ALASKA STATE LEGISLATURE
SENATE EDUCATION STANDING COMMITTEE
February 7, 2019
9:03 a.m.

MEMBERS PRESENT

Senator Gary Stevens, Chair
Senator Shelley Hughes, Vice Chair
Senator Chris Birch
Senator Mia Costello
Senator Tom Begich

MEMBERS ABSENT

All members present

COMMITTEE CALENDAR

PRESENTATION: THE RECENT MAJOR EARTHQUAKE AND RELATED DAMAGE TO SCHOOL FACILITIES IN THE ANCHORAGE AND MAT-SU AREAS

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

MICHAEL WEST, Ph.D., State Seismologist
Research Professor
University of Alaska Fairbanks
Fairbanks, Alaska
POSITION STATEMENT: Presented on the Alaska Earthquake Center.

TIM LAMKIN, Staff
Senator Gary Stevens
Alaska State Legislature
Juneau, Alaska
POSITION STATEMENT: Showed video of the earthquake at the University of Alaska Anchorage (UAA) campus.

TIM EDWARDS, Chief Risk Officer
University of Alaska

Anchorage, Alaska
POSITION STATEMENT: Testified on the impact of earthquake on the University of Alaska Anchorage campus.

TIM MEARIG, Facilities Manager
Department of Education and Early Development (DEED)
Juneau, Alaska
POSITION STATEMENT: Testified on DEED role regarding earthquakes.

MIKE BROWN, Executive Director of Operations
Matanuska-Susitna Borough School District
Palmer, Alaska
POSITION STATEMENT: Testified on the impact of the earthquake on the Matanuska-Susitna Borough School District.

DEENA BISHOP, Ph.D., Superintendent
Anchorage School District
Anchorage, Alaska
POSITION STATEMENT: Testified on the impact of earthquake on the Anchorage School District.

ACTION NARRATIVE

9:03:49 AM
CHAIR GARY STEVENS called the Senate Education Standing Committee meeting to order at 9:03 a.m. Present at the call to order were Senators Begich, Birch, and Chair Stevens.

Presentation: The Recent Major Earthquake and Related Damage to School Facilities in the Anchorage and Mat-Su Areas

9:04:14 AM
CHAIR STEVENS announced presentations about the November 30, 2018, earthquake and the resultant damage to schools in the Anchorage and Mat-Su areas.

9:04:50 AM
MICHAEL WEST, Ph.D., State Seismologist, Research Professor, University of Alaska Fairbanks, Fairbanks, Alaska, described the work of the Alaska Earthquake Center. Rapid assessment information about earthquakes comes from the Alaska Earthquake Center. If an earthquake happens, the most basic of information-- where it was, how big it was, what the extent of shaking was-- comes from the Alaska Earthquake Center. In coastal communities,

tsunami hazards are premised on an understanding of what areas of a community are in the potential flood zone and which ones are not. Over the past few decades, the Earthquake Center has mapped this community by community.

DR. WEST pointed out the center's research and analysis of why earthquakes happen in Alaska and what to expect in the future. In 2018, Alaska had 55,000 earthquakes. The vast majority are very small and not surprising, geologically speaking, but some stand out. When the unexpected happens, their responsibility is to figure why and what they can expect from those areas in the future.

DR. WEST said the application of their data is used in a variety of ways. All building codes have an adherence to seismic standards based on an area's history of earthquakes and anticipation about what might happen in the future. Any environmental reviews for large development plans have an extensive consideration of how to build safely for the seismic hazards. Consideration of the likelihood of different types of earthquakes in different places are built into insurance rates. Evacuation routes and shelters for tsunami hazards incorporate that.

CHAIR STEVENS asked whether most people are covered for earthquakes and tsunamis.

DR. WEST answered that one topic is earthquake insurance and the other is just someone's core, homeowner's insurance rates. Those are proprietary formulas, but he is sure they factor in earthquake potential in calculating overall rates. Earthquake insurance is an add on, which some people have and some don't.

