Rules Committee
•
Senate Finance Committee
•
Health & Social Services Committee
•
Community & Regional Affairs Committee
•
World Trade Special Committee
•

ALASKA STATE LEGISLATURE

While in Session
State Capitol, Rm. 119
Juneau, AK 99801
(907) 465-3704
Fax (907) 465-2529
•
While in Anchorage
716 W. 4th Ave. Ste 500
Anchorage, AK 99501
(907) 269-0169
Fax (907) 269-0172

SENATOR JOHNNY ELLIS
RULES COMMITTEE CHAIR

MEMORANDUM

DATE: **March 25, 2011**

TO: **Senator Kevin Meyer, Senator Joe Thomas**
Co-Chairs, Senate Education Committee

FROM: **Senator Johnny Ellis**

RE: **Hearing Request for Senate Bill 107 – An Act making special appropriations for new engineering buildings for the University of Alaska in Anchorage and Fairbanks.**

I am respectfully requesting that SB 107 be scheduled for a hearing in the Senate Education Committee at your earliest convenience.

SB 107 offers an important opportunity to invest in Alaska's development and progress by supporting new engineering facilities at the University of Alaska Anchorage and University of Alaska Fairbanks.

Included in this packet:

- A current version of SB 107 27-LS0462\M
- Sponsor Statement
- Letters of support
- Supporting Material

Other back up will be provided soon.

Thank you.

Senator Johnny Ellis State Capitol Rm 119 Juneau, AK 99801 Phone: (907) 465-3704 Fax (907) 465-2529 email: Senator.Johnny.Ellis@akleg.gov

SENATE BILL NO. 107

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-SEVENTH LEGISLATURE - FIRST SESSION

BY SENATOR ELLIS

Introduced: 3/21/11
Referred: Education, Finance

Funding Information:	**General Fund**	**$ 125,000,000**
	Other Funds	**-0-**
	Total	**$ 125,000,000**

A BILL

FOR AN ACT ENTITLED

"An Act making special appropriations for new engineering buildings for the University of Alaska in Anchorage and Fairbanks."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* **Section 1.** The sum of $75,000,000 is appropriated from the general fund to the University of Alaska for the design and construction of a new engineering building at the University of Alaska Anchorage.

* **Sec. 2.** The sum of $50,000,000 is appropriated from the general fund to the University of Alaska for the design and construction of a new engineering building at the University of Alaska Fairbanks.

* **Sec. 3.** LAPSE. The appropriations made by this Act are for capital projects and lapse under AS 37.25.020.

Rules Committee
•
Senate Finance Committee
•
Health & Social Services Committee
•
Community & Regional Affairs Committee
•
World Trade Special Committee
•
Committee on Committees

ALASKA STATE LEGISLATURE

While in Session
State Capitol, Rm. 119
Juneau, AK 99801
(907) 465-3704
Fax: (907) 465-2529
•
While in Anchorage
716 W. 4th Ave, Rm. 500
Anchorage, AK 99501
(907) 269-0169
Fax: (907) 269-0172

SENATOR JOHNNY ELLIS
RULES COMMITTEE CHAIR

SPONSOR STATEMENT – SENATE BILL 107

SB 107 – An Act making special appropriations for new engineering buildings for the University of Alaska in Anchorage and Fairbanks.

SB 107 will keep engineers living and working within our state by appropriating $50 million for the design and construction of new engineering facilities at the University of Alaska Fairbanks and $75 million for the design and construction of new engineering facilities at the University of Alaska Anchorage.

Alaska faces a shortage of qualified engineers and some companies are resorting to sending Alaska's engineering design work outside. Shortages are especially apparent for surveyors and electrical, mechanical, mining and petroleum engineers:

- Many of the engineers working in Alaska now are not Alaska residents, up to 35% in some fields
- Only 18% of engineers working in Alaska have degrees from an Alaska institution
- Alaska is nearly last in the US for graduating engineers

To respond to the state's need, the University of Alaska Board of Regents set a priority to double annual engineering graduates by 2014, to 200 per year. UA baccalaureate engineering majors have grown significantly, nearly doubling from just over 500 in FY03 to more than 1000 in FY10. UA engineering programs are succeeding at recruiting and training more engineers, but are facing daunting shortages of lab and classroom space.

