

**LANDSCAPE ARCHITECTURE
LICENSURE HANDBOOK:**
*Ensuring Safe, Healthy, and Resilient
Natural and Built Environments*

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1. EXECUTIVE SUMMARY

The purpose of this document is to educate and describe the importance and necessity of landscape architecture licensure through findings of empirical evidence of harm caused by incompetent landscape architectural work, which includes everything from the nuisance of repeated minor injuries all the way up to such things as permanent injury and death. In pursuit of that purpose, this document explains the justifications and reasons why landscape architecture is a licensed profession in all 50 states. This document also particularly illustrates the profession's direct impact on the health, safety, and welfare of the public. Numerous past reviews of the subject have found that regulation of the profession of landscape architecture is indeed necessary to protect the public from both physical and monetary harm—irreparable harm in some cases. Other reviews of the profession have highlighted the need for a comprehensive presentation of the evidence related to the potential for harm in landscape architecture practice. This document will attempt to fulfill that need.

This report provides concrete evidence that incompetent design and inadequate oversight of landscape architectural work has in fact caused serious, irreparable harm and specifically focuses on multiple incidents of injury that could have been prevented through competent landscape architectural practice. And because this document's approach is empirical—presenting dozens of actual cases in many areas of landscape architecture practice to establish the reality of the potential for harm—it does not rely on an extensive description of the scope of landscape architecture to merely imply that there is a *potential* for harm. On the contrary, where past discussions may have shown the mere potential for harm (and may have required a technical understanding of the profession), this report provides *actual* evidence of harm.

A fundamental understanding of the scope of the profession is necessary to understand landscape architecture licensure. Landscape architects steward the natural and built environment and are responsible for decisions that affect the condition of vital infrastructure, rights-of-way, and significant private and public site development.

Landscape architects design, document, and supervise the construction of hundreds of millions of dollars in infrastructure and site improvements each year, providing the potential for significant monetary harm. When performed by negligent, incompetent, or unethical practitioners, landscape architecture has the potential to cause serious personal injuries. Of near equal importance, poor landscape architecture practices can also seriously impair the value and use of property.

To illustrate those harms, this report includes examples of physical injury, property damage, and financial injury from across the spectrum of landscape architecture practice. Physical injuries have resulted from poor design of public plazas, outdoor lighting, parking lots, drainage features, streetscapes, outdoor stairs, decks, walls, earthworks, recreational facilities, playgrounds, plantings, fencing, and many other aspects of landscape architecture. Many injuries encountered in the research for this report are examples of irreparable harm caused by incompetent practice of landscape architecture, including fatal and permanently disabling hazards in designs and specifications. Those examples alone provide compelling evidence of the profession's impact on the public's health, safety, and welfare.

There is a strong but erroneous association of landscape architects with trades that are not, and should not be, subject to occupational regulation, such as garden or planting designers.

A number of professions are substantially and directly responsible for the orderly development of society's physical, legal, and financial infrastructure. Many, perhaps most, of those professions are subject to state licensure and regulation. In doing so, state policy makers are attempting to foster and ensure minimally competent, safe planning of the built environment. In these professions (unlike some others), certain economic influences must be subordinate to basic standards for public health, safety, and welfare—which subordination is best accomplished through licensure.

If there were no licensure for landscape architecture services, nonpractitioner clients would have no reliable source of information addressing practitioner knowledge of health and safety issues, regulatory compliance, avoidance of property damage, and other skills generally expected of a design professional.

The very nature of a technical profession makes it impracticable for consumers and the public who need these services to accurately assess the relative competence of an individual or firm.

Professional regulation is therefore needed to establish a comprehensive, enforceable set of practice standards and to prevent negligence and incompetence. Other methods of consumer and public protection are potentially unavailing for injured victims and no deterrent for negligent design professionals.

Without regulatory standards, consumers cannot rely on a professional to produce design and technical documentation that meets minimum standards of competence. In those cases, bargaining is risky, and various legal doctrines may deflect legal responsibility where a competent design professional should have identified techniques to mitigate physical hazards and other project liabilities in accordance with local, state, and federal regulations. State licensure of landscape architects allows consumers to manage their risk, particularly in the interest of reducing exposure for premises liability from hazardous and defective design. State licensing statutes have developed with the specific intent of preventing malpractice, offering protection for both consumers of landscape architecture services and the general public that frequently uses the built works of landscape architecture.

Landscape architecture is one of the forty most commonly regulated professions; statutes regulating architecture, landscape architecture, and engineering collectively enhance the safety of the built environment as a place for people to live, work, and move about. The practice and profession of landscape architecture is a distinct, mature member of the design professions, and its regulation is an essential component of statutory schemes to protect public health, safety, and welfare. Accordingly, the logical course of action—and the one best positioned to protect the public's interests—is to maintain and preserve licensure for landscape architects across the country.

The 2017 version of the original 2003 publication of this document addresses the current regulatory environment and includes new sections to provide a more comprehensive picture of the policy rationales supporting licensure. While the update largely retains the organization and content of the original version, many of the previous examples of real-world harm have been updated with new, more recent examples.

2. INTRODUCTION

The profession of landscape architecture shares with the other design professions of architecture and engineering a significant impact on public health, safety, and welfare. In projects designed for both public and private clients, architecture, landscape architecture, and engineering involve large construction investments and heavy use by the public.

Landscape architects often play a lead role in large public and private projects: They make critical recommendations and decisions affecting the sufficiency of these projects to meet public health and safety standards. For example, poorly specified paving surfaces and pedestrian amenities can expose public and private property owners to litigation and civil liability claims when injuries occur, and documented cases of injury and property damage have been linked to design flaws in a variety of landscape architectural plans.

Protecting the public health, safety, and welfare thus requires the direct involvement of landscape architects in state regulatory programs. Routinely, landscape architects both generate and check plans that control pedestrian, bicycle, and vehicular traffic; stabilize disturbed ground; avoid wasteful applications of water in the landscape; mitigate criminal activity; preserve land values; provide accessibility as required by the Americans with Disabilities Act, among others; specify playground equipment; and create safe places for recreation, civic events, transportation, offices, houses, and other public and private needs.

Landscape architects and other design professionals are subject to professional regulation because of the substantial risks of physical injury, harm to property, and potential for significant economic damage. One court characterized landscape architecture as “a profession embracing a field of highly technical and specialized knowledge and activities between the professions of architecture and engineering.”¹ As this document will show, regulation of landscape architecture is warranted to reduce risks

¹ *Matter of Geiffert v. Mealey*, 59 N.E.2d 415 (N.Y. App. 1941); *Paterson v. University of State of New York*, 252 N.Y.S.2d 452, 454-55 (N.Y. App. 1964) (“The practice of landscape architecture is recognized as the practice of a profession in this state and elsewhere as a profession embracing a field of highly technical and specialized knowledge and activities ‘between the professions of architecture and engineering.’ Such a determination is in line with the necessity for recognizing in the law, as in our universities, new professions which have been called into being to take care of modern requirements of our expanding civilization.”).

to a wide range of legitimate public health, safety, and welfare interests. Evidence presented in the past supporting architecture, landscape architecture, and engineering regulation has been found lacking by some regulatory authorities because of the supposed lack of evidence linking competence with state licensure requirements.² Therefore, it is necessary to consider the following factors relating to the burden of proof as it affects design professionals:

- Regulatory boards composed of licensed professionals and the public view their essential role as prevention of harm, and many boards focus on testing candidates for entry into the profession and educating members regarding professional standards.³
- Architects, landscape architects, and engineers routinely testify as expert witnesses in design negligence cases, but typically agree not to publicly discuss each case.
- Especially in the vast majority of cases that settle, design negligence litigation is extremely difficult to research due to the lack of publication and specific subject matter indexing of trial court cases.
- Most members of the design professions do not possess specific knowledge of legal research.

In addition to these general considerations, the profession of landscape architecture lacks the immediate recognition of the other design professions, and the evidence supporting regulation typically receives a level of scrutiny that these allied professions do not experience in equivalent reviews—despite the close similarities between other design professions and landscape architecture.

² See, e.g., Vermont, Landscape Architects: Second Sunrise Application, *Summary of Testimony and Evidence Preliminary Assessment on Request for Licensure*, Docket No. LA-01-0706, December 2006, at 2. Colorado Department of Regulatory Agencies, *Sunset Review of the Board of Architect Examiners*, 1980, at 1 (Examining the need for regulation in the first Sunset Review of the architecture statute in Colorado, the Department of Regulatory Agencies noted, “[M]embers of the profession and board members believe that significant public harm could occur if buildings were improperly designed. Our review agrees with this position but suggests there is *no clear evidence* that the existing licensing mechanism assures safe building design.”) (emphasis added).

³ See Colorado State Board of Examiners of Architects, *Position Statement for the Joint Legislative Sunrise/Sunset Review Committee*, Sept. 14, 1987, at 4 (“The purposes of the architectural registration board are to ensure that only persons with at least a minimum level of competence are permitted to practice and that practicing architects act according to professional standards of conduct.”).

As a result, the merits of landscape architecture regulation can be overwhelmed by an inaccurate and incomplete characterization of the profession and the potential for harm in its practice.

This report specifically focuses on a pattern of legal harm that has arisen on projects within the scope of landscape architecture. All potential harms are a valid and important regulatory concern, but the findings in this document provide actual evidence of harm, particularly irreparable harm—permanent injury and death—caused by negligent landscape architectural work. In other words, this report serves to document actual harms in cases that were previously treated only hypothetically in support of landscape architecture.⁴

After reviewing and considering these actual examples of physical and monetary harm, and with a better understanding of the scope and breadth of the profession, legislators, regulators, policy makers, and others will better be able to determine foreseeable harms that justify licensure.

2.1 SCOPE OF RESEARCH

In pursuit of the purposes of this document, the author has conducted a non-comprehensive, yet broad, national search of reported legal cases regarding the profession of landscape architecture and other related examples that fall within the scope of the profession. The scope of research was not intended to be exhaustive; rather, the legal cases and other materials referenced for this project are simply representative of a much larger body of data. That is, the use of nationally available legal records is intended to provide a representative sampling of landscape architecture issues on a national scale. Due to varying state rules concerning publication of cases, as well as varying market sizes for legal information and the development of common law in each state, a large number of cases from some states are more readily available and are in greater quantity, while very few cases from some other states are readily available to researchers.

⁴ Compare Legislative Auditor of the State of Hawaii, *Sunset Evaluation Report of Professional Engineers, Architects, Surveyors, and Landscape Architects*, Report No. 83-5, Jan. 1983, at 27 (“Potential dangers by this type of landscape architecture include... shock hazard resulting from improperly designed outdoor lighting systems...”) with *Batz v. First Florida Development, Inc.*, *infra* note 122 (landscape architect sued for negligence after outdoor lighting fatally electrocuted property owner).

The basic assumption of this study is that litigated cases are by their nature only one indicator of the potential for harm in the practice of a profession. Litigation covers a fraction of the actual number of incidents of harm caused by negligence. One primary difficulty with collecting evidence of harmful landscape architecture practice in any comprehensive manner is that settlement tends to abruptly end a large number of negligence cases, especially before they even distill into litigation. Of those disputes that do result in litigation, only a fraction reach trial and a verdict. And of the fraction of cases that go to trial, only a fraction of that number are appealed to a level where the case is likely to be published,⁵ and some other small fraction of cases are reported through an electronic database or one of the few published trial court reports. Each of these considerations represents an inherent limitation on the ability to gather representative cases of harm. Nevertheless, the cases and examples that are included in this document present a compelling case. Further, where research led to additional sources of information, such as trial court records, statutes, legal and economic scholarship, news stories, administrative reports, and other relevant materials, those sources are also incorporated into these findings.

In all of these sources, the goal was to provide a context for and examples of the real impact of landscape architecture on public health, safety, and welfare.

⁵ Most legal claims are resolved without ever reaching trial. See U.S. District Courts—Civil Cases Terminated, by Nature of Suit and Action Taken—During the 12-month Period Ending March 31, 2015, *Table C-4—U.S. District Courts—Civil Federal Judicial Caseload Statistics*, <http://www.uscourts.gov/statistics/table/c-4/federal-judicial-caseload-statistics/2015/03/31>. (Percent of federal civil cases reaching trial is under 5 percent.)

2.2 THE PROFESSION OF LANDSCAPE ARCHITECTURE

Landscape architects have been pivotal figures in many of this country's most valued places, as well as in extensive amounts, though less publicized, of physical development frequently encountered and used by the public.⁶ With design training and expertise relating to environmental and built systems, landscape architects have played leading roles in the development of places ranging from urban public plazas to national forests. Some of the most iconic and well-used spaces in the United States bear the indelible mark of landscape architects: New York's Central Park, the World War II Memorial⁷, the 9/11 Memorial⁸, the Washington Monument⁹, and the United States Capitol¹⁰ grounds, to name only a few.¹¹ The profession's reach is broad, yet it is specific enough that citizens very likely encounter the work of a landscape architect on a daily basis.¹²

⁶ See, e.g., Landscape Performance Series, <http://landscapeperformance.org/> (last visited Dec. 4, 2016).

⁷ Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2016-17 Edition*, Landscape Architects, on the Internet at <http://www.bls.gov/ooh/architecture-and-engineering/landscape-architects.htm> (visited November 28, 2016) (Noting that "Landscape architects and architects sometimes work together to create historic memorials, such as the World War II memorial in Washington, D.C.").

⁸ See National 9/11 Memorial, PWP Landscape Architecture, <http://www.pwpla.com/national-911-memorial> (last visited Dec. 4, 2016).

⁹ See *National Park Service Cultural Landscapes Inventory*, Washington Monument Grounds, Washington Monument, 2009. (Noting that prominent landscape architecture firm, Olin Partnership, produced a plan for the Washington Monument that "won the National Park Service's design competition on December 19, 2001, and was approved by the Fine Arts Commission on December 20, 2001.")

¹⁰ See Architect of the Capitol, *Frederick Law Olmsted*, <https://www.aoc.gov/capitol-grounds/frederick-law-olmsted> (last visited Dec. 4, 2016) (Noting that "In 1873, Congress commissioned Olmsted to design the enlarged grounds of the U.S. Capitol. After careful study, in June 1874 he presented a plan for a sophisticated landscape that highlighted the building it surrounded. His symmetrical design incorporated park-like edging, low walls, careful placement of trees and simple shrubs, and a series of curved walkways that afforded attractive views of the Capitol.").

¹¹ See also Park History, Central Park Conservancy, <http://www.centralparknyc.org/visit/park-history.html>; Memorial Architects, 9/11 Memorial & Museum, <https://www.911memorial.org/memorial-architects>; 2008 Professional Awards, General Design Honor Award, American Society of Landscape Architects, <https://www.asla.org/awards/2008/08winners/236.html>; <https://www.aoc.gov/capitol-grounds/about-grounds>.

¹² See *Occupational Outlook Handbook*, *supra* note 7 (Noting that landscape architects design public parks, playgrounds, residential areas, college campuses, and public spaces. They also plan the locations of buildings, roads, walkways, and plant material within these environments. "Landscape architects design these areas so that they are not only easy to use but also harmonious with the natural environment.").

The profession of landscape architecture continues to grow in its role as a design and management lead in public spaces, corridor planning, highway enhancement, land management, site development, urban parks, and other technically sophisticated projects.¹³ Today, landscape architectural plans are implemented at all scales of human intervention. Landscape architects specify techniques to build open-air facilities such as street and entry monuments, amphitheaters, campus grounds, commercial districts, urban plazas, parks, and parking lots. On a regional and national scale, landscape architects apply special technical knowledge to create plans that mitigate wildfire, flooding, erosion, pollutant impacts, crime, traffic conflicts, and an assortment of other environmental hazards. And although landscape architects also engage in the design of plant materials for residential and commercial landscapes, that is only one aspect of a profession that produces construction documents and applies technical knowledge with many applications such as those listed above. Landscape architects are increasingly called upon by all levels of government, as well as the private sector, to develop plans that conform to standards for public health, safety, and welfare.

Landscape architects are design professionals, comparable to other regulated professions that produce construction plans and bid documents, perform certification and management of built improvements, and bear responsibility for identifying and remedying public health, safety, and welfare issues before harm is done. The profession is advancing rapidly, with prominent roles, including the lead role, in projects that directly affect the built environment and the public. As the practice of landscape architecture has crossed a threshold where its regulation is linked in multiple practice areas to the maintenance of public health, safety, and welfare, all 50 states have now exercised jurisdiction to provide oversight for competence and professional standards.

¹³ See *Lake LBJ Municipal District v. Bennett Coulson*, 839 S.W.2d 880, 885 (Tex. App. 1992) (engineering firm designed drainage improvements based on a master plan by a landscape architecture firm).

2.3 ALLIED PROFESSIONS

Landscape architects have been long recognized as comparable in training and technical products to the “allied professions” of architecture and engineering.¹⁴ Known collectively as the design professions, architecture, landscape architecture, and engineering are often grouped together in statutes relating to the construction industry.¹⁵

As a result, currently in nearly 20 states, landscape architects are also grouped with architects and engineers for the purposes of professional regulation, participating in a joint board with one or both of the other design professions.

Perhaps more accurately, and certainly for the purposes of regulatory analysis, landscape architecture can be accurately described as a design discipline occupying the field between architecture and engineering—with significant overlaps on both sides.¹⁶

The competence of landscape architects to practice technical services overlapping with the scope of other design professions has been examined and upheld in a variety of contexts. Landscape architects are, for example, educated in and qualified to practice certain tasks that may also be considered civil engineering.¹⁷ Preparing “project site plans and land subdivision plans, including layout, stormwater management,

¹⁴ See, e.g., *Charles Harper Co. v. DeWitt Mortgage & Realty Co.*, 300 P. 839 (Cal. App. 1931) (landscape architects and engineers considered experts on grading and subsidence hazards).

¹⁵ 42 Pa. Cons. Stat. § 7502(e) defines a “construction design professional” as an “architect, professional engineer, landscape architect, or land surveyor licensed by the appropriate state board”; *Cowart v. Crown American Properties*, 572 S.E.2d 706 (Ga. App. 2002) (“construction design professional means any person who is an architect, professional engineer, landscape architect, geologist, or land surveyor who has been issued a license...”).

¹⁶ *Matter of Geiffert v. Mealey*, *supra* note 1.

¹⁷ See, e.g., Cornell University, Department of Landscape Architecture Undergraduate Degree Course Requirements: LA 3160 Site Engineering—course exposes students to site grading and its relationship to best environmental practices and deals with earthwork estimating, stormwater management, site surveys, and site layout; http://courses.cornell.edu/preview_program.php?catoid=18&poid=7875.

grading, and erosion control” are all civil engineering tasks that are also within the practice of landscape architecture according to existing laws.¹⁸ The corollary is also true: Certain tasks most commonly associated with landscape architects may also be practiced by architects and civil engineers.¹⁹

Despite these similarities, public misperceptions about the capabilities and professional role of landscape architects are common. There is a strong but erroneous association of landscape architects with trades that are not, and should not be, subject to occupational regulation, such as garden or planting designers. In contrast, architects, for example, are rarely mistaken for the contractors that install their designs. The allied professions of architecture and engineering have immediate associations with large, technically complex projects, while for some reason landscape architects are popularly associated with projects smaller in scale and dominated by a concern for aesthetics, which is simply not an accurate association. In fact, relatively few people realize the extent to which the functioning environment they encounter on a day-to-day basis is affected by the work of landscape architects.

¹⁸ See Georgia Attorney General, Opinion of Feb. 21, 1990 (“project site plans and land subdivision plans, including layout, stormwater management, grading, and erosion and sediment control.... I have concluded these areas fall within the licensed practice of landscape architecture”); see also, Texas Administrative Code 22-1-3-A, Rule §3.5 (the practice of landscape architecture includes “the analysis and design of...site landscape grading and drainage; systems for landscape erosion and sediment control;...and the collaboration of Landscape Architects with other professionals in the design of roads, bridges, and structures regarding the functional, environmental, and aesthetic requirements of the areas in which they are to be placed”); Deputy Attorney General of the State of Idaho, Opinion letter of Mar. 15, 1994 (landscape architecture practice includes grading and drainage); *Widner v. Fountain*, et al., No. 5:95-CV-452-4 (M.D.Ga., 1996), Consent Judgment (“There can be no bright line as to what extent a professional engineer or a landscape architect can perform the duties of preparing drainage studies in site plan work”); *Lake LBJ Municipal District v. Bennett Coulson*, *infra* note 13.

¹⁹ See *Ward v. Shoney's, Inc.*, *infra* note 296 (civil engineer serving in landscape architecture function: designing walkways, taking into account the manner in which pedestrians will use those walkways); see also, Pennsylvania State Board of Landscape Architecture, *Response to Act 142*, *infra* note 162 (architect specified plants in school site design).

Recognition of the technical expertise of landscape architects is only the first step in creating public policy that effectively addresses the profession. In Colorado, the state's Department of Regulatory Agencies (DORA) acknowledged that landscape architects have technical knowledge similar to both architects and engineers, yet until somewhat recently, it supported the state excluding landscape architects from professional regulation, stating: "Boards such as architects, professional engineers, and professional land surveyors are already regulating much of the environment of the landscape architect and further regulation may be unwarranted."²⁰ However, as Colorado eventually realized, that conclusion is neither logical nor based on the reality of the industries in which these professions overlap. Furthermore, DORA recently conducted a "sunset review" of Colorado's landscape architecture licensing act, in which DORA recommended that landscape architects continue to be licensed, in part because licensure protects consumers and government entities rely on the licensure standards to ensure landscape architects are competent to work on public projects.²¹

Indeed, the mere presence of overlap between landscape architecture and other regulated professions does not guarantee the adequacy of protections for the public. For many projects, the scope of a landscape architect's training and experience relative to other design professionals provides the greatest base of knowledge to develop safe and functional plans.²² Furthermore, professional overlap demonstrates that landscape architects possess and contribute technical skills in areas that are already deemed appropriate for regulation to protect the public health, safety, and welfare. In other words, the encroachment of architecture and engineering regulation into the discipline of landscape architecture is, in fact, a clear sign that regulation of the landscape architecture profession is warranted. Because of concerns for liability, the function of producing plans and management strategies for grading, drainage, erosion control, site assessments, site layout, and other design services is often reserved for licensed professionals. Prior to licensure, landscape architects were

²⁰ Colorado Department of Regulatory Agencies, *Sunrise Review of Landscape Architects*, 1995, at 18.

²¹ Colorado Department of Regulatory Agencies, *2016 Sunset Review: Landscape Architects Professional Licensing Act*, October 14, 2016, at 19.

²² Colorado Department of Regulatory Agencies, *Sunrise Review of Animal Chiropractors*, 2002, at 21 ("Supervision is typically required to ensure that a task is performed in a satisfactory manner. This requires that the supervisor possess superior knowledge or skills than the supervisee.").

excluded from a role in the construction industry for which they were qualified and for which regulators recognize the benefit of competition among the design professions.²³

The reality is, overlapping professional regulation produces a healthy and open market for technical design services. Many times landscape architects and engineers may produce the same functional result in the grading of a detention basin of a given volume, but the landscape architect will produce a design more visually attractive to clients and the public. (Although, interestingly, many civil engineering curricula at some accredited universities do not even include courses on grading and drainage; whereas most accredited landscape architecture programs include at least one technical course on grading and drainage.²⁴ Furthermore, the nationally administered Landscape Architecture Registration Exam contains an entire four-hour section on Grading, Drainage, and Construction Documentation where prospective landscape architects are tested on their competency in and knowledge of grading, stormwater management, erosion and sediment control, and construction documentation.²⁵) Architects, on the other hand, may produce designs for outdoor spaces that are visually appealing, but may lack experience with specific functional considerations for grading, drainage, and other matters in which landscape architects specialize. An audit of landscape architecture regulation by an agency in South Carolina found that overlap in professional jurisdiction was incidental to practice in these fields but

²³ See, e.g., Colorado Department of Regulatory Agencies, *Sunset Review of the State Board of Architect Examiners*, 1997, at 18 (“Architects receive training in a variety of subjects, engineering, environment, construction management, design, geology, and landscaping. Knowledge and expertise in these areas are necessary to protect the public when constructing a major project. Architects are very qualified generalists to oversee projects and ensure the public is protected. However, it is presumptuous and self-serving to maintain architects are the only occupation or profession capable of this service.”).

²⁴ Compare *Accreditation Standards For First-Professional Programs in Landscape Architecture*, Landscape Architectural Accreditation Board, March 2016, at 11 (specifically requiring “construction technology and site engineering” to be included in curriculum), with *Criteria for Accrediting Engineering Programs*, Accreditation for Engineering and Technology, November 2014, at 9 (requiring that civil engineering programs must generally “prepare graduates to apply knowledge of mathematics through differential equations, calculus-based physics, chemistry, and at least one additional area of basic science, consistent with the program educational objectives.”).

²⁵ Council of Landscape Architecture Registration Boards, *Landscape Architecture Registration Examination (L.A.R.E.) Orientation Guide*, December 2014, at 8.

did not consider this a reason to deregulate landscape architecture.²⁶

As articulated in legal decisions directly addressing the issue, the concurrent jurisdiction of state boards in the design professions is an inappropriate mechanism to engage in anticompetitive behavior.²⁷ Nevertheless, legitimate regulation often results in the regulated profession asserting a “monopoly of professional authority,” with which it attempts to thwart potential competition.²⁸ As one study noted regarding the abuse of regulation in disputes over professional jurisdiction: “These disputes are ordinarily resolved when the most economically powerful group wins, which ordinarily results in a seriously inefficient division of labor.... The result stunts the advancement of both professions and deprives consumers of the benefit of more efficient organization of professional services.”²⁹ Confusion or conflict stemming from overlap in the design professions is an issue that may be addressed in legislative drafting, but agitation between competitors is not relevant in an objective analysis of the need for landscape architecture regulation. Though architects, engineers, and even unlicensed professionals may provide competence in certain areas of landscape architecture practice, this is typically the subject of special exemptions in a licensing statute. Even

²⁶ Legislative Audit Committee of the State of South Carolina, *Sunset Review of the Landscape Architects Board of Registration*, July 12, 1979, at 26 (“Professional jurisdiction between architects, landscape architects, land surveyors, and civil engineers may overlap at times since these other professions can perform landscape architectural work when such work is incidental to their practice.”); see also, State of Hawaii, Landscape Architecture Subcommittee, *Sunset Evaluation Report of Professional Engineers, Architects, Surveyors, and Landscape Architects, Minority Reports*, Jan. 1983, at 10 (“Because a portion of a professional field includes activities not deemed appropriate for licensing by the lawmakers, it does not follow that the entire field should be ‘deregistered.’”); *Sunset Review of the Board of Architect Examiners*, 1980, *supra* note 2, at 2 (“The scope of practice for an architect and for an engineer are virtually indistinguishable. While the marketplace has helped draw lines between these two professions, by law their practice is interchangeable.”).

²⁷ *Schmidt v. Kansas Bd. of Technical Professions*, 21 P.3d 542 (Kan. 2001) (engineer cannot be barred from sealing building plans even if this constitutes the practice of architecture); Attorney General of Florida, Opinion AGO 94-105, Dec. 15, 1995 (state law allows architects and engineers to practice in areas within their respective fields, regardless of overlap with landscape architecture); Attorney General of North Carolina, Opinion, 49 N.C.A.G. 58 (1989) (town cannot permit engineers to exclude landscape architects from practice of producing construction documents).

²⁸ Mark J. Green, ed., *The Closed Enterprise System*, 1971, at 545. In an example affecting landscape architects, professional engineers in Vermont, through both their private society and state board, proposed that landscape architects should not be able to engage in any design work that affects that public health, safety, or welfare, including numerous areas overlapping engineering practice.

²⁹ *Id.*

under the highly questionable pretense that the gap between the built environments created by architecture practice and engineering practice is insignificant, the overlapping technical role of landscape architects, architects, and engineers is best addressed by placing all these related professions in a comparable regulatory status.³⁰

Issues related to overlapping jurisdiction may be resolved through formal and informal understandings between boards,³¹ or a formal system of exemptions in areas of overlap,³² or through consolidation of regulatory authority under a unified board.³³ Alternately, judicial intervention may be necessary if professional regulation is being used to restrain legitimate competition.³⁴ In any event, the overlap of landscape architecture practice with other regulation and certain unregulated services does not preclude appropriate regulation of landscape architects. That is, concurrent jurisdiction is a practical reality that does not inhibit effective regulation of the design professions.

³⁰ Colorado Department of Regulatory Agencies, *Sunrise Report on Discrimination in Mortgage Lending*, 1994, at 30 (the Department recommended that a “regulatory gap” in state law should be closed and that the state should “put all lenders on a level regulatory playing field”); see also Colorado Department of Regulatory Agencies, *Sunset Review of State Board of Examiners of Architects*, 1987, at 6 (architect licensing is justified by the reduced competition for engineers that would result if architecture were not a licensed profession).

³¹ See N.C. Sess. Laws 2001-496, § 12.1(b) (“The State Board of Examiners for Engineers and Surveyors and Board of Landscape Architects shall agree to a memorandum of understanding that identifies areas of overlap or common practice and plans for resolving disputes concerning standards of practice, qualifications, and jurisdiction regarding the identified areas of overlap.”).

³² See, e.g., Wyo. Stat. § 33-4-117 (landscape architecture licensing exemptions).

³³ The following states include landscape architects in a board with either all or some combination of architects, engineers, and other technical professions: Alaska, Arizona, Arkansas, Hawaii, Indiana, Kansas, Maine, Minnesota, Missouri, Montana, New Jersey, Ohio, Oklahoma, South Dakota, Tennessee, Texas, Virginia, Wisconsin, and Wyoming. All other states that regulate landscape architecture do so with a stand-alone board for the profession.

³⁴ See *Schmidt v. Kansas Bd. of Technical Professions*, *supra* note 27.

3. LICENSURE PROTECTS THE PUBLIC HEALTH, SAFETY, and WELFARE

The critical question posed and answered by this document is whether and to what extent the practice of landscape architecture affects the public health, safety, and welfare. This document particularly addresses whether the practice poses a cognizable and foreseeable risk of harm to the public's health, safety, and welfare. Before answering that question, or at least before addressing the evidence relevant to the question, we must address various fundamental concepts that provide the background knowledge needed to answer the question. That background information is the subject of this section of the document.

Naturally, any discussion about whether a given activity affects public health, safety, and welfare must begin with a description or definition of what exactly constitutes public health, safety, and welfare. Where do those magic words come from? And why are they so pertinent to the question of regulating any activity? The following subsection will attempt to address and answer those questions.

Additionally, previous evaluations of the need for landscape architecture regulation have lacked all or most of the evidence contained in this report. However, with this evidence casting actual light on the potential for harm, this section also reviews the following important criteria, which are necessary to evaluate the need for regulation:

- Does regulation address an easily recognizable potential for harm?
- Does regulation promote the public interest?
- Can regulation be accomplished without undue cost or impact to other professions?

In addressing those criteria, along with an overview of the concept of public health, safety, and welfare, this section provides a framework that the remaining sections of this document build upon to answer the critical question asked by this report.

3.1 STATES' POWER TO REGULATE THE PUBLIC HEALTH, SAFETY, AND WELFARE

As a general matter, the sovereign power of each state in the United States means that the state has the capacity to enact laws that regulate certain behavior and maintain order within the states. State sovereignty originates in the 10th Amendment to the United States Constitution, which provides that “The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.”³⁵ This inherent power held by the States is most often referred to as the “police power,” which “has its origin and is confined to, and deals with, that class of legislation which has to do with the public health, public welfare, public morals, and public safety.”³⁶ Despite its name, this power is not necessarily that states have the right or power to create police forces; rather it is that states have the power to make laws, rules, and regulations that are to preserve and protect the public health, safety, and welfare. Indeed, “the protection of individual rights is at the core of a state’s police power.”³⁷ Perhaps more succinctly, “The term ‘police power,’ as understood in American constitutional law, means simply the power to impose such restrictions upon private rights as are practically necessary for the general welfare of all.”³⁸

In light of that general description of the concept, a question arises: What types of restrictions are permissible under a state’s lawful exercise of the police power? In partial answer of that question, the United States Supreme Court articulated the following:

To justify the state in thus interposing its authority in behalf of the public, it must appear...that the interests of the public generally...require such interference; and...that the means are reasonably necessary for the accomplishment of the purpose, and not unduly oppressive upon individuals.³⁹

³⁵ U.S. Const. amend X.

³⁶ *Markley v. State*, 31 Ohio C.C. (N.S.) 225, 227 (Ohio C.C. 1909).

³⁷ Randy E. Barnett, *The Proper Scope of Police Power*, 79 Notre Dame L. Rev. 429–495 (2004).

³⁸ *State v. Cromwell*, 72 N.D. 565, 575, 9 N.W.2d 914, 919 (1943).

³⁹ *Lanton v. Steele*, 152 U.S. 133, 137 (1894).

