

**REGULATION OF LANDSCAPE ARCHITECTURE
AND THE PROTECTION OF PUBLIC HEALTH,
SAFETY, AND WELFARE**

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EXECUTIVE SUMMARY

Numerous past reviews have found landscape architecture regulation necessary to protect public safety and prevent irreparable harm. 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.

To address the need for regulation as a measure to protect public health, safety, and welfare, this report focuses on a pattern of legal harm not comprehensively documented in previous studies of landscape architecture. These findings provide empirical evidence of harm caused by incompetent landscape architectural work, from the nuisance of repeated minor injuries to permanent injury and death.

This report specifically focuses on many representative incidents of injury that could have been prevented through competent landscape architectural practice. Because the approach taken is empirical, presenting dozens of actual cases in many areas of landscape architecture practice to establish the reality of the potential for harm, this report does not rely on an extensive description of the scope of landscape architecture to imply that there is a potential for harm. Where past discussions of the potential for harm may have required a technical understanding of the profession, this report provides concrete evidence that defective design and inadequate supervision of landscape architectural work has the potential to cause, and, in fact, has caused, serious, irreparable harm.

A number of professions are substantially and directly responsible for the orderly development of society's physical, legal, and financial infrastructure. Regulation of landscape architects and other design professionals is a valid step taken by states to foster minimally competent, safe planning of the built environment. In these professions, certain economic influences must be subordinate to basic standards for public health, safety, and welfare.

Landscape architects are responsible for decisions that affect the condition of vital infrastructure, rights-of-way, and significant private and public site development. When performed by negligent, incompetent, or unethical practitioners, landscape architecture has the potential to cause serious personal injuries. Poor landscape architecture practices can seriously impair the value and use of property. Landscape architects document and supervise the construction of hundreds of millions of dollars in infrastructure and site improvements each year, where the potential to produce financial harm is also significant.

This report includes examples of physical injury, property damage, and financial harm from across the spectrum of landscape architecture practice. Physical injuries, for example, have resulted from poor design of outdoor lighting, playgrounds, plantings, parking lots, streetscape, outdoor stairs, decks, walls, earthwork, drainage features, recreational facilities,

fencing, and many other aspects of landscape architectural design. 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. Competent landscape architects are able to apply a variety of techniques to mitigate the potential for harm in each of these situations.

In a market with no state credential for landscape architecture services, non-practitioner clients 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 who need these services to accurately assess the relative competence of an individual or firm. Professional regulation is 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, where consumers cannot rely on a professional to produce design and technical documentation that meets minimum standards of competence, 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. State certification of landscape architects allows consumers to mitigate some amount of harm, 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 not only consumers of landscape architecture services but also the general public that frequently uses the built works of landscape architecture.

Landscape architecture is one of the forty most commonly regulated professions, with over 95 percent of the United States population living in a jurisdiction with state regulation of the profession. 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. 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.

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 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.

Public health, safety, and welfare require the direct involvement of landscape architects in 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; discourage criminal activity; preserve land values; provide accessibility as required by law; 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 due to 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 report will show, regulation of landscape architecture is warranted to reduce risks 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 perceived lack of evidence linking competence with state licensure requirements.² It is

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.”).

² See, e.g., 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).

necessary to consider the following factors relating to the burden of proof as it affects design professionals:

- Professional boards 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. 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 not comprehensively documented in previous studies of landscape architecture regulation. All potential harms are a valid and important regulatory concern, but these findings provide empirical evidence of harm, particularly irreparable harm – permanent injury and death – caused by negligent landscape architectural work. This report serves to document actual harms in cases that were previously treated only hypothetically in support of landscape architecture.⁴

This report is intended to review the evidence of harm related to landscape architecture and the various methods of evaluating professional regulation as applied to landscape architecture. As a survey of considerations in the regulation of this profession, it is intended for use by legislators, regulators, and members of the profession.

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.”).

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 30 (landscape architect sued for negligence after outdoor lighting fatally electrocuted property owner).

SCOPE OF RESEARCH

A national search of reported legal cases regarding landscape architecture formed the core research for this report.

The scope of research for this report was not intended to be exhaustive. Legal cases and other materials referenced for this project are instead representative of a much larger body of data. 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, a large number of cases from some states are easily accessed (e.g., California, New York), while very few cases from some other states are readily available to researchers (e.g., Vermont, New Hampshire).

The basic assumption of this study is that litigated cases are by their nature only an 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. The 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. 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.

Where research led to additional sources of information, such as trial court records, statutes, legal and economic scholarship, and news stories, relevant materials are also incorporated into these findings. To provide a context for legal evidence, this report draws from other sources that illustrate the impact of landscape architecture on public health, safety and welfare.

⁵ See *infra* note 291.

REGULATION OF THE DESIGN PROFESSIONS

Architecture, landscape architecture, and engineering have a history of regulation. Each of these professions involves unique training and unique skills, but, in regulation, these professions share common purposes and common attributes. Statutes regulating architecture, landscape architecture, and engineering enhance the safety of the built environment as a place for people to live, work, and move about. Each of these professions contributes to the mitigation of natural and human-made hazards and the safety of access routes, slopes and structures, and construction in general.

Landscape architecture emerged as a distinct design profession most recently, in the late nineteenth century. The design of outdoor spaces has since taken on modern requirements for parking lots, intermodal traffic, flood control, and security, as a few examples of design issues where application of professional standards directly affects public health and safety. As a result, intensive technical experience has become a necessity for competent landscape architecture practice.

This section provides an overview of landscape architecture regulation and its relationship to the regulation of architecture and engineering.

A SURVEY OF LANDSCAPE ARCHITECTURE REGULATION

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. Fifty years later, forty-seven states have enacted some form of regulation governing the profession.⁶

Historically, landscape architects have been pivotal figures in many of this country's most valued places, as well as extensive amounts, though less publicized, of physical development frequently encountered and used by the public.⁷ With design training and expertise relating to environmental and built systems, landscape architects have played leading roles in the development of places ranging from national forests to outdoor shopping malls. Past accomplishments by landscape architects have included New York's Central Park, the National Park System concept, reclamation planning for the Fresh Kills landfill in New York, and other works of national and international importance.

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."⁸ 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. The scope of landscape architecture practice and the growth of the profession account for its regulated status in jurisdictions covering over 95 percent of the U.S. population.

A typical landscape architecture statute contains several fundamental features. All states that regulate landscape architecture create a board or place landscape architecture regulation under the purview of a board combining related professions, most frequently a combined board with architects and/or 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. Oklahoma's statute provides an example:

"Landscape architecture" means the performance of professional services such as teaching, consultations, investigations, reconnaissance, research, planning, design, preparation of construction drawings and specifications, and construction observation in connection with the arranging of land and the elements thereon for public and private use and enjoyment, including the design and layout of roadways, service areas, parking areas, walkways, steps, ramps, pools, the location of buildings

⁶ As of 2003, only Colorado, New Hampshire, and Vermont have no statutory authority to regulate landscape architecture. Recent findings by officials in Colorado and Vermont indicate that various aspects of landscape architecture are also regulated in those states, only landscape architects may not engage in these regulated practices.

⁷ See Governor of Colorado, *Honorary Proclamation of Colorado Landscape Architecture Week*, April 16, 2002 ("Whereas, landscape architects have long used their design skills and aesthetic sense to shape the world around us into a more beautiful place; and whereas, landscape architects work to preserve the health, safety, and welfare of the public...").

⁸ Code of Ordinances, North Palm Beach, Florida, Appendix A, Section IV(C).

and other structures, and the grading of the land, surface and subsoil drainage, erosion control, planting, reforestation, and the preservation of the natural landscape, in accordance with accepted professional standards.⁹

Other features of a typical statute include authority to stamp drawings; eligibility standards; and procedures for evaluation of applicants, disciplinary action, and promulgation of necessary rules.

For the purposes of regulatory analysis, landscape architecture can be accurately described as a design discipline occupying the field between architecture and engineering.¹⁰ Landscape architects document the construction of platforms and walkways; plan subdivisions and design infrastructure improvements; and develop plans for fire abatement, water conservation, and water quality. Though landscape architects also engage in the design of plant materials for residential and commercial landscapes, this is only one aspect of a profession that produces construction documentation and applies technical knowledge with many applications.

The landscape architecture profession continues to grow in its role as design and management lead in urban parks and public space, corridor planning, highway enhancement, land management, site development, and other technically sophisticated projects.¹¹ 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 monumentation, parks, amphitheaters, golf courses, campus grounds, commercial districts, urban plazas, 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. 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. This discipline 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, a vast majority of states have exercised jurisdiction to provide oversight for competence and professional standards.

⁹ Okla. Stat. § 59-46.3(K).

¹⁰ Matter of Geiffert v. Mealey, *supra* note 1.

¹¹ 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).

CONCURRENT JURISDICTION: ARCHITECTS AND ENGINEERS

Landscape architects have been long recognized as comparable in training and technical products to the “allied professions” of architecture and engineering.¹² Known collectively as the design professions, architecture, landscape architecture, and engineering are often grouped together in statutes relating to the construction industry.¹³ In many 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.

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, qualified to practice certain skills that may also be considered civil engineering. Preparing “project site plans and land subdivision plans, including layout, storm water management, grading, and erosion control” are all civil engineering skills that are also within the practice of landscape architecture according to existing laws.¹⁴ The corollary is also true, meaning that certain skills most commonly associated with landscape architects may also be practiced by architects and civil engineers.¹⁵

Public misperceptions about the capabilities and professional role of landscape architects are not uncommon. There is a strong but erroneous common association of the profession with trades that are not, and should not be, subject to occupational regulation. 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 landscape architects are popularly associated with projects smaller in scale and dominated by a concern for aesthetics. 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.

¹² See *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).

¹³ 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...”).

¹⁴ See Georgia Attorney General, Opinion of Feb. 21, 1990 (“project site plans and land subdivision plans, including layout, storm water management, grading, and erosion and sediment control... I have concluded these areas fall within the licensed practice of landscape architecture”); 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*, *supra* note 11.

¹⁵ See *Ward v. Shoney’s, Inc.*, *infra* note 145 (civil engineer serving in landscape architecture function: designing walkways, taking into account the manner in which pedestrians will use those walkways); see also *infra* note 56 (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 acknowledged that landscape architects have technical knowledge similar to both architects and engineers but supported the state's present exclusion of 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.¹⁶

This conclusion is neither logical nor based on the reality of the industries in which these professions overlap. 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.¹⁷ 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. 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 and layout, and other design services is often reserved for licensed professionals. In states without landscape architecture regulation, landscape architects may be excluded from a role in the construction industry for which they are qualified and for which regulators recognize the benefit of competition among the design professions.¹⁸

Overlapping professional regulation is a practical reality that 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. 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

¹⁶ Colorado Department of Regulatory Agencies, *Sunrise Review of Landscape Architects*, 1995, at 18.

¹⁷ 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.")

¹⁸ 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.").

landscape architecture regulation by an agency in South Carolina found that overlap in professional jurisdiction was incidental to practice in these fields but did not consider this as reason to deregulate landscape architecture.¹⁹

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 anti-competitive behavior.²⁰ Nevertheless, legitimate regulation often results in the regulated profession asserting a “monopoly of professional authority,” with which it attempts to thwart potential competition.²¹ 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.²²

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 completely irrelevant 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 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.²³

¹⁹ 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.”).

²⁰ *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).

²¹ Mark J. Green, ed., *The Closed Enterprise System*, 1971, at 545. In a recent 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.

²² *Id.*

²³ 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*

Concurrent jurisdiction is a necessity to effectively cover the field of construction design. Issues related to overlapping jurisdiction may be resolved through formal and informal understandings between boards,²⁴ a formal system of exemptions in areas of overlap,²⁵ or consolidation of regulatory authority under a unified board.²⁶ Alternately, judicial intervention may be necessary if professional regulation is being used to restrain legitimate competition.²⁷ In any event, the overlap of landscape architecture practice with other regulation and certain unregulated services does not preclude appropriate regulation of the profession. Concurrent jurisdiction is a practical reality that does not inhibit effective regulation of the design professions.

