

ALASKA STATE LEGISLATURE

LEGISLATIVE BUDGET AND AUDIT COMMITTEE

Division of Legislative Audit



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SUMMARY OF: A Sunset Review of the Department of Commerce, Community, and Economic Development, Board of Registration for Architects, Engineers, and Land Surveyors, October 6, 2004.

PURPOSE OF THE REPORT

In accordance with Title 24 and Title 44 of the Alaska Statutes, we have reviewed the activities of the Board of Registration for Architects, Engineers, and Land Surveyors (BRAELS). As required by AS 44.66.050(a), the legislative committees of reference are to consider this report during the legislative oversight process involved in determining if the board should be reestablished. Currently, AS 08.03.010(c)(3) states that the board will terminate on June 30, 2005, and will have one year from that date to conclude its affairs. If the legislature does not extend the termination date for the board, BRAELS will have one year to conclude its administrative operations.

REPORT CONCLUSIONS

In our opinion, the termination date for the Board of Registration for Architects, Engineers, and Land Surveyors should be extended. The board is operating in the public interest by effectively regulating the individuals who hold themselves out to the public as registered architects, engineers, land surveyors, and landscape architects.

Alaska Statute 08.03.010(c)(3) requires BRAELS to be terminated on June 30, 2005. If no action is taken by the legislature, under AS 08.03.020, the board will have a one-year period to administratively conclude its affairs. We recommend the legislature extend the board's termination date to June 30, 2009.

FINDINGS AND RECOMMENDATIONS

Prior Audit Recommendation No. 1

The legislature should consider changes to the statutes mandating that BRAELS require continuing professional education of its licensees.

At the time of the prior review, no statutory or regulatory provision existed requiring registered professionals to obtain specified continuing education (CE) as a condition for registration renewal. The purpose of requiring continuing education for licensed

professionals is to promote professional practices consistent with current standards and information. The board supported the idea of voluntary continuing education for registrants; however, it did not have a consensus to make such CE mandatory.

Legislative Audit's Current Position

The prior finding has been partially resolved. The board received statutory authority to adopt regulations requiring CE for professionals it regulates. The board, however, has yet to adopt any mandatory CE regulations. We continue to recommend the board either develop appropriate mandatory CE requirements for its professional registrants or the legislature considers making such requirements mandatory by statute.

Recommendation No. 2

BRAELS should arrange for a comprehensive study regarding the public benefits and related off-setting costs that may be involved with recognizing additional engineering specialties in the State's licensing structure.

Individuals have appeared before BRAELS in recent years asking that the board expand the registrant categories and, accordingly, the number of people who can use the PE designation in commercial practice. Most specifically, individuals who have received accredited academic training in the field of environmental engineering or were recognized as a PE in another jurisdiction after passing only the NCEES environmental engineering examination, have sought BRAELS registration. To date, the board has shown no inclination to seek legislative changes to the current engineering licensure process.

We suggest BRAELS consider partnering with State professional organizations and/or the engineering schools affiliated with the University of Alaska to conduct a study. The study could comprehensively address public policy benefits and costs which would provide guidance whether the number of PE specialties should be expanded.

Recommendation No. 3

The legislature should consider making the landscape architect representative to BRAELS a full, voting member.

November 1, 2004

Members of the Legislative Budget
and Audit Committee:

In accordance with the provisions of Title 24 and Title 44 of the Alaska Statutes, the attached report is submitted for your review.

DEPARTMENT OF COMMERCE, COMMUNITY,
AND ECONOMIC DEVELOPMENT
BOARD OF REGISTRATION FOR ARCHITECTS,
ENGINEERS, AND LAND SURVEYORS

October 6, 2004

Audit Control Number

08-20028-05

This audit was conducted as required by AS 44.66.050 and under the authority of AS 24.20.271(1). Alaska Statute 44.66.050(c) lists criteria to be used to assess the demonstrated public need for a given board, commission, agency, or program subject to the sunset review process. Currently under AS 08.03.010(c)(3), the Board of Registration for Architects, Engineers, and Land Surveyors is scheduled to terminate on June 30, 2005. If the legislature takes no action to extend the termination date, the board would be allowed one year in which to conclude its administrative operations. We recommend that the legislature extend the board's termination date to June 30, 2009.

The sunset review was conducted in accordance with generally accepted government audit standards. Fieldwork procedures utilized in the course of developing this report are set out in the Objectives, Scope, and Methodology section.

Pat Davidson, CPA
Legislative Auditor

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OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Title 24 and Title 44 of the Alaska Statutes, we have reviewed the activities of the Board of Registration for Architects, Engineers, and Land Surveyors (BRAELS). As required by AS 44.66.050(a), the legislative committees of reference are to consider this report during the legislative oversight process involved in determining if the board should be reestablished. Currently, AS 08.03.010(c)(3) states that the board will terminate on June 30, 2005, and will have one year from that date to conclude its affairs. If the legislature does not extend the termination date for the board, BRAELS will have one year to conclude its administrative operations.

Objectives

The three central, interrelated objectives of our report are:

1. To determine if the termination date of the board should be extended.
2. To determine if the board is operating in the public interest.
3. To determine if the board has exercised appropriate regulatory oversight of architects, engineers, land surveyors, and landscape architects.

The assessment of the operations and performance of the board was based on criteria set out in AS 44.66.050(c). Criteria set out in this statute relates to the determination of a demonstrated public need for the board.

