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# Sunrise Analysis: Regulation of Ziplines and Canopy Tours

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A Report to the  
Governor  
and the  
Legislature of  
the State of  
Hawai'i

Report No. 12-08  
October 2012



**THE AUDITOR**  
STATE OF HAWAI'I

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## Office of the Auditor

The missions of the Office of the Auditor are assigned by the Hawai'i State Constitution (Article VII, Section 10). The primary mission is to conduct post audits of the transactions, accounts, programs, and performance of public agencies. A supplemental mission is to conduct such other investigations and prepare such additional reports as may be directed by the Legislature.

Under its assigned missions, the office conducts the following types of examinations:

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2. Management audits, which are also referred to as performance audits, examine the effectiveness of programs or the efficiency of agencies or both. These audits are also called program audits, when they focus on whether programs are attaining the objectives and results expected of them, and operations audits, when they examine how well agencies are organized and managed and how efficiently they acquire and utilize resources.
3. Sunset evaluations evaluate new professional and occupational licensing programs to determine whether the programs should be terminated, continued, or modified. These evaluations are conducted in accordance with criteria established by statute.
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**Based on 2009 insurance claims data from the company that insures 90 percent of Hawai'i's operators, ziplines had an injury/participant ratio of .00006. This ratio is lower than that of archery (.0006).**

Recommendations

Responses

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# Sunrise Analysis: Regulation of Ziplines and Canopy Tours

Report No. 12-08, October 2012

*Licensing ziplines and canopy tours adds little consumer protection*

## Call for regulation does not meet criteria

Ziplines have been used for more than 100 years to transport people and goods by use of a cable, a pulley, and gravity. More recently, the recreational industry has featured ziplines and "canopy tours" (guided transit of a forest canopy by means of ziplines) as a part of "challenge courses," adventure activities often located high up on support structures or trees. The first zipline course in Hawai'i opened in 2002. Today, there are 22 ziplines and canopy tours throughout the state.

In House Concurrent Resolution No. 118, House Draft 1, Senate Draft 1, the 2012 Legislature asked the Auditor to analyze Senate Bill No. 2433, Senate Draft 2 (S.B. No. 2433, S.D. 2) relating to challenge course technology and include an assessment of alternative forms of regulation. In our analysis of S.B. No. 2433, S.D. 2, we applied the Hawai'i Regulatory Licensing Reform Act, Chapter 26H, Hawai'i Revised Statutes, which limits regulation of professions and vocations, not businesses such as zipline and canopy tour operators. The Legislature's policy and criteria for assessing the merits of regulation require that those desiring the measure must provide the evidence supporting the case for engaging the State's policing powers to regulate.

The proposed bill would require annual inspections performed by state elevator inspectors or private inspectors certified by the Department of Labor and Industrial Relations (DLIR). Despite risks inherent in thrill rides, there was insufficient data of serious harm to the public to warrant regulation. Evidence of abusive practices was anecdotal and mostly alleged by industry members against so-called "wildcatters," facilities that are not constructed and operated per industry safety standards and do not have sufficient insurance coverage. However, we found that all 22 businesses are required by their insurance agencies to provide annual inspection reports by insurer-accredited companies designated under industry standards as qualified challenge course professionals. As a result, the industry is basically self-regulating. In addition, the DLIR estimates that it would need \$400,000 initially and \$350,000 each year to create and maintain a self-sufficient inspection and permitting program. To fund such an operation, the department would have to charge each of the 22 operators an initial licensing fee of \$18,000, as well as an annual fee of \$15,000. The bill proposes an initial and annual fee of \$100.

## Potential host agencies are a poor fit

The DLIR was selected as a potential host agency because of its existing role in administering amusement rides as part of its elevator and boiler safety program. However, the department has a multi-year inspection backlog of 5,000 elevators and is not inspecting attractions that fall under its jurisdiction for amusement rides. Clearly, it is not capable of handling its current duties let alone another inspection program, especially without significant additional resources.

Moreover, the other proposed host agency, the Department of Commerce and Consumer Affairs (DCCA), lacks the capability and authority to inspect accident sites, assessing cause and operator culpability in the event of significant accidents or fatalities. If S.B. No. 2433, S.D. 2, were enacted, it may create a false sense of safety for the public and raise the potential for liability to the State.

## Agencies' responses

The DLIR concurred with our analysis of S.B. No. 2433, S.D. 2. The DCCA opted not to comment on a draft of the sunrise report provided to it.

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# Sunrise Analysis: Regulation of Ziplines and Canopy Tours

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A Report to the  
Governor  
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Conducted by

The Auditor  
State of Hawai'i  
and  
Mr. Urs C. Bauder,  
Consultant

Submitted by

**THE AUDITOR**  
STATE OF HAWAI'I

Report No. 12-08  
October 2012

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## Foreword

This “sunrise” analysis of Senate Bill No. 2433, Senate Draft 2, assesses the regulation of ziplines and canopy tours requested by the Legislature in House Concurrent Resolution No. 118, House Draft 1, Senate Draft 1. The *Hawai‘i Regulatory Licensing Reform Act*, Chapter 26H, Hawai‘i Revised Statutes, requires the Auditor to evaluate proposals to regulate previously unregulated professions or vocations.

The analysis was performed by consultant Mr. Urs C. Bauder and presents our findings and recommendations on whether the proposed regulation is consistent with the policies in the licensing reform law and its probable effect.

We wish to express our appreciation to the Departments of Labor and Industrial Relations and Commerce and Consumer Affairs and other organizations and individuals we contacted for assistance in the course of our evaluation.

Marion M. Higa  
State Auditor

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# Table of Contents

## Chapter 1 Introduction

Background and Regulation of Ziplines and Canopy Tours .....	1
Objectives of the Analysis .....	8
Scope and Methodology .....	9

## Chapter 2 Licensing Ziplines and Canopy Tours Adds Little Consumer Protection

Summary of Findings .....	13
Call for Regulation Does Not Meet Criteria .....	13
Potential Host Agencies Are a Poor Fit.....	19
Regulation of Adventure-Type Attractions Would Be Difficult and Expensive To Implement ...	22
Conclusion.....	28
Recommendations.....	28

## Responses of the Affected Agencies ..... 29

## List of Exhibits

Exhibit 1.1	Photo of Zipline at Pi‘iholo Ranch, Maui .....	2
Exhibit 1.2	Photo of Canopy at Offenbach/Main, Germany .....	3
Exhibit 1.3	Summary of State Regulations of Ziplines and Canopy Tours.....	6
Exhibit 1.4	Map of States Regulating or Considering Regulation ..	6

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# Chapter 1

## Introduction

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This analysis is conducted according to the *Hawai‘i Regulatory Licensing Reform Act*, Chapter 26H, Hawai‘i Revised Statutes (HRS), specifically, the so-called “sunrise” provisions. Section 26H-6, HRS, requires bills seeking to regulate a previously unregulated profession or vocation to be referred to the Auditor for analysis. The Auditor must assess whether the proposed regulation is reasonably necessary to protect the health, safety, and welfare of consumers and is consistent with other regulatory policies regarding the regulation of certain professions and vocations in Section 26H-2, HRS. In addition, the Auditor must examine the probable effects of the proposed regulation and assess alternative forms of regulation.

In House Concurrent Resolution No. 118, House Draft 1, Senate Draft 1, the 2012 Legislature asked the Auditor to analyze Senate Bill No. 2433, Senate Draft 2 (S.B. No. 2433, S.D. 2) relating to challenge course technology, and include an assessment of alternative forms of regulation. The bill would require the Department of Labor and Industrial Relations (DLIR) to issue permits to zipline and canopy tour operators in the form of certificates of inspection, to perform initial and annual inspections, and to accept private inspectors who meet challenge course standards. The Legislature requested the Auditor to specifically address the issues of inspectors and inspector qualifications raised by the DLIR.

