediate expenditures.

Output is the total value of industry production. It consists of value-added plus intermediate expenditures. Output is frequently the total price paid by consumers for a good or service.

Value-Added is the most applicable measure of economic impact, because it excludes intermediate inputs, which are the goods and services (such as energy, raw materials, semi-finished goods and services purchased from all sources) used in the production process to produce ***other*** goods or services rather than for ***final*** consumption. For example, the paper stock used in a magazine publication is an intermediate input whereas paper stock sold in an office-supply store is the final product sold to the consumer. The value of producing the magazine's paper stock is accounted for in measures of GDP within the Paper Manufacturing sector, not in the Publishing sector.

Economic Impact: Annual

The following table provides the estimated total annual economic impact across the lifetime of the assumed base of 100 startups participating in the Zero Labs' accelerator. The total annual economic impact is a sum of Employment, Labor Income, Value-Added and Output across the three impact types of direct, indirect and induced effects.

Table 9: Zero Labs - Total Annual Economic Impact

Impact Type	Employment	Labor Income ($MM)	Value Added ($MM)	Output ($MM)
Direct Effect	1,969	$210.90	$313.00	$527.20
Indirect Effect	3,224	$194.60	$328.60	$614.40
Induced Effect	1,693	$95.90	$196.10	$321.50
Total	**6,886**	**$501.40**	**$837.70**	**$1,463.20**

Source: IMPLAN Group, LLC; The Innovation Group

We estimate that 100 startups participating in the Zero Labs' accelerator programs will support 1,969 direct jobs and add $313 million in direct value to the state economy. These direct impacts drive a further $525 million in added value to the economy and nearly 4,900 jobs from indirect and induced effects.

Economic Impact: Two-Year Annual Snapshot[9]

The following table provides a snapshot of the potential annual economic impact after a 2-year period. For this analysis, we assumed that the base of 100 startups participated in the Zero Labs' accelerator in a single calendar year (e.g., 2024) and analyzed the economic impact that would result after two calendar years (e.g., 2025-26).

Table 10: Zero Labs - Potential Annual Economic Impact in 2027

Impact Type	Employment	Labor Income ($MM)	Value-Added ($MM)	Output ($MM)
Direct Effect	340	$50.30	$74.60	$125.60
Indirect Effect	768	$46.40	$78.30	$146.40
Induced Effect	403	$22.90	$46.70	$76.60
Total	**1,512**	**$119.50**	**$199.60**	**$348.60**

Source: IMPLAN Group, LLC; The Innovation Group

Utilizing the empirical data summarized previously, we estimate that 38 companies reach the pre-seed stage and 15 companies reach the seed stage,[10] and, by 2027, the potential annual economic impact from these startups will support 340 direct jobs and add $75 million in direct value to the state economy. These direct impacts drive a further $125 million in added value to the economy and nearly 1,200 jobs from indirect and induced effects.

This economic effect analysis provides a structured framework for understanding the potential economic impact of the Zero Labs' accelerator. By mapping out how startups typically progress and result in direct, indirect and induced local economic impact, we can better estimate the possible economic benefits to Nevada's economy. However, it's important to view these projections as part of a range of potential outcomes, acknowledging both the opportunities and uncertainties inherent in startup development.

9 This two-year snapshot represents a theoretical impact after two years and is based on the assumption that 100% of startup activity occurs within Nevada. In practice, the actual impact may be lower due to out-of-state and international participants in the Zero Labs accelerator.

10 As summarized in Tables 3 and 5 above: on average 38.0% of startups move from idea to pre-seed and 15.2% from pre-seed to seed and it takes startups 0.5 years to move from idea to the pre-seed round and an additional 0.8 years to move from the pre-seed round to the seed round.

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This report is intended for general informational purposes only and is based on available data, which may not be exhaustive, to produce a theoretical framework for the potential economic impact of a startup accelerator program.

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