Scope and Methodology

Under the direction and supervision of the Division of Legislative Audit, another auditor conducted most of this review. We followed professional standards to determine that the other auditor was independent and their work was competent and sufficient.

The major areas of our review were board proceedings, licensing, complaint investigation, and resolution functions for fiscal years ending June 30, 2001 through 2004. During the course of our examination we reviewed and evaluated the following:

1. Applicable statutes and regulations.
2. Compliance with statutes and regulations related to the Board of Registration for Architects, Engineers and Land Surveyors.

3. Minutes of meetings of the board.
4. Licensing and investigation files.
5. Annual reports issued by the Board of Registration for Architects, Engineers and Land Surveyors.
6. Complaints filed with the Department of Commerce, Community, and Economic Development, Division of Occupational Licensing, Office of the Ombudsman, Human Rights Commission, and Equal Employment Opportunity Commission.
7. Reading and correspondence files maintained with the Department of Commerce, Community, and Economic Development, Division of Occupational Licensing.
8. Interviews with employees of the Department of Commerce, Community, and Economic Development, Division of Occupational Licensing.
9. Other documents and interviews deemed pertinent.

ORGANIZATION AND FUNCTION

The Board of Registration for Architects, Engineers and Land Surveyors (BRAELS) is a regulatory board consisting of 11 members appointed by the governor. The board consists of two civil engineers, two land surveyors, one mining engineer, one electrical or mechanical engineer, one engineer from another branch of the profession of engineering, two architects, one landscape architect, and one public member.

Alaska Statute requires each board member to have been a resident in the State for three consecutive years immediately preceding an appointment to BRAELS.

Additionally, except for the public member and the nonvoting landscape architect position, board members must be registered and have a minimum of five years of professional practice in their field.

Alaska Statutes 08.48.101 and 08.48.111 establish the powers of the board. They include:

1. Adopting regulations.
2. Describing the contents, conducting and establishing a minimum score for passing examinations.
3. Suspending, revoking, or refusing to issue or renew a license.
4. Issuing licenses to practice to architects, engineers, and land surveyors who meet standards of education and training determined to be necessary by the board.

Department of Commerce, Community, and Economic Development, Division of Occupational Licensing

The Department of Commerce, Community, and Economic Development, Division of Occupational Licensing, provides administrative and investigative assistance to the Board of Registration for Architects, Engineers and Land Surveyors. Administrative assistance includes budgetary services and functions such as collecting fees, maintaining files, receiving and issuing application forms, and publishing notices of examinations and meetings.

BOARD OF REGISTRATION FOR ARCHITECTS, ENGINEERS AND LAND SURVEYORS

As of June 30, 2004

Professional Members

Donald Iverson, Chair, Civil Engineer
Clifford Baker, Lands Surveyor
Boyd Brownfield, Civil Engineer
Linda Cyra-Korsgaard, Landscape Architect
Craig Fredeen, Mechanical Engineer
Robert Gilfilian, Civil Engineer
Richard Hughes, Mining Engineer
Kenneth Maynard, Architect
Scott McLane, Lands Surveyor
Patricia Peirsol, Architect

Public Member

Kimberly Mills

Alaska Statute 08.01.065, mandates the Department of Commerce, Community, and Economic Development, with the concurrence of the board, adopt regulations to establish the amount and manner of payment of application fees, examination fees, license fees, registration fees, permit fees, investigation fees, and all other fees as appropriate for the occupations covered by the statute.

Alaska Statute 08.01.087 empowers the Department of Commerce, Community, and Economic Development, Division of Occupational Licensing, with the authority to act on its own initiative or in response to a complaint. The division may:

1. Conduct an investigation if it appears a person is engaged or is about to engage in a prohibited professional practice.
2. Bring an action in Superior Court to enjoin the act.
3. Examine the books and records of an individual.
4. Issue subpoenas for the attendance of witnesses and records.

REPORT CONCLUSIONS

In our opinion, the termination date for the Board of Registration for Architects, Engineers, and Land Surveyors (BRAELS) should be extended. The board is operating in the public interest by effectively regulating the individuals who hold themselves out to the public as registered architects, engineers, land surveyors, and landscape architects.

BRAELS serves a public purpose and has demonstrated an ability to conduct its business in a satisfactory manner. The board continues to develop regulations to improve its effectiveness and ensure that registered architects, engineers, land surveyors, and landscape architects licensed in the State of Alaska are competent and consistently practiced within the requirements and ethical standards of the respective professions involved.

Alaska Statute 08.03.010(c)(3) requires BRAELS to be terminated on June 30, 2005. If no action is taken by the legislature, under AS 08.03.020, the board will have a one-year period to administratively conclude its affairs. We recommend the legislature extend the board's termination date to June 30, 2009.

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FINDINGS AND RECOMMENDATIONS

In our prior sunset audit report,¹ we made three recommendations. Two of these recommendations have been satisfactorily addressed; the remaining is reiterated as Prior Audit Recommendation No. 1 below. Additionally, Recommendations No. 2 and No. 3 are new recommendations.

Prior Audit Recommendation No. 1

The legislature should consider changes to the statutes mandating that BRAELS require continuing professional education of its licensees.

At the time of the prior review, no statutory or regulatory provision existed requiring registered professionals to obtain specified continuing education (CE) as a condition for registration renewal. The purpose of requiring continuing education for licensed professionals is to promote professional practices consistent with current standards and information. The board supported the idea of voluntary continuing education for registrants; however, it did not support statutory or regulatory changes that would make such CE mandatory.