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).

²⁴ 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.”).

²⁵ See, e.g., Wyo. Stat. § 33-4-117 (landscape architecture licensing exemptions).

²⁶ The following states include landscape architects in a board with architects, engineers, and other technical professions: Alaska, Arizona, California, Hawaii, Indiana, Kansas, Maine, Minnesota, Mississippi, New Jersey, Oklahoma, South Dakota, Tennessee, Texas, Virginia, and Wyoming. All other states that regulate landscape architecture do so with a stand-alone board for the profession.

²⁷ See *Schmidt v. Kansas Bd. of Technical Professions*, *supra* note 20.

EVIDENCE OF HARM

There is a solid factual basis for the regulation of landscape architecture. As stated in sections above, the purpose of this report is to compile a representative cross-section of the information that counsels in favor of landscape architecture regulation. A fundamental piece of this supporting information is evidence of the potential for harm.

Landscape architects are design professionals charged with responsibility for designing and overseeing the construction of major projects, and the vast majority of 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: Incompetence, negligence, and unethical practices have serious consequences.

The cases discussed below are examples of aspects of landscape architecture practice that may cause serious physical injuries, property damage, and various financial harms. Each real case represents a potential 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 others, 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).²⁸
- Individuals and firms with no technical design education or testing to ensure competence in providing landscape architecture services.

These cases show that consumers of the services offered by landscape architects include both members of the general public that lack the necessary knowledge to evaluate the qualifications of practitioners, as well as institutions and other professionals who rely on the minimum competence of landscape architects and in many situations do not have adequate subject matter knowledge to select professionals qualified for particular work. In addition, these cases show 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.²⁹

²⁸ For example, see *Ward v. Shoney's, Inc.*, *infra* note 145, where an engineer specified landscape edging that was hazardous due to pedestrian circulation.

²⁹ 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

PHYSICAL INJURY

The evidence compiled beneath this heading is a survey of harms to public health and safety within the field 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 plans. 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 hazards in designs and specifications.

Physical injury is organized into categories below in terms of areas of special technical knowledge where landscape architects impact public health and safety. The report therefore incorporates cases regarding lighting, playgrounds, parking lots, streetscape, outdoor structures, roadway improvements, site planning, and plant material.

LIGHTING

The documented harms from negligently designed outdoor lighting are representative of the range of physical injuries that may occur when the practice of landscape architecture is undertaken 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.

Lighting Equipment

The consequences of negligent outdoor lighting specifications have proven lethal. In the Florida case of *Batz v. First Florida Development, Inc.*,³⁰ 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. In the California case of *Solano v. Harbor Villa Apartments*,³¹ one person was killed and two rescuers injured after non-professionals installed an underwater light contrary to specifications. Due to inadequate knowledge of lighting equipment, outdoor lighting was again responsible for creating an extreme risk of electrocution.

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.").

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

³¹ *Solano v. Harbor Villa Apartments*, No. 663996 (Ca., Orange Cty. Super. Ct., June 4, 1993).

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, bicycles, 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.

Poor night lighting causes “slip and fall” type accidents, occurring where serious hazards are otherwise open and obvious. In a representative case, which ultimately reached the Supreme Court of Missouri, a man fell six feet after unknowingly stepping off a retaining wall. 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. Following lengthy litigation, the owner of the parking lot was held liable for allowing the dangerous lighting condition to exist.³²

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.*³³ In the *Henry* case, a worker making an early morning 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 that understood the parking lot would be used for deliveries. The fall of the delivery worker ultimately required hip replacement and cost the property owner \$424,000 to settle the case. In the case of *Shaw v. Northridge Enterprises, L.P.*,³⁴ 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.

A variety of 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.³⁵ In a Colorado case, broken bones resulted when a pedestrian stepped into an open drainage channel in an unlighted parking lot.³⁶ Without adequate lighting or other means of mitigating risks, the

³² Swanson v. Goodwim, 327 S.W.2d 903 (Mo. 1959).

³³ 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).

³⁴ Shaw v. Northridge Enters., L.P., No. G.D. 02-2929, (Penn., Allegheny Cty. C.C.P., Feb. 3, 2003).

³⁵ Davenport v. Cotton Hope Plantation Horizontal Property Regime, 508 S.E.2d 565 (S.C. 1998) (landscape contractor found liable for inoperable floodlight).

³⁶ Connelly v. Redman Development Corp., 533 P.2d 53 (Colo. App. 1975) (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.”).

property owner in the Colorado case was held 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. The appropriate distribution and specification of lighting elements greatly reduces hazards from shadows and dark pockets that facilitate violent attacks, stalking, and various acts of street crime.³⁷ 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.

There is an extensive list of physical harms from crime in which inadequate lighting and poor lighting design have been a cause of injury. 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.³⁸ 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.³⁹ Poor outdoor lighting was linked to injuries from a shooting in one Florida case,⁴⁰ and in Kentucky, a court found that inadequate outdoor lighting had been the proximate cause of a rape.⁴¹

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.

PLAYGROUNDS

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

³⁷ See Owen Stevens, *Lighting Design: A Primary Consideration in Crime Prevention and Detection*, in *Canadian Security*, July/August 1987, at 22-24.

³⁸ *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 lacerating liver and spleen and injuring diaphragm of female victim).

³⁹ *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).

⁴⁰ *Jordan v. Socony Mobil Oil Co.*, No. 90-091255 (Fla., Dade County Cir. Ct., Sept. 15, 1992) (shooting in gas station lot, settled for \$575,000).

⁴¹ *Doe v. Dickman Garden Apartments*, No. 95 CI 01002 (Ky., Kenyon Cty. Cir. Ct., Mar. 11, 1998) (settled for \$200,000); see also *McLean 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).

providing an environment that will stimulate play and imagination, while at the same time implementing the safest possible plan.⁴² 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.

The case of *Cooper v. City of New Orleans*⁴³ is an example of the harm presented by negligent playground design. In the *Cooper* 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 6-year-old girl fell from a play structure onto a non-resilient 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 *Cooper* designer in breach of the duty to uphold professional standards.

Because many playground features will present an unnecessary risk of harm if defectively designed or specified, playground injuries are often attributed to negligence.⁴⁴ In recent court cases, children have been injured on playgrounds by swings,⁴⁵ slides,⁴⁶ and on multiple occasions by inappropriate playground surfaces.⁴⁷ 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 6 year old reported in a 1993 Colorado news item⁴⁸ 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

⁴² 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.

⁴³ *Cooper v. City of New Orleans*, 680 So.2d 1259 (La. App. 1996) (\$2,929,777 judgment subsequently settled by parties out of court).

⁴⁴ 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).

⁴⁵ *Pecore v. City of Syracuse*, 298 N.Y.S.2d 883, (N.Y. App. 2002) (10 year old injured in fall from park swing).

⁴⁶ *Jones v. City of Hartford*, 18 Conn. L. Rptr. 420 (Conn. Super. 1996) (defective slide on playground caused injuries); see also *infra* note 66, below, regarding a playground slide-related injury.

⁴⁷ *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).

⁴⁸ *Boy suffocates in playground sand*, Rocky Mountain News, Oct. 2, 1993 (child suffocated after becoming trapped under a piece of jungle gym equipment).

playground fence allowed children to escape while entrapping supervising adults.⁴⁹ 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 themselves.

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 specifications may lead to ruts and other trip hazards.⁵⁰ In the case of *Rodgers v. Meyers & Smith, Inc.*,⁵¹ 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.

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 exclusively are educated and tested for their knowledge of the hazardous characteristics of plants, producing designs that avoid the types of incidents highlighted in this section.

Sweet gum trees 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 case of *Henderson v. St. Francis Community Hospital*,⁵² 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."⁵³ It follows that adherence to professional landscape architecture standards would have prevented injury in the *Henderson* case.

⁴⁹ Griffin v. McDonald's Corp., No. 96-CP-23-1694R (S.C., Greenville County CCP, Jan. 22, 1998).

⁵⁰ 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).

⁵¹ Rodgers v. Meyers & Smith, Inc., 206 N.E.2d 845 (Ill. App. 1965).

⁵² Henderson v. St. Francis Community Hospital, 399 S.E.2d 767 (S.C. 1990).

⁵³ *Id.*

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 case demonstrates the latter danger. A picnic area and recreational field in a county forest preserve were located immediately adjacent to a large native honeylocust tree. While playing in the field, an 8-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.⁵⁴ 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 honeylocust. 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.⁵⁵ Serious injuries result when plans call for human activities inappropriately close to thorns.⁵⁶

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. In South Dakota, a campground was located directly under such hazardous trees. Two visitors were seriously injured, one permanently disabled, when a large tree limb fell on them from above. The resulting negligence case was settled for an undisclosed amount.⁵⁷

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).

Ironically, though the former Colorado Landscape Architecture Registration Board oversaw a much more horticulturally-oriented law than most current statutes, including recent proposals in Colorado, even a scope of practice confined to planting design has a demonstrable effect on public health and safety. One commentator at the time of the Colorado board's legislative repeal in 1976 quipped, "Whoever hurt himself running into a

⁵⁴ 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).

⁵⁵ 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).

⁵⁶ 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 shrub in a school play area).

⁵⁷ Krumwiede v. Cooper, No. 95-62 (S.D., Roberts Cty. Cir. Ct., Dec. 6, 1996).

bush?”⁵⁸ The serious injuries in cases investigated for this report suggest that the answer to that question is far from humorous.

SITE PLANNING

As a landscape architectural product, a site plan establishes the basic organization of uses and activities on a tract of land. Depending on the level of detail, site plans may 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.⁵⁹ A negligent site plan is 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.⁶⁰ For example, a pool gate in one case was improperly specified, allowing unsupervised access to a 4 year old, who drowned.⁶¹ A 3 year old drowned where a play area was located next to a steeply sloped pond.⁶² A court in that case found the property owner liable for negligence in failing to fence the pond.

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.⁶³ In another case, a child was

⁵⁸ 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 62.

⁵⁹ See *Scanlan v. Tilcon 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).

⁶⁰ *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).

⁶¹ *Collyar v. Harley*, No. 92-7369 (Fla., Hillsborough Cty. Cir. Ct., Sept. 21, 1995).

⁶² *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. Pachaug 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 2 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”).

⁶³ *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).

brain damaged after being struck by a car in a dangerous intersection.⁶⁴ 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.

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.⁶⁵ 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, a slide platform was located so close to a building that it allowed children access to the roof; a landscape architect was charged with malpractice after a child was injured.⁶⁶ 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 recently installed in front of a new 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.⁶⁷

The principles of CPTED (also discussed in the Lighting section above) 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.⁶⁸ 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

⁶⁴ Joyce v. Simi Valley Unified School Dist., 11 Cal.Rptr.2d 137 (Cal. App. 1992).

⁶⁵ Schulte v. The Detroit Edison Co., 213 N.W.2d 311 (Mich. App. 1973).

⁶⁶ *Professional Licensure of Landscape Architects*, *supra* note 58, at 39.

⁶⁷ 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 194.

⁶⁸ Post Properties, Inc. v. Doe, 495 S.E.2d 573 (Ga. App. 1997).

the extent of the owner's liability for creating a setting in which such a sequence of violent crimes could take place without detection.⁶⁹

Incompetent layout of outdoor spaces and landscape features creates risks to public health and safety,⁷⁰ 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.

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 non-vehicular areas. In fact, the Florida case of *Koenig v. TOC Retail, Inc.*⁷¹ revealed that this type of incident was so common at convenience stores that the industry had developed a name for it, a "drive-thru." 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 disfigurement 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.

