

# ALASKA STATE LEGISLATURE

## LEGISLATIVE BUDGET AND AUDIT COMMITTEE



Division of Legislative Audit

P.O. Box 113300  
Juneau, AK 99811-3300  
(907) 465-3830  
FAX (907) 465-2347  
legaudit@legis.state.ak.us

July 11, 2011

Members of the Legislative Budget  
and Audit Committee:

In accordance with the provisions of Title 24 and Title 44 of the Alaska Statutes (sunset legislation), we have reviewed the activities and the attached report is submitted for your review.

### DEPARTMENT OF NATURAL RESOURCES ALASKA SEISMIC HAZARDS SAFETY COMMISSION SUNSET REVIEW

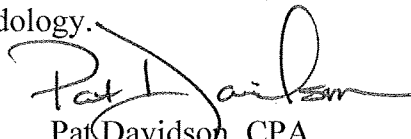
June 15, 2011

Audit Control Number  
10-20072-11

This sunset review was conducted as required by AS 44.66.050(a) and under authority of AS 24.20.271(1). Alaska Statute 44.66.050(c) lists the criteria for assessing demonstrated public need for a given board, commission, agency, or program subject to the sunset review process. Currently, under AS 44.66.010(a)(8), the Alaska Seismic Hazards Safety Commission (ASHSC) is scheduled to be terminated on June 30, 2012. If the legislature takes no action to extend this date, the ASHSC would have one year to conclude operations.

In our opinion, the termination date of the ASHSC should be extended until June 30, 2016. The ASHSC serves a public need and is operating in the public's interest.

The audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on the audit objectives. Fieldwork procedures utilized in the course of developing the findings and recommendations presented in this report are discussed in the Objectives, Scope, and Methodology.

  
Pat Davidson, CPA  
Legislative Auditor

# **TABLE OF CONTENTS**

	<u>Page</u>
Objectives, Scope, and Methodology .....	1
Organization and Function .....	3
Background Information.....	7
Report Conclusions.....	9
Findings and Recommendations .....	11
Analysis of Public Need .....	15
Agency Responses	
Office of the Governor .....	23
Department of Natural Resources .....	25

# OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Title 24 and 44 of the Alaska Statutes, we have reviewed the activities of the Alaska Seismic Hazards Safety Commission (ASHSC or the commission) to determine if there is a demonstrated public need for its continued existence and if it has been operating in an efficient and effective manner.

As required by AS 44.66.050(a), this report shall be considered by the committee of reference during the legislative oversight process in determining whether the ASHSC should be reestablished. Currently, under AS 44.66.010(a)(8), the commission will terminate on June 30, 2012, and will have one year from that date to conclude its administrative operations.

## Objectives

Two central, interrelated objectives of our report are:

1. Determine if the termination date of the ASHSC should be extended.
2. Determine if the ASHSC is operating in the public's interest.

The assessment of the council's operations and performance was based on criteria set out in AS 44.66.050(c). These criteria relate to the determination of a demonstrated public need for the council.

## Scope

Our audit reviewed ASHSC operations and activities for the period of July 1, 2005, through April 28, 2011.

## Methodology

To gain an understanding of ASHSC operations and activities, we reviewed:

- Applicable statutes related to the ASHSC.
- The Commission Charter, ASHSC Rules of Procedure, and website.
- Commission meeting minutes and notices of public meetings.
- ASHSC annual reports to the governor and legislature.

- Other documents related to the commission's activities and mission, as necessary.

Additionally, we:

- Analyzed ASHSC meeting minutes and notices of public meetings for commission member attendance and compliance with public notice requirements.
- Attended the April 7, 2011, teleconference ASHSC meeting to observe the commission's operations.
- Reviewed the activities and publications of other state organizations with missions and objectives similar to the ASHSC and compared them in terms of membership, mission, accomplishments, and strategic plans. We reviewed the:
  - Oregon Seismic Safety Policy Advisory Commission.
  - State of California Alfred E. Alquist Seismic Safety Commission.
  - Utah Seismic Safety Commission.
- Interviewed the commission chair, select commission members, and administrative support on various aspects of ASHSC operations.
- Examined commission member applications and resumes filed with the Office of the Governor to determine if commission appointments complied with statutes.<sup>1</sup>

---

<sup>1</sup> Alaska Statute 44.37.065

## ORGANIZATION AND FUNCTION

The Alaska Seismic Hazards Safety Commission (ASHSC or the commission) was established by the legislature in 2002; however, commission members were not appointed until 2005. The ASHSC convened for the first time in October 2005 and operates on a \$10,000 annual budget. The ASHSC is administered by the Department of Natural Resources (DNR), Division of Geological and Geophysical Surveys (DGGS).