Legislative Audit's Current Position

The prior finding has been partially resolved. The board received statutory authority² to adopt regulations requiring CE for professionals it regulates. The board, however, has yet to adopt any mandatory CE regulations.

The current board supports professionals obtaining professional education. Continuing professional education is critical for these professionals to stay competitive in their respective fields. While the board has not yet adopted a continuing education program – it continues to consider a mandatory CE program and is consulting professional societies for their input.

In recent annual reports, the board has stated it believes most licensees are voluntarily complying with the continuing education requirements of various professional societies. While many national organizations maintain continuing education requirements as a requirement for membership, there is no legal, statutory, or ethical mandate that requires licensees in the State of Alaska to maintain current affiliation with a national organization. Accordingly, there is no assurance that registered professional architects, engineers, and land

¹ Division of Legislative Audit's *Department of Community and Economic Development, Board of Registration for Architects, Engineers, and Land Surveyors, October 20, 2000*, Audit Control No. 08-20001-00.

² CH 66 SLA 2004

surveyors keep abreast of current developments and maintain a minimum level of competency in their professional field.

Based on review of continuing education requirements of other state boards and licensing jurisdictions, the national trend is to require continuing education for engineers and other construction-related professionals. Currently, 24 states have mandatory continuing education requirements for professional engineers and 31 jurisdictions require continuing education for land surveyors.

The National Council of Examiners for Engineers and Surveyors (NCEES)³ has set out in its “*Model Law*” and “*Model Rules*,” for licensing jurisdictions, specific suggested requirements related to CE for engineers and land surveyors. Similarly, the American Institute of Architects (AIA) has established minimum guidelines for aiding licensing jurisdictions in their efforts of establishing minimum continuing education requirements. Use of such guidelines in developing state requirements would promote consistency with other jurisdictions and not necessarily create an undue burden on professionals that choose to relocate from one jurisdiction to another.

We continue to recommend the board either develop appropriate mandatory CE requirements for its professional registrants or the legislature considers making such requirements mandatory by statute.

Recommendation No. 2

BRAELS should arrange for a comprehensive study regarding the public benefits and related off-setting costs that may be involved with recognizing additional engineering specialties in the State’s licensing structure.

NCEES is the organization primarily responsible for preparing and scoring the examinations used for assessing the qualifications of applicants for engineering licensure. Examinations cover a broad spectrum of specialized engineering disciplines. In addition to the more traditional, long-time recognized fields related to chemical, civil, electrical, and mechanical engineering, NCEES also provides examinations for 13 other specialty areas, or branches (disciplines and subdisciplines) of engineering.⁴ Such a variety of examinations allows a large array of individuals, with various specialized training to be licensed and recognized as a professional engineer. In addition to the core engineering disciplines, Alaska recognizes mining and petroleum engineers with the designation of professional engineer.

³ NCEES is a federation of engineering licensing boards in all 50 states, the District of Columbia, and four territories or possessions (Puerto Rico, Guam, Virgin Islands, and the Northern Marina Islands). Membership in NCEES also includes 14 separate boards for land surveyors and one independent board for structural engineers. In all, NCEES’ membership is made up of 70 boards. Like Alaska, in many states the engineering or engineering-surveying board also regulates one or more other professions such as architects and landscape architects.

⁴The disciplines involved are: (1) agricultural; (2) building architectural; (3) control systems; (4) environmental; (5) fire protection; (6) industrial; (7) metallurgical; (8) mining and mineral; (9) naval architectural and marine; (10) nuclear; (11) petroleum; (12) structural engineering I; and, (13) structural engineering II.

One of these specialty areas is environmental engineering. In recent years, individuals have appeared before the board requesting it to consider registering environmental engineers. Such action would allow the individuals with training and background in this area, who have passed the relevant NCEES examination, to be able to hold themselves out to the public as a professional engineer.

Alaska, like California and ten other jurisdictions, license by discipline.

Alaska is one of 12 jurisdictions that register engineers by specific discipline.⁵ In Alaska, discipline categories are limited to individuals passing the NCEES examinations for Civil, Electrical, Mechanical, Chemical, Mining/Mineral, and Petroleum engineering. Successful applicants earn a given designation depending on the examination(s) they took and passed. Although all individuals can use the title “Professional Engineer,” or “PE” – separate licenses are required for each branch of engineering in which the individual wants to practice.

PE discipline and related scope of practice are reflected in review of construction documents.

In engineering, the central procedure to affix professional responsibility is by the use of seals and signatures. Engineers place their seal or signature on a document using an embossing stamp or, increasingly, a digital representation of such a stamp, listing their name, area of licensed discipline, and license number. Under state regulation, an engineering registrant may not sign or seal a plan or document dealing with professional services in which they are not qualified by “*virtue of education, experience, or registration.*”

State regulations define what constitutes the practice of chemical engineering, civil engineering, electrical engineering, mechanical engineering, mining engineering, and petroleum engineering. These regulatory definitions of the various branches of engineering, coupled with the prohibition against registrants sealing documents or plans outside their area of registration, establishes a scope of practice for each discipline. The scope of practice for each engineering discipline may, to varying degrees, overlap with the other disciplines. Accordingly, enforcement of such regulatory requirements often involves making subjective judgments about where various specialties may or may not overlap. However, with only six recognized disciplines in Alaska, such overlap in the scope of practice between engineering specialties is lessened.