The space shortages UA engineering programs face are severe. Engineering programs across the country offer on average 120 gross square feet (GSF) per student. UAA's program currently has access to only one-third the average at 44 (GSF). The recent UA funded UA Engineering Plan by consultant Ira Fink and Associates details the additional space needs at each of the UAA and UAF campuses. The recommendation was a minimum of 74,968 (GSF) is needed at UAA and 43,058 (GSF) at UAF.

More engineering resources are a critical component of economic development and growing our own Alaskan workforce. Engineers and surveyors play key roles in the planning, design and management of any resource development, construction or development projects. For Alaska to move forward and keep our promise to develop our resources, we will need "Alaska Grown" engineers.

University of Alaska
UA Engineering Plan 2010

DRAFT REPORT (Presented to Regents February 17-18, 2011)
January 24, 2011 (Draft E1)
By UA hired consultant, Ira Fink and Associates, Inc.
See http://www.alaska.edu/bor/agendas/2011/feb17-18/110217ref01.pdf
Extracted Text

Page ES-9

• **Degree Increases:** Based on historical enrollments and projections in the Engineering Plan 2010, baccalaureate engineering degrees are expected to increase to 103 by spring 2014 at UAA and to 99 by spring 2014 at UAF. The Regents' target of 200 undergraduate baccalaureate degrees being awarded at the University of Alaska should be reached in spring 2014.

Page ES-11

• **UAA Engineering Space Needs Projection:** For projection purposes, space needs were projected for both campuses at 1,676 asf per faculty based on a benchmark analysis of ten other schools and colleges of engineering. Based on this benchmark, the UAA School of Engineering should have 64,526 asf (107,543 gross square feet) of space. With its current existing space of 15,309 square feet, and the ability to gain back 4,278 square feet used for other programs in the UAA Engineering Building, the current space deficit for engineering at UAA is 44,939 asf, or about 74,898 gross square feet. Registrar-assigned classroom space used by UAA would add another 2,194 asf (3,657 gross square feet). The total space needs deficit is 78,555 gross square feet.

• **UAF Engineering Space Needs Projection:** At UAF, the 43.5 faculty at 1,676 asf per faculty would lead to a current space need of 72,906 asf. Deducting the current CEM space of 47,071 square feet leaves a CEM space deficit of 25,835 asf, or about 43,058 gross square feet. With the addition of Registrar-assigned classroom space of 6,730 square feet, the total UAF CEM space needs is 32,565 asf, or about 54,275 gross square feet.

Pages R-3 to R-4

RECOMMENDATIONS

1. Bachelor of Science Degrees: UAA and UAF should maintain a minimum of graduating 200 undergraduate trained engineers annually.

. . . . .

2. New Facilities: UAA and UAF should begin detailed facility programming and conceptual design for new engineering buildings on their campuses.

A major challenge to the UAA and UAF programs is the inadequacy of space devoted to engineering in general and engineering teaching laboratories in particular. As the photographs in this report indicate, the engineering laboratories themselves are cramped and full. Providing adequate space for hands-on learning, for the ability to set up and maintain projects, and for the opportunity to be in the laboratory in off hours, constitute opportunities that cannot be had at present because of the lack of space.

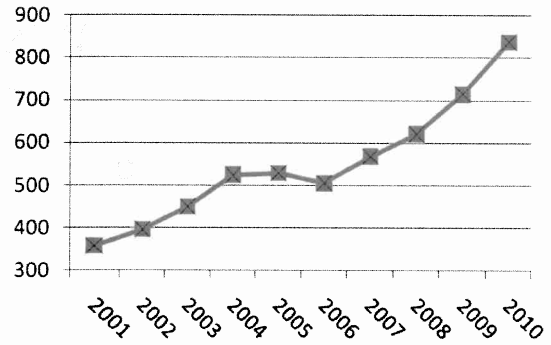
. . . . .