The ASHSC is comprised of 11 members appointed by the governor for three-year terms.<sup>2</sup> The ASHSC is made up of a cross section of government and private sector representatives. Commission members include representatives from the University of Alaska (UA); local government (in various seismically active regions of the state); DNR; the Department of Military and Veterans' Affairs (DMVA); an appropriate federal agency; and the insurance industry. The commission also includes three members from the general public "*who are expert in the fields of*" geology, seismology, hydrology, geotechnical engineering, structural engineering, emergency services, or planning.<sup>3</sup>

Members of the ASHSC serve without compensation, but are entitled to per diem and travel expenses. The commission receives administrative assistance from DNR, DGGS.

ASHSC standing committees include: insurance, schools, earthquake scenarios, education and outreach, hazards identification, response and recovery, and partnership.

Alaska Statute 44.37.067 mandates the ASHSC:

1. *Recommend goals and priorities for seismic hazard mitigation to the public and private sectors;*

<sup>2</sup>In June 2006, with the passage of HB 83, the commission was expanded to include two additional local government members. These positions were appointed September 2006, bringing total membership to eleven commissioners.

<sup>3</sup>Alaska Statute 44.37.065(c)(7)

### Exhibit 1

#### **Alaska Seismic Hazards Safety Commission Members**

*(As of April 30, 2011)*

John Aho, Chair, Public Member  
Laura Kelly, Vice-chair, Federal Agency  
Representative  
Gary Carver, Public Member  
Roger Hanson, UA Representative  
Richard Koehler, DNR Representative  
Daniel Mahalak, Local Government  
Representative  
David Miller, Local Government  
Representative  
Mark Roberts, DMVA Representative  
Robert Scher, Public Member  
Gayle White, Insurance Representative  
Vacant, Local Government  
Representative

2. *Recommend policies to the governor and the legislature, including needed research, mapping, and monitoring programs;*
3. *Offer advice on coordinating disaster preparedness and seismic hazard mitigation activities of government at all levels, review the practices for recovery and reconstruction after a major earthquake, and recommend improvements to mitigate losses from similar future events;*
4. *Gather, analyze, and disseminate information of general interest on seismic hazard mitigation;*
5. *Establish and maintain necessary working relationships with other public and private agencies;*
6. *Review predictions and warnings issued by the federal government, research institutions, and other organizations and persons and suggest appropriate responses at the state and local levels; and*
7. *Review proposed seismic hazard notifications and supporting information from state agencies, evaluate possible socioeconomic consequences, recommend that the governor issue formal seismic hazard notifications when appropriate, and advise state and local agencies of appropriate responses.*

Alaska Statute 44.37.067 states that the ASHSC is to:

*(1) Advise the governor and the legislature on disaster preparedness and seismic hazard mitigation and on budgets for those activities and to recommend legislation or policies to improve disaster preparedness or seismic hazard mitigation; (2) conduct public hearings; (3) appoint committees from its membership and appoint external advisory committees of ex-officio members; and (4) accept grants, contributions, and appropriations from public agencies, private foundations, and individuals.*

### DGGS

Alaska Statute 41.08.010 establishes DGGS in DNR under the direction of the state geologist. The state geologist is appointed by the DNR commissioner and is responsible for conducting geological and geophysical surveys to determine Alaskan land's potential for:

1. Production of metals, minerals, fuels, and geothermal resources;
2. The locations and supplies of groundwater and construction materials; and

3. Potential geologic hazards to buildings, roads, bridges, and other installations and structures.

The state geologist is also responsible for conducting other surveys and investigations necessary to advance the geology of the State. With the approval of the DNR commissioner, the state geologist may acquire, by gift or purchase, geological and geophysical reports, surveys, and similar information.

Alaska Statute 41.08.020(b)(1)-(8) further specifies that DGGs shall:

- 1. Collect, record, evaluate, and distribute data on the quantity, quality, and location of underground, surface, and coastal water of the state;*
- 2. Publish or have published data on the water of the state;*
- 3. Require the filing with it of the results and findings of surveys of water quality, quantity, and location;*
- 4. Require of water well contractors, the filing with it of basic water and aquifer data normally obtained, including but not limited to well location, estimated elevation, well driller's logs, pumping tests and flow measurements, and water quality determinations;*
- 5. Accept and spend funds for the purposes of this section, AS 41.08.017, and 41.08.035 and enter into agreements with individuals, public or private agencies, communities, private industry, state agencies, and agencies of the federal government;*
- 6. Collect, evaluate, and distribute geologic data on seismic events and engineering geology of the state;*
- 7. Identify potential seismic hazards that might affect development in the state;*
- 8. Inform public officials and industry about potential seismic hazards that might affect development in the state.*

(Intentionally left blank)



## **BACKGROUND INFORMATION**

Mitigation of seismic hazards refers to studying, identifying, and prioritizing actions that could be taken to reduce the impact of potential damage resulting from an earthquake. Accordingly, seismic hazards mitigation can involve everything from considering where earthquakes are most likely to strike to how buildings, bridges, other infrastructure, and even topography can be built or modified to reduce damage.