In over 40 other licensing jurisdictions, applicants take examinations in one of up to 16 specific branches of engineering. Upon successful completion and licensure, the engineer may then practice in any area in which they are competent. All licensed engineers are called

⁵According to the BRAELS chair, other jurisdictions that license by discipline are California, Arizona, Nevada, West Virginia, Nebraska, Hawaii, Wyoming, Vermont, Rhode Island, Guam, and the Northern Mariana Islands. He also noted these states represent almost 22 percent of registered engineers.

“Professional Engineers or PE,” regardless of the examination they took and passed.⁶ In contrast, within states like Alaska and California, the PE designation is limited to much fewer engineering disciplines and the scope of practice of each discipline is set out explicitly in state regulations.

Whereas many state boards administer most, if not all, NCEES examinations; Alaska is selective and consistent with the eventual licensing designations, choosing not to administer most of the nationally-available examinations.

Recently, applicants with specialized engineering backgrounds have sought PE registration.

As previously mentioned, individuals have appeared before BRAELS in recent years asking that the board expand the registrant categories and, accordingly, the number of people who can use the PE designation in commercial practice. Most specifically, individuals who have received accredited academic training in the field of environmental engineering or were recognized as a PE in another jurisdiction after passing only the NCEES environmental engineering examination, have sought BRAELS registration. To date, the board has shown no inclination to seek legislative changes to the current engineering licensure process.

The board’s administrator has characterized the board’s position as stemming from the uniqueness of Alaska’s construction and related engineering environment. BRAELS looks upon engineers who are licensed in Alaska as representing the core disciplines that are most applicable to the State’s resource extraction and construction activities. In the absence of uniform building codes in much of Alaska, it is the engineering review and certification – the aforementioned sealing or “stamping” of plans – that best serves the public protection.

Public may be better served through recognition of increased specialization.

Alaska presents unique engineering challenges because of its climate, seismic risks, and lack of consistent local government oversight on many construction projects in the unorganized borough. Such factors serve to place more burdens on the licensing and practice of engineering to promote public protection. Given the trends in engineering over the years to higher degrees of specialization, it may be that public protection is better served by the recognition of more specialized disciplines.

As stated earlier, California has a licensing structure for engineers similar to Alaska. A comprehensive study of California’s engineering licensing structure evaluated the merits of expanding the use of the PE designation to allow specialists to utilize that title. The study concluded that licensing of engineers should be expanded to cover more disciplines – primarily because of the demands of modern construction and the need for better public protection. The California legislature however, has not acted on the recommendations of the study.

⁶ In all states, as either a matter of law or professional ethics, engineers are constrained to practice only in areas in which they are competent and proficient by reason of education or experience.

Such an assessment is beyond the scope of a sunset audit review. The California study considered such factors as:

- the academic training involved with the various engineering specialties and the degree to which subject matter overlapped with the “central” disciplines or was unique to a given discipline.
- the content of the various NCEES examinations and the degree to which subjects covered overlap with the traditional “central” disciplines or was unique to the specialty area.
- the complaints, investigations, disciplinary actions involving licensees to determine if engineering failures could be attributable to lack of specialized expertise.
- the nature of the state’s construction marketplace, and whether there was a demand for more specialized engineering services that could be utilized in projects to the same extent as that of licensed engineers.

A study that considered such factors, as they applied to Alaska, would provide more insight into where the best interests of the public may lie when it comes to licensing engineers. We suggest BRAELS consider partnering with State professional organizations and/or the engineering schools affiliated with the University of Alaska to conduct such a study. The study could comprehensively address public policy benefits and costs which would provide guidance whether the number of PE specialties should be expanded.

Recommendation No. 3

The legislature should consider making the landscape architect representative to BRAELS a full, voting member.

In 1998, the legislature began the process of licensing the practice of landscape architecture in Alaska. The profession was placed under BRAELS, and legislation setting up the regulatory structure amended the State’s uncodified law to provide for a temporary, nonvoting representative of the new profession to sit on the board.⁷ The uncodified statute set a lapse date of June 30, 2001, for the landscape architect nonvoting seat.

In 2001 legislation extending the termination date for BRAELS, the nonvoting seat was extended through June 30, 2005 – the new “sunset date” for the board. This 2001 amendment also allowed the individual to be reimbursed for travel and per diem expenses. Similar to the requirements for BRAELS members from the engineering, architectural, and land surveying professions, the individual appointed to this position is required to have been a State resident for the three years immediately prior to appointment.

⁷ See section 31 of Chapter 47, SLA 1998.

We suggest the legislature consider amending BRAELS' statutes to make the landscape architect position a permanent voting member of the board. While such action would increase the size of BRAELS to 11 voting members, the cost of meetings would not be appreciably increased given the effect of the 2001 legislation. As shown by Exhibit 2 on page 17 of this report, the number of landscape architects is small but close to the number of mining engineers – a group that by State law is specifically afforded representation on the board.

A ANALYSIS OF PUBLIC NEED D

The following analyses of board activities relate to the public-need factors defined in AS 44.66.050(c). These analyses are not intended to be comprehensive, but address those areas we were able to cover within the scope of our review.

The extent to which the board, commission, or program has operated in the public interest.

The board through its administration of architects, engineers, land surveyors, and landscape architects licensure, has endeavored to present competent professionals to the public. There is a public need for this board because of the professional expertise required to practice the various professions within its purview. The licensing of applicants who meet necessary qualifications is necessary to protect the public's safety, health, and welfare.