This study calculates the space deficit at UAA SOE to total 44,939 assignable square feet (asf) (74,898 gross square feet). This is in addition to the existing School of Engineering space, which totals 15,309 asf (25,515 gsf) plus an additional 4,278 asf (7,130 gsf) from space in the UAA Engineering Building that is currently assigned to the College of Health and Social Welfare for the WWAMI medical program.

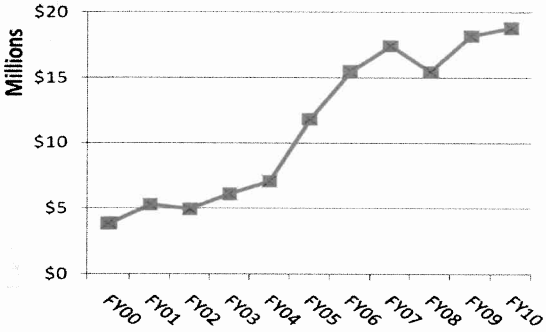
At UAF, the CEM space deficit is computed to be 25,835 asf (43,058 gsf). This is in addition to the 47,071 asf (78,452 gsf) of existing CEM space and 6,730 asf (11,217 gsf) of Registrar-assigned classrooms.

UAF College of Engineering and Mines
Update and Briefing - April 2011

CEM Student Enrollment



INE Research Funding



UAF Engineering Space Projection

Total UAF Engineering Space Need (43.5 UAF Faculty x 1,676 asf/Faculty)	72,906 asf	=	121,510 gross square feet
Existing CEM Space	- 47,071	=	- 78,452
CEM Space Deficit	25,835 asf	=	43,058 gross square feet
Plus Registrar-Assigned Classroom Space	+ 6,920	=	+ 11,533
Total Net Additional UAF CEM Space Needs	32,755 asf	=	54,591 gross square feet
$18 Million Research Income/$200 per sf	90,000 gsf		
GSF to ASF Conversion at 0.60	54,000 asf		
Existing INE Space	35,040 asf		
INE Space Deficit	18,960 asf	=	31,600 gross square feet

Source: Ira Fink and Associates, Inc.

Teaching Need

Research Need

College of Engineering and Mines & Institute of Northern Engineering

The College of Engineering and Mines (CEM) is growing fast, extending its ability to serve Alaska. CEM, formed in 2004, incorporated the resource-based and traditional engineering programs along with the Institute of Northern Engineering (INE - UAF's engineering research arm) into one strong unit.

Program Growth

- In 2006 UA President Hamilton announced the goal of doubling the graduation rate of engineers. CEM is well on the way to achieving that goal with a 70% increase in enrollment since 2006.
- The UAF computer science program joined CEM in 2010.

Research Accomplishments

- INE research funding is on a growth trend toward $24M over the next few years after starting at $6M when the college was formed in 2004.
- The newly formed Alaska Center for Energy and Power is addressing State needs for energy through applied research and testing.

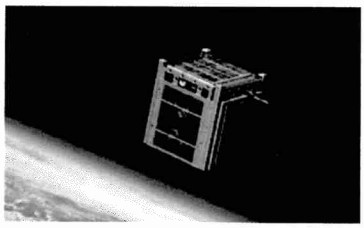
Facilities Needs

- **The recently completed UA Engineering Plan 2010 identified an additional 86,200 gross square feet of additional engineering space needs at the UAF campus in order to accommodate current teaching and research activities.**
- FY10 funding for engineering facilities planning is being used to carry out programming and planning for the new UAF engineering building. The RFP for planning and design services has been issued and proposals are due back mid-April.