Similar organizations in other states have taken actions such as studying earthquake-prone areas as well as evaluating infrastructure and topography in regions that have been identified as high risk. They work with local, state, and federal governments as well as private-sector interests to construct or modify buildings, bridges, highways, and power lines to reduce the damage earthquakes may cause. Additionally, they coordinate activities such as the evaluation of the topography of high risk areas. For example, organizations consider what measures could be taken to avoid such things as flood damage from rivers and lakes, damage from landslides or avalanches, or tsunamis precipitated by an earthquake.

*Mitigation* is distinguished from *response* in that it involves a proactive evaluation of potential earthquake damage and takes steps to avoid or reduce damage and loss of human life. In contrast, *response* involves necessary actions taken after an earthquake to restore and protect public health and safety. Response stems from preparedness. In 2001, HB 53 presented a formal finding in its proposal to create the ASHSC; it states:

*Although the state has made significant improvements in disaster preparedness since the great earthquake of 1964, there has been little corresponding improvement in measures to reduce the disaster potential of major earthquakes and, consequently, to reduce the dependence on disaster relief.*

(Intentionally left blank)

## **REPORT CONCLUSIONS**

The Alaska Seismic Hazards Safety Commission's (ASHSC or the commission) termination date should be extended until June 30, 2016.

Under AS 44.66.010(a)(8), the ASHSC is scheduled to terminate on June 30, 2012. If the legislature does not extend this date, the ASHSC will have one year to conclude its operations.

In developing our conclusion on whether the ASHSC's termination date should be extended, the ASHSC's operations were evaluated using the 11 factors set out in AS 44.66.050(c). Under the State's "sunset" law, these factors are to be considered when determining if the commission has demonstrated a public need for its continued operation.

Overall, we found the ASHSC is operating in the public's interest. The commission has gathered and disseminated information; facilitated discussions and partnerships with various members of state, local, and federal government as well as private entities concerning seismic hazards and risk mitigation; encouraged efforts to address seismic risk mitigation; and brought attention to seismic hazards. Therefore, we recommend the legislature extend the ASHSC's termination date until June 30, 2016.

Improvements are needed to increase the ASHSC's effectiveness and efficiency.

The ASHSC should make improvements to enhance its effectiveness and efficiency. The organization has been active in addressing a number of its statutory objectives but lacks measureable outcomes to improve seismic hazards risk mitigation that correspond to commission activities. Because the commission's role is advisory, its effectiveness is largely dependent on decision-makers implementing its recommendations. However, the commission has made only two formal policy recommendations in six years.

ASHSC annual reports identify a number of goals established by the ASHSC's standing committees, and seismic-risk issues being addressed by the commission as a whole. Many of these goals and issues being addressed have not been achieved and some goals repeat over multiple years. Some goals are vague and do not solicit specific actions, deliverables, or metrics to measure the commission's progress in addressing the goals. (See Exhibit 2 on the following page.)

The ASHSC cannot assess its progress or the effectiveness of its activities without a clear plan for addressing seismic risk issues in a measurable manner. Furthermore, by not analyzing its progress on a regular basis the ASHSC cannot readily identify areas in need of improvement, ways to efficiently manage its goals, or areas in need of greater attention. (See Recommendation No. 1.)

## Exhibit 2

Goals, Future Deliverables, Future Tasks, Work Plans <sup>4</sup>	Year Introduced	Year Accomplished
Develop a periodic newsletter to the governor and legislators.	2008, 2009, 2010	Not completed
Develop a directory of speakers with expertise in seismic risk mitigation issues.	2008, 2009, 2010 <sup>5</sup>	Not completed
Develop a potential model legislation.	2008, 2009, 2010 <sup>6</sup>	Not completed
Develop a media education package with materials to explain basic seismic risk information to students and the public.	2008, 2009	Not completed
Foster contacts with other localities that are addressing the issues involved with at-risk school facilities.	2010	Partially complete Too vague to assess
Continue to seek funding to identify earthquake-damage-prone facilities.	2010	
Recommend improvements in facility earthquake-risk mitigation including policy changes, legislation and public outreach.	2010	2011
Complete a draft white paper summarizing the present state of knowledge of the State's seismic hazards risk .	2010, 2011	Not completed
Draft a "Continuity of Operations Plan" to provide for continuing critical ASHSC functions in the event of an interruption of standard ASHSC operation.	2010, 2011	Not completed
See all commissioners successfully complete ICS 100 course. <sup>7</sup>	2010, 2011	Not completed
Develop a post earthquake clearing house process.	2010, 2011	Not completed
Test ASHSC significant earthquake incident procedure during the March 2010, Tsunami Awareness Week.	2010	2010
Develop a concise brochure that describes the ASHSC and its activities.	2010, 2011	Not completed
Work on planning for the 2014 International Earthquake Engineering Conference to be held in Anchorage, Alaska.	2009, 2010, 2011	Too vague to assess

<sup>4</sup>Goals, future deliverables, future tasks, and work plans were derived from ASHSC annual reports; the years introduced are the years these actions were discussed in the annual report, and the years accomplished are the years in which ASHSC annual reports indicate these have been accomplished.