The board is responsible for adopting regulations to ensure only persons with the proper qualifications are admitted into the profession. The board disciplines, suspends, or revokes licenses of practitioners who have committed acts listed as violations under state law. Licensees are required to stamp final drawings, specifications, surveys, plats, plates, reports, or similar documents with a seal bearing the registrant's name, registration number, and the profession for which they are registered. By affixing this seal and signing the documents, the registrant certifies that these documents were prepared by or under the registrant's direct supervision, and the registrant has met the minimum standards set to protect public safety, health, and welfare.

The board has established regulations governing its duties and licensure requirements, enforces the laws for issuing licenses in a uniform and consistent manner, holds meetings, and administers examinations in accordance with statutory requirements.

The extent to which the operation of the board, commission, or agency program has been impeded or enhanced by existing statutes, procedures, and practices that it has adopted, and any other matter, including budgetary, resource, and personnel matters.

Alaska Statute 08.01.065(c) states, "... *the total amount of fees collected for an occupation approximately equals the actual regulatory costs for the occupation.*" Further, AS 08.01.065(f) requires, "... *the total amount of fees collected by the State Board of Registration for Architects, Engineers, and Land Surveyors approximately equals the total regulatory costs of the department and the board for all occupations regulated by the board.*"

The revenues for the Board of Registration for Architects, Engineers, and Land Surveyors come from licensing and renewal fees. Renewals are conducted on a biennial basis and are due by December 31st of odd-numbered years. This creates a two-year cycle in board

revenues, with BRAELS receiving most of its revenues during the renewal period. We reviewed the internal records maintained by the Division of Occupational Licensing (OccLic) for revenues and expenditures associated with BRAELS. The schedule in Exhibit 1 reflects financial information of the board for FY 02, FY 03, and FY 04. We did not audit this information, but present it for general information purposes.

Exhibit 1

State of Alaska State Board of Registration for Architects, Engineers, and Land Surveyors Schedule of License Revenues and Board Expenditures FY 02 - FY 04 (Unaudited)			
	<u>FY 04</u>	<u>FY 03</u>	<u>FY 02</u>
Revenue	\$ <u>1,174,500</u>	\$ <u>166,600</u>	\$ <u>1,143,600</u>
Direct Expenditures			
Personal Services	254,400	215,000	212,200
Travel	50,800	51,700	49,500
Contractual	168,200	84,200	106,700
Supplies	1,000	1,800	2,100
Equipment	<u>-0-</u>	<u>700</u>	<u>-0-</u>
Total Direct Expenditures	474,400	353,400	370,500
Indirect Expenditures	<u>314,600</u>	<u>298,100</u>	<u>264,500</u>
Total Expenditures	789,000	651,500	635,000
Net Income (Loss)	<u>385,500</u>	<u>(484,900)</u>	<u>508,600</u>
Beginning Cumulative Surplus (Deficit)	84,100	569,000	60,400
Ending Cumulative Surplus (Deficit)	\$ <u><u>469,600</u></u>	\$ <u><u>84,100</u></u>	\$ <u><u>569,000</u></u>

During the period covered by the sunset review, it appears licensing fees were adequately set. The board ended FY 01 with a net balance of just over \$60,000 and has managed to maintain sufficient surplus to carry them through the lower revenue nonrenewal years without incurring a deficit. Given the number of professions and the total number of licensees the board regulates, the cumulative surplus of \$469,600 at the FY 04 year-end is not unreasonable given expected lower revenues in FY 05.

The extent to which the board, commission, or agency has recommended statutory changes that are generally of benefit to the public interest.

Several changes were made to the board's statutes during the period under review. The board supported these changes, with the more significant issues being:

- (1) the addition of Limited Liability Companies and Limited Liability Partnerships to the organizations authorized to practice under the jurisdiction of BRAELS (Chapter 38, SLA 2000); and,
- (2) the authority for BRAELS to establish continuing education requirements for individuals regulated by the board (Chapter 66, SLA 2004).

The extent to which the board, commission, or agency has encouraged interested persons to report to it concerning the effect of its regulations and decisions on the effectiveness of service, economy of service, and availability of service that it has provided.

Regulatory changes made by the board included:

- (1) acceptance of NCEES "model law engineer" council record as meeting minimum standards for engineer registration by comity (12 AAC 36.105(f));⁸
- (2) a requirement that a minimum of two years of course work in an ABET (Accreditation Board for Engineering and Technology) accredited engineering curriculum be completed by applicants prior to taking the fundamentals and professional engineering examinations (12 AAC 36.062);
- (3) allowing disciplinary sanctions against an Alaskan registrant, if another jurisdiction has disciplined the individual (12 AAC 36.320); and,
- (4) revision of the expired license regulation so retesting is no longer required. An applicant previously registered in Alaska, whose license has expired needs only to prove they have taken one of the examinations listed in 12 AAC 36.100.

The location, date, and time of upcoming board meetings, examination dates, and notices of proposed regulatory changes are published in the *Anchorage Daily News*, the board's internet website and the State's online public notice internet website. The State also offers a subscription service whereby the State will email public notices to the subscriber.

⁸ There is an exception, which involves an applicant that has taken a principles and practices examination in a branch of engineering outside the six core disciplines that Alaska licenses. In such cases, the applicant would be required to provide additional work experience in one of the six branches, or sit for the examination in one of the Alaska-recognized six core disciplines.

The extent to which the board, commission, or agency has encouraged public participation in the making of its regulations and decisions.

Public notices of proposed regulations are published in major newspapers. Meetings are adequately advertised, and time is set aside for public testimony. The board reviews all public correspondence at their meetings.