Student Success

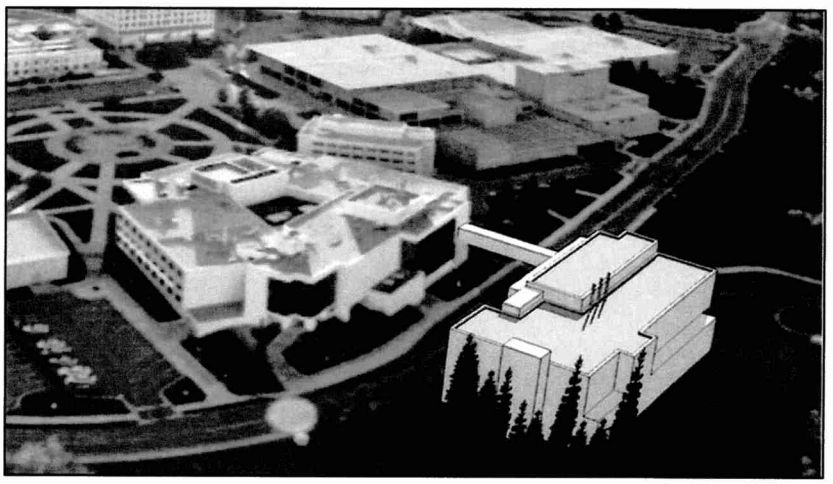
- The NASA-funded Student Rocket Project launched its fifth sounding rocket from Poker Flat Research Range in January 2009.
- The UAF ASCE Steel Bridge Team just won the 2011 Northwest Regional Title and will be attending Nationals later this spring.
- UAF's team entered the 2011 Society of Automotive Engineers Clean Snowmobile Challenge and won 1st place in the design competition, unseating U of Wisconsin (first place title winner three years in a row).
- For the last two years, CEM students from the UAF Microgravity project have won flight time on NASA's zero-G aircraft. They are now scheduled to launch a "CubeSAT" in 2013 as part of a NASA-funded program.

SRP-5 is launched from Poker Flat, Jan 2009



UAF to launch its own "CubeSAT" in 2013 as part of a NASA program

Proposed Duckering Building Expansion



AS&T Established 1980

Alaska Science & Technology
P.O. Box 100400
Anchorage, AK U.S.A. 99510-0400

907.562.2482
fax 907.561.2482
akscitec@alaska.net

March 23, 2011

Senator Johnny Ellis
Alaska Senate
State Capitol Room 119
Juneau, AK 99801

Forwarded by email

Dear Senator Ellis:

Funding is urgently needed for a new engineering building at the University of Alaska Anchorage.

Ballooning School of Engineering enrollments have created a space crisis. If funding was available today, the time consuming process of design, procurement, and construction would not allow a new building to be occupied for upwards of 10 years. Enrollments have tripled in the last 10 years. The word **crisis** is well justified.

The UAA School of Engineering (SOE) provides direct ready access to an engineering education for the more than 50 percent of Alaska's population located in Anchorage and Mat-Su. It also draws from the entire state. Enrollments will continue to grow, if faculty and facilities keep pace to accommodate them.

Beginning about 1998, a concentrated seven-year effort resulted in accredited programs in computer, electrical, and mechanical engineering. Prior to 2005, it was necessary to leave the area to obtain this type of higher education. High School graduates and working residents seeking continuing education are only beginning to recognize and take advantage of the new programs. Enrollment demands must be served.

Unfortunately, the UA 2010 Engineering Report initiated by Regents in response to this dramatic enrollment growth is only marginally competent. UAA needs 140,000 sq.ft. of additional engineering classroom and laboratory space by 2015, which is greatly understated in the Report. This is another example of typical regional politics, which have compromised development at UAA since the beginning.

At the UAA SOE, laboratory equipment is now rotated in and out of storage to meet multi-disciplinary class schedules. This compromising handicap is no way to operate a school of engineering. Accreditation is at risk. Hiring and retention of high quality faculty will suffer. Enrollments may have to be capped.

I have helped to push development of higher education in Anchorage and Southcentral Alaska, since Anchorage Community College only existed in evenings at West High School and on Elmendorf Air Force Base. Since the late '90s, my efforts have been focused upon providing local access to contemporary engineering educations. I have a unique perspective about this from long-time engagement as a physical scientist and engineer, and also as a senior official in the Alaska Section of the Institute of Electrical and Electronics Engineers (IEEE). It is extremely important to meet the public demand for higher education where it exists.