Pedestrians have been injured due to negligent parking lot design in a wide assortment of settings. According to reports of litigation, so-called drive-thrus are a persistent problem in high-traffic convenience store and fast food settings.⁷² Two students were injured in a school parking lot when a car accelerated over a curb.⁷³ And in a case asserting negligent design against a theme park, several people were injured in a parking lot island designated

⁶⁹ *Pocase v. Cullen/Frost Bankers, Inc.*, No. 94-CI-04811 (Tex., Bexar Cty. 131st Jud. Dist. Ct., Sept. 18, 1995).

⁷⁰ 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. 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.

⁷¹ *Koenig v. TOC Retail, Inc.*, No. 93-08544, 38 ATLA L. Rptr. 353 (Fla., Hillsborough Cty. Cir. Ct., April 17, 1995).

⁷² See *Auerbach v. Rita's Water Ice Franchise Corp.*, No. 7361-99 (N.J., Camden Cty. 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); *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).

⁷³ *Constantinescu v. Conejo Valley Unified School District*, 20 Cal.Rptr.2d 734 (Cal. App. 1993).

as a picnic area.⁷⁴ 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.

When designed with minimum competence, a parking lot will safely guide pedestrians, bicycles, and motor vehicles to and from their destination. Lacking minimum competence, the design of a parking lot can present an assortment of navigational hazards. The edge of a parking lot built on fill can drop off rapidly, presenting a hazard to unwarned visitors. In *Schager v. Midway Shopping Ctr. Ltd. Partnership*,⁷⁵ a visitor was killed after falling from a parking lot to the 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. In Colorado, 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.⁷⁶ Parking lot features such as speed bumps⁷⁷ and wheel stops⁷⁸ have also been associated with injuries in reported cases.

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

⁷⁴ *Robison v. Six Flags Theme Parks, Inc.*, 75 Cal.Rptr.2d 838 (Cal. App. 1998).

⁷⁵ *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); *see also* *Swanson v. Goodwim*, *supra* note 32 (serious injuries from fall at edge of parking lot).

⁷⁶ *Smith v. Estes Park*, 944 P.2d 571 (Colo. App. 1997).

⁷⁷ *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).

⁷⁸ *Dillard v. Vanderbilt University*, 970 S.W.2d 958, 1998 WL 32704 (Tenn. Ct. App. 1998) (woman injured after tripping over concrete wheel stop).

the gap.⁷⁹ Grading defects in streetscape have been the attributed cause of a variety of injuries, some serious and debilitating.⁸⁰

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 caused head, arm, and knee injuries to a passerby.⁸¹ Defective design and specifications for a tree grate were alleged to have caused injuries in a Rhode Island trip and fall case.⁸² And, in a third 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.⁸³ In the case of the disused metal sleeve, 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 or provided warnings for trip hazards.

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.*,⁸⁴ in which the local government was held liable for the defective design. Obstructions to pedestrian traffic have also caused serious injury in reported Colorado and Louisiana cases.⁸⁵

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.

⁷⁹ *Coln v. City of Savannah*, 966 S.W.2d 34 (Tenn. 1998).

⁸⁰ *Keown 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).

⁸¹ *Pierce v. City of Racine*, 319 N.W.2d 180 (Wis. App. 1982).

⁸² *Newman-Simkins v. Johnson*, No. NC 1996-35, 1999 RI Super LEXIS 89 (R.I., Super. Ct. of R.I., Newport, Sept. 23, 1999).

⁸³ *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).

⁸⁴ *Braithwaite v. West Valley City Corp.*, 860 P.2d 336 (Utah 1993).

⁸⁵ *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.

EXTERIOR 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.

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 a Colorado *Doe v. Roe* case, where a fall caused severe head trauma and permanent disability.⁸⁶ In this Colorado case, the litigation process revealed numerous design defects that made a stairway of landscape timbers extremely dangerous, including non-uniform riser height; inadequate handrails; and a lack of positive drainage on the steps, leading to ponding of water and ice. The defendant ultimately paid \$2 million dollars to settle the negligence case.

In other cases, negligently designed outdoor stairs have been linked to:

- Severe internal injuries, where no handrails were provided;⁸⁷
- Loss of bowel, bladder, and sexual function, where a stair landing lacked adequate dimensions,⁸⁸
- General injuries, where use of glazed tile inappropriate for outdoor use caused a slip and fall;⁸⁹ and
- Injury of a child, where railings did not include adequate safety measures.⁹⁰

⁸⁶ *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).

⁸⁷ *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).

⁸⁸ *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).

⁸⁹ *Johnson v. Witteles*, No. YC 043572 (Cal., Los Angeles Cty. Super. Ct., April 17, 2003).

⁹⁰ *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).

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.⁹¹ Another Colorado case illustrates the potential for harm when guardrails are incompetently designed. In the case of *LaPlata County v. Moreland*,⁹² a deck was built without complete enclosure by a guardrail, despite a county government requirement to that effect. Relying on a non-existent guardrail, a visitor fell 10 feet onto rocks below, resulting in paraplegia, among other injuries. 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.⁹³

To demonstrate minimal competence, landscape architects are also tested on the use of fasteners and adhesives in various applications. 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. When the boy hit the ground, a nail entered his skull, resulting in loss of hearing and loss of facial muscle control.⁹⁴ In another case of an improperly attached railing, a man fractured and herniated several disks and suffered permanent disabilities after falling with the railing.⁹⁵ 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.

Walls

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

Negligent retaining wall design poses a serious hazard, which risk is greatly enhanced without an extensive technical vocabulary. In *Stone v. ITT Sheraton Corp.*,⁹⁶ a retaining wall collapsed on two hotel guests, killing one and severely injuring another. The case cited

⁹¹ *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 1 year old where design of guardrail fence along ditch in city park failed to adequately prevent children from falling into ditch).

⁹² *Board of County Commissioners of La Plata County v. Moreland*, 764 P.2d 812 (Colo. 1988).

⁹³ *Schager v. Midway Shopping Ctr. Ltd. Partnership*, *supra* note 75.

⁹⁴ *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).

⁹⁵ *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).

⁹⁶ *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).

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 free-standing outdoor walls for screening, monumentation, and other purposes. Incompetence and negligence in the design of walls is associated with very serious injuries. In the case of *Tieder v. Little*,⁹⁷ 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.⁹⁸

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. 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.⁹⁹ 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.¹⁰⁰ A California case settled for \$2 million after the overhead beam in a deck collapsed onto a tenant and caused serious, disabling injury.¹⁰¹ These cases are an indication of the potential for harm in the many landscape architecture projects that include decks, gazebos, walkways, and platforms.

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.¹⁰² Incompetent ramp design can also be injurious and costly for developers and property owners seeking professional guidance for

⁹⁷ *Tieder v. Little*, 502 So.2d 923 (Fla. App. 1987).

⁹⁸ *Id.*, at 927.

⁹⁹ *Brehm v. Trammell Crow Constr. Co.*, No. 89-L-51 (Ill., Grundy Cty. Cir. Ct., Sept. 22, 1992).

¹⁰⁰ *Kamp v. Pries*, No. 98-L-506 (Ill., Madison Cty. Cir. Ct., Mar. 16, 2001).

¹⁰¹ *Johnson v. Roe Bank*, confidential court and docket number, 40 ATLA L. Rptr. 25 (Cal., Mar. 19, 1996).

¹⁰² *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).

accessibility compliance. In Colorado, a wheelchair ramp was deemed an attractive nuisance after a 5 year old using the ramp for recreation collided with a vehicle in the adjacent street and suffered permanent disabilities.¹⁰³ 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.

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;
- Storm water flows are concentrated and/or discharged inappropriately;
- Drain inlets and sewers are negligently designed; and
- Erosion is not adequately controlled.

This section documents cases where injuries, some fatal, have been caused by negligence in the landscape architecture service area of grading, drainage, and erosion control planning.

Grading

With technical knowledge of angles of repose, compaction, and practical limits of slopes in various applications (e.g., shorelines, ballfield areas), landscape architects ensure public safety on projects with an earthwork component.

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*,¹⁰⁴ professionally produced plans for a fill source and retention basin incorporated appropriate safety 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.¹⁰⁵

¹⁰³ *Bennett v. Gitzen*, 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).

¹⁰⁴ *Fitzgerald v. City of Mt. Dora*, No. 91-391-CA-01 (Fla., Lake Cty. Cir. Ct., Nov. 13, 1992).

¹⁰⁵ *Id.* (jury found for plaintiff).

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.¹⁰⁶ 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. The 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. 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.¹⁰⁷

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.¹⁰⁸

Surface Drainage

Options for safely controlling the accumulation and runoff of storm water constitute a rapidly developing body of technical knowledge, with applications that are increasingly addressed within the scope of landscape architecture services.

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. In *Morrocco v. Piccardi*,¹⁰⁹ 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.

The contemporary practice of landscape architecture has evolved alongside the development of storm water detention, retention, and other technically sophisticated methods of addressing water quality and flood control. The grading scheme for a parking lot, for

¹⁰⁶ *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”).

¹⁰⁷ *McKnight v. Circle S Convenient Mkt.*, No. 88-771 (S.D., Pennington Cty. Cir. Ct., Oct. 26, 1992).

¹⁰⁸ *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).

¹⁰⁹ *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).

example, may concentrate large amounts of runoff to a single detention basin or single discharge point into the municipal storm water system. In *Hunt v. Hatch*,¹¹⁰ the negligent design of storm water 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.

The conveyance of water through open channels is a potentially hazardous design feature, as shown in recent Colorado cases related to both irrigation¹¹¹ and storm water.¹¹² In *City of Longmont v. Henry-Hobbs*, a young boy died after falling in a spillway for storm water 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.¹¹³ Landscape architects routinely design sites with existing and/or proposed drainage features, and knowledge of techniques to mitigate drowning hazards is a key life safety aspect of landscape architectural professional responsibility. The duty to warn of existing hazards is further discussed below in the Recreational Facilities section.

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.

As a hazard to public health and safety, negligent specification of inlet grates warrants serious attention based on past cases. Mentioned briefly in the Playgrounds section above, the case of *Rodgers v. Meyers & Smith, Inc.*¹¹⁴ 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, heavily impacting his genital area. The injury caused debilitating pain in the victim's "back and scrotum area" for years.¹¹⁵ Meyers & Smith, Inc., the landscape architecture firm, was found potentially negligent. At issue in *Dick v. Florida Department of Transportation*¹¹⁶ was the negligent design of a drain inlet, where the mismatch of a grate and frame left a 7-

¹¹⁰ *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).

¹¹¹ *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").

¹¹² *City of Longmont v. Henry-Hobbs*, 50 P.3d 906 (Colo. 2002).

¹¹³ *Id.*, at 909.

¹¹⁴ *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 re-grading and repaving project for a school playground).

¹¹⁵ *Id.*

¹¹⁶ *Dick v. Florida Dep't of Transp.*, No. 91-00723-CA (Fla., Duval Cty. Cir. Ct., Sept. 22, 1992).

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.

Erosion Control

Though erosion is most obviously a potential cause of property damage, unchecked storm water runoff, loaded with erosive sediments, can also contribute to significant life safety risks. This point is illustrated by the case of *Martin v. Flanagan*,¹¹⁷ where uncontrolled erosion ultimately altered the runoff pattern in an area. The defendant's failure to control erosion transformed overland sheetflow 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.

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. The design of recreational facilities is another landscape architecture service area involving 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 design for recreation. (Playground design is discussed under its own heading above.)

Active Recreation

Traditionally, active recreation includes baseball, softball, football, soccer, hockey, basketball, volleyball, tennis, and other field sports. The contemporary program for a community recreational facility may also accommodate rock climbing, rollerblading, and skateboarding. The landscape architect lays out and orients sporting areas, specifies the equipment to be installed for play, and furnishes detailed design for unique and complex elements of the facility.

The landscape architect in *Traub v. Cornell University*¹¹⁸ specified the basketball goal to be installed at an outdoor facility on a university campus. The specified frame did not incorporate safety measures to absorb the force of dunked balls and other impacts to the goal. In the *Traub* case, 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.

