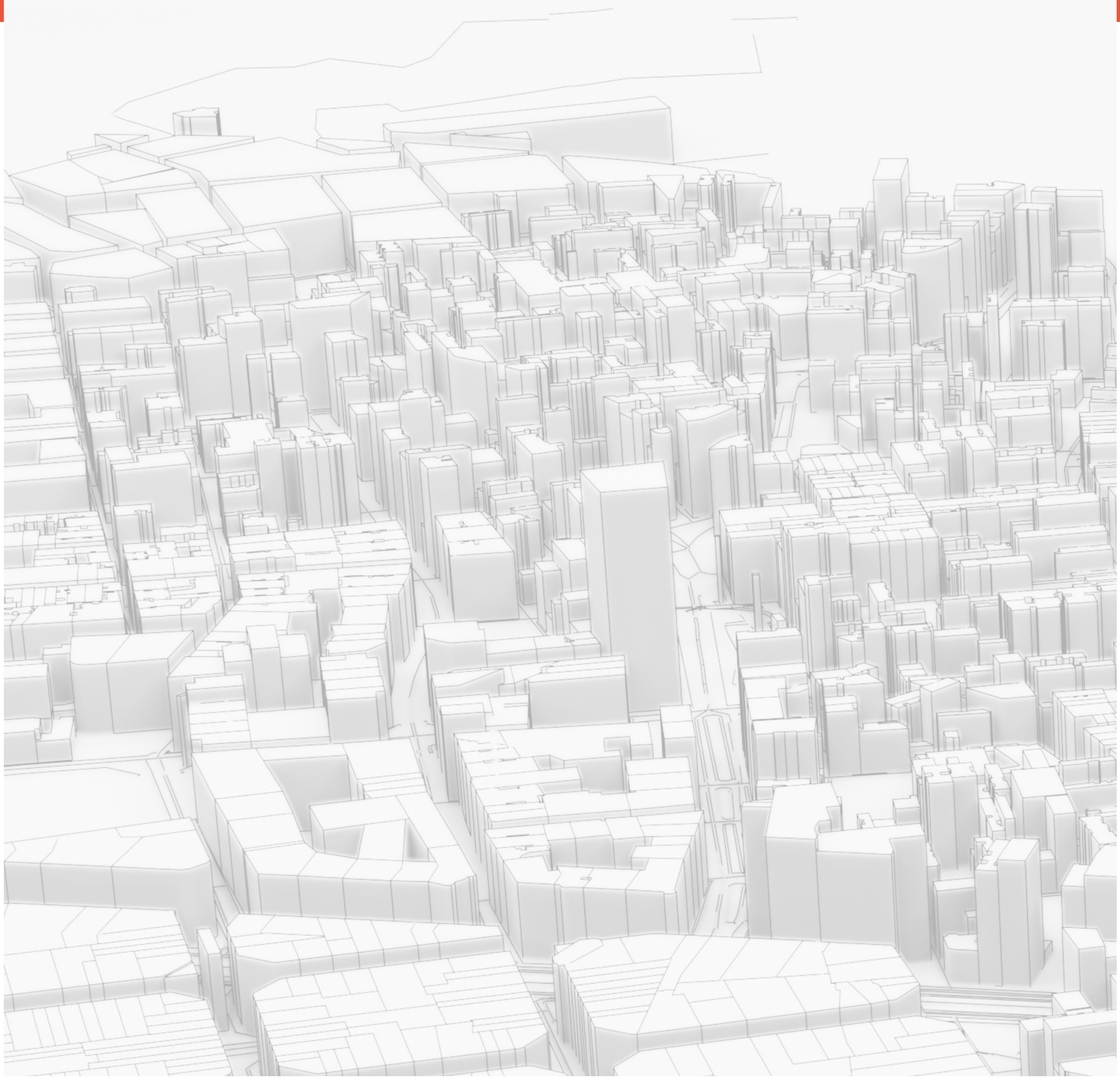
State Permissions vs. Market Possibilities

Regulatory Sandboxes in Nevada



Nevada
Policy

State Permissions vs. Market Possibilities

Regulatory Sandboxes in Nevada

Researched and Written by Cameron Belt

Nevada Policy

Dedicated to the rule breakers and innovators who pushed the status quo at Lyft and Uber. You changed Nevada for the better.

Table of Contents

Executive Summary

Burdensome regulations are slowing Nevada down.

Society needs innovation to survive. Progress relies on policies that foster experimentation and innovation. Governmental barriers stifle novel ideas and prevent our community from reaching its potential.

The rapid pace of technology demands a shift from outdated regulations. Embracing flexibility and adaptability in our regulations can enable transformative ideas to leap from entrepreneurs' minds into our lives.

Currently, innovators can wind up stuck in a Catch-22: regulators are skeptical to change laws and standards until there's evidence it's the right choice, but innovators can't generate real world evidence without changes to the laws and standards. Existing regulations may be well intentioned, but intentions don't make our state a better place to live and work. Results do.

Regulatory sandboxes address this tension:

- A regulatory sandbox identifies obsolete regulations hindering an entrepreneur's innovative ideas;
- It allows entrepreneurs to receive a waiver from specific regulations for a set length of time;
- Innovators get a testbed for their ideas;
- Regulators get insights into how they might need to change; and
- A break from government regulation doesn't mean a break from market regulation.

Government agencies often struggle to regulate new products due to a lack of understanding or data. This can lead to confusion and cause costly and long delays. When these regulations obstruct new businesses, it not only affects the entrepreneur but also economic growth. It deprives consumers of potential benefits. It limits job opportunities.

From a top-down approach Nevada has done a lot to spur economic development. Tax abatements, public investments and other tools have been used to diversify the economy. These top-down approaches aren't the only, or even best options – they're just the ones the public officials can control the easiest.

Nevada needs to achieve diversification not through targeting, but through trial and error of new

businesses. Bottom-up solutions – solutions created by entrepreneurs with visions of the future – are where much of the world's economic growth stems from.

Nevada has one of the top 10 most complicated statutory codes in the U.S. Nevada currently ranks 43rd on the Entrepreneur Regulatory Barrier Index (See Section 7). Established companies can sustain and often prefer inflexible regulatory structures because they raise barriers to entry for would-be competitors. However, startup enterprises that seek to carve out new approaches for meeting consumer demand are the overwhelming drivers of economic growth. The growth of these firms is impeded by high regulatory barriers.

Nevada needs to reinvent itself yet again. This time, we need to become the easiest state for innovators to create new products that can better the world. We can't be left behind.

What's Permissible Can Stop What's Possible

Regulations don't always keep Nevadans safe.

For example, rideshare companies Uber and Lyft could have launched in Nevada years earlier than they did. Uber tried at one point, as this author is well aware. I was the first illegal Uber passenger in Reno. (Years later, I was able to verify this fact while working within the company's Nevada corporate headquarters.)[1] Uber and Lyft both had the technology. They had the driver supply. They definitely had the rider demand. They just didn't have permission to operate. Uber's launch was possible, it just wasn't permissible.[2] That delay likely cost lives.

As Nevada Policy has detailed previously, Uber's struggle with Nevada regulations started in 2012.[3] Uber could not enter the market because:

- They were having trouble "dealing with an old state statute requiring livery services charge a high minimum hourly rate;"[4]
- Uber's execs had never seen minimum rates so high (Las Vegas' minimum fare was $40 while San Francisco's was $8); and
- The mismatch between Nevada's decades-old regulatory approach and Uber's new, unique business model didn't permit a successful market launch.

Uber knew that the Las Vegas market would benefit from its product. The company was so sure of its decision that it had identified Las Vegas as the 15th target city in its rollout. However, Uber wasn't legally allowed to launch in Nevada until September of 2015,[5] after it was already live in more than 300 cities across the globe.[6] Those 300 cities, spread across dozens of countries, were all easier to start an innovative business in than Nevada.

This author became a rideshare executive with Uber in 2016 and, 12 months later, was recruited to rival rideshare firm Lyft. Lyft's strategy and mission was to become the best rideshare option for locals throughout Nevada. For a while, Lyft undoubtedly achieved that goal. In 2018, the Lyft team spearheaded the launch of the Las Vegas Coalition for Zero Fatalities.[7] It was a first-of-its-kind public-private partnership with one goal in mind: preventing impaired driving in Nevada. Lyft pledged to donate $100,000 toward that objective in its first year.[8] The initial partners included:

- Fremont Street Experience
- City of Las Vegas
- Downtown Project
- Downtown Summerlin
- Entercom Communications
- Las Vegas Metropolitan Police Department
- Las Vegas Monorail
- Lyft NV
- Nevada Highway Patrol
- PT's Entertainment Group
- Raiders
- Topgolf Las Vegas
- Zero Fatalities

The coalition's first event was New Year's Eve (NYE) 2018. That night more than 1,000 Las Vegans got home safely using the designated promotion code provided by my team at Lyft (tens of thousands more also received rides but did not use the code). That New Year's Eve 2018 was "the first NYE in four years without an alcohol-related crash fatality."[9] Metro also saw "a 15 percent decline in DUI arrests year-over-year, the first decrease reported in five years," according to Vegas News.[10]

What began as an initial year-long pilot program focused on Southern Nevada continued to grow over the next four years and spread statewide through December 2022.[11] These programs had never been seen before and new technology allowed them to make our community better.

In the six years this author served as a rideshare executive, my teams were able to:

- Launch Autonomous vehicles at CES;[12]
- Partner with one of the world's largest K-Pop groups;[13]
- Throw a first-of-its-kind art-car festival; and[14]
- Organize rideshare helicopter services.[15]

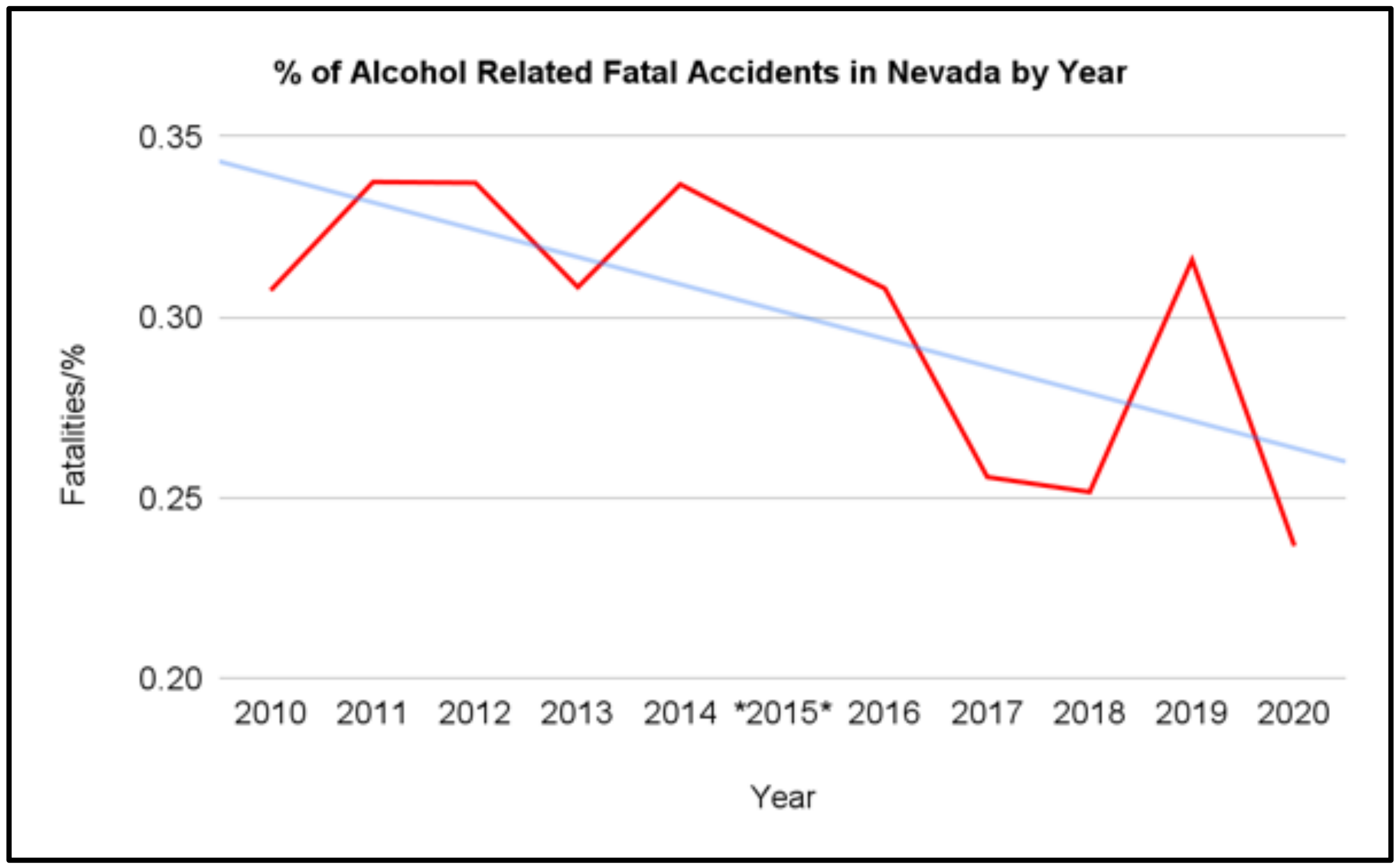
Out of all these achievements, the Coalition for Zero Fatalities held the deepest personal reward for this author. My family has served the Las Vegas Metropolitan Police Department for three generations and has dealt directly with the pain and loss caused by impaired driving in this community.[16] The innovative services pioneered by rideshare firms provided every driver on the platform a means to directly help address this important social problem.

Private businesses that achieve the greatest commercial success are those that identify key social problems and come up with innovative new products to solve those problems. Our private business did exactly that. The founders of the Coalition couldn't be certain that our program would work, but we had resources and relationships that we were willing to leverage in order to try. We launched an experiment, and it paid off. No one could have predicted our results.

In retrospect, it's baffling to think, just three years prior, it would have been ILLEGAL for the Nevada Lyft team to do this.

Moreover, it's clear that the Coalition's work in Nevada was not the only instance of rideshare services leading to fewer cases of impaired driving. Research shows that "when Lyft enters a market, ride volumes increase and DUI incidents decrease."[17] Multiple studies have shown this is a trend in both foreign and domestic markets. There is variance within each market, but there is overwhelming evidence that rideshare availability reduces impaired driving.[18] The problem is, rideshare companies can't produce this important result if their businesses are not allowed to operate.

Between the years of 2012 and 2015, when Uber first tried to enter Nevada, more than 300 individuals lost their lives to alcohol-impaired driving.[19] This is why removing outdated regulatory barriers matters. Lives can be at stake. It is unfathomable that society would allow regulatory rigidity to prevent the emergence of life-saving innovation. We cannot allow what's permissible to stop what's possible.