A state permissibly exercises its police power when it enacts regulations that protect the public's interests, and does so in a manner that is reasonably necessary and not overly oppressive. Similarly, another court stated that a state's exercise of police power should "be confined to such restrictions and burdens as are necessary to promote the public welfare, or, in other words to prevent the infliction of a public injury."⁴⁰ But, those statements beg a more refined version of our previous question: What types of restrictions promote the public welfare and prevent injury?

As this section and remaining sections in this document point out, the types of restrictions that promote the public welfare and prevent injury are those that address easily recognizable potential for harm, those that promote the public interest, and those that protect the public without unduly affecting other professions. Each of those considerations is addressed more fully in the remaining subsections of this section. In the end, it will be shown that licensure of landscape architects adequately achieves each of those goals.

⁴⁰ *State v. Chicago, M. & St. P. Ry. Co.*, 71 N.W. 400, 385 (Minn. 1897).

3.2 LICENSURE ADDRESSES AN EASILY RECOGNIZABLE POTENTIAL FOR HARM

Licensure of landscape architects addresses an easily recognizable potential for harm as it ensures competent practitioners are the ones providing design services within the scope of services offered by landscape architects. The scope of landscape architectural services—whether performed by licensed professionals or not—is directly positioned to jeopardize public health, safety, and welfare. There is much cognizable harm within the scope of a landscape architect’s technical knowledge and professional responsibility. For example, serious injury can result from improper design of substandard drainage and grading plans, incompetent siting of excavations and structures, improper selection of materials and specifications, and a wide variety of other decisions that are typically within the scope of the landscape architect.

This real potential for incompetent practice is evidenced by examples in this report such as incompetent designs of outdoor features being associated with all variety of injuries, from minor slip and fall injuries to permanent disability and death. Even in accidents where the victim’s health is likely to be fully restored, the evidence confirms that property owners may be sued and face serious liability any time defective landscape architectural plans are implemented. As noted by one of the nation’s largest professional insurance providers for landscape architects, “I find that the most outrageous [negligence] claims have occurred from practitioners that do not possess the training and experience. Absent registration and regulation, anyone can call themselves a landscape architect regardless of formal education, training, and experience.”⁴¹

Importantly, the licensing of professions such as attorneys or land surveyors makes clear that hazards to life and limb are not the only appropriate measure of risk to public health, safety, and welfare.⁴² Risk of monetary loss is certainly another factor weighing in favor of licensure—and regulations addressing that risk are also a permissible exercise of

⁴¹ Jim Leatzow, Letter to the Colorado Department of Regulatory Agencies, June 26, 2001.

⁴² *Sunset Evaluation Report*, *supra* note 4, at 24 (land surveyors are regulated because “a significant potential for harm exists...the primary danger is extended and costly litigation and severe financial loss...”).

a state's police power.⁴³ For landscape architecture, as with engineering and architecture, consumer protection through some form of regulation is appropriate given the involvement of design professionals in projects involving significant real estate and financial assets. In fact, the cost of repairing faulty design work can easily exceed the initial cost of a project,⁴⁴ and difficulty in restoring a property to its prior or intended condition may also amount to irreparable harm in some cases.⁴⁵

Landscape architecture regulation has previously been justified based on, at least in part, inferences of the potential for harm. These prospective assessments of the potential for harm are as valid a justification for regulation as an assessment devoted solely to actual harms that have already occurred. In fact, for the purpose of protecting public health, safety, and welfare, it is likely that the prospective scope of harm is the better measure of the need for regulation. Furthermore, the limited research for this report does not in any way disaffirm the importance of prospective harms as benchmarks in the need for regulation. For example, park shelters were not directly researched and are not specifically discussed in any case in this report. However, landscape architects do locate and specify park shelters, and states have specifically recognized the associated life safety issues as part of the need for regulation.⁴⁶ Similarly, landscape architects possess skills that directly affect public health, safety, and welfare in the design of fountains and other water features, subsurface drainage, alignment of roads and paths, and bridge details. These and other prospective harms augment the evidence of a need for regulation.

Nevertheless, although the potential for harm is justification enough, this document shows there are numerous documented examples of harm caused by incompetent practice of services within the scope of landscape architecture.

⁴³ See e.g., *New Orleans Campaign For a Living Wage v. City of New Orleans*, 825 So.2d 1098 (La. 2002) (stating that state legislatures have “broad scope to experiment with economic problems” in exercise of its police power).

⁴⁴ See *Redbud Cooperative Corp.*, *infra* note 313.

⁴⁵ See *Settlement Nearing*, *infra* note 346 (damage to alpine wetlands may constitute irreparable harm).

⁴⁶ See Joint Practice Committee [of the State Boards of Architects, Professional Engineers and Surveyors, and Landscape Architects], *Handbook for New Mexico Building Officials* (2000 Edition), at 9.

Additionally, the potential harm from professionals behaving unethically and without regard for client expectations is also recognized as part of the need for regulation.⁴⁷ Landscape architect practitioners have in the past been disciplined for forging professional signatures and seals, stamping plans without supervising or reviewing work, working outside an area of competence, intemperance, and other harmful behaviors.⁴⁸ Each of these is further evidence of real harm from within landscape architecture's scope.

Accordingly, regulation creates enforceable competency standards for entry into professional practice and makes disciplinary action a significant disincentive to substandard practice.⁴⁹ The research for this report reveals a wide assortment of incidents in which the work of a competent landscape architect would have prevented or significantly reduced the risk of harm, and other incidents where the work of incompetent landscape architecture practice resulted in harm. Regulation discourages or prohibits the practice of landscape architecture by individuals untrained, untested, and unskilled in the profession—in doing so, the public is protected.

⁴⁷ See Colorado Department of Regulatory Agencies, *Sunset Review of the Board of Real Estate Appraisers*, 2001, at 19 (“users of appraisal services rely on the opinions and work products of appraisers to make informed decisions regarding private and public investments”).

⁴⁸ See, e.g., *Defalco v. Dirie*, 978 F.Supp. 491 (S.D.N.Y. 1997) (in a racketeering case, a developer was pressured by local government officials into using a certain landscape architect); see also *Foxchase, LLLP et al. v. Cliatt*, *infra* note 310 (unlicensed landscape architect engaged in multiple misrepresentations).

⁴⁹ *Sunset Review of the Board of Professional Engineers and Professional Land Surveyors*, *infra* note 121, at 28 (“The absence of regulation creates the potential for harm to the public in a number of ways. As previously noted, the consumer would not be able to gauge the competency of engineers and land surveyors because of the absence of licensing requirements and practice standards. The disciplinary process would be lost, which is the primary way to prevent engineers and land surveyors from continuing to provide substandard service.”).

3.3 LICENSURE PROMOTES THE PUBLIC INTEREST

Licensure promotes the public interest because, as somewhat stated previously in this document, licensure establishes minimal levels of competence that drastically reduce the risk of incompetent professionals performing acts that harm the public. Consequently, public interest analysis provides a distinct basis upon which a need for landscape architecture regulation may be found. In its broadest form, public interest analysis asks if a regulation is justified by a cost-benefit analysis.⁵⁰ The most conservative analysis of professional regulation, however, holds that protecting the public interest will only occur where regulation mitigates the potential for harm. In either analysis, regulating landscape architecture is a choice made with the public interest at the center of the decision.

As previously explained in this report, the police power and regulatory authority of a state is denoted by “the public health, safety, and welfare,” and it constitutes a broad zone of interests, with direct associations to landscape architecture. Professional regulation of landscape architecture responds to significant harms that property owners and governments seek to avoid by procuring the services of a competent landscape architect. Landscape architects are trained and tested in knowledge that directly relates to hazards to life and limb. The protection of aesthetic values and orderly development are also frequently the subject of ordinances and statutes and are almost invariably found to be within the scope of public health, safety, and welfare.⁵¹ Though it is a small area within landscape architecture practice, numerous local landscape ordinances specifically rely on landscape architects to produce submittals, and, based on concerns

⁵⁰ See discussion of this topic under “Regulation in the Public Interest” at page 57; see also Colorado Department of Regulatory Agencies, *Sunrise Review of Respiratory Therapists*, 1999 (noting in a favorable recommendation the “very strong case for the benefits” of the proposed legislation).

⁵¹ See *All. for the Wild Rockies v. United States Forest Serv.*, No. 1:15-CV-00193-EJL, 2016 WL 4581404, at *5 (D. Idaho Aug. 31, 2016) (discussing alleged injuries arising out of a defendant’s violation of a statute “designed to protect an individual’s aesthetic enjoyment and recreational values.”); *Spectrum v. Board of County Commissioners of Jefferson*, 59 F.Supp.2d 1101, 1107 (D.Colo. 1999) (restriction of development in certain areas without viewshed analysis or visual mitigation is a proper exercise of the police power); *Landmark Land Co., Inc. v. City and County of Denver*, 728 P.2d 1281, 1285 (Colo. 1986) (“It has been well established that protection of aesthetics is a legitimate function of the legislature.”); *Berman v. Parker*, 348 U.S. 26, 32-33 (1954) (the police power may be exercised for considerations of aesthetics and environmental quality).

for public and consumer safety and the value of aesthetics to property values and the community as a whole, may require a professional stamp for government review.⁵²

The direct role of landscape architecture regulation in preventing harm is discussed in other sections of this report. For example, in addition to harm prevention, landscape architecture regulation provides a credential that can be used by consumers who have no other means to assess technical competence. When Virginia opted to continue its regulation of landscape architects, state regulators found that “there are certain kinds of landscaping projects, with sufficient design complexity and requirements for safety that having a program at the state level to certify education, experience, and competence seems to be in the public interest.”⁵³ Thus, it seems clear that regulation of landscape architects protects the public interest.

⁵² Every state that has a “practice act” (meaning only landscape architects may practice within a statutorily defined or rule-based definition of the profession) requires that services performed under the “practice” of landscape architecture be accompanied by a seal or stamp. See also Dennis Abbey, *U.S. Landscape Ordinances*, J. Wiley & Sons (1998).

⁵³ Virginia Board of Commerce, *A Report on the Need for a Regulatory Program for Landscape Architects*, June 24, 1991.

3.4 LICENSURE CAN BE ACCOMPLISHED WITHOUT UNDUE IMPACT TO OTHER PROFESSIONS

Licensure can be accomplished without undue impact to other professions because the most closely related professions to landscape architecture will not be diluted or limited in their practices even if landscape architects remain licensed. Professional regulation is funded almost exclusively through the fees and fines assessed by state boards set up to monitor and regulate whatever profession the board was created for. These fees and fines are paid by professional practitioners and are typically adjusted to reflect a revenue stream close to the estimated operating budget of the board. The boards of design professions are typically established in a manner that assures their ability to be self-funding,⁵⁴ and occasionally these boards produce significant surplus revenue for other state purposes.⁵⁵

Moreover, there is generally little debate that landscape architecture regulation can be accomplished without disruption to an existing system of regulation. Architecture and engineering practice in states with landscape architecture regulation is, for example, indistinguishable from architecture and engineering practice in states without landscape architecture regulation. Exemptions and other techniques to minimize impact to other professions are discussed previously in this document.

In addition to the criteria covered in this section, an evaluation of the multiple policy rationales that support licensure will provide further basis for the need for regulation.

⁵⁴ See State of Colorado, Senate Bill 03-080 (Regulate Landscape Architects), Fiscal Note (fee revenue sufficient to cover costs of the proposed board).

⁵⁵ *Regulatory Agency Action—Board of Landscape Architects*, Calif. Reg. L. Rptr., Vol. 15, No. 4 (Fall 1995), at 83 (California's Board of Landscape Architects was funded through licensing fees paid by landscape architects, and historically had a surplus that could be absorbed into the state's general fund). See also Tex Gov't Code Ann. § 472.102 (Statute requires that the Texas Board of Architectural Examiners (of which landscape architects are included) "shall annually remit \$510,000 to the general revenue fund.).

4. LICENSURE IS SUPPORTED BY MULTIPLE POLICY RATIONALES

There are numerous justifications for landscape architecture regulation. This document focuses on the potential for serious and irreparable harm, where landscape architecture regulation protects consumers and the general public from major hazards and major liabilities stemming from malpractice and the untrained practice of landscape architecture. The safety of construction and infrastructure depends upon the technical competence of those responsible for their physical design and implementation.

While examination of the potential for irreparable harm is incumbent upon a profession considered for licensing, as is the focus of this paper, landscape architecture regulation of some form is also justified by various complementary considerations. This section summarizes the broad bases for regulation that efficiently allocate risks and enable consumers to make sufficiently informed choices.

Specifically, this section will first provide background information related to a general overview of the current state of licensure across the country, including licensure of related design professions, as well as licensure of landscape architects. Following the background discussion, this section will address the following justifications or rationales that support licensure: economic concerns, comparison to deregulated “professions,” the public interest, placing landscape architecture on equal footing, statutes of repose, state certificates of review, and mechanic’s lien rights.

4.1 BACKGROUND

In order to fully analyze the profession of landscape architecture and the need for licensure, it is important to evaluate other similarly situated and regulated professions and compare those allied professions with landscape architecture. Once that is accomplished, this section will also evaluate the need and propriety of sunrise and sunset reviews that states utilize regarding licensure of landscape architects.

4.1.1 *Licensure of Design Professions*

There are multiple similar or “allied” professions that often work alongside or in conjunction with landscape architects in the design, construction, real estate, environmental, and planning industries. These professions generally include architects and engineers, which incorporate all the varied strains of those disciplines (e.g., civil, structural, electrical, and mechanical engineers). The purpose of this subsection is to briefly summarize the extent to which allied professions are currently regulated and then to draw some comparisons with those professions to the profession of landscape architecture. This summary primarily addresses the licensure of architects and engineers.

Interestingly, like landscape architects, these allied professions also, by and large, are licensed across the country. The profession of architecture is regulated in all 50 states by requiring that any practice of architecture must be performed by a licensed architect.⁵⁶ And the varying engineering disciplines are similarly licensed country-wide.⁵⁷ Currently, architects and engineers essentially enjoy unquestioned licensure, to the extent that most states do not perform any sunset review of the profession, and any sunset review that does occur is simply to review the state board that manages the profession. This nonquestioning is largely the result of policy makers’ and the general public’s acceptance of engineering and architecture’s real risk of harm to the public. After all, architects and engineers design the buildings we live, work, play, shop, govern, manufacture, and worship in, not to mention the roads and bridges we drive on. Consequently, those structures must be designed in such a way to be structurally sound, and states have thus concluded that licensure is a key element in protecting against the risk of negligent design.

⁵⁶ National Council of Architectural Registration Boards, *Regulation of Architecture*, <http://www.ncarb.org/About-NCARB/Regulation-of-Architecture.aspx> (noting that all 50 states require licensure of architects; the first state to enact architect licensure was Illinois in 1897 and the last state to enact was Wyoming in 1951.).

⁵⁷ National Society of Professional Engineers, *Who Needs NSPE Anymore?*, <https://www.nspe.org/resources/pe-magazine/may-2015/who-needs-nspe-anymore>.

Part of the reasons and justifications for the licensure of architects and engineers is that they each have relatively rigorous education, testing, work experience, and continuing education requirements before licensure can be obtained. Those requirements are designed to ensure the technical competence of practitioners who design structures, systems, processes, and reports that, if those things are done incompetently, have the real potential to cause physical and monetary injury to the public.⁵⁸

Yet, virtually every justification posed to support the licensure of architects and engineers is also applicable to the licensure of landscape architects. Landscape architects similarly endure a rigorous education, must pass a four-part multiday national examination, must work for a minimal number of years before becoming licensed (in all but three states), and are required to obtain continuing education credits in many states. But, more important, a landscape architect's work has the real risk to harm the public, just like the work of an engineer or architect. The only difference in harm is where the risk originates. With architects and engineers the risk may come from a poorly designed structure, and with landscape architects, the risk of harm may come from a poorly designed outdoor surface, a negligently designed retaining wall, a recklessly designed outdoor shade structure or deck, or an incompetently designed stormwater management system, to name just a few of the examples illustrated further in this document below. Ultimately, for purposes of licensure analysis, the profession of landscape architecture is fundamentally and practically identical to the professions of architecture and engineering; as a result, the public would be best protected if the profession were regulated alongside these allied professions.

⁵⁸ See NSPE Position Statement No. 1773, *Protecting the Professional Engineer Against Attacks on Licensure as a Barrier to Trade*, May 2016.

4.1.2 *Licensure of Landscape Architects*

Landscape architecture regulation in the United States dates to 1953, when California became the first state to enact a statute to establish minimum competence for practitioners. Now, all 50 states have enacted some form of regulation governing the profession.⁵⁹ The one possible current exception to landscape architects being regulated in the contiguous United States is the District of Columbia, where a current effort at licensure is under way.⁶⁰ Although the public now benefits from the wide regulation of landscape architects, that has only been a relatively recent occurrence. The three most recent states to add licensure are Colorado, Vermont, and New Hampshire. Each of those states conducted evaluations of the profession, typically over several years, and ultimately each deciding that the unregulated practice of the profession does in fact impose cognizable risks of harm on the public—risks that must be mitigated.

Currently, 47 states regulate the profession in the form of “practice” acts, which means that the actual practice of landscape architecture is regulated, instead of just the title “landscape architect.”⁶¹ In other words, in a practice-act state, the details and scope of the profession of landscape architecture are defined by statute or rule, and only those who are licensed are allowed to perform services within the defined scope. A very small minority of states are “title” act states, which means that virtually anybody is allowed to practice within the scope of the profession of landscape architecture so long as they do not call themselves or hold themselves out as “landscape architects” by title.⁶² Due to its lesser form of regulation, title-act states pose a greater risk to the public by fostering a greater possibility of the incompetent practice of landscape architecture.

⁵⁹ See State Licensure Laws, American Society of Landscape Architects, <https://www.asla.org/StateGovtAffairsLicensure.aspx>.

⁶⁰ B21-0790—Regulation of Landscape Architecture and Professional Design Firms Amendment Act of 2016.

⁶¹ See American Society of Landscape Architects, State Licensure Laws, <https://www.asla.org/StateGovtAffairsLicensure.aspx> (Noting that all states except Illinois, Massachusetts, and Maine are “practice” act states).

⁶² *Id.* (Noting that the only remaining “title” act states are Illinois, Massachusetts, and Maine).

The ultimate realization of regulation for landscape architects across the country is certainly also attributable to, at least in part, the profession's broad reach across everyday life. As has been and will be shown, landscape architecture affects broad areas of the physical environment, and landscape improvements have appropriately been characterized as "all visible construction except buildings and utilitarian structures."⁶³ As the profession has matured, its built works have multiplied, especially as part of the day-to-day infrastructure of urban and suburban areas worldwide. Thus, the scope of landscape architecture practice and the growth of the profession very likely account for its regulated status in every state.

A typical landscape architecture regulation contains several fundamental features. Each state that regulates landscape architecture has created a board or has placed landscape architecture regulation under the purview of a board combining related professions, most frequently a combined board with architects and engineers. The typical professional regulation statute will also include an appropriate definition for landscape architecture, concisely reviewing health, safety, and welfare considerations addressed through the regulation. For example, Alabama's statute states:

⁶³ Code of Ordinances, North Palm Beach, Florida, Appendix A, Section IV(C).

“Landscape Architecture” means “The performance of professional services such as consultation, investigation, research, planning, design, preparation of drawings and specifications, and responsible supervision in connection with the development of land areas where, and to the extent that the dominant purpose of such services is the preservation, enhancement, or determination of proper land uses, natural land features, planting, naturalistic and aesthetic values, the settings and approaches to structures or other improvements, the setting of grades and determining drainage and providing for standard drainage structures, and the consideration and determination of environmental problems of land including erosion, blight, and other hazards. This practice shall include the design of such tangible objects and features as are incidental and necessary to the purpose outlined herein but shall not include the design of structures or facilities with separate and self-contained purposes such as are ordinarily included in the practice of engineering or architecture, and shall not include the making of land surveys of final plats for official approval or recordation.”⁶⁴

Other features of a typical statute include authority to stamp drawings; eligibility standards, such as education and exam requirements; and procedures for evaluation of applicants, disciplinary action, and promulgation of necessary rules. In all of this regulation, it must be remembered that the public is and has been protected through the current licensure frameworks across the country.

⁶⁴ ALA. CODE § 34-17-1(3).

4.1.3 *Sunrise and Sunset Reviews of Landscape Architecture*

Sunset legislation, enacted initially in Colorado in 1976, formalized the review of occupational regulation.⁶⁵ From its inception, the objective of sunset review was to eliminate “burdensome and inefficient” boards that did not act in the public interest.⁶⁶ Sunset review was also intended to prompt periodic fine-tuning of continued boards, and refining and limiting board activities to those that advanced the public interest.

In both early and later sunset reviews, landscape architecture regulation was found necessary to protect public safety and prevent irreparable harm.⁶⁷ Due to evidentiary issues that this report seeks to remedy, other sunset reviews of

⁶⁵ See 2016 *Sunset Review*, *supra* note 21 (noting that the sunset review process provides “a way to analyze and evaluate regulatory programs and determine the least restrictive regulation consistent with the public interest.”).

⁶⁶ As a bill, the Sunrise law was promoted by Colorado Common Cause as a way to rid government of agencies that do not serve the public interest. See Sidney B. Brooks, *The First Measure of Sunset*, Colorado Lawyer, Jan. 1978, at 14, 15.

⁶⁷ See, e.g., Massachusetts Executive Order No. 562, *To Reduce Unnecessary Regulatory Burden*, March 31, 2016 (Ordering that each Massachusetts state agency shall review regulations, and shall retain or modify those regulations that are “essential to the health, safety, environment, or welfare of the state; and in so reviewing, the agencies must demonstrate that “(1) there is a clearly identified need for governmental intervention that is best addressed by the Agency and not another Agency or governmental body; (2) the costs of the regulation do not exceed the benefits that would result from the regulation; (3) the regulation does not exceed federal requirements or duplicate local requirements; (4) less restrictive and intrusive alternatives have been considered and found less desirable based on a sound evaluation of the alternatives; (5) the regulation does not unduly and adversely affect Massachusetts citizens and customers of the Commonwealth, or the competitive environment in Massachusetts; (6) the Agency has established a process and a schedule for measuring the effectiveness of the regulation; and (7) the regulation is time-limited or provides for regular review.” After considering those criteria, the state preserved the regulation of landscape architecture.). Staff of the Florida Senate Economic, Community, and Consumer Affairs Committee, *A review of Chapter 481, Part II, Florida Statutes, Landscape Architecture*, Nov. 1987, at 56-57 (“Non-regulation of landscape architects could be detrimental to the public interest in a number of ways.... While the repeal of Chapter 481, Part II, Florida Statutes, may allow the competitive market to determine the quality of service, the public, through a poor design, could be irreparably harmed.”); *Sunset Review of the Landscape Architects Board of Registration*, *supra* note 26, at 2 (“The continuation of the Board of Registration and the regulation of landscape architects is needed for the protection of South Carolina natural resources and for the safety and welfare of the general public.”); Texas Sunset Advisory Commission, *Report to the 78th Legislature*, Feb. 2003, at 43 (recommendation to continue the board responsible for overseeing landscape architects for another 12 years); *Need for Licensing Landscape Architects*, *infra* note 369.

landscape architecture have provided inconsistent results. In some significant part, negative sunset reviews can be attributed to a presumption against regulation, present from very early in the history of sunset review. That is, no matter the evidence, a sunset review that is bent on eliminating a profession will interpret the evidence however it desires, regardless of the logical implications of that evidence. Sunset reviews that come to the question of regulation predisposed to a certain outcome are likely not to produce decisions or regulations that are best suited to protect the public's health, safety, and welfare.

For example, the predisposition of a reviewer or an agency to favor or disfavor any given regulation is obscured by the use of statistics and methods that rely heavily on subjective interpretation. The use of disciplinary statistics in analysis of professional regulation is a prime example of inferences being drawn from inconclusive data. Regulators have used both high disciplinary numbers and low disciplinary numbers to conclude that professional regulation is effective.⁶⁸ While disciplinary cases heard by professional boards may be taken as an indicator of the harms addressed through regulation, the relative number of disciplinary cases cannot be effectively applied as an indicator of the potential incidence of harm.⁶⁹

Sunrise review is a more recent addition to the regulatory process as a counterpart to sunset review. Sunrise review provides a process for evaluation of trades and professions that have not undergone sunset review for lack of existing

⁶⁸ *Sunset Review of the State Board of Registration for Professional Engineers and Professional Land Surveyors*, *infra* note 121, at 24 (increase in the number of disciplinary actions indicates improvement in board effectiveness); Julianne D'Angelo and Robert Fellmeth, *A Perspective on California's Regulation of Tax Preparers, Certified Public Accountants, Architects, and Landscape Architects*, Calif. Reg. L. Rptr., Vol. 13, No. 4 (Fall 1993), at 9 (citing a low volume of disciplinary action by the California Board of Architectural Examiners as consistent with a successful regulatory program to screen incompetent practitioners); *Sunset Review of the Examining Board of Architects*, 1997, *supra* note 23, at 38 ("The Board [of Architect Examiners] seldom receives complaints involving technical issues.").

⁶⁹ As noted in the introduction to this report, the prevention of harm by testing for competence is a typical focus for boards in the design professions.

regulation.⁷⁰ Landscape architecture experience with sunrise review demonstrated the extent to which subjectivity is capable of overwhelming the analysis of the need for regulation.

As an example of this subjectivity, according to one sunrise review, the type of harm demonstrated by an incident in which a child was killed in a negligently designed skatepark is “not compelling.”⁷¹ The same report also failed to address evidence submitted to the reviewing agency regarding other fatalities linked to negligent landscape architecture practice.⁷² The selective use of evidence in the sunrise process enhances the subjectivity of agency opinions regarding the need for regulation.

One highly subjective conclusion repeated in some sunrise reviews is that substandard landscape architecture practice is not causing harm because state, federal, and private consumer protection organizations receive few complaints regarding landscape architects. The Colorado Department of Regulatory agencies, for example, contacted the Consumer Protection division of a county district attorney’s office, and learned that a recent case receiving media attention⁷³

⁷⁰ Landscape architects were never reviewed under Colorado’s Sunset law. The Landscape Architecture Statute (Colo. Rev. Stat., §§ 12-71-101, et seq.) was eliminated in 1976 by the Colorado General Assembly, prior to the first investigation and review of professional boards by the Colorado Department of Regulatory Agencies. The pre-1976 Board of Landscape Architects oversaw a loose title protection statute (e.g., including nurserymen), with only tangential relation to the technical profession defined in current and proposed legislation across the nation.

⁷¹ *Sunrise Review of Landscape Architects*, 2002, *infra* note 1061, at 10 (“The Applicant furnished several cases that they considered to be examples of public harm. The most dramatic example involved a skatepark in Eagle County constructed by volunteers. The Applicant furnished a supporting newspaper article...” Concluding the same paragraph, the Sunrise Review states that “the examples of harm provided to the Department of Regulatory Agencies (DORA) were not compelling.” In the skatepark article provided to DORA, *Eagle County shuts skatepark after accidental death*, *infra* note 2531, the example of harm was unmistakably a fatality.).

⁷² *Id.*

⁷³ An article regarding consumer problems relating to Applied Landscaping Solutions and other contractors appeared in the Boulder County newspaper, *The Daily Camera*, on August 1st (Wednesday), 2001.

was about a landscape contractor, and concluded that this case yielded no evidence relevant to the need for regulation of landscape architecture.⁷⁴ Independent research regarding this case showed that the landscape contractor was in fact improperly designing landscape improvements (i.e., irrigation, drainage, outdoor stairs) and in so doing caused property and financial damage to multiple clients.⁷⁵ That evidence indicates that landscape contractors are performing technical services beyond their ability, causing potential injury and property damage as a result. Thus, casual interpretation of consumer complaint information allows regulators charged with protecting the public interest to ignore the serious possibility that incompetent individuals are holding themselves out as capable landscape architects while delivering defective, unsafe, and ultimately costly inferior services.

The separation of sunrise review into a process with standards distinct from sunset review has facilitated the development of different standards for the two forms of evaluation. For instance, where sunrise review is subject to an applicant burden of proof, proposals for regulation are judged based on the applicant's ability to be persuasive. This implies that regulatory officials producing a sunrise evaluation have no duty to make an objective assessment, based on all available evidence, of the need for regulation. In proposals for professional regulation, an applicant burden of proof again allows review to be guided by subjective factors. As the basis for analysis of the need for regulation, an applicant burden of proof serves only to establish the regulator as the adversary of any potential new regulation.

⁷⁴ *Id.*

⁷⁵ *Applied Landscape Solutions*, *infra* note 323.

From their inception, sunrise and sunset review were not intended to exclude any profession from reasonable regulation if it would efficiently, and without undue burden, serve the public interest. While it has been an impediment in some states, the sunrise and sunset process has not prevented landscape architecture from receiving attention as a public health, safety, and welfare issue. Since sunset legislation was first introduced, numerous states⁷⁶ have enacted new laws concerning regulation of the profession.

4.2 ECONOMIC

Not only does licensure of landscape architects protect the public from the risk of physical injury (and its attendant monetary costs), but it also promotes a positive economic impact. This occurs several ways, including ensuring project funds are spent on competent design and not on incompetent practice that brings a lesser value and a risk of design flaws, leading to higher maintenance costs and the risks of construction defects. Further, licensure leads to higher quality and safer design of public spaces and landscapes (both urban and rural), increasing the likelihood of those designed environments positively contributing to the economy.

Property owners, whether public or private, hire landscape architects to improve real property. Very often those improvements represent a significant investment of money, leading property owners to hire competent and experienced professionals.⁷⁷ Licensure provides an objective measure of that desired competence—particularly for property owners not familiar with the design and construction process. Often, property owners also rely on the licensure designation as one criterion in evaluating who can best add value through wise management of a project budget.

⁷⁶ For example, since 1993, several states (e.g., Alaska, Colorado, Michigan, Missouri, New Hampshire, North Dakota, Vermont, Virginia, Washington, and Wisconsin) enacted new legislation to regulate landscape architecture.

⁷⁷ See, e.g., Landscape Architecture Foundation, Landscape Performance Series, *Case Study Briefs*, <http://landscapeperformance.org/case-study-briefs>; examples include U.S. Coast Guard Headquarters, Washington, D.C. (Landscape architects created the fundamental concepts and layout for the site, which contributed to the \$646 million project being able to retain up to 424,000 gallons of rainwater, save 520,000 gallons of potable water annually, and sequester 883,000 pounds of carbon annually due to the 985 new trees on the site); and Mary Bartelme Park, Chicago, IL (Landscape architects were leaders of the project team that created a project that reduced water use by 1.13 million gallons annually, which saves over \$4,200 in water usage fees.).

Receiving the best value for dollars spent is perhaps most important in the context of public projects. As a matter of public policy, many government agencies depend on a professional stamp for lead consultants or for construction oversight. As with other professions that design and manage major public improvements and frequently encounter regulatory issues, not only are enforceable professional standards (and the associated availability of a professional stamp to establish competence without additional expense to a client or government agency) appropriate, but licensure is of critical importance to public agencies spending tax dollars and improving public property by contracting for design and management services.⁷⁸ While qualified, landscape architects in states at one time without licensure were often not seriously considered to lead projects that would benefit from their expertise.⁷⁹

Licensed landscape architects are also more likely to bring economic value to a project by providing services in conjunction with architects and engineers, and through the process of “value engineering,” which is the process of evaluating a project’s design and finding methods, materials, or options to more efficiently use project dollars. A well-designed project will reduce the amount of rework and changes after initial bidding. A clear set of construction drawings will also foster more accurate bidding, leading to greater budget certainty. An inexperienced, untrained, and unlicensed practitioner’s skills are inherently limited in these areas, which increases the risks of economic uncertainty—in the form of inadequate or expense-laden drawings—on any given project.

⁷⁸ Colorado Department of Regulatory Agencies, *Sunrise Review of Landscape Architects*, 1995, Appendix A (a majority of local government officials support licensure for landscape architects, and a majority issue RFPs where landscape architects are intended to have the lead role).

⁷⁹ In response to a Colorado Department of Regulatory Agencies survey question asking “Please discuss how the lack of licensure in Colorado may affect your choice of landscape architect for the project,” a senior architect with the City of Denver Department of Public Works noted, “The result is that landscape architects cannot be seriously considered as the prime contractor for a project that requires other disciplines be included on a team.” Landscape Architects Questionnaire for 1995 Sunrise Review, Mark R. Leese, City of Denver, Colo., Public Works Department.

Additionally, not only does competent design lead to wise investment of a property owner's money, it's also more likely to produce a project requiring less long-term cost, long-term maintenance, and risk of defects. For example, a competently designed irrigation system can save thousands of gallons of water over its lifetime, which not only saves water, but money as well.⁸⁰ The appropriate use of landscape plantings can reduce energy consumption in buildings (through tree placement, green roofs, and other screening methods through trees and shrubs), leading to lower long-term maintenance costs. Moreover, when a project is competently designed, the long-term risks of repair costs due to design defects are reduced. The long-term risks of public injury due to poor design are also reduced.