¹¹⁷ *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).

¹¹⁸ *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).

The recent rise in popularity of “extreme” sports highlights the importance of technical competence in the design of outdoor recreational facilities. For example, in the case of *Luenberger v. City of Golden*,¹¹⁹ 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. Poorly specified paved surfaces are especially prone to rapid deterioration, creating hazardous conditions for rollersports.¹²⁰

The proliferation of skate parks and skate ramps in particular has been accompanied by reports of injury due to improper design. In Colorado, with no regulation of landscape architecture, a skate park was designed and built by a group of non-professionals. Stunt features were assembled without proper fastening or safety inspections, creating potentially dangerous conditions for skaters. Ultimately, a boy was killed after a pipe rail broke loose and crushed him.¹²¹

Golf Courses

As a sub-discipline 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 will be hazardous 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.*¹²² In the *Schachner* 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.

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. Competent landscape architects

¹¹⁹ *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).

¹²⁰ *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).

¹²¹ 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 skate park 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).

¹²² *Schachner v. Sea Pines Plantation Co.*, No. 91-CP-07-2262 (S.C., Beaufort Cty. C.C.P., Jan. 25, 1993).

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*,¹²³ 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. 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.

If a user is injured on a trail, a lawsuit will frequently allege design defects.¹²⁴ 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.¹²⁵ A recent trail accident in Colorado killed a man intimately familiar with the Mary Carter Greenway Trail when his aorta was severed in a collision with another bicycle.¹²⁶ The accident occurred near a narrow, blind curve at a road underpass.

Dangerous conditions result when a trail alignment is selected that passes near steep slopes¹²⁷ or, in the case of *Brown v. State*,¹²⁸ 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. In the opinion of the court holding the state liable for the boy's wrongful death, the court noted:

It 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 [landscape architect] 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.

The desire of the *Brown* court for a design professional who 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.

¹²³ *Santalucia v. County of Boone*, 644 N.Y.S.2d 408 (N.Y. App. 1996).

¹²⁴ 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).

¹²⁵ *Dinelli v. County of Lake*, 691 N.E.2d 394 (Ill. App. 1998).

¹²⁶ *Man killed in collision cycled for his health*, Rocky Mountain News, October 14, 2003 (on-line archive) (both cyclists were wearing helmets).

¹²⁷ 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.

¹²⁸ *Brown v. State*, 29 N.Y.S.2d 85 (N.Y. Ct. of Claims 1941).

Bodies of Water

Similar to the danger of designing a trail along a cliff (above), 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.

To integrate either a natural or artificial body of water into a recreational site design, a competent landscape architect will incorporate warnings and/or mitigation techniques for known hazards. In *Benton v. City of Oakland City*,¹²⁹ 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. 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.¹³⁰ 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.¹³¹ Landscape architects possess technical knowledge that enables them to determine appropriate situations to warn of latent hazards or employ mitigation and avoidance techniques.

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. Additional public health and safety concerns related to pedestrians, bicycles, and other non-vehicular traffic are addressed above 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. In the case of *Kelley and Kelley v. Hallum*,¹³² 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. Without

¹²⁹ *Benton v. City of Oakland City*, 721 N.E.2d 224 (Ind. 1999).

¹³⁰ *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).

¹³¹ *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).

¹³² *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).

authorization, a non-landscape architect 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, and based in part on obstructed views, the non-landscape architects were held liable for the wrongful death caused by their negligence. Obstructed views at intersections are extremely dangerous. And, as demonstrated by several other cases – involving skull fractures and permanent loss of vision,¹³³ quadriplegia,¹³⁴ and fatal injuries¹³⁵ – vegetation is frequently the cause of such obstructed views.

Negligently specified plantings in the 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.¹³⁶

Technical knowledge of traffic control devices is essential 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. In the case of *Glass v. Mitchell Construction*,¹³⁷ 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.”¹³⁸ Landscape work in other cases has also resulted in fatalities when stop signs, for example, are not properly installed.¹³⁹ And where street and sidewalks end abruptly, as at the boundary of new subdivisions, the landscape architect

¹³³ *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).

¹³⁴ *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).

¹³⁵ *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).

¹³⁶ *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).

¹³⁷ *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).

¹³⁸ *Id.*, at 83.

¹³⁹ *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. Northridge 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 cause traffic death).

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.¹⁴⁰

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.¹⁴¹

OTHER LANDSCAPE ARCHITECTURE DESIGN HAZARDS

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 will be hazardous if improperly incorporated into a plan or specified without adequate technical knowledge. This section provides examples of harms caused by the negligent use of common landscape architectural materials.

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. Landscape architects have been sued for malpractice after pedestrians have tripped over sprinkler heads.¹⁴²

Irrigation design defects have 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.¹⁴³ A design that over-applies water in certain areas and creates

¹⁴⁰ 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).

¹⁴¹ 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).

¹⁴² *Professional Licensure of Landscape Architects*, *supra* note 58, at 40.

¹⁴³ 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.

standing water will hamper efforts to control such pests as fire ants, wasps, and mosquitoes.¹⁴⁴

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,¹⁴⁵ some serious and permanently disabling.¹⁴⁶ In the case of *Ward v. Shoney's, Inc.*,¹⁴⁷ 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 foot path. In addition to metal landscape edge, other edging materials, such as landscape timbers, have been associated with trip and fall injuries.¹⁴⁸

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.¹⁴⁹

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 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. 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

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).

¹⁴⁴ Rein v. Benchmark Construction Co., *supra* note 143.

¹⁴⁵ Plunk v. Nat'l Health Investors, Inc., 92 S.W.3d 409 (Tenn. Ct. App. 2002); Ward v. Shoney's, Inc., 817 A.2d 799 (Del. 2002); Dobson v. State, 23 S.W.3d 324 (Tenn. Ct. App. 1999).

¹⁴⁶ Dobson v. State, *supra* note 145 (serious and permanently disabling injuries, including many broken bones in slip and fall on landscape metal edge).

¹⁴⁷ Ward v. Shoney's, Inc., *supra* note 145.

¹⁴⁸ 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).

¹⁴⁹ 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).

memory loss, prompting the defendant land owner to settle the negligence case for \$900,000.¹⁵⁰ In another negligence case, a path in a park was closed using a wire stretched between two posts twenty 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.¹⁵¹ A similar wire boundary was responsible for the fatal severing of the spinal cord of a 13-year-old ATV rider.¹⁵² 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.¹⁵³

Signage

The design of outdoor spaces 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,¹⁵⁴ shallow water,¹⁵⁵ abrupt ends of sidewalks and trails,¹⁵⁶ and other hazards.¹⁵⁷ In addition to hazards in built designs, warning signs are an important safety measure for sites where landscape architectural plans are under construction. For example, the 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.¹⁵⁸

¹⁵⁰ *Salser v. Bob Evans Farm*, settled before filing, 40 ATLA L. Rptr. 25 (Ohio, Aug. 15, 1996).

¹⁵¹ *Stewart v. Town of Hudson*, No. 994959, 2000 WL 33171007 (Mass., Super. Ct. of Mass., Nov. 30, 2000).

¹⁵² *Collins v. S&D Farms, Inc.*, No. CL 91-6411-AD (Fla., Palm Beach Cty. Dist. Ct., July 16, 1993).

¹⁵³ *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).

¹⁵⁴ *Fitzgerald v. City of Mt. Dora*, *supra* note 104; *Brown v. State*, *supra* note 128.

¹⁵⁵ *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).

¹⁵⁶ *Swieckowski v. Fort Collins*, *supra* note 140.

¹⁵⁷ *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).

¹⁵⁸ *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.

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.¹⁵⁹ 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. The cases noted under this heading are a small sample of the incidents in which property has been damaged as a result of incompetence, negligence, and unscrupulous practice in the field of landscape architecture.

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*¹⁶⁰ is a prime example of why unethical and incompetent practitioners are, in forty-seven states currently, 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 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.

¹⁵⁹ *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).

¹⁶⁰ *Foxchase, LLLP et al v. Cliatt*, 562 S.E.2d 221 (Ga. App. 2002).

Negligent planning for storm water has been linked to property damage in numerous cases.¹⁶¹ In *Redbud Cooperative v. Clayton*, following a pattern found in the Physical Injury cases above, a landscape architect prepared the original grading and drainage plan for a site and obtained the necessary approvals. Prior to construction and without consulting the landscape architect, the developer altered the plan. Significant deviations from the landscape architect's plan included blocking 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.¹⁶²

Small property owners have been hard hit by the impacts of drainage design negligence. The builder in *Beeftu v. Creekside Ventures, LLC*¹⁶³ 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.¹⁶⁴ In landscape planning leading up to the case of *TriAspen Construction Co. v. Johnson*,¹⁶⁵ landscape architecture and site development review failed to protect a house from natural water runoff on a hillside. 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

¹⁶¹ *Erie Insurance Exchange v. Colony Development*, 736 N.E.2d 950 (Ohio App. 2000) (negligent design lead to erosion damage); *McLendon & Cox v. Roberts*, 398 S.E.2d 579 (Ga. App. 1990) (landscape architect sued for damages from increased storm water 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 *Lary 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).

¹⁶² *Redbud Cooperative Corp., et al 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).

¹⁶³ *Beeftu v. Creekside Ventures, LLC*, 37 P.3d 526 (Colo. App. 2001); see also *Morrocco v. Piccardi*, *supra* note 109 (drainage pitched toward house caused physical injury and property damage).

¹⁶⁴ *Beeftu 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).

¹⁶⁵ *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).

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.¹⁶⁶ An 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.¹⁶⁷ In general, landscape architects have been held to a professional standard of care for drainage functionality in states with regulatory landscape architecture practice standards. The Massachusetts case of *Town of Watertown v. Halvorson Company Landscape Architects*,¹⁶⁸ 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*,¹⁶⁹ 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*,¹⁷⁰ the landscape contractor installed a slope stabilization design despite knowledge that a landscape architect's assistance was probably needed. 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. With regulation under a state board, landscape professionals are held to standards that would have yielded competent and practical solutions to the design problems in both the *Hoang* and *Gallo Construction* cases.

IRRIGATION

In terms of typical costs, irrigation is a major improvement to residential, commercial, industrial, institutional, recreational, and agricultural properties. Incompetent irrigation planning damages property both directly and indirectly. As a direct cost of poor design, a non-functional irrigation system will require re-excavating installed equipment and procuring new design and contracting to retrofit the irrigation system appropriately. In a

¹⁶⁶ *Seaman Unified School District v. Casson Construction Co.*, 594 P.2d 241 (Kan. App. 1979).

¹⁶⁷ *Application for Sunrise Review of Landscape Architecture Regulation*, *supra* note 95, Appendix 1, Example E.

¹⁶⁸ *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).

¹⁶⁹ *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").

¹⁷⁰ *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).

recent Colorado case, a landscape contractor held itself out as capable of performing irrigation design, but, in a string of incidents, left design-build clients with malfunctioning and inoperable irrigation systems.¹⁷¹ Negligent irrigation design by the Colorado 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. Irrigation systems may have contributed to the damage to school properties described in the Grading and Drainage section above, as incompetent irrigation planning can exacerbate expansive soils and cause serious foundation and structural problems in adjacent buildings.¹⁷²

EXTERIOR STRUCTURES

Poorly conceived plans for outdoor structures can inhibit the use of a property, cause a rapid decline into disrepair,¹⁷³ and require costly remedial measures. An incompetent landscape contractor in the recent Colorado case of *State v. Applied Landscape Solutions*¹⁷⁴ designed and built concrete steps that failed to conform to basic city code standards, obliging the property owner to remove the steps and assume the responsibility for locating a qualified designer. 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, in Colorado, the negligent design of a retaining wall by a contractor/builder caused \$67,000 damage to a foundation and a site drainage system.¹⁷⁵ In Utah, a retaining wall designed by a contractor collapsed and caused a “substantial portion” of a yard to slide into the adjacent street.¹⁷⁶ Inexperienced contractors may be particularly likely to inadequately design retaining walls where there are possible drainage problems.¹⁷⁷

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,¹⁷⁸ especially related to design issues, such as liner specifications, that could cause a high volume of water to leak into a building.