The board's meeting agenda sets aside adequate time for the board to take public comment. Minutes from the meetings of the board reflect public participation throughout the meeting. Proposed regulations are often circulated to those affected by the proposed regulations through professional trade journals, public notice advertisement, or direct mail correspondence from OccLic.

The efficiency with which public inquiries or complaints regarding the activities of the board, commission, or agency filed with it, with the department to which a board or commission is administratively assigned, or with the office of victims' rights or the office of the ombudsman have been processed and resolved.

For the period July 2001 through May 2004, OccLic opened 92 investigative cases related to individuals either seeking licensure or licensed by the BRAELS. Of those cases, approximately 40% were initiated by OccLic staff. Another 16% came from complaints of individuals holding a BRAELS or other related license. Other government agencies generated approximately 20% of the complaints while the general public generated 15%. The remaining 9% came from various sources such as clients, inquiries from other states, or other law enforcement agencies.

As of June 2004, 33 of the 92 complaints remained open. We reviewed nine complaints that had been open for longer than 120 days; the average length of time these cases had been opened exceeded a year (397 days). Four of the nine complaints involved allegations of unlicensed practice; three alleged incompetence; one was a complaint about a possible professional ethics violation; and, one involved fraud or misrepresentation.

Seven of the nine cases reviewed had periods of inactivity exceeding 90 days. Three of the cases that had been significantly delayed involved consultation with "expert witnesses." There was no apparent rationale for the delays in the remaining six complaints. Based on evidence reviewed, we conclude BRAELS complaints are not consistently being resolved efficiently. Efficiency issues related to investigations are being evaluated in another audit report. This report addresses the history, and evaluates the effectiveness, of the State's overall sunset process.

No complaints or investigations specifically involving the actions and activities of the Board of Registration for Architects, Engineers, and Land Surveyors were received, or undertaken

by, either the Office of the Ombudsman or the Office of Victim’s Rights within the past three fiscal years.

The extent to which a board or commission that regulates entry into an occupation or profession has presented qualified applicants to serve the public.

The board is statutorily responsible for the issuance of all licenses. A person may apply for licensure by examination or by using past performance records. Licensure using past performance records is more commonly referred to as licensure by comity. The application process for licensing appears reasonable and appropriate.

Overall, the application process for licensing appears reasonable and appropriate. The licensing process is neither unduly restrictive nor too lax. Each applicant is required to satisfy requirements for licensing. When reviewing licensure procedures, we found no instances of unqualified applicants being awarded a license.

Exhibit 2 summarizes licensing activity for the past three fiscal years, listing the number of new licenses issued per year and the number of current license holders regulated by the board at the end of FY 04.

Exhibit 2

New Licenses Issued (Exclusive of Renewals)	FY 01	FY 02	FY 03	FY 04	Active as of June 30, 2004
Engineers - Chemical	7	10	6	8	97
Engineers - Civil	91	139	111	113	2,610
Engineers - Electrical	23	32	25	30	548
Engineers - Mechanical	34	30	36	35	622
Engineers - Mining	0	1	1	2	31
Engineers - Petroleum	5	1	8	5	105
Total Engineers	160	213	187	193	4,013
Architects	23	12	20	13	502
Land Surveyors	14	33	14	7	585
Landscape Architects	6	5	8	5	30
Corporate Authorization	36	36	41	33	342
Total licenses issued	239	299	270	251	5,472

The extent to which state personnel practices, including affirmative action requirements, have been complied with by the board, commission, or agency to its own activities and the area of activity or interest.

The Ombudsman received no complaints regarding the Division of Occupational Licensing. We did not find any evidence that the board was not complying with State personnel practices, including affirmative action in qualifying applicants. In no instances has the board denied an applicant a license based on personal attributes.

The extent to which statutory, regulatory, budgeting, or other changes are necessary to enable the agency, board, or commission to better serve the interest of the public and to comply with the factors enumerated in AS 44.66.050.

Annually, the board prepares a report for the Department of Commerce, Community, and Economic Development, Division of Occupational Licensing. This report includes information on the prior year activities of the board including their goals and objectives, legislative recommendations, budget report, and a statistical overview of licensing activity. Minor errors in statistical information and omission of several sections of the reports were consistently found from year to year. Due care and attention should be paid to the preparation of all schedules and reports included in the annual report, so as not to bring into question the overall integrity of the report.

As discussed in Prior Year Recommendation No. 1, the board has obtained statutory authority to write regulations requiring continuing education (CE) as a condition for registration renewal. There appears to be some willingness on the part of the board to develop regulations that would require mandatory CE for the renewal of land surveyor licenses. However, for architects and engineers, the board believes many registrants are voluntarily complying with continuing education requirements of their respective professional organizations. Requiring CE for all licensees would safeguard the public interest by ensuring registrants maintain a minimal level of competence consistent with current standards and information related to the regulated profession.

As discussed in Recommendation No. 2, we recommend that BRAELS conduct a study to assess the costs and benefits involved with possibly expanding the number of licensed engineering disciplines that would be recognized by the board.



OFFICE OF THE COMMISSIONER

Frank H. Murkowski, Governor

December 30, 2004

Pat Davidson
Legislative Auditor
Legislative Budget and Audit Committee
Division of Legislative Audit
P.O. Box 113300
Juneau, AK 99811-3300

RE: Board of Registration for Architects, Engineers and Land Surveyors

Dear Ms. Davidson:

Thank you for the opportunity to review the Board of Registration for Architects, Engineers, and Land Surveyors (BRAELS) Preliminary Audit Report.