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### **Background and Regulation of Ziplines and Canopy Tours**

Ziplines have been used for more than 100 years to transport people and goods by use of a cable, a pulley, and gravity. Ziplines are also a part of challenge courses, often referred to as “ropes courses,” in combination with other elements and located high up on support structures or trees, or on the ground. These courses challenge people to confront their fears—as a physical or emotional test—or to master technical skills. Such courses are popular for personal development and team building in educational settings as well as for corporate and military training.

More recently, the recreational industry has adapted ziplines and elements of challenge courses to create adventure activities primarily for thrill and entertainment (some advertise cultural and environmental benefits) that come in a plethora of descriptions—zipline tours, canopy tours, aerial tours, treetop courses, adventure parks, and aerial trekking. These facilities are different from traditional challenge courses, because they are open to the public, built for high numbers of users, and tend to be larger. For example, zipline elements that may typically measure 150

to 1,000 feet in a challenge course would more likely run from 1,200 to more than 2,000 feet long in a recreational course. The longer the course, the faster the participant travels.

These recreational courses also pose different design and engineering challenges, giving rise to two standards-setting organizations, which provide guidance for the construction and operation of these courses. The largest standard-setting organization for ziplines and canopy tours is the Association of Challenge Course Technology (ACCT). The ACCT defines ziplines and canopy tours as:

**Zipline:** A rider attached to a pulley traverses a cable suspended between two support structures. An example is depicted in Exhibit 1.1.

**Exhibit 1.1**  
**Photo of Zipline at Pi'iholo Ranch, Maui**



Source: Pi'iholo Ranch website

**Zipline tour:** A guided aerial transit by means of a series of zipline stations.

**Canopy tour:** A guided transit of a forest canopy most commonly by means of ziplines or aerial walkways with platforms as shown in Exhibit 1.2.



**Exhibit 1.2**  
**Photo of Canopy Tour at Offenbach/Main, Germany**



Source: Creative Commons

Generally, the difference between ziplines and canopy tours is that the former involves man-made support structures and anchors, while the latter is attached to trees.

**Challenge course** is another relevant term used to cover the spectrum of attractions, including ziplines and canopy tours. The ACCT defines a challenge course as a facility with one or more elements which challenges participants as part of a supervised, educational, or recreational curriculum. The State of Massachusetts uses this definition for regulating ziplines and canopy tours.

It is difficult to determine the number of ziplines and canopy tours in the country. A zipline marketing consultant estimates as many as 13,000, mostly amateur or backyard ziplines, at camps, schools, or outdoor education programs. The number of professional or commercial operations can be more easily established. As of July 2012, according to the industry website directory *Zipline Nirvana*, there were more than 300 ziplines and canopy tours in the United States and Canada. In 2005, there were only nine such facilities. The industry is busy enhancing the customer experience as new equipment allows faster rides serving groups that are younger, older, and heavier, thus expanding the customer base.

New variations such as aerial trekking (a physical challenge obstacle-type course originating in Europe) are gaining a foothold in the U.S. market.

### ***Industry standards***

Traditionally, the place to go for thrill rides was the carnival. The National Association of Amusement Ride Safety Officers is a well-established organization offering training and certification for inspectors for this industry. Adventure-type outdoor activities are a much newer industry. This industry has two standards-setting organizations that have developed, to a degree, competing standards and accreditation programs. The ACCT is the older and larger of the two. The Professional Ropes Course Association (PRCA), has been accredited by the American National Standards Institute since 2005. However, in the area of accrediting personnel qualified to install, inspect, and train staff, the industry lacks a uniform process. Currently, accreditation is awarded to companies that are responsible for developing and training qualified challenge course professionals.

### ***Federal and state regulations***

There are no federal or Hawai'i regulations for ziplines and canopy tours. The U.S. Consumer Protection Safety Commission investigates accidents at facilities "not permanently fixed to a site," essentially fair and carnival rides. However, there may be some overlap with occupational safety laws to the extent that safety affects employees. For example, the Hawai'i Occupational Safety and Health Division of the Department of Labor and Industrial Relations investigated an accident involving two employees, one fatally injured, at a Hawai'i island zipline. The division's Boiler and Elevator Inspection Branch regulates amusement rides, defined in Section 12-250-2, Hawai'i Administrative Rules, as "a mechanically or electrically operated device designed to carry passengers in various modes and used for entertainment and amusement." According to the director, the department does not regulate ziplines or canopy tours.

### ***Ziplines and canopy tours in Hawai'i***

The first zipline course built in Hawai'i and the nation, has hosted more than 250,000 people since opening in 2002. According to the Attractions and Activities Association of Hawai'i, there are 22 known zipline and canopy tours operating in Hawai'i:

- One on O'ahu—Bay View Mini-Putt and Zipline;
- Eight on Maui—FlynnHawaiian, GoZip Hawai'i Ziplines, North Shore Zipline, Paradise Eco Adventures at Maui Dragon Fruit Farm, Pi'iholo Ranch Zipline, Maui Tropical Plantation, and Skyline Eco-Adventures (at Haleakala and Ka'anapali);

- Four on Kaua‘i—Kaua‘i Backcountry Adventures, Just Live, Outfitters Kaua‘i Ltd., Princeville Ranch; and
- Nine on Hawai‘i island—Big Island Eco Adventures, Hawai‘i Zipline Tours, LLC, Hawai‘i Forest & Trails, Honoli‘i Mountain Outpost, KapohoKine Adventures, Kohala Zipline, The Umauma Experience, Pa‘ani Ranch, and World Botanical Gardens.

Industry members we interviewed describe the business as lucrative. An average course offers about eight elements as part of its adventure tour. Attendance fluctuates seasonally, but the typical course can have 80 to 100 customers per day, with larger courses accommodating as many as 200 per day. Consequently, we estimate that around 2,000 people ride on ziplines and canopy tours each day in Hawai‘i, or more than 700,000 per year. Prices for zipline and canopy tours in Hawai‘i, advertised on the Internet, range from \$90 to \$200 per person or as low as \$30 for a single zipline ride.

According to operators we interviewed, a critical amount of business is obtained through wholesalers and hotel activity desks. These businesses are added onto the operator’s liability insurance policy. In the words of one operator, “not a single agent would sell your tour without insurance.” Before issuing a policy, insurance companies require ziplines and canopy tours to meet ACCT or PRCA standards, which include safety inspections upon installation and every year thereafter. Insurance companies accredit companies designated as qualified challenge course professionals to perform inspections according to industry standards.