¹⁷¹ *State v. Applied Landscape Solutions*, No. 01 CV 1098 (Colo., Boulder County 20th Judicial Dist., 2003).

¹⁷² *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).

¹⁷³ *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).

¹⁷⁴ *State v. Applied Landscape Solutions*, *supra* note 171.

¹⁷⁵ *Perlmutter v. Blessing*, 706 P.2d 772, 773 (Colo. 1985).

¹⁷⁶ *Wessel v. Erickson Landscaping Co.*, 711 P.2d 250 (Utah 1985) (collapse of retaining wall attributed to defective design).

¹⁷⁷ *See* *Pullen v. Calvert*, 527 P.2d 398 (Ore. 1974) (landscape contractor liable for failure of wall design where drainage problems occurred).

¹⁷⁸ Lisa Speckhardt, *Landscape Liability: Insurers are taking a closer look at liability issues with rooftop gardens*, *Landscape Architecture*, Jan. 2003, at 26.

OTHER DAMAGE TO PROPERTY

Examples of property damage may be found in many of the same negligence and incompetence situations that create risk of physical injury. This report does not attempt to survey property or financial injury cases to the same extent as physical injury cases. Landscape architects in most states are aware of local examples, and often serve as expert witnesses, where incompetent and negligent professional services have caused significant property damage. The research for this report did, however, incidentally reveal several additional examples in which minimum competence would have prevented damage to property.

Site Planning

Especially in dry climates and densely forested regions, 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 recent Western wildfires.¹⁷⁹ As demonstrated by the lack of property damage experienced directly in the path of recent blazes, effective defensible space techniques include selective tree-thinning, strategic siting of structures, driveway alignment as a fire break, and strategic irrigation.¹⁸⁰ 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.¹⁸¹

Paved Surfaces

As with other technical applications within the scope of the design professions, specification of pavement is not only a potential source of physical injury, improper design and specification may also diminish the value of property. In *Michaelis v. Benavides*,¹⁸² a client homeowner sued the landscape contractor that had negligently constructed a patio and driveway. The patio became severely cracked due to inadequate reinforcement and failure to provide an expansion joint, and additionally did not have a sufficient profile at its edge to prevent pieces of the patio from sliding downhill. The driveway was too narrow to accommodate traffic and inadequate drainage posed a hazard to the home’s structural integrity. The *Michaelis* court noted that, beyond the property damage at issue, the design defects created hazardous conditions for the homeowners and their guests.

Site Investigation

Without diligent investigation, apparently simple projects 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, for example, cuts are

¹⁷⁹ Mary Butler, *Fire precautions save homes*, Daily Camera (Boulder, Colorado), November 4, 2003, at 1A, 5A.

¹⁸⁰ *Id.*

¹⁸¹ *Ross v. Southern Cal. Edison Co.*, No. 257053 (Ca., Riverside Cty. Super. Ct., April 22, 1997).

¹⁸² *Michaelis v. Benavides*, 71 Cal.Rptr.2d 776 (Cal. App. 1998).

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.¹⁸³

¹⁸³ *Professional Licensure of Landscape Architects*, *supra* note 58, at 39.

FINANCIAL HARM

Landscape architects are responsible for documenting and/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.¹⁸⁴ As documented by the Council of Landscape Architectural Registration Boards,¹⁸⁵ 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.

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.¹⁸⁶ 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.¹⁸⁷ State licensing boards have taken action where landscape architects have demonstrated incompetence in the preparation of plans and caused financial injury.¹⁸⁸

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.¹⁸⁹ A series of cases illustrates the potential for

¹⁸⁴ *Professional Licensure of Landscape Architects*, *supra* note 58, at 30; *infra* note 267.

¹⁸⁵ Council of Landscape Architectural Registration Boards, *The Impact of Landscape Architecture on Public Health, Safety, and Welfare*, Nov. 3, 2001, at 2.

¹⁸⁶ *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).

¹⁸⁷ *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).

¹⁸⁸ *Matter of Timothy Araiys 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).

¹⁸⁹ 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

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.*¹⁹⁰ 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 held liable for breach of contract, negligence, and negligent misrepresentation and ordered to pay a total damages award of \$1,516,719.

Landscape architects are involved in wetland compliance in most states,¹⁹¹ 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.¹⁹²

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,¹⁹³ 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. 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 retail business in Cannon Beach, Oregon.¹⁹⁴

consistent level of expertise, training, and ethics." Stephen D. Beck, Letter of support for continued regulation of landscape architecture to the Virginia Department of Commerce, dated March 11, 1991.

¹⁹⁰ *Winsted Land Development v. Design Collaborative Architects, P.C.*, No. CV 960071571, 1999 WL 639942 (Ct., Super. Ct. of Conn., Aug. 12, 1999).

¹⁹¹ 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").

¹⁹² *Settlement nearing in wetlands destruction*, Rocky Mountain News, Sept. 26, 1993, at 6A, 20A.

¹⁹³ See *supra* note 67 (delays and extra costs in Denver office building where necessary to modify art installation for ADA compliance).

¹⁹⁴ *Alford v. City of Cannon Beach*, No. CV 00-303-HU, 2002 WL 3149173 (D.Or., Jan. 15, 2002).

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*¹⁹⁵ 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 for neighbors impaired the value of covenants on the homeowner's lot.

NEGLIGENT DESIGN

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 a number of cases.

The architectural firm of Skidmore, Owings & Merrill was ordered to pay damages totaling \$2,100,000 as the prime consultant on a defective streetscape project.¹⁹⁶ As established by landscape architect testimony 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. 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.¹⁹⁷ 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.¹⁹⁸

Defects in landscape architectural plans incur a broad assortment of remedial costs. These costs have been due to defects in plans and specifications for paving materials,¹⁹⁹ soil preparation,²⁰⁰ drainage,²⁰¹ seeding specifications,²⁰² irrigation,²⁰³ grading,²⁰⁴ and site investigation.²⁰⁵

¹⁹⁵ *Village of Wadsworth v. Kerton*, 726 N.E.2d 156 (Ill. App. 2000).

¹⁹⁶ *City of Charlotte v. Skidmore, Owings, & Merrill*, 407 S.E.2d 571 (N.C. App. 1991).

¹⁹⁷ *American Manufacturers Mutual Insurance Co. v. Edward D. Stone, Jr. & Associates*, 743 F.2d 1519 (11th Cir. 1984).

¹⁹⁸ *Id.*

¹⁹⁹ *City of Charlotte v. Skidmore, Owings, & Merrill*, *supra* note 196.

²⁰⁰ *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.

²⁰¹ *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.

²⁰² *Saltiel v. GSI Consultants*, 788 A.2d 268 (N.J. 2002) (defective turfgrass specifications for university athletic field rendered field unfit for use).

²⁰³ *First Interstate Bank of California v. Winncrest Homes, Inc.*, *supra* note 200.

LOSS OF CONSUMER CHOICE

Competitive barriers shortchange practitioners and consumers. 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, without regulation, landscape architects and their clients lack 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 look to state regulation as a reliable benchmark to assess technical competence.

The best interests of the consumer are not well served when testing for minimal competence of design professionals is limited to a smaller pool of firms with a narrower range of expertise. This is 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 other design professionals inhibits the market for a variety of professional services that landscape architects are qualified to perform.

Land development activities have many potential impacts, and the issuance of a state registration number and professional stamp to design professionals is a complement to land use regulations and building codes. To expedite approvals and reduce the burden of technical evaluation, cities and other reviewing agencies frequently require development plans to be stamped and/or certified by a registered design professional.²⁰⁶ Landscape architects are capable of certifying 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 is 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

²⁰⁴ 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).

²⁰⁵ *Id.*

²⁰⁶ 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.”).

public safety.²⁰⁷ 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.²⁰⁸

A specific concern in jurisdictions without a state regulatory program and professional stamp is that, under the Uniform and International Building Codes, landscape architects may not be 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 landscape architecture practice statute,²⁰⁹ the Nevada Attorney general ruled that landscape architects should be allowed to practice grading design to the full extent of their capability.²¹⁰ Where landscape architecture skills are not recognized by state law, it is very possible that consumers will not be able to execute site plans, grading plans, and drainage plans produced by landscape architects, even when the landscape architect is best qualified to develop these plans and best qualified to ensure compliance with relevant codes.

Landscape architects are unable to perform the certification function in a number of jurisdictions due to either state or local law.²¹¹ This effectively prevents landscape architects from providing services they are qualified to undertake. Partial regulation of the design professions (e.g., including architects and engineers within a regulatory framework while excluding landscape architects) prevents the optimum utilization of trained design professionals. The Council on Licensure, Enforcement, and Regulation has noted that it is harmful to the public for a regulatory scheme to prevent individuals from other professions from providing services for which they are qualified.²¹²

Registration and licensing are a way for landscape architecture clients to limit their liability. Developers, public land owners, 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. As 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

²⁰⁷ Letter from J. S. Hodge, Chief Engineer, Commonwealth of Virginia Department of Transportation to Phillip A. Shaw, Chairman of the Landscape Architecture Section, APELSLA Board, March 20, 1991, as attached to the Landscape Architecture Section Defense for 1991 Review by the Virginia Department of Commerce.

²⁰⁸ Virginia Department of Commerce, Board for Professional and Occupational Regulation, *Need for Licensing Landscape Architects*, 2000, at 2, 3.

²⁰⁹ Nev. Rev. Stat. § 623A.060(2).

²¹⁰ Nevada Attorney General, Opinion 2002-27, July 16, 2002.

²¹¹ See State of Colorado, University of Colorado-Boulder, *Request for Qualifications, Project W48118* (noting architect or engineer registration as a minimum requirement for a tennis court renovation project). For additional discussion of this topic, see *infra* note 276 (landscape ordinances may require a stamp for review).

²¹² Council for Licensure, Enforcement, and Regulation, *Professional Licensure Justification*, in *Questions a Legislator Should Ask*, 1994, at 19.

practitioner.²¹³ 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.

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 Colorado, for example, a land developer retained a landscape architecture firm to correct errors in an overlot 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.²¹⁴ 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.

For clients of the design professions, another concern is that landscape architecture services will be diminished, if offered, in the growing market for interdisciplinary work. Landscape architects in a state without regulation form contracts for interdisciplinary work at their own peril. As stated in the Colorado case of *Warde v. Davis*,²¹⁵ “The general rule is: A contract made in the course of a business or occupation for which a license is required by one who has not complied with such requirement is unenforceable.”²¹⁶ While landscape architects are trained and competent competitors in the market for professional design services, lack of regulatory status may seriously impair the ability of landscape architects to market the full scope of their services and, as a result, this rule impairs the ability of consumers to efficiently utilize professional landscape architects.²¹⁷ This inefficient approach to the regulation of design professionals relies on standards for professional regulation that either intentionally or unintentionally, but in either case irrationally, discriminate against landscape architects.²¹⁸ As another example, the reform of the market for legal services may soon make possible partnerships between legal practitioners and design professionals.²¹⁹ In the envisioned multidisciplinary market, consumers of legal and design services would benefit from the efficiency of a single-firm provider – but, in many states, the rules being contemplated to enhance consumer options for professional services will require all services

²¹³ Jim Leatzow, Letter to the Colorado Department of Regulatory Agencies, June 26, 2001, at 2.

²¹⁴ Testimony in the Colorado Senate Committee on State, Veterans, and Military Affairs, January 28, 2003.

²¹⁵ *Warde v. Davis*, 351 F.Supp. 519, 520 (D.Colo. 1972), *aff'd* 494 F.2d 655 (10th Cir. 1974).