Comments on the recommendations are noted below:

Recommendation No. 1:

The legislature should consider changes to the statutes mandating that BRAELS require continuing professional education of its licensees:

It is our understanding the board is not opposed to adopting a continuing education (c e) program. The board is considering implementing a voluntary or mandatory CE program since statutory authority was granted effective September 14, 2004. The board assigned a subgroup to study CE and make recommendations to the board. The subgroup is reviewing issues surrounding adoption of a mandatory program including: perceived administrative burden to registrants, concern of availability of courses, costs to registrants to comply, staff time to implement and oversee a regulatory CE program, expected drop off in registrants deciding not to renew, and no demonstrated correlation between design professional's performance with mandatory CE and those not submitting to a mandatory CE program.

Recommendation No. 2:

BRAELS should arrange for a comprehensive study regarding the public benefits and related off-setting costs that may be involved with recognizing additional engineering specialties in the state's licensing structure.

The board currently has assigned a subgroup to study engineering disciplines. The board believes specialties can be practiced as sub-sets of the core disciplines, although the board is currently studying

adding additional branches. So far, the small number of requests for licensure in sub-disciplines of civil, electrical, and mechanical engineering less than 25 in 5 years have not, in the opinion of the board, warranted specific specialty licensure (sub-disciplines) because applicants can currently get licensed in a core discipline, and then can specialize their practice.

For example, environmental engineering applicants are not excluded from registration but the licensure path is via core disciplines. Environmental engineers by examination can take the civil professional engineering examination and can select "environmental" as the afternoon depth segment of the examination.

One concern the board has is due to the unique size of Alaska and cost to ensure compliance with its statutes and regulations. Alaska is unique because it is a large state geographically, with limited site inspections by investigators. Investigators are responsible for having many small communities without building officials to oversee the construction. Site inspections help provide assurances for health, safety, and welfare. With a limited investigative staff (1.5 investigators are assigned to BRAELS), considerations of how enforcement staff may be affected by changes in disciplines will need to be considered.

Alaska, like California and seven other states, limits the number of disciplines licensed.

Per the 2003 NCEES Survey, Alaska, and 11 other jurisdictions license by discipline (CA, AZ, NV, WV, NE, HE, WY, VT, RI, GU, NMI), about roughly 22 percent of registered engineers in the U.S. The largest of these, California, does *not* offer the newest professional engineering exams such as environmental, Structural I or Naval Architectural and Marine engineering but, does offer *most* disciplines or branches of engineering.

Another concern the board has is how licensure of sub-disciplines would affect current registrants of the six core disciplines. For example, civil engineers may no longer be able to continue to offer specialized services such as environmental engineering, or they may be subject to additional examination or licensure in order to work as "environmental engineers."

Recommendation No. 3:

The legislature should consider making the landscape architect representative to BRAELS a full, voting member.

The board agrees the matter of board member representation should be considered. Extending the landscape architect board representative was recommended in the FY 04 Annual report as a Legislative recommendation, although not all board members concur whether the landscape architect board representative should be "voting" or remain a "non-voting" member. The board is also considering whether the mining engineer representative should be broadened to include petroleum engineer (or possibly geological engineer if geological engineering branch is eventually added as a discipline). The legislature may want to address this aspect of the board make-up in addition to the landscape architect matter.

Again, thank you for the opportunity to comment.

Sincerely,



Edgar Blatchford
Commissioner

cc: Rick Urion, Director
Division of Occupational Licensing



DIVISION OF OCCUPATIONAL LICENSING
Board of Registration for Architects, Engineers, and Land Surveyors (AELS)

Frank H. Murkowski, Governor

December 16, 2004

Pat Davidson, Legislative Auditor
Division of Legislative Audit
P.O. Box 113300
Juneau, AK 99811-3300

Dear Pat:

In response to the recommendations by the Division of Legislative Audit (Audit Control Number 08-20028005), as current AELS Board Chair, I am happy to respond on behalf of the Board to the three Legislative Audit recommendations:

1. Continuing Education:

Prior Audit Recommendation No. 1 and current recommendation that the board either develop appropriate mandatory CE requirements for its professional registrants or the legislature considers making such requirements mandatory by statute.

The Board is currently considering if it should require a mandatory CE program and will consider the requirements for its licensees with respect to health, safety, and welfare of the public.

Background and Board Actions:

In 2000, the Legislative Budget and Audit Committee recommended the Legislature should consider revising statutes requiring continuing education for architects, engineers, and land surveyors, and the board regulations requiring that some level of continuing education (CE) be mandated. Recommendation for CE was also included in the 1996 audit.

Board Actions/Meetings

At numerous meetings in 2001 and 2002, the Board has discussed if it should proceed with CE. It did not feel there was uniform support for mandatory CE. Consequently, the Board did not implement a mandatory program as a condition of renewal. At the urging of the Alaska Professional Society of Land Surveyors (ASPLS) for mandatory CE for land surveyors, in its annual report to the Legislature, asked the Legislature to grant statutory authority. Through the efforts of the Alaska Professional Design Council (APDC), and its member ASPLS, HB 252 was introduced in April 2003, providing the

statutory framework for CE. The bill passed the Legislature in May 2004, granting the statutory authority to develop regulations as a condition of license renewal, not to exceed national norms.