CHAIR STEVENS noted that his communities, Kodiak and Homer and that area, are southern coast. He doesn’t know if his own insurance covers tsunamis, but they would do well to look at that.

DR. WEST responded that he agreed, but he is not an expert on insurance.

SENATOR BEGICH shared that he looked at the Alaska Earthquake Center site often and that he noticed significant activity in Kaktovik. It concerns him because their wealth comes from the North Slope. He asked what is going on in Kaktovik.

DR. WEST replied that on August 12, there were two significant earthquakes, a 6.4 and a 6.0, with prodigious aftershocks. Almost all the activity up there can be attributed to aftershocks. The bigger question is why they occurred in the first place. They are still wrapping their heads around that. It is not a surprise to have earthquakes in that area, but they were the most significant earthquakes on the North Slope in recorded history.

9:11:09 AM
SENATOR BEGICH said that he was concerned about the oil fields and that perhaps they should delve into potential precautions later.

DR. WEST responded that the producers and oil companies that work in that area are aware of seismic hazards and have been forward about planning and taking precautions and monitoring their facilities.

DR. WEST said his intent is to show that information from the Earthquake Center is used, such as for the building of ports and major development projects. Every school in the state has at some points in its construction attempted to factor in that information. The legislature, with AS 14.40.075, gave the role of earthquake monitoring to the university. The statute designates the role of state seismologist, the role he is in. Although he is an employee of the university and the Geophysical Institute, he answers to the legislature.

DR. WEST said the center operates a network of seismic monitoring instruments across the state. They record vibrations and are streamed back to Fairbanks in real time. Each site has a self-contained power system, a sensor in the ground, and radio communication to let data be aggregated in real time at the center.

DR. WEST said the center takes the pulse of Alaska. Any vibration in the ground, a landslide, explosion, earthquake, registers somewhere on one of the monitors.

CHAIR STEVENS said he noted several sites in Canada.

DR. WEST answered that they do have a lot of partner organizations. They work closely with Canadians. Earthquakes don't obey political boundaries.

DR. WEST said he wanted to give examples of the ways people work with their data to answer meaningful questions. One way is to assess where shaking was strong and where it was not. He displayed a slide of earthquake data along the pipeline that very quickly helped engineers assess where to pay attention and where not to worry--support tools for people making rapid decisions after an earthquake.

DR. WEST said they have had a lot of questions about the November 30 earthquake. One has been was this a worst-case scenario. People only need to look back to 1964 to see the answer is no. But the next earthquake will look very different. It will shake differently. The patterns will be different.

9:16:08 AM
DR. WEST said Southeast Alaska is more than capable of a magnitude 7 earthquake, but it is likely to be some distance from Juneau. Fairbanks has a history of magnitude 6 and 7 earthquakes but not as frequently as Southcentral Alaska.

DR. WEST said the forecast about when aftershocks will end is by the end of 2019. At that point it will be difficult to distinguish an aftershock from normal background seismic activity.

DR. WEST said one question has been where was shaking most violent. It was about the same in the Mat-Su, Eagle River, and Anchorage areas. There was disproportionate damage in the Eagle River, but it probably did not experience shaking that was stronger than elsewhere.

DR. WEST said four of the five earthquakes in the U.S. occur in Alaska. Their fundamental challenge is limited observations. They don't have the same resources tools available in the lower 48. Alaska has three seismic sensors in an area the size of California.

DR. WEST said they would have more capabilities with more sensors. He made an analogy of an astronomer doing research with a pair of binoculars as opposed to the Hubble telescope.

DR. WEST said Washington, Oregon, and California are rolling out on an operational basis earthquake early warning. People can have 5, 10, 15, 60 seconds warning before the shaking hits. It is now a reality in parts of this country. It is not even considered in Alaska because Alaska doesn't have the foundation to build that system.