²¹⁶ See also *Friedman v. Mt. Village, Inc.*, 640 P.2d 1037 (Ore. App. 1982) (“payment for [architectural] services performed... while unlicensed are not collectible in Oregon.”); *Koscove v. Bolte*, No. 98CA1099 (Colo. Ct. App., Feb. 15, 2001) (out-of-state attorney unlicensed in Colorado could not earn attorneys’ fees); *Lieff v. Medco Professional Services Corp.*, No. 97CA1333 (Colo. Ct. App, July 9, 1998) (unlicensed individual could not receive fee for real estate transaction).

²¹⁷ Additional discussion of this topic occurs in the Regulation in the Public Interest section below, at page 57.

²¹⁸ As one commentator has noted, unequal access to state licensure may be a violation of substantive due process. *Professional Licensure of Landscape Architects*, *supra* note 58, at 20-22.

²¹⁹ American Bar Association Commission on Multidisciplinary Practice (MDP), *Report to the House of Delegates*, July 2000.

in such a multidisciplinary firm's scope to be subject to some form of regulatory oversight.²²⁰

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 within the scope of a landscape planning effort; 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.

²²⁰ *Id.*; see Multidisciplinary Practice Commission of the Wisconsin State Bar, *Final Report*, November 2002, at 18 (“each MDP firm must initially, and each year thereafter, file a registration that identifies its owners [and] certifies they are licensed in good standing within their profession...”).

ADDITIONAL EVIDENCE RELATING TO REGULATION

There are numerous justifications for landscape architecture regulation. This paper 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 depend on the technical competence of those responsible for its physical design and implementation.

In addition to harm prevention, landscape architecture regulation is justified by economic and equitable concerns. 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 basis for regulation that efficiently allocates risks and enables consumers to make sufficiently informed choices.

REMOVING BARRIERS TO COMPETITION: PLACING LANDSCAPE ARCHITECTS ON EQUAL FOOTING

Without statutory professional status, landscape architects are unable to develop clients and determine the costs of doing business within the same legal framework that governs architects, engineers, and, typically, surveyors. Whether or not a landscape architect requires every statutory privilege granted an architect or an engineer, a landscape architect may be denied certain basic legal protections without professional status. Without these legal protections, landscape architects face a degree of business and personal risk greater than other design professionals. This risk may be manifest in higher insurance rates to do 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.

Equal Footing: 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.²²¹ 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 period time during which design defects are likely be discovered.

²²¹ The purpose of a statute of repose is to protect those whose design, install, or construct an improvement from facing never-ending potential liability based on that work. *See* 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, and a landscape architect may be unable to gain the same legal protection as architects and engineers.²²² 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,²²³ 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.²²⁴

In states without professional regulation, it is unclear whether landscape architects are granted the same legal privileges as architects and engineers under a statute of repose. This uncertainty is by itself a legal burden that, among design professionals, landscape architects bear alone.

Equal Footing: Certificates of Review

Claims of professional negligence are required in many states to be certified by a member of the profession at issue in the potential lawsuit. In the words of one such certificate of review statute, its purpose 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...”²²⁵

Because the typical certificate of review statute applies only to regulated professionals, the protection is possibly unavailable to landscape architects in states without landscape architecture regulation. In Colorado, for example, the certificate of review statute applies to malpractice claims against “licensed professionals.”²²⁶ Without a professional board or a statute regulating landscape architecture as a profession, landscape architects may be sued without the filter of the certificate of review through which suits against architects and engineers must pass.²²⁷ As a result, landscape architects in states without regulation are, again, alone among design professionals in bearing certain legal risks.

²²² 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).

²²³ 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.

²²⁴ 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).

²²⁵ Colo. Rev. Stat. § 13-20-601.

²²⁶ Colo. Rev. Stat. § 13-20-602.

²²⁷ See Hamilton v. Thomson, 23 P.3d 114, 115 n.2 (Colo. 2001), State v. Nieto, 993 P.2d 493, 501 (Colo. 2000).

Equal Footing: Mechanics Liens

The mechanics lien is 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.²²⁸ However, courts will not grant a mechanics lien merely because a professional has assisted in the improvement of a property.²²⁹ Lack of a proper license has been held to render a design firm ineligible for a mechanics lien.²³⁰ Landscape architects practicing without professional recognition under a state statute face the risk that work otherwise deemed eligible for a mechanics lien will be held ineligible for lack of a license.

Cumulatively, uncertainties in the availability and enforcement of mechanics liens, statutes of repose, and certificate of review requirements for professional negligence claims force landscape architects in states without regulation to assume risks for which clear statutory protection is available to other design professionals. In states that do not grant the profession regulatory status, enactment of statutes to shield architects, engineers, and other professionals from frivolous lawsuits has had the unintended consequence of magnifying barriers to competition for landscape architects.

REGULATION IN THE PUBLIC INTEREST

Serving the public interest is an independent justification for professional regulation.²³¹ This report focuses on regulation of the landscape architecture profession as a means to mitigate harms to the public health, safety, and welfare. Public interest analysis, briefly discussed here, also 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.

²²⁸ See *Stan Miller, Inc. v. Breckenridge Resort Assoc., Inc.*, 779 P.2d 1365 (Colo. App. 1989) (mechanics lien valid for an architect who designed a comprehensive site plan and site analysis).

²²⁹ *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 mechanics lien statute, a derogation of the common law, is to be strictly construed in determining who is entitled to a lien”).

²³⁰ *O’Kon and Company, Inc. v. Riedel*, 540 So.2d 836 (Fla. App. 1988) (mechanics lien not enforceable because firm engaged in practice of architecture without a state license).

²³¹ 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”).

The landscape architecture profession as a whole, including both public and private sector projects, bears responsibility for protecting the public interest. To illustrate, as has been noted in the rationale for regulation of architecture practice, the private sector developer is primarily motivated to generate an income-producing package that may be conveniently transferred or sold to another party, leaving the designer to be the representative of the public interest.²³² The very same principle applies to landscape architects: For example, 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 is linked to blight and resultant financial loss to property owners and the community.²³³ The training and licensing of landscape architects, much the same as architects, is designed to place responsibility for the public interest, in all settings served by the profession, in the hands of practitioners. 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.²³⁴

Public interest and the avoidance of public harm are concurrent 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.²³⁵

Above and beyond harm prevention, landscape architecture regulation is an important 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.²³⁶ Government oversight in the form of a self-regulating²³⁷ board or boards corrects for the severe imbalance in information about professional qualifications and induces a more nearly optimal exchange in the marketplace.

²³² National Council of Architecture Registration Boards, *Regulation of Architects*, March 2001, at 1-2.

²³³ See Richard M. Yearwood, *Land Subdivision Regulation*, Praeger Publishers: New York, at 66-67.

²³⁴ 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).

²³⁵ See, *infra* note 301.

²³⁶ 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. See Robert Cooter and Thomas Ulen, *Law and Economics*, 2nd Ed., Addison-Wesley Publishing, 1997, at 41.

²³⁷ "Self-regulating board" refers to a state professional board, as described under Evaluation of the Need for Regulation – Terminology, at page 71 below.

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.²³⁸ Registration and licensing are useful tools for pre-qualifying consulting bids or screening potential employees who will be responsible for managing landscape architecture work in compliance with professional standards.²³⁹ As established by the literature regarding professional regulation, the search cost to locate minimally competent design professionals is a significant burden on consumers.²⁴⁰

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.²⁴¹ Nationally, landscape architects trained or employed in states without licensing are disadvantaged in their ability to compete for jobs in both the public and private sector.

It is 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. State law in Colorado, for example, encourages partnership between architects and engineers²⁴² but does not contemplate partnership with landscape architects.

Contrary to public interest, landscape architects have difficulty competing for design service contracts when they are unable to procure a state credential.²⁴³ For example, landscape

²³⁸ 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.

²³⁹ See, *infra* note 241.

²⁴⁰ 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”).

²⁴¹ 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’”).

²⁴² See Colo. Rev. Stat. § 12-4-110(4).

²⁴³ *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).

architects in Colorado (where architects and engineers are licensed but landscape architects are not) are unable to compete for major contracts where design teams require licensed landscape architects.²⁴⁴ One consequence of the deregulated status of landscape architects in Colorado is that architects and engineers in the state are often preferred to perform trail and other recreational development work that is a prominent and specific theme in the training and testing for landscape architectural competence.²⁴⁵

Professional regulation enhances competition and the economic contribution of landscape architects. Landscape architects offer unique value to various types of projects. For example, 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, enforceable professional standards (and the associated availability of a professional stamp to establish competence without additional expense to a client or government agency) are not only appropriate, but licensure is of critical importance to public agencies that spend tax dollars and improve public property by contracting for design and management services.²⁴⁶ Landscape architects in states without licensure may not be seriously considered for a lead role on projects that would benefit from their expertise.²⁴⁷

²⁴⁴ See U.S. Army Corps of Engineers, *Request for Proposals DACA45-02-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”).

²⁴⁵ 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).

²⁴⁶ 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).

²⁴⁷ 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.

EVALUATION OF THE NEED FOR REGULATION

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 must be subordinate to basic standards for public health, safety, and welfare.²⁴⁸ For example, as discussed below, 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 protection of public health, safety, and welfare, accounting for contemporary opinion that generally accepts professional regulation as a restriction to protect society from incompetents and charlatans.²⁴⁹

In many states, the evaluation of the need for professional regulation occurs through a formal process. When this evaluation is undertaken for a profession that is not the subject of existing regulation, the process is typically known as a sunrise review. When the evaluation concerns the continued need for regulation of a profession, the process is referred to as sunset review. It should be noted that sunrise and sunset review are modern developments, while occupational and professional regulation can be traced to colonial times and earlier.²⁵⁰ Sunrise and sunset review are guided by statutory or administrative criteria.²⁵¹ In general, some degree of discretion in sunrise and sunset review is appropriate, since enumerated criteria do not in all cases provide definitive answers regarding the need for regulation.²⁵²

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 a rational response for trades and professions that may expose consumers and the general public to harm. Accordingly, landscape architecture regulation

²⁴⁸ 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.

²⁴⁹ *Professional Licensure Justification*, *supra* note 212, at 1.

²⁵⁰ *Id.*

²⁵¹ *See, e.g.*, Colo. Rev. Stat. § 24-34-104.1 (4)(b) ("[T]he determination as to whether such regulation of an occupation or a profession is needed shall be based upon the following considerations: [1] Whether the unregulated practice of the occupation or profession clearly harms or endangers the health, safety, or welfare of the public, and whether the potential for harm is easily recognizable and not remote or dependent upon tenuous argument; [2] Whether the public needs, and can reasonably be expected to benefit from, an assurance of initial and continuing professional or occupational competence; and [3] Whether the public can be adequately protected by other means in a more cost-effective manner.")

²⁵² *Sunrise Review of Naturopathic Physicians*, *supra* note 240, at 26 ("While it is not clear whether the sunrise criteria for regulation have been satisfied, there are reasons to consider regulation...").

has been upheld in legal cases and opinions as a valid protection of public health, safety, and welfare. In the case of *Paterson v. University of State of New York*,²⁵³ the legitimacy of landscape architecture regulation was challenged. The court rejected the challenge and upheld New York’s licensure law. As noted in the holding:

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.²⁵⁴

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.”

Evaluation of landscape architecture according to typical criteria reinforces the conclusion that there is a need for regulation. Prior to examining the evidence newly collected for this report, an historical perspective is provided, including the major issues and inconsistencies regarding landscape architecture regulation found in past sunrise and sunset evaluations of the profession.

²⁵³ The Court of Appeals stated in its 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.” *Paterson v. University of State of New York*, *supra* note 1, at 455.