### ***Regulation in other states***

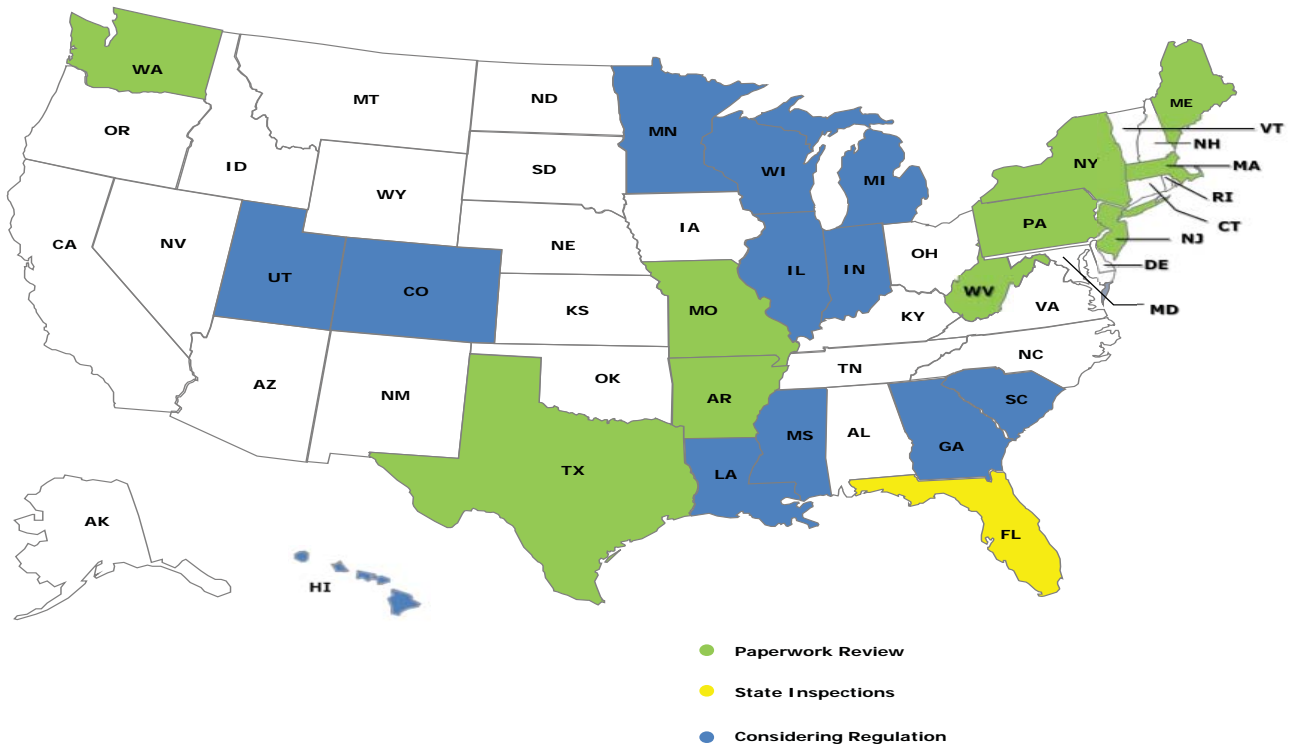
Eleven states currently regulate ziplines and canopy tours as shown in Exhibit 1.3. Of these, one (Florida) performs some or all inspections, while ten issue permits on the basis of submitted paperwork. Ziplines and canopy tours are categorized differently. Some states group them under amusement attractions or devices, in some cases as distinguished from amusement rides, which are usually defined as mechanical or electrical devices. According to an industry analysis and as shown in Exhibit 1.4 as many as 12 states, including Hawai‘i, are considering regulating ziplines.

**Exhibit 1.3**  
**Summary of State Regulations of Ziplines and Canopy Tours**

States regulating ziplines and canopy tours	Definition covers ziplines/canopy tours	State inspection	Paperwork review only	States also regulate amusement rides
Arkansas	Amusement attraction		X	X
Florida	Amusement attraction	X		X
Maine	Amusement device		X	X
Massachusetts	Challenge course		X	X
Missouri	Amusement ride		X	X
New Jersey	Amusement ride		X	X
New York	Amusement device		X	X
Pennsylvania	Amusement attraction		X	X
Texas	Amusement ride		X	X
Washington	Amusement ride		X	X
West Virginia	Ziplines/canopy courses		X	X

Source: Office of the Auditor

**Exhibit 1.4**  
**Map of States Regulating or Considering Regulation**



Source: Office of the Auditor

**Senate Bill No. 2433,  
Senate Draft 2**

In Senate Bill No. 2433, Senate Draft 2, zipline is defined as a commercial, recreational activity in which a cable or rope line suspended between support structures enables a person attached to a pulley to traverse from one point to another for the purpose of amusement, pleasure, thrill, or excitement. The bill defines canopy tours as a commercial facility not located in an amusement park or carnival that provides supervised or guided educational or recreational activity, including beams, bridges, cable traverses, climbing walls, nets, platforms, ropes, swings, towers, ziplines, and other aerial adventure courses, installed in or on trees, poles, portable structures, or buildings, or be part of self-supporting structures.

Senate Bill No. 2433, Senate Draft 2, places responsibility for regulating ziplines and canopy tours within the Department of Labor and Industrial Relations. Permits, in the form of a certificate of inspection and renewed annually, are required to legally operate a zipline or canopy tour. Fees for permits are set at \$100 per year for each operator. The bill also limits to \$100, the fee for annual inspections by DLIR inspectors and follow-up inspections in cases of standards violations or accidents.

The department must issue a permit provided the operator meets the department's requirements. Inspections must be performed within 30 days of the first time the tour is open to the public and 30 days within expiration of the annual permit. Additional surprise inspections, meaning without notice, may be conducted during normal business hours. The department is authorized to accept inspection reports by qualified challenge course professional inspectors hired by operators in lieu of performing its own inspections. However, under § -9, *Qualified challenge course professional inspectors*, these private inspectors must be certified by the department. The department must adopt rules in accordance with Chapter 91, HRS, for the safe installation, repair, maintenance, operation of ziplines and canopy tours. These rules must include certification by a qualified engineer of a zipline or canopy tour's structural integrity as a requirement for a permit.

Operators must apply for a permit on an annual basis. An application must be submitted at least 15 days before the tour is first open for public use. Renewal applications must be submitted at least 15 days before the permit is set to expire. The bill requires operators to construct and operate their facilities in accordance with accepted industry standards, have annual inspections, train employees in accordance with industry standards, and carry liability insurance. Operators must maintain records including proof of insurance, inspection reports, maintenance reports, and participant acknowledgment of risks and duties, for at least five years. Insurance coverage minimums are set at \$1 million per incident and \$2 million in the aggregate with a \$50,000 minimum for property damage.

The bill provides that operators must be liable for any injury, loss, or damage caused by a failure to follow duties and standards of care. Operators are required to report to the department serious injuries or fatalities within 24 hours. Operators are not liable for injuries, loss, or damages caused by participants who fail to comply with the provisions in § -3, *Responsibilities of participants; prohibited acts*, outlined in S.B. No. 2433, S.D. 2. This section requires participants to act as a “reasonably prudent person.” Under § -12, *Indemnification and hold harmless*, operators must indemnify and hold harmless the department, State, its officers, employees, and agents, excluding the private qualified challenge course professional inspectors, from and against all claims.

The department director, in opposing S.B. No. 2433, S.D. 2, and an almost identical House Bill No. 2060, testified that the proposed regulation was problematic and costly. According to the director, the elevator inspectors who perform inspections on amusement rides do not have the expertise to conduct zipline and canopy tour inspections and are already struggling to maintain training and certification standards. Before the Senate Ways and Means Committee, the director coupled his strong opposition to the bill with a suggestion for a sunrise analysis from our office.

### ***Impetus for the proposed regulation***

According to lawmakers and industry members, the main driver for regulation is industry concern about operators who may not adhere to industry standards and may not obtain insurance. Such operators are seen as a risk to public safety, and the reputation of the industry, and Hawai‘i as a tourist destination.

The 2012 Legislature received about 20 testimonies in support of Senate Bill No. 2433, and more than 40 testimonies for a similar measure (House Bill No. 2060), from businesses in the tourism industry, zipline and canopy tours operators, and relatives of the individual fatally injured at a Hawai‘i island zipline in 2011. There were also community members favoring regulation, but in some cases they expressed concerns not addressed by the bill, such as environmental concerns.

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### **Objectives of the Analysis**

1. Determine whether there is a reasonable need to regulate ziplines and canopy tours to protect the health, safety, and welfare of Hawaii’s public.
2. Assess the probable effects of the regulation and the appropriateness of alternative forms of regulation.

3. Make recommendations as appropriate.

## Scope and Methodology

We assessed the need to regulate ziplines and canopy tours as proposed in S.B. No. 2433, S.D. 2, in accordance with Section 26H-2, HRS, of the *Hawaii Regulatory Licensing Reform Act*. We did this despite the fact that operating ziplines and canopy tours is a business rather than a profession or vocation. The Legislature's stated policy is to regulate only if there is a need to protect consumers. Regulation is an exercise of the State's police power and should not be imposed or used lightly.

## Regulatory policy in Hawaii

Hawai'i's "sunrise" law requires the Auditor to assess new regulatory proposals that would subject unregulated professions and vocations to licensing or other regulatory controls against the regulation policies provided in Section 26H-2, HRS. These policies clearly articulate that the primary purpose of such regulation is to protect consumers, stating that:

- The State should regulate only where it is reasonably necessary to protect consumers;
- Regulation should protect the health, safety, and welfare of consumers and not the occupation;
- Regulation should be avoided if it artificially increases the costs of goods and services to consumers, unless the cost is exceeded by the potential danger to consumers;
- Regulation should be eliminated when it has no further benefit to consumers;
- Regulation should not unreasonably restrict qualified persons from entering the profession; and
- Aggregate fees for regulation and licensure must not be less than the full costs of administering the program.