If we don't provide ready local access, the majority of our youth seeking an engineering education will attend universities Outside. After graduation, they seek nearby employment and get married, resulting in a lost resource to Alaska. Our youths are one natural resource we cannot afford to keep shipping Outside. Home-grown Alaskan engineering graduates provide a stable workforce that does not constantly transfer in and out of the state. Important economic factors are involved.

A stable engineering workforce contributes to the existing economy, and importantly to a developing economy. There is a need to move away from an economy almost totally based on extraction of natural resources. Resident engineers can also establish new industries based on innovative products. Ready access to a public higher education is necessary to bring this about. The key word is Access!

I am well connected from past service on a number of internal UAA bodies dating to 1980, including Chair of the Chancellor's Advisory Council and founder of the SOE Advisory Board. However at the present time I am not a member of an internal body, which provides latitude to independently represent the public's best interest. My background offers insight about current and future university program needs, and also the legislative process. I am aware of the internal push for funding.

I know you have strongly supported UAA in the past, and unfortunately the UA Administration is only now beginning to utilize $2M of your prior $10M appropriation for additional engineering planning at UAA and UAF. Again, regional politics are at work, and UA President Gamble's unwise Fisher Report is going to greatly complicate matters. Over the many years, this has been highly frustrating.

While contacting you I have felt a need to re-establish credibility, because it has been some time since I've worked directly with the Legislature on university matters. This was ongoing in earlier years. I will be happy to serve as a resource for coordination and in-depth information, on or off the radar. Please support the urgent need to fund a new engineering building at UAA.

Sincerely,

/s/ Robert L. (Bob) Baldwin
Managing Principal

From: Fred Millen [mailto:fmillen@uskh.com]
Sent: Friday, February 05, 2010 8:59 AM
To: Sen. Johnny Ellis
Subject: UAA Facility and Funding

Dear Senator Ellis,

It has come to my attention that you submitted legislation that would fund new facilities and infrastructure at the University of Alaska. As a Director of Human Resources at USKH, Inc I often recruit and hire engineers from various disciplines. Too many times I have had to hire individuals from outside of Alaska due to a void in the local applicant pool. An investment in UAA would help remedy this and allow my company and other local firms the opportunity to hire locally and provide graduates with opportunities here in our great state.

Thank you for introducing the legislation. It is my sincere hope that it gains the needed support.

Regards,

Fred S. Millen, SPHR
Director of Human Resources

USKH
SHARED VISION. UNIFIED APPROACH

2515 A St.
Anchorage, AK 99503
t: 907.276.4245
f: 907.343.5217
www.uskh.com

From: Mikal Hendee [mailto:mkhengineering@gmail.com]
Sent: Monday, March 28, 2011 10:21 AM
To: Sen. Johnny Ellis
Subject: Re: Seeking your support for Engineering Facilities - SB107

Dear Senator Ellis,
I am writing to let you know I am in full support of Senate Bill SB107 to fund the construction of new engineering buildings at UAF and UAA. As a 15-year engineer working in Alaska, I have watched the market for engineers increase over the years. The current engineering facilities at UAF and UAA are inadequate to support the demand for engineering graduates in this state.
Thank you for your sponsorship of this bill.
Sincerely,
Mike Hendee

Mike Hendee, P.E.
MKH Engineering
8050 Queen Victoria Drive
Anchorage, AK 99518
907-244-3807
mkhengineering@gmail.com

University of Alaska
UA Engineering Plan 2010

DRAFT REPORT (Presented to Regents February 17-18, 2011)
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Alaska Professional Design Council PO Box 100515 Anchorage AK 99510-0515

MEMBER SOCIETIES

Alaska Society of Professional Engineers

Alaska Society of Professional Land Surveyors

American Congress on Surveying & Mapping Alaska Section

American Institute of Architects Alaska Chapter

American Society of Civil Engineers Alaska Section

American Society of Landscape Architects Alaska Chapter

American Council of Engineering Companies of Alaska

Professional Engineers in Private Practice Alaska Chapter

American Society of Interior Designers

Structural Engineers Association of Alaska

LEGISLATIVE LIAISON COMMITTEE
2011 POSITION STATEMENT

The Alaska Professional Design Council (APDC) is a consortium of professional societies representing architects, engineers, land surveyors, landscape architects and other design professionals. Our member organizations have a combined membership of over 1,500 and represent approximately 5,000 licensed professionals. APDC addresses issues of concern to the various design professions through workshops, seminars, ad-hoc committees, standing committees, and governmental task forces. APDC also receives sustaining member support from 30 Architectural and Engineering firms throughout the State of Alaska.