What's more, sound design (more likely to be achieved by licensed professionals) fosters broader economic benefits going well beyond immediate project-specific economic benefits. Those benefits take the form of increased property values⁸¹; higher tax revenues; higher consumer spending; lower traffic accidents; safety for pedestrians; lower crime rates; project-cost savings from value engineering, reuse of materials, and conservation of water and energy; and implementation of sustainable or "green" design and building strategies, to name a few.⁸²

While this subsection only briefly discussed the potential economic benefits that licensed landscape architects can bring to a project, it's clear that a minimal amount of regulation in the form of licensure will ensure maximized benefits.

⁸⁰ See, e.g., Peter Mayer, Paul Lander, & Diana Glenn, *Outdoor Water Efficiency Offers Large Potential Savings, But Research on Effectiveness Remains Scarce*, Journal of the American Water Works Association 07(2):61-66; and Fedro S. Zazueta & Dorota Z. Haman, *Potential Impacts of Improper Irrigation System Design*, IFAS Extension, October 2014.

⁸¹ See, e.g., Landscape Architecture Foundation, Landscape Performance Series, *Case Study Briefs*, <http://landscapeperformance.org/case-study-briefs>; for example, Sundance Square Plaza, Fort Worth, TX (Landscape architects lead a specialized design and worked closely with the client to meet project needs, which resulted in economic stimulation that activated over 90 percent occupancy in two new buildings adjacent to the site within the first six months of the project's opening. The project also contributed to a 5 percent increase in per square foot sales price of residential units in downtown Fort Worth during the plaza's first six months of existence.).

⁸² Land8, *Place Value: Empowering Landscape Architects to Measure the Economic Benefit of Designed Landscapes*, <http://land8.com/profiles/blogs/landscape-architects-measure-economic-benefits-designed-landscape>, March 8, 2016.

4.3 COMPARISON TO REGULATED NONTECHNICAL OCCUPATIONS

Recently, there has been a push across the United States to evaluate the propriety of certain licensed occupations. This movement is largely motivated by a political desire to eliminate government's imposition into business and into the lives of citizens. While some may see this movement as benefiting the public and a competitive marketplace, too much deregulation—or deregulating the wrong professions versus some low-to-mid-income occupations —unnecessarily puts the public at risk. Practicing the profession of landscape architecture is fundamentally different than the vast majority of occupations targeted for deregulation. Most, if not all, of the justifications for deregulating these occupations do not apply to the profession of landscape architecture.

For example, recently the occupation of hair braiding has become a target for deregulation. Currently, numerous states require a license to practice the occupation of hair braiding. Some states require more than a thousand hours of education in order to obtain a cosmetology license to become a hair braider.⁸³

Additionally, requiring a higher barrier to entry into the occupation of hair braiding seems to provide little to no public benefit. As one study stated, “there is no clear relationship between health and safety complaints and training hours. Most states saw no health and safety complaints against braiders, whether licensed, registered, or unlicensed, despite widely varying training requirements.”⁸⁴ Given these considerations, since 2004, 15 states have deregulated or eliminated licensure requirements for hair braiders through either legislation, rulemaking, or court ruling.⁸⁵

⁸³ Angela C. Erickson, *Barriers to Braiding, How Job-Killing Licensing Laws Tangle Natural Hair Care in Needless Red Tape*, Institute for Justice, July 2016 (noting that the number of hours required to work as a braider varies from as little as zero to well over 1,000 hours, and as high as 2,100 hours in South Dakota).

⁸⁴ *Barriers to Braiding* at 20, *supra* note 85.

⁸⁵ *Id.* at 24.

Policy makers feel many of these same considerations and evidences can be applied to other licensed occupations such as animal massage therapists, auctioneers, sign language interpreters, private detectives, ice cream peddlers, taxicab drivers, ticket scalpers, beekeepers, chicken keepers, Christmas tree sellers, and pawnbrokers.

The profession of landscape architecture stands in stark contrast to hair braiding and the above listed occupations. Each of those occupations focuses on a very narrow skill or service, with typically low risk of harm to the public health, safety, and welfare. On the other hand, the profession of landscape architecture requires a college degree, typically several years of practical experience under another licensed professional, passage of a professional examination, and, most important, the work of landscape architects affects the health, safety, and welfare of nearly every inhabitant on a daily basis. The sheer scope and quantity of landscape architecture's reach increases the number of opportunities for the public to be affected.

A recent federal executive report stated: "In many fields, occupational licensing plays an important role in protecting consumers and ensuring quality. Licensing can also encourage practitioners to invest in and maintain their skills. These benefits are important to both consumers and licensed practitioners."⁸⁶ The report also noted that more work needs done to tailor the regulatory environment in the United States so that the public is protected and the market is not unnecessarily burdened.⁸⁷ Specifically, "policymakers should adopt institutional reforms that promote a more careful and individualized approach to occupational regulation that takes into account its costs and benefits."⁸⁸

Nowhere are those suggestions more true than with the profession of landscape architecture. As this document makes clear, when policymakers are fully informed of landscape architecture's depth and breadth of impact on the public, licensure is the only reasonable approach to fully ensure the protection of public health, safety, and welfare.

⁸⁶ Department of the Treasury Office of Economic Policy, the Council of Economic Advisers, and the Department of Labor, *Occupational Licensing: A Framework for Policymakers*, 56, July 2015.

⁸⁷ *Id.*

⁸⁸ *Id.*

4.4 PUBLIC INTEREST

Serving the public interest is, generally speaking, an independent justification for professional regulation of landscape architects.⁸⁹ Public interest analysis, briefly discussed here, also specifically supports the case for landscape architecture regulation.

At a minimum, a finding that landscape architecture regulation mitigates harm to consumers and the general public naturally leads to a conclusion that regulation is in the public interest. The landscape architecture profession as a whole, including both public and private sector projects, bears responsibility for protecting the public interest. To illustrate, one rationale for regulation of architecture practice is that a private-sector developer is primarily motivated to generate an income-producing package that may be conveniently transferred or sold to another party, while the architect is required to serve both the client and to be a representative of the public interest.⁹⁰ The very same principle applies to landscape architects: Working with private developers, landscape architects are frequently the primary consultant creating subdivision plans, where negligent siting of land uses and lots, poor street layout, inadequate planning for public improvements, and the failure of other design and construction skills are linked to blight and resultant financial loss to property owners and the community.⁹¹ The training and licensing of landscape architects, much the same as architects and engineers, is designed to place responsibility for the public interest—in all settings served by the profession—in the hands of practitioners, not the sometimes self-serving clients. While building code, zoning, and subdivision regulations provide a set of rules intended to protect public safety, those laws offer significantly less protection in a jurisdiction where incompetent design professionals practice freely.⁹²

⁸⁹ Colorado Department of Regulatory Agencies, *Sunset Review of the Office of Outfitters Registration*, 2002, at 24 (“creating a minimal comfort level for consumers should not be underrated”).

⁹⁰ National Council of Architecture Registration Boards, *Regulation of Architects*, March 2001, at 1-2.

⁹¹ See Richard M. Yearwood, *Land Subdivision Regulation*, Praeger Publishers: New York, at 66-67.

⁹² See *Board of County Commissioners of LaPlata County v. Moreland*, *supra* note 92 (county not liable for injuries where it permitted construction of a deck that failed to comply with county code provisions regarding guardrails).

Another motivating factor for landscape architects to act in the public's interest is the profession's ethical standards. A large majority of landscape architects in the United States belong to the American Society of Landscape Architects (ASLA), which imposes a code of professional ethics on its members. The preamble of that code is telling: "The profession of landscape architecture...was built on the foundation of several principles—dedication to the public health, safety, and welfare and recognition and protection of the land and its resources."⁹³ Perhaps more specifically, the code also states: "Members should endeavor to protect the interests of their clients *and the public* through competent performance of their work and participate in continuing education, educational research, and development and dissemination of technical information relating to planning, design, construction, and management of the physical environment."⁹⁴

In addition to their ethical obligations, competent landscape architects protect the public interest and ensure avoidance of public harm in instances where the general public is unable to assess the presence of latent defects in goods and services. Where incidents of negligence, incompetence, and unethical behavior do occur, professional regulation typically provides a more expedient forum than the courts for investigating claims by injured clients and other parties. The findings of a disciplinary process serve to accelerate and encourage the resolution of claims that are costly and tedious to litigate due to legal technicalities unrelated to the merits of a malpractice or negligence claim.

Landscape architecture regulation also serves the public interest as a component of an efficient marketplace for technical design services. The very nature of a technical profession makes it impracticable for consumers who need these services to accurately assess the relative competence of an individual or firm. For instance, when a consumer cannot rely on a professional to produce design and technical documentation that meets minimum standards, bargaining is risky and inefficient.⁹⁵ Government

⁹³ ASLA Code of Professional Ethics, Preamble.

⁹⁴ *Id.*, ES1.3 (emphasis added).

⁹⁵ See Robert Cooter and Thomas Ulen, *Law and Economics*, 2nd Ed., Addison-Wesley Publishing, 1997, at 41 (noting that, in the terms of law and economics, there is an informational asymmetry between design professionals, e.g., architects, landscape architects, and engineers, and their clients).

oversight in the form of a self-regulating⁹⁶ board or boards corrects for the severe imbalance in information about professional qualifications and induces a more nearly optimal exchange in the marketplace.

Additionally, landscape architects, similar to other design professionals, save consumers significant expense, both in up-front search costs and in unnecessary complications, by submitting to a state administered process to test and issue credentials for competent practitioners.⁹⁷ Registration and licensing are useful tools for prequalifying consulting bids or screening potential employees who will be responsible for managing landscape architecture work in compliance with professional standards. As established by the literature regarding professional regulation, the search cost to locate minimally competent design professionals is a significant burden on consumers.⁹⁸

Employers of landscape architects (e.g., public agencies, consulting firms) likewise derive incidental benefit from regulation that establishes a standard of competence for its workforce. Because landscape architects are responsible for reviewing and managing the design and installation process for major public facilities, employers in the design professions routinely prefer, if not require, state licensing or registration, and the existence of such a credential is integral to the management of major development projects.⁹⁹ Nationally, landscape architects trained or

⁹⁶ “Self-regulating board” refers to a state professional board, as described under Evaluation of the Need for Regulation—Terminology, at page 71 below.

⁹⁷ One report indicated that “in occupations where the cost of searching for information and the cost of adverse outcome are both high, licensing can be well worth it.” This criterion applies to landscape architecture; landscape architecture licensing is a protection for members of the public who lack the capacity to make an informed appraisal of the quality and value of a product. *Professional Licensure of Landscape Architects*, *supra* note 58, at 15, 18.

⁹⁸ Carl Shapiro, *Investment, Moral Hazard and Occupational Licensing*, 53 Rev. Econ. Stud. 843 (1986); Colorado Department of Regulatory Agencies, *Sunrise Review of Naturopathic Physicians*, 1997, at 27 (regulation helps to “increase public awareness and assist the public in determining which qualifications to look for in a practitioner”).

⁹⁹ See City of Thornton, Colo., *Job listing #01-165* (landscape architect license preferred); U.S. Forest Service, *Job Listing R2-014-01G, Golden, Colo. duty location* (landscape architecture license required); Colorado Department of Regulatory Agencies, *Sunrise Review of Landscape Architecture Regulation*, 2002, at 11 (“The Applicant advanced a sound argument concerning the competitive disadvantage of landscape architects in relation to other design professionals in Colorado. They note, with adequately documented examples, that ‘employers in the design professions routinely prefer, if not require, licensing or registration, and the existence of such a credential is integral to the management of major development projects.’”).

employed in states that were to deregulate the profession would be disadvantaged in their ability to compete for jobs in both the public and private sector.

It is also in the public interest to provide for regulatory programs for the design professions to further allow for efficient collaboration and partnership between members of the professions. With the regulation of landscape architecture, landscape architects are better able to form business associations with architects and engineers to provide better overall design services.

Contrary to public interest, landscape architects have difficulty competing for design service contracts when they are unable to procure a state credential.¹⁰⁰ For example, before landscape architecture was a licensed profession in Colorado, landscape architects were unable to compete for major contracts where design teams required licensed landscape architects.¹⁰¹ So, one consequence of the deregulated status of landscape architects in Colorado was that architects and engineers in the state are often preferred to perform trail and other recreational development work, which they were not the best trained or equipped to perform because that type of work is a prominent and specific theme in the training and testing for landscape architectural competence.¹⁰² Other outcomes may include out-of-state licensed landscape architects competing for the project.

Ultimately, licensure of the landscape architects ensures the public's interests are protected through the ancillary goals of the profession to mitigate harm, ensure ethical practice, provide independent oversight, ensure competent employees, allow collaboration between design professions, and ensure a competitive marketplace.

¹⁰⁰ *Sunset Review of the Landscape Architects Board of Registration*, *supra* note 19, at 1 (termination of the Board would have an adverse impact on South Carolina-based landscape architects who would have difficulty competing for federal contracts).

¹⁰¹ See U.S. Army Corps of Engineers, *Request for Proposals DAC445-02-R-0012* (Control Tower at the U.S. Air Force Academy in Colorado), at 4-5 (design team should include a registered landscape architect); National Park Service, *Solicitation Number N1253020111* (work on “a variety of architectural, engineering, landscape architectural projects, and construction contract supervision” requires bidders to address “professional licensing and/or registration requirements for the indicated public use facilities”).

¹⁰² Colorado Department of Transportation, *Construction Permit Number 02-244* (Kinney Run Trail Project requires the contractor to hire a Colorado registered professional engineer to inspect work for compliance with specifications).

4.5 LEGAL TREATMENT OF DESIGN PROFESSIONS

Albeit a lesser reason for licensure, without statutory professional status, landscape architects would be unable to compete fairly and develop clients and determine the costs of doing business within the same legal framework that governs architects, engineers, and, typically, surveyors. Like their design profession counterparts, landscape architects must meet rigorous education, examination, and experience requirements. Landscape architects may be denied certain basic legal protections without professional status. Without these legal protections placing them on equal footing, landscape architects face a degree of business and personal risk greater than other design professionals. This risk may be manifest in higher insurance rates for comparable work, a higher degree of personal liability for an individual to engage in practice, increased costs to consumers, and an artificial barrier to practice that limits the market for construction design services. Other existing laws and regulations, such as statutes of repose, certificates of review, and mechanic's liens, may also put landscape architects at a disadvantage if landscape architecture becomes an unlicensed profession.

4.5.1 *Statutes of Repose*

Most state legislatures have enacted statutes of repose for design professionals. The essence of a statute of repose is a limitation on the period of time after the implementation of a design that the designer may be held liable for negligence. Public policy favors statutes of repose due to the potential for never-ending liability for the designer of any site or building where an accident ultimately occurs.¹⁰³ Design professionals covered by the law are protected from a legal action—in which the design professional may be one of a number of named defendants—after the expiration of a statutory time period during which design defects are likely to be discovered.

¹⁰³ The purpose of a statute of repose is to protect those who design, install, or construct an improvement from facing never-ending potential liability based on that work. See *Ryan v. Commonwealth Edison Co.*, 381 Ill. App. 3d 877, 883, 885 N.E.2d 544, 549 (2008) (“Statutes of repose ‘stem from a basic equity concept that a time should arrive, at some point, that a party is no longer responsible for a past act.’”); *Franks v. Honolulu*, 843 P.2d 668 (Hawaii 1993) (“At the time the legislature enacted [the procedures for filing claims against design professionals (Hawaii Rev. Stat. § 672-2)], parties who suffered personal injury or property damage as a result of construction activities would sue practically everyone connected with the design, construction, and development of the project involved”).

Statutes of repose in some states apply to specific licensed design professionals, including landscape architects, and suppliers of building materials. In other states, landscape architects are not named as a profession protected by the law; as a result, a landscape architect may be unable to gain the same legal protection as architects and engineers.¹⁰⁴ Though property improvements routinely designed by landscape architects, such as grading and irrigation, have been held to be within the scope of a statute of repose,¹⁰⁵ resident and out-of-state landscape architects practicing in states without regulation must also be concerned that the licensing of architects and engineers creates, where there is overlap in professional services, certain exclusive zones of protection for licensed design professionals.¹⁰⁶

If landscape architects were not licensed, it is unclear whether such professionals would be granted the same legal privileges as architects and engineers under a statute of repose. This uncertainty would be a legal burden that, among design professionals, landscape architects would bear alone.

¹⁰⁴ *Gleason v. Becker-Johnson Assoc., Inc.*, 916 P.2d 662 (Colo. App. 1996) (availability of statute of repose must be strictly construed); *Flatiron Paving v. Great Southwest Fire*, 812 P.2d 668 (Colo. App. 1990) (statute of repose does not apply to a mover responsible for relocating a monument on a site since the statute does not specifically refer to movers).

¹⁰⁵ See *Embree v. American Continental Corp.*, 684 P.2d 951 (Colo. App. 1984) (defect in grading by contractor covered by statute of repose); *Homestake v. Oliver*, 817 P.2d 979 (Colo. 1991) (contractor who designed and installed irrigation covered by statute of repose); *Criswell v. M.J. Brock & Sons, Inc.*, *supra* note 165 (contractor who designed landscape plans covered by statute of repose). All of the noted Colorado cases involve contractor liability vis-à-vis the state's statute of repose; no reported case in Colorado has determined the applicability of the statute to landscape architects.

¹⁰⁶ In Colorado, the state Supreme Court held that an architect was entitled to protection under the statute where the architect became licensed during the course of providing architectural services. *Yarbro v. Hilton Hotels Corp.*, 655 P.2d 822 (Colo. 1982).

4.5.2 *Certificates of Review*

It is an unfortunate reality of the professional design industry that meritless lawsuits are often filed against design professionals. Such lawsuits not only sap already scarce judicial resources but they also increase the costs of doing business—to say nothing of the time and money they waste. And perhaps even more so, frivolous lawsuits harm reputations and cause untold stress on the life of a design professional. In most states, when a client or property owner perceives any defect in construction they can file a lawsuit and allege any number of claims or defects against all entities that were involved in the construction of the project. Naturally, the design professionals on that project are dragged into the suit—regardless of the factual basis for the claims. Because such lawsuits exist, some states have enacted laws that require a “certificate of merit” or “certificate of review” from a review board before the lawsuit can proceed. The purpose of these statutes, as one state has provided, is to “prevent the filing of frivolous professional malpractice actions, to avoid unnecessary time and costs defending professional negligence claims, and to reduce the resulting costs to society.”¹⁰⁷

These statutes make sense, but the potential problem for landscape architects is that the statutes often only apply to regulated professionals. So, the protection is possibly unavailable to landscape architects in states where landscape architects were not licensed. In Colorado, for example, the certificate of review statute applies to malpractice claims against “licensed professionals.”¹⁰⁸ So, prior to landscape architects being licensed in Colorado, landscape architects were subject to being sued without the filter of the certificate of review through which suits against architects and engineers must pass.¹⁰⁹ As a result, without licensure, landscape architects are, again, alone among design professionals in bearing certain legal risks.

¹⁰⁷ Colo. Rev. Stat. § 13-20-601.

¹⁰⁸ Colo. Rev. Stat. § 13-20-602.

¹⁰⁹ See *Hamilton v. Thomson*, 23 P.3d 114, 115 n.2 (Colo. 2001), *State v. Nieto*, 993 P.2d 493, 501 (Colo. 2000).

4.5.3 *Mechanic's Lien Rights*

A mechanic's lien provides a statutory right to recover the value of contracted goods and services that improve the property of another. This right is an important avenue of recourse for architects, landscape architects, and engineers. For example, large private-sector land development projects often progress through the design phase with little to no cash flow coming in to the developer. Where such a developer is the client, design professionals are able to perform work with the assurance that a lien against the land to be improved will be available if the client fails to pay, goes bankrupt, and so forth.

Landscape architectural plans contribute to the improvement of property in the same way as do plans produced by architects and engineers.¹¹⁰ However, courts will not enforce a mechanic's lien merely because a professional has assisted in the improvement of a property.¹¹¹ Lack of a proper license has been held to render a design firm ineligible for a mechanic's lien.¹¹² Landscape architects practicing without professional recognition under a state statute face the risk that work otherwise deemed eligible for a mechanic's lien will be held ineligible for lack of a license.

Cumulatively, uncertainties in the availability and enforcement of statutes of repose, certificate of review requirements for professional negligence claims, and mechanic's liens would force landscape architects in states that deregulate the profession to assume risks for which clear statutory protection is available to other design professionals. In states that were to deregulate the profession, enactment of statutes to shield architects, engineers, and other professionals from frivolous lawsuits would have the unintended consequence of magnifying barriers to competition for landscape architects.

¹¹⁰ See *Stan Miller, Inc. v. Breckenridge Resort Assoc., Inc.*, 779 P.2d 1365 (Colo. App. 1989) (mechanic's lien valid for an architect who designed a comprehensive site plan and site analysis).

¹¹¹ *Laurence J. Rich & Assoc. v. First Interstate Mortgage Co.*, 807 P.2d 1199 (Colo. App. 1990); *Schneider v. J.W. Metz Lumber Co.*, 715 P.2d 329, 332 ("Colorado courts have long held that the mechanic's lien statute, a derogation of the common law, is to be strictly construed in determining who is entitled to a lien").

¹¹² *O'Kon and Company, Inc. v. Riedel*, 540 So.2d 836 (Fla. App. 1988) (mechanic's lien not enforceable because firm engaged in practice of architecture without a state license).

5. LICENSURE PROTECTS AGAINST THE RISK OF HARM

As illustrated by the following section, there is a solid factual basis for the regulation of landscape architecture. As stated previously, the purpose of this report is to compile a representative cross section of the information and examples that illustrate the need for and benefits of landscape architecture regulation. A fundamental piece of this supporting information is actual examples of harm caused by or related to the practice of landscape architecture.

Landscape architects are design professionals charged with responsibility for designing and overseeing the construction of major projects, and all states have recognized that the nature of landscape architectural work is itself evidence of the potential for harm.

Translating the scope of landscape architecture into actual cases, this section demonstrates the logical result of a profession in which there is a significant potential for harm through incompetence, negligence, and unethical practices, all of which can have serious and injurious consequences.

The cases discussed below are examples of aspects of landscape architecture practice, or services within the scope of landscape architecture, that have caused or been closely related to serious physical injuries, property damage, and various financial harms. Each real case represents a harm within the scope of landscape architecture services. It should be noted that harms in the practice of landscape architecture are caused not only by negligent and incompetent landscape architects, but also by non-landscape architects engaged in the profession's technical work. The examples below generally fall into one of three categories:

- landscape architects failing to meet standards of minimum competence
- other design professionals practicing negligently in an area of overlap (often an area of professional practice in which landscape architects are typically most aware of user and technical requirements)¹¹³
- individuals or businesses with no technical design education or testing to ensure competence in providing landscape architecture services

These cases show that consumers of landscape architect services include members of the general public who lack the necessary knowledge to evaluate the qualifications of practitioners, as well as both public and private institutions and other professionals who rely on the minimum competence of landscape architects. In many of those circumstances, the party hiring a landscape architect or design professional, or those benefiting from the work, did not have adequate technical subject matter expertise to select a qualified professional. These cases also demonstrate that the potential for harm in landscape architecture practice extends far beyond the original consumer of landscape architectural services, to the many members of the general public that use the public and private spaces designed by landscape architects.¹¹⁴

¹¹³ See, e.g., *Ward v. Shoney's, Inc.*, *infra* note 296, where an engineer specified landscape edging that was hazardous due to pedestrian circulation.

¹¹⁴ See Colorado Department of Regulatory Agencies, *Sunset Review of the State Board of Registration for Professional Engineers and Professional Land Surveyors*, June 1993, at 27 (noting in a recommendation to continue regulation of the practice of engineering that, "The direct client may be an 'informed user' but this is not true, however, of the public who may use the system or structure.... Licensure acts to protect the using public as well as the direct purchaser of services.").

5.1 LICENSURE PROTECTS AGAINST THE RISK OF PHYSICAL INJURY

The evidence in this section provides a survey of harms to public health and safety within the scope of landscape architecture. The cases below are representative of the potential for harm where negligent or incompetent landscape architecture practices are carried through into built products. Many injuries encountered in the research for this survey are clear examples of irreparable harm caused by incompetent practice of landscape architecture, including fatal and permanently disabling injuries caused by designs, specifications, and improperly implemented suggestions.

Physical injury is organized into categories below in terms of areas of special technical knowledge where landscape architects affect public health and safety. The report therefore incorporates cases regarding lighting, streetscapes, roadway improvements and traffic handling, outdoor structures, grading, drainage, erosion control, site planning, parking lots, recreational facilities, site investigation, playgrounds, plant material, and other design hazards.

5.1.1 Lighting

The documented harms from negligently designed outdoor lighting are representative of the range of physical injuries that may occur when services within the scope of the practice of landscape architecture are performed without technical competence. Lighting is an integral part of many landscape architecture projects, and basic safety can be easily compromised without technical knowledge of lighting equipment and functional considerations in lighting design. Lacking basic safety, the cases described below include many forms of serious injury, including fatal accidents.

5.1.1.1. *Lighting Equipment*

The consequences of negligent outdoor lighting specifications have proven lethal. In the Florida case of *Batz v. First Florida Development, Inc.*,¹¹⁵ a homeowner was killed attempting to adjust a landscape light at his residence. A lawsuit resulted, naming as defendant the landscape architect responsible for producing the lighting plan. The family of the electrocuted victim claimed that the landscape architect's improper specifications and negligent inspection had caused the wrongful death. The landscape architect paid \$1,000,000 to settle the negligence claim.

Additionally, lighting equipment used in the wrong place can create an unnecessary risk of injury. In the case of *Chandler v. Mary Mahoney's, Inc.*, a three-year-old child suffered severe second- and third-degree burns after falling on and touching a landscape light in a shrub bed outside a restaurant.¹¹⁶ The child's parents sued the restaurant claiming negligence for having a "super hot" light in a landscape area that could foreseeably come in contact with patrons. Although a landscape architect was not involved in the case, the facts illustrate the risks that come from improperly specified lighting equipment, which risks landscape architects are specifically trained to address and minimize.

5.1.1.2 *Lighting Design*

Though the danger of negligently specified lighting equipment cannot be overstated, the hazards of poor illumination design are perhaps equal in the potential to produce harm. Without proper lighting, outdoor areas at night are rendered unsafe for navigation by pedestrians, bicyclists, and other traffic; and, in case after case, outdoor lighting design has been the cause of injury where inadequate lighting has provided the opportunity for violent crime.

¹¹⁵ *Batz v. First Fla. Dev., Inc.*, No. 97-667 CA (Fla., Martin Cty. Cir. Ct., July 30, 1998).

¹¹⁶ *Chandler v. Mary Mahoney's, Inc.*, 126 So. 3d 972, 973 (Miss. Ct. App. 2013)

For example, in a case out of Georgia, one person was killed and two others were seriously injured when they were hit by a van at night in a bridge construction zone.¹¹⁷ The three had exited their car after they had been involved in a separate accident, when an approaching van struck them, traveling at full speed, in part because the streetscape was not adequately lit.¹¹⁸ The two injured individuals and the estate of the person who died filed a lawsuit against the designer of the bridge widening project because it failed to properly implement sufficient lighting of the streetscape.¹¹⁹ Had the designer adequately and properly designed the lighting for the project, the likelihood of the accident would probably have been drastically reduced.

Poor night lighting also creates the serious risk of “slip and fall” type accidents, occurring where serious hazards would otherwise be open and obvious. In one case, which ultimately reached the Supreme Court of Missouri, a man fell six feet after unknowingly stepping off a retaining wall.¹²⁰ The record shows that the man had parked in a stall at the edge of the defendant’s parking lot, where a retaining wall ran along the outer perimeter. Poor lighting was held to be the cause of the misplaced footing that led to serious injuries, hospitalization, and a weakened condition for the remainder of the victim’s life.¹²¹ Following lengthy litigation, the owner of the parking lot was held liable for allowing the dangerous lighting condition to exist.¹²²

To produce a reasonable level of safety, outdoor lighting must be properly designed to illuminate both high- and low-traffic areas where hazards may exist. In a parking lot, improper lighting may fail to illuminate icy patches, as demonstrated by the case of *Henry v. P.F.D. Supply Corp.*¹²³ In that case, a worker making an early morning

¹¹⁷ *HNTB Georgia, Inc. v. Hamilton-King*, 697 S.E.2d 770 (Ga. 2010).

¹¹⁸ *Id.* at 772.

¹¹⁹ *Id.*

¹²⁰ *Swanson v. Goodwin*, 327 S.W.2d 903 (Mo. 1959).

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Henry v. P.F.D. Supply Corp.*, No. 91-L-901 (Ill., St. Clair County Cir. Ct., Feb. 7, 1995) (jury verdict for plaintiff, subsequently settled for \$424,000).

delivery slipped on a patch of ice unobservable under the lighting conditions in the parking lot. This fall resulted in a serious injury, foreseeable to a designer who understood the parking lot would be used for deliveries. The fallen delivery worker ultimately required hip replacement, and it cost the property owner \$424,000 to settle the case. In the case of *Shaw v. Northridge Enterprises, L.P.*,¹²⁴ involving a truck parking lot, a woman was run over by a truck and killed where the property owner was negligent in failing to provide adequate lighting and traffic controls in the parking lot. The Shaw court awarded \$2.5 million in the wrongful death case. In both of those cases, proper lighting design would have seriously reduced the risk of such tragedies.

A variety of other serious injuries have been attributed to falls caused by inadequate lighting. Inoperable landscape lighting was found to be the cause of an injury in a South Carolina case, where the injured party fell down a darkened outdoor stairway.¹²⁵ In a Colorado case, a pedestrian broke multiple bones when she stepped into an open drainage channel in an unlighted parking lot.¹²⁶ In its holding, the court noted, "The area was not lighted, there was no cover over the ditch, and there were no signs or marker indicating the presence of the ditch." Without adequate lighting or other means of mitigating risks, the court held the property owner liable for the dangerous conditions of its property at night.

The design of outdoor illumination can also enhance or deter crime. Research in the field of Crime Prevention Through Environmental Design (CPTED) has demonstrated that professional lighting design reduces the incidence of crime.¹²⁷ The appropriate distribution and specification of

¹²⁴ *Shaw v. Northridge Enters., L.P.*, No. G.D. 02-2929, (Penn., Allegheny Cty. C.C.P., Feb. 3, 2003).

¹²⁵ *Davenport v. Cotton Hope Plantation Horizontal Property Regime*, 508 S.E.2d 565 (S.C. 1998) (landscape contractor found liable for inoperable floodlight).

¹²⁶ *Connelly v. Redman Development Corp.*, 533 P.2d 53 (Colo. App. 1975).

¹²⁷ *Crime Prevention Through Environmental Design*, NAHB Land Development magazine, Fall 1994, at 22, 25.

lighting elements greatly reduces hazards from shadows and dark pockets that facilitate violent attacks, stalking, and various acts of street crime.¹²⁸ By failing to provide minimal lighting levels or by creating areas of high contrast, incompetent lighting design creates outdoor spaces that enhance the likelihood of criminal activity.¹²⁹

There is an extensive list of physical harms from crime in which inadequate lighting and poor lighting design have been a cause of injury.¹³⁰ In the District of Columbia, poor lighting near the entrance to an apartment was linked to a persistent crime problem, including an incident where a victim was shot in the neck.¹³¹ An ATM user in California was shot in the head, lost an eye, and was permanently disfigured where the lighting design of the ATM facility was inadequate and created hiding places.¹³² Poor outdoor lighting was linked to injuries from a shooting in one Florida case,¹³³ insufficient lighting also contributed to an attack and robbery of a woman in a major retailer's parking lot,¹³⁴ and in Kentucky, a court found that inadequate outdoor lighting had been the proximate cause of a rape.¹³⁵

¹²⁸ See Owen Stevens, *Lighting Design: A Primary Consideration in Crime Prevention and Detection*, in Canadian Security, July/August 1987, at 22-24.

¹²⁹ Shoshana Walter, *Crime Rises in Oakland, and Dim Lights Get Blame*, New York Times, Sept. 23, 2011, at A25A. (The article notes that "Research has long shown a correlation between street lighting and crime. Brandon Welsh, a criminology professor at Northeastern University, said streetlights acted as "natural surveillance" and could reduce crime by 20 percent as well as give residents a sense of pride and ownership over their neighborhood.")

¹³⁰ *Id.* (Article points out a 25 percent increase in homicides in Oakland after local ordinance required energy-efficient lighting be installed on streetlights, which led to more darkness on streets at night and more places for criminals to hide.)

¹³¹ *Arias v. Fernwood Corp.*, No. 90-8856, (D.C., D.C. Super. Ct., Oct. 15, 1991) (settled for \$500,000); see also *Bennett v. Gano*, No 99-10087 (Tex., Travis Cty. 53rd Jud. Dist. Ct., Nov. 21, 2000) (apartment complex parking lot designed with inadequate lighting became area of known criminal activity, including incident in which attack lacerated liver and spleen and injured diaphragm of female victim).

¹³² *Walters v. Roe Bank*, confidential docket number, 37 ATLA L. Rptr. 104 (Ca., Los Angeles Cty. Super. Ct., June 2, 1993) (settled for \$240,000).