We were also guided by *Questions a Legislator Should Ask*, a publication of the national Council on Licensure, Enforcement and Regulation (CLEAR) that stated that the primary guiding principle for legislators is whether the unregulated occupation presents a clear and present danger to the public's health, safety, and welfare. If it does, regulation may be necessary; if not, regulation is unnecessary and wastes taxpayers' money.

In addition to the regulatory policies in Chapter 26H, HRS, and the guidance from CLEAR, we considered other criteria for this analysis, including whether or not:

- The incidence or severity of harm based on documented evidence is sufficiently real or serious to warrant regulation;
- Any other alternatives provide sufficient protection to consumers (such as federal programs, other state laws, marketplace constraints, private action, or supervision); and
- Most other states regulate the occupation for the same reasons.

In assessing the need for regulation and the specific regulatory proposal, we placed the burden of proof on proponents of the measure to demonstrate the need for regulation. We evaluated their arguments and data against the above criteria. We examined the regulatory proposal and assessed whether the proponents provided sufficient evidence for regulation. In accordance with sunrise criteria, even if regulation *may* have *some* benefits, we recommend regulation only if it is *demonstrably* necessary to protect the public.

### ***Types of regulation***

As part of our analysis, we assessed the appropriateness of the specific regulatory approach put forth in the proposed legislation and the appropriateness of regulatory alternatives. The three approaches commonly taken to occupational regulation are:

*Licensing* is the most restrictive form of occupational regulation and confers a legal right to practice to individuals who meet certain qualifications. Penalties may be imposed on those who practice without a license. Licensing laws usually authorize a board that includes members of the profession to establish and implement rules and standards of practice.

*Certification* restricts the use of certain titles (for example, social worker) to persons who meet certain qualifications, but it does not bar others from offering such services without using the title. Certification is sometimes called title protection. Government certification should be distinguished from professional certification, or credentialing, by private organizations. For example, social workers may gain professional certification from the National Association of Social Workers.

*Registration* is used when the threat to the public's health, safety, or welfare is relatively small or when it is necessary to determine the impact of the operation of an occupation on the public. A registration



law simply requires practitioners to register their details onto the State roster so the State can keep track of practitioners. Registration can be mandatory or voluntary.

To accomplish our objectives, we reviewed literature on ziplines and canopy tours regulation and practices, including any standards promulgated by relevant national bodies, and regulation in other states. We also reviewed regulatory statutes in other states related to ziplines and canopy tours and analyzed the various forms of regulations and their provisions.

We contacted appropriate personnel at the DLIR, Department of Commerce and Consumer Affairs, members of the industry in Hawai'i, and other individuals with relevant expertise on the issues, locally and nationally. We conducted interviews in person or by telephone. We attempted to identify the costs and possible impacts of the proposed regulation. We conducted our assessment from June 2012 to August 2012.

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# Chapter 2

## Licensing Ziplines and Canopy Tours Adds Little Consumer Protection

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The *Hawai'i Regulatory Licensing Reform Act*, Chapter 26H, Hawai'i Revised Statutes (HRS), limits regulation of certain professions and vocations to situations in which it is reasonably necessary to protect the health, safety, and welfare of the consumers. In our sunrise analysis of Senate Bill No. 2433, Senate Draft 2 (S.B. No. 2433, S.D. 2), we applied the criteria outlined in Chapter 1 to the 22 known zipline and canopy tour businesses operating in Hawai'i. Based on these criteria, we found insufficient data to support the need to regulate these businesses by requiring annual inspections performed by state elevator inspectors or private inspectors certified by the Department of Labor and Industrial Relations (DLIR). Moreover, annual inspections are already required by insurers of these businesses to mitigate risks. As proposed, the bill regulating a small number of thrill-ride activities and aerial adventure courses may result in the highest licensing fee in the nation.

House Concurrent Resolution No. 118, House Draft 1, Senate Draft 1, of the 2012 legislative session asked us to also address the issue of inspector qualifications and assess alternative forms of regulation. We note a need to clarify intent on the type of regulation desired, because the required regulatory infrastructure would be difficult and expensive to implement.

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### Summary of Findings

1. The call for regulation of ziplines and canopy tours does not meet criteria.
2. Potential host agencies are a poor fit.
3. Regulation of adventure-type attractions would be difficult and expensive to implement.

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### Call for Regulation Does Not Meet Criteria

State regulatory policies and the guidelines for assessing the need for regulation require that those promoting regulation provide proof that engaging the State's policing powers is reasonably necessary to protect consumers. For our analysis, we sought documented evidence that ziplines and canopy tours pose harm to the consumer, including safety risks and abusive practices by zipline and canopy tour operators.

The criteria further direct us to be wary of signs that regulation benefits an occupation rather than the public, including evidence that regulation might discourage qualified persons from entering the field and that it might increase costs to the consumer. Finally, we are required to determine the degree to which proposed regulatory fees will provide the administering agency sufficient resources for its regulatory effort.

We found that, despite a tragic accident costing the life of a zipline course builder's employee in September 2011, there is insufficient data supporting the existence of a serious risk to the public's health, safety, and welfare to warrant regulation as proposed in S.B. No. 2433, S.D. 2. Evidence for abusive practices is slim, anecdotal, and mostly alleged by industry members against their competitors within the industry. For example, according to one legislator, industry members raised concerns about so-called "wildcatters," facilities that are not constructed and operated in accordance with industry safety standards, which may be operating either without or with insufficient insurance. Generally, we found the aerial adventure course industry, which includes ziplines and canopy tours, has a good safety record, given that certain risks are inherent in such activities.

In addition, the financial resources provided for in S.B. No. 2433, S.D. 2, specifically § -7 *inspection and permits fees*, and § -9 *qualified challenge course professional inspectors*, are insufficient for administering the regulation. Finally, massive backlogs for the inspection of elevators conducted by the DLIR Occupational Safety and Health Division's Boiler and Elevator Inspection Branch and the failure to inspect amusement attractions already under its jurisdiction, show that the department is poorly equipped to regulate an additional industry at this time. The department's inability to conduct inspections, issue permits, and certify private inspectors, if S.B. No. 2433, S.D. 2, were enacted, may create a false sense of safety for the public and raise the potential for legal liability to the State.

***Sunrise law regulates professions and vocations, not business entities***

The *Regulatory Licensing Reform Act*, Chapter 26H, HRS, provides the policies for regulating certain professions and vocations. Accordingly, the agency responsible for professional and vocational licensing within the Department of Commerce and Consumer Affairs (DCCA) regulates dentists, accountants, nurses, and optometrists among many other vocations and professions. These vocations and professions are self-regulated through a board, commission, or departmental program enforcing statutory or national industry standards for accreditation and the conduct of the licensees it oversees. Licensing professionals, such as doctors and nurses, gives individuals a legal right to practice their skills and charge fees for their services.

In contrast, zipline and canopy tour operators are in business to provide thrill-rides and entertainment. The proposed bill defines a zipline as a “commercial recreational activity” and canopy tours as a “commercial facility not located in an amusement park or carnival” as depicted in Exhibits 1.1 and 1.2. As such, ziplines and canopy tours are businesses operating in Hawai‘i, not vocations or professions and do not meet the sunrise law provisions of Section 26H-2, HRS.