<sup>5</sup>In 2010, these goals changed from "Develop a speaker's bureau," to "Continue to consider developing a speaker's bureau."

<sup>6</sup>Language changed from "Develop model legislation," to "Consider model legislation that addresses."

<sup>7</sup>ICS 100, Introduction to the Incident Command System, introduces the Incident Command System (ICS) and provides the foundation for higher level ICS training. This course describes the history, features and principles, and organizational structure of the ICS. It also explains the relationship between ICS and the National Incident Management System. The course is approximately 3 hours long. (FEMA website <http://training.fema.gov>)

## FINDINGS AND RECOMMENDATIONS

### Recommendation No. 1

The Alaska Seismic Hazards Safety Commission (ASHSC or the commission) should develop a strategic plan to guide its efforts to mitigate seismic hazard risk in Alaska.

The ASHSC lacks a clear strategy for prioritizing and monitoring its efforts which has limited its effectiveness and efficiency in providing guidance to decision makers addressing seismic hazard risks in the State.

Over the past six years, the ASHSC has been active in gathering and disseminating information, facilitating discussions, and forming partnerships with various organizations. While these efforts are important toward achieving some of its statutory objectives, there are few deliverable or measurable effects of its efforts to reduce seismic hazards risk.

State departments annually submit to the Office of Management and Budget performance measures. As part of their analysis, the departments identify goals or end results, outline strategies to achieve those results, and provide a status update on progress. The benefits of such strategic planning include clearer focus, increased efficiency and effectiveness, and a basis for measuring progress.

The ASHSC should develop a strategic plan in an effort to provide guidance to decision makers addressing seismic hazard risk in Alaska. It should also coordinate with the Department of Natural Resources (DNR) to establish annual performance measures through the budgetary process which would allow for an on-going appraisal of its effectiveness.

### Recommendation No. 2

The ASHSC should ensure it provides reasonable public notice of all ASHSC meetings.

Since October 2005, there have been 51 ASHSC meetings. Fourteen of the 51 meetings did not provide reasonable advance public notice. Furthermore, three of the 14 were not posted to the Alaska Public Notice System (APNS). Public notice of ASHSC meetings on the APNS ranged anywhere from two to 52 days.

The cause of the variances in advance public notice is two-fold. It includes a lack of clarity regarding a reasonable time period for public notice of meetings and a lack of procedures for ensuring meetings are publicized on the APNS. Alaska Statute 44.62.310 requires “reasonable” public notice be given for all public meetings; however, it does not define *reasonable* in quantifiable terms such as days or weeks.<sup>8</sup> Additionally, the ASHSC does not have procedures for ensuring meetings approved by DNR commissioner’s office are

---

<sup>8</sup>For audit purposes we quantified *reasonable* to be seven days in advance of the meeting.

publicized on the APNS. Adequate notice is essential for maximizing public participation at ASHSC meetings.

We recommend the ASHSC develop procedures to ensure meetings are published on the APNS in a timely manner.

### Recommendation No. 3

The ASHSC should recommend replacement of its members in a timely manner.

The ASHSC did not follow its rules of procedure requiring its members with three or more consecutive unexcused absences to be immediately recommended for replacement. Since April 2010, one ASHSC member has not attended any of the 10 commission meetings or participated in commission activities.

Numerous attempts by the ASHSC to contact the commission member were unsuccessful. Rather than recommend replacement after the third consecutive unexcused absence, the commission elected to delay its recommendation for replacement until the member's term expired on June 30, 2011.

Alaska Statute 44.37.065 mandates ASHSC composition include 11 members. Furthermore, ASHSC-adopted rules of procedure, Article II-6 (meeting attendance), states, "*A member who misses three consecutive regular meetings without prior approval shall automatically be recommended for replacement.*"

Failure to recommend the replacement of the inactive member has resulted in the ASHSC operating with only 10 of the 11 required members for over a year. Consequently, the commission has failed to comply with statute and missed the valuable input and contributions a potential replacement member may have offered.

The ASHSC should follow the adopted rules of procedure and recommend immediate replacement of habitually absent members.

### Recommendation No. 4

The Office of the Governor and the ASHSC should work to fill appointments to all commission seats in a timely manner.

The ASHSC is an 11-member commission consisting of a cross section of government and private sector representatives including three local government members from seismically active regions of the State. During FY 10, one local government seat was vacant over nine months. Alaska Statute 44.37.065(c) requires the governor to appoint both government and private commission seats. According to the Office of the Governor, the vacancy was due to an insufficient applicant pool.