¹³³ *Jordan v. Socory Mobil Oil Co.*, No. 90-091255 (Fla., Dade County Cir. Ct., Sept. 15, 1992) (shooting in gas station lot, settled for \$575,000).

¹³⁴ *Padgett v. Kmart Corp.*, No. CV 315-48, 2016 WL 6802482, at *2 (S.D. Ga. Nov. 15, 2016).

¹³⁵ *Doe v. Dickman Garden Apartments*, No. 95 CI 01002 (Ky., Kenyon Cty. Cir. Ct., Mar. 11, 1998) (settled for \$200,000); see also *MLean v. Eidelstein*, No. 95-16139 CA 01 01 (Fla., Dade Cty. Cir. Ct., Mar. 24, 1997) (attack at apartment complex attributed in part to inadequate outdoor lighting, claim settled for \$395,000).

Illumination of outdoor areas is a prime example of a design service where protecting public and consumer safety is an essential professional skill. Safe outdoor lighting design involves applying technical knowledge regarding visual adaptation and acuity, glare, fixture specifications, circulation patterns and functional requirements, and even microclimate. Intuitive responses requiring no technical knowledge, such as maximizing lighting wattage to maximize visibility, have been proven counterproductive and frequently unsafe. Licensure provides assurance that landscape architects, who often design and specify lighting, will be acting in a competent way and will ensure the public is protected.

5.1.2 Playgrounds

Playgrounds are fun places for children and families; unfortunately they are also fraught with risk of injury. In fact, one report estimated that more than 200,000 children go to emergency rooms each year because of playground injuries.¹³⁶ The same report estimated that 35 percent of those injuries are severe, and at least 15 children die each year due to playground injuries, “most caused by falls to hard surfaces, strangulation by entanglement, and head entrapment.” Considering these sobering numbers, it must be imperative for policy makers to implement regulations that minimize the risks of these very foreseeable injuries. Licensure of the design professionals who design and specify playground equipment is just such a regulation.

A landscape architect will often be the design professional assigned responsibility for layout and specification of playground materials, with clients ranging from park and school districts to private businesses and associations. The landscape architect is charged with providing an environment that will stimulate play and imagination, while at the same

¹³⁶ *When Playtime Goes Wrong*, FindLaw, <http://corporate.findlaw.com/litigation-disputes/when-playtime-goes-wrong.html>.

time implementing the safest possible plan.¹³⁷ While accidents at playgrounds may not be entirely preventable, landscape architects are trained and tested on their knowledge of fall zones, appropriate materials for playground equipment, and knowledge of hardscape, grading, and drainage features associated with playgrounds.

In a 2008 case, an adult parkgoer suffered lower spine injuries, including fractured vertebrae, after going down a park slide and landing on his buttocks on an inadequate play surface of wood chips.¹³⁸ In such a case, a licensed landscape architect would be in the best position to properly specify an appropriate playground surface and to best specify the appropriate type of playground equipment—all in pursuit of reducing the risk of injury to the public.

The case of *Cooper v. City of New Orleans*¹³⁹ is another example of the harm presented by negligent playground design. In that case, a design professional (the case report indicates that an architect had possibly been responsible for the playground design) negligently failed to specify a resilient surface below play equipment and was probably also negligent in failing to specify age-group-appropriate equipment. The design flaws were revealed when a six-year-old girl fell from a play structure onto a nonresilient surface and was rendered paraplegic by her injuries. Because falls are a foreseeable and, in fact, essential consideration in playground design, the court found the designer in breach of the duty to uphold professional standards.¹⁴⁰

¹³⁷ In the past, playground injuries have included broken bones, damaged brains, paralysis, blindness, and death. Playgrounds currently account for over 200,000 emergency room visits from children each year. Playground safety is based on guidelines and expert advice, as the Consumer Product Safety Commission has declined to formally regulate playground design. Connie Cass, *Less summer fun: The dulling of the American playground*, Daily Camera [Associated Press], Boulder, Colorado, July 8, 2003, at 6C.

¹³⁸ *Swinehart v. City of Spokane*, 145 Wash. App. 836, 187 P.3d 345 (2008).

¹³⁹ *Cooper v. City of New Orleans*, 680 So.2d 1259 (La. App. 1996) (\$2,929,777 judgment subsequently settled by parties out of court).

¹⁴⁰ *Id.*

Because many playground features will present an unnecessary risk of harm if defectively designed or specified, playground injuries are often attributed to negligence.¹⁴¹ In some cases children have been injured on playgrounds by swings,¹⁴² slides,¹⁴³ ropes¹⁴⁴, and on multiple occasions by inappropriate playground surfaces.¹⁴⁵ Even adults have proven to be a liability problem where playground equipment is used by those outside of a design-specific age group.

The asphyxiation death of a six-year-old reported in a 1993 Colorado news item¹⁴⁶ demonstrates that even a sandbox can be extremely hazardous if it is located with equipment that could entrap a child or where there is inadequate opportunity for supervision. As another example of playground design that inhibits effective supervision, the McDonald's Corporation was found to be liable for injuries in a 1998 South Carolina case, where a playground fence allowed children to escape while entrapping supervising adults.¹⁴⁷ In that case a child easily moved from a playground to an adjacent high-traffic parking lot, while the supervising adult was unable to follow the child without inflicting injury upon himself.

As a final source of playground hazard, playground design integrates other areas of specialized technical knowledge critical to public and consumer safety. For example, defective grading

¹⁴¹ See *Andretta, PPA v. Rudig*, No. CV 99065340, 2000 WL 1269327 (Ct., Super. Ct. of Ct., Aug. 17, 2000) (negligence alleged in case of injuries suffered by child playing on the school playground).

¹⁴² *Pecore v. City of Syracuse*, 298 N.Y.S.2d 883, (N.Y. App. 2002) (10-year-old injured in fall from park swing).

¹⁴³ *Jones v. City of Hartford*, 18 Conn. L. Rptr. 420 (Conn. Super. 1996) (defective slide on playground caused injuries); see also *infra* notes 145 and 151, regarding a playground slide-related injuries.

¹⁴⁴ See *Five-Year-Old Boy Dies in Daycare Playground Accident*, Illinois Injury Lawyer Blog, http://www.illinoisinjurylawyerblog.com/2014/06/fiveyear_old_boy_dies_in_dayca.html.

¹⁴⁵ Cooper, *supra* note 43; *Schabel v. Deer Valley Unified School District* No. 97, 920 P.2d 41 (Ariz. Ct. App. 1996) (school district may be liable for negligently failing to install an appropriate, adsorptive playground surface where a child fractured an arm at a playground).

¹⁴⁶ *Boy suffocates in playground sand*, Rocky Mountain News, Oct. 2, 1993 (child suffocated after becoming trapped under a piece of jungle gym equipment).

¹⁴⁷ *Griffin v. McDonald's Corp.*, No. 96-CP-23-1694R (S.C., Greenville County CCP, Jan. 22, 1998).

specifications may lead to ruts and other trip hazards.¹⁴⁸ In the case of *Rodgers v. Meyers & Smith, Inc.*,¹⁴⁹ a landscape architect negligently specified a sewer cover in a playground area, leading to serious injuries when the cover tilted unexpectedly.

As discussed in the respective sections of this report, the dangers of landscape architecture practice involving negligent site planning, negligent grading and drainage, and negligent outdoor structures, among other skills of importance to playground projects, are typically heightened where members of a vulnerable population, such as children, are the primary users of a built design. These concerns simply add to the real-world examples of risks posed by incompetent playground design.

¹⁴⁸ *Sidwell v. Griggsville Community Unit. School Dist.* Number 4, 588 N.E.2d 1185 (Ill. 1992) (student injured after tripping on rut on school playground).

¹⁴⁹ *Rodgers v. Meyers & Smith, Inc.*, 206 N.E.2d 845 (Ill. App. 1965).

5.1.3 Plant Material

Plant material poses a risk to public health and safety where plans place human activities in close proximity to thorns, weak branches, poisonous plants, and excessive tree litter. Among the design professions, landscape architects are specifically and exclusively educated and tested for their knowledge of the hazardous characteristics of plants, producing designs that avoid the types of incidents highlighted in this section.

A prime example of how landscape architects can minimize risks posed by plant materials is the case of *Henderson v. St. Francis Community Hospital*¹⁵⁰ out of South Carolina. That case dealt with a landscape architect's advice regarding sweet gum trees, which are an example of a landscape plant that is useful in many situations but in other situations undesirable or dangerous. The sweet gum fruit is relatively large and round, falling to the ground in large quantities from mature trees. The plant is inappropriate where, for example, patients and visitors to a hospital would be likely to step on the fallen fruits. In the *Henderson* case a landscape architect had identified this risk and advised against the planting of sweet gum at the defendant hospital. Ignoring this recommendation, the hospital planted sweet gum trees such that debris fell in the path of pedestrians. A visitor was subsequently injured after slipping on one or more of the fruits. As the South Carolina Supreme Court later noted when it found the hospital liable for the victim's injuries, "the hospital had been warned by a landscape architect firm that the sweet gum trees were undesirable because they caused the dangerous accumulation of debris."¹⁵¹ It follows that adherence to professional landscape architecture standards would have prevented injury, to say nothing of the legal costs that grew out of the injury.

Some plant material is hazardous year-round. For example, thorn-bearing plants pose a risk when they are placed near activities, and conversely, plans that place activities near existing thorny plants are likely to be dangerous. An Illinois

¹⁵⁰ *Henderson v. St. Francis Community Hospital*, 399 S.E.2d 767 (S.C. 1990).

¹⁵¹ *Id.*

case demonstrates the latter danger. A picnic area and recreational field in a county forest preserve were located immediately adjacent to a large native honey locust tree, which has large thorns. While playing in the field, an eight-year-old boy ran face-first into the thorny tree, and, as a result, a thorn penetrated his sternum bone and lodged in his chest near his heart.¹⁵² Removal of the thorn required surgery. As established by a landscape architect who testified in the case, the accident could have been avoided through the use of preventative design measures, creating a spatial separation between the recreational area and the honey locust. In another case involving thorny trees, a 12-year-old injured his eye after running face-first into a thorny tree in the common area of an apartment complex.¹⁵³ Serious injuries result when plans call for human activities inappropriately close to thorns.¹⁵⁴

In the layout of outdoor spaces, landscape architects also apply knowledge of plant materials to avoid placing activities close to trees that pose a foreseeable risk due to weak wood—for instance, shallow and confined roots, or a mechanically weak branching structure—that could cause limbs or entire trees to topple to the ground. For example, in an Illinois case, a bicyclist was killed when she was riding on a bicycle path and a tree limb fell on her.¹⁵⁵ The broken limb came from a weak-wooded, defective, and weakened tree that was planted too close to the bike path. In other words, it was very likely that improper tree selection created the risk of that injury. Similarly, in another case in South Dakota, a campground was located directly under such hazardous trees. Two visitors were seriously injured, one permanently

¹⁵² *A.D. ex rel. J.D. v. Forest Preserve District of Kane County*, 731 N.E.2d 955 (Ill. App. 2000) (jury held for plaintiff, reversed on appeal because of government immunity).

¹⁵³ *Robinson v. New York City Housing Authority*, 702 N.Y.S.2d 22 (N.Y. App. 2000) (housing authority held not liable due to the doctrine of assumption of risk).

¹⁵⁴ *Zavora v. Paul Revere Life Insurance Co.*, 145 F.3d 1118 (9th Cir. 1998) (thorn in back of an eye is a disabling injury); see also Pennsylvania State Board of Landscape Architecture, Response to Act 142, P.N. 1457, *Sunset Legislation—State Board of Landscape Architects*, 1982, at 23-24 (architect who agreed to perform landscape architecture work as compensation for past negligent architecture work specified a thorny poisonous bush [WRONG WORD??] in a school play area).

¹⁵⁵ *Foust v. Forest Pres. Dist. of Cook Cty.*, 2016 IL App (1st) 160873, 2016 WL 5706935.

disabled, when a large tree limb fell on them from above. The resulting negligence case was settled for an undisclosed amount.¹⁵⁶

Other examples illustrate how the improper specification of plant material can contribute to or cause significant injury or death. In one case, a motorcyclist was hit and killed by another driver whose view had been obstructed by shrubs.¹⁵⁷ Had the proper size of shrubs been specified and planted by a competent landscape architect, perhaps the view-obstructing condition would not have been present.

As these cases demonstrate, landscape architects are frequently in the best position to mitigate harms presented by plant material. In many cases, the landscape architect will mitigate harm by locating activities a safe distance from hazardous vegetation. In other cases, hazards may be mitigated through competent plant selection, specifications, or other remedial measures (e.g., tree staking, bracing). But even in those circumstances, the improper specification of materials can cause the risk of harm. For example, in *Grimes v. Family Dollar Stores of Florida, Inc.*, a pedestrian walking through a parking lot landscape island (which is entirely foreseeable) sustained serious injuries after he tripped and fell on a protruding tree stake.¹⁵⁸ A properly specified method of tree staking would have reduced or eliminated that risk.

¹⁵⁶ *Krumwiede v. Cooper*, No. 95-62 (S.D., Roberts Cty. Cir. Ct., Dec. 6, 1996).

¹⁵⁷ *Townsend v. Pierre*, 429 N.J. Super. 522, 526, 60 A.3d 800, 802 (App. Div. 2013), rev'd, 221 N.J. 36, 110 A.3d 52 (2015).

¹⁵⁸ *Grimes v. Family Dollar Stores of Florida, Inc.*, 194 So. 3d 424, 426 (Fla. Dist. Ct. App. 2016), reh'g denied (June 30, 2016).

5.1.4 Site Planning

As a landscape architectural product, a site plan establishes the basic organization of uses and activities on a tract of land: where buildings are located, vehicular and pedestrian circulation, placement and orientation of parking, and so on. Depending on the level of detail, site plans may also include plantings, site furnishings, fences, walls, and a variety of other built features that landscape architects are called upon to incorporate into outdoor settings. Negligent layout of site features creates risks to public health and safety when access to attractive nuisances is not appropriately restricted, when incompatible activities are located in direct contact, and when opportunities for crime are enhanced by design that interferes with visibility and surveillance.

A competent landscape architect recognizes an attractive nuisance and takes appropriate steps to limit access. In many cases, a fence or gate will be necessary to prevent injury, especially to children.¹⁵⁹ A negligent site plan is often characterized by inadequate fencing, inadequate warning signs, improperly specified components of a security system, location of uses near hazards, or some combination of these design defects.

As attractive nuisance cases demonstrate, the deaths of children could have been prevented through proper site planning. Children have drowned in outdoor pools where adequate warnings were not provided.¹⁶⁰ For example, a pool gate in one case was improperly specified, allowing unsupervised access to a four-year-old, who drowned.¹⁶¹ A three-year-old drowned where a play area was located

¹⁵⁹ See *Scanlan v. Ticon New York, Inc.*, No. 3347/98 (N.Y., Rockland Cty. Sup. Ct., Feb. 24, 2003) (boy injured where quarry failed to adequately fence its property).

¹⁶⁰ *Sober v. Goldberg*, No. 95/257/94 CV10173 (Md., Baltimore County Cir. Ct., Oct. 9, 1995) (11-year-old girl died in residential pool, settled for \$800,000).

¹⁶¹ *Collyar v. Harley*, No. 92-7369 (Fla., Hillsborough Cty. Cir. Ct., Sept. 21, 1995).

next to a steeply sloped pond.¹⁶² A court in that case found the property owner liable for negligence in failing to fence the pond. Landscape architects are uniquely positioned to be aware of and to specify measures that can significantly reduce the risks posed by attractive nuisances.

In addition to preventing fatalities, proper site planning mitigates other serious harms associated with attractive nuisances. In the context of an outdoor pool as an attractive nuisance, design defects in the fencing around the pool caused the near drowning and resulting severe developmental delays of a 19-month-old.¹⁶³ In another case, a child was brain damaged after being struck by a car in a dangerous intersection.¹⁶⁴ The intersection was immediately adjacent to the school the child attended. An appeals court found that the placement of a gate near the intersection could subject the school to liability for the child's injuries, since such a gate is foreseeable as a dangerous property condition where it encourages children to enter the street near a dangerous intersection.¹⁶⁵

Landscape architects also possess professional awareness of built features that will be incompatible if placed in close proximity. For example, as a landscape architect testified in a Michigan case, certain recreational areas and power lines should not be located in close proximity.¹⁶⁶ In that case, three boys were electrocuted playing under power lines in a park. As a result, one boy was killed, another had a leg amputated, and the third was seriously injured. In another case, improperly segregating pedestrian and automobile circulation led to an

¹⁶² *Stern v. Peppertree Ltd.*, No. 91 CV 1457 (Ohio, Lake Cty. C.C.P., Dec. 22, 1992) (a jury awarded \$150,000 to the plaintiff in the wrongful death case); see also *Bresnan v. Pachang Marina & Campground Ass'n, Inc.*, No. CV-99- 0551308S (Conn., New London Cty. Jud. Dist. Ct., June 13, 2001) (non-landscape architects liable for wrongful death and \$2.2 million in damages in drowning of two-year-old where "negligent in placing attractive playground equipment near a water hazard without taking precautions concerning the foreseeable risk of a child falling into the pond").

¹⁶³ *Becerra v. Bockhacker*, No. LC001163 (Ca., Los Angeles Cty. Super. Ct., June 14, 1994) (fence did not completely enclose pool area, nor did other features serve as effective barriers; settled for \$850,000).

¹⁶⁴ *Joyce v. Simi Valley Unified School Dist.*, 11 Cal.Rptr.2d 137 (Cal. App. 1992).

¹⁶⁵ *Id.*

¹⁶⁶ *Schulte v. The Detroit Edison Co.*, 213 N.W.2d 311 (Mich. App. 1973).

auto-pedestrian accident in front of a department store.¹⁶⁷ Had the site plans in these cases followed the customary practices of landscape architecture, injury to children could have been avoided.

Adults, though better able to assess and avoid many of the hazards noted above, are also placed at risk by negligent site planning. For instance, two marble sculptures installed in front of a city office building in Denver protruded into the path of pedestrian circulation, posing a risk to public safety and violating the Americans with Disabilities Act according to the City of Denver's Commission for People with Disabilities. The initial design of the art installation presented a risk to the blind, as well as bicyclists and pedestrians in general. To remedy the problem, the developer of the new office building found it necessary to erect a temporary fence while investing additional resources to modify the sculpture.¹⁶⁸

The principles of CPTED (also discussed in the Lighting section) are of great importance to the site planning process. Landscape design that provides hiding areas for criminals has been held the cause of a rape where access to an apartment building was otherwise secure.¹⁶⁹ In a dramatic example of hazardous site planning, the secluded location and obstruction of views to an ATM were linked to an incident in which an ATM customer was robbed, raped, killed by a gunshot to the head, and set on fire using gasoline. Sued for wrongful death, the ATM owner settled for \$4.5 million rather than allowing a jury to decide the extent of the owner's liability for creating a setting in which such a sequence of violent crimes could take place without detection.¹⁷⁰ It is perhaps cases like that which

¹⁶⁷ *Slizer v. Hill*, No. CIV.A. 08C-04-191MJB, 2012 WL 1435014, at *2 (Del. Super. Ct. Apr. 20, 2012).

¹⁶⁸ Mark P. Couch, *Two-faced sculpture to get a facelift*, Denver Post, August 28, 2002, at 1A, 8A; *A nose out of joint* [editorial], Denver Post, August 29, 2002, at 6B ("[A] lot of people involved with the project are pretty frustrated by this development. No doubt, but the obvious question is: Why didn't anyone consult the commission or check the ADA—which is, after all, the law?"). At a minimum, the corrective measures in the City of Denver example represent the type of financial harm exacted upon clients of landscape architects negligent or incompetent in designing for compliance with the ADA; see *Alford v. City of Cannon Beach*, *infra* note 348.

¹⁶⁹ *Post Properties, Inc. v. Doe*, 495 S.E.2d 573 (Ga. App. 1997).

¹⁷⁰ *Pocase v. Cullen/Frost Bankers, Inc.*, No. 94-CI-04811 (Tex., Bexar Cty. 131st Jud. Dist. Ct., Sept. 18, 1995).

resulted in CPTED principles regarding placement of ATMs. Those principles hold that commercial drive-throughs (with ATMs) are “potentially the perfect place for criminal activity. They are often used at odd hours, are hidden from view, and those using them will almost certainly be carrying cash. The rule of thumb in the design of a drive-through can be reduced to one word: visibility.”¹⁷¹ A site plan designer, unfamiliar with safety and crime-prevention principles such as that, would be more likely to place an ATM or a drive-through on a site plan in a manner that increases the risk of crime. Licensure of landscape architects provides a significant risk-reducing measure of possible design errors like that.

Incompetent layout of outdoor spaces and landscape features creates risks to public health and safety,¹⁷² including potentially lethal hazards. In combination with risks from incompetence in other technical areas of landscape architecture practice, it is fair to estimate that design defects could cause injury on practically every site plan, especially where produced by incompetent practitioners.

5.1.5 Parking Lots

Landscape architects routinely design parking lots for commercial and institutional developments. Public health and safety concerns in parking lot design include, as a matter of critical importance, the management of vehicular traffic to minimize pedestrian hazards, as well as the safe and effective design of parking lot details.

A significant number of injuries have been caused where curbs and other barriers have been inadequately designed to prevent cars from striking pedestrians on sidewalks and in other nonvehicular areas. In fact, the Florida case of *Koenig v. TOC Retail, Inc.*¹⁷³ revealed that this type of incident was

¹⁷¹ Durham City and County CPTED Private Sector Taskforce, *Crime Prevention Through Environmental Design: Durham County Guide to Creating a Safer Community*, at 12.

¹⁷² William Beckner, Director of Fairfax County Parks, Letter of support for continued regulation of landscape architecture to Virginia Department of Commerce, Feb. 26, 1991, at 2 (noting that a curving roadway bisected the picnic area and playground at a Virginia park, a potential cause of injury where a child was walking between the facilities and struck by a car).

¹⁷³ *Koenig v. TOC Retail, Inc.*, No. 93-08544, 38 ATLA L. Rptr. 353 (Fla., Hillsborough City Super. Ct., May 15, 2002) (Patron of walk-up window struck by a car that jumped a curb, resulting in amputated leg and \$1.3 million settlement).

so common at convenience stores that the industry had developed a name for it, a “drive-through.” The plaintiff in the *Koenig* case had been walking on the sidewalk in front of a convenience store when a car jumped the curb and caused severe injuries, including facial disfiguration and the amputation of a leg. Based on a claim that the curb and sidewalk were defectively designed as a barrier, the case was settled for \$5.4 million. The *Koenig* case was not unique, as evidence showed that at least 75 similar incidents had occurred at other stores owned by the same company in the preceding three years.¹⁷⁴

One common source of risk with parking lots is the likelihood of conflicts between cars and pedestrians. Wise parking lot planning and layout will minimize, to the extent practical, the number of areas of auto-pedestrian conflict. Indeed, pedestrians have been injured due to negligent parking lot design in a wide assortment of settings. According to reports of litigation, so-called drive-throughs are a persistent problem in high-traffic convenience store and fast food settings.¹⁷⁵ In one case, two students were injured in a school parking lot when a car accelerated over a curb.¹⁷⁶ In another case, several people asserted negligent design against a theme park after they were injured in a parking lot island designated as a picnic area.¹⁷⁷ Noting evidence that the picnic area was surrounded on all sides by vehicular traffic and not protected by any form of barrier, the court held that the theme park could be liable for negligent design.¹⁷⁸

¹⁷⁴ *Id.*

¹⁷⁵ See *Auerbach v. Rita's Water Ice Franchise Corp.*, No. 7361-99 (N.J., Camden City Super. Ct., May 15, 2002) (Patron walk-up window struck by a car that jumped a curb, resulting in amputated leg and \$1.3 million settlement); see also *Springtree Properties, Inc. v. Hammond*, 692 So.2d 164 (Fla. 1997) (Failure to install bumper posts at curbside of fast-food restaurant alleged cause of an accident in which patron was struck while leaving).

¹⁷⁶ *Constantinescu v. Conejo Valley Unified School District*, 20 Cal.Rptr.2d 734 (Cal. App. 1993).

¹⁷⁷ *Robison v. Six Flags Theme Parks, Inc.*, 75 Cal.Rptr.2d 838, 845–846 (Cal. App. 1998).

¹⁷⁸ *Id.*

When designed with even a minimum level of competence, a parking lot will safely guide pedestrians, bicycles, and motor vehicles to and from their destination while minimizing auto-pedestrian conflicts. Without being designed with a minimum level of competence, the design of a parking lot can present an assortment of navigational hazards. To illustrate, in one case the edge of a parking lot built on fill dropped off rapidly, which presented an unreasonable hazard to unwarned visitors.¹⁷⁹ In that case, *Schager v. Midway Shopping Ctr. Ltd. Partnership*,¹⁸⁰ a visitor was killed after falling from a parking lot to a driveway below. The court in that case found the failure to provide a guardrail or fence in the parking lot design sufficiently negligent to sustain a wrongful death action against the property owner.¹⁸¹ In a Colorado case, the state appellate court upheld an action against a municipality where defects related to the design of parking lot surface drainage led to the injury of a parking lot user.¹⁸² Parking lot features such as speed bumps¹⁸³ and wheel stops¹⁸⁴ have also been associated with injuries in reported cases.

Given the foreseeable risks inherent in parking lot design, it is imperative to ensure that those design professionals who frequently lay out and design parking lots are competent to do so. Perhaps the most objective way for property owners, consumers, and public to evaluate that competency is through licensure.

¹⁷⁹ *Schager v. Midway Shopping Ctr. Ltd. Partnership*, No 107737/96 (N.Y. Sup. Ct., June 1, 1999) (the record in *Schager* does not indicate the involvement of a landscape architect, which may account for the failure to meet building code standards in the parking lot).

¹⁸⁰ *Id.*

¹⁸¹ *Id.*

¹⁸² *Smith v. Estes Park*, 944 P.2d 571 (Colo. App. 1997).

¹⁸³ *Mignery v. Duneland Beach Ass'n*, No. 46 D03-8904-CT-104 (Ind., LaPorte Cty. Super. Ct., Oct. 23, 1991) (bicycle rider thrown from bicycle at speed bump, fracturing collarbone and requiring surgery; a jury found the property owner negligent in failing to provide warning of the speed bump and awarded \$150,000).

¹⁸⁴ *Dillard v. Vanderbilt University*, 970 S.W.2d 958, 1998 WL 32704 (Tenn. Ct. App. 1998) (woman injured after tripping over concrete wheel stop).

5.1.6 Streetscape

Streetscape design includes paving, lighting elements, street trees, signage, and other typical features of an urban street. To an extent equivalent to other built products of the design professions, streetscape projects are used by many people, with users representing a cross section of all ages and ability levels. As a profession, landscape architects are uniquely qualified to perform streetscape design, and in many projects (especially the types of injury detailed below), non-landscape architects have been responsible for producing hazardous designs.

Injuries in the streetscape setting are particularly prevalent where the designer fails to accurately articulate the dimensions of paving elements or fails to adequately control final grades through specifications. Poor grading control leads to vertical discontinuities in a walking surface, creating trip hazards and causing injuries. A three-eighths-inch vertical gap between pavers and a sidewalk was deemed by one court to be a “defective, unsafe, and dangerous” condition after a woman injured her wrist and arm in a trip and fall accident at the gap.¹⁸⁵ Grading defects in streetscape have caused a variety of injuries, some serious and debilitating.¹⁸⁶

Urban design elements such as signs, tree planters, and utility equipment also create trip hazards in defective streetscape design. For example, in one typical case, an access cover in a sidewalk was not properly specified to match its frame, creating a one-inch grade differential that was found to have

¹⁸⁵ *Coln v. City of Savannah*, 966 S.W.2d 34 (Tenn. 1998).

¹⁸⁶ *Keonn v. Fiddler's Inn*, No. 01AO1-9712-CV-00730, 1998 Tenn. App. LEXIS 621 (Tenn. Ct. App., Sept. 14, 1998) (held that the design of a 3 1/2 inch “step” to access city hall could be the legal cause of injury in a fall); *Williams v. City of Baton Rouge*, 844 So.2d 360 (La. App. 2003) (injury of child causing debilitating pain and surgical intervention attributed to grade differential at sidewalk/driveway junction and plant material obscuring view of sidewalk, the appeals court characterized the trial court of award of \$165,000 as “conservative”); *Garlick v. Gallatin Municipal Authority*, No. G.D. 215 (Penn., Fayette Cty. C.C.P., April 19, 2002) (pedestrian injured at discontinuity between parking lot and sidewalk); *Ogle v. Billick*, 453 P.2d 677, 680 (Ore. 1969) (where plaintiff was injured in a fall from a stairway, engineer could be negligent in road design that undermined a handrail and created a steep drop-off from the existing stairway); *Aitkenhead v. City & County of San Francisco*, 150 Cal.App.2d 49 (Cal. App. 1957) (city held negligent for defective design where height variance between curb and sidewalk and gaps in sections of curb created a trip hazard and caused injuries).

caused head, arm, and knee injuries to a passerby.¹⁸⁷ In a recent Connecticut case, a design professional was hired by a municipality to design a “streetscape project” that included a retaining wall along the streetscape.¹⁸⁸ After the project was constructed, a pedestrian sued the municipality after he fell off the retaining wall and was seriously injured. His lawsuit included a cause of action against the design professional for negligence because the retaining wall did not have a fence specified to be installed on top of the wall, which would have prevented the fall and resulting injuries.¹⁸⁹

Defective design and specifications for a tree grate were alleged to have caused injuries in a Rhode Island trip and fall case.¹⁹⁰ And, in yet another example of hazardous design details, a jury awarded \$841,000, including punitive damages, when a store patron was injured after tripping over the metal sleeve for a traffic sign.¹⁹¹ In that case, the jury deemed the property owner liable for a latent defect in shopping center improvements. In each of these cases, a minimally competent landscape architect would have produced plans that eliminated, drastically reduced, or provided warnings for trip hazards.

A streetscape is hazardous if it does not provide a clear path for pedestrians. It would, for example, be negligent to design a fence that obstructs a sidewalk and forces pedestrians to walk in a busy roadway. A pedestrian was killed in this exact situation in the Utah case of *Braithwaite v. West Valley City Corp.*¹⁹² In that case, the local government was held liable

¹⁸⁷ *Pierce v. City of Racine*, 319 N.W.2d 180 (Wis. App. 1982).

¹⁸⁸ *Fisk v. Town of Redding*, 164 Conn. App. 647, 649, 138 A.3d 410, 412 (2016) (It is not clear on the facts of the case what type of design professional performed the work because the case mentions an “architect” as the designer of the project, but it also discusses engineering elements.).

¹⁸⁹ *Id.*

¹⁹⁰ *Newman-Simkins v. Johnson*, No. NC 1996-35, 1999 RI Super LEXIS 89 (R.I., Super. Ct. of R.I., Newport, Sept. 23, 1999); see also *Curtis v. City of Charlevoix*, No. 328456, 2016 WL 6905900, at *1 (Mich. Ct. App. Nov. 22, 2016) (Plaintiff tripped, fell, and injured her ankle on a tree grate in the middle of a sidewalk that ran alongside a parking lot.).

¹⁹¹ *Wilcox v. Wal-Mart Stores, Inc.*, No. A4-94-24 (W.D.N.D., June 15, 1995) (patron tripped on sleeve protruding 5 inches from sidewalk and suffered ruptured disks, surgeries, and permanent limitation in range of neck motion).

¹⁹² *Braithwaite v. West Valley City Corp.*, 860 P.2d 336 (Utah 1993).

for the defective design. Obstructions to pedestrian traffic have also caused serious injury in reported Colorado and Louisiana cases.¹⁹³

In addition to the specific examples in this section, potential harms in streetscape design include failure to exercise competence in lighting, site planning, grading and drainage, exterior structures, and other technical skills in the field of landscape architecture. Because of their specific training related to grading, planning, outdoor surfaces, tree selection, and selection of other design details, competent—and licensed—landscape architects are in the best position to fully address the harms that can result from negligent streetscape design.

¹⁹³ *Wheeler v. County of Eagle*, 666 P.2d 559 (Colo. 1983) (county may be negligent for failing to address pedestrian safety issues created by vegetation growing in county road right-of-way); *Williams v. City of Baton Rouge*, *supra* note 80.

5.1.7 Outdoor Structures

Specialized technical knowledge is required where landscape architects are called upon to design outdoor stairways, decks, viewing platforms, ramps, and other built features for safe ingress and egress. As illustrated in the examples below, professional skill in this area of landscape architecture practice is necessary to maintain a reasonable standard of safety for consumers of landscape architecture services, including the general public.

5.1.7.1 Stairways

Exterior stairways can be extremely dangerous if designed without the minimal competence of a trained landscape architect. The potential harm from poorly designed outdoor stairs is evident in *Doe v. Roe*, where a fall caused severe head trauma and permanent disability.¹⁹⁴ In that case, the litigation process revealed numerous design defects that made a stairway of landscape timbers extremely dangerous, including nonuniform riser height, inadequate handrails, and a lack of positive drainage on the steps, which led to ponding of water and ice. The defendant ultimately paid \$2 million to settle the case.