***Serious risk to public is unclear***

Despite inherent risks of ziplines and canopy tours, we were unable to determine a clear and present danger to the public’s safety, health, and welfare to warrant regulation. Senate Bill No. 2433, S.D. 2, defines participants as “any person who engages in activities on a zipline or canopy tour individually or in a group activity supervised by a zipline or canopy tour operator.” Participation is entirely voluntary. Since the purpose of ziplines and canopy tours is to provide pleasure, thrill, or excitement, the perceived danger is an enticement for some to engage in these adventure-type activities. Operators require customers to acknowledge on a waiver form that they voluntarily accept certain risks inherent in these activities before being allowed to use the facilities. Proponents of the bill were unable to provide us with documented evidence of serious harm from ziplines and canopy tours in general and from operators alleged to engage in unsafe practices in particular. We are aware that there have been at least two serious injuries in recent months that occurred on ziplines in Hawai‘i, however, we were not able to determine if these injuries could have been prevented if S.B. No. 2433, S.D. 2, had been in effect.

**Onus of proof is on proponents**

According to legislators we interviewed, owners and operators of existing zipline and canopy tours in Hawai‘i are the main proponents of S.B. No. 2433, S.D. 2. One legislator indicated that industry members began to call for regulation after business dropped off following the fatal accident of a zipline employee at Honoli‘i on the island of Hawai‘i in 2011.

None of the representatives of the zipline and canopy tour industry whom we interviewed were able to provide documented evidence of harm to the public from using zipline and canopy tours other than inherent risks their customers willingly accept. Some voiced concerns about one or two competitors failing to operate to acceptable standards, but such concerns are anecdotal.

The concern about safety was triggered in part, by the fatal accident on the island of Hawai‘i in 2011. This was the first such accident in the ten-year history of zipline facilities in Hawai‘i, according to testimony by the

Activities and Attractions Association in support of S.B. 2433, S.D. 2. The DLIR's Hawai'i Occupational Safety and Health Division (HIOSH) has determined that this accident occurred when the platform tower collapsed, in part because it was anchored in unsound soil. According to HIOSH, the zipline operator did not meet the relevant industry standards to ensure the soil in which the anchors and the guy system were installed had the necessary strength to withstand twice the expected load. The industry standards applied by HIOSH is the *Challenge Course and Canopy/Zip Line Tour Standards* (Seventh Edition 2008) published by the Association for Challenge Course Technology (ACCT).

We also learned that construction of the course in question was not supervised by a licensed engineer to ensure structural soundness even though the course operator was awarded a building permit by the County of Hawai'i. We found existing law requires construction oversight by a licensed engineer may apply to the installation of commercial ziplines and canopy tours. Under Chapter 464, HRS, Professional Engineers, Architects, Surveyors, and Landscape Architects, certain structures open to the public require certification by an engineer. Section 464-5, HRS, states that: "all engineering work in which the public health and safety is involved shall be designed by and the construction supervised by a duly licensed engineer." According to the Board of Professional Engineers, Architects, Surveyors, and Landscape Architects, any structure open to the public, including structures for aerial adventure courses, would fall under this provision.

### **Proponents lack data on safety risks**

As the main promoters of the bill, industry members were unable to provide more than anecdotal evidence of serious injuries resulting from the use of zipline and canopy tours that would be less likely to occur if the industry were regulated. Nor could they provide any data on harm to the public specific to facilities alleged to operate below standard or without insurance. We received only anecdotal information alleging that one or two operators may have remained temporarily open to the public without insurance after failing required inspections. Although the HIOSH, in its investigation of the fatal accident on the island of Hawai'i, found that there had been a failure to meet certain industry standards, these findings are being contested. The builder contends that the course design and installation met industry standards. The HIOSH noted that the course was built by a company whose owner served on the committee that developed the ACCT installation and equipment standards.

The industry members we interviewed stress that participation in the activities they offer is safe. They report that bumps and bruises are the most common injuries. In fact, some of the worst injuries experienced by some operators occurred to people walking on the property. By far

the most common cause of injury is human error, primarily participants' failure to follow instructions. We interviewed representatives of six of the 22 courses operating in Hawai'i. Some who have been in business nine or more years report zero insurance claims as a result of injuries to riders. All the operators we interviewed stressed a strong commitment to safety as expressed in their expansive course maintenance programs and staff training.

In an attempt to determine the relative safety of zipline and canopy tours, we contacted a leading insurance agent who insures 90 percent of Hawai'i's operators. According to 2009 claim data from the company's clients, there were 60 claims for injuries requiring hospital care from facilities with an estimated one million customers. This translates to an injury/participant ratio of .00006. From estimates by the National Safety Council on sports and recreational injuries requiring hospital care, this ratio is lower than that of archery (.0006), snowboarding (.009) and football (.0508). These comparisons, while persuasive, must be read with reservations since they do not reflect the severity of injuries and are based on estimates for the number of participants. Also, the safety ratio for ziplines and canopy tours reflects operations covered by only one insurance agency and does not provide information on the relative safety of facilities that are insured with other agencies or operate without insurance.

### **Insurance requirements already provide a measure of safety**

Ziplines and canopy tours that carry liability insurance have been shown to offer a high level of safety for customers from harm not inherent to the activity. Customers willingly exonerate operators from the inherent risks that exist by signing a waiver before being allowed to participate. Most safety concerns are about operators who fail to meet the requirements insurers impose before issuing a policy but remain open to the public anyway. Insurers control their risk from claims by refusing to accept an operation as a client unless it has been inspected and found to meet or exceed industry standards set by the ACCT or the Professional Ropes Course Association.

The purpose of S.B. No. 2433, S.D. 2, is to establish standards and regulations for zipline and canopy tour operators. Under § -2 *zipline and canopy tour operators*, operators must ensure that ziplines and canopy tours are inspected at least annually by a qualified inspector and train employees in accordance with industry standards. Under § -1 *definitions*, challenge course standards means the current edition of the ACCT standards, or substantially equivalent standards approved by the department. Operators already meet these requirements when they obtain insurance. We found that all of the 22 courses that we identified

operating in Hawai‘i are covered through two insurance agencies. As a result, the insurance requirements already provide a measure of safety essentially identical to the requirements in the proposed regulation.

Before obtaining or renewing an insurance policy to cover a zipline or canopy tour for liability risks, insurers require owners to provide inspection reports attesting to the safety of a new installation prior to issuing a policy. Inspections are done annually when insurance policies are renewed. These inspections are carried out by companies designated under industry standards as qualified challenge course professionals and accredited by the insurer. One operator reportedly spends approximately \$5,000 annually for such inspections.

Industry members explained to us that zipline and canopy tour operators depend heavily on referrals from intermediaries such as hotel activity desks and wholesalers. To protect themselves from legal liability, these intermediaries require being added as an insured party to an operator’s insurance policy. In addition, no landowner will allow use of the property, nor will a bank provide financing, without being covered by the operator’s liability insurance.

Because insurance is necessary and requires annual inspections, the industry is basically self-regulating. Most of the 11 states with regulations for ziplines and canopy tours rely on these insurance-required inspections and the underlying industry standards as part of their oversight efforts.

### **Industry interests loom large in effort to regulate**

One reason proponents of S.B. 2433, S.D. 2, desire regulation is the concern about “borderline reckless” operators lacking a high commitment to safety. While public safety concerns are cited as the reason for the proposed regulation, we found that there are also concerns about industry reputation and competitive advantages for those who use shortcuts to avoid the very expensive safety measures, including high-quality equipment and extensive staff training (a minimum of 40 hours training is required for some staff).

The zipline and canopy tour industry is one of the fastest growing in the state. The business is described by insiders as lucrative, and proliferation of facilities may create competitive pressures on existing courses in some areas. However, regulation involving very high licensing fees may deter some from entering the market, according to industry members. Absent concrete evidence of abusive safety practices that would necessitate regulation, the benefits accruing to existing operators from regulation must be considered. As the criteria provide, the purpose of regulation is to protect the public, not the occupation, or in this case, the ziplines and canopy tour operators.



***Self-sufficiency requirement may burden licensees***

Senate Bill No. 2433, S.D. 2, provides for inspection and permit fees of \$100 initially and for each annual renewal. In addition, a maximum of \$100 is allowed for additional inspections relating to violations or accidents. However, by DLIR estimates, these amounts fall far short of the fees necessary under the policies for regulating professions or vocations. Specifically, under Section 26H-2(7), HRS, fees for licensing and regulation must not be less than the full cost of administering the program.