Source: 2023 County Health Ranking[20]

Regulations – Dictating What's Permissible

Regulators intend to protect something. The motivations of regulators may range from protecting the public interest and protecting established firms from competition to simply protecting the social order. Regulation looks to put a stop to actions deemed harmful in some way. These sets of rules or directives govern the behavior of individuals, businesses and institutions. Regulation is about dictating what's permissible. It dictates what citizens, entrepreneurs and businesses can and cannot do.

One of the goals of regulation is to protect consumers. This is attempted by:

- Setting standards for product quality and safety;
- Preventing deceptive business practices; and
- Ensuring transparency in business transactions.

Even if well intentioned, no regulation's full effects can be predicted. Often good intentions lead to unfortunate results. Regulations can end up serving the interests of the industry being regulated, rather than the public. Industries can manipulate regulatory agencies to pass policies at the expense of the public interest. These regulations raise the cost of doing business and create barriers for newcomers. When this happens, regulations end up protecting entrenched producers and not consumers.[21]

When regulations protect current producers rather than enable new ones, they become too restrictive. They impede entrepreneurship and stifle innovation. This leads to another unintended consequence: maintaining the status quo and dissuading disruptive entrepreneurship.

- Well-intentioned regulations often cause stagnation.
- Growth can only happen when individuals can pursue the best and highest uses of resources, capital, land, labor and knowledge.
- Good regulations need to foster innovation and expand on humans' ability to discover possible new solutions to humanity's many challenges.

Innovation – Discovering What's Possible

While regulation focuses on what's permissible, innovation is about figuring out what's possible.

Innovation moves the world forward. It's pro-human, pro-community and pro-growth. Innovation and entrepreneurship are the engine of the economy.[22] Innovation comes from people closest to the problem devising solutions and not from bureaucrats many levels away.[23]

Innovation fuels economic growth, improves societal well-being and drives human progress. Entrepreneurs and innovators disrupt and advance the status quo. They use their judgment to look at the present and imagine how the future can come together.[24] Their ideas birth new products, technologies, services and business models. They open new markets, create jobs and bring products to life. They find new solutions to old problems. They do all this by catering to consumers with products or solutions that consumers are able to grasp and adopt in a timely enough manner to attract capital.

Innovation addresses key societal issues, including healthcare, education and poverty. Today it is possible – where state regulations allow – to deliver convenient and inexpensive health monitoring, medical advice and educational content all through remote platforms using providers located anywhere in the world. By pushing boundaries and defying norms, entrepreneurs can affect social changes.

Innovation plays a critical role in driving economic growth and prosperity in many ways:

- **Productivity Growth:** Improvements to processes increase productivity. Producing more goods and services with the same amount of resources leads to higher output and economic growth.
- **Competitiveness:** Innovation is key to maintaining competitiveness. Countries and companies that innovate are better equipped to create and launch new products or markets, leading to expansion.
- **Job Creation:** Innovation often leads to the creation of new industries and the expansion of existing ones. While it can also lead to job displacement, innovation tends to create more jobs than it destroys. [25]
- **Increased Living Standards:** Innovation can lead to the development of new technologies that enhance the quality of life.

- **Revenue Growth:** Innovation can lead to the development of new products and services increasing revenue, the societal captial stock and long-run survival.

Yet, entrepreneurs often face challenges, especially from regulations that lag technological advancements.[26]

"Innovation is the ability to see change as an opportunity – not a threat."

- Steve Jobs -

Maintain Status Quo or Grow?

Technology has made regulating more difficult. Technology evolves at an exponential pace but the ability for regulators to change their approach is much slower.

This creates legal uncertainties that hinder innovation. Regulations need to be adaptable. They need to encourage innovation while mitigating risks. Innovation needs to proceed unless there's a strong case for its restriction.[27]

In 1997, the Clinton Administration acknowledged this and supported the idea of regulatory flexibility. The Clinton White House said, "the private sector should lead ... government should avoid undue restrictions on electronic commerce."[28] Where government regulation is needed, it should be to provide a "predictable, minimalist, consistent and simple legal environment for commerce."[29]

Supporting innovation doesn't imply a state of anarchy. Laws that secure property rights, liability for damages and enforceable contracts are necessary for commercial development in the real-world.

But innovation should be more important than regulation.[30] Policymakers should not stifle innovation out of fear of imagined worst-case scenarios that may never appear. A bottom-up and adaptable approach to regulation can enable change and allow for its benefits to materialize.

Entrepreneurs need to be willing and able to challenge the status quo. However, many current regulations were designed decades ago. They do not reflect what's possible now and therefore needlessly inhibit human potential. This leads to:

- **Barriers to Entry:** Regulations often require businesses to meet certain standards or acquire licenses before they can operate.
- **Uncertainty:** In evolving industries regulations lag behind the pace of innovation. This can create uncertainty for innovators, who may not know how their product or service will be regulated.
- **Inflexibility:** Regulations are often designed for traditional business models and technologies can make it difficult for innovative businesses with new models.
- **Innovation Bias:** Some regulations may (often inadvertently) favor existing technologies making it impossible for new technologies to compete.
- **Risk Aversion:** The potential for regulatory fines or even prison[31] can make businesses more risk-averse and less likely to pursue untested ideas.

Given how regulation can interfere with innovation, policymakers must ask:

- What policies encourage innovation?
- What policies slow the process down?
- Which currently dominates our regulatory paradigm?

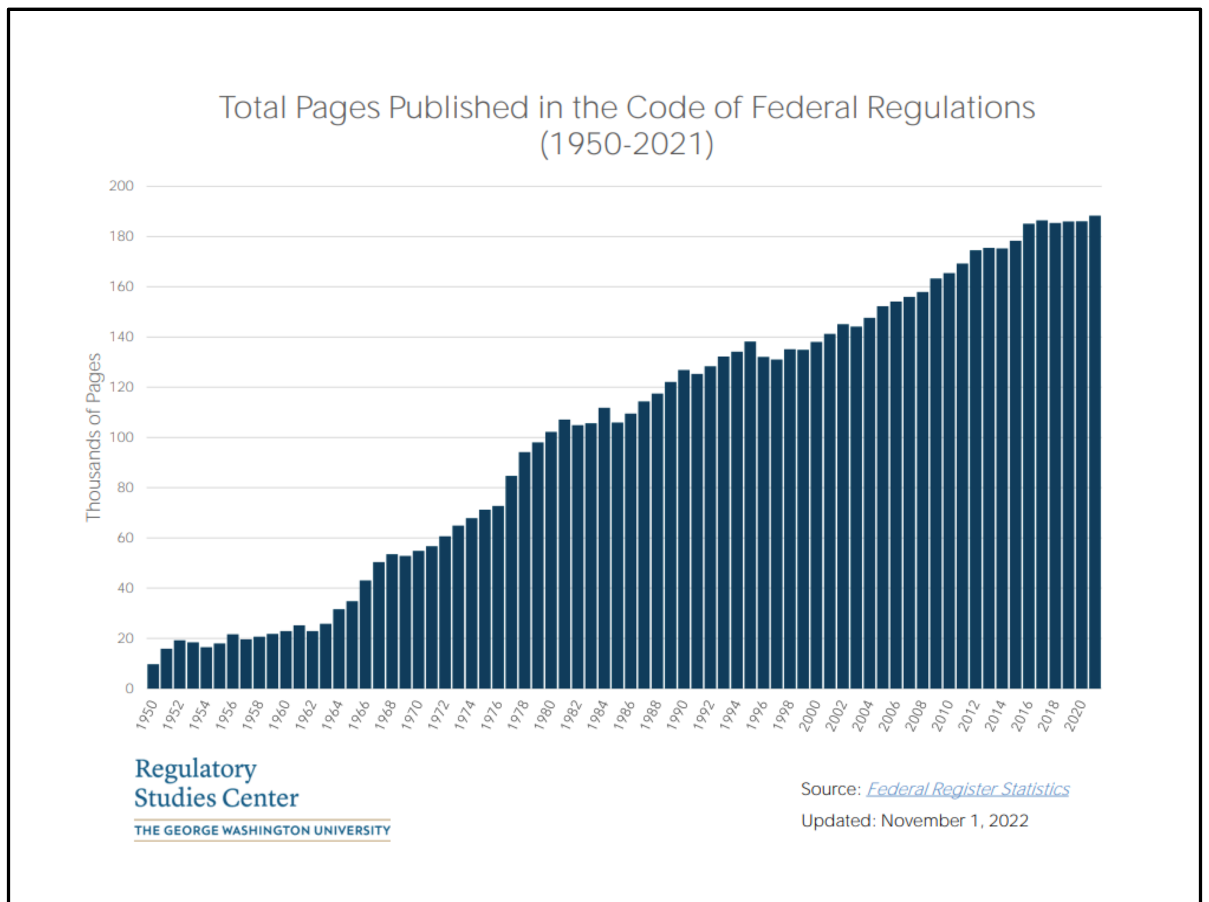
"The secret of change is to focus all of your energy, not on fighting the old, but building on the new."

- Socrates -

Current Regulatory Climate – U.S.

Government regulation has ballooned since the 1950s. There is an objective way to measure this. From 1950 to 2018, the number of pages in the Code of Federal Regulations (CFR) "grew from just less than 10,000 pages to more than 186,000 pages."[32] According to scholars at George Washington University, the CFR is "the codification of the general and permanent rules … of the federal government. The number of total pages published in the CFR annually provides a sense of the volume of existing regulations with which American businesses, workers, consumers and other regulated entities must comply."[33]

Understanding which federal laws apply to their businesses costs new entrepreneurs both time and money. Every delay an entrepreneur faces means less time is available to engineer new solutions for emergent social problems and fewer customers served.



Source: Regulatory Studies Center Columbian College of Arts & Sciences

These increased regulatory burdens have come at significant cost to new businesses across the country. The nonpartisan Congressional Budget Office, or CBO, reports "newly established businesses are typically more productive than the firms that preceded them."[34] Startups are often the purveyors of new approaches for solving social problems. Our world needs startups and new businesses. However, "entrepreneurship in the economy has declined significantly over the past four decades," according to the CBO analysis.[35]

Citing the CBO's report, Chris Edwards from the Cato Institute found that from 2000-2018 the share of employment in firms less than 5 years old fell:

- 60 percent in high-tech manufacturing;
- 56 percent in information;
- 53 percent in high-tech;
- 38 percent in services;
- 38 percent in manufacturing;
- 33 percent in construction; and
- 13 percent in retail.[36]

Empirical research has identified the negative cost of regulatory growth and complexity.

- **Expansions in regulations slow GDP growth.** Economists Bentley Coffey and Patrick McLaughlin of the Mercatus Center found that, "[H]ad regulation been held constant [in the U.S.] at levels observed in 1980 … the economy would have been nearly 25 percent larger by 2012 (regulatory growth since 1980 cost GDP $4 trillion in 2012, or about $13,000 per capita)."[37]
- **Burdensome regulation depresses employment and new firm creation.** "[F]rom 1998 to 2011, increased federal regulation reduced the entry of new firms by 1.2 percent annually and reduced hiring by 2.2 percent annually."[38] There are clear winners, however, from a regulatory state that depresses the formation of new businesses. As economists James Bailey and Diana Thomas say, "incumbents of all sizes might actively seek increasing regulation to deter entry of new firms and thereby limit competition."[39]
- **Regulation accumulation disproportionately impacts businesses in lower income areas.** Economists Dustin Chambers, Patrick McLaughlin and Laura Stanley found that, "[A] 10 percent increase in the effective federal regulatory burden on a state is associated with an approximate 2.5 percent increase in the poverty rate." They argue that "the greater poverty that results from additional regulations should be considered when weighing the costs and benefits of additional regulations."[40]
- **Regulations reduce new entrants into an industry and kill startups.** A 2020 Fraser Institute study by economics professors Liya Palagashvili and Paola Suarez looked at 19,000 technology startups in the United States and Canada found "more regulated industries may exhibit lower rates of entry and that more regulated industries are associated with a greater likelihood of a startup closing." These higher-regulated industries attracted fewer investors than lesser-regulated industries.[41]

- **Regulatory growth increases operating costs by about 3.3 percentage points per year.** According to economists Richard Fullenbaum and Tyler Richards, over the past 20 years, due to regulation alone, costs have increased by move than 92 percent. Reducing the volume of regulations is like a technological innovation by driving down operating costs and therefore increasing economic growth.[42]

These estimates together with the alarming decrease in young firms across the country paint a concerning picture. Regulatory burdens come at a considerable cost.

Current Regulatory Climate – Nevada

Nevada has significant room to improve its approach to regulation.

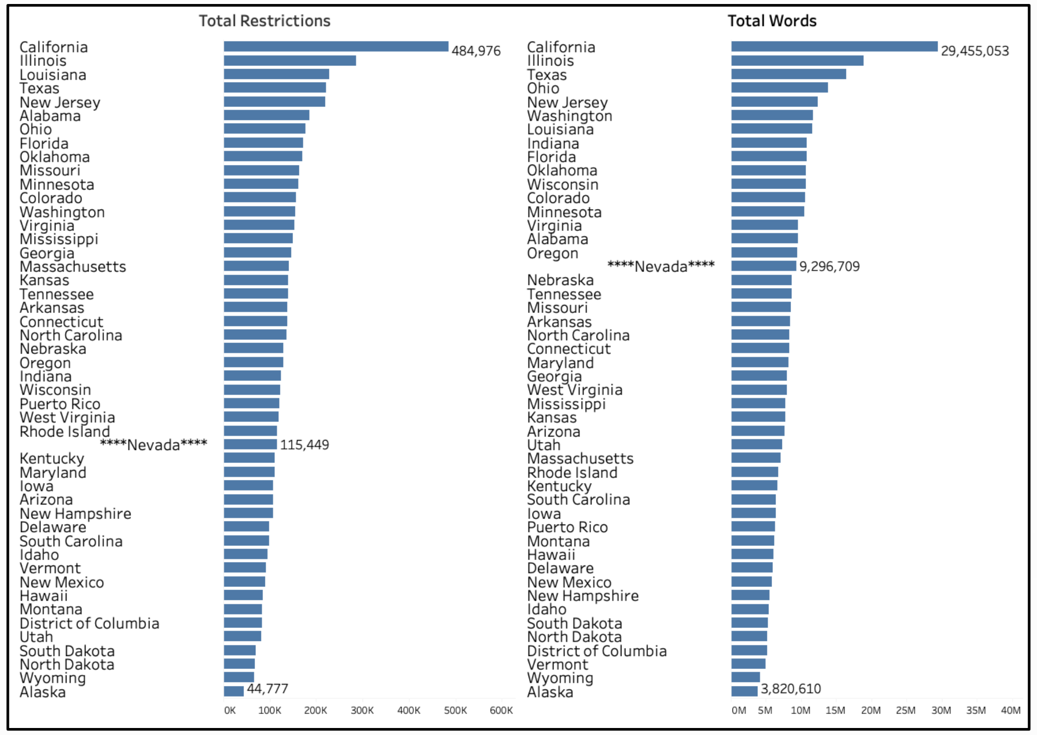
Nevada's regulatory environment has followed national trends. Nevada's growth in population and urban development has led to more regulations across the board. The growing concern over water usage has also led to an increase in regulations, including bans on grass[43] and limiting the size of residential pools.[44]

While regulations attempt to protect public interests, the accumulation of thousands of regulations create barriers to entry, slow economic growth and dynamism, and increase the cost of doing business.