In 2006, the legislature underscored the importance of diverse local government representation on the ASHSC when it added two additional local government seats. During the extended vacancy, the commission was unable to operate at full capacity or benefit from the input of the eleventh member representing a local government.

The Office of the Governor and the ASHSC should work jointly to fill appointments to all commission seats in a timely manner.

(Intentionally left blank)



## **ANALYSIS OF PUBLIC NEED**

The following analysis of the Alaska Seismic Hazards Safety Commission (ASHSC or the commission) activities relates to the public need factors defined in the “sunset” law, Alaska Statute 44.66.050. This analysis was not intended to be comprehensive, but address those areas we were able to cover within the scope of our review.

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

To evaluate whether the ASHSC operated in the public’s interest, we measured its activities against the objectives set out in AS 44.37.067. Based on our review, we determined that the ASHSC has addressed, in part, most of its statutory objectives.

The following provides the seven objectives set out in statute in relation to the ASHSC’s activities.

1. Recommend goals and priorities for seismic hazards mitigation to the public and private sectors.

During FY 10, the ASHSC recommended the Alaska Department of Education and Early Development (DEED) evaluate existing public schools for vulnerability to seismic hazards. To assist in establishing budget priorities and selecting schools for seismic safety evaluation, the ASHSC provided a map and table identifying Alaska public school buildings located in areas with the highest seismic activity.

In 2008, the ASHSC made a formal request to the Division of Geological and Geophysical Surveys (DGGs) to encourage DGGs to complete a database of known active earthquake faults across Alaska and to make it available publicly. DGGs hired a geologist specializing in neotectonics and paleoseismology to conduct this project. It is nearly complete and will soon be publicly available. This project is only one component of an ongoing DGGs program to identify and evaluate seismic sources in Alaska that pose risks to public safety and infrastructure.

The ASHSC has been an active proponent of earthquake scenarios. Earthquake scenarios describe the expected ground motions and effects of specific hypothetical, large earthquakes. Conducting training exercises based on realistic earthquake situations helps utilities, emergency responders, and other agencies plan and coordinate emergency responses.<sup>9</sup> In 2009, the commission developed a proposal and endorsed a second proposal supporting two scenarios in the Anchorage region. Neither scenario was funded. The commission recently began promoting and supporting a scenario for the Kodiak area.

---

<sup>9</sup> <http://earthquake.usgs.gov/hazards/products/scenario/>

2. Recommend policies to the governor and the legislature including needed research, mapping, and monitoring programs.

In addition to giving presentations to the Senate Finance, Education, and Community and Regional Affairs Committees, the ASHSC also provides the governor and legislature with an annual report. In its annual report, presented to the legislature in February 2011, ASHSC made two policy recommendations concerning Alaska schools. These recommendations built on the commission's previous efforts to identify public school buildings in seismically active regions. These policies recommended identifying educational facilities most at risk and funding seismic risk mitigation for all future school design, construction, and major renovation projects.

3. Offer advice on coordinating disaster preparedness and seismic hazards mitigation activities of government at all levels, review the practices for recovery and reconstruction after a major earthquake, and recommend improvements to mitigate losses from similar future events.

As discussed above, the ASHSC has been active in recommending the evaluation of existing public schools in need of seismic retrofit and prioritizing schools at greatest seismic risk. These efforts have been demonstrated through recommendations to and collaborations with DEED and presentations to the senate.

In 2010, the ASHSC reviewed and updated the Hazards Mitigation Plan (HMP) seismic hazards section and mitigation goals. The HMP provides an analysis of the State's natural hazards, assesses the risks and vulnerabilities associated with those hazards, and defines the State's plan for mitigation of those hazards. Furthermore, it identifies short and long term goals and objectives with recommended actions and initiatives to reduce or prevent potential injury or damages.<sup>10</sup>

4. Gather, analyze, and disseminate information of general interest on seismic hazards mitigation.

The ASHSC has co-sponsored trainings, lectures, and meetings in Alaska. For example, in 2010, the commission co-sponsored a training course on hospital structural and non-structural earthquake mitigation for primary healthcare providers in Southcentral Alaska. In 2009 and 2010, the ASHSC co-sponsored the Joyner Lecture.<sup>11</sup> The commission is

---

<sup>10</sup>State Hazard Mitigation Plan 2010 p. 43 of 888

<sup>11</sup>The William B. Joyner Memorial Lectures were established by the Seismological Society of America (SSA) in cooperation with the Earthquake Engineering Research Institute (EERI) to honor Bill Joyner's distinguished career at the United States Geological Survey and his abiding commitment to the exchange of information at the interface of earthquake science and earthquake engineering, so to keep society safer from earthquakes. Joyner Lecturers are chosen based on whether the lecturer's contributions are from earthquake science to earthquake engineering or from earthquake engineering to earthquake science. [http://www.seismosoc.org/awards/joyner/joyner\\_lectures.php](http://www.seismosoc.org/awards/joyner/joyner_lectures.php)

also participating in planning the 2014 National Conference on Earthquake Engineering to be held in Anchorage, Alaska.