In other cases, negligently designed outdoor stairs have been linked to severe internal injuries, where no handrails were provided;¹⁹⁵ loss of bowel, bladder, and sexual function, where a stair landing lacked adequate dimensions;¹⁹⁶ general injuries, where use of glazed tile inappropriate for outdoor use caused a slip and fall;¹⁹⁷ and

¹⁹⁴ *Doe v. Roe*, confidential docket number, 36 ATLA L. Rptr. 377 (Colo., Pitkin Cty. Dist. Ct., Feb. 10, 1993) (among other design defects, the stairs did not conform to the Uniform Building Code); see also *Reno v. Krantz*, Denver County District Ct., No. 96-CV-5429 (Dec. 28, 1999) (total judgment in excess of \$1 million for injuries stemming from a dangerous condition in stairway present from the time of initial construction).

¹⁹⁵ *Goodwin v. Rocky Point Village Corp.*, No. 89-15700 Div. W (Fla., Hillsborough Cty. Cir. Ct., Sept. 23, 1991) (settled for \$2.47 million); see *Eisenpresser v. Staples, Inc.*, 42 ATLA L. Rptr. 274 (N.Y. Sup. Ct., April 14, 1999) (building code violation for lack of handrail is sufficient evidence for prima facie case of negligence); *Ogle v. Billick*, *supra* note 80 (transition to existing stairway undermined safety of handrail and steps).

¹⁹⁶ *Johnson v. State*, No. 3AN-96-173 Civil, 41 ATLA L. Rptr. 95 (Ak., 3d Jud. Dist. Super. Ct., Oct. 24, 1997) (failure to provide stair landing of 60 inches, as required by code, found to be sole cause of serious injuries in fall down staircase).

¹⁹⁷ *Johnson v. Witteles*, No. YC 043572 (Cal., Los Angeles Cty. Super. Ct., April 17, 2003).

injuries to a child, where railings did not include adequate safety measures.¹⁹⁸

In each of these circumstances, it is clear a competent and licensed professional is necessary to both understand basic design principles and also to adequately address and implement building codes and other design and construction standards that reduce the risk of harm to the public.

5.1.7.2 Guardrails

Guardrails are a feature of outdoor stair landings, ramps, and decks, as well as a protective device at the top of slopes and the perimeter of other hazardous features.¹⁹⁹ For example, the case of *LaPlata County v. Moreland*²⁰⁰ illustrates the potential for harm when guardrails are incompetently designed. There, a deck was built without complete enclosure by a guardrail, despite a county government requirement to that effect. Relying on a nonexistent guardrail, a visitor fell 10 feet onto rocks below, resulting in paraplegia, among other injuries.²⁰¹ The victim sought to recover from the county for failing to enforce its code, but the court held the county not liable, a legal result that highlights the importance of requiring landscape architects to demonstrate minimum competence prior to engaging in design work that has the potential for serious harm. As discussed in the Parking Lots section of this report, failure to provide a complete guardrail where it should have been required was also found the cause of a fatal fall down a steep slope.²⁰²

¹⁹⁸ *Beltran v. Enriquez*, No. RCV 21903 (Ca., San Bernadino Cty. Super. Ct., Oct. 20, 1997) (railing along landing of external stairway violated municipal building code, with only one intermediate rail between ground level and top of guardrail; arbitrator awarded \$750,000); see also *Okosisi v. Dominique Apartments, Ltd.*, No. YC 022023 (Cal., Los Angeles Cty. Super. Ct., Dec. 4, 1998) (despite a guardrail and balcony design conforming to all applicable building codes, defendant in stairway design negligence case settled for \$1 million after 21-month-old slid under a balcony guardrail, fell two stories, and suffered brain damage).

¹⁹⁹ *Wagoner v. City of Dallas*, No. 86-7739K (Tx., Dallas Cty. 192nd Jud. Dist. Ct., January 1991) (\$5,000,000 judgment against city for brain damage and permanent injury to one-year-old where design of guardrail fence along ditch in city park failed to adequately prevent children from falling into ditch).

²⁰⁰ *Board of County Commissioners of La Plata County v. Moreland*, 764 P.2d 812 (Colo. 1988).

²⁰¹ *Id.*

²⁰² *Schager*, *supra* note 187.

Similarly, in a 2016 case, a woman was severely injured when she fell on a set of outdoor stairs at Yosemite National Park that did not have handrails or guardrails.²⁰³ That case involved the design and rehabilitation of a trail, stairs, and viewing area for one of Yosemite’s granite landscapes, including the famous Half Dome feature. The National Park Service (NPS) hired a landscape architect to design the rehabilitation project and to aid in its bidding and construction. Deposition testimony in the case established that the NPS directed the design elements of the work including removing “vertical elements” such as handrails, and varying the building-code-required dimensions for the rise and run of the stairs.²⁰⁴ If the landscape architect in that case had more autonomy over the design and management of the project, it is very likely the health and safety elements would have remained on the project.

A case in Illinois illustrates a similar point. In *Milijevich v. Provena Hospitals*, an elderly woman suffered serious injuries due to falling from a four-foot retaining wall in a hospital parking lot because there was no guardrail.²⁰⁵ The woman’s injuries resulted in part because there was no guardrail installed at the top of the retaining wall, and, perhaps more relevant for the purposes of this document, there also were no shrubs planted in the narrow landscape area between the top of the retaining wall and an adjacent parking lot curb. Significantly, the design firm that designed the project had called for a line of shrubs—presumably designed by a landscape architect (although the case does not specify)—to be planted along the top of the wall, yet the shrubs were never installed.²⁰⁶ As a result, the additional “barrier” of shrubs was absent in addition to no guardrail.²⁰⁷ That case illustrates the problems that arise when a competent designer’s plans are not adhered to: unnecessary risks increase.

²⁰³ *Loye v. United States*, No. CV F 10-1581 LJO GSA, 2011 WL 4841604, at *2 (E.D. Cal. Oct. 12, 2011), *aff’d*, 502 F. App’x 695 (9th Cir. 2012).

²⁰⁴ *Id.* at 2–4.

²⁰⁵ *Milijevich v. Provena Hosps.*, 2011 WL 10453927 (Ill. App. 2011).

²⁰⁶ *Id.* at 6.

²⁰⁷ *Id.*

To demonstrate minimal competence, landscape architects are also tested on the use of fasteners and adhesives in various applications. That skill is no trivial matter. For example, incompetent railing design, particularly fastener specifications, was found the cause of injuries where a 12-year-old boy fell 12 feet after leaning on a rotten wood rail.²⁰⁸ When the boy hit the ground, a nail entered his skull, which caused loss of hearing and loss of facial muscle control.²⁰⁹ In another case of an improperly attached railing, a man fractured and herniated several disks and suffered permanent disabilities after falling when the railing failed.²¹⁰ At 29 inches, and below the center of gravity of a typical adult, the height of the railing was another serious design defect, contributing to the property owner's settlement of the case for \$350,000.

The general public often takes design elements, such as guardrails and handrails, for granted; the public does not fully appreciate the competency required to adequately provide for such protective measures, nor does the public necessarily recognize the risks involved with the incompetent provision of those measures. In light of these risks, and the public's general lack of awareness, landscape architects must be licensed to ensure their competency to provide these critical built elements.

²⁰⁸ *Schultz v. DeVaux*, No. 5650 of 1991 (Penn., Westmoreland Cty. C.C.P., May 19, 1995) (wood railing, allegedly in violation of the local building code, was rotten due to inadequate sealing, fastening, and location; jury awarded over \$250,000).

²⁰⁹ *Id.*

²¹⁰ *McDonald v. Disc Realty Trust*, No. 92-6482 (Mass., Middlesex Cty. Super. Ct., Sept. 21, 1994) (railing violated building codes in terms of both method of attachment and height).

5.1.7.3 Walls

Landscape architects produce and supervise design projects that include various types of walls. For example, retaining walls are frequently required where grading and earth movement require cut or fill material to enable site and roadway development.

Negligent retaining wall design poses a serious hazard, which risk is greatly enhanced without an extensive technical competence. For example, in *Stone v. ITT Sheraton Corp.*,²¹¹ a retaining wall collapsed on two hotel guests, killing one and severely injuring another. The case cited numerous design defects that caused the failure, including a lack of footings, no reinforcement, and inadequate drainage. The hotel paid \$2.25 million to settle the case.

Landscape architects also design and specify freestanding outdoor walls for screening, monumentation, and other purposes. Incompetence and negligence in the design of these types of walls is also associated with very serious injuries. For example, in the case of *Tieder v. Little*,²¹² a student traversing a walkway outside a campus dormitory was killed when a vehicle struck an outdoor wall and the entire mass of the wall fell onto the student. An architect had designed the brick wall without adequate reinforcement, allowing the type of catastrophic failure where the entire wall would topple in one piece. The court noted the critical design error in finding the campus architect potentially negligent:

The collapse of the brick wall resulting in the decedent's death was entirely within the scope of danger in designing and constructing the wall without adequate supports, and was a reasonably foreseeable consequence of such negligence.²¹³

²¹¹ *Stone v. ITT Sheraton Corp.*, settled before filing, 35 ATLA L. Rptr. 340 (Mass., Mar. 4, 1992); see also *Guerrero v. Colorado Springs*, 507 P.2d 881 (Colo. App. 1972) (injuries caused by collapse of retaining wall).

²¹² *Tieder v. Little*, 502 So.2d 923 (Fla. App. 1987).

²¹³ *Id.* at 927.

With cases like that in mind, the need for competent and licensed landscape architects to design such elements cannot be overstated. While it is true the area of retaining walls does have some overlap with engineers, landscape architects are very often tasked with designing retaining walls, which simply underscores again the necessity of licensure.

5.1.7.4 *Decks and Shade Structures*

The importance of minimum competence in basic structural principles and construction details is also demonstrated in cases pertaining to decks and shade structures, which landscape architects are often tasked with designing.

Often, the failures result from improper specification or use of fasteners on the deck. In an Illinois case, a deck collapsed onto a man's feet due to inadequate fasteners, which injuries required surgery and caused a permanent disability.²¹⁴ The defendant construction firm in the case settled with the victim for \$894,000. In another Illinois case, a girl broke an arm in multiple locations and suffered other injuries after being thrown to the ground when a deck collapsed. After testimony established that the deck was defectively designed, with inadequate design and specification of fasteners, the court imposed a judgment of \$1.3 million against the property owner.²¹⁵ A California case settled for \$2 million after the overhead beam in a deck collapsed onto a tenant and caused serious, disabling injury.²¹⁶ These cases are an indication of the potential for harm in the many landscape architecture projects that include decks, gazebos, walkways, and platforms. Licensed landscape architects are sure to minimize the risks involved in projects like those.

²¹⁴ *Brehm v. Trammell Crow Constr. Co.*, No. 89-L-51 (Ill., Grundy Cty. Cir. Ct., Sept. 22, 1992).

²¹⁵ *Kamp v. Pries*, No. 98-L-506 (Ill., Madison Cty. Cir. Ct., Mar. 16, 2001).

²¹⁶ *Johnson v. Roe Bank*, confidential court and docket number, 40 ATLA L. Rptr. 25 (Cal., Mar. 19, 1996).

5.1.7.5 Ramps

As a final example of the potential for harm caused by poorly designed outdoor structures, the criteria for ramp design should account for a variety of users with different functional needs—wheelchair chairs, deliveries, and the general public, for example. In one case, failure to design the appropriate slope for a delivery ramp resulted in knee injuries requiring surgery, as well as a \$175,000 jury award.²¹⁷ In another case, a store patron fell and suffered multiple fractured vertebrae after he tripped on an allegedly negligently designed sidewalk and handicap accessible ramp.²¹⁸ In the lawsuit, the patron alleged his injuries were caused by negligent design of the handicap access ramp.

Incompetent ramp design can also be injurious and costly for developers and property owners seeking professional guidance for accessibility compliance. In Colorado, a wheelchair ramp was deemed an attractive nuisance after a five-year-old using the ramp for recreation collided with a vehicle in the adjacent street and suffered permanent disabilities.²¹⁹ The ramp was steeply pitched and easily accessed to and from the adjacent street, and frequented as an amusement by local children on skateboards, bicycles, and even tricycles, illustrating the importance of access control and other site planning considerations in the safe design of outdoor structures.

In these, and untold more cases, a landscape architect, who is often tasked with designing the layout and grading of handicap accessible routes, would have been in the best position to mitigate or significantly reduce any risks of harm posed by incompetent ramp design.

²¹⁷ *Patterson v. Kentucky Fried Chicken, Inc.*, No. CV-192-2349-CC (Mo., Clay Cty. Cir. Ct., July 20, 1995) (ramp too steep to safely deliver heavy or bulky products).

²¹⁸ *Brock v. Food, Folks & Fun, Inc.*, 2014 WL 2810846, (Ohio Ct. App. 2014).

²¹⁹ *Bennett v. Gitzgen*, 484 P.2d 811 (Colo. App. 1971) (property owner liable for maintaining a known danger to children; owner cannot employ the doctrine of assumption of risk to defend against the negligence claims of small children injured by the dangerous condition).

5.1.8 Grading, Drainage, and Erosion Control

Landscape architects are engaged in the design and execution of earthwork operations at all scales. The modification of topography has numerous public health and safety implications, with potential injury where:

- Slopes do not meet stability criteria.
- Trip hazards occur without adequate control over final grades.
- Positive drainage is not maintained.
- Stormwater flows are overly concentrated or discharged inappropriately.
- Drain inlets and sewers are negligently designed.
- Erosion is not adequately controlled.

This section documents cases where injuries, some fatal, have been caused by negligent services within the scope of landscape architecture that deals with grading, drainage, and erosion control design.

5.1.8.1 Grading

With technical knowledge of angles of repose, compaction, and practical limits of slopes in various applications (e.g., shorelines, ball field areas), landscape architects ensure public safety on projects with an earthwork component. This portion of a landscape architect's scope of work poses not only monetary and economic risks to the public, but, maybe more important, it has the possibility of creating unnecessary risks of physical injury on site and on adjacent properties as well. The examples in this subsection show exactly that.

To ensure public safety, a minimally competent landscape architect may specify temporary or permanent fencing around grading operations. In the case of *Fitzgerald v. City of Mt. Dora*,²²⁰ professionally produced plans for a fill source and retention basin incorporated appropriate safety

²²⁰ *Fitzgerald v. City of Mt. Dora*, No. 91-391-CA-01 (Fla., Lake Cty. Cir. Ct., Nov. 13, 1992).

considerations. The contractors, however, failed to adhere to the plans, instead building steep, unstable slopes while leaving the site unfenced. An 11-year-old boy was killed when the slopes collapsed on him.²²¹

As initially discussed in the Streetscape section of this report, quantitatively small grading errors are a source of significant potential harm—perhaps an even greater source of harm than large grading errors due to the difficulty of detection.²²² A common context for landscape architects to design fine grading is in the earthwork and walkways that tie into the finished floor elevation (FFE) of a building. A trained landscape architect typically produces a grading design that drains away from the building, while also providing a safe transition between the interior and exterior of the building. For instance, a competent landscape architect would not spot-grade a site to leave a four-inch gap at the threshold of a building. In one example, where such a gap did occur, the resulting trip-and-fall case led to hip replacement surgery for the victim and a settlement cost of \$500,000 for the property owner.²²³

In a Colorado case, a wheelchair user was injured where the threshold to a building created a dangerous condition. The injured party in this case was unable to obtain a remedy due to the Colorado governmental immunity statute, barring recovery against government entities for inadequate design.²²⁴

²²¹ *Id.* (jury found for plaintiff).

²²² *Aitkenhead v. City & County of San Francisco*, *supra* note 80 (sidewalk and curb sections meeting at four different elevations and linked to injury “form a condition which can hardly be said to be trivial as a matter of law”).

²²³ *McKnight v. Circle S Convenient Mkt.*, No. 88-771 (S.D., Pennington Cty. Cir. Ct., Oct. 26, 1992).

²²⁴ *Springer v. City and County of Denver*, No. 98CA0545 (Colo. App., May 13, 1999) (protrusion of a threshold cover plate created a dangerous condition for wheelchair user).

As those cases illustrate, even small deviations in grading can create unnecessary and unreasonable risks of injury. It is those fine points of technical expertise that create the necessity of ensuring the design professionals, such as landscape architects, are competent to perform those tasks. Licensure provides an objective and clear measure of that competency.

5.1.8.2 *Surface Drainage*

Options for safely controlling the accumulation and runoff of stormwater constitute a rapidly developing body of technical knowledge, with applications that are increasingly addressed within the scope of landscape architecture services; as a result, the risks of injury are also increasing and must be addressed.

Traditionally, landscape architects are responsible for producing grading plans that maintain positive drainage throughout a site. Incompetence or negligence in this skill may result in accumulation of standing water in areas intended for pedestrians, bicyclists, skaters, and the public in general—which can lead to injury if not designed competently. For example, in *Morrocco v. Piccardi*,²²⁵ a contractor with no technical background in landscape architecture designed and installed a landscape project with drainage pitched toward a residence. In addition to causing property damage to the house and yard, the accumulation of water resulting from this negligent design created a dangerous condition near the entry to the house. The contractor was held liable for the dangerous condition after a resident fell on a patch of ice, shattering several bones and suffering permanent sinus damage.²²⁶

The contemporary practice of landscape architecture has evolved alongside the development of stormwater detention, retention, and other technically sophisticated methods of addressing water quality and flood control.

²²⁵ *Morrocco v. Piccardi*, 713 A.2d 250 (R.I. 1998) (damages due to personal injury estimated at \$500,000); *Hoskinson v. City of Iowa City*, 621 N.W.2d 425 (Iowa 2001) (city may be liable for head injury allegedly due to “designing walkway and landscape immediately surrounding it so as to cause water to pool and form ice”); *Parks v. State*, 1998 WL 2001188 (Mich. App. 1998) (slip and fall on icy patch at highway rest stop attributed to design defect).

²²⁶ *Morrocco*, 713 A.2d at 253–254.

The grading scheme for a parking lot, for example, may concentrate large amounts of runoff to a single detention basin or single discharge point into the municipal stormwater system. In *Hunt v. Hatch*,²²⁷ the negligent design of stormwater drainage caused excessive amounts of water to be discharged from a shopping center parking lot into the adjacent street. A driver swerved to avoid the torrent, lost control, and was rendered quadriplegic by a spine injury after colliding with oncoming traffic. The designer paid an undisclosed amount to settle the case.²²⁸

Similarly, the conveyance of water through open channels is another potentially hazardous design feature, as shown in two Colorado cases related to both irrigation²²⁹ and stormwater.²³⁰ In *City of Longmont v. Henry-Hobbs*, a young boy died after falling in a spillway for stormwater drainage. Holding the city potentially liable for wrongful death, the court specifically noted design flaws such as a lack of caging around the spillway and failure to place warning signs in the vicinity.²³¹ Landscape architects routinely design sites with existing or proposed drainage features, and knowledge of techniques to mitigate drowning hazards is a key life safety aspect of landscape architectural professional responsibility.

²²⁷ *Hunt v. Hatch*, No. E20623, 41 ATLA L. Rptr. 63 (Ga., Fulton Cty. Super. Ct., Apr. 24, 1997) (subsequent to settlement with the designer, jury trial resulted in \$26.8 million award against the shopping center owner).

²²⁸ *Id.*

²²⁹ *City of Colorado Springs v. Powell*, 48 P.3d 561 (Colo. 2002) (where one boy was killed and one injured, the court found that “[h]ad the ditch been designed with warning signs or a means of escape, the injuries might have been prevented”).

²³⁰ *City of Longmont v. Henry-Hobbs*, 50 P.3d 906 (Colo. 2002).

²³¹ *Id.*, at 909.

5.1.8.3 Storm Sewer Details

While landscape architects are trained and tested in pipe sizing and the layout of subsurface drainage systems, practitioners are most frequently employed to locate and specify inlet structures and other surface components of a storm sewer system. Improper design specifications for these surface components create trip hazards and the potential for entrapment in areas inundated with water. Injuries can also result from the faulty sizing and design of a stormwater management system. In one case, a nine-year-old boy died after he was sucked into a drain culvert in a parking lot that had been flooded.²³² A design professional expert witness in that case testified that the sizing of the stormwater pipes constituted improper design, which caused safety and functionality concerns because the system could not adequately handle the volume and velocity of stormwater. The expert also testified that the flooding and pooling of the water in the parking lot around the culvert resulted from the improper design, which led to the boy's death.²³³ A competent landscape architect in that situation may well have been able to understand the foreseeable risks of improper design, and been able to produce a more functional and safer design.

As a hazard to public health and safety, negligent specification of inlet grates warrants serious attention based on past cases. As mentioned previously in this report, the case of *Rodgers v. Meyers & Smith, Inc.*²³⁴ involved a landscape architecture firm that failed to assess the potential for a sewer grate to tilt when walked upon. The grate was not matched to its frame and did, in fact, tilt when walked upon by an adult man, which resulted in serious injuries and debilitating pain in the victim's "back

²³² *Mason v. City of Mt. Sterling*, 122 S.W.3d 500, 507 (Ky. 2003) (The case also noted the heightened probability of children being "attracted" to the flooding that was caused by the faulty design, which was a consideration in the court's decision regarding the doctrine of "attractive nuisance.")

²³³ *Id.* at 506–507.

²³⁴ *Rodgers v. Meyers & Smith, Inc.*, *supra* note 51 (the court found the potential that a cover did not fit its frame foreseeable for a landscape architecture firm engaged in a regrading and repaving project for a school playground).

and scrotum area” for years.²³⁵ In that case, a landscape architecture firm was found potentially negligent.²³⁶ At issue in *Dick v. Florida Department of Transportation*²³⁷ was the negligent design of a drain inlet, where the mismatch of a grate and frame left a seven-inch gap. A sheriff’s deputy was investigating at the side of the road when his foot became entrapped in the gap, causing a fall that ended in severe head trauma and total disability. The case was settled for \$700,000 before reaching trial.

Thus, the improper design of storm sewer details and specification of materials can quite foreseeably result in personal injury and death. Only through ensuring that competent professionals are performing this type of work will these foreseeable risks be drastically reduced.

5.1.8.4 Erosion Control

Though erosion is most obviously a potential cause of property damage, it can also contribute to significant life safety risks through unchecked stormwater runoff loaded with erosive sediments. This point is illustrated by the case of *Martin v. Flanagan*,²³⁸ where uncontrolled erosion ultimately altered the runoff pattern in an area. The defendant’s failure to control erosion transformed overland sheet flow of runoff into eroded channels of water, accelerating and concentrating water that discharged onto a road. Three people were killed where water had accumulated and formed an icy patch on the road.

In Maryland, two young girls suffered severe and lifelong brain damage after they fell through ice that had formed in a deep portion of a local stream, which had been altered by a stormwater design project several years earlier.²³⁹ Testimony in the case showed that the portion of the stream where the girls fell through the ice had

²³⁵ *Id.*

²³⁶ *Id.*

²³⁷ *Dick v. Florida Dep’t of Transp.*, No. 91-00723-CA (Fla., Duval Cty. Cir. Ct., Sept. 22, 1992).

²³⁸ *Martin v. Flanagan*, 818 So.2d 1124 (Miss. 2002) (expert witness testified that water runoff from the artificial eroded condition caused the accident and three resulting deaths).

²³⁹ *Casper v. Charles F. Smith & Son, Inc.*, 71 Md. App. 445, 461, 526 A.2d 87, 95 (1987), *aff’d*, 316 Md. 573, 560 A.2d 1130 (1989).

been artificially deepened over time because of some faulty erosion control measures. Prior to the project, that portion of the streambed was only six inches to one foot deep, but after several “gabion” baskets (which are cubical wire baskets filled with rocks) were installed, the flow of the streambed was altered, which caused significant erosion and deepening of the stream.²⁴⁰ For various legal reasons in that case the children’s parents did not receive compensation; nevertheless, the real risk of harm created by erosion control measures can and should be addressed by competent design professionals, including landscape architects.

5.1.9 Recreational Facilities

Public and private investment in recreational facilities has increased dramatically in recent decades, with landscape architects frequently leading design teams and performing construction administration. Because recreational facilities often involve, sometimes exclusively, outdoor environments with sports fields, parks, trails, and other landscape elements, landscape architects are uniquely suited to perform and manage design services in this arena. Further, the design of these recreational facilities involves a broad assortment of technical skills and an accordingly broad set of potential harms. This section provides examples of the diverse public health and safety concerns that landscape architects confront in active-recreation design.

²⁴⁰ *Id.* at 463.

5.1.9.1 Active Recreation

Traditionally, active recreation includes baseball, softball, football, soccer, hockey, basketball, volleyball, tennis, and other field sports. The more modern program for a community recreational facility may also accommodate rock climbing, Rollerblading, and skateboarding. In projects like these, landscape architects lay out and orient sporting areas (keeping in mind the appropriate separation of incompatible uses), specifies the equipment to be installed for play, and furnishes detailed designs for unique and complex elements of those projects. In all of this, the landscape architect must constantly be aware of and mitigate potential risks of harm.

In one case out of New York, a landscape architect in *Traub v. Cornell University*²⁴¹ specified a basketball standard to be installed at an outdoor facility on a university campus. The specified basketball frame did not incorporate safety measures to absorb the force of dunked balls and other impacts to the goal. As a result, a recreational basketball player severely injured his wrists after dunking a ball into the rigid frame. The landscape architect's failure to recognize that a rigid frame would be a dangerous condition in its specified location caused the university to be potentially liable for injuries stemming from the negligent specifications.²⁴²

In Alaska, a spectator at a high school football game was seriously injured after she was struck by a player who ran out of bounds.²⁴³ In bringing the suit, the woman alleged that the field had been negligently designed because the dimensions between the edge of the field and where spectators foreseeably would stand was not sufficient, and not in accordance with industry standards.²⁴⁴ To help prove her claims, the woman hired a landscape architect to offer expert opinion on the proper dimensions and design

²⁴¹ *Traub v. Cornell University*, No. 94-CV-502, 1998 U.S. Dist. LEXIS 5530 (N.D.N.Y., April 15, 1998) (rigid frames for basketball goals, as specified, as opposed to "breakaway" frames, may be unacceptably dangerous).

²⁴² *Id.*

²⁴³ *Barton v. N. Slope Borough Sch. Dist.*, 268 P.3d 346 (Alaska 2012).

²⁴⁴ *Id.* at 347.

criteria for the particular field. Ultimately, the woman lost her claim, but not necessarily on the basis that either the field had not been negligently designed or that the landscape architect's testimony was not valuable to the jury.

A more modern concern in this arena is the recent rise in popularity of "extreme" sports, which simply underscores the importance of technical competence in the design of outdoor recreational facilities. For example, in the case of *Luenberger v. City of Golden*,²⁴⁵ the Colorado Court of Appeals found that a local government may be liable for an injury sustained by a bicyclist using a half-pipe on city park land. Such skate and bike facilities involve complex design solutions to link spaces and minimize conflicting patterns of use, while requiring tight control of specifications for railings, poured-in-place concrete, drains, and other features. Moreover, poorly specified paved surfaces are especially prone to rapid deterioration, creating hazardous conditions for rollersports.²⁴⁶

The proliferation of skateparks and skate ramps in particular has been accompanied by reports of injury due to improper design. In another Colorado example, at a time when the profession of landscape architecture was not regulated, a group of nonprofessionals designed and built a community skatepark. The group assembled stunt features without proper fastening or safety inspections, creating potentially dangerous conditions for skaters. Sadly, a boy was killed after a pipe rail broke loose and crushed him.²⁴⁷

²⁴⁵ *Luenberger v. City of Golden*, 990 P.2d 1145 (Colo. App. 1999) (city may be liable under an exception to Colorado's government immunity statute for the bicycle-related injury in the half-pipe on city park land).

²⁴⁶ See *Stabley v. Huron-Clinton Metropolitan Park Authority*, 579 N.W.2d 374 (Mich. App. 1998) (injury to Rollerblading park user in fall at crack in paved surface).

²⁴⁷ Ellen Miller, *Eagle County shuts skate park after accidental death*, Rocky Mountain News, June 26, 2001; see also Colorado Council of Landscape Architects, *Application for Sunrise Review of Landscape Architecture Regulation, Appendix 1, Examples*, July 1, 2001 (a second Colorado skatepark caused injuries where coping along the skate bowl edge was incompetently specified for local freeze-thaw conditions broke loose and became a hazard to skaters).

With the recent public awareness and sensitivity to the risks exposed to the public's (particularly youth) use of sports fields and other recreational facilities, it seems even more important now than ever to put objective measures in place that ensure such fields and facilities are designed by competent professionals, such as landscape architects. In doing so, the risks of physical injury that are inherent in those spaces will be reduced.

5.1.9.2 *Golf Courses*

As a subdiscipline of the field of landscape architecture, golf course design involves grading and drainage and plant material selection, as well as public health and safety considerations unique to the game of golf. The layout of a golf course can create an unnecessary and unreasonable risk of harm when fairways, greens, and tees are not appropriately distanced. The location of a tee box in close proximity to the fairway of an adjacent hole gave rise to litigation in *Schachner v. Sea Pines Plantation Co.*²⁴⁸ In that case, a golfer was preparing to tee when a ball shot from the adjacent fairway went directly into the victim's glasses, which caused shattered glass to enter the eye and ultimately required multiple corneal transplants. The defendant paid \$112,500 to settle the claim of negligent golf course design.

In another similar case out of Hawaii, a man was also struck in the eye from an errant golf ball, which may have been caused in part because of the negligent layout of the golf course.²⁴⁹ The court held that the owner of the course "has an obligation to design a golf course to minimize the risk that players will be hit by golf balls, e.g., by the way the various tees, fairways, and greens are aligned or separated."²⁵⁰

²⁴⁸ *Schachner v. Sea Pines Plantation Co.*, No. 91-CP'07-2262 (S.C., Beaufort Cty. C.C.P., Jan. 25, 1993).

²⁴⁹ *Yoneda v. Tom*, 133 P.3d 796, 811 (Hawaii 2006).

²⁵⁰ *Id.* at 810.

An incompetent golf course designer may well overlook significant risk-reducing measures such as the proper layout of golf holes; whereas, a technically trained landscape architect would likely be in a better position to evaluate, weigh, and address all competing risks.

5.1.9.3 Trail Design

While generally considered “passive” recreation, the design and planning of trails can involve high volumes of traffic, conflicts between various modes of travel, and routes that enter and pass through both man-made and natural hazards. As this section illustrates, if a user is injured on a trail, a lawsuit will frequently allege design defects.²⁵¹ Competent landscape architects are able to apply a variety of techniques to mitigate the potential for harm in each of these situations.

In the New York case of *Santalucia v. County of Boone*,²⁵² bicycle and pedestrian traffic used the same trail, with the direction of travel restricted on some parts of the trail. As a landscape architect testified during the trial, the trail design was confusing and, as a result, unsafe. Consequently, a woman pedestrian was traveling along the intended route when struck by a bicycle traveling the wrong way. The county that owned and operated the trail was held liable for \$150,000, based on a severe injury to the woman’s shoulder that permanently affected her range of motion and potentially required surgery.

In another design negligence case related to traffic conflicts, a trail user was injured in a collision with a vehicle where the trail crossed a local road.²⁵³ A trail accident in Colorado killed a man intimately familiar

²⁵¹ Colorado Department of Regulatory Agencies, *Sunrise Review of Landscape Architects*, 1995, at 14-15 (design of the Yampa River Trail by a civil engineering firm has been linked to multiple incidents and lawsuits claiming the design caused injuries).

²⁵² *Santalucia v. County of Boone*, 644 N.Y.S.2d 408 (N.Y. App. 1996).

²⁵³ *Dinelli v. County of Lake*, 691 N.E.2d 394 (Ill. App. 1998).

with the Mary Carter Greenway Trail when his aorta was severed in a collision with another bicycle.²⁵⁴ The accident occurred near a narrow, blind curve at a road underpass.

In a similar case from 2016, a woman was severely injured in a bicycle accident when she landed in an unseen culvert after she rode her bike over a bridge and off a bike trail.²⁵⁵ The dangerous condition of the trail was created in part because at some point during construction the designs were changed and the trail alignment was altered, which created a shortened, 90-degree turn in the trail. That alignment created an unsafe condition for a trail or sidewalk user.²⁵⁶

In yet another trail case, a woman broke her spine after she fell down a 20-foot embankment after she attempted to avoid horseback riders on a trail at a national wildlife refuge in Washington state.²⁵⁷ The trail in that case had been designed by a landscape architect, who also oversaw the management of the trail after it was completed. The woman's fall was caused, at least partially, because of a soft edge on the trail, which had been purposely designed into the project in part because of budget concerns.²⁵⁸ The U.S. Fish and Wildlife Service, who managed the refuge, faced the possibility of a significant monetary judgment as a result of the trail design and the woman's injuries.