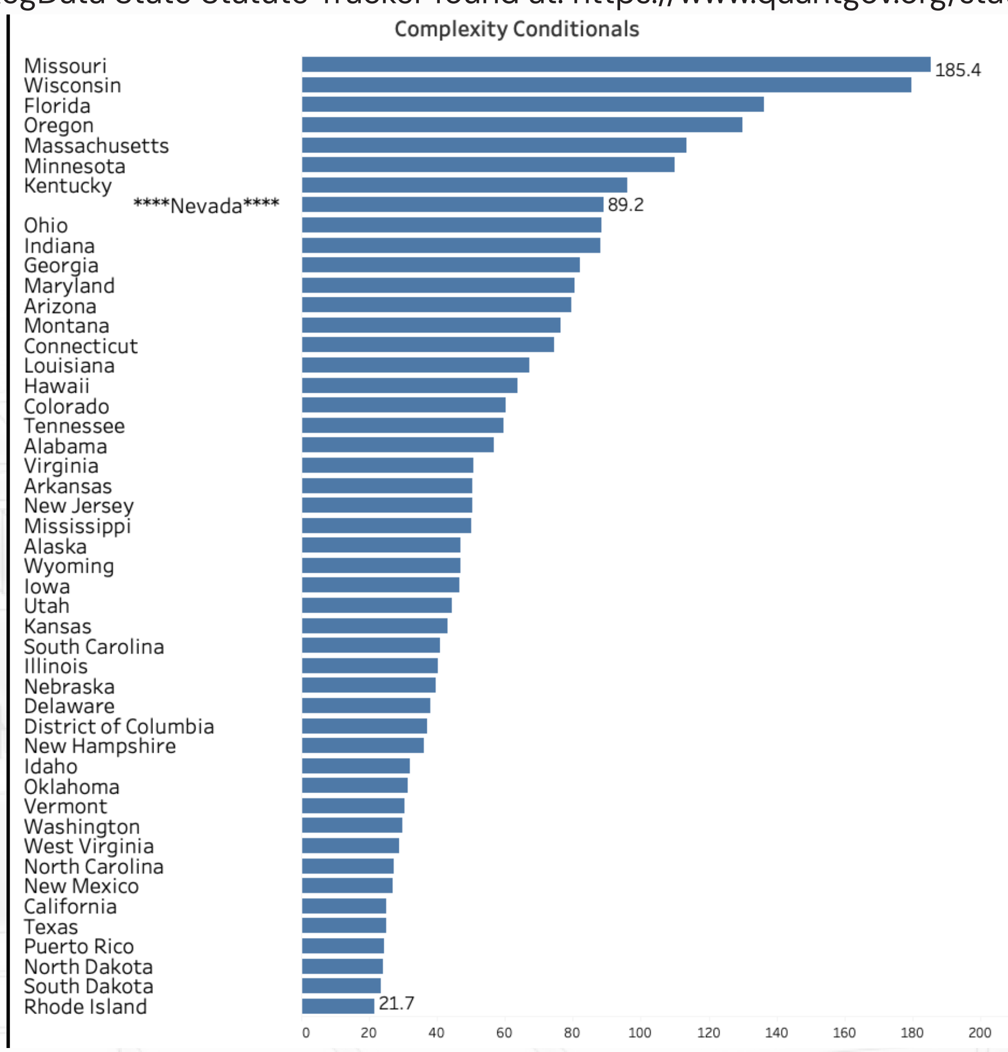
Not all regulations are created equal, though. In order to understand where progress can be made, it is necessary to distinguish flexible from rigid regulations. Regulations with words such as shall, must, may not, prohibited and required are rigid.[45] These regulations create the most substantial barriers for prospective businesses. RegData, a quantitative machine learning tool developed at the Mercatus Center, provides analyses of regulations that use these rigid words.[46] The tool assigns a score for how burdensome each state's regulatory and statutory codes are.

In relative terms, Nevada's number of restrictive statements rank within the middle third of states at 30th overall. However, Nevada ranks within the top third in total words in its administrative code, at 17th. So, while Nevada may be near the median in terms of absolute restrictions, wordiness inflicts regulatory costs for firms that must read and interpret the law to adapt their business models.

Nevada's largest issue lies in the complexity and confusion within its statutory code. Nevada's statutory code has the eighth-most conditional statements among the states. These conditional statements (cross-references and inter-dependencies to other statutes) make it more difficult for firms to understand which laws apply to them. For startup firms without in-house counsel, the additional legal expense needed to interpret interdependent statutes can quickly consume capital.



Source: RegData State Statute Tracker found at: https://www.quantgov.org/state-statutes



Source: RegData State Statute Tracker found at: https://www.quantgov.org/state-statutes

While Nevada is sometimes regarded as being a business-friendly state due to lack of a corporate income tax (despite numerous industry-specific excise taxes, a tax on private-sector payroll and a corporate gross-receipts tax), taxes alone are not the only cost of business imposed by governments.[47] According to a 2021 study conducted by Chris Edwards of the Cato Institute, Nevada is ranked 43rd on the Entrepreneur Regulatory Barrier Index. The only states that impose more regulatory barriers are: New York, West Virginia, Washington, Hawaii, California, New Jersey and Connecticut.

Edwards looked at 17 variables across four main categories. Those categories include:

- Small Business Opinions;
- Occupational Licensing;
- Other Entry Barriers; and
- Regulation-Created Costs.

The categories that overwhelmingly drag Nevada down in this ranking are occupational licensing and regulation-created costs – regulations most focused on the startup of new businesses.

A quick summary of the rankings for Nevada:

- **Nevada is the most burdensome state when it comes to Occupational Licensing.** The percentage of workers that require an Occupational License is 27 percent. That's 7.4 percentage points higher than average and 3 percentage points higher than the second-most burdensome state.
- **Nevada has the highest average costs to acquire an occupational license, coming in at $527.** This is 42 percent higher than the average ($368) and 7 percent higher than the next-highest state.
- **Nevada is one of only six states considered to be highly regulated for land use.** This variable was calculated from "the average score in the 2019 Wharton Residential Land Use Regulatory Index for cities in each state."[48] This was used as a proxy for the zoning restrictiveness for building projects of all types.

Nevada's Occupational Licensing system is outdated. As Edwards says, "The large state differences in licensing requirements for many occupations suggest that the rules are often not based on a rational analysis of health or safety."[49] Edwards continues:

> "Athletic trainers are not licensed in California, but in Nevada they must have a college degree, pass an exam and pay $666 for initial licensing and $150 for annual renewals." He continues, "Heating, ventilation and air conditioning (HVAC) contractors are not licensed in more than a dozen states, but in Nevada they must pass an exam and pay $1,135 for initial licensing and $600 for renewals every two years."[50]

A report conducted by the Obama administration found, " ... licensing requirements raise the price of goods and services, restrict employment opportunities and make it more difficult for workers to take their skills across state lines."[51]

Entrepreneur regulatory barriers index ranking (rank of 1 is the least barriers, rank of 50 is the most barriers)

Rank	State	Rank	State	Rank	State
1	Georgia	18	Idaho	35	Iowa
2	South Dakota	19	Wisconsin	36	Michigan
3	North Dakota	20	New Mexico	37	Vermont
4	Colorado	21	Missouri	38	Maryland
5	New Hampshire	22	Minnesota	39	Maine
6	Kansas	23	Oklahoma	40	Montana
7	Indiana	24	Kentucky	41	Rhode Island
8	Wyoming	25	Alaska	42	Oregon
9	Utah	26	Mississippi	43	Nevada
10	Ohio	27	Florida	44	New York
11	Virginia	28	South Carolina	45	West Virginia
12	North Carolina	29	Alabama	46	Washington
13	Arkansas	30	Louisiana	47	Hawaii
14	Delaware	31	Tennessee	48	California
15	Texas	32	Pennsylvania	49	New Jersey
16	Nebraska	33	Illinois	50	Connecticut
17	Arizona	34	Massachusetts		

Source: Edwards, Chris. "Entrepreneurs and Regulations"

Specific Barriers

Starting a business is difficult already due to basic market factors. An entrepreneur must correctly perceive a market need, devise a product offering that fills this need and risk their own capital or convince others to risk capital in pursuit of that venture. The entrepreneur must also become adept at managing people and projects efficiently. These inherent difficulties are complicated further when governments throw up additional, often arbitrary, obstacles.

Entrepreneurs often need to obtain various permits, licenses and approvals from local authorities before starting a business. These may relate to zoning, fire codes, alcohol licensing, signage or parking, among others. The process of obtaining necessary approvals from governments is costly and can take months in some cases, causing startup ventures to deplete their capital. Nevada Policy detailed this problem a decade ago.[52] Not much has changed, unfortunately.

Established small businesses in the U.S. spend an average of $12,000 to be compliant with federal, state and municipal regulations. When starting up a new company, it can cost upwards of $83,000 for compliance.[53]

New businesses can also be delayed by regulatory requirements. Chris Edwards provides an example: "Land-use and zoning regulations can create delays and barriers for brick-and-mortar startups ... The average time for project approvals was 3.7 months in the light[ly regulated] jurisdictions and 8.4 months in the high jurisdictions [such as Nevada], with approvals taking 18 months in some places."[54]

In order to better understand the barriers entrepreneurs must overcome, it's helpful to see a selection of them all in one place. The table below provides an overview of some of the most common, costly and time-consuming barriers that result from restrictive regulation.

Regulatory barrier	Effect on entrepreneurs
Excessive numbers of permits and licenses	These can be time-consuming and costly. They can discourage new startups and inhibit the launch of innovative products.
Zoning Restrictions	These can make it difficult for entrepreneurs to find locations. They can hinder home-based businesses and new types of businesses not covered in existing code.

Regulatory barrier	Effect on entrepreneurs
Complex Procedures	Increases mistakes and forces entrepreneurs to pay for expert guidance.
Regulatory Uncertainty	Regulations that are unclear, inconsistent or changing can create uncertainty making it difficult to plan.
Bureaucratic Delays	Undermines planning and burns cash while businesses sit idle.
Data Privacy and Security Regulations	For tech startups, these can require significant investments and can limit certain types of business models.
Favoritism and Corruption	Disadvantages independent entrepreneurs compared to incumbent businesses.
Lack of Government Transparency	Creates uncertainty and obstructs unfair decision making.
Bans and Restrictions on Business Activities	Increases costs, reduces innovation and fosters black markets.

Adapted from: Edwards, Chris. "Entrepreneurs and Regulations: Removing State and Local Barriers to New Businesses"

Making the Possible Permissible – Regulatory Sandboxes

What is a Regulatory Sandbox

As the Cato Institute's Chris Edwards says, "To speed economic recovery and support long-term growth, governments should remove regulatory barriers to startups."[55]

Regulatory sandboxes look to relax barriers facing innovators while helping regulators stay relevant.[56] They provide temporary relief from existing regulations. This allows entrepreneurs to operate on a limited scale, rather than not at all. These can facilitate business's efforts to establish proof of concept without sacrificing market integrity, consumer protection or financial stability.

Sandboxes open what's possible to become permissible, even if the current laws may say otherwise.

- Sandboxes fall under a special government office that acts between entrepreneurs, elected officials and regulators.
- Business owners can request specific exemptions from regulations.
- If approved, entrepreneurs then have more freedom to innovate and iterate.
- Lawmakers can reassess and repeal policies that are outdated or unnecessary.

Regulatory sandboxes serve as an open playing field for policymakers and regulators. This allows them to work together rather than in sometimes-confrontational silos. They show how existing systems may need to adapt to accommodate emerging technologies and business models. These real-world businesses operations create real data. This real world data allows decisions to be made based on facts and not guesses.

The features and requirements for regulatory sandboxes can vary, but they generally share these features:

- They are temporary.
- They are for a limited number of consumers.
- They may limit geography.
- They contain provisions for consumer protection and compensation.
- Participants must share information about their operations with regulators.
- Maintaining well-functioning property and liability legal environments, just like any other market interaction, are necessary for success.[57]

Regulatory sandboxes offer many benefits.

- They create an equitable landscape where businesses, big or small, can serve the market.
- They can be more effective than tax breaks for attracting industries to a state.
- They can come with reciprocity agreements, allowing states to collaborate and businesses to expand their services across states.

History

Regulatory sandboxes have been around for almost a decade. They started in 2014 in the United Kingdom as part of the Financial Conduct Authority's "Project Innovate."[58] The project focused on innovation in the financial technology (fintech) industry. The FCA understood:

- An unprecedented wave of innovation was underway.
- That innovation can be a "powerful driver of effective competition in the interests of consumers."[59]
- As a regulatory body, they had a mandate to support and encourage innovation.
- Regulation needed to be kept up to date with the capabilities of the market.