DR. WEST revealed that the monitoring network in Alaska is presently stronger than before. Alaska has its Hubble telescope because of a massive rollout in the last three years of seismic instrumentation through a National Science Foundation project that is going away in 2020. They are mounting an extensive campaign with federal agencies, Alaska's Congressional delegation, and a state capital project to retain portions of this.

SENATOR BEGICH asked why the project is going away.

DR. WEST answered that it is a research project. The objective was not year-to-year, decades of monitoring, which is the focus of the Alaska Earthquake Center.

CHAIR STEVENS asked about the seismic stations in the state.

DR. WEST replied that they are very similar to what they operate. They could not have tracked the Kaktovik earthquakes without this project. The closest stations to Kaktovik are part of the project going away in 2020.

SENATOR BEGICH asked if the cost of the capital budget entailed taking over the seismic stations before they are removed. He asked how fast that would have to happen before the Science Foundation removes its science project.

DR. WEST responded that the goal is to assume ownership and integrate about half of the facility into the existing state network. They are pursuing $48 million at the federal level, which would operate the system for a decade. He would characterize what they are seeking in state capital funds as kick starter funds.

SENATOR BEGICH said that is a small investment to keep oil and gas partners whole.

9:25:05 AM
SENATOR BIRCH said he has seen a lot of remote sensing capabilities and the technology is improving. He asked would they get the granularity they needed with satellites.

DR. WEST answered yes. There are many different technologies today to form their earthquake monitoring capability. GPS sensors are remarkably capable. People would be surprised at what information cell phones and their accelerometers can

provide in certain locations. Satellite images have excellent granularity; they lack temporal coverage. A pass every few days is the not the same as 100 samples a second.

DR. WEST said he wanted to cover building codes because they are germane to the education discussion. Building codes have built into them the seismic record that is changing and evolving constantly. It is why they know to build to a high standard in some areas and not in other areas.

DR. WEST said a video of schoolchildren responding to the November 30 earthquake with drop, cover, and hold responses is remarkable and no accident. There has been a concerted effort over many years to train students. Everyone involved in training deserves accolades for the responses that day.

DR. WEST said over the last six years the Alaska Seismic Hazards Safety Commission has been pursuing support through FEMA (Federal Emergency Management Agency) to work with school districts to provide rapid building screening. This highlights which buildings in the district are of concern.

CHAIR STEVENS said that is important because in tsunami areas the schools are the evacuation centers.

DR. WEST responded that that is a key point for coastal communities.

DR. WEST said he wanted to encourage them to put seismometers in schools. In the world of 2019 that is easy to do. It is useful and specific data about that particular school and its neighborhood. It is an Alaska Seismic Hazards Safety Commission policy recommendation.

9:31:50 AM
At ease

9:31:53 AM
SENATOR HUGHES and SENATOR COSTELLO joined the committee.

CHAIR STEVENS reconvened the meeting.

9:33:06 AM
TIM LAMKIN, Staff, Senator Gary Stevens, Alaska State Legislature, showed a video of the earthquake at the University of Alaska Anchorage (UAA) campus submitted by UAA and noted that Tim Edwards would be testifying via teleconference.

9:35:35 AM
TIM EDWARDS, Chief Risk Officer, University of Alaska, Anchorage, Alaska, said over 60 facilities were damaged at UAA and the University of Alaska Fairbanks, including Anchorage, Eagle River, Mat-Su, and Seward, with nearly $4 million in damages. The UAA Anchorage campus was closed for five days. Now they were working to see how much of the $4 million FEMA would reimburse.

SENATOR BEGICH asked he expected more damage to be revealed after the thaw.

MR. EDWARDS said yes, they were monitoring that, especially around rain downspouts.

SENATOR HUGHES asked if he was repeating assessments because of the aftershocks.

MR. EDWARDS answered that they monitor daily if they get aftershocks. It is an on-going assessment project.