The ASHSC has both received and given several briefings and presentations on a variety of seismic issues. The commission chair gave presentations to Alaska Partnership for Infrastructure Protection, Chugach Electric Association, Pioneers of Alaska, and Elmendorf Air Force Base Alaskan Command and Joint Task Force.

Additionally, the ASHSC hosts a website that includes media releases and announcements, studies, reports, presentations, and links to various other seismic resources. The commission also recently began using social media to make announcements via Twitter.

5. Establish and maintain necessary working relationships with other public and private agencies.

The ASHSC has formed partnerships and collaborated with DEED and the Alaska Department of Commerce, Community and Economic Development, Division of Insurance (DOI). The commission has members on the Alaska Partnership for Infrastructure Protection, State Hazard Mitigation Advisory Committee, Western States Seismic Policy Council (WSSPC), and the Municipality of Anchorage, Geotechnical Advisory Commission.

The ASHSC is a voting member of the WSSPC. At the 2010 WSSPC annual meeting, the ASHSC chair developed an agenda and facilitated a meeting of other states' seismic commissions and agency representatives from different seismically active states. Additionally, the ASHSC was instrumental in bringing the 2014 National Conference on Earthquake Engineering to Anchorage, Alaska.

6. Review predictions and warnings issued by the federal government, research institutions, other organizations and persons, and suggest appropriate responses at the state and local levels.

There have been no significant seismic events that would require action for this objective. However, the ASHSC has procedures to rapidly convene upon the occasion of a significant seismic event to review predictions and warnings and suggest appropriate actions. The process for rapidly convening has been successfully performed in two separate exercises by the commission and the Alaska Department of Military and Veteran's Affairs, Division of Homeland Security and Emergency Management (DHS&EM).

7. Review proposed seismic hazard notifications and supporting information from state agencies; evaluate possible socioeconomic consequences; recommend that the governor issue formal seismic hazard notifications when appropriate; and advise state and local agencies of appropriate responses.

See item 6 above.

The ASHSC currently has seven active standing committees to advance the commission's objectives. Standing committees include: insurance, schools, earthquake scenarios, education and outreach, hazards identification, response and recovery, and partnerships. The schools and insurance committees also include liaisons from DEED and DOI, respectively.

To address its objectives, the ASHSC meets several times per year via teleconference and at least two times per year in Anchorage for face-to-face meetings.

***Determine 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.***

Exhibit 3 details the unaudited Schedule of Operating Expenditures for the period FY 08 through the third quarter of FY 11. The FY 11 expenditures are significantly less than those of prior years because expenses for one of the commission's in person meetings had not been recorded in the accounting records at the time of this report.

#### ASHSC Strategy

The ASHSC does not have a comprehensive strategy for addressing seismic hazards risk mitigation. Although the commission remains active in addressing its objectives as defined in statute, the effectiveness of its efforts has been limited to a few measurable outcomes. (See Recommendation No. 1.)

#### **Exhibit 3**

<b>Schedule of Operating Expenditures and Funding Sources</b>				
<i>(Unaudited)</i>				
	<u>FY 08</u>	<u>FY 09</u>	<u>FY 10</u>	<u>FY 11*</u>
Expenditures:				
Travel	\$7,423	\$ 8,089	\$10,929	\$ 1,884
Services	2,835	1,604	685	685
Commodities	<u>90</u>	<u>104</u>	<u>296</u>	<u>83</u>
Total Operating Expenditures	\$10,348	\$ 9,797	\$11,910	\$ 2,652

*\*Expenditures through April 20, 2011*

#### Public Meeting Notices

Procedures for ensuring proper noticing of public meetings have been inadequate. Fourteen of the 51 meetings held since the ASHSC began operating have not been reasonably

noticed.<sup>12</sup> Additionally, three meetings were not publicized at all. (See Recommendation No. 2.)

### ASHSC Appointments

The ASHSC has not operated in compliance with Alaska Statutes with regard to the composition of the commission. Alaska Statute 44.37.065 requires the ASHSC to include 11 members appointed by the governor for a three year term. One commission member has had excessive absences and has ceased participation in commission activities for over a year.

The ASHSC has not recommended this commission member's termination from the commission as required by its rules of procedures. As a result, the commission has operated with only 10 members since April 2010. (See Recommendation Nos. 3 and 4.)

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

The ASHSC has not pursued any statutory changes.

***Determine 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.***

Public comment periods have occurred at all meetings. Additionally, the public has the opportunity to contact the ASHSC via their website or through the chair whose contact information is posted on commission agendas. The commission provided public notice for all but three of 51 meetings hosted during the audit period.