As part of this project, they identified that:

- Existing regulation was complex.
- Interpreting individual provisions was challenging for businesses.
- Identifying applicable rules and which activities were regulated was unclear.
- These challenges led to a substantial decrease in entrepreneurs' "appetite to innovate."[60]

After the Authority launched this first regulatory sandbox in 2016, applications from private firms seeking to participate started flying in.[61] By 2022 the sandbox had received more than 550 applicants and admitted 177 projects.[62] One of the most successful outcomes of this program was a material rise in funding for participants following sandbox acceptance. Research showed that firms in the sandbox were 50 percent more likely to attract capital as a result of participating and received 15 percent more funding than non-participants. These increases were due to reductions in regulatory cost and the perception of a substantial risk reduction for capital providers.[63]

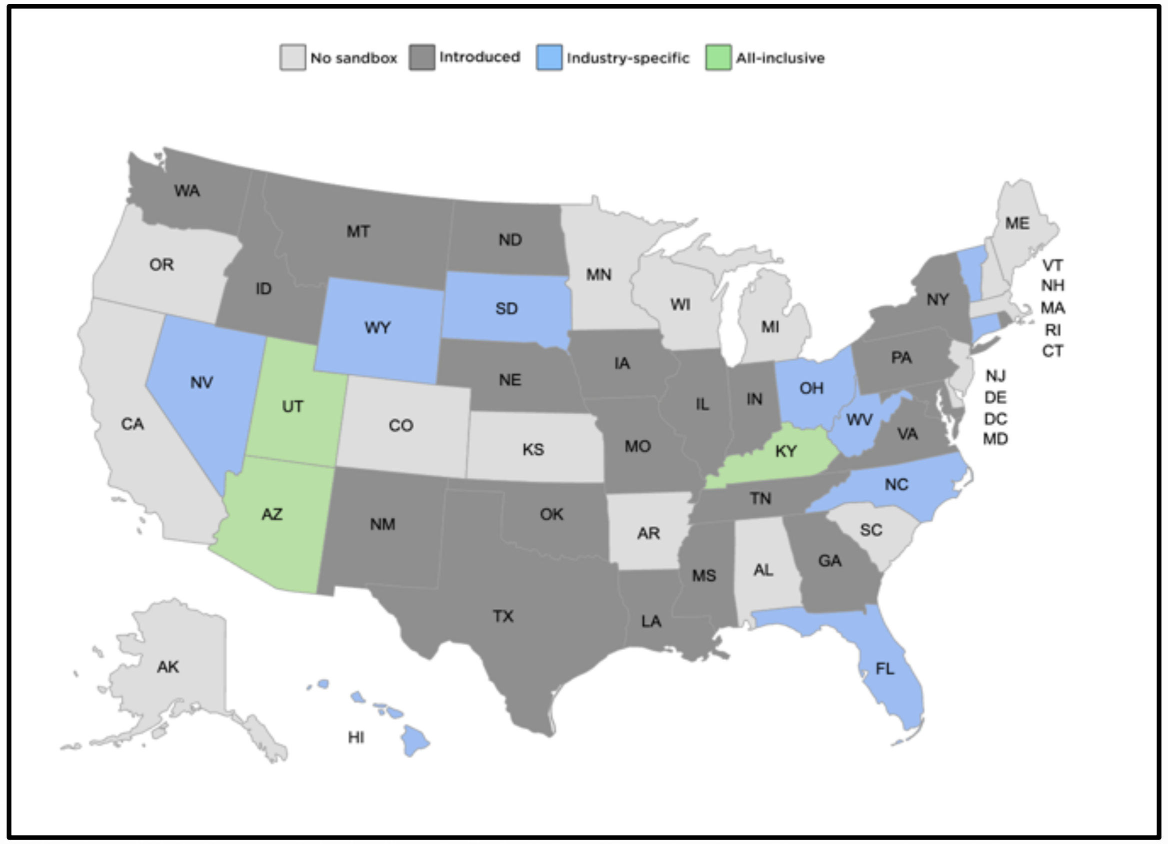
Sandboxes have now spread across the globe. The World Bank reports more than 57 jurisdictions offer an active sandbox as of the end of 2020.[64] Sandboxes entered the U.S. after Arizona passed a fintech sandbox in 2018.[65] Since then, 13 states in total have passed regulatory sandboxes that cover many different sectors.[66]

The latest innovation in regulatory sandboxes came from Utah in 2021. Following the successful creation of Utah's sandboxes for fintech, insurance and legal services, the state legislature decided unanimously to pass a universal sandbox. This law expanded the program to all businesses in all industries regardless of their size or political power to petition for regulatory relief.[67] Arizona[68] and Kentucky[69] followed suit in 2022 and 2023, respectively.

These universal sandboxes represent an innovative approach to regulation with technological change top of mind. So long as transparency is maintained, they also remove political favoritism.[70] They provide a safe, controlled space for experimentation. They balance the need for innovation with regulation. They benefit innovators, regulators, consumers and society.

The use of universal sandboxes:

- Encourages innovation and growth in businesses which leads to bettering communities and lives.
- Removes the challenges of complex and time-consuming regulatory processes.
- Informs regulators and lawmakers how laws and regulations may be impeding economic growth.
- Leads to less complex policies in the future.



Source: Libertas Institute regulatory sandbox map[71]

Well-structured sandboxes require entrepreneurs to document their innovation's performance under real world, unpredictable conditions. Effective sandbox policies include:

- Procedures to adapt regulation in response to industry feedback.
- Broad authorizations to accommodate new technology changes.
- Limitations on scope and duration.

Regulatory sandboxes identify unnecessary regulations and speed up innovative products and services. Temporarily waiving obstacles allows businesses to test their ideas by providing a break from onerous, outdated regulations. They do this all while still ensuring consumer protection.

Sandboxes aren't Free-For-Alls

According to Anne Hobson, public policy manager for Meta, and Eileen Norcross, vice president for Applied Research at the Mercatus Center, "[s]andboxing allows for the discovery of the proper design of a regulation in conjunction with the regulated party, while ensuring customers are eligible to seek damages from firms should a product cause harm."[72] Despite some regulatory relaxations within the sandbox, companies are still subject to the law. In particular, laws related to fraud, false advertising and consumer protection still apply. These legal liabilities offer basic market solutions

to disputes and serve as strong deterrents against intentional misconduct or bad actors.

Critics may contend that businesses will cut corners or bring untested products to market simply to make quick profits. These are always risks in a market economy, regardless of whether a sandbox exists. Fortunately, consumers are discriminating and there are legal recourses in place to adjudicate disputes and punish bad actors. The goal is not to prevent ALL potential worst-case scenarios. It's to structure our laws to hold companies liable for failures. As Brian Knight, a leading expert in designing effective regulatory sandboxes explains, "While there is a risk that a product may fail, if that failure is a result of a violation of the law, the consumer should be compensated. This means that when evaluating whether to let a firm participate in a sandbox, regulators should make certain all firms have a credible plan to compensate consumers, and the means to execute it if necessary."

In the absence of government regulation, all parties involved may have a higher incentive to be diligent. As Florida State University economist Randall Holcombe explains, " ... government regulation crowds out private regulation ... because of government standards, customers in an industry assume that government regulation is protecting them."[74] In other words, regulation can induce consumers to become less discriminating due to the perceived assurance that a company is operating ethically, even if this is not the case. It can also displace the emergence of self-regulatory structures imposed by industry, such as the regulation of lawyers by the American Bar Association or of accountants by the American Institute of Certified Public Accountants.

Service providers will have to prove that they are trustworthy and able to pay for damages. James Buchanan, winner of the Nobel Prize in Economics, and his co-author Roger Faith explain, " ... where new and necessarily uncertain "invasions," "spillovers" or "harmful effects" may take place, liability-rule protection offers a legal climate within which economic growth can proceed."[75] Liability rules incentivize businesses to account for the cost of their potential failures. Because they are financially liable to pay for damages, it is vital they follow and enforce safe practices if they want to stay financially solvent. This is especially true for startups with new products or services trying to establish themselves and gain buy-in from business service providers as well as customers. Often businesses turn to other businesses or organizations to help ensure they are adequately providing for the protection of their customers and can cover losses in the event they cause harm. In this respect, governments are not the only source of regulation in a market economy.

Advocating for regulatory sandboxes does not mean advocating for no regulation. Instead, it's a call for the process to be altered. Sandboxes look to create a more dynamic, forward-looking process rather than a stagnant, backwards-looking process.

Several mechanisms already exist that can ensure the protection of customers within the sandbox. In some situations, they can even reduce the need for direct state regulation. Some industry-specific examples include:

- **Insurance Markets:** Companies within the sandbox might be required to hold insurance that covers potential damages or losses to consumers. This protects consumers and incentivizes companies to hold high standards and avoid accidents to keep premiums low. The insurance companies act as regulators. They assess the risk associated with each business and adjust their policies and pricing accordingly. Insurers can also actively enact requirements on businesses such as monitoring devices, training programs, or other interventions that they expect can decrease the likelihood of losses. This is already a common practice throughout the economy and there is no reason to expect sandboxes to provide any lower level of commercial discipline.[76]

- **Quality Assurers:** Independent quality assurance entities play a significant role in maintaining standards. These organizations establish industry best practices, audit companies for compliance and provide certifications that signal quality and trustworthiness to consumers.[77] One example is Underwriters Laboratory (UL), an independent nonprofit organization that conducts safety tests and creates standards for safe products. Businesses want to have UL's logo displayed on their products because it tells consumers that the product has met their rigorous testing process. Another example is the National Sanitation Foundation (NSF). The NSF establishes standards for food, water and consumer goods that are often stricter than what is required by government regulations.[78]
- **Consumer Feedback Mechanisms:** Market-based feedback mechanisms, such as online reviews and ratings, can also offer a form of regulation. Businesses that fail to meet customer expectations can be quickly identified and be forced to fix the service failures, or face losses.
- **Escrow Services:** In certain industries, escrow services can hold customer funds until the service or product has been delivered as promised, protecting consumers from potential losses.
- **Investor Oversight:** Venture capitalists and other investors play an important regulatory role. They often require businesses to meet certain performance standards and can provide guidance.[79]

In all these instances, the state government acts as a facilitator creating the framework for the sandbox. This also diffuses risk across many parties instead of being concentrated on the regulator. This decentralization provides for checks and balances as each party needs to reduce losses.

It's far more efficient for the market to find ways to enforce regulation. It means public resources do not need to be spent on these areas. This frees public resources to be used elsewhere, such as in the provision of critical public safety or sanitation services. Situations where private companies can solve public problems should be celebrated and pursued above all else.

Silver State Sandboxes

Current Laws and Expansion of Efforts

Regulatory sandboxes in Nevada are not a new concept. In 2019, a bipartisan effort led by State Senators Ben Kieckhefer and Pat Spearman led to successful passage of Senate Bill 161.[80] This bill required the director of the Department of Business and Industry to establish and administer the Regulatory Experimentation Program for Product Innovation.[81] This new program created Nevada's first industry-specific regulatory sandbox for the financial technologies (fintech) industry. This legislation made Nevada a leader within the sandbox movement alongside Utah and Arizona during that period.

This law allowed:

> "persons offering or providing such a product or service in a technically innovative way may seek a temporary exemption from some or all of the statutory and regulatory provisions that otherwise apply to the product or service. At the end of the period of exemption, a participant in the program must cease to provide the product or service or continue operations in accordance with applicable licensing and other requirements."[82]

The law called for consumer protections, required companies that are not licensed to notify customers and allowed companies to get products to market on an experimental basis. In short, the law provided for all the best practices of regulatory sandboxes.

The program's intent is to "help businesses test innovative financial products or services without first having to meet certain state licensing or regulatory requirements."[83]

While this fintech sandbox was a step in the right direction, it has been met with some challenges.[84] Since the program's establishment in 2020 there have been no participants. In a 2022 report, Terry Reynolds, the director of the Nevada Department of Business and Industry, provided a summary of the operations of the program to date and identified some challenges. First, the report identified that Nevada was not the only state with limited participation in the fintech focused regulatory sandboxes. At the time of the report, only Arizona – the first state to create a regulatory sandbox – had seen fintech participants.[85] The report concluded this was due to a few key factors including: "a perceived unwillingness of many prospective applicants to be regulated; (2) mismatches between a sandbox's area of authority and the product or service in question; and (3) prospective administrative burdens associated with a sandbox application."[86] Following Reynold's report, two bills were introduced in the 2023 Nevada Legislative session aimed at making changes to the Department of Business and Industry.

In 2023 State Senator Hammond submitted Senate Bill 376,[87] which called for the Department of Business and Industry to conduct a study to evaluate the effectiveness of the program, assess comparable programs adopted by other states and analyze how other governments (state and federal) have implemented blockchain technology.

The bill was not granted a hearing and, as a result, died in committee.

By contrast, the bipartisan Senate Bill 165[88] was at least granted a hearing and was approved by the Senate Committee on Government Affairs. Senate leadership designated the bill as “exempt” from standard legislative deadlines, which is a designation given to a small handful of bills that leadership deems to be priorities. However, the bill was never brought up for another hearing before the conclusion of the legislative session.

Senate Bill 165 sought to create an “Emerging Technologies Task Force” within the Department of Business and Industry, which currently administers the fintech regulatory sandbox. As proposed in the bill, the Emerging Technologies Task Force would “develop certain strategies and make certain recommendations with regard to: attracting businesses that are engaged in the development of emerging technologies and encouraging the growth of such businesses.”[89] The bill would also have created an Opportunity Center for Emerging Technology Businesses which would “advocate for, assist and support the growth of businesses engaged in the development of emerging technologies.”[90]

Given Senate Bill 165’s bipartisan sponsorship and recognition by legislative leadership, it’s certainly plausible that a version of this legislation will again be introduced during the 2025 legislative session. However, where Nevada was once a leader, the state has been left behind as Arizona and Utah have continued to innovate by creating universal sandboxes. In fact, Reynolds identified this emerging trend in his 2022 report. The report discusses how Utah addressed the issues Nevada’s program faces by implementing the universal regulatory sandboxes detailed earlier in Section 9. Reynolds pointed out that under this universal approach the program director has more flexibility, and the program receives input from multiple stakeholders. He recommended that “[t]he Nevada Sandbox Program would benefit from a similar reassessment of its purpose and structure, particularly as these relate to the goals of economic development and state regulatory capacity building for emerging or innovative technologies.”[91] Nevada lawmakers should take Reynolds’ recommendation under serious consideration. While the fintech industry has been slow to take advantage of this program in Nevada, other industries are taking full advantage of the universal sandboxes found in other states.

Future Sandboxes

It’s time for regulations to catch up with the ideas and capabilities of the market.

Nevada has a few options in order to stay competitive and to continue this trend of forward-thinking legislation that started in 2019. Nevada could:

- Continue with ad hoc expansion of sandboxes to industries one at a time, requiring separate legislation for each expansion.
- Catch up with Arizona and Utah by passing universal sandboxes to open experimentation to all current or future industries.
- Take a leap past every other state and approve innovation zones, first proposed by Gov. Steve Sisolak (more on this can be found in a later section).

It may seem like wishful thinking to talk about future industries that don’t yet exist. But consider the fact that over the past two decades countless new industries (i.e., social media, the sharing economy, smartphones, blockchain and autonomous vehicles) have been created and completely changed the world. These changes came quickly on the heels of commercialization of the internet and personal computing in the late 20th century. Decades prior, television, satellite transmissions and rapid advances in medicine led to permanent changes in society. These types of changes happen rapidly and on an ongoing basis. They will continue to happen over ensuing decades.

There is no way to know beforehand how much value any one innovation or industry can bring to Nevadans. The only way to find out is to allow these new ideas out of the minds of innovators so individuals can experiment with them through the market process.

Rather than picking one industry at a time Nevada should consider enacting an all-inclusive sandbox. This adaptable program would provide benefits to businesses in all industries. It will allow regulators and innovators across the economy to work together rather than at odds with one another.

A universal sandbox has distinct operational advantages:

- Creating an Office of Regulatory Relief removes the possibility of redundant efforts.
- Working across regulatory bodies can help remove silos in a proactive manner.
- Visibility across specialized regulatory areas can bring novel insights.[92]
- Learnings from sandbox participants are brought together and regulatory gaps can be found.
- One source of all communications will allow for full public transparency.
- Regulators can easily go on record and share their opinions and concerns.
- Regulatory relief bills may be more easily created.

As an entrepreneur, how would this look?