The department estimates that it needs \$400,000 initially and \$350,000 each year for regulating the current industry of 22 operators. To create a self-sufficient program, this translates to an initial fee per operator of about \$18,000, and \$15,000 each year thereafter, easily the highest fee in the nation. In other states, licensing fees for zipline and canopy courses range from \$25 to \$2,000, according to the Association of Challenge Course Technology.

The zipline and canopy tour operators we contacted—some of the largest in the state with 80 to well over 100 customers a day—indicated that they are able to absorb licensing fees of several thousand dollars per year.

The question whether regulation would artificially increase the cost to consumers cannot be adequately answered because any conclusion must be based on rough estimates. Based on industry information, we surmise that with 22 courses serving an average of 60 to 90 guests per day, the annual count of customers statewide could range between 480,000 and 700,000. Smaller operators would feel a greater effect since their license fee would have to be spread among fewer customers. Ticket prices advertised on the Internet range between \$90 and \$200 for zipline and canopy tours with single zipline rides as low as \$30. In most cases, the license fees would affect an increase in ticket prices by a minor percentage.

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**Potential Host Agencies Are a Poor Fit**

Legislators struggled with the choice of the agency to be assigned to regulate ziplines and canopy tours. The DLIR was selected because of the Occupational Safety and Health Division's existing role in administering amusement rides as part of its elevator and boiler safety program and its existing inspection and investigation expertise. Similarly, all other states regulating ziplines and canopy tours have paired this function with that for amusement rides.

However, the DLIR is currently incapable of carrying out its existing oversight functions related to protecting public safety. Recent measures to address this situation have been put in place, but it is unclear when the department may be in position to effectively implement safety

regulations for zipline and canopy tours. In addition, the department seems disinclined to accept provisions in S.B. No. 2433, S.D. 2, to allow the department to rely on private-sector inspections for two reasons: the department has concerns about the rigor of such inspections. Also, according to the department, a prohibition to privatize services customarily provided by civil service employees in Hawai‘i may apply and extend to the regulation of zipline and canopy tours. We also identified some flaws and omissions in the proposed bill that the Legislature should consider for revision. Problems with S.B. No. 2433, S.D. 2, are discussed later in this chapter.

Some legislators envision regulating the zipline and canopy tour industry by a DCCA program, in line with its function of licensing professions and vocations. Both agencies have expressed concerns about their ability to regulate this industry because it requires expertise that these administrative programs do not currently possess.

***DLIR is unable to carry out its current inspection duties***

The DLIR lacks the capability to ensure public safety for its existing elevator and boiler inspection program. The department has a multi-year inspection backlog of 5,000 elevators. Clearly, the department is not capable of handling its current duties, let alone another inspection program, especially without significant additional resources.

According to the department director, the 2012 Legislature in Act 103, Session Laws of Hawai‘i 2012, seeks to make the Boiler and Elevator Branch financially self-sustaining by creating the Boiler and Elevator Special Fund into which fees for inspections, permits, and examinations are deposited. The purpose of the fund is to help the department address long-term problems in both recruitment and retention of inspectors plus address the historical backlog of inspections. However, the department, currently in the process of hiring and training new inspectors, faces a long and uncertain process for catching up with its backlog and updating rules and standards. The time needed for bringing the department’s safety programs up to date is difficult to estimate but will likely take well into FY2013–14.

The skill sets required of state inspectors to regulate ziplines and canopy tours differ significantly from those required for the mechanically or electrically oriented amusement ride inspections currently performed by the department’s elevator inspectors. The department director stated that although some elevator inspectors maintain certification with the National Association of Amusement Ride Safety Officials, they would need to develop expertise based on ACCT equivalent standards for challenge course construction and operations. For example, the department anticipates a need to acquire personnel or contract for expertise in structural engineering and arboriculture. A local canopy

tour executive confirmed the potential complexity of skills needed. As an example, he said he uses five separate arborists to maintain trees and assess the soundness of trunks to attach cables at his facility to ensure they pose no safety risk to the public.

### **DLIR has not regulated attractions in its jurisdiction**

The department is not inspecting attractions such as waterslides and inflatable amusement facilities that fall under its jurisdiction for amusement rides. This is attributed to a lack of resources. These attractions, while not normally part of a carnival, fall under the definition of amusement rides because they use mechanical means to move water or air. Inflatable devices, usually jumping castles or slides, are of particular concern because they are typically used by children. If not properly secured, these rides are susceptible to being blown off their anchors by sudden gusts of wind, which could result in severe injury to occupants. Unlike the mainland U.S., Hawai‘i has had only some “close calls,” according to the department, which regards inflatable devices as a high-risk activity currently not overseen by the State.

### **Industry standards raise department concerns**

Apart from concerns about the department’s limitations, its director also raised concerns about acceptance of industry standards for regulation purposes. Senate Bill No. 2433, Senate Draft 2, identifies the voluntary industry standards developed by the ACCT or equivalent standards approved by the department. According to the director:

[The Department of Labor and Industrial Relations] would oppose adopting voluntary consensus industry standards as standards for the regulation of ziplines and canopy tours without certifications by a standards accreditation agency as this would represent undue liability for the state. Moreover, the ACCT standards are overly permissive, partially based on [Occupational Safety and Health Administration] workplace safety standards, were originally written for the educational and therapeutic market and thereby are not acceptable as public safety standards. Therefore, any standards based on ACCT standards developed for state approval for public safety purposes would require further development.

Industry’s standards and practices have also been criticized by local zipline and canopy tour operators. One owner finds fault with allowing builders and owners to inspect their own courses instead of requiring inspections by an independent party. Another criticizes the designation of Qualified Challenge Course Professional, required for performing inspections, not being awarded to individuals but rather to companies. Consequently, inspections are not necessarily performed by a person with a certificate attesting to their having met certain requirements, but by employees of an accredited company.

***Non-vocational regulation is outside DCCA's area of expertise***

During committee deliberations on S.B. No. 2433, the option of regulation through the DCCA was considered, including the use of a business license process which requires proof of liability insurance coverage before a license is granted. The advantage of this process is that initial and annual inspections that are required before an insurer issues a policy would substitute for a state inspection. Such an approach would effectively privatize the inspections, essentially reducing the regulation process to a paperwork review. However, should significant accidents or fatalities occur, the DCCA would need to have an infrastructure in place for inspecting the accident site and assessing cause and operator culpability, if appropriate.

In the event of an accident, the DCCA lacks the capability and authority to conduct investigations. Also, DCCA's process is designed to establish that an individual possesses the qualifications to provide a service, and its oversight process focuses on the conduct of licensed individuals rather than facilities. For example, DCCA licenses elevator mechanics but does not inspect elevators or any other equipment or machines. The department's investigators therefore are qualified for investigating complaints about the conduct of individuals rather than critical safety issues, hazard patterns of structures, and equipment.

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**Regulation of Adventure-Type Attractions Would Be Difficult and Expensive To Implement**

Legislators have expressed a desire to improve public safety as a reason for regulating ziplines and canopy tours. While our review concludes that available information on risks to patrons does not warrant regulation, these safety concerns are not likely to disappear. Such concerns, however, raise larger questions about how to determine when a potentially dangerous ride or activity should be regulated. Each of the available regulatory options requires the desire for safety to be balanced against the potentially significant costs of regulating a relatively small number of businesses.

***Senate Bill No. 2433, Senate Draft 2 is problematic***

The proposed bill mandates that DLIR accept inspection reports from operators of ziplines and canopy tours for use in lieu of inspections by department-employed inspectors for issuing and renewing permits. Essentially, relying on operator-provided inspection reports reduces the oversight process to reviewing licensee-provided documentary proof of compliance. Paperwork reviews for licensing require substantially fewer resources because the overseeing agency does not incur the costs for conducting its own inspections, hiring, and training qualified personnel to conduct inspections, and travel. Some states utilizing this concept employ inspectors for random inspections and accident investigations only. Testimony to the Legislature and interviews with department representatives indicate that DLIR is uncomfortable relying on private

sector inspections based on industry standards, preferring an in-house capability for regulation.