²⁵⁴ *Id.*

SUNRISE AND SUNSET REVIEWS OF LANDSCAPE ARCHITECTURE

Sunset legislation, enacted initially in Colorado in 1976, formalized the review of occupational regulation. From its inception, the objective of sunset review was to eliminate “burdensome and inefficient” boards that did not act in the public interest.²⁵⁵ Sunset review was also intended to prompt periodic fine-tuning of continued boards, 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.²⁵⁶ Due to evidentiary issues that this report seeks to remedy, other sunset reviews of 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. As noted regarding the Colorado model, “it is quite possible to have a sunset effort which is narrow and biased – aimed just at getting rid of agencies and programs no matter whether they have valid public missions.”²⁵⁷

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.²⁵⁸ Regulators have used both high disciplinary numbers and low disciplinary numbers to conclude that professional regulation is effective.²⁵⁹ While disciplinary cases heard by professional boards may be taken as an

²⁵⁵ 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.

²⁵⁶ 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, though a poor design, could be irreparably harmed.”); *Sunset Review of the Landscape Architects Board of Registration*, *supra* note 19, 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*, *supra* note 208.

²⁵⁷ Michael S. March, et al., University of Colorado at Denver, Graduate School of Public Affairs, *Sunset Review, The Colorado Program: Statutes, Organization, Methodology, Evaluation Criteria, and Results*, Nov. 15, 1977 (“This sort of tone... was to some extent encountered at the top side of DORA...”). A little over a year after the first Sunset Law took effect, Colorado Common Cause signaled “a yellow caution light for application of the concept.” *Professional Licensure of Landscape Architects*, *supra* note 58, at 66.

²⁵⁸ Colorado Department of Regulatory Agencies, *Sunrise Review of Investment Advisors*, 1998, at 8 (a survey of surrounding states “revealed that states took very few disciplinary actions against investment advisors, but all believed that the initial screening of applicants is very effective as a proactive regulatory step”); see also *Sunset Evaluation Report of Professional Engineers, Architects, Surveyors, and Landscape Architects, Minority Reports*, *supra* note 19, at 5 (“The fact that no complaints have been filed with the Board of Registration in the five years prior to this report indicates only that the state has been adequate in registering landscape architects and the landscape architects have fulfilled their legal responsibilities.”); *Sunset Review of the Office of Outfitters Registration*, *supra* note 231, at 26 (discussing the uncertainty of conclusions drawn from records of disciplinary actions); Charles W. Wolfram, *Modern Legal Ethics*, West Publishing, 1986, at 832 (critiquing the tabulation of disciplinary actions as a justification for lawyer licensing).

²⁵⁹ *Sunset Review of the State Board of Registration for Professional Engineers and Professional Land Surveyors*, *supra* note 29, at 24 (increase in the number of disciplinary actions indicates improvement in board effectiveness); Julianne

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.²⁶⁰

Sunrise review is a more recent addition to the regulatory process, enacted in Colorado in 1985, for example, 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 regulation.²⁶¹ Landscape architecture experience with sunrise review has, if anything, demonstrated the extent to which subjectivity is capable of overwhelming the analysis of the need for regulation.

According to one recent sunrise review, the type of harm demonstrated by an incident in which a child was killed in a negligently designed skate park is “not compelling.”²⁶² The same report also failed to address evidence submitted to the reviewing agency regarding other fatalities linked to negligent landscape architecture practice. 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 recent 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, learned that a recent case receiving media attention²⁶³ was about a landscape contractor, and concluded that this case yielded no evidence relevant to the need for regulation of landscape architecture. 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

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 18, at 38 (“The Board [of Architect Examiners] seldom receives complaints involving technical issues.”).

²⁶⁰ 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.

²⁶¹ 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.

²⁶² *Sunrise Review of Landscape Architects*, 2002, *supra* note 241, 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,” *supra* note 121, the example of harm was unmistakably a fatality).

²⁶³ 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.

property and financial damage to multiple clients.²⁶⁴ This evidence indicates that landscape contractors are performing technical services beyond their ability, causing potential injury and property damage as a result. 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.

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 states²⁶⁵ have enacted new laws concerning regulation of the profession.

²⁶⁴ State v. Applied Landscape Solutions, *supra* note 171.

²⁶⁵ For example, in the last decade (1993-2003) several states (e.g., Wisconsin, Alaska, North Dakota) enacted new legislation to regulate landscape architecture, and several other states (e.g., Idaho, Iowa, Mississippi, Missouri, Ohio, Oregon, and Texas) amended existing statutes to regulate the practice of landscape architecture as a licensed profession.

APPLICATION OF THE EVIDENCE OF HARM

Previous evaluations of the need for landscape architecture regulation have lacked all or most of the evidence contained in this report. With this evidence casting new light on the potential for harm, this section reviews the standard criteria used 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?

These questions are addressed in turn below.

DOES LANDSCAPE ARCHITECTURE REGULATION ADDRESS AN EASILY RECOGNIZABLE POTENTIAL FOR HARM?

Landscape architects and non-landscape architects practicing landscape architecture are in a position to jeopardize public health, safety, and welfare. There are many cognizable harms within the scope of a landscape architect's technical knowledge and professional responsibility. Serious injury is the result 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.

The evidence in this report demonstrates that incompetent designs of outdoor features are 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 the nation's largest professional insurance provider 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."²⁶⁶

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.²⁶⁷ For landscape architecture, as with engineering and architecture, consumer

²⁶⁶ Letter of Jim Leatzow, *supra* note 213.

²⁶⁷ *Sunset Evaluation Report of Professional Engineers, Architects, Surveyors, and Landscape Architects, Report No. 83-5, 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...").

protection through some form of regulation is appropriate given the involvement of design professionals in projects involving significant real estate and financial assets. The cost of repairing faulty design work can easily exceed the initial cost of a project,²⁶⁸ and difficulty in restoring a property to its prior or intended condition may also amount to irreparable harm in some cases.²⁶⁹

Landscape architecture regulation has previously been justified based, at least in part, on 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 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.

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.²⁷⁰ Similarly, landscape architects possess skills that directly impact 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.

The potential harm from professionals behaving unethically and without regard for client expectations is recognized as part of the need for regulation.²⁷¹ 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.²⁷²

Regulation creates enforceable competency standards for entry into professional practice and makes disciplinary action a significant disincentive to substandard practice.²⁷³ The

²⁶⁸ See *Redbud Cooperative Corp., et al v. Clayton*, *supra* note 162.

²⁶⁹ See *supra* note 192 (damage to alpine wetlands may constitute irreparable harm).

²⁷⁰ 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.

²⁷¹ 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”).

²⁷² 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*, *supra* note 160 (unlicensed landscape architect engaged in multiple misrepresentations).

²⁷³ *Sunset Review of the Board of Professional Engineers and Professional Land Surveyors*, *supra* note 29, 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

research for this report revealed a wide assortment of incidents in which the work of a competent landscape architect would have prevented harm. Regulation discourages or prohibits the practice of landscape architecture by individuals untrained, untested, and unskilled in the profession.

DOES LANDSCAPE ARCHITECTURE REGULATION PROMOTE THE PUBLIC INTEREST?

As discussed briefly in this report, 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 regulation is cost-benefit justified.²⁷⁴ The most conservative analysis of professional regulation, however, holds that promotion of the public interest will only occur where regulation mitigates the potential for harm. In either analysis, regulating landscape architecture is a choice made in the public interest.

The police power and regulatory authority of the state denoted by “the public health, safety, and welfare” constitute 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, as documented in the Evidence of Harm section of this report. The protection of aesthetic values and orderly development are frequently the subject of ordinances and statutes and are almost invariably found to be within the scope of public health, safety, and welfare.²⁷⁵ 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 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.²⁷⁶

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

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.”)

²⁷⁴ 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).

²⁷⁵ *See* *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).

²⁷⁶ Dennis Abbey, *U.S. Landscape Ordinances*, J. Wiley & Sons (1998).

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.”²⁷⁷

CAN LANDSCAPE ARCHITECTURE REGULATION BE ACCOMPLISHED WITHOUT UNDUE COST OR IMPACT TO OTHER PROFESSIONS?

Professional regulation is funded almost exclusively through the fees and fines assessed by each board. 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,²⁷⁸ and occasionally these boards produce significant surplus revenue for other state purposes.²⁷⁹

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 in the above section of this report regarding Concurrent Jurisdiction.

In addition to the three criteria covered in this discussion, an evaluation of the need for regulation may engage in an assessment of alternative methods to address the potential for harm. This adjunct to an evaluation of the need for regulation is covered in detail below.

²⁷⁷ Virginia Board of Commerce, *A Report on the Need for a Regulatory Program for Landscape Architects*, June 24, 1991.

²⁷⁸ See State of Colorado, Senate Bill 03-080 (Regulate Landscape Architects), Fiscal Note (fee revenue sufficient to cover costs of the proposed board).

²⁷⁹ *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).

A NEED TO REGULATE: FINDINGS AND RESPONSES

Landscape architecture regulation mitigates harm and serves 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.

Finding a need to regulate landscape architecture is the result of applying the same standards that support the regulation of architecture and engineering. A 1999 study conducted by the State of Minnesota is instructive: Landscape architecture is one of the 40 most commonly regulated professions.²⁸⁰ While there is some diversity among the states as to the mode of regulation, with licensure by in large the most common form, there is a consistent finding among 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.

Specific forms of occupational regulation, including reliance on various private market mechanisms, are applicable depending on the nature and magnitude of a harm being addressed through occupational regulation. Determining the appropriate regulatory approach requires evaluation of the reasons occupational regulation may or may not be needed. This evaluation is presented in this report in the following Analysis of Forms of Regulation.

²⁸⁰ State of Minnesota Legislative Auditor, *Program Evaluation: Occupational Regulation*, Feb. 3, 1999, at 42.

ANALYSIS OF FORMS OF REGULATION

The question of how to most effectively regulate a profession accompanies a finding of the need to regulate. Alternative forms of regulation are discussed below. For each approach, a different type of statute and a different level of protection can be expected.

This analysis shows that state licensing and registration are appropriate for landscape architecture. Furthermore, the research for this report revealed that various alternatives to licensing and registration have been attempted, and in each instance involved costs equal to or greater than a professional board, with few of the benefits.

Terminology

Prior to analysis of the various forms of regulation, it is helpful to understand the meaning of several terms as used in this report and in other discussion of professional regulation.

Self-regulation. In the case of landscape architecture, architecture, and engineering, a form of licensing and registration known as “self-regulation” is commonly adopted. The distinctive feature of professional self-regulation is that the state enables a board composed at least 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.

Licensing, Certification, and Registration. A confusing array of terms is 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.

“License.” A license grants an individual²⁸¹ 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.

In some contexts, the term “certification” is used to denote a credential issued by a private organization; this form of regulation is discussed below 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.²⁸² 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.

Regulation of the design professions has under all these forms of regulation (licensing, certification, registration) been associated with self-regulation, as defined above, under a state board.

²⁸¹ Corporations and other business entities may also be granted licenses if business practice provisions are included in the enabling legislation.

²⁸² 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.

DEREGULATION

Extensive discussion of the deregulation of landscape architecture is contained in the sections below regarding private boards and civil litigation.²⁸³ 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, civil litigation and private boards do not have the capacity to establish a comprehensive, enforceable set of professional standards, nor do these approaches provide an effective mechanism for preventing negligence and incompetence.

It has been suggested that consumers and the general public in states without landscape architecture regulation are able to 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.²⁸⁴ 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.²⁸⁵

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 re-check technical documents is time-consuming and costly.²⁸⁶

As noted above, search costs for competent practitioners may be significant when there is no meaningful and accessible credential upon which to assess competence.²⁸⁷ Lacking a credential and lacking professional status, consumers of landscape architecture services may

²⁸³ See, *supra* note 256 (sunset of landscape architecture regulation would negatively impact the public).

²⁸⁴ 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.

²⁸⁵ 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.”).

²⁸⁶ *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).

²⁸⁷ See, *supra* note 240 (regulation increases awareness of practitioner qualifications).

be misled, or even compelled, to rely entirely on a competitive bidding process to procure landscape architecture services.²⁸⁸ 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.²⁸⁹

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.²⁹⁰

Deregulation is at odds with the abundant evidence of a need to regulate landscape architecture. This fact bears repeating: Failure to regulate landscape architecture is a failure to protect public health, safety, and welfare on the many projects and in the many places designed and built as directed by landscape architects.