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

The ASHSC is an advisory body whose powers and duties are limited to recommending policies to the governor and the legislature under AS 44.37.067. For the period FY 05 through FY 11, the commission made two policy recommendations; both were included in the FY 10 annual report provided to the governor and legislature in February 2011. The recommendations were discussed in a public meeting which provided opportunity for public comment.

---

<sup>12</sup> Notice provided was less than seven days in advance of the meeting date.

***Determine 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.***

The Office of the Ombudsman, the Office of Victim's Rights nor the Department of Natural Resources (DNR) reported any complaints filed with them regarding the ASHSC.

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

This criterion is not applicable because the ASHSC does not regulate any occupations or professions.

***Determine 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.***

Nothing in our review of the ASHSC indicated that there were any complaints involving ASHSC personnel practices. No complaints against the commission or its members were filed with the Department of Administration, DNR, Office of the Ombudsman, Human Rights Commission, United States Equal Opportunity Office, or Boards and Commissions.

***Determine the extent to which statutory, regulatory, budgeting, or other changes are necessary to enable the agency, board, or commission to better serve the interests of the public and to comply with the factors enumerated in this subsection.***

Recommendation Nos. 1 through 4 address changes to enable the ASHSC to better serve the public's interest.

***Determine the extent to which the board, commission, or agency has effectively attained its objectives and purposes and the efficiency with which the board, commission, or agency has operated.***

The ASHSC has provided some guidance to decision-makers on what steps should be taken to mitigate seismic hazard risk in Alaska. One particular success has been the commission's work in the area of school safety.

The ASHSC has worked collaboratively with DEED on seismic issues concerning school construction and renovation. The collaboration resulted in revision of the capital funding planning document for new construction and retrofitting of existing school facilities. The revised planning document specifically addresses seismic issues and requires a professional cost assessment for seismic hazards mitigation of a school facility. This revised form has been implemented for all DEED FY 12 funding requests.

There have been a few other significant outcomes. The ASHSC's promotion of mapping existing earthquake faults has resulted in a project to complete a database of known active and potentially active faults across Alaska and to make it publicly available. This project is nearing completion; however, there are perhaps hundreds of active faults in the State that have not been identified and mapped. Thus additional work is necessary to identify and evaluate sources of seismic risks posed to public safety and infrastructure.

Additionally, efforts to establish and maintain relationships have materialized in a meeting of states' seismic commission and agency representatives at the 2010 WSSPC annual meeting in Denver, Colorado. Finally, in response to an ASHSC resolution, the 2014 National Conference on Earthquake Engineering is being hosted in Anchorage, Alaska.

However, the ASHSC has made only two formal policy recommendations since becoming active in 2005. These policy recommendations were presented in the annual report provided to the governor and legislature in February 2011. While the recommendations do address a statutory requirement of the commission; they were not made until the sixth year of the commission's operations.

As shown by its many committees and goals outlined in Exhibit 2 (page 10), the ASHSC has many ideas for addressing seismic hazard risk in Alaska. However, few of these concepts have materialized into guidance lawmakers, other decision makers, and the general public can use. With improved planning, focus, and monitoring, the commission could have many more successes like its contributions to school safety. (See Recommendation No. 1.)

<b><i>Determine the extent to which the board, commission, or agency duplicates the activities of another governmental agency or the private sector.</i></b>
--

The ASHSC mission is related to those of other state agencies such as DGGS and the DHS&EM. Rather than being duplicative, these agencies work collaboratively to address common objectives.

According to AS 41.08.020, part of DGGS' mission is to identify potential geologic hazards to buildings, roads, bridges, and other installations and structures.

DGGS' recognized powers and duties include:

- Collecting, evaluating, and distributing geologic data on seismic events and engineering geology of the State;
- Identifying potential seismic hazards that might affect state development; and
- Informing public officials and industry about potential seismic hazards that might affect state development.



DHS&EM's mission is to provide critical services to the State of Alaska to protect lives and property from terrorism and all other hazards as well as to provide rapid recovery from all disasters.

Functional units of DHS&EM include: planning; analysis and mitigation; preparedness; operations; disaster assistance; and program support. The planning, analysis and mitigation includes an earthquake program which offers general advice about earthquake preparedness such as drop, cover, and hold drills as well as tips related to various topics such as securing furniture, water heaters, and preparing your family for an earthquake.

The State Hazard Mitigation Advisory Committee (SHMAC) is also under DHS&EM. SHMAC has a diverse statewide panel of 47 members representing state, local, tribal, regional and federal agencies. This committee supports the State Hazard Mitigation Officer (SHMO) and assists in the development of the HMP.

The ASHSC was established purposely to address seismic hazards risk mitigation. This mission is advanced through advocacy of various research, mapping, and monitoring programs as well as through partnerships and coordination amongst agencies with related missions and, as such, some overlap in the missions of these agencies is expected.