1. Imagine you have a new idea for a business, and you hear about the regulatory sandbox.
2. You apply and the Office of Regulatory Relief (reporting to either the Department of Business & Industry or Governor's Office of Economic Development) oversees your application.
3. The office then identifies and reaches out to the agencies that oversee the regulations from which you're seeking an exemption."
4. Those agencies then overview the request and evaluate the potential risks.
5. If they determine there's a chance that safety or public health would be put in danger, the agency would issue a denial opinion. This would then be put on official record and submitted to the Office of Regulatory Relief's director.
6. The director takes the findings from all applicable regulatory bodies and submits them to the Sandbox Advisory Committee.
7. The committee looks over the regulators' opinions and takes them under advisement.
8. They then are either able to agree with the opinions or disagree with them.
9. Overrides, approvals and rejections will be reported and submitted to a legislative committee and become a matter of fully transparent open records.

This format encourages checks and transparency. It reduces the burdens on the entrepreneur. The Office of Regulatory Relief operates on their behalf obtaining the opinions of the requested regulators.

This is also a win for regulators. They have a forum to share their expertise and go on record. Regulators get a chance to have their reservations proven correct and can update rules as required. They maintain relevancy as technology advances. In a dynamic world, not only do our businesses need to learn and adapt, but our public agencies and regulators that look to govern must also adapt. As Adam Thierer, author of Evasive Entrepreneurs and senior fellow at the R Street Institute observes, "[i]f innovative companies are expected to reinvent their business models every couple of years, it is reasonable to demand that the public policies governing those companies' technologies adapt at a similar pace."[93] Through this process of learning and adapting private and public entities in Nevada can continue to become better.

In this way, Nevada can become more "future-proof" and robust. This will allow Nevada to attract innovators in a bottom-up manner.

If Nevada lawmakers do see a specific need to exclude particular sectors from the sandbox such exclusions can be specified within the authorizing legislation, but they are not recommended.

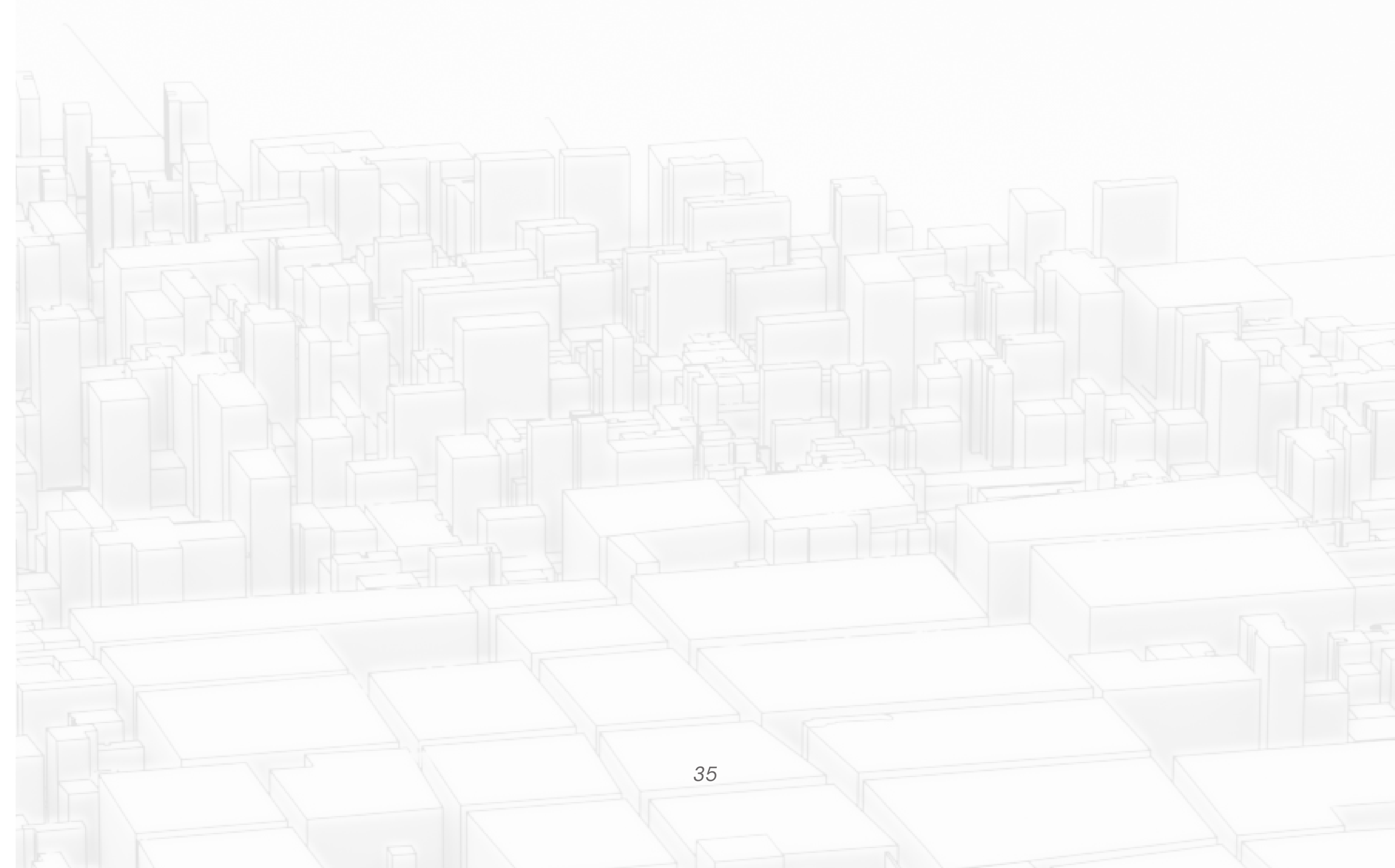
Choosing to exclude an industry will have more to do with political pressure from interests and lobbyists than it does with the public's best interest.

In addition to passing a universal sandbox, Nevada should also include a provision offering reciprocity

with businesses accepted into sandboxes in other states. This can open the door for regionalized growth and help innovators more quickly gather data to identify product or service flaws, gaps and opportunities.

Top-down industry targeting, tax abatement programs and other economic development incentive programs may attract large-scale projects. But regulatory sandboxes are a much more efficient and potentially lower-cost option to the public. Sandboxes level the playing field rather than arbitrarily picking and choosing winning companies or industries. Sandbox legislation has the potential to diversify the Nevada economy further than any appointed bureaucrat with supposed expertise in economic development may expect.

Nevada should place trust in competition and organic, bottom-up experimentation more than top-down direction. By doing this, policymakers can choose to create new knowledge rather than act only on historical data.



Previous Times Sandboxes Could Have Helped

To help contextualize the proposal for a regulatory sandbox and make it tangible, it helps to focus on a few specific use cases. Below are a few examples of companies that struggled with regulation in the past where a regulatory sandbox could have been helpful.

23andMe

- The U.S. Food and Drug Administration barred 23andMe from providing health-related genetic reports. Now 23andMe is the largest genetics community in the world. Their data allow teams to create novel medical therapies to aid in preventative healing measures. Many patients' lives could have been improved sooner if regulations had not prevented 23andMe from offering diagnoses.[94]

Airbnb

- In many cities, Airbnb was banned or heavily restricted. These barriers limited the availability of affordable options for travelers and income opportunities for hosts.[95]

Fintech Companies

- Robo-advisors Betterment and Wealthfront or peer-to-peer lenders like Lending Club often provide lower-cost alternatives to traditional financial services. Delays kept consumers from benefiting from these lower-cost services sooner.[96]

Otmo.com

- Prior to sandboxes being approved in Utah, Otmo.com was forced to shut down by the Utah Department of Insurance. Otmo is best described as a vehicle breakdown repair membership. If your vehicle broke down, Otmo would cover the costs of the repairs. Like faith-based medical cost-sharing organizations, Otmo pooled resources from members and covered out-of-pocket auto expenses. Otmo's founders recognized that warranties and insurance sometimes don't cover the full cost of auto repair, leaving car owners with surprise bills. By being a part of Otmo's membership service, customers had more peace of mind that their auto repair costs would be covered. They had customers and a product, just not permission to operate.[97]

Lyft Roadside Assistance

- Although rideshare companies Uber and Lyft have been mentioned herein, it's important to note that due to overly burdensome regulations, Nevada is the only state in the U.S. where Lyft was unable to launch their On-Demand Roadside Assistance. Multiple appeals to state and local authorities stopped this from launching.[98]

Lyft and Uber PIN Match

- This system allowed riders and drivers to be matched together in designated queue areas during high-traffic events such as Electric Daisy Carnival, Life is Beautiful, sporting events or at the airport. Other states allowed this product to launch,[99] but due to one line of code in the Nevada Revised Statutes[100] it was unable to be used in Las Vegas – the market that had the most frequent need for it.[101]

Regulatory Sandbox Examples by Industry

New technologies across many industries have the potential to be aided by regulatory sandboxes. Each industry has the potential to make Nevadans' lives easier and less costly, but these new innovations need proof of concept within the marketplace to fine-tune their approach.

Given the wide range of industries represented below, and Nevada's goal to diversify the economy, a universal regulatory sandbox, rather than any targeted industry-specific alternative, is the best policy option.

Healthcare

New research suggests that quasi-regulatory sandboxes helped increase public safety during the COVID-19 pandemic.[102] According to Jacob Sherkow of the University of Illinois College of Law, "The U.S. Food and Drug Administration's (FDA) emergency use authorizations were a type of 'regulatory sandbox' – a 'safe space' in which regulations are relaxed."[103] In addition, the FDA regulations surrounding virtual health care were relaxed and improved the availability and accessibility of health care. "Reforms to regulate virtual practice were similarly fast-tracked … [with some arguing] that relaxing regulatory barriers during the pandemic demonstrates that these requirements were unnecessary for public protection."[104]

Sandboxes have the potential to improve health and social care services and are increasingly used in healthcare regulation. According to researchers, the benefits of healthcare sandboxes include:

- Reduction in time and cost of getting products to market as delays due to less regulatory uncertainty for first-time innovators.
- Increased access to finances for innovators which is a challenge due to regulatory uncertainty.
- Increased throughput of tested and introduced products to market which are often abandoned at early stages due to associated risks and regulatory uncertainty.[105]

Artificial Intelligence

Regulatory sandboxes can play a significant role in the development of artificial intelligence (AI) technologies. AI developers can test and refine their technologies in a controlled environment under regulatory supervision, mitigating risks while fostering innovation.

Healthcare
- AI is revolutionizing the healthcare industry through predictive diagnostics and personalized medicine. These applications often involve sensitive patient data and have direct impacts on patient health. A regulatory sandbox could allow developers to test AI healthcare applications using anonymized data. This would help ensure that the AI algorithms are accurate and respectful of patient privacy.[106]

Financial Services
- AI is increasingly used in financial services for tasks such as credit scoring, fraud detection and automated investment advice. However, these uses raise concerns about financial stability, consumer protection and algorithmic fairness. A sandbox could allow these firms to test their AI models with real transactions.[107]

Data Privacy
- AI algorithms often rely on large amounts of data, raising concerns about data privacy and consent. A regulatory sandbox could allow companies to test new methods of anonymization, data minimization or differential privacy.[108]

Utilities and Energy

A sandbox specific for energy has been proposed by the Agency for the Cooperation of Energy Regulators (ACER) and the Council of European Energy Regulators (CEER).[109] The proponents hope "in the best case, the results of the sandbox – what works and what does not – can be scaled up"[110] across other EU countries. Some of the proposed and expected projects would include "enhancement of sector integration, digitalization of the energy sector, enhanced flexibility in energy/electricity systems, storage solutions, smart grids … as well as self-produced energy and energy communities."[111]

Smart Grid Technologies
- Regulatory sandboxes could allow utility companies to test and refine smart grid technologies, such as advanced metering infrastructure and demand response systems.[112]

Distributed Energy Resources (DERs)
- DERs, like solar panels, wind turbines and battery storage systems, are changing the dynamics of energy generation and distribution. Integrating these resources into the existing grid poses technical and regulatory

challenges.[113]

Energy Blockchain Applications

- Blockchain has the potential to bring significant changes to energy markets. This could enable peer-to-peer energy trading, transparent tracking of renewable energy certificates and more. These novel applications often fall outside existing regulatory frameworks.[114]

Insurance

Regulatory sandboxes could help the insurance industry and "insurtech" firms.

Peer-to-Peer (P2P) Insurance

- P2P insurance allows a group of individuals to pool their resources to insure against any specified risk. This model challenges the status quo by allowing for a more organic and direct form of group insurance that obviates the need for intermediaries, but which raises new regulatory questions.[115]

AI and Machine Learning

- Many insurance companies are exploring the use of AI for tasks ranging from underwriting and pricing to claims processing and fraud detection. The use of AI in these areas raises concerns about data privacy, algorithmic bias and explainability.[116]

Telematics Insurance

- Telematics insurance uses real-time data from connected devices (like a car's GPS system) to assess risk and pricing more accurately. This model raises concerns about data privacy and security.[117]

Blockchain Applications

- Blockchain technology has potential applications in insurance for things like smart contracts and transparent claim processing. The use of blockchain in insurance is largely uncharted territory from a regulatory perspective.[118]

On Demand Insurance

- These allow consumers to turn coverage on or off by pushing a toggle on a smartphone. This is helpful for providing coverage for expensive equipment (professional cameras, drones, laptops, etc.) only when there is a need. A sports photographer is less likely to have a camera break if it's sitting in a protective case at home instead of on the sidelines of a Raiders game.[119]

Legal

Regulatory sandboxes have played an important role in fostering innovation in the legal industry. Since adopting a Legal Innovation Sandbox in 2020, Utah has authorized 55 entities to participate[120] and seen more than 47,000 legal services provided.[121]

Legal Tech Applications

- Many companies are now offering artificial intelligence-powered legal research tools, contract analysis software and even AI legal advisors. However, these tools raise questions about accuracy, responsibility and even unauthorized practice of law.[122]

Online Legal Services

- Online platforms that offer legal advice or document drafting services can make law more accessible to the public. However, they also blur the lines of traditional legal practice and raise issues of confidentiality, accountability and quality control.[123]

Alternative Business Structures (ABS)

- Some jurisdictions are considering alternative business structures for law firms, such as allowing non-lawyer ownership or investment. These models could drive innovation and reduce costs, but they also raise ethical and regulatory questions.[124]

Casino & Gaming

Nevada's gaming industry could benefit from the use of regulatory sandboxes to test and refine new technologies, business models and increase product options for Nevadans. As reported by the Nevada Current, gaming industry experts say that "a tedious regulatory apparatus is thwarting innovation by hi-tech gambling device manufacturers … the state's process lacks the flexibility required to tweak technology without long delays."[125] Former Nevada Gov. Bob List supports the need for innovation in the Casino & Gaming industry. He says, "young people are bored by the current products that are out there on the floor."[126] Gov. Lombardo agrees that there is a "logjam" preventing the Gaming Control Board (GCB) from approving new technologies.[127]

Sports Betting Technologies

- Sports betting technologies and platforms have reinvented betting. While DraftKings has a secondary HQ in Las Vegas, the company is barred from offering its product to Nevadans. Nevada has an on-premise requirement to sign up, which differs from other states. DraftKings is a digital company and has never had a Nevada location to allow for in-person enrollment. "We've never really had that urgency to go get a license because we don't have a way for consumers to get access to the product."[128]

Virtual and Augmented Reality Gaming

- VR and AR technologies can provide immersive gaming experiences. They present new challenges in terms of fairness, security and player protection. [129]

Auto Repair and Transportation

Regulatory sandboxes could be used in the auto-repair and transportation industries to experiment with new technologies, business models and services, while ensuring they meet safety and other regulatory standards. Here are a few examples:

Advanced Auto Repair Technologies

- Auto repair shops are increasingly using advanced technologies, like AI-based diagnostic tools or augmented reality for repairs. These technologies could raise new regulatory issues, for instance, around data privacy or certification requirements.[130]

Drone Delivery Services

- Drones are being explored for delivery services, especially in remote or congested areas. However, they present new challenges for aviation safety and privacy regulations.[131]

Vehicle Towing Services

- TowPro is a mobile app that modernizes public safety towing dispatch. TowPro provides situational awareness for dispatchers, officers and towing companies.[132] TowPro is an approved current participant in Utah's universal sandbox program. This would be illegal in Nevada without first gaining approval through the NTAs arduous process.[133]

Brick & Mortar Traditional Businesses

Regulatory sandboxes can even be used for more traditional brick-and-mortar businesses to test innovative practices, technologies and business models.