Clarification of legislative intent on this issue may be needed since the department's expressed preferences and cost estimates seem to run counter to those indicated in S.B. No. 2433, S.D. 2. The bill limits permit fees to \$100 and allows for private sector inspectors in lieu of using state employees. These provisions signal the Legislature's preference for a less costly paperwork review-type of permitting process. For example, West Virginia has privatized all routine inspections; however, this option may be subject to challenge by the public union representing DLIR inspectors in Hawai'i. We also found some problems with provisions and omissions in the bill relating to definitions, enforcement, and records.

### **Model law relies on privatized inspections**

Senate Bill No. 2433, Senate Draft 2, was modeled after a law passed by the West Virginia Legislature in 2011. According to the director of consumer safety, who oversees the consumer safety section in the division of labor of the West Virginia Department of Commerce, related rules were issued effective July 1, 2012, when oversight of the program began. Thus, too little time has passed to allow us to assess its effectiveness or any unintended effects. Although the West Virginia Consumer Safety Section has responsibilities similar to DLIR's Boiler and Elevator Inspection Branch, its approach to regulation differs significantly.

Since 2005, West Virginia has moved from in-house inspections to an almost totally privatized system, employing only two public inspectors for random inspections and investigations of reportable accidents—related to elevators, boilers, and amusement rides in addition to ziplines and canopy tours. In addition to ziplines and canopy tours, West Virginia also regulates water slides, white water rafting, climbing walls, go-carts, and inflatable devices. According to the director of consumer safety, regulating ziplines and canopy tours did not require any additional resources beyond a \$100 annual license fee. West Virginia has 12 licensees for ziplines and canopy tours—routine workload additions are limited to paperwork reviews of required documentation for licensure and accrediting private-sector inspectors.

### **Court decision may limit third-party inspections**

Most of the 11 states that regulate ziplines and canopy tours accept private-sector inspection reports as proof of compliance for licensing purposes. However, the DLIR raised the concern that use of private-sector inspectors may be subject to legal challenges. In 1997, the Hawai'i Supreme Court in *Konno v. County of Hawai'i*, adopted a

“nature of services” test in banning privatization of services customarily and historically provided by civil servants. The department explains that the decision precludes following other states in privatizing inspection services by the Boiler and Elevator Inspection Branch. The department thinks it possible that using private-sector inspectors for ziplines and canopy tours might be contested on the basis of that court decision. The scope of this review did not include an assessment of the likelihood of such a challenge.

While the Legislature clearly sought to allow the department to use the self-regulating aspects of the industry, DLIR expressed a preference for more costly inspections through department-employed personnel. Department representatives have expressed concerns about the rigor of both the inspections by private-sector personnel and the industry standards for ziplines and canopy tours, advocating that an in-house inspection capability is essential to ensure public safety and limit the potential for liability exposure to the State. This position must be weighed, however, against the fact that at least ten of the 11 states regulating ziplines and canopy tours issue licenses on the basis of inspections performed by third parties. The Legislature may need to clarify its preference: the DLIR preferred approach or emulating the private-sector based model used in most other states.

### **Definitions differing from industry definitions may confuse**

The definition of canopy tours in S.B. No. 2433, S.D. 2, is problematic because it deviates from the industry definition for canopy tours. This is likely to confuse or be misinterpreted, and may place facilities not intended to be regulated under state oversight. Canopy tours are defined by the ACCT as “guided aerial exploration or transit of the forest canopy, most commonly by means of a series of ziplines or walkways.” The ACCT also contends that elements outside this definition should not be regulated as canopy tours. In general, what ziplines and canopy tours have in common is that their activities occur above ground.

The proposed bill’s definition of canopy tours includes a list of ten specified elements, including climbing walls, swings, and towers. The definition also includes support structures such as poles, portable structures, buildings, and self-supporting structures in addition to trees. As written, the definition may place freestanding climbing walls that are not part of an adventure park and charge user fees, then subject to regulation.

The issue of defining ziplines and canopy tours for regulatory purposes presents a challenge as similar definitions are interpreted differently in different states. Mechanical or electrical rides generally are defined as amusement rides, some limited to those found in carnivals and fairs.

To regulate non-mechanical or electrical amusements, some states have added a definition for amusement attraction, structure, or device to establish regulatory jurisdiction over non-mechanical amusement devices. Ziplines and canopy tours regulations fall under the definition of amusement attraction in five of the 11 regulating states. They are covered under amusement rides in four states with challenge courses, and zipline and canopy tours applied in one state each. These definitions are generally interpreted to include ziplines and canopy tours but also cover additional activities that may not be carnival rides, such as climbing walls, bungee jumps, slides, white-water rafting, and water-walking balls. Consequently, most states that regulate ziplines and canopy tours also regulate other amusement attractions.

The ACCT suggests that the best description for the spectrum of attractions that include ziplines and canopy tours would be “aerial adventure courses,” which could be defined as a “combination of rope course elements, zip lines, climbs and traverses” that may use belays, nets, or water to protect guests from falls. The State of Massachusetts uses the broader definition of challenge course to regulate ziplines and canopy tours: “A facility or facilities not located in an amusement park or carnival consisting of one or more elements that challenge participants as part of a supervised educational/recreational curriculum.”

Senate Bill No. 2433, Senate Draft 2, requires the DLIR to “issue a permit in the form of a certificate of inspection.” The wording was adopted from the West Virginia law. This is criticized by the department as confusing and inviting potential liability, as the department currently does not certify any of its inspections. This wording becomes even more problematic if the department were to use the authority to accept inspections by third parties, provided for in the bill.

### **Bill lacks penalties and an appeals process**

Requiring a business to be licensed or registered and comply with specified requirements is less likely to be effective if the regulatory agency lacks the authority to impose penalties on owners who operate an unsafe facility or fail to meet regulatory requirements. Most states that regulate ziplines and canopy tours provide for criminal or civil sanctions for non-compliance with the law, ranging from closing an attraction to imposing fines of up to \$5,000 for repeat violators. Some states assign misdemeanor or felony status to violations. There are no such penalties for non-compliance, nor provisions for a complaints and appeals process to challenge regulatory decisions in S.B. No. 2433, S.D. 2. The department cites the massive backlogs in existing due-process programs, in some cases delaying decisions for years, as a reason for desiring separate complaints and appeals provisions in S.B. No. 2433, S.D. 2.

### **Training records are critical to regulators**

Most accidents on ziplines and canopy tours are due to human error, mainly customers failing to follow instructions but also staff errors. The most effective means to ensure a safe experience for participants is thorough staff training. Industry standards require up to 80 hours of training for fully certified staff and more for course managers. Consequently, documentation of training is an important part of assessing the safety of an operation. While S.B. No. 2433, S.D. 2, requires operators to train their employees according to industry standards, there are no provisions requiring operators to maintain staff training records, nor authorizing the department to access such records at any reasonable time. A requirement to maintain training records and make them available for inspection is common in other states' regulations.

### **After-the-fact inspection provision may be a safety risk**

Senate Bill No. 2433, S.D. 2, provides in § -5(c) that:

Each zipline or canopy tour shall be inspected on at least an annual basis. The department shall perform an inspection of the zipline or canopy tour: (1) within thirty days of the first time the zipline is made available to the public use.

Essentially, this seems to allow a new zipline or canopy tour to do business for a month before its facilities are inspected. Since S.B. No. 2433, S.D. 2, mandates DLIR to issue a permit upon demonstrating compliance with requirements, and also prohibits operators from doing business without a permit, § -5(c) is at best confusing and at worst inviting an interpretation that could place customers at risk. Other state laws, in Massachusetts, Pennsylvania, and Washington, are quite clear that new operations must be inspected by a qualified inspector before being allowed to operate.