One component of APDC activity is the Legislative Liaison Committee (LLC). The LLC is a standing committee that has been actively involved in legislation affecting the design community since the 1970's (actually predating APDC).

APDC works very closely with the Architects, Engineers, and Land Surveyors (AELS) Board to further the interests of the regulated design professions in keeping with the protection of the health, safety and welfare of the public. APDC generally supports the efforts of the AELS Board.

The following is a discussion of the primary issues of concern to APDC and our membership this legislative session:

Expand QBS to cover all recipients of state funds (APDC, ACEC) – The State of Alaska currently requires that designers on state funded public works projects be selected using a Qualifications Based Selection (QBS) criteria. This methodology results in the best qualified designer being selected for public projects. Political subdivisions of the state also design and construct public projects, and some of those entities attempt to utilize design fee, or cost as a component of the selection process. Due to the complex nature of design projects, APDC and ACEC strongly believe that it is in the public's interest to utilize QBS for all public projects, and are therefore working to extend the state requirement to use QBS on public works projects to political subdivisions receiving state funding for public works projects.

Specialty contractor exemption provision modification (AELS Board issue) – The AELS Board has expressed a concern that some work is being designed and installed without the appropriate oversight of a registered design professional. The Board is considering legislation that is intended to insure that the work completed by a specialty contractor under the exemption that exists in statute, is appropriately designed, and has the appropriate level of design professional involvement.

Alaska Professional Design Council
PO Box 100515
Anchorage AK 99510-0515

Support a state funded transportation program (APDC) – Alaska's essential transportation infrastructure is highly dependent on federal funding. In order to insure that Alaskans will have a safe, secure transportation system, it is vitally important for the state to implement a stable state funded transportation infrastructure program.

Support capital funding for deferred maintenance and repair of the state's public infrastructure (APDC) – APDC supports state funding for funding of capital projects that decrease the level of deferred maintenance and contribute to the repair of public facilities.

University of Alaska Design Programs and Funding (APDC) – APDC supports state funding for education in the engineering, surveying programs at the University of Alaska. Alaska faces a serious shortage of design professionals, especially in anticipation of major projects that may be occurring in the near future such as a gas line and other such projects. This is an issue of national proportion as evidenced by national professional organizations and major US engineering companies repeatedly emphasizing the declining number of engineering and design profession graduates nationwide. In order to keep the labor supply up with the demand, the University of Alaska system should be graduating about 200 entry level engineers each year. Currently, the University is producing roughly have of that demand. The University of Alaska system has had recent success in recruitment through programs such as the Alaska Native Science and Engineering Program [ANSEP], and the Bachelor of Science in Engineering [BSE] program. The University also has developed an increased number of pathways into engineering programs from all UA campuses. There has been a surge of lower division enrollment in the UA engineering programs, and this trend is expected to continue. The University also has a growing Geomatics (Surveying) program that needs additional support. The program has had to turn away applicants in recent years due to lack of space. There is also an interest in developing a School of Architecture in Alaska, and increasing technical support program offerings such as drafting, construction technology, and project management. While no specific proposal for a School of Architecture exists, APDC supports ongoing discussions between architects and University officials regarding establishment of an architectural program that can respond to growing demand in Alaska.

A steady supply of engineers, architects, surveyors and related design professionals into the Alaska workforce will have a multiplying effect on economic development in the State. This requires an increased investment in the UA design programs, and a look to the future for development of new programs.

During the last session of the State Legislature funds were provided for the University of Alaska to accomplish a Planning Study and Design for engineering facilities at the Fairbanks and Anchorage campuses. With the engineering planning study concluding and the designs for the two facilities about to begin, construction funding is the next step to assure that funds are available for continuous of our much needed investment into future.