At its June 2004 meeting, since the Board has 7 new Board members since 2002, the Chair requested a new Subgroup be formed to assess the current trends and support for a mandatory or voluntary program for CE. In the past, some registrants have expressed concern for costs involved to administer CE; costs for courses; concern about governmental oversight; and effectiveness of mandatory CE for architects, engineers, land surveyors, and landscape architects.

The CE subgroup, under the leadership of Board member Boyd Brownfield, is working first, to decide if the Board will embrace CE as a matter of state policy. Since there are costs involved to registrants, the subgroup is proceeding carefully. Next, it will review current requirements for U.S. jurisdictions by profession, and to assess support for mandatory continuing education by profession.

Many AELS Board members, some registrants and professional societies strongly support CE to maximize their professional skills, the real question is if the requirements will ensure public health and safety are met. There are many approaches to address CE. A mandatory education program will be an administrative burden to registrants, through the cost of the program, and may provide little tangible proof the ones who could benefit most will acquire skills. There is no question that participating in many courses and seminars is beneficial, but some may seek ways to meet the requirements without really improving their professional skills. Crafting a mandatory program, administered by state government, is a serious matter, with the potential for disciplinary action on licensees. Creating a successful volunteer program would require effective incentives. Some professional organizations, such as the American Institute of Architects (AIA), require its members to meet CE to be in good standing, and offer countless courses and will track CE for members. One option the Board can consider would be to recommend professional societies develop and model CE programs, using the effective AIA model.

Status reports have been given at the August and November 2004 AELS Board meetings, and it is anticipated the subgroup will report its recommendations at the February 2005 AELS Board meeting.

2. Expand Engineering Disciplines Offered

Recommendation No. 2

BRAELS should arrange for a comprehensive study regarding the public benefits and related off-setting costs that may be involved with recognizing additional engineering specialties in the State's licensing structure.

The AELS Board agrees it would be useful to have a comprehensive study and will explore the option to partner with professional societies and the University of Alaska. A comprehensive study may prove cost prohibitive and it may be possible to move forward with expansion of disciplines if its own subgroup recommends expansion based on public protection and public need for services.

Background and Board Actions on Engineering Disciplines:

In the past five years, the AELS Board has considered adding to the six engineering disciplines it licenses. The Board has concluded the specialty practice can be performed as a sub-set of the core disciplines of civil, electrical, mechanical, chemical, mining, and petroleum, and did not find necessity to add expand the disciplines offered. So far, the small number of requests from sub-disciplines of civil, electrical, and mechanical engineering (less than 25 in 5 years) have not, in the opinion of the Board, warranted specific specialty licensure (sub-disciplines) because applicants can get licensed in a core discipline, and then can specialize their practice. For example, environmental engineering applicants are not excluded from registration but the licensure path is via core disciplines. Environmental engineers by examination can take the civil engineering examination and can select “environmental” as the afternoon depth segment of the examination.

With recent requests by control system engineers, and geological engineers seeking specialty licensure, the Board is revisiting the issue of adding additional engineering branches. The AELS Board has formed a subgroup, under the leadership of Robert Gilfilian, assigned to study engineering disciplines, in particular, control systems, environmental engineering, fire protection, and geological engineering branches.

One concern the Board has is how licensure of sub-disciplines, such as environmental engineering, would affect current registrants. Some registered civil engineers have built an environmental engineering practice (a subset of civil engineering). It is possible that requests for proposals (RFPs) would specify registration as an “environmental engineer” in order to provide environmental engineering services on projects. If that happened it may be necessary for civil engineers practicing environmental engineering to take the environmental examination in order to continue to offer specialized services. Or it may be necessary to require dual licensure with biennial fees for “civil engineering” and “environmental engineering” practices in order to provide a full scope of services.

Another concern the Board has is the impact additional branches of engineering and overlap between professions that requires investigative action to ensure public protection is met. The AELS Board supports increased site inspections and travel for its investigators to ensure adequate oversight of projects.

The Board anticipates the subgroup will make recommendations to the full AELS Board at its February 2005 AELS Board meeting.

3. Consider adding a permanent voting Landscape Architect Board member

Recommendation # 3: The legislature should consider making the landscape architect representative to BRAELS a full, voting member.

Composition of the Board has been a consideration of the Board, and the Board agrees the matter should be considered. Extending the landscape architect board member was recommended in the FY 04 Annual report as a Legislative recommendation, although not all board members concur if the landscape architect board member should be “voting” or remain “non-voting” since only 31 landscape architects are licensed in Alaska. The Board has faced a similar issue with respect to the “mining engineer” Board member, with only 33 mining engineers registered in Alaska. The Board recognizes the difficulty has been to find licensees willing to serve from such a small pool of eligible registrants.

Also being considered and studied is if the Board should ask the Legislature to address the issue to expand the “mining engineer” Board member position to include related fields of petroleum and geological engineering.

4. Other Comments

The Board recognizes the importance of efficient investigators and agrees cases should be handled timely and efficiently. The Board requested and was granted an additional half-time investigator to provide better coverage for investigations statewide. The Board works closely with its full-time and part-time investigator and would like to note that the quantity and quality of the work of its current investigative staff is very much appreciated by the Board. The Board has also asked the Division of Occupational Licensing for additional site investigations to ensure the appropriate professionals are involved in the design of large residential, commercial, and public projects.

I appreciate the opportunity to make comments on behalf of the AELS Board.

Sincerely,

Donald J. Iverson, Chair
Board of Registration for Architects, Engineers,
and Land Surveyors (AELS)