MR. EDWARDS said the earthquake caused substantial campus damage. The boilers went offline at three residence halls. The Chugiak-Eagle River campus was damaged significantly. The middle college was relocated temporarily, but the Eagle River campus has reopened, which he called truly amazing considering the amount of damage. The UAA administration building has reopened. The fire suppression, plumbing, and coolant leaks at numerous facilities were caught early with rapid initial assessment.

SENATOR BIRCH asked about the photo of concrete blocks in a bathroom in a slide of campus damage.

MR. EDWARDS replied that some of the walls had unreinforced concrete. That is an issue they are looking into as they do their assessment. He said the photo is of a leased building in Chugiak. When concrete is not reinforced with rebar, it can cause problems quickly.

SENATOR BIRCH responded, "Clearly."

MR. EDWARDS reviewed a slide of flooding at the Alaska Airlines Center caused by the fire suppression system. They were afraid of the boards on the basketball court warping, but they cleaned it up quickly and there was no damage.

MR. EDWARDS said the photo of damage at the Student Union is typical of a lot of the damage. A lot of ceiling tiles and lights came down in many areas. Within 7 or 8 days, the response team had the Student Union back together.

MR. EDWARDS said the response team got a water main break at the Engineering and Computation Building under control very quickly. It could have caused major damage. The flooding was getting close to electrical systems. It was remarkable they didn't have more water main breaks.

MR. EDWARDS said their buildings did well structurally, but internally it was like shaking a snow globe. At the library over 100,000 books were knocked off the shelves. Everything is picked up and running at the library now.

MR. EDWARDS said they have a strong culture of emergency planning. They have three emergency managers, one at each campus, and one statewide emergency manager. They were prepared for the earthquake in November. They were able to execute what they had planned for. There were no student, faculty, or staff injuries. The initial assessments on all buildings were complete in 36 hours. The earthquake occurred on Friday. They worked throughout the weekend and the campus reopened on Tuesday in time for finals and commencement.

MR. EDWARDS shared that the UAA mantra has now become, "Together, we are unstoppable."

MR. EDWARDS said earthquake repairs are 90 percent complete. They will be back to 100 percent shortly. They are working with the claims division and FEMA.

9:47:20 AM
TIM MEARIG, Facilities Manager, Department of Education and Early Development (DEED), Juneau, Alaska, said the department does not have a direct role in schools at the LDA level except for a few REAA (Regional Educational Attendance Area) schools that they own. Someone from the department's facility staff spent the weekend in Mat-Su and Anchorage just being a partner with them. School safety staff happened to be in Anchorage for a conference during the earthquake. That unit provides trauma-centered education for teachers. They provided department interface with school districts about available resources such as counselors and information.

MR. MEARIG said the department handles emergencies through the requirement that each district must ensure their buildings. The department is not funded with an emergency fund. AS 14.11, which provides state aid for school capital, provides for grant and debt reimbursement as provided through the legislature. In the Anchorage earthquake in January 2016, the department participated with state aid in a project at Romig Middle School and West High School to fund repairs that were initially covered by district emergency funds. They were then submitted for state aid on a prioritized basis. That could happen with the November earthquake. If costs are beyond what FEMA insures, there might be applications to the state for funding for repairing facilities.

CHAIR STEVENS noted that in coastal communities, schools are evacuation centers in case of tsunamis. He asked if the department has a role in making sure that those centers are stable.

MR. MEARIG answered that the department doesn't have a specific standard about a school being an emergency shelter. That is a community decision. As for whether AS 14.11 should fund a school functioning in that role, there has been some discussion in the past about who has the responsibility for things such as generator capacity, fuel, and food storage. There are open questions about how that dovetails with the K-12 mission.

SENATOR BEGICH asked for confirmation that grants for school construction require schools to meet the highest standards to anticipate seismic shock.