### ***Options are wrought with problems***

The two options—licensure and registration—available to the Legislature for the regulation of ziplines and canopy tours are problematic. Licensure is the more stringent form of regulation. Usually an operating license is granted upon proof that the operation meets standards assuring public health, safety, and welfare. Registration is less restrictive, primarily allowing the State to keep track of an operation. It may be coupled with a mandate to adhere to specified minimum standards of conduct or operation. Regulation by licensure affords the State a greater degree of control over the enforcement of standards but may increase its exposure to liability claims if the processes are found to be flawed. Registration, on the other hand, relies on the rigor of an industry's self-regulatory processes. According to the DLIR, self-regulation does not



provide an appropriate level of safety. The department has referred to the approach as “hoodwinking the public.”

The most obvious model for licensure in Hawai‘i is the existing oversight of elevators and amusement rides administered by DLIR. According to the department, acquiring necessary administrative and in-house inspection capability for ziplines and canopy tours would incur significant costs and involve massive fees to be charged to licensees. Legislators, aware of this dilemma, have sought less costly alternatives, which is evident in S.B. No. 2433, S.D. 2, which authorizes DLIR to use insurer-required inspections in lieu of performing its own inspections.

All but one (Florida) of the 11 states that regulate ziplines and canopy tours rely on a paper review process and do not perform routine inspections with state-employed inspectors. Some states in fact do not employ any inspectors for amusement rides and attractions, while others use in-house inspectors for surprise inspections and accident investigations only. This approach requires fewer resources than in-house inspections. For example, West Virginia, was able to add these responsibilities without any additional resources other than the \$100 permit fee from each licensee.

The DLIR believes industry inspections lack rigor, and a paper review would provide a false sense of security to the public. The department envisions a process involving its own inspection capability with the associated costs as the price to safeguard public safety. However, as previously discussed, the department is unable to handle its current inspection responsibilities and is not capable of handling another inspection program.

Registration has the advantage of limited government involvement and lower cost but relies on an industry’s self-regulating process. Generally, regulation by mandatory registration forbids operating a facility unless the operator has registered with the State. This may be paired with a requirement for filing insurance certificates or inspection reports with the regulatory agency. Some record-keeping requirements, such as staff training, may also be required. In addition, enforcement provisions may be included for unregistered or non-compliant operators.

The State of Texas uses such a model. Texas regulates amusement rides, which it interprets as any commercial amusement larger than playground equipment, including ziplines and canopy tours. Administered by the Texas Department of Insurance, regulation is entirely based on insurance-required safety inspections and insurance certificates, including allowing insurers to accredit inspectors. Enforcement is left to state and local law officials. The Texas insurance department does not employ any inspectors. Alaska uses a similar model for regulating ski lifts.

***Other states regulate a spectrum of attractions***

We found that most states that regulate ziplines and canopy tours also regulate other commercial attractions that are not mechanical carnival rides. These attractions usually fall under a definition for amusement attraction, structure, or device as opposed to a mechanical ride. Among those are climbing walls, white water rafting, bungee jumping (with or without a hoist) and “anything larger than a playground facility.” The regulatory agencies involved can proactively assess the safety of any commercial thrill ride or activity that meets the definition, even if not specifically named in the law. Such a capability exists in Hawai‘i only for mechanical or electrical amusement rides. In addition, passing S.B. No. 2433, S.D. 2, would make Hawai‘i the only state among the 11 regulating ziplines and canopy tours to regulate these types of challenge courses exclusively.

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**Conclusion**

As outlined in chapter 1, the policies and criteria set by the Legislature for assessing the merits of regulation require that those desiring the measure must provide the evidence supporting the case for engaging the State’s policing powers to regulate. Such evidence must document that serious harm has occurred to members of the public and will continue unless the individuals involved in the profession, vocation, or occupation are regulated. Since proponents have not provided any evidence of harm or abusive practices, we conclude that the necessity for regulating zipline and canopy tour operators has not been established. To the extent these businesses operating in Hawai‘i must be inspected annually based on industry standards for insurance purposes, safety measures are already in place to protect the public. In addition, due to a backlog of safety inspections, lack of expertise and resources, the Department of Labor and Industrial Relations is ill equipped to conduct inspections, issue permits, and certify private inspectors. If S.B. No. 2433, S.D. 2, were enacted, it may create a false sense of safety for the public and raise the potential for liability to the State.

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**Recommendations**

1. Senate Bill No. 2433, Senate Draft 2, of the 2012 legislative session as proposed should not be enacted.
2. The Legislature should approach regulating adventure activities with caution and weigh carefully the issues of potential state legal liability, regulatory agency competence, and resources needed.
3. The Legislature should consider the risk to public safety of all adventure activities and attractions in determining any need for regulation.

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## Responses of the Affected Agencies

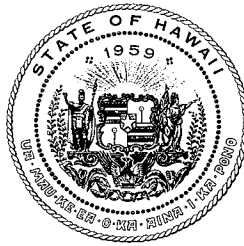
### **Comments on Agency Responses**

We transmitted a draft of this report to the Departments of Labor and Industrial Relations and Commerce and Consumer Affairs on October 1, 2012. A copy of the transmittal letter to the Department of Labor and Industrial Relations is included as Attachment 1, and its response is included as Attachment 2. The Department of Commerce and Consumer Affairs opted not to respond.

The department generally agreed with our findings, conclusions and recommendations, on the regulation proposed by Senate Bill No. 2433, Senate Draft 2.

STATE OF HAWAII  
OFFICE OF THE AUDITOR

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October 1, 2012

**COPY**

The Honorable Dwight Takamine  
Director  
Department of Labor and Industrial Relations  
Keelikolani Building  
830 Punchbowl Street  
Honolulu, Hawai'i 96813

Dear Director Takamine:

Enclosed for your information are three copies, numbered 6 to 8, of our confidential draft report, *Sunrise Analysis: Regulation of Ziplines and Canopy Tours*. We ask that you telephone us by Wednesday, October 3, 2012, on whether or not you intend to comment on our recommendations. If you wish your comments to be included in the report, please submit them no later than Wednesday, October 10, 2012.

The Department of Commerce and Consumer Affairs, Governor, and presiding officers of the two houses of the Legislature have also been provided copies of this confidential draft report.

Since this report is not in final form and changes may be made to it, access to the report should be restricted to those assisting you in preparing your response. Public release of the report will be made solely by our office and only after the report is published in its final form.

Sincerely,

Marion M. Higa  
State Auditor

Enclosures



STATE OF HAWAII  
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

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HONOLULU, HAWAII 96813  
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October 8, 2012

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OFC. OF THE AUDITOR  
STATE OF HAWAII

Ms. Marion M. Higa  
State Auditor  
Office of the Auditor  
465 South King Street, Room 500  
Honolulu, HI 96813-2917

Dear Ms. Higa:

Thank you for the opportunity to respond to the draft ***Sunrise Analysis: Regulation of Ziplines and Canopy Tours***. We appreciate the work that you and your office have done to review the Department of Labor and Industrial Relations (DLIR) potential regulation of zipline and canopy tours.

The DLIR essentially concurs with the analysis provided by your office in the draft. The draft outlines several areas of serious concern to the DLIR if it was charged with the responsibility to regulate this industry. The Boiler and Elevator Branch continues to struggle to meet its current statutory responsibilities. With the enactment of Act 103 (Session Laws of Hawaii, 2012) the Legislature has supplied the department with the tools to effectively carry out its mission to ensure public safety for boilers and especially elevators.

Currently, the implementation of Act 103 remains amongst the DLIR's highest priorities and we are appreciative of the recognition in your draft report for the daunting challenges in operationalizing the objectives of Act 103. Adding additional responsibilities to the Branch at this time would impede our efforts to accomplish our statutory obligations in a complex situation that presents us with a demanding set of circumstances.

The DLIR values the public safety responsibilities entrusted to the department and will continue to strive to improve fulfilling that trust to ensure public safety.

Thank you for your work on this comprehensive and thorough Report.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Dwight Y. Takamine". The signature is fluid and cursive, with a long horizontal stroke at the end.

Dwight Y. Takamine