Retail Stores

- Regulatory sandboxes could allow retail stores to test new technologies such as autonomous checkout systems, drone delivery or augmented reality.[134]

Construction Companies

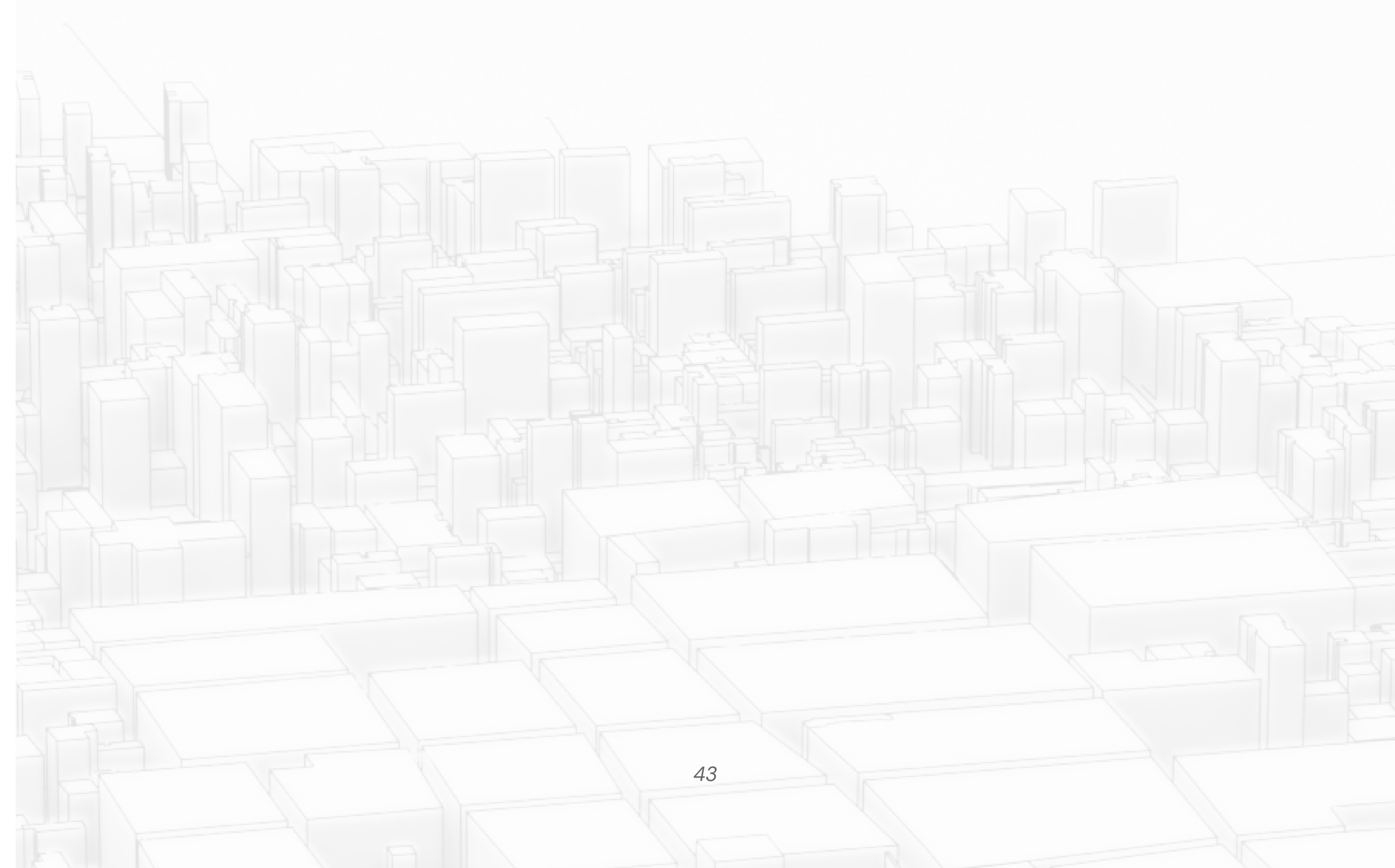
- Construction firms could experiment with innovative building techniques, such as 3D printed houses or smart building technologies.[135]

Manufacturing Firms

- Firms could experiment with advanced manufacturing techniques like AI or robotics.[136]

Agricultural Stores or Farms

- Urban vertical farming or drone-based crop monitoring systems face regulatory barriers in the current regulatory and zoning environment.[137]



Innovation Zones

History and Overview

In his January 2021 State of the State Speech, Gov. Sisolak teased a revolutionary idea: innovation zones. At the time few details were provided, but Sisolak claimed the policy proposal had the potential to attract new companies without the use of tax abatements or public financing.[138]

This promised to be a "home run" for economic development if there ever was one.

While Sisolak was the messenger, Jeff Berns, CEO of Blockchains, LLC, had the vision.[139] Berns purchased more than 67,000 acres of undeveloped desert land located in Storey County with the plans to build a community based around Blockchain technology. He envisioned an "experimental community spread over about a hundred square miles, where houses, schools, commercial districts and production studios will be built."[140] Berns also wanted all voting and storing of personal data to be done on the Ethereum blockchain network.

In Berns' own words: "This will either be the biggest thing ever, or the most spectacular crash-and -burn in the history of mankind … either way it's going to be one hell of a ride."[141]

By February 2021, a draft of the proposed authorizing legislation was released. It was immediately met with opposition[142] as critics quickly labeled it a proposal to establish a "company town."[143]

Just 2.5 months later, Sisolak reversed his support and killed the proposal. He instead commissioned a special joint committee to study the issue.[144]

By October 2021, Blockchains, LLC chose to withdraw their proposal from consideration.[145]

The Innovation Zone proposal was a bold step to drive economic diversification and innovation in Nevada. Innovation zones were defined as "a unique form of local government on private land, for the purpose of creating favorable conditions for the advancement of innovative technologies and accelerating the state's growing economic diversification and ability to attract advanced technology industries prepared to invest in the State's success."[146]

Like regulatory sandboxes, innovation zones promise to reduce barriers to new technologies and innovative businesses. They differ in that innovation zones are large-scale real estate developments centered around advancing specific technological innovations. The proposal identified eight qualifying industries:

- Blockchain
- Autonomous technology
- Internet of Things (IoT)
- Robotics
- Artificial intelligence
- Wireless technology
- Biometrics
- Renewable resources

Innovation zones also set out to solve a deeper issue: the current structure of local government in the United States is not set up to develop radical new technologies and industries. As declared within the proposed authorizing legislation:

> The traditional forms and functions of local government political subdivisions existent under Nevada statute are inadequate alone to provide the flexibility and resources conducive to making the State a leader in attracting and retaining new forms and types of businesses and fostering economic development in emerging technologies and innovative industries.[147]

Innovation zones were just as much about innovating governance systems as they were focused on innovating technology. The resolution statement in the proposed legislation acknowledged this fact:

> To accomplish the objective of diversifying the State's economy and providing for new and alternative sources of revenue for the fiscal support of the State, an alternative form of local government political subdivision with the powers and authority prescribed by this act is an appropriate means and necessary measure to further economic development within the State.[148]

How Would Innovation Zones Work

The proposed process to create an Innovation Zone was thorough. It required extensive capital and pre-planning of development.

1. To establish an "Innovation Zone" in Nevada, a company or individual would need to apply to the Governor's Office of Economic Development.
2. The proposed Zone would need to consist of at least 50,000 contiguous, undeveloped acres within a single county, owned or controlled by the applicant. The land could not be part of any pre-existing governmental division or have any permanent residents.
3. The application would need to include a detailed development plan, employment projections, proof of sufficient investment pledges ($250 million initially, $1 billion over a decade), and assurance that required public utilities and natural resources could be secured. An industry-specific tax related to the "innovative technology" involved would also be required for

the Zone's creation.

4. If approved, the Zone would gain authority like local governmental bodies and be managed by a three-member board of supervisors, appointed by the governor (two would be appointed from a list of five applicants provided by the "Innovation Zone" applicant).
5. When ready (the exact specifics of which are vague), the Zone would assume basic service responsibilities (police, fire, healthcare, etc.), gradually taking over from the existing county. Once transitioned, the Zone would no longer be subject to county ordinances.
6. Residents would vote in the surrounding county until there be at least 100 eligible voters within the Zone, at which point the Zone would organize its own independent elections. The Zone would biennially report to the Legislature, outlining its progress, investment and use of innovative technology.

Once operational, an Innovation Zone would carry the same rights, obligations and duties as any Nevada county. Its public officials would be held to the same standards as their counterparts elsewhere in the state. This also would include the courts and school districts within the Innovation Zone.

Greater regulatory and administrative freedom within these zones could further stimulate innovation and progress. Innovation zones counteract regulatory accumulation not by blanket deregulation, but by establishing controlled environments. Like regulatory sandboxes, they would envision regulation as an evolving process rather than a prescribed set of rules.

Innovation zones provide a space where regulatory structures can be flexible.

- They can adapt to keep pace with innovation.
- These zones can serve as real-world laboratories for policy experimentation as well as business innovation.
- They can generate valuable insights that can guide broader regulatory reform statewide.

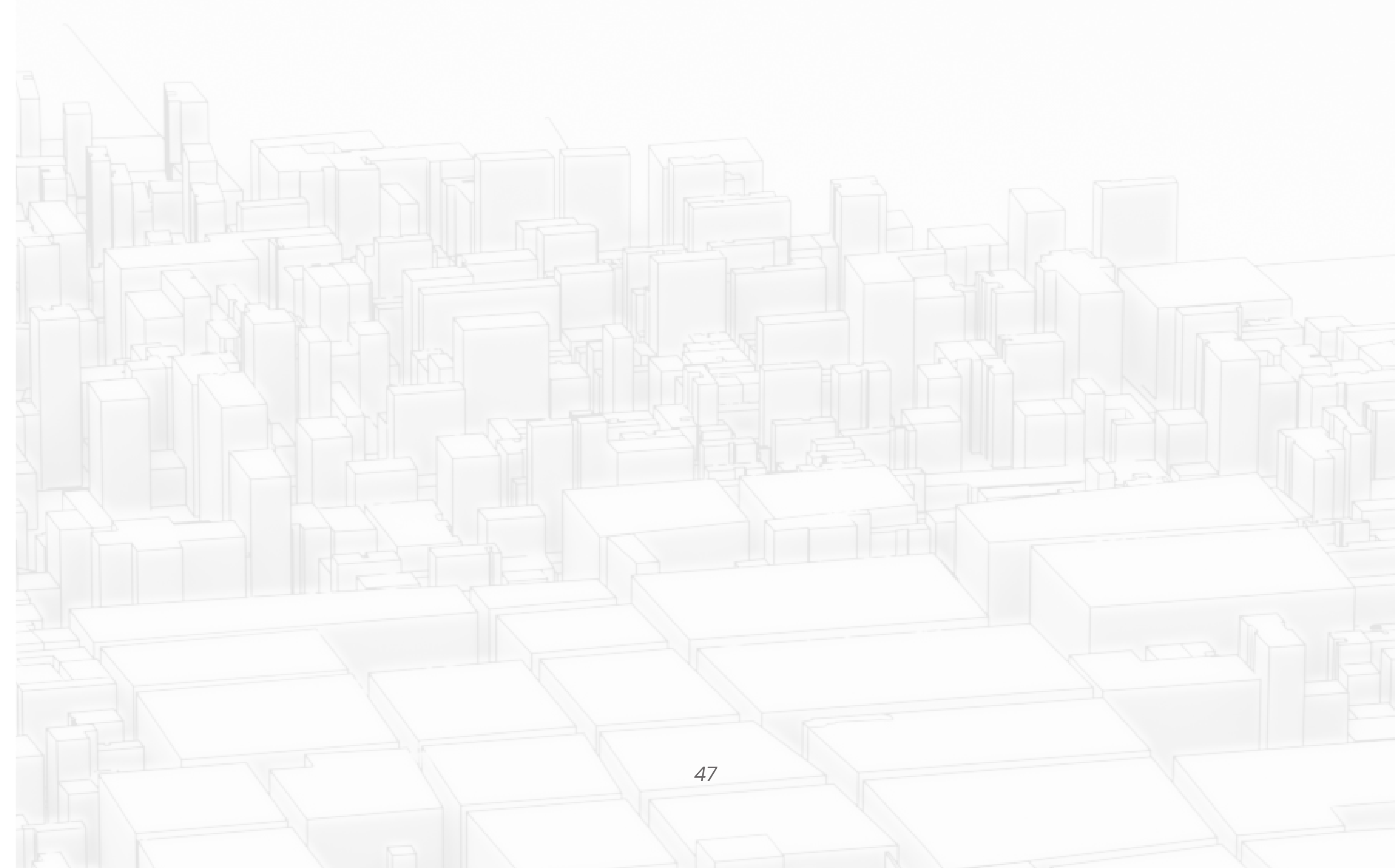
Innovation zones are, by their nature, opt-in. Nevadans who choose to live or work in the Zone freely choose to accept some risk and uncertainty to be part of a new and dynamic community. This makes the challenges of regulation much easier. When people are willing to knowingly assume risks, those risks are fully internalized into the related transactions and parties to any exchange can transact *caveat emptor*.[149]

By confining the initial testing and development of new technologies to a specific area, potential negative impacts can be more effectively managed and contained. This also provides regulators with a controlled environment with unanimous opt-in of participants to learn from the operation and adoption of these new models.