MR. MEARIG replied that they adopt appropriate codes put in place by code enforcement officials and code bodies. They list those codes for school projects. Those buildings are superior quality buildings. There is a seismic importance factor used in code based on the type of building.

9:54:54 AM
SENATOR HUGHES asked, in addition to building codes, if any consideration of location of schools is given as far as historic seismic activity and location of fault lines.

MR. MEARIG answered that mostly local zoning provisions take those into account. The department has published a school site selection criteria handbook that includes some criteria about siting in safe areas They do primarily rely on local jurisdictions.

9:57:11 AM
At ease

9:57:17 AM
MIKE BROWN, Executive Director of Operations, Matanuska-Susitna Borough School District, Palmer, Alaska, called the committee's attention to the two-page handout about the status of facilities in the Mat-Su Borough School District. As of December 18, 2018, all schools were back in session except for Houston Middle School, which has been deemed not safe to occupy. The district has spent $1 million for earthquake repairs and response and the Mat-Su Borough $800,000, so roughly $2 million has been spent to date.

MR. BROWN said the Mat-Su assembly appropriated emergency funding to address immediate needs. Immediately after the earthquake their facilities responses included structural assessments as well as various inspections of life and safety systems, such as fire protection. Emphasis was placed on preventing further damage from things such as water and gas leaks.

MR. BROWN said outside of the damage to Houston Middle School, Houston Jr/Sr High School, Colony High School, and Wasilla Middle School, the majority of damage was to ceiling grid and tile. Houston Middle School suffered significant structural damage, especially in the second story classroom wing, as well as the gymnasium, and is unsafe to occupy. The Mat-Su Borough has already engaged with architects and engineers to assess the facilities. They are doing that detailed inspection now. They will get that report in the next month and the insurance adjusters report. At that time they can begin to establish the cost estimate to repair or replace. The damage is in the millions of dollars with complete replacement as a possibility. The borough and district worked closely to place 13 portables at Houston High School. The two schools were consolidated into what is now known as Houston Jr/Sr High School. In just one month since the 7.0 earthquake they instituted a plan to keep the Houston Middle School students together and provide them a safe and healthy environment. This will be an extended stay.

MR. BROWN said Colony High School had gym damage and has been unsafe to occupy since the earthquake, but they expect Monday, February 11, that the gym will be open. The Knik Elementary gym experienced significant ceiling grid and tile failure. Those repairs will be completed over spring break in mid-March.

MR. BROWN said they are fortunate that there were no significant injuries. They are revisiting procedures and processes to help improve preparedness as they move forward. Student and staff responses won the day. They continue the process of rapid visual screening. They are screening for further investigations or future capital improvements to make improvements in seismic capacity in select buildings. Their number two priority on their six-year CIP [Capital Improvement Projects] on file with the Department of Education and Early Development is seismic upgrades for four facilities.

MR. BROWN said they are pleased with the actions of staff and students to protect life. The way they conducted evacuations was appropriate, as well as the reunification process to ensure kids were handed back to parents and guardians correctly and safely. They put a focus on getting back to normal operations, getting schools opened as quickly as possible.

MR. BROWN said lastly, they are moving forward on how to make sure they have what they need to make improvements in facilities based on what they've learned the last two months.

10:05:41 AM
SENATOR HUGHES said that at Palmer High School, fire alarms were going off and so students were exiting and having to remain outside. She asked if teachers felt that they were adequately trained as far as evacuation and communication systems. She also asked about the process for reunification and the process for dealing with students whose parents could not pick them up. Some parents would have been stuck in Anchorage. She noted that there had been traffic jams when parents were picking up students. She asked how the alert went out to parents. She also wondered how much fear kids had when they were back in school and what resources did teachers have for that.

MR. BROWN replied that he would start with communications. They had an extensive debrief with principals about lessons learned. Communications was one of the primary things that came up. They are going to procure additional radios. They want to make sure they have better radio communications so they do not rely on building infrastructure and administrators can give better direction and guidance about whether students should evacuate or stay put.