²⁵⁴ *Man killed in collision cycled for his health*, Rocky Mountain News, October 14, 2003 (online archive) (both cyclists were wearing helmets).

²⁵⁵ *Mattson v. City of Rushford*, No. A15-1018, 2016 WL 1551642, at *2 (Minn. Ct. App. Apr. 18, 2016), *review denied* (July 19, 2016).

²⁵⁶ *Id.*

²⁵⁷ *Flugstad v. United States*, No. 13-5192 RJB, 2013 WL 6881307, at *7 (W.D. Wash. Dec. 31, 2013), *aff'd in part, rev'd in part and remanded*, No. 14-35136, 2016 WL 3917659 (9th Cir. July 20, 2016).

²⁵⁸ *Id.* at 8.

Dangerous conditions also resulted in other cases such as when a trail alignment is selected that passes near steep slopes²⁵⁹ or, in the case of *Brown v. State*,²⁶⁰ a cliff. In the *Brown* case, a trail in a state park traversed the top of a cliff, from which a boy fell to his death. The negligence of the state's landscape architect was found to have caused the fall.²⁶¹ In the opinion of the court holding the state liable for the boy's death, the court noted:

[I]t would have been simple to have built a wall of such height and of such precipitate elevation that it would have been a plain warning to the visitors who had been enticed to proceed to its face that beyond they should not go, that beyond it were dangers which the park superintendent testified he knew existed. We believe that the arts of landscape architecture could have devised a wall which would have been a barrier without marring the beauty of the spot.²⁶²

The desire of the *Brown* court for a design professional that will combine aesthetic sensitivity and life safety skills in trail design is representative of the demands placed on landscape architects as the profession has evolved.

²⁵⁹ In Fairfax County, Virginia, a bicyclist collided with a tree and suffered injuries where improper trail alignment and banking on a steep grade caused an uncontrolled descent. William Beckner, Director of Fairfax County Parks, Letter in support of continued regulation of landscape architecture to the Virginia Department of Commerce, February 26, 1991, at 2.

²⁶⁰ *Brown v. State*, 29 N.Y.S.2d 85 (N.Y. Ct. of Claims 1941).

²⁶¹ *Id.*

²⁶² *Id.* at 87.

5.1.9.4 Bodies of Water

Similar to the danger of designing a trail along a cliff in the previous subsection, recreational areas may be designed in a way that magnifies the latent hazards of bodies of water. Where they are part of a park or recreational facility, for example, public beaches and swimming areas are frequently part of a master site plan produced by or under the supervision of a landscape architect. These circumstances bring their own inherent risks of harm that can and should be addressed by a competent design professional.

To integrate either a natural or artificial body of water into a recreational site design, a competent landscape architect will incorporate warnings or mitigation techniques for known hazards. For example, in *Benton v. City of Oakland City*,²⁶³ a shallow area at a public beach was known to the defendant city, but no warning sign was posted. The city was held liable when a visitor dove headfirst into the shallow area and broke his neck. The record of the *Benton* case does not indicate that the park had ever been reviewed for safety by a landscape architect; however, a competent landscape architect is in a very good position to address and mitigate those risks. In another case, involving public property used to access a municipal reservoir, the failure to post “No Swimming” signs or erect a fence around the reservoir was found to have contributed to a drowning death in the reservoir.²⁶⁴ As pointed out in a Colorado case, the dual use of reservoirs for water storage and recreation creates special hazards for users of the reservoir.²⁶⁵ Because landscape architects are trained in, and are often called to address, the need for signage (whether wayfinding signage or warnings), they are enabled to determine appropriate situations where warnings of latent hazards are necessary or where it is feasible to employ mitigation and avoidance techniques.

²⁶³ *Benton v. City of Oakland City*, 721 N.E.2d 224 (Ind. 1999).

²⁶⁴ *Salaman v. City of Waterbury*, No. CV 92 113165S (Conn., Waterbury Super. Ct., Oct. 21, 1994) (jury awarded \$1.2 million based on the city’s failure to warn of swimming hazards or fence the reservoir).

²⁶⁵ *Bijou Irrigation District v. The Empire Club*, 804 P.2d 175, 184 (Colo. 1991) (“Rapid fluctuations in water level can create hazards for users of the reservoir”), cert. denied, 500 U.S. 918 (1991).

5.1.10 Roadway Improvements and Traffic Handling

Certain types of landscape architecture projects involve planning for roadway improvements and traffic control. Subdivision design, highway enhancements, and construction permitting are three landscape architecture service areas that specifically require technical competence to maintain driver visibility and safely handle traffic. These tasks each bring potential for risks, which a competent landscape architect is positioned to address. (Additional public health and safety concerns related to pedestrians, bicycles, and other nonvehicular traffic are addressed in the Streetscape and Parking Lots sections of this report.)

Landscaped boulevards, medians, entry monuments, and other improvements within the public right-of-way are familiar landscape architecture projects—and because they often involve auto-pedestrian conflicts, they are projects that must be managed from a risk-reducing perspective. In the case of *Kelley and Kelley v. Hallum*,²⁶⁶ the berm and plantings at an intersection were initially designed by a licensed landscape architect, which plans the court found to be competent and safe. Importantly for the purposes of this document, a non-landscape architect, without authorization, modified the planting specifications in a manner that caused impeded visibility at the intersection. No such obstruction would have occurred had the landscape architect's plans been implemented. After a woman was killed in a collision at the intersection, caused in part by obstructed views, the non-landscape architects were held liable for the wrongful death caused by their negligence.²⁶⁷ Obstructed views at intersections are extremely dangerous, as demonstrated by several other cases involving significant and traumatic injuries: skull fractures and permanent loss of vision,²⁶⁸

²⁶⁶ *Norm Kelley and Jan Kelley, Ind., on behalf of the estate of Amanda Kelley, deceased, and a/n/f of Matthew Kelley, a minor v. Lloyd Thomas Hallum, Fairfield Village Community Association, Association Management, Inc., The Spencer Company*, No. 94-46155 (Tex., Harris Cty. 80th Jud. Dist. Ct., 1994).

²⁶⁷ *Id.*

²⁶⁸ *Lieber v. McIntyre*, No. L-9506-15 (N.J., Middlesex Cty. Super. Ct., Dec. 1997) (serious injury, including loss of vision and fractures to the skull, after collision at intersection where a tree obstructed the visibility of a stop sign).

quadriplegia,²⁶⁹ and death.²⁷⁰ Vegetation is frequently the cause of such obstructed views.

Furthermore, negligently specified plantings in a road right-of-way are a potential hazard not only as a visibility problem, but also as a physical danger to cars and drivers. As noted in the Plant Materials section above, excessive debris has been associated with accidents involving pedestrians, and weak wood has also fallen and injured the passive users of a site. Similar accidents have involved motorists. In one example, a tree planted in a roadway median fell on a car, leaving the passenger a paraplegic.²⁷¹ In another, more recent, example a person was killed after the car they were driving struck an oak tree on the shoulder of a road.²⁷² There was discussion in that case about the landscape architect evaluating and deciding to retain or remove that tree prior to the accident.²⁷³ Thus, the proper specification and selection of trees that are appropriate along streets and sidewalks can go a long way toward reducing tree-related injuries.

²⁶⁹ *Doe v. Roe Campground*, confidential docket number, 43 ATLA L. Rptr. 229 (Ca., Fresno Cty. Super. Ct., Aug. 2, 1999) (bicyclist suffered quadriplegia, resulting in an eventual settlement of \$7 million, when foliage along a road prevented the bicyclist and a car from seeing each other before coming to an intersection).

²⁷⁰ *Whitt v. Silverman*, 788 So.2d 210 (Fla. 2001) (pedestrian killed by vehicle where landscape plantings obstructed sight lines at entrance to service station); *Manufacturer's Nat'l Bank v. Erie County Road Comm'n*, 587 N.E.2d 819 (Ohio 1992) (township may be liable for a fatal accident where vegetation obstructed views at an intersection); Gary Sprott, *Hillsborough County jury awards millions in 1999 car crash that killed one girl and injured her sister*, Miami Tribune, March 31, 2001 (developer and homeowners' association liable for \$17,000,000 in damages after changing approved landscape design in road median, obstructing views, and causing fatal accident).

²⁷¹ *Professional Licensure of Landscape Architects*, *supra* note 58, at 39; see also *Bentley Koepke, Inc. v. Jeffery Allen Corp., et al.*, No. C-970137, 1998 Ohio App. LEXIS 684 (Ohio App., Feb. 27, 1998) (landscape architect sued for wrongful death after tree fell on car, killing driver).

²⁷² *Ebanks v. State, Dep't of Transp. & Dev.*, 126 So. 3d 561, 568, (La. App. 2013).

²⁷³ *Id.*

Technical knowledge of traffic control devices is also essential to public safety and to landscape architects producing plans that involve new access or intensification of existing access to local roads and highways. On a construction site, failure to properly locate a stop sign at a temporary access point to the street is a precursor to serious harm. For example, in the case of *Glass v. Mitchell Construction*,²⁷⁴ a landscape architect was sued for wrongful death after a fatal accident, where construction traffic from a new subdivision entered an existing roadway. The court noted that the landscape architect may have been “negligent in failing to implement properly plans providing for traffic safeguards.”²⁷⁵ Landscape work in other cases has also resulted in fatalities when stop signs, for example, are not properly installed.²⁷⁶ And where street and sidewalks end abruptly, as at the boundary of new subdivisions, landscape architects should be aware of the potential need for a barricade, warning, or some other traffic control device to prevent, as occurred in a Colorado case, bicyclists from losing control and suffering injury.²⁷⁷

Although landscape architects may not always be the lead consultant on roadway improvement and traffic handling projects, they are uniquely trained to provide technical advice and solutions to minimize the risks inherent in those projects.

²⁷⁴ *Glass v. Peter Mitchell Construction, et al.*, 718 A.2d 79 (Conn. App. 1998) (court awarded a \$1 million wrongful death judgment against the contractor).

²⁷⁵ *Id.*, at 83.

²⁷⁶ *Civalier, et al. v. Wawa, Inc., et al.*, 648 A.2d 705 (N.J. 1994) (landscape contractor sued for wrongful death after removing stop sign at intersection); *Shaw v. Northbridge Enters., L.P.*, *supra* note 34 (lack of traffic control contributed to wrongful death in truck parking lot); see also *Ezell v. Christian County*, 245 F.3d 853 (6th Cir. 2001) (improper placement of stop sign in location with visual obstruction causes traffic death).

²⁷⁷ *Swieckowski v. Fort Collins*, 923 P.2d 208 (Colo. App. 1995) (developer may be liable for child's injuries after a child fell into a ditch where the roadway in a new subdivision abruptly ended with no barricades or warnings), *aff'd*, 934 P.2d 1380 (Colo. 1996); see also *Pierson v. Black Canyon Aggregates, Inc.*, 48 P.3d 1215 (Colo. 2002) (truck driver injured when road ended abruptly and discharged a vehicle down a 17-foot drop-off into a gravel pit).

5.1.11 Site Investigation

When the existing condition of a site presents a potential hazard, due diligence is necessary to avoid liabilities, including the risk of physical injury that may result from disturbing existing conditions. For example, plans produced by landscape architects may, and frequently do, require preliminary investigation of underground utilities, geological and mining hazards, and soil contamination. Failure to adequately investigate hazardous existing conditions has been linked to serious injury in past cases.²⁷⁸

5.1.12 Other Design Hazards That Pose Risk of Physical Injury

As a profession generally responsible for designing improvements to exterior spaces, landscape architecture practice utilizes a wide variety of building materials. Many of these building materials can be hazardous to the public if they are improperly incorporated into a design or specified without adequate technical knowledge. This section provides examples of harms caused by the negligent use of common landscape architectural materials.

5.1.12.1 Irrigation

A typical irrigation plan will place rotors and spray heads at the transitional edge between walkways, lawns, and planting beds. The volume of foot traffic in such transitional areas may be relatively high, resulting in an appreciable trip hazard where irrigation is designed without consideration of safety in grade-matching specifications or horizontal layout of irrigation equipment. Indeed, landscape architects have been sued for malpractice after pedestrians have tripped over sprinkler heads.²⁷⁹ For example, in a 2010 case out of

²⁷⁸ *Long v. America Communication Services of El Paso, Inc.*, No. 96-2496 (Tex., El Paso Cty. 34th Jud. Dist. Ct., Oct. 30, 1997) (trench worker paraplegic where poor investigation of underground conditions led to collapse of alley roadway); *Andrea, et al. v. E.I. DuPont De Nemours, et al.*, 735 N.Y.S.2d 683, 684 (N.Y. App. 2002) (defendant landscape architecture and architecture firm sued for injuries from exposure to toxic chemicals during renovation of school facility; case dismissed due to legal technicalities prior to consideration of merits).

²⁷⁹ *Professional Licensure of Landscape Architects*, *supra* note 58, at 40.

Louisiana, a woman sued a landscape architect after she was seriously injured in a trip-and-fall accident involving a sprinkler head.²⁸⁰ Significantly, the facts of that case showed that during the installation of the sprinkler heads by a contractor, a landscape architect meticulously and repeatedly measured the distance away from the sidewalks that the sprinkler heads were installed.²⁸¹ The landscape architect presumably did this because of the foreseeable risk of tripping that the heads created. In the end, the court found that neither the contractor nor the landscape architect were liable.²⁸²

Irrigation design defects have also been linked to injuries due to a spray pattern that unevenly applies water. In a dramatic example, irrigation design was linked to a fire ant attack that killed an elderly woman.²⁸³ Additionally, a design that overapplies water in certain areas and creates standing water will hamper efforts to control such pests as fire ants, wasps, and mosquitoes.²⁸⁴

Irrigation design is a central area of many landscape architects' practices. As briefly illustrated in this subsection, it is clear that a technically competent professional is imperative to ensure the foreseeable risks are drastically reduced.

²⁸⁰ *Lingoni v. Hibernia Nat'l Bank*, 33 So.3d 372 (La. App. 2010).

²⁸¹ *Id.* at 10–11.

²⁸² *Id.* at 22.

²⁸³ *Rein v. Benchmark Construction Co.*, 2003 Miss. LEXIS 282 (Miss. 2003) (according to expert testimony, “drainage and direction of the irrigation heads” in the site design would tend to hamper pest control efforts); see also *Murphey v. Aetna Casualty and Surety Co.*, No. 91-4698-K (La., Lafayette Parish Dist. Ct., Aug. 27, 1993) (fatal fire ant attack linked to exterior design problems; settled for \$573,000).

²⁸⁴ *Rein v. Benchmark Construction Co.*, *supra* note 143.

5.1.12.2 Landscape Edging

Similar to irrigation equipment, landscape edging is commonly found in transitional landscape areas, often areas receiving a relatively high volume of pedestrian traffic. In multiple cases, metal landscape edging has caused trip and fall injuries,²⁸⁵ some serious and permanently disabling.²⁸⁶ In a 2016 Michigan case, a woman was seriously injured after tripping on plastic landscape edging abutting a sidewalk.²⁸⁷ The property owner was found liable. In the case of *Ward v. Shoney's, Inc.*,²⁸⁸ the court found the plans of a civil engineer negligent because the engineer specified raised landscape edging in an area that was reasonably foreseeable as a footpath. In addition to metal landscape edge, other edging materials, such as landscape timbers, have been associated with trip and fall injuries.²⁸⁹ These cases illustrate the need for competent professionals to recognize risks posed to pedestrians who may travel close to trip hazards such as landscape edging. When those risks are recognized, then certain measures can be taken to ensure the appropriate materials are specified.

²⁸⁵ *Plunk v. Nat'l Health Investors, Inc.*, 92 S.W.3d 409 (Tenn. Ct. App. 2002).

²⁸⁶ *Dobson v. State*, *supra* note 145 (serious and permanently disabling injuries, including many broken bones in slip and fall on landscape metal edge).

²⁸⁷ *Held v. N. Shore Condo. Ass'n*, No. 321786, 2016 WL 453454, at *4 (Mich. Ct. App. Feb. 4, 2016), *appeal denied*, 884 N.W.2d 788 (Mich. 2016).

²⁸⁸ *Ward v. Shoney's, Inc.*, 817 A.2d 799 (Del. 2002); *Dobson v. State*, 23 S.W.3d 324 (Tenn. Ct. App. 1999).

²⁸⁹ *Labroad v. McEleney*, No. 970482695S, 2000 WL 839957 (Ct., Super. Ct. of Conn., May 4, 2000) (property owner may be liable for injuries stemming from duty to warn of hidden landscape timber).

5.1.12.3 *Tree Staking*

Stakes around trees are a standard landscape architectural detail where necessary to prevent tree damage, especially during establishment (e.g., root development after transplanting). Tree guards are specified in settings with a high potential for trunk damage (e.g., urban streetscape). Injury due to the negligent use of both tree stakes and tree guards has been the subject of litigation.²⁹⁰

5.1.12.4 *Gates and Fencing*

As a site planning consideration, gates and fences cause injury where design and specifications fail to adequately control access to a potential hazard. (Failure to safely enclose hazardous outdoor areas is discussed in greater depth above in the Site Planning section of this report.)

Aside from site planning considerations, gates and fences are themselves potentially hazardous, as physical objects that may directly cause injury if negligently designed or specified. As an example, landscape architects design fences to enclose outdoor service and utility areas. In one case, the door to a trash enclosure was designed without a lock or latch.²⁹¹ On a gusty day, the door of the enclosure spontaneously flew open, striking a passerby on the head. Following the incident, the injured party suffered cognitive problems, including memory loss, prompting the defendant land owner to settle the negligence case for \$900,000.²⁹² In another negligence case, a path in a park was closed using a wire stretched between two posts 20 inches above the ground. With no lighting and no warning sign regarding the wire boundary, a walker on the path tripped over the wire, fractured his nose, and suffered other facial injuries.²⁹³ A similar wire boundary was responsible for the fatal

²⁹⁰ *Mildred Malinosky v. C & H Landscape Contractors, Inc.*, No. 42219, 1980 Ohio App. LEXIS 13062 (Ohio App. Dec. 4, 1980) (landscape contractor sued for injuries due to wire tree braces); *Professional Licensure of Landscape Architects*, *supra* note 58, at 39 (malpractice claim against landscape architect for injuries caused by tree guard).

²⁹¹ *Salser v. Bob Evans Farm*, settled before filing, 40 ATLA L. Rptr. 25 (Ohio, Aug. 15, 1996).

²⁹² *Id.*

²⁹³ *Stewart v. Town of Hudson*, No. 994959, 2000 WL 33171007 (Mass., Super. Ct. of Mass., Nov. 30, 2000).

severing of the spinal cord of a 13-year-old ATV rider.²⁹⁴ Fences are also hazardous where poor specifications and design (e.g., undersized footer, inadequate fastening) create the potential for a fence to collapse and cause injuries.²⁹⁵ These risks can be foreseen and reduced by licensed landscape architects.

5.1.12.5 Signage

The design of outdoor spaces also requires landscape architects to be conscious of potential hazards and to explore the use of signage where it may mitigate the risk of injury. Cases in other sections of this report have discussed injuries in negligence cases where there has been a failure to incorporate warnings regarding steep and unstable slopes,²⁹⁶ shallow water,²⁹⁷ abrupt ends of sidewalks and trails,²⁹⁸ and other hazards.²⁹⁹ In addition to those hazards, warning signs are an important safety measure for sites where landscape architectural plans are under construction. For example, a landscape architect hired to produce a plan for a recreation area in Delaware was sued for wrongful death after an 11-year-old was killed attempting to sled in the construction area. The client park district was held liable for the death because warning signs around the construction zone were not posted clearly and were inadequate to effectively deter improper use of the unfinished recreation area.³⁰⁰ Again, a technically trained and licensed landscape architect would be in a prime position to see and mitigate that risk of harm.

²⁹⁴ *Collins v. S&D Farms, Inc.*, No. CL 91-6411-AD (Fla., Palm Beach Cty. Dist. Ct., July 16, 1993).

²⁹⁵ *Catanzarite v. City of Springfield*, 32 Mass. App. Ct. 967 (1992) (park visitor injured when a portion of wrought iron fence collapsed on her foot).

²⁹⁶ *Fitzgerald v. City of Mt. Dora*, *supra* note 104; *Brown v. State*, *supra* note 128.

²⁹⁷ *Benton v. City of Oakland City*, *supra* note 129; *Salaman v. City of Waterbury*, *supra* note 130; *Saunders v. Scrivener*, No. CV97-5828 (Mo., Jackson Cty. Cir. Ct., Mar. 26, 1998) (property owner liable for \$7.21 million in quadriplegia injury where owner failed to provide depth markers on pool and lack of diving warnings).

²⁹⁸ *Swieckowski v. Fort Collins*, *supra* note 140.

²⁹⁹ *Connelly v. Redman Development Corp.*, *supra* note 36 (trip hazard at ditch); *Mignery v. Duneland Beach Ass'n*, *supra* note 77 (hazard at speed bump).

³⁰⁰ *Caine v. New Castle County*, 379 A.2d 1112 (Del. 1977). Landscape architecture regulation was enacted into law by the Delaware General Assembly while this case was pending.

5.2 LICENSURE PROTECTS AGAINST THE RISK OF PROPERTY DAMAGE

Consumers of landscape architecture services entrust significant property and assets to practitioners. Private individuals and corporate clients rely on the professional competence of consulting landscape architects to protect and improve the value of their property. Neighboring property owners rely on competence in the practice of landscape architecture to prevent adverse impacts from encroaching beyond the boundaries of a site.³⁰¹ And the general public relies on landscape architectural competence to ensure that significant improvements funded by public agencies are executed in a manner that accomplishes the intended public benefit. Poor landscape architecture practices can seriously impair the value and use of property in each of these contexts. Given that risk, this section will illustrate several examples where work that falls under the scope of landscape architecture was performed in such a way that damage has resulted from incompetence, negligence, and unscrupulous practice.

5.2.1 Grading, Drainage, and Erosion Control

A substantial number of property damage cases arise from faulty planning of grading, drainage, and erosion control. As demonstrated by the cases below, consumers of landscape architecture services rely on professional standards to ensure that projects of all sizes will not lead to damage from slope failure, erosion, freezing and thawing, expansive soils, or poor drainage in general.

The case of *Foxchase, LLLP v. Cliatt*³⁰² is a prime example of why unethical and incompetent practitioners are, and should remain, prohibited from either practicing landscape architecture or holding themselves out as landscape architects. In *Foxchase*, a golf course design firm, whose president falsely held herself out to be a licensed landscape architect, had been hired to develop golf course plans and specifications, supervise work, and correct outstanding violations of a county erosion and sediment control ordinance. During

³⁰¹ *Gladin v. Von Engeln*, 575 P.2d 418 (Colo. 1978) (where slope subsidence causes property damage, grading and associated site improvements may be presumed to have caused the damage).

³⁰² *Foxchase, LLLP et al. v. Cliatt*, 562 S.E.2d 221 (Ga. App. 2002).

the design and construction phases of work, excess water, sediment, sand, and debris flowed unabated down a creek on the golf course property to an adjacent property, where the runoff caused significant damage. The unlicensed landscape architect and her firm were found liable for damages to the adjacent property based on evidence that the unlicensed landscape architect had written “misleading letters to county inspectors in attempt to avoid responsibility for erosion control” and that she and her firm had “acted in bad faith in failing to properly correct the excess flow of water and debris that was damaging” the adjoining property.³⁰³

Negligent planning for stormwater has been linked to property damage in numerous other cases.³⁰⁴ In *Redbud Cooperative v. Clayton*, a landscape architect prepared the original grading and drainage plan for a site and obtained the necessary approvals.³⁰⁵ Prior to construction and without consulting the landscape architect, the developer altered the plan. Significant deviations from the landscape architect’s plan included impeding swales and failing to build culverts, resulting in inadequate drainage of a subdivision. The cost of repairs required due to the developer’s negligence in the case exceeded the cost if the developer had simply implemented the initial plan as drawn by the landscape architect.³⁰⁶

³⁰³ *Id.*

³⁰⁴ *Erie Insurance Exchange v. Colony Development*, 736 N.E.2d 950 (Ohio App. 2000) (negligent design led to erosion damage); *McLendon & Cox v. Roberts*, 398 S.E.2d 579 (Ga. App. 1990) (landscape architect sued for damages from increased stormwater runoff); *Burt v. Beautiful Savior Lutheran Church of Broomfield*, 809 P.2d 1064 (Colo. App. 1990) (accelerated flow in storm drainage network constituted trespass); *Englewood v. Linkenheil*, 362 P.2d 186 (Colo. 1961) (placement of driveway and other filling of adjacent property “seriously interfered... with proper drainage of plaintiff’s lands”). See also *Larry Miller Corp.—Denver v. Board of County Commissioners, Adams County*, 2003 Colo. App. LEXIS 1220 (Colo. App., July 31, 2003) (government may be liable for failure to mitigate known drainage problems); *Parkway Co. v. Woodruff, Presley, Mickelson & Klein, Inc.*, 857 S.W.2d 903, 913, 919 (Tex. App. 1993) (lot and home immediately adjacent to subdivision were “effectively placed in floodplain” and suffered flood damage when concrete retaining wall on subdivision boundary was not built according to specifications), result aff’d, 901 S.W.2d 434 (Tex. 1995).

³⁰⁵ *Redbud Cooperative Corp. v. Clayton*, 700 S.W.2d 551, 559 n. 17 (Tenn. App. 1985) (developer liability based on design negligence), cert. denied; see also *Mountz v. Lebanon County*, 45 D&C.2d 355 (Penn. Common Pleas Ct. of Lebanon County, 1968) (landscape architect joined as defendant where negligent design of drainage facilities in a new subdivision damaged property).

³⁰⁶ *Id.*; see also *Esco, Inc. v. Builders Mut. Ins. Co.*, No. 2:08-CV-1759-PMD, 2009 WL 3065210, at *1 (D.S.C. Sept. 22, 2009) (After monetary damages arose out of a grading and drainage plan for a project, a review board recommended that a professional landscape architect or an engineer design the appropriate drainage plan for the site.).

Small property owners are particularly susceptible to the monetary harms that can come from negligent design—particularly because they are often inexperienced with what constitutes a competent and quality landscape architect. The builder in *Beefu v. Creekside Ventures, LLC*³⁰⁷ negligently failed to follow an approved drainage plan and graded a lot such that a walk-out basement could be flooded. In Colorado, the initial developer is not liable for a subsequent failure to follow plans and the builder is not held to landscape architectural standards, leaving the injured future occupant of the property no recourse for the damages caused by a drainage design problem.³⁰⁸ In another case, the landscape planning leading up to litigation, a landscape architecture and site development review failed to protect a house from natural water runoff on a hillside.³⁰⁹ A subsequent owner sued the original builder, alleging that failure to install a peripheral drain around the house caused cracking in the foundation.

Landscape architects are responsible, alongside other design professionals, for decisions that affect the condition of vital infrastructure, rights-of-way, and public property. For example, the architect of a new school was retained to also produce a landscape plan, which was negligently designed in a manner that collected large amounts of water in close proximity to a school. The school gym floor was seriously damaged by the resultant water and soil movements.³¹⁰ An

³⁰⁷ *Beefu v. Creekside Ventures, LLC*, 37 P.3d 526 (Colo. App. 2001); see also *Morocco v. Piccardi*, *supra* note 109 (drainage pitched toward house caused physical injury and property damage).

³⁰⁸ *Beefu v. Creekside Ventures, LLC*, *supra* note 164; but see *Fowler v. Bowen & Bowen Construction Co.*, No. 406-O- 07P (Ga., Hall Cty. Ct., Oct. 25, 2002) (Georgia builder held liable for \$100,000 in property damage and \$150,000 in other damages where the builder failed to correct drainage problem through remedial landscape design.).

³⁰⁹ *TriAspen Construction Co. v. Johnson*, 714 P.2d 484 (Colo. 1986) (failure to install peripheral drain around foundation of house on steep slopes caused cracking in foundation; homeowner may not legally recover exemplary damages). See also *Criswell v. M.J. Brock & Sons, Inc.*, 681 P.2d 495, 496 (Colo. 1984) (homeowners sustained severe damage to basement floor and foundation caused in part by defects in landscape plans, but on appeal to the Colorado Supreme Court litigated only the constitutionality of a statute of limitations).

³¹⁰ *Seaman Unified School District v. Casson Construction Co.*, 594 P.2d 241 (Kan. App. 1979); see also *Waite v. CDG Properties, LLC*, 2016 WL 5401842 (Grading and stormwater management system affected subsurface drainage and caused death of trees. LA testified as expert witness.).

extremely similar situation occurred in Colorado, where non-landscape architects acted as landscape architects, making decisions regarding fine grading, irrigation strategy, and quantities and qualities of plantings. In the Colorado incident, a school floor was damaged when grading and drainage design services offered by a non-landscape architect did not meet standards of landscape architecture competence.³¹¹

In general, landscape architects have been held to a professional standard of care for drainage functionality in states with regulatory landscape architecture practice standards. Failing to meet that standard often results in monetary harm. The Massachusetts case of *Town of Watertown v. Halvorson Company Landscape Architects*,³¹² for instance, held that a landscape architecture firm could be held liable for flooding stemming from the firm's design documents that improperly directed drainage on a school playground.

A homebuilder and landscape contractor in two separate cases failed to incorporate professional landscape design advice and incurred property damage as a result. In *Hoang v. Arbess*,³¹³ a homebuilder ignored a soil engineering recommendation to use special landscape techniques in an area of expansive soils. The homebuilder installed the widely used landscape treatment of bluegrass and sprinklers instead. This design proved to be extremely harmful to the house and other improvements on the property. In *Gallo Construction Company, Inc. v. Ghetti*,³¹⁴ the landscape contractor installed a slope stabilization design despite knowledge that a landscape architect's assistance was probably needed.

³¹¹ *Application for Sunrise Review of Landscape Architecture Regulation*, *supra* note 95, Appendix 1, Example E.

³¹² *Town of Watertown v. Halvorson Company Landscape Architects*, No. 93-5918, 1996 Mass. Super. LEXIS 501 (Mass., Super. Ct. of Mass. at Middlesex, June 21, 1996).

³¹³ *Hoang v. Arbess*, No. 02CA0417, 2003 Colo. App. LEXIS 530 (Colo. App., April 10, 2003) ("Homes were not constructed in accordance with these engineering and landscaping recommendations [to mitigate expansive soils risks] and, as a result, suffered serious damage.").

³¹⁴ *Gallo Construction Company, Inc. v. Ghetti*, 1985 Mass. App. Ct. 189 (Mass. App. 1985) (landscape contractor had initially recommended seeking slope stabilization design guidance from a landscape architect).

After the contractor finished placing soil and completed the stabilization job, the slope failed, causing significant damage to the property owner and a complete loss on the design/build investment.

In light of the examples in this subsection, with regulation under a state board, landscape professionals are held to standards that would have yielded competent and practical solutions to the design problems presented in these cases.

5.2.2 Irrigation

In terms of typical costs—both with the initial costs and long-term maintenance costs, irrigation is a major improvement to residential, commercial, industrial, institutional, recreational, and agricultural properties. So, incompetent irrigation planning damages property both directly and indirectly. For example, as a direct cost of poor design, a nonfunctional irrigation system will require re-excavating installed equipment and procuring new design and contracting to retrofit the irrigation system appropriately. In one case, a landscape contractor held itself out as capable of performing irrigation design, but, in a string of incidents, the contractor left design/build clients with malfunctioning and inoperable irrigation systems.³¹⁵ Negligent irrigation design by that landscape contractor also indirectly damaged property, in which one victim suffered flood damage to a basement as a result of leaking equipment and poor drainage from improper irrigation design. In other cases, irrigation systems may have damaged school properties described previously in this report because incompetent irrigation planning can exacerbate expansive soils and cause serious foundation and structural problems in adjacent buildings.³¹⁶ Moreover, because irrigation design is often a task that many non-landscape architects attempt to perform, it is critical to recognize the monetary costs that come from such unlicensed work.

³¹⁵ *State v. Applied Landscape Solutions*, No. 01 CV 1098 (Colo., Boulder County 20th Judicial Dist., 2003).

³¹⁶ See *Financial Associates, Ltd. v. G.E. Johnson Construction Co., Inc.*, 723 P.2d 135, 139 (Colo. 1986) (landscape irrigation may have contributed to structural damage).

5.2.3 Exterior Structures

Poorly conceived plans for outdoor structures can inhibit the use of a property, cause a rapid decline into disrepair,³¹⁷ and require costly remedial measures. For example, an incompetent landscape contractor in the case *State v. Applied Landscape Solutions*³¹⁸ designed and built concrete steps that failed to conform to basic city code standards, which required the property owner to remove the steps and assume the responsibility for finding a qualified provider. Reported legal cases also show that design/build retaining wall projects are prone to cause property damage where contractors are not qualified to design to landscape architectural standards. For example, the negligent design of a retaining wall by a contractor/builder caused \$67,000 in damage to a foundation and a site drainage system.³¹⁹ In a Utah case, a retaining wall designed by a contractor collapsed and caused a “substantial portion” of a yard to slide into the adjacent street.³²⁰ Inexperienced contractors may be particularly likely to inadequately design retaining walls where there are possible drainage problems.³²¹

Landscape architects are also retained to design rooftop gardens. Some insurers are wary of the potential for “huge claims” for property damage from rooftop gardens,³²² especially related to design issues, such as liner specifications, that could cause a high volume of water to leak into a building.