Convert Landscape Architect position on AELS Board from non-voting, to full voting member (ASLA) – The Alaska Society of Landscape Architects supports the conversion of the current non-voting position on the AELS Board to full voting status. The current position requires a significant commitment of time and energy for the individual appointed to the position, but provides no ability to impact the decisions of the AELS Board.

Richard S. Armstrong, PE, LLC
Mechanical/Electrical Engineer

3700 Bon face Parkway A
Anchorage AK 99504

Phone 907-222 3000
Fax 907-222-3001
Cell 907-229-0331
Email darmstrong@rsa-ak.com

March 31, 2011

Senator Bettye Davis
State Capitol Room 30
Juneau, Ak 99801

Re: SB 107: UAA Engineering Building

Dear Senator Davis:

I have been on the University of Alaska Anchorage School of Engineering Advisory Board since its inception. Since our involvement, we have seen engineering enrollments increase exponentially at UAF, especially in the mechanical and electrical engineering areas since the introduction of the BSE program in engineering. The program has attracted so many students that the classrooms and labs are totally overwhelmed, and not adequate to properly provide the instruction needed for the program.

I understand that you are a champion of education, so I urge you to support SB 107 which addresses appropriation of $75 million for the design and construction of a new engineering building at the UAA campus, in addition to $50 million for engineering facilities at the UAF campus.

The building will enable many of our students to get their engineering education right here in Anchorage, so they do not have to move elsewhere, or abandon their desire to become engineers. Additionally, the graduates of the engineering programs at UAA will fill open jobs that are presently going to out of state engineers because there are not enough people to fill the engineering positions.

Thank you in advance for your support of this essential bill.

Very truly yours,

Richard S. Armstrong, P.E.

Cc: Senator Johnny Ellis

March 9, 2011

Senator Kevin Meyer
State Capitol Room 103
Juneau, AK 99801

RE: Support for UAA and UAF Engineering Facilities Construction Funding

Honorable Senator Meyer,

I am writing you today to request your support in meeting the critical needs for engineering related professionals in Alaska. As you may be aware, there is a tremendous demand for engineering professionals not only in our state, but nationwide. As a resource development state, Alaska must recognize the vital role that engineers, architects, surveyors and construction managers play in the development of our state. With many high profile Alaska projects planned for the future, combined with the critical need to address vital infrastructure upgrades throughout the state, the demands on our professional industry are so great that we must often look outside of the state to find professional and technical resources needed to perform the work.

I am proud to state that I am a lifelong Alaskan, having been born, raised and educated in Alaska. I earned my civil engineering degree from UAF and my MBA degree from UAA, and I have been working on engineering projects in Alaska for well over 30 years. As I advanced in my engineering and management career, I recognized the value that graduates from either UAF or UAA engineering programs had over other out-of-state graduates. Many of the projects that I have been involved with are rural in nature since I am Inupiaq from Barrow, Alaska and I have worked for Alaska Native Corporations or the North Slope Borough throughout my career. Graduates from either UAF or UAA have a fundamental understanding of the challenges of working in a rural community, whether it has to do with awareness of Alaska Native cultures, environmental extremes, permafrost or logistical challenges in construction.

Unfortunately, the University of Alaska (UA) is not meeting the current or projected needs of our engineering industry. A recent study was commissioned by the UA to look at the overall UA engineering program and it made the recommendation that both the UAA and UAF engineering programs require additional facilities to meet the demands of industry. I have heard that a Bill may be introduced soon for supporting the construction of engineering facilities at both UAA and UAF. I strongly support this effort and as one of your constituents, I would request your assistance by co-sponsoring this proposed Bill and supporting it too.

Respectfully,

Richard S. Reich

Richard S. Reich, P.E.
8310 Barnett Drive
Anchorage, AK 99518
Email: Richard.Reich@UICUMIAQ.com
Phone: (907) 273-1808

-----Original Message-----
From: John.Aho@CH2M.com [mailto:John.Aho@CH2M.com]
Sent: Monday, April 04, 2011 9:48 AM
To: Sen. Johnny Ellis
Subject:

Senator Ellis:

As a life-long Alaskan and having practiced engineering in the State for 40 years I wish express my support for SB107 and thank you, again, for your efforts in this area. The facilities are long overdue-the situation is critical.