²⁸⁸ 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.

²⁸⁹ Louisiana v. McIlhenny, 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).

²⁹⁰ 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).

CIVIL LITIGATION

As a substitute for 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, but in those cases to a degree that justifies litigation; and 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.

Above, this report provided extensive evidence of fatalities and disabling injuries in cases within the scope of professional landscape architecture. These cases are only a fraction of the claims against landscape architects and non-landscape architect practitioners.²⁹¹ Moreover, as detailed in this section and 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.

Recent 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.”²⁹² 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.²⁹³ This section provides examples of legal considerations that make the civil courts a poor

²⁹¹ 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. 2002 Federal Judicial Caseload Statistics, available at <http://www.uscourts.gov/caseload2002/contents.htm>.

²⁹² W. Kip Viscusi, ed., *Regulation Through Litigation*, Washington, D.C.: Brookings Institution Press, 2002, at 1.

²⁹³ 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”).

means to deter negligence and incompetence and of little value to consumers attempting to ascertain professional competence.

CONSUMER PROTECTION LAWS

The regulation of design professions through a state board provides for investigation and discipline when consumers have been financially harmed due to technical defects.²⁹⁴ 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.²⁹⁵ For landscape-related professionals, the recent Colorado case of *State v. Applied Landscape Solutions*²⁹⁶ is an example of a state consumer protection act being used to take action against an unethical and technically incompetent practitioner. In that case, a 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 over 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.

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 technically competent or trained (i.e., irrigation design, drainage, stair design) and are rarely held accountable through consumer protection laws.²⁹⁷
- 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.²⁹⁸

Consumer protection laws are backward-looking and do not incorporate technical standards for specific professional products. These laws accordingly offer little protection above and beyond the negligence actions discussed below.

²⁹⁴ See *supra* note 204.

²⁹⁵ See Colorado Department of Regulatory Agencies, *Sunrise Review of Hearing Aid Dispensers*, 1994, at 9 (state consumer protection act insufficient to address harm).

²⁹⁶ *State v. Applied Landscape Solutions*, *supra* note 171.

²⁹⁷ *Applied Landscape Solutions* was the first landscape contractor sued by the Boulder District Attorney's Office.

²⁹⁸ 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.

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.²⁹⁹ 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.

NEGLIGENCE AND PROFESSIONAL NEGLIGENCE ACTIONS

Compared with state registration, certification, and licensing programs, 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 in cases discussed above. Complementary professional regulation mitigates the incidence and severity of negligence cases and establishes a standard of care consistent with consumer expectations.

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.³⁰⁰

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.³⁰¹ The following paragraphs discuss the impact of several common legal principles on recovery against negligent landscape practitioners. In a number of situations, lack of complementary professional regulation inhibits recovery in the civil courts.

²⁹⁹ Colorado Department of Regulatory Agencies, *Sunrise Review of Investment Advisors*, 1997, at 14 (“DORA [the Department of Regulatory Agencies] has consistently held that adequate regulation closest to the people is the most effective form of government. State regulation, when appropriate, is more flexible to meet the demands of Colorado citizens and provides for greater accountability of the regulator than federal regulation.”).

³⁰⁰ 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).

³⁰¹ See *Loup-Miller v. Brauer & 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).

Sovereign Immunity

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. In general, governments are not liable for personal injury, with limited exceptions.³⁰² The case of *Springer v. City and County of Denver*³⁰³ is an example. In *Springer*, a wheelchair user was injured at the site of a 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 the civil courts for remedial action can be unavailing for injured victims and no deterrent for negligent design professionals. 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 in a case of negligent design.

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*,³⁰⁴ 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. In *Morocco v. Piccardi*,³⁰⁵ a design defect caused ice to accumulate in front of a private residence, leading to a slip and fall injury. The primary factual difference between the two cases was that a public entity owned the property in *Parks*, while the site of the accident in *Morocco* was private property. While the plaintiff was able to recover for injuries caused by the design defect in *Morocco*, the plaintiff in *Parks* was not able to obtain a judgment due to the sovereign immunity of the defendant public agency.

Given the considerable 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,³⁰⁶ and public agencies may have little incentive to consider liability for defective plans in the selection of design professionals.

Expert Testimony and 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

³⁰² See, e.g., Colo. Rev. Stat. § 24-10-106 (governmental immunity).

³⁰³ *Springer v. City and County of Denver*, *supra* note 108.

³⁰⁴ *Parks v. State*, *supra* note 109.

³⁰⁵ *Morocco v. Piccardi*, *supra* note 109.

³⁰⁶ A professional license is a key element in judicial findings of such duties. See *Moransis v. Heathman*, *infra* note 315; *Dufficy & Sons, Inc. v. BRW, Inc.*, *infra* note 318.

construction defects.³⁰⁷ Proof of professional negligence, a breach of this heightened standard of care, will often depend on expert testimony.³⁰⁸

Beyond the sheer time and expense of resort to the civil courts, the risk placed on consumers of landscape architecture services is exacerbated by the lower standard of care that landscape architects may be held to without statutory recognition of a professional status. In Colorado, the Court of Appeals specifically rejected the admission of expert testimony relating to landscape architecture services, reasoning in part that no case or statute in Colorado designates the producers of design specifications and contract documents for golf courses and related facilities, who in practice are most often landscape architects, as professionals.³⁰⁹

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.³¹⁰ In *Kelley and Kelley v. Hallum*,³¹¹ 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.

Today, in unregulated states, a victim of landscape architectural malpractice must 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.

The Economic Loss Rule

The economic loss rule is premised on the assumption that landscape architects and other professionals serve their clients through a contractual relationship. 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 economic damages is an action on the contract. In effect, the

³⁰⁷ James Acret, *Architects & Engineers*, 2nd Ed., McGraw-Hill Book Co., at 199.

³⁰⁸ *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”).

³⁰⁹ *Town of Breckenridge v. Golfcourse*, 851 P.2d 214, 216 (Colo. Ct. App. 1992), *cert. denied* (1993).

³¹⁰ *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.”).

³¹¹ *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.

rule precludes clients of various professions from bringing a suit for negligence, even if the professional was negligent.³¹²

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 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.³¹³ The rule has specifically applied in cases barring negligence claims against landscape architects.³¹⁴

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*,³¹⁵ 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.³¹⁶

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.³¹⁷

In a state where landscape architecture is unregulated, the results under the economic loss rule are unclear. In Colorado, a 2002 Court of Appeals decision appears to adopt the rule in *Moransis*, where the existence of statutory duties determines the availability of a negligence action for economic damages. In that case, *Dufficy & Sons, Inc. v. BRW, Inc.*,³¹⁸ the court

³¹² 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...”).

³¹³ *Bersthauer/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).

³¹⁴ *Widett v. U.S. Fidelity & Guarantee Co.*, 815 F.2d 885 (2nd Cir. 1987) (economic loss rule applies to negligence claim against landscape architect).

³¹⁵ *Moransis v. Heathman*, 744 So.2d 973, 983 (Fla. 1999).

³¹⁶ *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.”).

³¹⁷ *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.”).

³¹⁸ *Dufficy & Sons, Inc. v. BRW, Inc.*, 74 P.3d 380 (Colo. App. 2002) (“Contractors clearly are subject to a substantial risk of loss by relying on the plans and specifications prepared by licensed engineers that they are obligated to implement.”).

found that a subcontractor's detrimental reliance on defective plans, stamped by a licensed engineer, gave rise to a negligence claim based on a professional duty of care independent of contractual duties. The project in the case involved specification of paint for bridge structures, a category of highway enhancement design that may also be performed by landscape architects. However, given the court's finding in *Dufficy* that licensing and a professional stamp give rise to special duties, it appears that the economic loss rule would remain a bar in Colorado to an identical claim against a landscape architect.

Negligence Principles: General Remarks

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 legal doctrines, such as the economic loss rule or assumption of risk, 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 significant risks on consumers and the public at large.

PRIVATE BOARDS

Some functions of a board of landscape architects do not 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,³¹⁹ the police power is an exclusive government function. Any attempt to delegate regulatory authority to a private professional board rests on uneasy legal ground.³²⁰ 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 authority.³²¹ 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 prone to poor performance as a regulator of the public interest. 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). Membership in the 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. 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 the disciplined 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. Landscape architecture in the state of Oregon was in fact briefly “regulated” by a non-profit corporation, after the sunset of the State Board of Landscape Architects. It soon became clear that the non-profit corporation could not maintain the functions of the former state

³¹⁹ North Carolina, for example, retains a private firm to administer its landscape architecture board.

³²⁰ *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).

³²¹ *See* Phillip Areeda, *Antitrust Law: An Analysis of Antitrust Principles & Their Application*, Aspen Law and Business Publishing, 2000, at 482-485.

board, and lawmakers in Oregon determined that public health, safety, and welfare would be best served by reenacting legislation to create a state board.³²² 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.”³²³

³²² *Response to Act 142, P.N. 1457, Sunset Legislation – State Board of Landscape Architects*, *supra* note 56, at 22.

³²³ *Id.*, at 25.

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.

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. The legal costs and legal burdens upon a consumer to recover on a bond are significant, and bonding companies, with the advantage of (and incentive of) large amassed financial resources, tend to strongly defend against consumer claims. As a result, bonding provides very little 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.

REGISTRATION AND CERTIFICATION

Registration and certification statutes provide consumers with a meaningful credential upon which to assess minimum competence. 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, non-practitioner 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.

There is a demand and a need for state examination of landscape architects. Among the public policy reasons why landscape architecture should be a regulated profession alongside architects and engineers, 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.³²⁴ As another example, a court may require adversarial parties to rely on the professional opinion of a landscape architect to resolve a property dispute.³²⁵

The merit of state certification is 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.³²⁶ As stated in a letter from the Chief Engineer for the Virginia Department of Transportation, supporting landscape architecture regulation:

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.³²⁷

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

³²⁴ 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.

³²⁵ *Baillargen 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.).

³²⁶ See discussion of UBC and IBC stamped drawings on page 52.

³²⁷ Letter from J. S. Hodge, *supra* note 207.

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 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 is of significant value to consumers and the end users of landscape architectural work.

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, preventing incompetent practitioners from offering services that expose consumers 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, testing individuals who will practice landscape architecture for minimum competence, is the logical mechanism to mitigate the most harmful impacts of negligence and incompetence.³²⁸

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. 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). A professional board with expertise in the standards of landscape architectural practice is an efficient and responsive forum 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.”³²⁹

³²⁸ 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.”).

³²⁹ Roger G. Noll, *The Political Economy of Deregulation*, American Enterprise Institute, 1983, at 161.

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, as the United States Court of Appeals for the Sixth Circuit found in a recent case, 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.³³⁰ 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,³³¹ 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.³³²

Landscape architecture sunset review and its equivalents 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.”³³³ That notion is contradicted by the facts: Licensing does nothing more than give landscape architects marketplace parity with other design professionals. The idea 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, amphitheatres, plazas, and other public places.

³³⁰ *Craigmiles v. Giles*, No. 00-6281 (6th Cir. , Dec. 6, 2002).

³³¹ 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.”).

³³² *A review of Chapter 481, Part II, Florida Statutes, Landscape Architecture*, *supra* note 256, 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”).

³³³ Letter regarding Sunset Review of [the California] Board of Landscape Architects, Center for Public Interest Law, Nov. 25, 1995, at 4 (emphasis added).

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.

As of 2003, professional regulation in every state except Colorado, New Hampshire, and Vermont addresses landscape architecture, though a minority of these forty-seven states protect public health and safety only to the extent possible under a state certification law. 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 harm to children, pedestrians, major public projects, and private property. Both state certification and licensing reduce 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 both practitioners who currently operate without accountability to any disciplinary authority and non-practitioners who purport to offer 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 forty-seven 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.