³¹⁷ See *Pieri v. Rosebrook*, 275 P.2d 67 (Cal. App. 1954) (negligent specification of fasteners in a deck design distributed loads in a manner that caused damage to the house to which it was attached).

³¹⁸ *State v. Applied Landscape Solutions*, *supra* note 323.

³¹⁹ *Perlmutter v. Blessing*, 706 P.2d 772, 773 (Colo. 1985).

³²⁰ *Wessel v. Erickson Landscaping Co.*, 711 P.2d 250 (Utah 1985) (collapse of retaining wall attributed to defective design).

³²¹ See *Pullen v. Calvert*, 527 P.2d 398 (Ore. 1974) (landscape contractor liable for failure of wall design where drainage problems occurred).

³²² Lisa Speckhardt, *Landscape Liability: Insurers are taking a closer look at liability issues with rooftop gardens*, *Landscape Architecture*, Jan. 2003, at 26.

Each of these cases illustrates, in part, the risks that come from the incompetent practice of services within the scope of landscape architecture. And they also make clear that the work of landscape architects is not just restricted to a narrow set of designs or problems, but extends to many types of exterior structures.

5.2.4 Site Planning

Especially in dry climates, densely forested regions, or other fire-prone environments, competent landscape architects incorporate design techniques to mitigate significant fire hazards. These techniques, known generally as “defensible space,” have been credited with saving homes in some Western wildfires.³²³ As demonstrated by the lack of property damage experienced directly in the path of the blazes, effective defensible-space techniques include selective tree thinning, strategic siting of structures, driveway alignment as a fire break, and strategic irrigation.³²⁴ In one California case where defensible space techniques were largely absent, close proximity of vegetation to power lines and houses ignited a 25,000-acre wildfire and caused at least \$2.2 million in property damage.³²⁵ Licensed, competent landscape architects are uniquely suited to address these risks.

³²³ Mary Butler, *Fire precautions save homes*, Daily Camera (Boulder, Colorado), November 4, 2003, at 1A, 5A; see also Firewise Communities, *The basics of defensible space and the “home ignition zone,”* <http://www.firewise.org/wildfire-preparedness/be-firewise/home-and-landscape/defensible-space.aspx?sso=0>.

³²⁴ *Id.*

³²⁵ *Ross v. Southern Cal. Edison Co.*, No. 257053 (Ca., Riverside Cty. Super. Ct., April 22, 1997).

5.2.5 Paved Surfaces

As with other technical applications within the scope of landscape architecture, not only is specification of pavement a potential source of physical injury, but improper design and specification may also diminish the value of property. For example, in a 2011 case out of New York, a contractor was held liable for costs to remedy construction defects and property damage that were caused by the contractor's failure to follow the designs of a landscape architect for the paving system around a residential pool.³²⁶ This illustrates the monetary harms that can arise from not following a licensed landscape architect's recommendations.

5.2.6 Site Investigation

Without diligent investigation of a site prior to a project, seemingly simple efforts to alter and improve a site have the potential to harm property rights and adversely impact the condition of existing physical features. For example, operations to cut and fill earth may appear to the eye to interfere with no other landscape feature, but could cause major property damage if cuts are made that expose underground utilities or if fill is placed in a floodplain, in a fire lane, or in an access easement. In one such case, a landscape architect was sued for malpractice after a water main was ruptured on a job being supervised by the landscape architect.³²⁷ Had that project been adequately and properly investigated prior to construction, the risk of those damages would be reduced.

³²⁶ *J. Tortorella Swimming Pools, Inc. v. Gans*, 33 Misc. 3d 1214(A), 939 N.Y.S.2d 740 (Sup. Ct. 2011).

³²⁷ Dr. Samuel C. Miller, *Professional Licensure of Landscape Architects: An Assessment of Public Needs and Private Responsibilities*, American Society of Landscape Architects, Washington, D.C. (1978), at 39.

5.3 LICENSURE PROTECTS AGAINST THE RISK OF FINANCIAL HARM

Landscape architects are responsible for documenting or supervising the construction of hundreds of millions of dollars in infrastructure and site improvements each year. The potential for incompetent, negligent, and unethical landscape architecture practice to produce financial harm is significant. As noted in past studies of landscape architecture regulation, a concern for protecting public health, safety, and welfare should include recognition of the importance of regulation of the design professions in protecting economic welfare.³²⁸ And as documented by the Council of Landscape Architectural Registration Boards,³²⁹ the economic risks of incompetent landscape architecture practice have a myriad of cost impacts, including initial development costs; maintenance costs; commercial usefulness and viability; costs associated with mitigating environmental damage; damage to physical facilities from structural failure, frost, decay, and water damage; and liability costs associated with physical injury or inadequate accessibility provisions. This section collects representative cases of economic harm caused by incompetence, negligence, and inconsistent application of professional standards for landscape architecture services.

³²⁸ *Id.* at 30; *infra* note 42.

³²⁹ Council of Landscape Architectural Registration Boards, *The Impact of Landscape Architecture on Public Health, Safety, and Welfare*, Nov. 3, 2001, at 2.

5.3.1 Bidding Errors

Contractors who rely on plans negligently produced by design professionals enter into detrimental contracts. A bid drawing prepared by a design professional can lead to significant extra costs for the contractor if design errors and omissions are discovered during the construction phase.³³⁰ In some cases, negligently produced landscape architectural plans have been so replete with errors that contractors have been unable to complete work and are compelled to take legal action against the practitioner.³³¹ These type of errors can have a ripple effect into several of the entities that are often involved in any given construction project such as owners, lenders, sureties, and contractors—each of those entities are at the risk of loss when drawing and bidding errors occur. To help stem this tide, some state licensing boards have taken action where landscape architects have demonstrated incompetence in the preparation of plans and caused financial injury, which shows the propriety of both licensing landscape architects and the need for state boards to oversee the profession.³³²

³³⁰ *Forte Bros. v. National Amusements, Inc.*, 525 A.2d 1301 (R.I. 1987) (architect's failure to accurately calculate volume of rock and earth material removed from a site caused financial harm to a contractor); *Donnelly Construction Co. v. Oberg/Hunt/Gilleland*, 677 P.2d 1292 (Ariz. 1984).

³³¹ *Professional Licensure of Landscape Architects*, *supra* note 58, at 39 (citing two malpractice claims against landscape architects in which incomplete and erroneous plans caused delays and additional expenses in construction work).

³³² *Matter of Timothy Arajys Rumph*, Land. Arch. License 000852, No. 16970 (New York Board of Landscape Architects, Feb. 10, 1998) (licensee found negligent in two incidents of preparing preliminary landscape plans with errors).

5.3.2 Feasibility and Permitting Errors

Legal cases and practical experience show that even the most sophisticated clients hire landscape architects because they either need or desire to rely on the landscape architect's technical expertise as a design professional.³³³ For example, the senior vice president for development of a large real estate holding corporation stated, "When I hire a certified landscape architect, surveyor, or other licensed professional, it is with the expectation that I can be assured of a consistent level of expertise, training, and ethics." A series of cases illustrates the potential for financial harm where landscape architects are responsible for making critical strategic assessments and decisions in the development process.

The case of *Winsted Land Development v. Design Collaborative Architects, P.C.*³³⁴ involved a landscape architect in charge of a multidisciplinary team. The client retained the landscape architect's firm to ascertain the need for permits and obtain all permits necessary to develop a large property as a commercial center. The landscape architect failed to inform the firm's client that a U.S. Army Corps of Engineers dredge and fill permit would be needed, resulting in 6.5 acres of wetlands filled in violation of the Clean Water Act. The commercial project was stalled and lost potential tenants and buyers when the wetlands violation was discovered. The court noted that the client relied on design professionals held out to be licensed and competent, and found the design firm, through the actions of its landscape architect, to have breached a professional standard of care in not properly addressing wetland requirements. The design firm was

³³³ Stephen D. Beck, Letter of support for continued regulation of landscape architecture to the Virginia Department of Commerce, dated March 11, 1991.

³³⁴ *Winsted Land Development v. Design Collaborative Architects, P.C.*, No. CV 960071571, 1999 WL 639942 (Ct., Super. Ct. of Conn., Aug.12, 1999).

held liable for breach of contract, negligence, and negligent misrepresentation and ordered to pay a total damages award of \$1,516,719.³³⁵

In a 2013 case, a site planning and civil engineering firm was held liable for producing a site plan that contained errors, delayed the obtaining of a permit, caused fines and penalties to be incurred by the owner, caused construction delays, and caused increased construction costs.³³⁶ Significantly, the individual responsible for preparing the defective site plan and other designs had received a master's degree in landscape architecture, but was not a licensed landscape architect, effectively demonstrating the importance of licensure and the importance of showing competency beyond an education.

Landscape architects are often involved in wetland compliance in most states,³³⁷ but less so where the financial impact of incompetent wetland planning is not addressed through professional regulation. In Colorado, the developer of an alpine golf course "had no idea they were breaking the law" when they filled 40 acres of wetlands. The developers ultimately faced \$2.5 million in delays, \$200,000 in fines, the costs of wetland restoration work, and criticism from scientists that filling created irreparable harm.³³⁸

Competent design professionals are also essential when working within complex regulatory environments such as the Americans with Disabilities Act. ADA requirements (e.g., ADA-AG design guidelines) not only require technical construction knowledge,³³⁹ but also cost experience to help clients determine the need to build to ADA-AG standards. In some cases, an ADA accommodation is not required, and in some cases certain accommodations could be prohibited.

³³⁵ *Id.*

³³⁶ *Heavenly Days Crematorium, LLC v. Harris, Smariga & Associates, Inc.*, 202 Md. App. 252, 258, 32 A.3d 155, 159 (2011), rev'd, 433 Md. 558, 72 A.3d 199 (2013).

³³⁷ See *First Atlantic Corp. v. Gleichman & Co.*, 1996 Me. Super. LEXIS (Me., Super. Ct. of Maine, Cumberland Cty., Nov. 7, 1996) ("The landscape architect informed the defendants that the presence of wetlands, habitats, and other environmental issues imposed impediments to the project and greatly affected its economic viability.").

³³⁸ *Settlement nearing in wetlands destruction*, Rocky Mountain News, Sept. 26, 1993, at 6A, 20A.

³³⁹ See *supra* note 232 (delays and extra costs in Denver office building where necessary to modify art installations for ADA compliance).

Professional evaluation of ADA requirements and options can have a major impact on the cost of a compliant design solution, as demonstrated by the costly litigation of accessible outdoor design for a new small business in Cannon Beach, Oregon.³⁴⁰

Local regulations may also require the assistance of competent landscape architects to prevent financial harm. A homeowner suffered financial damage in *Village of Wadsworth v. Kerton*³⁴¹ when a landscape contractor failed to assess or comply with village requirements (e.g., submittal and approval of a landscape plan; scenic corridor regulations) and private covenants (restricting development on certain areas of the lot). Due to the outcome of the village's case against the contractor, the homeowners have an illegal fence and landscaping, and the contractor has impaired the value of covenants on the homeowner's lot.

When an incompetent and unlicensed individual undertakes to perform design services within the scope of the profession of landscape architecture, they subject themselves, their clients, and the public to the risks illustrated in this subsection. If a design cannot be feasibly constructed, or a set of drawings is negligently prepared, the owner and the public stand to suffer monetary harm. However, ensuring and maintaining licensure for landscape architects will help foster an environment where those designs and designers are few.

5.3.3 Negligent Design

As just mentioned, the cost to remedy negligent landscape architectural design can be substantial. In addition to the various errors and omissions discussed above, specific defects in landscape architecture technique are discussed in the following cases.

An architectural firm was ordered to pay damages totaling \$2,100,000 as the prime consultant on a defective

³⁴⁰ *Alford v. City of Cannon Beach*, No. CV 00-303-HU, 2002 WL 3149173 (D.OR., Jan. 15, 2002).

³⁴¹ *Village of Wadsworth v. Kerton*, 726 N.E.2d 156 (Ill. App. 2000).

streetscape project.³⁴² As established by the expert testimony of a landscape architect, and found by the jury, the specification of streetscape paving material was inadequate to accommodate the freeze and thaw of water or the heavy traffic over crosswalk features.³⁴³ In another case, a landscape architecture firm, engaged in a national scope of practice, failed to diligently research and specify corrective measures for soil problems.³⁴⁴ Awarding the client \$900,000 in damages, the court in that case found the firm negligent in the preparation of plans and negligent in recommending to the client to accept a bid that did not include necessary work.³⁴⁵

In another case, a landscape architectural firm was sued by a municipality for allegedly negligently designing multiple aspects of a large waterfront park project.³⁴⁶ The municipality alleged approximately \$1.5 million in damages arising out of the supposedly negligent work, with approximately \$8 million in repair costs. In defending its position, the landscape architecture firm pointed to numerous notices of potential defects that it gave to multiple parties on the project.³⁴⁷ Ultimately, the court dismissed the case on the grounds that the statute of limitations had run out; but, of course, that did not save either party from the significant costs.³⁴⁸

³⁴² *City of Charlotte v. Skidmore, Owings, & Merrill*, 407 S.E.2d 571 (N.C. App. 1991).

³⁴³ *Id.*

³⁴⁴ *American Manufacturers Mutual Insurance Co. v. Edward D. Stone, Jr. & Associates*, 743 F.2d 1519 (11th Cir. 1984).

³⁴⁵ *Id.*

³⁴⁶ *City of Chattanooga v. Hargreaves Associates, Inc.*, 2012 WL 2353688, at *6 (Tenn. Ct. App. June 21, 2012).

³⁴⁷ *Id.*

³⁴⁸ *Id.*

Another example of monetary costs arising out of incompetent work is the case of *City of Spearfish v. Duinick, Inc.*³⁴⁹ In that case, a landscape architect designed a golf course, but arguably failed to properly account for some subsurface soil conditions. After a specified pond had been constructed on the golf course, the pond began to leak, which caused over \$40,000 in damages.³⁵⁰

Defects in landscape architectural plans incur a broad assortment of remedial costs. In addition to the examples just mentioned, those remedial costs have been due to defects in plans and specifications for paving materials,³⁵¹ soil preparation,³⁵² drainage,³⁵³ seeding specifications,³⁵⁴ irrigation,³⁵⁵ grading,³⁵⁶ and site investigation.³⁵⁷

The significant financial risks are real. Without landscape architecture licensure, the public is subjected to unnecessary risks in the form of defective plans or negligent design that lead to difficulty obtaining project approval as well as long-term monetary consequences.

³⁴⁹ *City of Spearfish v. Duinick, Inc.*, No. 5:14-CV-05039-KES, 2016 WL 4133517, at *1 (D.S.D. Aug. 3, 2016).

³⁵⁰ *Id.*

³⁵¹ *City of Charlotte v. Skidmore, Owings, & Merrill*, *supra* note 196.

³⁵² *Loup-Miller v. Brauer & Associates*, 572 P.2d 845, 846 (Colo. Ct. App. 1977) (after trial and appeal, retrial required for developer attempting to recover costs incurred after landscape architect specified untested soil amendment technique and failed to effectively supervise installation); *First Interstate Bank of California v. Winncrest Homes, Inc.*, CO35434, CO 36722, 2003 Cal. App. Unpublished LEXIS 7200 at 67-68 (Ca., Cal. Ct. App., July 25, 2003); *American Manufacturers Mutual Insurance Co. v. Edward D. Stone, Jr.*, *supra* note 197.

³⁵³ *First Interstate Bank of California v. Winncrest Homes, Inc.*, *supra* note 200; see also *Larry Miller Corp.—Denver v. Board of County Commissioners, Adams Co.*, *supra* note 161.

³⁵⁴ *Saltiel v. GSI Consultants*, 788 A.2d 268 (N.J. 2002) (defective turfgrass specifications for university athletic field rendered field unfit for use).

³⁵⁵ *First Interstate Bank of California v. Winncrest Homes, Inc.*, *supra* note 200.

³⁵⁶ *Matter of Alyson Flynn*, Land. Arch. # 3074, reported in Fall 2002 LATC Newsletter (Landscape Architecture Technical Committee, California Architects Board, May 31, 2002) (landscape architect failed to meet professional standards for investigating topography and surveys, resulting in incorrect pool excavation).

³⁵⁷ *Id.*

5.3.4 *Loss of Consumer Choice*

Competitive barriers shortchange both practitioners and consumers. That is, the effect of a lack of regulatory parity between landscape architects and other design professionals may be a restraint of trade in service areas where fully licensed professions overlap landscape architecture practice. In addition, when regulation did not exist across the country (and if landscape architecture were ever deregulated), landscape architects and their clients lacked a mutually advantageous bargaining tool. Technical competence is important to clients, who seek safe, cost-effective solutions with a minimum potential for future liability. Clients of design professionals can look to state regulation as a reliable and objective benchmark to assess technical competence.

Furthermore, the best interests of consumers are not well served when the market of design professionals is limited to a smaller pool of firms with a narrower range of expertise. Prior to landscape architects being universally licensed in the United States (current legislation for the District of Columbia is pending congressional approval³⁵⁸), this was the situation in states without state certification or licensing of landscape architects. While competitive barriers may not be an intuitive reason to regulate a profession, the unbalanced regulatory treatment of landscape architects relative to its allied professions inhibits the market for a variety of professional services that landscape architects are qualified to perform—and consumers thereby suffer.

Additionally, land development activities have many potential impacts on the public health, safety, and welfare, and the issuance of a state registration number and professional stamp to design professionals is essentially a complement to land use regulations and building codes, offering a measure of assurance that those regulations and codes will be addressed and adhered to. To expedite approvals and reduce the burden of technical evaluation, cities and other reviewing agencies frequently require development plans to be stamped or certified by a registered design professional,

³⁵⁸ The District of Columbia City Council, Bill 21-790.

such as a landscape architect.³⁵⁹ In those instances, landscape architects are typically granted the ability to certify code compliance and safety for site plans; lighting plans; grading plans; layout of parking lots, bicycle paths, and pedestrian systems; landscape drainage; irrigation; plantings; walls, fences, and other details of site improvement.

Regulation of design professionals in pursuit of consumer protection is also a preemptive step taken by states to enable a market for minimally competent, safe planning of the built environment. Even where the requirement for a landscape architect's stamp on a drawing is left entirely up to individual clients and reviewing agencies, there is a significant demand for plans that are stamped and certified by a landscape architect. As the chief engineer of the Virginia Department of Transportation noted, the certification of designs produced by all the design professions—architects, landscape architects, and engineers—is an important mechanism to address public safety.³⁶⁰ A study of landscape architecture regulation in Virginia affirmed the value of a continued state government program to certify the education and experience of landscape architects.³⁶¹

Prior to universal licensing, a specific concern in jurisdictions where a state regulatory program and professional stamp did not exist was that, under the Uniform and International Building Codes, landscape architects were arguably not able to produce site plans, grading plans, drainage plans, and other construction related reports and plans. In Clark County, Nevada, for example, the adopted building code permitted only professional engineers and land surveyors to produce grading plans. However, because “grading is a fundamental skill of the landscape architect,” as recognized in Nevada’s

³⁵⁹ See *Sunset Review of the State Board of Examiners of Architects*, 1987, *supra* note 23, at 6 (“Local officials rely on the state’s licensure and stamp requirements for architects and engineers as they do not have the resources to do a detailed evaluation of the soundness of design proposals, especially in small communities.”).

³⁶⁰ Letter from J. S. Hodge, Chief Engineer, Commonwealth of Virginia Department of Transportation to Phillip A. Shaw, Chairman of the Landscape Architecture Section, APEISLA Board, March 20, 1991, as attached to the Landscape Architecture Section Defense for 1991 Review by the Virginia Department of Commerce.

³⁶¹ Virginia Department of Commerce, Board for Professional and Occupational Regulation, *Need for Licensing Landscape Architects*, 2000, at 2, 3.

landscape architecture practice statute,³⁶² the Nevada attorney general ruled that landscape architects should be allowed to practice grading design to the full extent of their capability.³⁶³ This example is a microcosm of a larger issue: When policy makers and the public are educated and understand the real breadth of landscape architecture, then they enact laws, rules, and regulations that are more in accordance with the real impact of the profession. A related illustration is that the Council on Licensure, Enforcement, and Regulation has noted it is harmful to the public for a regulatory scheme to prevent individuals from other professions from providing services for which they are qualified.³⁶⁴

Registration and licensing are also ways for landscape architecture clients to limit their liability. Developers, public landowners, and other clients of landscape architects are able to reduce their exposure to premises liability by securing the services of a competent design professional subject to the discipline of a state regulatory board; more specifically, a professional they can put faith and trust in and who has a duty to perform the services competently. As has been noted by Leatzow & Associates, the nation's largest provider of professional liability insurance to landscape architects, there is a direct correlation between training and experience in landscape architecture and the magnitude and severity of injury and damage claims against the practitioner.³⁶⁵ Clients of landscape architects are also able to reduce their exposure to other potential liabilities where incompetent practitioners lack knowledge of regulatory and practical requirements.

Moreover, inconsistency in the treatment of landscape architects relative to other design professionals, specifically architects and civil engineers, adds an unnecessary layer of complexity to many landscape architecture projects and imposes additional costs on consumers. In one case, for example, a land developer retained a landscape architecture

³⁶² Nev. Rev. Stat. § 623A.060(2).

³⁶³ Nevada Attorney General, Opinion 2002-27, July 16, 2002.

³⁶⁴ Council for Licensure, Enforcement, and Regulation, *Professional Licensure Justification, in Questions a Legislator Should Ask*, 1994, at 19.

³⁶⁵ Jim Leatzow, Letter to the Colorado Department of Regulatory Agencies, June 26, 2001, at 2.

firm to correct errors in an overlaid grading plan produced by an engineering firm, but to obtain local government approval was forced to retain the same engineering firm to stamp and review the corrected plans.³⁶⁶ The exclusion of landscape architects from the marketplace of design professionals qualified to certify plans is a poor utilization of technically trained professionals and a disservice to the private clients and public agencies that work with landscape architecture products.

Commercial and institutional landowners desire grading and drainage systems that are both functional and aesthetically integrated within the architectural character of a site, as well as the environmental context; however, liability concerns currently compel such clients to enter into expensive arrangements, contracting design services between multiple firms, and frequently implement plans that compromise landscape architectural quality. Landscape architects offer a residential homeowner the ability to cost-effectively solve grading and drainage problems, but plans for such improvements may require a professional stamp to meet homeowner association or local government approval criteria. In these service areas and many more, a restraint of trade on landscape architecture through lack of regulation fails to foster an open market. Consumer choice is artificially limited where professional regulation does not recognize all design practitioners trained to address the needs of public health, safety, and welfare.

³⁶⁶ Testimony in the Colorado Senate Committee on State, Veterans, and Military Affairs, January 28, 2003.

6. LICENSURE IS THE MOST APPROPRIATE FORM OF REGULATION

Landscape architecture regulation mitigates harm and services the public interest. Professional boards and administration are funded by fees, which impose relatively little cost on practitioners. Regulation does not burden other competent professionals, and mechanisms to accommodate professional overlap are commonplace. In sum, the evidence related to landscape architecture practice satisfies the criteria for professional regulation. This penultimate section discusses and illustrates various forms of regulation and concludes that licensure is the most appropriate.

Finding a need to regulate landscape architecture is applying the same standards that support the regulation of architecture and engineering. There is a consistent finding among all states that landscape architecture should be regulated. Exclusion of landscape architecture based on a general policy of limiting professional regulation is the result of arbitrary standards or an analysis that inaccurately depicts the scope of landscape architecture training and practice. Landscape architects are not equivalent to hair braiders: Their work affects peoples' lives and their pocketbooks.

Determining the appropriate regulatory approach requires evaluation of the reasons occupational regulation may or may not be needed. The following section evaluates the various regulatory approaches.

A number of professions are substantially and directly responsible for the orderly development of society's physical, legal, and financial infrastructure. In these professions, certain economic influences are, in effect, subordinate to basic standards for public health, safety, and welfare.³⁶⁷ For example, in the case of an engineer, the public interests must be subordinate to any anecdotal benefits that might come from no regulation. In other words, an engineer should not be permitted to produce negligent design work simply because their client failed to expressly bargain for a safe and functional design in a contract for services. Technical competence and professional standards play a critical role in the

³⁶⁷ As stated by one design professional, "It is not necessarily very easy for an architect to say 'No' to a client who suggests directly or indirectly that there might be shortcuts the design could take to avoid the expense of complying with all the code requirements. It is a lot easier to say 'No' to the client when you can say it is a condition of your architectural license..." Letter of Roy Perlmutter to the Colorado Department of Regulatory Agencies, dated April 29, 1987.

protection of public health, safety, and welfare. This reality accounts for the contemporary opinion that generally accepts professional regulation as a restriction to protect society from incompetents and charlatans.³⁶⁸

What are the critical questions that need to be answered when considering whether a given profession should be regulated? Under typical criteria, a regulated profession will present an easily recognizable potential for harm, better serve the public interest under regulation, and be amenable to regulation without undue cost to the public or impact to other professions.

Occupational regulation is both an answer to those criteria and a rational response for trades and professions that may expose consumers and the general public to harm. Of course, for purposes of this document, the question is whether landscape architects should be licensed professionals. As has already been stated, landscape architects are currently licensed in all 50 states. And those regulations have, in many cases, already been upheld in legal cases and opinions as a valid protection of public health, safety, and welfare. For example, in the case of *Paterson v. University of State of New York*,³⁶⁹ the legitimacy of New York's landscape architecture regulation was challenged. Simply put, the court flatly rejected the challenge and upheld New York's licensure law. As noted in the holding:

The Legislature deems the practice of landscape architecture a matter of public concern and enacted the challenged legislation in order to safeguard life, health, and property.... The testimony at trial established that the regulation and practice of landscape architecture was clearly related to the public health and welfare and, as such, constituted a valid exercise of the police power, thus affording a substantial basis for the declared public policy.³⁷⁰

The *Paterson* decision affirmed the finding of the trial court that landscape architecture licensing is warranted because “the public has a vital interest in proper layout and development of land.”

³⁶⁸ *Professional Licensure Justification*, *supra* note 212, at 1.

³⁶⁹ *Paterson v. University of State of New York*, *supra* note 1, at 455.

³⁷⁰ *Id.* (emphasis added).

With the idea in mind that some professions must be regulated in order to adequately protect the public's interests, and considering the critical questions just mentioned, this section will analyze some of the concerns or issues that arise when considering whether landscape architecture should be a regulated profession. In the end, this section concludes much the same as the Paterson court; namely, that licensure of the profession of landscape architecture is vital to the protection of the public health, safety, and welfare.

6.1 FREE-MARKET REGULATION/ DEREGULATION

Extensive discussion of the free market regulation and deregulation of landscape architecture is contained in the sections below regarding private boards and civil litigation.³⁷¹ The mode of preventing and remedying harmful landscape architecture presented in these private-sector approaches to regulation requires no specific government intervention and is for all practical purposes a form of deregulation. As discussed below, without complementary professional regulation, free-market regulation through civil litigation and private boards does not have the capacity to establish a comprehensive, enforceable set of professional standards, nor do these approaches necessarily provide an effective mechanism for preventing negligence and incompetence.

Free-market regulation asks if “Market Darwinism” can adequately regulate the profession of landscape architecture while also protecting public health, safety, and welfare. Like its biological counterpart, the concept of “Market Darwinism” in its most basic form is the theory of natural selection—the survival of the fittest. In the context of Market Darwinism, only the most educated, skillful, talented, and business-savvy landscape architects will flourish and survive. While seemingly initially beneficial to the consumers, clients and the public would pay the price. Trial-and-error runs at services by design professionals would determine the market providers—essentially making the public the subject of their experiments. The public, through experiencing the physical and financial harms exhibited throughout this report, would eventually determine the primary market participants.

³⁷¹ See *supra* note 256 (sunset of landscape architecture regulation would negatively impact the public).

It has also been suggested that consumers and the general public, absent landscape architecture regulation, would benefit from the pervasiveness of regulation in other states. This approach may yield some preventative benefit to consumers of landscape architecture services willing to incur the extra cost to seek out practitioners licensed in other states. However, even if legally permissible, it is unlikely that regulatory authorities are willing to devote substantial resources to discipline and enforcement activities related to projects outside of their jurisdiction. There is a legitimate concern that reliance on out-of-state regulation gives the state without regulation few alternatives to deter or discipline substandard practice that occurs within the state.³⁷² For states without landscape architecture regulation, it should also be of concern that the state may be a magnet for landscape architects unable or unwilling to submit to an evaluation of their ability to meet a minimum standard of competency.³⁷³

Additionally, a lack of regulation comes with hidden costs. For example, a professional stamp is used by public and private agencies to verify compliance with professional standards. Reliance on contractors or specially qualified employees to exhaustively recheck technical documents is time-consuming and costly.³⁷⁴ And this is to say nothing of the onerous burden it places on the average public consumer to discern what distinguishes a competent professional from an incompetent one.

Indeed, as noted above, search costs for competent practitioners may be significant when there is no meaningful and accessible credential upon which to assess competence.³⁷⁵ Lacking a credential and lacking professional status, consumers of landscape architecture services may be misled, or even compelled, to rely entirely on a competitive

³⁷² Colorado Department of Regulatory Agencies, *Sunrise Review of Professional Boxing*, 1998, at 22 (without state regulation of boxing, federal law would require boxing events held in the state to be supervised by out-of-state officials, from states that do regulate boxing). Boxing regulation was subsequently enacted in 2002 as Colorado House Bill 02-1078.

³⁷³ Colorado Department of Regulatory Agencies, *Sunset Review of the Real Estate Division*, 1998, at 31 (“50 states regulate the real estate industry in a manner similar to Colorado. Absent regulation, Colorado could become, at the very least, a ‘dumping ground’ for persons who have lost their license in other states. In such a scenario, the threat to the public is greatly increased.”).

³⁷⁴ *Sunset Review of the State Board of Examiners of Architects*, 1987, *supra* note 23, at 6 (licensing of architects reduces the cost of local government review).

³⁷⁵ See *supra* note 240 (regulation increases awareness of practitioner qualifications).

bidding process to procure landscape architecture services.³⁷⁶ As many jurisdictions have long recognized:

The value of [professional] services is not to be measured by a mere matching of dollars, so to speak; it is not to be determined upon the irrational assumption that all men in the particular class are equally endowed with technical or professional skill, knowledge, training, or efficiency; nor are such services rendered more desirable because offered more cheaply in a competitive bidding contest.³⁷⁷

In states without professional regulation, many clients of landscape architects are unaware or unable to use the value of competence as a factor in the search for landscape architecture services.³⁷⁸

Therefore, deregulation is at odds with the abundant evidence of a need to regulate landscape architecture. This fact bears repeating: Failure to regulate landscape architecture—or the willful deregulation of it—is a failure to protect public health, safety, and welfare.

³⁷⁶ In response to a Colorado Department of Regulatory Agencies survey question asking “Please discuss how the lack of licensure in Colorado may affect your choice of landscape architect for the project,” a department director with the City of Thornton noted, “We are stuck with low bid. Low bid and no license is a bad mix.” Landscape Architects Questionnaire for 1995 Sunrise Review, response of Andy Jennings, City of Thornton, Colo., Manager of Parks, Forestry, and Buildings.

³⁷⁷ *Louisiana v. McIlbenny*, 9 So.2d 467, 471 (La. 1942) (the result of not treating landscape architects as professionals would be to attract the “least capable” people to fill public bids).

³⁷⁸ State of Texas Attorney General, Letter Opinion M-926 (1971) (prohibition of competitive bidding under the Texas Professional Services Procurement Act applies to architects but excludes landscape architects).

6.2 LITIGATION

As a substitute for regulation, or as an alternate form of regulation, litigation in the civil courts is infused with risks and uncertainty.

A variety of assumptions lead some commentators to believe that the harms generated in the built landscape may be fully redressed in the courts. Civil litigation would potentially be an effective form of regulation, for example, if it could be assumed that substandard landscape architecture practices cause no irreparable harm, no deaths, and no permanent injury; that incompetent landscape architects and other incompetents practicing in the field adversely affect only a few individuals and a few properties, and only in those cases to a degree that justifies litigation. Further, the theory holds that substandard practices are effectively deterred by lawsuits brought against negligent practitioners, incompetents, and charlatans. While the provision of other goods and services may meet these criteria, litigation is a mechanism ill-suited to fully address harms caused by less than minimum competence in architecture, landscape architecture, and engineering—if only because litigation as a deterrent will inevitably never cure or eliminate irreparable harms.