Land Availability Issues

A final problem at the core of Innovation zones is the scarcity of land open for private development throughout Nevada. Although Nevada is a large state comprising over 70 million acres, federal agencies manage and own more than 56.3 million acres-or about 80 percent-of this making it inaccessible for private development.[150]

Innovation zones would bypass many of Nevada's restrictive zoning and land-use laws giving flexibility to developers. In this way, Innovation zones could serve as an experimental ground for regulatory reform. By observing the economic and social impacts of different land-use policies within these zones, policymakers could gain valuable insights into what works and what doesn't. These benefits could then spillover to the rest of the state.



Conclusion

Peter Boettke, professor of economics at George Mason University, said, "[e]conomics is a deadly serious discipline that tackles vital questions of wealth and poverty, of life and death."[151]

Removing barriers to innovation, entrepreneurship and the freedom to build new ideas is one of the most pressing challenges facing Nevada today.

Increasing regulatory flexibility isn't only about job creation or wage growth. Those things are great, but emerging technologies can also save lives and enhance the quality of life. New ideas that can benefit lives should have space to grow. We can't say which new ideas the market will ultimately adopt, nor can we fully anticipate which regulations may get in the way. But regulatory strictures do constrain the breadth of potential innovation. This paper has highlighted numerous examples of this fact, and our community has been made worse for it.

Adaptable regulations can allow for the growth and prosperity of Nevadans. Policy solutions such as regulatory sandboxes and innovation zones are better ways to organize our world instead of static, inflexible regulations that have been on the books for decades.

The reason why our current regulations pose problems to innovation is because they are based on a fictitious static world, not on the dynamic real one.

When evaluating policy options for problems in the real world we need to ask whether our policies are allowing us to become better or maintaining the status quo. To be relevant, our policies and regulations need to deal with the fact that technology evolves, new solutions to old problems can be found and we can't predict the future. Regulations should be responsive to these changes rather than a static rulebook.

The only way for Nevadans' day-to-day lives to be made better is through trial and error. It happens through entrepreneurs and investors coming together and seeing opportunity, and then acting on that opportunity. Policymakers owe that freedom to Nevadans.

By adopting universal regulatory sandboxes in Nevada policymakers can establish themselves as forward-looking stewards of change.

Regulatory sandboxes are a responsible policy option. At a minimum, Nevada needs to expand its adoption of these policies to make them available to all industries rather than any specific targeted industry. Policymakers should do this to encourage innovation within the state, but also to remain competitive with Nevada's neighbors. By expanding regulatory sandboxes, the Nevada Legislature could make one decision that has the potential to solve hundreds of problems.

Ideally, in addition to regulatory sandboxes, the Nevada Legislature should revisit innovation zones and provide a pathway for these types of investment to occur. Policymakers should provide Nevadans with room to experiment with solutions to problems.

Nevadans deserve the freedom to try. They deserve to try to build new businesses and they deserve to be consumers of the products from new businesses.

At their core, innovation zones are private funds used to develop private lands to build a community for private citizens, who all voluntarily choose to opt-in.

Seen in this way, innovation zones aren't anything new at all. They're how the West was won.

Model Policy Language

Can be found here: https://libertas.org/model-legislation/sandbox-all-inclusive.pdf

[1] This happened on October 24, 2014, at 11:07 AM.
[2] Pierceall, Michelle Rindels and Kimberly. "Judge Puts the Kibosh on Ridesharing Uber in Nevada, for Now." Las Vegas Sun, October 24, 2014. https://lasvegassun.com/news/2014/oct/24/nevada-puts-stop-ridesharing-uber-now/.
[3] Lawrence, Geoffrey, and Cameron Belt. "The Path to Sustainable Prosperity." Nevada Policy Research Institute policy study (2013).
[4] "Vegas Cab Alternative Runs into Regulations Stifling Competition." Las Vegas Sun, March 28, 2012. https://lasvegassun.com/news/2012/mar/28/high-tech-limo-service-considers-lv-move-concerned/.
[5] Velotta, Richard N. "Uber Begins Ride-Sharing Service in Vegas, Reno." Journal, March 2, 2017. https://www.reviewjournal.com/local/local-las-vegas/uber-begins-ride-sharing-service-in-vegas-reno/.
[6] Lazo, Luz. "Uber Turns 5, Reaches 1 million Drivers and 300 Cities Worldwide. Now What?" The Washington Post, November 30, 2021. https://www.washingtonpost.com/news/dr-gridlock/wp/2015/06/04/uber-turns-5-reaches-1-million-drivers-and-300-cities-worldwide-now-what/.
[7] Fremont Street Experience. "We're Joining with Lyft to Get Guests Home Safely." Fremont Street Experience, April 20, 2023. https://vegasexperience.com/downtown-insider/joining-lyft-get-guests-home-safely/.
[8] Jaffe, Herb. "Lyft Offers Big Assist in Fight against Drunken Driving in Las Vegas." Journal, February 20, 2018. https://www.reviewjournal.com/local/local-columns/herb-jaffe/lyft-offers-big-assist-in-fight-against-drunken-driving-in-las-vegas/.
[9] "Las Vegas Coalition for Zero Fatalities Is Doubling down in 2019." Lyft Blog. Accessed May 15, 2023. https://www.lyft.com/blog/posts/las-vegas-coalition-for-zero-fatalities-is-doubling-down-in-2019.
[10] VegasNews. "Las Vegas Coalition for Zero Fatalities Gives $10,000 and Challenges 100 Local Bars to Save Lives with Lyft." VegasNews.com. November 20, 2018. https://vegasnews.com/171470/las-vegas-coalition-for-zero-fatalities-gives-10000-and-challenges-100-local-bars-to-save-lives-with-lyft.html.
[11] As of this writing the last Coalition sponsored event was New Year's Eve, 2022. See: Drummond, Cristen. "Free and Discounted Nye Rides to Deter Impaired Drivers on Las Vegas Roads." KSNV, December 30, 2022. https://news3lv.com/news/local/free-and-discounted-nye-rides-to-deter-impaired-drivers-on-las-vegas-roads.
[12] O'Kane, Sean. "I Took a Gamble by Riding in a Self-Driving Lyft in Las Vegas." The Verge, January 8, 2018. https://www.theverge.com/2018/1/8/16860590/self-driving-lyft-las-vegas-ces-2018.
[13] Lyft Twitter Status: https://twitter.com/lyft/status/1512251576647254016?lang=en
[14] Briones, Isis. "An Intergalactic Art Car Festival Is Taking over the Las Vegas Strip." Forbes, June 7, 2018. https://www.forbes.com/sites/isisbriones/2018/06/07/lyft-las-vegas-car-festival-interview/?sh=1726bdc2725c.
[15] Hawkins, Andrew J. "Uber Chopper Is a Total Marketing Gimmick That Happens to Be Stupid Fun." The Verge, January 6, 2017. https://www.theverge.com/ces/2017/1/6/14191468/uber-chopper-gimmick-flying-car-ces-2017.
[16] Torres-Cortez, Ricardo. "For One Local Family, Serving with Metro Police Is More than a Job." Las Vegas Sun, April 14, 2017. https://lasvegassun.com/news/2017/apr/14/las-vegasfamily-serving-metro-police-more-job/.
[17] "Dui Reductions." Lyft. Accessed May 15, 2023. https://www.lyft.com/impact/dui-reductions.
[18] Murez, Cara. "More evidence uber, lyft are reducing drunk driving crashes." U.S. news Accessed May 15, 2023. https://www.usnews.com/news/health-news/articles/2022-06-28/more-evidence-uber-lyft-are-reducing-drunk-driving-crashes.
[19] County Health Rankings & Roadmaps. University of Wisconsin Population Health Institute. https://www.countyhealthrankings.org/explore-health-rankings/rankings-data-documentation

[20] Ibid
[21] Stigler, George J. "The theory of economic regulation." The Bell journal of economics and management science (1971): 3-21.
[22] Kirzner, Israel M. Competition and entrepreneurship. University of Chicago press, 2015.
[23] Hayek, Frederick A. "The use of knowledge in society." In Knowledge management and organizational design, pp. 7-15. Routledge, 2009.
[24] Foss, Nicolai J., and Peter G. Klein. Organizing entrepreneurial judgment: A new approach to the firm. Cambridge University Press, 2012.
[25] McCloskey, Deirdre N., and Art Carden. Leave me alone and I'll make you rich: How the bourgeois deal enriched the world. Chicago: The University of Chicago Press, 2020.
[26] Thierer, Adam. Evasive entrepreneurs and the future of governance: How innovation improves economies and governments. Cato Institute, 2020.
[27] Thierer, Adam. "Embracing a culture of permissionless innovation." In Cato Online Forum, vol. 4. 2014.
[28] Framework for Global Electronic Commerce. 1997. https://clintonwhitehouse4.archives.gov/WH/New/Commerce/read.html
[29] Ibid
[30] Peterson, Eric. "Regulators Threaten Coinbase and Cryptocurrency Innovation." Reason.com, September 23, 2021. https://reason.com/2021/09/23/regulators-threaten-coinbase-and-cryptocurrency-innovation/.
[31] Sam Schechner. "Two Uber Executives Indicted in France." The Wall Street Journal, July 23, 2015. https://www.wsj.com/articles/uber-executives-ordered-to-stand-trial-by-french-prosecutors-1435667386.
[32] Gregg, Samuel. The Next American Economy: Nation, State, and Markets in an Uncertain World. Encounter Books, 2022. Pg. 173
[33] "Reg Stats: Regulatory Studies Center: Trachtenberg School of Public Policy & Public Administration: Columbian College of Arts & Sciences: The George Washington University." Accessed May 15, 2023. https://regulatorystudies.columbian.gwu.edu/reg-stats.
[34] "Federal Policies in Response to Declining Entrepreneurship," Congressional Budget Office, December 29, 2020. The CBO estimates are based on data from "Business Dynamics Statistics." abstract https://www.cbo.gov/publication/56906
[35] Ibid
[36] Edwards, Chris. "Entrepreneurs and Regulations: Removing State and Local Barriers to New Businesses," Policy Analysis no. 916, Cato Institute, Washington, DC, May 4, 2021. https://doi.org/10.36009/PA.916.
[37] Bentley Coffey, Patrick McLaughlin, and Pietro Peretto, "The Cumulative Cost of Regulations," Mercatus Center, April 26, 2016.
[38] Bailey, James B., and Diana W. Thomas. "Regulating away competition: The effect of regulation on entrepreneurship and employment." Journal of Regulatory Economics 52 (2017): 237-254.
[39] Op cit Bailey, James
[40] Chambers, Dustin, Patrick A. McLaughlin, and Laura Stanley. "Regulation and poverty: an empirical examination of the relationship between the incidence of federal regulation and the occurrence of poverty across the US states." Public Choice 180 (2019): 131-144.
[41] Liya Palagashvili and Paola Suarez, "Technology Startups and Industry-Specific Regulations," Fraser Institute (Canada), July 30, 2020.
[42] Fullenbaum, Richard, and Tyler Richards. "The Impact of Regulatory Growth on Operating Costs." (2020). https://www.mercatus.org/research/working-papers/impact-regulatory-growth-operating-costs
[43] Winslow, Ben, and Sheri Quinn. "Las Vegas Ups the Ante on Turf Buybacks." Deseret News, November 17, 2022. https://www.deseret.com/utah/2022/11/16/23460404/new-nevada-law-bans-nonfunctional-turf-by-2026.
[44] Poore, Colton. "Water Authority Endorses Limits to Residential Pool Size." Journal, July 21, 2022. https://www.reviewjournal.com/news/politics-and-government/clark-county/water-authority-endorses-limits-to-residential-pool-size-2611121/.
[45] RegData U.S. 4.1 User's Guide. March 15, 2022, https://quantgov-documentation.s3.amazonaws.com/regdata_4_1_user_guide.pdf
[46] https://www.quantgov.org/
[47] Nevada is ranked 25th in the Fraser Institute's Economic Freedom Rankings and Nevada ranked 3rd in Cato's more broad Freedom in the 50 States 2019 Report which considers more than just barriers to entrepreneurship.
[48] Op cit Edwards, Chris pg. 31
[49] Op cit Edwards, Chris pg. 12
[50] Op cit Edwards, Chris pg. 12

[51] "Occupation Licensing: A Framework for Policymakers." https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf
[52] Op cit Lawrence and Belt
[53] Mandelbaum, Robb. "The $83,000 Question: How Much Do Regulations Really Cost Small Businesses?" Forbes, January 25, 2017. https://www.forbes.com/sites/robbmandelbaum/2017/01/24/the-83000-question-how-much-do-regulations-really-cost-small-business/?sh=3289ed7a1b25
[54] Op cit Edwards, Chris. Pg. 18
[55] Op cit Edwards, Chris.
[56] The term regulatory sandbox is a nod to tech companies use of "sandboxes" where developers and programmers can test new ideas and changes to the businesses core product with real user data, without completely changing the business system as a whole. Intuitively, sandboxes are where temporary structures are created and imaginations are allowed to run freely with minimal potential for sustained harm.
[57] Knight, Brian R., and Trace E. Mitchell. "The sandbox paradox: Balancing the need to facilitate innovation with the risk of regulatory privilege." SCL Rev. 72 (2020): 445.
[58] Financial Conduct Authority. Project Innovate: Call for input Feedback Statement. October 2014. https://www.fca.org.uk/publication/feedback/fs-14-2.pdf
[59] Ibid pg. 5
[60] Ibid pg. 6
[61] "Financial Conduct Authority Unveils Successful Sandbox Firms on the Second Anniversary of Project Innovate." FCA, November 7, 2016. https://www.fca.org.uk/news/press-releases/financial-conduct-authority-unveils-successful-sandbox-firms-second-anniversary.
[62] "Regulatory Sandbox Accepted Firms." FCA, February 21, 2023. https://www.fca.org.uk/firms/innovation/regulatory-sandbox/accepted-firms.
[63] "Digging for Gold: How Regulatory Sandboxes Help Fintechs Raise Funding." CEPR.Org February 2, 2021.https://cepr.org/voxeu/columns/digging-gold-how-regulatory-sandboxes-help-fintechs-raise-funding
[64] "Key Data from Regulatory Sandboxes Across the Globe." The World Bank. November 1, 2020. https://www.worldbank.org/en/topic/fintech/brief/key-data-from-regulatory-sandboxes-across-the-globe
[65] "Welcome to Arizona's Regulatory Sandbox." Attorney General State of Arizona. https://www.azag.gov/sandbox
[66] "Regulatory 'Sandbox' Reforms Advance across the Nation." Mississippi Center for Public Policy, November 8, 2021. https://mspolicy.org/regulatory-sandbox-reforms-advance-across-the-nation/
[67] "HB 217: Creating a Legal Structure to Encourage Innovation." Libertas Institute. https://libertas.org/bill/hb-217-creating-a-legal-structure-to-encourage-innovation/
[68] Bill History for HB2731 Arizona Legislature 2022 https://apps.azleg.gov/BillStatus/BillOverview/77796
[69] House Bill 264 Kentucky Legislature 2023 https://apps.legislature.ky.gov/record/23RS/hb264.html
[70] Op cit Knight, Brian R., and Trace E. Mitchell
[71] "Regulatory Sandboxes in Your State." Libertas Institute. https://libertas.org/outreach/sandbox/state/
[72] See "Hobson, Anne, and Eileen Norcross. "A call for institutional analysis: practicing polycentric political economy in policy research." The Review of Austrian Economics 34, no. 3 (2021): 347-359. See also Knight, Brian. "How to build a good regulatory sandbox: Four principles to help policymakers get it right." The Bridge. The Mercatus Center at George Mason University (2019).
[73] Op cit Knight, Brian. "How to build a good regulatory sandbox: Four principles to help policymakers get it right."
[74] Holcombe, Randall G. Public policy and the quality of life: market incentives versus government planning. No. 161. Greenwood Publishing Group, 1995. Pg. 102
[75] Buchanan, James M., and Roger L. Faith. "Entrepreneurship and the Internalization of Externalities." The Journal of Law and Economics 24, no. 1 (1981): 95-111. Pg. 111
[76] See: Sutter, Daniel. "Building a safe port in the storm: Private vs. public choices in hurricane mitigation." Mercatus Policy Comment 21 (2008)., Polacek, Andy. "How do property and casualty insurers manage risk? The role of reinsurance." Chicago Fed Letter (2015)., and Baetjer Jr, Howard. "Regulating regulators: Government vs. markets." Cato J. 35 (2015): 627.
[77] See: Klein, Daniel B. "The demand for and supply of assurance." Economic Affairs 21, no. 1 (2001): 4-11., Sutter, Daniel. Quality assurance by the public sector: an analysis of building code enforcement. Fairfax, VA: Mercatus Center, George Mason University, 2008.
[78] "NSF Standards for Drinking Water Systems." https://www.Nsf.org/consumer-resources/articles/standards-water-treatment-systems
[79] This is especially true for Innovation Zones detailed below.