Duplication of activities is avoided through the collaborative efforts of the ASHSC, other governmental agencies, and private sector entities. The ASHSC was active in advocating for mapping of active faults which is now being performed by DGGS. The ASHSC has also collaborated with DHS&EM on various training activities and was active in the review and updating of the earthquake section of the 2010 State of Alaska HMP. Commission membership includes representation from each of these agencies as well as the Municipality of Anchorage Geotechnical Advisory Commission, Alaska Partnership for Infrastructure Protection, Alaska Earthquake Information Center, SHMAC, and the United States Coast Guard.



SEAN PARNELL  
Governor



P.O. Box 110001  
Juneau, Alaska 99811-0001  
(907) 465-3500  
Fax (907) 465-3532

STATE OF ALASKA  
OFFICE OF THE GOVERNOR

July 25, 2011

RECEIVED

JUL 25 2011

LEGISLATIVE AUDIT

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

Dear Ms. Davidson:

This letter is in response to your July 19, 2011 "CONFIDENTIAL" preliminary audit report on the Alaska Seismic Hazards Safety Commission (ASHSC).

Recommendation No. 4: The Office of the Governor and the ASHSC should work to fill appointments to all commission seats in a timely manner.

The Office of the Governor concurs with this recommendation. The board is currently at full membership, and all appointments are up-to-date. This reflects the commitment of the Office of Boards and Commissions to making timely appointments that allow the board to function productively.

If you need additional information, please contact me at 269-7450.

Sincerely,

Jason Hooley  
Director of Boards and Commissions

cc: Michael Nizich  
Chief of Staff

(Intentionally left blank)

# STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

SEAN PARNELL, GOVERNOR  
550 WEST 7<sup>TH</sup> AVENUE, SUITE 1400  
ANCHORAGE, ALASKA 99501-3650  
PHONE: (907) 269-8431  
FAX: (907) 269-8918

August 9, 2011

RECEIVED

AUG 11 2011

LEGISLATIVE AUDIT

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

Subject: Preliminary audit report on Department of Natural Resources, Alaska Seismic Hazards Safety Commission

Dear Ms. Davidson:

Thank you for your letter dated July 19, 2011, requesting my comments on the Division of Legislative Audit's Preliminary Report, *Department of Natural Resources, Alaska Seismic Hazards Safety Commission, Sunset Review*. I appreciate your division's thorough and objective review of this commission, which is scheduled to sunset June 30, 2012.

The Alaska Seismic Hazards Safety Commission (ASHSC) is administered by DNR's Division of Geological & Geophysical Surveys (DGGs). As you know, Alaska is by far the most seismically active state in the country and ranks among the highest in seismic risk to its citizens and infrastructure. The ASHSC's mission to guide the governor and legislature in ways to reduce these risks before damaging earthquakes occur is crucial to our public safety and economy. Therefore, I agree with your recommendation to extend the termination date of the commission to at least June 30, 2016. The ASHSC chair and I also agree that improvements can be made to increase the commission's effectiveness and efficiency.

As requested, and with input from the ASHSC chair, I will briefly comment on each of the report's recommendations.

***Recommendation No. 1 – The ASHSC should develop a strategic plan to guide its efforts to mitigate seismic hazard risk in Alaska.***

I agree with this recommendation. DGGs has asked the ASHSC to develop a strategic plan. The ASHSC chair has committed to a date of November 15, 2011, to complete and adopt this plan. Once the strategic plan is developed, DGGs will work with the ASHSC to develop performance measures and targets for the Office of Management and Budget (OMB).

***"Develop, Conserve, and Enhance Natural Resources for Present and Future Alaskans"***

***Recommendation No. 2 – The ASHSC should develop procedures to ensure meetings are published on the Alaska Public Notice System in a timely manner.***

I agree that the ASHSC should provide reasonable public notice. DGGS posts the public notices on behalf of the ASHSC chair and will ensure that they are issued at least seven days prior to meetings. This recommendation has already been implemented.

***Recommendation No. 3 – The ASHSC should follow the adopted rules of procedure and recommend immediate replacement of habitually absent members.***

The ASHSC has implemented this recommendation and will strictly follow its adopted rules of procedure for recommending immediate replacement of habitually absent members should this situation arise again.

***Recommendation No. 4 – The Office of the Governor and the ASHSC should work to fill appointments to all commission seats in a timely manner.***

I agree with this recommendation. We will work with the ASHSC and the Governor's office immediately to fill appointments in a timely manner. Because the appointments rely on a sufficient pool of qualified applicants, this task may require the ASHSC to be more proactive in soliciting applicants and publicizing the vacancies. This can be accomplished partly through public notices.

Thank you again for your thorough and informative report and for the opportunity to comment.

Sincerely,



Daniel S. Sullivan  
Commissioner

cc: Bob Swenson, State Geologist and Director, DGGS  
Rod Combellick, Division Operations Manager, DGGS  
John Aho, Chair, Seismic Hazards Safety Commission