MR. BROWN said they use Blackboard Mass Notification, which is very effective in getting the word out quickly to parents. The

superintendent made decisions about criteria for the reunification process to make sure that kids would not possibly be going home to a gas leak without an adult to check that. Schools had explicit guidance about releasing students to parents and guardians. They have had a lot of discussions lately about traffic control with the Mat-Su Borough and how to orchestrate a reunification site if they must go to a secondary location.

MR. BROWN said the facilities crews and custodians restored schools back to order. Teachers had a day in classrooms before students returned to restore normalcy to allow the staff to address student needs the next day.

SENATOR HUGHES spoke about the trauma of the aftershocks. She asked if teachers felt they had adequate support while aftershocks were occurring and were additional counseling resources needed.

MR. BROWN answered that he was not aware of any specific needs, but psychologists and counselors were available

SENATOR BEGICH asked if he expected to find more damage after the thaw.

MR. BROWN said that may occur. They did a grounds inspection with a civil engineer. Because they are in a more rural area, they had to look at wells for cracks in casing. They did a grounds assessment as best they could, but it will be an ongoing assessment process as the snow and ice melt.

SENATOR HUGHES asked if the district requires earthquake drills.

MR. BROWN answered absolutely. They do drill procedures on a regular basis and schools are required to report that they did those drills.

10:14:40 AM
DEENA BISHOP, Ph.D., Superintendent, Anchorage School District, Anchorage, Alaska, noted that on October 19, 2019, at 10:19 in the morning, every school and every adult in the Anchorage School (ASD) did the Great Alaska Shakeout, so nearly a month prior to the earthquake everyone participated in an earthquake drill.

DR. BISHOP said that everything in her presentation is archived on the ASD website. The ASD is an important part of the

community since 1/6th of the entire population of Anchorage walks through an ASD school or works in an ASD school daily, and she wanted to make that she reached out to the community and made the information accessible.

DR. BISHOP explained that the link to the Earthquake Updates page is on the Hot Topics page on the ASD website. Updates start with a letter November 30 to ASD staff and families that spelled out how communication would be given, what they would be doing, and how they could access the most up-to-date information. The last letter is dated January 22 for Eagle River Elementary and Gruening Middle School, the two schools taken offline, including for next year. They are now working with the entire community to work for the best situation of kids. Their primary goal immediately after the earthquake was to keep students with their teachers. But now they want to talk to the community about whether rezoning would be better than splitting up grade levels and things like that. They are being very transparent with the process.

DR. BISHOP said the ASD web page, The Road to Recovery, is an update of all information from the very first rapid assessment the day of the earthquake as well as the next steps.

DR. BISHOP said they did have an emergency operation center, the Ed Center. They kept track of all 92 facilities plus two rented facilities. By statutory requirement, schools must have a higher level of readiness than general buildings. They had to ensure that fire alarms were working, that panic buttons were working, that the playground equipment had been assessed, that the kitchen was ready for lunch. The Ed Center kept an ongoing assessment of capital and school-ready functions. That group operated for a month after the earthquake.

DR. BISHOP showed an online spreadsheet of ASD school status that was updated with information from the Ed Center. As soon as they knew information, families knew it.

10:21:11 AM
DR. BISHOP shared that a video of student reaction had been taken because, serendipitously, a teacher supervisor happened to be filming a teacher lesson when the earthquake struck. The video shows how well the students responded during the earthquake. Dr. Bishop said they do teach their kids to be alert and then listen to instructions. Dr. Bishop related a story of a reporter asking her how she responded when she first heard that an earthquake was going to happen. She added, "Preparation

matters. The training matters. The Great Alaska Shakeout matters."

DR. BISHOP said the emergency operation center was set up the day of earthquake. The primary focus was student and staff safety and then reunifications with families. Initially, about 24,000 students were in buildings. The earthquake struck right before elementary school started, and 12,000 students were on buses.