[80] Nevada Legislature SB161 2019 https://www.leg.state.nv.us/App/NELIS/REL/80th2019/Bill/6232/Text
[81] "Nevada Sandbox Program." Nevada Sandbox program. Accessed May 15, 2023. https://business.nv.gov/Programs/Nevada_Sandbox_Program/.
[82] Op Cit SB161 pg. 1.
[83] Op Cit Nevada Sandbox Program
[84] Annual Report on Regulatory Experimentation Program for Product Innovation. Department of Business and Industry Office of the Director. January 20, 2022. https://www.leg.state.nv.us/Division/Research/Documents/RTTL_NRS657A.530_2022.pdf
[85] Sandbox Alumni. Office of the Arizona Attorney General. https://www.azag.gov/sandbox/alumni
[86] Op cit Annual Report on Regulatory Experimentation Program for Product Innovation, pg. 7
[87] Nevada Legislature SB376 2023 https://www.leg.state.nv.us/App/NELIS/REL/82nd2023/Bill/10339/Overview
[88] Nevada Legislature SB165 2023 https://www.leg.state.nv.us/App/NELIS/REL/82nd2023/Bill/9875/Text
[89] Ibid pg. 1
[90] Ibid pgs. 1-2
[91] Op cit Annual Report on Regulatory Experimentation Program for Product Innovation, pg. 7
[92] Epstein, David. Range: Why generalists triumph in a specialized world. Penguin, 2021.
[93] Op Cit Thierer, Adam. Evasive entrepreneurs Pg. 253
[94] Wojcicki, Anne. "23andMe's CEO on the Struggle to Get over Regulatory Hurdles." Harvard Business Review, April 21, 2021. https://hbr.org/2020/09/23andmes-ceo-on-the-struggle-to-get-over-regulatory-hurdles.
[95] Guttentag, Daniel. "Regulating innovation in the collaborative economy: An examination of Airbnb's early legal issues." Collaborative economy and tourism: Perspectives, politics, policies and prospects (2017): 97-128.
[96] Unites States Government Accountability Office. "Person-To-Person Lending: New Regulatory Challenges Could Emerge as the Industry Grows." GAO-11-613, July (2011).
[97] Utah Innovates: Regulatory Frameworks for the Future. Libertas Institute. Public Policy Brief. https://libertas.org/policy-papers/regulatory_sandbox.pdf
[98] "Lyft Launches New Services for Car Owners to Make Maintaining a Car as Easy as Requesting a Ride." Lyft. Accessed May 15, 2023. https://www.lyft.com/car-owner/roadside-assistance
[99] Cradeur, Jay. "Pin Airport Pickups: What They Are and How They Work." The Rideshare Guy, July 29, 2020. https://therideshareguy.com/airport-pin-pickups/.
[100] NRS 706A.200 https://www.leg.state.nv.us/nrs/NRS-706a.html#NRS706ASec200
[101] I owe a debt of gratitude to officer Brian from the NTA for alerting me to this provision allowing Uber to avoid heavy penalties at EDC 2017. Hopefully you're relaxing on a beach somewhere.
[102] Sherkow, Jacob S., Regulatory Sandboxes and the Public Health (February 1, 2022). University of Illinois Law Review, vol. 2022, pp. 357-410, Available at SSRN: https://ssrn.com/abstract=3792217 or http://dx.doi.org/10.2139/ssrn.3792217
[103] The Regulatory Review. "Regulatory Sandboxes Slowed the Spread of Covid-19." The Regulatory Review, July 26, 2021. https://www.theregreview.org/2021/07/27/burd-regulatory-sandboxes-slowed-spread-covid-19/
[104] Leslie, Kathleen, Sophia Myles, Tracey L. Adams, Catharine Schiller, Jacob Shelley, and Sioban Nelson. "Protecting the public interest when regulating health professionals providing virtual care: a scoping review protocol." Systematic Reviews 12, no. 1 (2023): 1-5. See also: Bhatia, Abhishek, Rahul Matthan, Tarun Khanna, and Satchit Balsari. "Regulatory Sandboxes: a cure for mHealth Pilotitis?." Journal of Medical Internet Research 22, no. 9 (2020): e21276. And Walsh, C. "Regulatory Sandbox: A new tool for telehealth innovation in a post-Covid world." Columbia Business Law Review (2021).
[105] Leckenby, Emily, Dalia Dawoud, Jacoline Bouvy, and Páll Jónsson. "The sandbox approach and its potential for use in health technology assessment: A literature review." Applied Health Economics and Health Policy 19 (2021): 857-869.
[106] Goldfarb, A., and F. Teodoridis. "Why is AI adoption in health care lagging." Brookings, Available Online: https://www.brookings. edu/research/why-is-ai-adoption-in-health-care-lagging/ (2022)
[107] Barefoot, J. A. "The case for placing AI at the heart of digitally robust financial regulation." Brookings Institute, Washington, DC, USA, May 24 (2022).
[108] Gesser, Avi, Mengyi Xu, Michael Pizzi, and Jackie Dorward. "The Challenges That AI Poses for Data Minimization." Debevoise Data Blog, March 17, 2023. https://www.debevoisedatablog.com/2023/03/17/ai_data_minimization_challenges/.
[109] Sunila, Kanerva, and Ari Ekroos. "Regulating radical innovations in the EU electricity markets: time for a robust sandbox." Journal of Energy & Natural Resources Law 41, no. 1 (2023): 5-25.
[110] Op cit Sunila, Kanerva pg 16
[111] Op cit Sunila, Kanerva pg. 22 See also: International Smart Grid Action Network (ISGAN), "Smart Grid Case Studies,

Innovative Regulatory Approaches with Focus on Experimental Sandboxes 2.0 Casebook" https://www.iea-isgan.org/wp-content/uploads/2021/10/Regulatory-Sandbox-2.0_For-Publication.pdf
[112] Brown, Ashley, and Raya Slater. "Smart Grid Issues in State Law and Regulation." In, 2010.
[113] Proctor, Darrell. "Distributed Energy Resources Bring Benefits, Challenges and New Opportunities." POWER Magazine, May 5, 2020. https://www.powermag.com/distributed-energy-resources-bring-benefits-challenges-and-new-opportunities/.
[114] "Blockchain: A True Disruptor for the Energy Industry: Deloitte Us." Deloitte United States, October 23, 2020. https://www2.deloitte.com/us/en/pages/energy-and-resources/articles/blockchain-use-cases-energy-resources-industry-disruptor.html.
[115] Frankenfield, Jake. "Peer-to-Peer (P2P) Insurance: What It Is, How It Works." Investopedia, May 1, 2023. https://www.investopedia.com/terms/p/peertopeer-p2p-insurance.asp.
[116] Anthony Habayeb, Monitaur. "How AI Regulation Is Developing in the Insurance Industry." VentureBeat, December 18, 2021. https://venturebeat.com/ai/how-ai-regulation-is-developing-in-the-insurance-industry/.
[117] McDonnell, Kevin, Finbarr Murphy, Barry Sheehan, Leandro Masello, German Castignani, and Cian Ryan. "Regulatory and technical constraints: An overview of the technical possibilities and regulatory limitations of vehicle telematic data." Sensors 21, no. 10 (2021): 3517.
[118] Snape, Gia. "Is Blockchain Finally Coming for the Insurance Industry?" Insurance Business America, January 24, 2023. https://www.insurancebusinessmag.com/us/news/technology/is-blockchain-finally-coming-for-the-insurance-industry-433879.aspx.
[119] "On-Demand Insurance." NAIC. Accessed May 15, 2023. https://content.naic.org/cipr-topics/demand-insurance.
[120] "Authorized Entities." Utah Office of Legal Services Innovation. Accessed May 15, 2023. https://utahinnovationoffice.org/authorized-entities/.
[121] March 2023 Activity Report. The Office of Legal Services Innovation. https://utahinnovationoffice.org/2023/04/27/march-2023-activity-report/
[122] Coyer, Cassandre. "As Regulators Fall behind, Legal Grapples with Emerging Tech Risks." Legaltech News, October 19, 2022. https://www.law.com/legaltechnews/2022/10/19/as-regulators-fall-behind-legal-grapples-with-emerging-tech-risks/.
[123] Engstrom, David Freeman. "Rethinking the Regulation of Legal Services: What States Are Doing to Move the Needle on Access to Justice." Stanford Law School. https://law.stanford.edu/2022/05/18/rethinking-the-regulation-of-legal-services/ .
[124] Bray, Jonathon. "The ABC of ABSs (Alternative Business Structures)." Lexology, May 7, 2021. https://www.lexology.com/library/detail.aspx?g=fa337150-9cdc-41ff-b475-343bf2365c5e .
[125] Gentry, Dana. Nevada Current March 21. "Young People 'bored' by Nevada Gambling, Says Former Governor." Nevada Current, March 21, 2023. https://www.nevadacurrent.com/blog/young-people-bored-by-nevada-gambling-says-former-governor/.
[126] Ibid
[127] Ibid
[128] Candee, Adam. "Draftkings Las Vegas Office Open for Business, but Not Its Sportsbook." Legal Sports Report, January 16, 2020. https://www.legalsportsreport.com/36888/draftkings-sportsbook-las-vegas-office/.
[129] "The Knotty Problem of Applying Real-World Laws to VR and Ar." World Economic Forum. Accessed May 11, 2023. https://www.weforum.org/agenda/2021/08/real-world-laws-ar-and-vr/.
[130] Vivo, Marcela De. "Mercedes-Benz Technicians in the US Will Now Use Microsoft Hololens 2 and Augmented Reality to Fix Cars." Relay Cars https://blog.relaycars.com/augmented-reality-to-fix-cars/
[131] Gaba, Farri T., and Matthias Winkenbach. Regulatory Implications for Unmanned Aerial Vehicles in Last-Mile Delivery. 2022.
[132] "Utah Office of Regulatory Relief." business.utah.gov, May 10, 2023. https://business.utah.gov/regulatory-relief/#applicants.
[133] Op Cit Lawrence and Belt. The Path to Sustainable Prosperity pg. 37
[134] See https://standard.ai/ and https://justwalkout.com/
[135] "Legal Considerations to Entering 3D Printed Construction." NAHB. Accessed May 15, 2023. https://www.nahb.org/blog/2022/06/legal-considerations-to-entering-3d-printed-construction.
[136] "Rise of Robotics in Manufacturing Causes Plethora of Legal Issues." The Manufacturer. https://www.themanufacturer.com/articles/rise-of-robotics-in-manufacturing-causes-plethora-of-legal-issues/
[137] See https://ponixfarms.com/ and Burden, Jared. "Vertical Farming Faces Several Challenges. Zoning Law Is One of

Them." https://agfundernews.com/vertical-farmings-challenge-in-the-us-urban-zoning-law
[138] Snyder, Riley, Michelle Rindels, Megan Messerly and Tabitha Mueller. "Sisolak Sets Vision of a Future Nevada Economy in State of State Address amid Economic, Health Crisis." The Nevada Independent, December 14, 2021. https://thenevadaindependent.com/article/sisolak-sets-vision-of-a-future-nevada-economy-in-state-of-state-address-amid-economic-health-crisis.
[139] Popper, Nathaniel. "A Cryptocurrency Millionaire Wants to Build a Utopia in Nevada." The New York Times, November 1, 2018. https://www.nytimes.com/2018/11/01/technology/nevada-bitcoin-blockchain-society.html.
[140] Ibid
[141] Ibid
[142] Metz, Sam. "Storey County Passes Resolution against Innovation Zones." AP NEWS, March 3, 2021. https://apnews.com/article/legislature-nevada-blockchain-4fd5dd049e0b0ed0a69dda16d0e1f570.
[143] April Corbin Girnus, Nevada Current February 26. "Sisolak: 'It's Not a "Company Town."'" Nevada Current, March 2, 2021. https://www.nevadacurrent.com/2021/02/26/sisolak-its-not-a-company-town/.
[144] Nevada Legislature SCR11 2021 https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/8187/Text
[145] Metz, Sam. "Tech Company Asks to Withdraw Storey County 'Innovation Zone' Plan." Serving Carson City for over 150 years. Accessed May 15, 2023. https://www.nevadaappeal.com/news/2021/oct/07/tech-company-asks-withdraw-storey-county-innovatio/.
[146] Innovation Zones: Next Steps for Nevada. Proposal for a Special Joint Committee. Office of Steve Sisolak. https://gov.nv.gov/uploadedFiles/govnewnvgov/Content/News/Press/2021_docs/IZnextSteps.pdf
[147] BDR 22-1109 2.03 pg. 5 https://www.leg.state.nv.us/App/InterimCommittee/REL/Document/25663
[148] BDR 22-1109 2.04
[149] Higgs, Robert. "Banning a risky product cannot improve any consumer's welfare (properly understood), with applications to FDA testing requirements." The Review of Austrian Economics 7, no. 2 (1994): 3-20.
[150] Lang, Hannah. "States with the Most Land Owned by the Federal Government." Stacker, May 15, 2020. https://stacker.com/real-estate/states-most-land-owned-federal-government.
[151] Boettke, Peter J. "Living economics." Oakland, CA: Independent Institute (2012). Pg. 19


Nevada
Policy