This report details the extensive evidence of fatalities, permanent physical injury, and financial harm in cases within the scope of landscape architecture. These cases are only a fraction of the claims against landscape architects and non-landscape architect practitioners.³⁷⁹ Moreover, due to a variety of legal considerations, civil court remedies are frequently inadequate, failing to deter substandard practice and leaving critical factual determinations regarding technical competence in the hands of adversarial litigants. While the tort system is the primary recourse for victims of professional malpractice, it is a problematic policy to rely on civil litigation alone to guard consumer and public safety. Litigation is costly, imprecise, and on many occasions fails to compensate a party injured by malpractice.

³⁷⁹ Most legal claims are resolved without formal judicial action. Records for U.S. District Courts reveal that 19 percent (34,098 of 176,960) of cases filed in 2002 were never acted upon by the courts. Almost 98 percent (174,755 of 176,960) of 2002 federal trial court cases failed to reach trial. *U.S. District Courts—Civil Federal Judicial Caseload Statistics*, <http://www.uscourts.gov/statistics/table/c-4/federal-judicial-caseload-statistics/2015/03/31>.

Scholarly work compiled by the American Enterprise Institute–Brookings Institute Joint Center for Regulatory Studies has concluded that “policies that result from litigation almost invariably involve less public input and accountability than government regulation.”³⁸⁰ Legal action for design professional negligence or incompetence is also unlikely to affect professional reputation since such information is not widely available and is based on technical subject matter that may be outside the potential client’s appreciation.³⁸¹

Accordingly, while litigation does serve an important purpose in the business, regulatory, and legal framework of American society, it falls woefully short of addressing all the important considerations at issue with the professional licensing of landscape architects.

6.2.1 Negligence Actions

Compared with other forms of regulation, civil litigation involves shifting significant risks onto the consumer of professional services—for example, civil litigation places enormous risks on the type of client property owners found liable for latent design defects. Complementary professional regulation mitigates the incidence and severity of negligence cases and establishes a standard of care consistent with consumer expectations.

³⁸⁰ W. Kip Viscusi, ed., *Regulation Through Litigation*, Washington, D.C.: Brookings Institution Press, 2002, at 1.

³⁸¹ See Note, *Architect Tort Liability in Preparation of Plans and Specifications*, 55 Calif. L. Rev. 1361, 1389, Nov. 1967 (“there is little chance that potential clients will hear of a lawsuit against an architect and thereafter regard him as less qualified”).

Litigating a preventable case of design malpractice exacts a greater overall cost from society than the testing and disciplinary process administered through a regulatory board. Even individuals and organizations generally skeptical of government intervention in the market view some form of regulation as preferable to promoting consumer and public safety solely through litigation.³⁸²

The range of defenses available in a civil action is substantial. Obtaining a civil remedy for negligent practice and breach of professional contractual duties is time-consuming and expensive, and negligent or unethical landscape architects and non-landscape architect practitioners are able to avoid culpability by systematically raising roadblocks to recovery in the civil courts.³⁸³ The following paragraphs discuss the impact of several common legal principles on recovery against negligent landscape architecture practitioners. In a number of situations, lack of complementary professional regulation inhibits recovery in the civil courts.

6.2.2 Sovereign Immunity

The legal doctrine of sovereign immunity provides one common barrier to recovery for those affected by negligent design work. The doctrine is basically that for certain actions, government agencies are immune from liability—despite the occurrence of actual negligence. The courts grant sovereign immunity to federal, state, and local governments as a matter of common law, and in modern times sovereign immunity is codified in statutes that refine the common law. Again, the concept generally holds that governments are not liable for personal injury, with limited exceptions.³⁸⁴ To illustrate, in the

³⁸² Paul H. Rubin, *Why Regulate Consumer Product Safety?* in Regulation (published by the Cato Institute), Volume 14, Number 4, Fall 1991 (“While [consumer product safety regulation] imposes relatively few costs, the same is not true of the tort system. This system imposes substantial direct and indirect costs. The direct costs are of two sorts. First, there are the costs of the system itself, including litigation costs. The total amount spent on litigation may approximate two-thirds of the amount at stake in a litigated case. Even if we view damage payments as transfers, the litigation costs are clearly deadweight losses. Moreover, damage payments are not merely transfer payments. They also impose real costs on society.”) (paragraph break omitted).

³⁸³ See *Loup-Miller v. Braner & Associates*, *supra* note 200 (after trial and appeal, retrial required for developer attempting to recover costs incurred after landscape architect specified untested technique and failed to effectively supervise installation).

³⁸⁴ See, e.g., Colo. Rev. Stat. § 24-10-106 (governmental immunity).

case of *Springer v. City and County of Denver*,³⁸⁵ a wheelchair user was injured at the site of a provable design defect but unable to obtain a remedy due to the Colorado government immunity statute, barring recovery against government entities for inadequate design.

The *Springer* case illustrates how reliance on negligence claims in civil court for remedial action can be unavailing for injured victims and offers virtually no deterrent for negligent design professionals (particularly with the ubiquity of any number of applicable insurance policies). Though an injured party might still be able to recover from a negligent third-party design professional, assuming the public entity did not use its own staff to produce the design in a particular case, sovereign immunity fosters a permissive, even lucrative, environment for providers of landscape architecture services who act without due regard for basic safety concerns. And many public entities that manage property and facilities do employ architects, landscape architects, and engineers to produce plans, in which case every possible defendant could be immune from the consequences of a negligent design.

Another troublesome issue in this area is that for a person injured by negligent design, similar fact patterns will often yield different results depending on whether the injury occurred on public or private property. In the case of *Parks v. State*,³⁸⁶ injuries from a slip and fall on an icy walkway leading to a publicly owned rest stop facility were attributed to design defects that caused ice to accumulate. And because the defendant was a public agency, the injured party was barred from recovering any damages for their injury. However, in *Morrocco v. Piccardi*,³⁸⁷ a design defect caused ice to accumulate in front of a private residence, leading to a slip and fall injury. Since the defendant was a nonpublic entity,

³⁸⁵ *Springer v. City and County of Denver*, *supra* note 232.

³⁸⁶ *Parks v. State*, *supra* note 109.

³⁸⁷ *Morrocco v. Piccardi*, *supra* note 109.

the injured plaintiff was able to recover damages for her injuries. Very similar situations, with inconsistent outcomes.

Given the significant amount of public property affected by landscape architecture, sovereign immunity dilutes the effectiveness of civil litigation as a deterrent to negligent practice. Landscape architects will be held liable only to the extent that courts regard them as having special duties as design professionals,³⁸⁸ and public agencies may have little incentive to consider liability for defective plans in the selection of design professionals.

6.2.3 Expert Testimony and the Standard of Care

Another barrier to recovery for plaintiffs injured by negligent design work is expert testimony and the definition of the standard of care. Design professionals are held to a higher standard of care with respect to, for example, the interpretation of contracts, the supervision of construction work, and the detection of construction defects.³⁸⁹ And proof of professional negligence, a breach of this heightened standard of care, will often depend on expert testimony.³⁹⁰

Beyond the sheer time and expense of resort to the civil courts, the risk placed on consumers of landscape architecture services is exacerbated by a possible lower standard of care that landscape architects may be held to without statutory recognition of a professional status. In contrast, the existence of a professional board enhances the duty of care to which practitioners are held, even if a common law duty of care is already recognized by the court of a particular jurisdiction.³⁹¹ For example, in *Kelley and Kelley v. Hallum*,³⁹²

³⁸⁸ A professional license is a key element in judicial findings of such duties. See *Moransis v. Heathman*, *infra* note 405; *Dufficy & Sons, Inc. v. BRW, Inc.*, 74 P.3d 380 (Colo. App. 2002).

³⁸⁹ James Acret, *Architects & Engineers*, 2nd Ed., McGraw-Hill Book Co., at 199.

³⁹⁰ *Id.*, at 25-26; *Aetna Casualty and Surety Co. v. Leo A. Daly Co.*, 870 F.Supp 925, 936 (S.D.Iowa 1994) (“The negligence of a professional must ordinarily be shown by expert testimony”).

³⁹¹ *Eastern Steel v. City of Salem*, 549 S.E.2d 266, 274 (W.Va. 2001) (“The duty of care may be further defined by rules of professional conduct promulgated by the agencies charged with overseeing the specific profession of which a defendant is a member.”).

³⁹² *Norm Kelley and Jan Kelley, Ind., on behalf of the estate of Amanda Kelley, deceased, and a/n/f of Matthew Kelley, a minor v. Lloyd Thomas Hallum, Fairfield Village Community Association, Association Management, Inc., The Spencer Company*, *supra* note 132.

Texas professional regulations created a recognition that the landscape architect should be a design professional familiar with the potential safety hazards in a roadway median planting; this established a clear standard of care for the landscape architectural function and created liability for the untrained individuals who changed a landscape architect's plan and in so doing caused a traffic fatality.³⁹³

Consequently, if the profession of landscape architecture were to be deregulated, a victim of landscape architectural malpractice would be required to litigate a considerable number of threshold issues in the civil courts, including the need for expert witnesses and the availability of a professional standard of care.

6.2.4 The Economic Loss Rule

Another legal doctrine that creates a barrier to recovery for victims of negligent design work is the "economic loss rule." This rule is premised on the assumption that landscape architects and other professionals serve their clients through a contractual relationship, and virtually all risks that may arise out of the project are subsumed in that contract. In other words, in its most basic form, the economic loss rule states that, because the professional and client have had the opportunity to allocate all economic risks through the negotiation of a contract, the only action that may be taken for monetary damages is an action on the contract. In effect, the rule precludes clients of various professions from bringing a suit for negligence (which is a tort, not a contractual based cause of action), even if the professional was negligent.³⁹⁴ The proper cause of action in that instance is breach of contract.

Furthermore, the negligence of a design professional can affect clients who had inadequate technical knowledge to effectively negotiate for negligence contingencies, as well as third parties who rely on products of the design professional without having a direct contractual relationship. Contractors

³⁹³ *Id.*

³⁹⁴ See *General Builders Supply, Inc. v. Issaquah Construction Company*, 1999 WL 1034518 (Wash. App. 1999) ("When the economic loss rule applies, a tort remedy is simply not available. And this is true even where the conduct at issue might be subject to a tort remedy in other situations.").

that incurred extra costs because they relied on defective plans have been barred under the economic loss rule from recovering against a negligent design professional.³⁹⁵ The rule has specifically applied in cases barring negligence claims against landscape architects.³⁹⁶

However, courts have recognized that public policy places some limit on the application of the economic loss rule. Discussing a malpractice claim against an engineer in the case of *Moransis v. Heathman*,³⁹⁷ the Florida Supreme Court noted that “because action against professionals often involves purely economic loss without any accompanying personal injury or property damage, extending the economic loss rule to those cases would effectively extinguish such causes of action.” The Florida court held that the economic loss rule is not a bar to negligence claims against a licensed engineer, particularly because a licensed profession is by statute obligated to act in accordance with specific duties.³⁹⁸

In New York State, where landscape architects have for over 40 years been regarded in the eyes of the law as design professionals akin to architects and engineers, a court expressly repudiated the applicability of the economic loss rule in a \$1,000,000 malpractice suit against a landscape architect.³⁹⁹

³⁹⁵ *Berstbauer/Phillips v. Seattle School*, 881 P.2d 986 (Wash. 1994); accord *National Steel Erection Co. v. J. A. Jones Construction Co.*, 899 F.Supp 268 (N.D.W.Va. 1995).

³⁹⁶ *Widett v. U.S. Fidelity & Guarantee Co.*, 815 F.2d 885 (2nd Cir. 1987) (economic loss rule applies to negligence claim against landscape architect).

³⁹⁷ *Moransis v. Heathman*, 744 So.2d 973, 983 (Fla. 1999).

³⁹⁸ *Id.*, at 977 (“the [court below] held that there was no obligation or duty owed by the individual professional to the company’s client for the client’s economic damages. We disagree. In this regard, we find our [prior] decision, as well as the statutory scheme regulating professionals in general, and engineers in particular, to be controlling and instructive.”).

³⁹⁹ *Robinson Development Co. v. Anderson*, 547 N.Y.S.2d 458 (N.Y. App. 1989) (“Most malpractice claims against professionals regularly arise out of a contractual relationship and involve injury to property or pecuniary interests only. To hold otherwise would eliminate the availability of malpractice claims against professionals such as architects where the damages are essentially pecuniary in nature.”).

6.2.5 General Remarks on Negligence Principles

In the end, professional responsibility and legal culpability cannot be equated. A responsible professional will exercise diligence to avoid harm and guard the interests of a client even when these efforts are unnecessary from the perspective of the practitioner's legal liability. Likewise, the reach of civil liability does not encompass the same potential for harm as regulation that requires minimal competence. Without regulatory standards, various issues and legal doctrines, such as sovereign immunity; expert witnesses and the standard of care; negligence claims; and the economic loss rule or assumption of risk; each deflect legal responsibility in situations where a competent design professional should have identified techniques to mitigate physical hazards and project liabilities.

The limitations of civil litigation place a heavy burden on consumers to discriminate between firms in the technically complex design professions. A system that relies solely on litigation to protect public health, safety, and welfare places too many risks on consumers and the public at large.

6.2.6 Consumer Protection

The regulation of design professions through a state board provides a mechanism for investigation and discipline when consumers have been financially harmed due to technical defects.⁴⁰⁰ Without a state board or landscape architecture statute, investigation of cases and obtaining remedies for substandard practice is difficult to accomplish using general legal principles or a general statute such as a consumer protection act.⁴⁰¹ As a result, most justifiable complaints would go uninvestigated and unpunished. Nevertheless, such boards can be effective. For example, in *State v. Applied Landscape Solutions*,⁴⁰² a state consumer protection act was used to take action against an unethical and technically incompetent practitioner. In that case, a

⁴⁰⁰ See *supra* note 204.

⁴⁰¹ See Colorado Department of Regulatory Agencies, *Sunrise Review of Hearing Aid Dispensers*, 1994, at 9 (state consumer protection act insufficient to address harm).

⁴⁰² *Applied Landscape Solutions*, *supra* note 323.

design/build landscape contractor generated at least one dozen consumer complaints within the first few months of operation, designing irrigation, grading, and outdoor stairs defectively. After more than two years of litigation, several defendants had not settled or reached judgment, and injured consumers were still awaiting restitution for the cost of property damage.⁴⁰³

Several observations from the *Applied Landscape* case are relevant when considering the merits of general consumer protection laws in addressing problems in the market for construction design services:

- Consumers have no basis under consumer protection laws to discern qualified versus unqualified providers of landscape services. A pattern of harm must develop before the capabilities (or lack thereof) of a provider are publicly known.
- Landscape contractors frequently engage in design services for which they are not competent or trained (e.g., irrigation design, drainage, stair design) and are rarely held accountable through consumer protection laws.⁴⁰⁴
- A state consumer protection act may provide an inadequate basis to prosecute landscape contractors operating beyond their capability and at the least is inefficient as a means of protecting consumers.⁴⁰⁵

⁴⁰³ *Id.*

⁴⁰⁴ *Applied Landscape Solutions* was the first landscape contractor sued by the Boulder District Attorney's Office.

⁴⁰⁵ The settlement with one defendant in *Applied Landscape* stipulated a denial of deceptive trade practices. After two years of litigation, the District Attorney's lawsuit under the Colorado Consumer Protection Act did not legally establish that this defendant was unqualified to engage in certain types of work, including landscape design.

Additionally, consumer protection laws are notoriously backward-looking and do not incorporate technical standards for specific professional products. These laws accordingly offer little protection above and beyond the negligence actions illustrated in this document.⁴⁰⁶

Thus, consumer protection regulations may lend some measure of effective regulation, but on balance they are fraught with many of the same negative implications as the previously discussed regulation options.

6.3 PRIVATE BOARDS

Some functions of a board of landscape architects do not necessarily directly involve the police power of the state. These functions include maintaining a list of qualified practitioners, collecting fees, communicating with practitioners and related professional organizations, and other administrative functions. On a number of occasions, observation of these administrative functions has prompted comments that the private sector may be able to perform essential board functions more efficiently than an agency of government.

While administrative functions of a state board are capable of being privatized,⁴⁰⁷ the police power is an exclusive government function. Any attempt to delegate regulatory authority to a private professional board rests on uneasy legal ground.⁴⁰⁸ In the law of antitrust, there is a critical distinction between a state itself enacting a regulatory program and the state attempting to empower a private board with the same sovereign

⁴⁰⁶ Also of note, the Federal Trade Commission (FTC) and consumer protection laws passed by the United States Congress do not and should not be expected to result in competence or minimum standards for practitioners of landscape architecture in the several states. The FTC collects some consumer data, but pursues issues of a national scope (e.g., large corporate monopolies). The FTC has neither the resources nor the jurisdictional focus to attempt regulation of the landscape architecture profession.

⁴⁰⁷ North Carolina, for example, retains a private firm to administer its landscape architecture board.

⁴⁰⁸ *City of Lafayette v. Louisiana Power & Light*, 435 U.S. 415 (1978) (market restraints adopted as the independent policy of governmental units subordinate to the state are not shielded from antitrust regulation); see also *United States v. Texas Board of Public Accountancy*, 464 F.Supp. 400, 404 (W.D. Tex. 1978) (bidding rules imposed by the accountancy board were not mandated by the state and therefore not exempted from the Sherman Antitrust Act).

authority.⁴⁰⁹ Therefore, an act delegating to a private board the jurisdiction of the state over a profession may not provide the necessary authority to achieve the desired protection of the public interest. At a minimum, this strategy may be subject to litigation under federal antitrust law.

Regardless of the availability of regulatory authority, private boards are impractical and similarly prone to poor performance as regulators of the public interest. For example, a private board is incapable of compelling membership or preventing any given individual from engaging in lawful work. This is especially true of private professional associations, such as the American Society of Landscape Architects (ASLA). As mentioned in this document previously, membership in ASLA imposes a code of ethics on members, but that code is not intended to assess technical skills or hold members to any particular standard of technical competence. And even if the ASLA code of ethics is used to exclude unethical landscape architects from ASLA membership, this is unlikely to have any significant effect on consumer safety, since that unethical landscape architect can simply continue to practice without being a member of the private association. Moreover, since landscape architects must pay several hundred dollars in annual dues to avail themselves of the ASLA code of ethics, it is more than likely that an unethical landscape architect would simply elect not to join the association.

In general, a voluntary private organization is not responsive to public needs. For example, landscape architecture in the state of Oregon was in fact briefly “regulated” by a nonprofit corporation, after the sunset of the State Board of Landscape Architects. However, it soon became clear that the nonprofit corporation could not maintain the functions of the former state board, and lawmakers in Oregon determined that public health, safety, and welfare would be best served by reenacting legislation to create a state board.⁴¹⁰ The state of Pennsylvania also considered transitioning to a private board during one cycle of sunset review, but opted to retain its state board in part due to concern that “there would be loss of legislative controls and less consumer involvement in a profession that is intimately tied to the public health, safety, and welfare.”⁴¹¹ Therefore,

⁴⁰⁹ See Phillip Areeda, *Antitrust Law: An Analysis of Antitrust Principles & Their Application*, Aspen Law and Business Publishing, 2000, at 482-485.

⁴¹⁰ *Response to Act 142*, *supra* note 162, at 22.

⁴¹¹ *Id.*, at 25.

while private boards are an option, and were temporarily implemented in one state, drawbacks of such a system quickly emerged and the state board regulation was quickly reinstituted.

6.4 BONDING

To the extent that poor landscape architecture practices can have a major negative impact on property and financial interests, it has been suggested that state and local law could remedy such impacts by requiring a bond. This mechanism would emulate a common safeguard in the construction industry, the performance bond. Such a bond would provide a surety for any entity harmed by the negligent performance of landscape architecture services. So, an individual or entity who suffers such harm would be able to make a claim to the surety company that issues the bond, and if the claim was deemed legitimate, the surety would then pay out an agreed upon sum.

Unfortunately, the facts upon which a bond would be payable, and to whom, for negligence and incompetence are fundamentally different and substantially more complex than default on a performance bond. As a result, the legal costs and legal burdens upon a consumer to recover on a bond would be significant, and bonding companies, with the advantage of (and incentive of) large amassed financial resources, tend to strongly defend against consumer claims. In other words, not surprisingly, bonding companies typically try to avoid paying. As a result, bonding provides uncertain consumer protection, and regulators in most states have abandoned or ceased relying on bonding programs to remedy professional negligence, incompetence, and unethical behavior. Furthermore, bonding is poorly adapted to address physical injuries, where many incidents cause irreparable harm and monetary recoveries are difficult to predict.

6.5 REGISTRATION AND CERTIFICATION

Two other forms of regulation are that of “registration” and “certification.” Before analyzing these two options, it is necessary to clarify a confusing array of terms that are used in the field of occupational regulation. For example, the stamp of a professional engineer is in many states specified to read “Registered Professional Engineer,” and the stamps of architects and landscape architects likewise employ the term “registered” to denote a professional status with the state. In most cases where the “registered” stamp of a design professional is exhibited, the underlying statute grants a “license” to practice the specific profession. The terms “license,” “certification,” and “registration” are also used interchangeably in common parlance. Following a general convention among regulatory authorities, this report distinguishes a license from certification and registration as follows:

- “License.” A license grants an individual⁴¹² the ability to engage in the practice of a profession; this form of regulation prohibits unqualified individuals from engaging in the practice of certain professional services. Licensing is also known as “practice” regulation.
- “Registration” and “Certification.” Registration and certification, as the terms are used in this report, refer to a form of regulation where the state reserves the use of a professional title or titles for those who satisfy certain standards of qualification. Registration and certification are also known as “title” regulation.⁴¹³
- In some contexts, the term “certification” is used to denote a credential issued by a private organization; this form of regulation is disused under the heading of “Private Boards.” Some regulatory authorities further distinguish “registration” as regulation requiring an individual or firm to be listed on a roster with the state, but without requiring any evidence of qualification.⁴¹⁴ Given the historical use of “registration” in the design professions to mean either state licensing or state certification, distinctions in usage between registration and certification are not observed in this report.

⁴¹² Corporations and other business entities may also be granted licenses if business practice provisions are included in the enabling legislation.

⁴¹³ In some contexts, the term “certification” is also used to denote a credential issued by a private organization.

⁴¹⁴ This form of regulation is appropriate where disclosure is of primary concern. For example, professional lobbyists are often required to register with the state but are typically not required to pass a test or demonstrate knowledge of any particular subject matter.

Consumers of professional services typically lack the expertise or resources, or both, to verify the qualifications of competing individuals and firms in the marketplace. In an unregulated landscape architecture market, nonpractitioner clients have no reliable source of information addressing practitioner knowledge of health and safety issues, regulatory compliance, avoidance of property damage, or other skills generally expected of a design professional. So, registration and certification statutes provide consumers with a meaningful credential upon which to assess minimum competency.

In either of these frameworks, there is still a necessity for state examination of landscape architects. Among the public policy reasons why landscape architecture should be a regulated profession alongside architects and engineers is that some form of state certification of minimum competence is essential to allow consumers, government, and the general public to benefit from standards of professional competence. State certification is an economical mechanism for various public and private entities to guard the safety and overall impact of landscape improvements, streetscape, and other development. For example, to avoid waste, allocation of water supply for irrigation within a Colorado special district is delegated to landscape architects, who are best qualified to analyze the water budget and irrigation system requirements for landscape materials.⁴¹⁵ As another example, a court may require adversarial parties to rely on the professional opinion of a landscape architect to resolve a property dispute.⁴¹⁶

The merit of state certification is also underscored by the significance of a design professional's stamp. The International Building Code, widely being implemented as the next generation of the Uniform Building Code, generally requires the imprint of a stamp of a registered design professional on all appropriate drawings.⁴¹⁷ Such a stamp is an objective symbol of public protection. As stated in a letter from the chief engineer for the Virginia Department of Transportation, supporting landscape architecture regulation:

⁴¹⁵ The Meridian Metropolitan District requires submittal of a Landscape Irrigation Demand Certification by a "licensed landscape architect" to protect its water supply from waste in landscape applications.

⁴¹⁶ *Baillargeon v. A.G. Press*, 521 P.2d 746, 748 (Wash. App. 1974) (landscape architects are in a better position than the courts to resolve certain types of boundary disputes based on views, trees, "spite fences," etc.).

⁴¹⁷ See discussion of UBC and IBC stamped drawings on page 52.

The landscape architecture profession, like the engineering and architecture professions, generates designs that could have a dramatic effect on the safety of the public. All of these professions develop plans which must meet specific criteria from a design standpoint. Likewise, these designs must be certified to ensure the public's safety.⁴¹⁸

Registration and certification statutes empower a board of landscape architects to authorize stamps, through which practitioners are able to convey that plans conform to professional standards. While state registration or certification cannot on its own prevent negligent or incompetent landscape architecture practice (as is intended by a licensing statute), the availability of a state credential does mitigate some modicum of harm for the many consumers and government agencies that seek out or require the stamp of a design professional. As consumers and agencies that rely on stamped plans are aware, technical documentation produced by inadequately trained design practitioners is time-consuming to review, inefficient to build, and potentially a source of serious harm and serious liability. State certification and registration are of significant value to consumers and users.

6.6 LICENSURE

The ideal option for balancing the competing interests at play in a design and construction project is professional licensing. Licensing statutes have developed with the specific intent of preventing malpractice. Public policy favors licensing for professions that encompass a potential for irreparable harm, including instances of wrongful death, permanent injury, property damage, and serious financial losses.

Licensing is part of a comprehensive approach to reducing harm. Through licensing, incidents of irreparable harm are prevented and the social costs of negligence (reflected in premiums for liability insurance and legal fees) are reduced. The necessity of litigation, including the cases discussed in this report, to redress harmful landscape architecture highlights the importance of regulation. Where it is appropriate, the foremost advantage of licensing is that it functions as a prior restraint, largely preventing incompetent practitioners from offering services that expose consumers

⁴¹⁸ Letter from J. S. Hodge, *supra* note 368.

and the public to unacceptable levels of risk and irreparable harm. The many serious cases of harm recounted in this report demonstrate that licensing landscape architects is the logical mechanism to mitigate the most harmful impacts of negligence and incompetence.⁴¹⁹

Typically, a licensing statute also creates and permits a state licensing board to administer the state's licensure program. State professional licensing boards are typically composed of in part by members of the profession to develop, promulgate, and enforce regulations that establish the standards of the profession. Typically, the enabling legislation will grant a professional board authority to broadly enforce the standards of the profession. Through subsequent actions of the board, including promulgation of regulations and disciplinary cases, a professional duty of care is defined. Because members of a given profession are best able to define standards of competence and recognize violations of professional standards, self-regulating professions provide an efficient mechanism for the state to investigate malpractice and revoke privileges to prevent further harm. In other words, "self-regulation" should not be misinterpreted to imply that private action on the part of landscape architects is sufficient to achieve the protection of public health, safety, and welfare; this term refers to the composition and authority of a state board.

Where courts become mired in legal technicalities, licensing boards also have the power to quickly assess incompetence and rehabilitate, reprimand, or revoke the right to practice, preventing further harm and making key factual findings in the active case. In contrast, alternatives to licensing have no effect on the right to practice and provide relatively weak ability to enforce professional standards (through rehabilitation, reprimand, revocation, and especially preliminary testing). Yet a professional board with expertise in the standards of landscape architectural practice is most often an efficient and responsive forum

⁴¹⁹ Colorado Department of Regulatory Agencies, *Sunrise Review of Investment Advisors*, 1997, at 7-8, 15 ("Colorado is one of four states that does not require state regulation of investment advisers.... [A] survey revealed that states took very few disciplinary actions against investment advisers, but all believed that the initial screening of applicants is very effective as a proactive regulatory step of keeping bad actors out of the industry.... Additionally, states felt an examination also ensured up-front competency.... Through a [recommended] state regulatory program, Colorado is also gaining regulatory assistance from a national network of state agencies that perform similar functions. In today's mobile workforce, this network will proactively assist Colorado in keeping individuals and firms with prior disciplinary actions out of the industry and out of Colorado.").

to hear complaints and halt unprofessional activities. From a practical standpoint, administration of a registration board and administration of a licensing board are virtually identical, with the licensing board offering a greater level of public protection through its authority.

Licensing is generally opposed by a segment of commentators that believes the regulatory process is used surreptitiously to avoid competition. From an analytical point of view, regulatory arguments “based on either a desire to avoid competition or a wish to preserve interests inadvertently created by regulation itself deserve short shrift.”⁴²⁰ Further, some uses of prior restraint with little rational basis are cited in support of the theory that professional regulation exists only to create barriers to entry that will limit competition in the market. For example, the United States Court of Appeals for the Sixth Circuit found that allowing only licensed funeral directors to sell caskets is far more likely a measure to prevent competition than it is a protective measure for public health, safety, and welfare.⁴²¹ In contrast, the argument that landscape architecture regulation will act as a form of marketplace protectionism is contradicted by data regarding the economic effects of regulation on the design professions,⁴²² as well as the fact that, by placing landscape architecture on equal footing with the other design professions, regulation enhances competition in the market for design services. Landscape architecture services must compete in a general market for design services, and regulation has been found to have minimal effects on the cost of service to the public.⁴²³

⁴²⁰ Roger G. Noll, *The Political Economy of Deregulation*, American Enterprise Institute, 1983, at 161.

⁴²¹ *Craigsmiles v. Giles*, No. 00-6281 (6th Cir., Dec. 6, 2002).

⁴²² See *Sunset Review of the Board of Architect Examiners*, 1980, *supra* note 2, at 4 (“Historically, professionals are eager for licensure to protect their professional turf in the marketplace from competition and prices are kept high since market forces are restrained. However, with architecture this traditional pattern has not held true.”).

⁴²³ *A review of Chapter 481, Part II, Florida Statutes, Landscape Architecture*, *supra* note 67, at 53 (the Florida Auditor General’s report on landscape architecture regulation “concluded that the cost of regulation of the practice of landscape architecture does not significantly increase the cost of providing services to the public”).

Some sunset reviews of landscape architecture have examined the notion that the profession simply wishes to “secure for itself a guaranteed cut of local government service contracts for service which can be performed by architects, engineers, or even unlicensed personnel.”⁴²⁴ That notion is contradicted by the facts: Licensing does nothing more than give landscape architects marketplace parity with other design professionals. The wealth of real-world examples in this document show that the notion that landscape architecture regulation is intended to limit competition is based on speculation that directly contradicts the rational basis of many valid local ordinances, service procurement practices, and hiring policies that seek licensed landscape architects. Licensing of landscape architects has no demonstrable negative effect on competition, and the alternative is a status quo where non-landscape architects will routinely design and supervise the installation of major public improvements for which landscape architects are optimally qualified, such as bicycle and pedestrian systems, street and highway enhancements, recreational facilities, amphitheaters, plazas, and other public places. The benefits of that status quo would be drastically outweighed by the mountain of risks and negative effects that are proven to flow from that type of incompetent practice.

Accordingly, licensure is the only worthy regulatory goal in order to adequately protect the public health, safety, and welfare.

⁴²⁴ Letter regarding Sunset Review of [the California] Board of Landscape Architects, Center for Public Interest Law, Nov. 25, 1995, at 4 (emphasis added).

7. CONCLUSION

By all accounts, landscape architecture is a mature, distinct profession, closely allied with other licensed professions. Landscape architecture is a technically involved profession, affecting both basic environmental systems and complex systems in the built environment. The profession affects individual consumers, large institutional clients, and the general public that regularly use works of landscape architecture.

Just as there is a need for functional highways and buildings in the built environment, there is a growing demand and recognition of the need for a safe and functional intermodal transportation system, for safe playgrounds, for effective rehabilitation of disturbed ground, for land management that conserves water and reduces fire hazards, and an extended list of landscape architectural services affecting public safety and the security of property and financial investments. Increasingly, the profession of landscape architecture performs critical technical and management roles in the development and maintenance of the built environment.

In light of that, all 50 states currently regulate and govern how landscape architects benefit the public, with three states only protecting public health and safety to the extent possible under a state certification law. As the examples and illustrations in this document make clear, the cost of discovering substandard practitioners is a significant financial and personal risk when unwittingly imposed on individual consumers and includes the risk of serious irreparable and monetary harm to children, pedestrians, major public projects, and private property. Licensing reduces the social cost of negligence, incompetence, and unethical behavior in landscape architecture practice.

Licensing completes a program to protect public health and safety by limiting the practice of landscape architecture to competent individuals. Licensing of landscape architects will reduce, and in many cases avoid, the potential for public harm by holding practitioners accountable and prohibiting the offering of landscape architectural services without the training and experience that is required to attain minimum competence. Negligent landscape architecture has the potential to cause harm, and has caused serious harm in an extensive list of documented incidents.

Licensing of the landscape architecture profession gives states the ability to promote a safe environment, from the most remote managed wilderness to the most urban streetscape.

As documented in this report, there are compelling legal and practical reasons why landscape architecture is presently regulated in all 50 states. Regulation of the landscape architecture profession provides a broad base of protection to public health, safety, and welfare where state professional regulation is a cost-effective measure to screen out incompetents and bad actors.

The evidence and rationale supporting landscape architecture regulation are compelling, consistent, and well-precedented. Therefore, licensure should be preserved and protected.