DR. BISHOP said that seven of the 15 heavily damaged schools are in the Chugiak-Eagle River area. Eagle River Elementary and Gruening Middle School are the two taken offline for next year and presently, students are housed in different locations. School was closed for a week. For two days all staff was out so they could ensure all buildings. Then all employees, including bus drivers, aides, and teachers, moved classrooms and put classrooms back together. They used their own school buses to move material.

DR. BISHOP said that FEMA was onsite February 4. The process with FEMA is a negotiation about loss and damage. The ASD to date has expended just over $22 million. Many of the costs are reimbursable through insurance. They do not have earthquake insurance per se, but building contents and what occurs after the earthquake, such as water damage, are covered. Their insurance adjusters called the day of the earthquake. The slide presentation noted that the costs do not include the top 15 schools that are currently being evaluated by architecture and design firms.

DR. BISHOP concluded by sharing an ASD video made to assure families that students would be safe returning to school. They wanted to show classrooms were mission ready.

SENATOR BEGICH asked if she expected to find more damage after the thaw.

DR. BISHOP answered absolutely, especially in parking lots and ground damage. ASD has received some criticism about bonding or the cost of school construction. ASD has been replacing roofs over the last several years. Schools in Anchorage are old and built under different code. As they replace roofs, they also upgrade them to seismic code. Now the community understands why roofs cost $2 to $3 million. The newer areas of Dimond High went through the earthquake just fine. The original areas were the ones damaged. They know that building codes work.

DR. BISHOP said that when kids came back to school, it was important to return to normalcy, to move through this emergency, to learn from this event, to talk about it, and to continue to learn.

SENATOR COSTELLO thanked her for preparing students. She shared that she was home with her 11-year-old son when the earthquake hit and he grabbed her hand and ducked under the kitchen table. She said anyone who went to West High School knows it is missing a level because of the 64 quake. The Alaska Seismic Hazards Safety Commission provides information on the FEMA rapid visual screening risk results, which estimates the collapse probability of schools. The commission told her the Anchorage municipality does not provide that information to the commission. She asked Dr. Bishop to work with her on addressing that because Anchorage public schools should not be omitted from this transparent source of information.

10:32:45 AM
DR. BISHOP answered that she would. She said her ASD has not been contacted, but they will look into it with the municipality. ASD runs the schools, but the municipality owns the schools.

SENATOR HUGHES asked how the FEMA money was handled. And since school was not in session for a week, would there have to be makeup days for students.

DR. BISHOP replied that the ASD builds additional days beyond the minimum of 170 days. Students will make up 1.5 days and 1.5 days will be excused by DEED. Extending the school year is difficult for families because of graduations, work, students going into military, and so many other concerns.

DR. BISHOP said that FEMA is not a legislative process. It is directly with the entities of the city, university, and school district. FEMA is a negotiation. They must demonstrate those needs. It is an approval by the federal government of the need that the federal government will reimburse up to 75 percent.

CHAIR STEVENS said preparation is really important. They were lucky it wasn't worse as it has been in the past. He asked whether the school district is an evacuation site.

DR. BISHOP responded that many schools are evacuation sites. Through their emergency response they have enough food, water,

and blankets--enough for three days to house the number of students and families in different areas. They work with the municipality on that. Structurally, many schools were not damaged. The older HVAC (heating, ventilation, and air conditioning) systems use water, so, along with sprinkler systems, they had extensive water damage. The ages of buildings and dates of renovations mattered with earthquake damage. Starting November 30, the city wanted to know the extent of damage in order to know whether schools could be used as evacuation sites. Some of the schools were greenlined right away for the city in case they were needed. "It really just worked. Practice does help us prepare," Dr. Bishop said.

10:38:59 AM

There being no further business to come before the committee, Chair Stevens adjourned the Senate Education Standing Committee at 10:38 a.m.