Dr. John L. Aho

6771 Lauden Circle
Anchorage, AK 99502-3973

April 2, 2011

Senator Lesil McGuire
State Capitol, Room 125
Juneau, AK 99801-1182

RE: In support of construction of University of Alaska Engineering facilities:

Dear Senator McGuire:

I have been involved with the history of this particular project for many years now, first through my actions on the Board of the Alaska Chapter of the American Institute of Architects, and now also as a member of the Alaska Professional Design Council and the UAA School of Engineering Advisory Board.

I encourage you to support legislation for building funds for new Engineering facilities at ***BOTH*** UAA and UAF. Construction funds are needed almost immediately since lack of space and adequate technology in existing spaces is making it hard for students to graduate in a timely fashion, even threatening the accreditation of the UAA program. The existing buildings at both UAA and UAF are more than 30 years old, are under sized, and do not contain appropriate laboratories for undergraduate programs.

The UA Board of Regents recognized the need for expanding engineering education in the state and set objectives for the programs in 2007. This included the annual graduation of 200 undergraduate trained engineers, 20 baccalaureate construction manager graduates and 40-60 certificate and construction technology graduates by 2012. The UA Engineering Report 2010 prepared by Ira Fink and Associates cites industry demand for 200 Bachelor of Science engineering graduates per year by 2014. In the past five years both programs together have graduated between 50 and 100 students each year. It will take both programs to meet industry need.

Enrollment in the newly accredited UAA programs (accredited in 2009) has sky rocketed from under 10 in 2004 to over 70 in 2010. There are currently almost 200 seniors with engineering majors trying to graduate, but they can't get the courses they need. The Fink report found that 75,000 square feet of building are needed at UAA to meet current enrollment requirements for accreditation, and 54,000 square feet for the UAF program. This is to meet current need, not some projection of future growth.

Alaska is a developing state, with a large demand for engineers and other design and construction professionals to build the infrastructure and access the state's resources. Student and industry demand exists for the programs. Please support this growth industry through funding education facilities to meet the need, facilities adequate to the task, meeting national standards for accreditation, student and faculty retention.

Sincerely,

Catherine Call, AIA

Sent by fax: 907.465.6592

Cc: Senator Ellis
by fax 907.465.2529

From: Mikal Hendee [mailto:mkhengineering@gmail.com]
Sent: Monday, March 28, 2011 10:21 AM
To: Sen. Johnny Ellis
Subject: Re: Seeking your support for Engineering Facilities - SB107

Dear Senator Ellis,
I am writing to let you know I am in full support of Senate Bill SB107 to fund the construction of new engineering buildings at UAF and UAA. As a 15-year engineer working in Alaska, I have watched the market for engineers increase over the years. The current engineering facilities at UAF and UAA are inadequate to support the demand for engineering graduates in this state.
Thank you for your sponsorship of this bill.
Sincerely,
Mike Hendee

Mike Hendee, P.E.
MKH Engineering
8050 Queen Victoria Drive
Anchorage, AK 99518
907-244-3807
mkhengineering@gmail.com

From: Fred Millen [mailto:fmillen@uskh.com]
Sent: Friday, February 05, 2010 8:59 AM
To: Sen. Johnny Ellis
Subject: UAA Facility and Funding

Dear Senator Ellis,

It has come to my attention that you submitted legislation that would fund new facilities and infrastructure at the University of Alaska. As a Director of Human Resources at USKH, Inc I often recruit and hire engineers from various disciplines. Too many times I have had to hire individuals from outside of Alaska due to a void in the local applicant pool. An investment in UAA would help remedy this and allow my company and other local firms the opportunity to hire locally and provide graduates with opportunities here in our great state.

Thank you for introducing the legislation. It is my sincere hope that it gains the needed support

Regards,

Fred S. Millen, SPHR
Director of Human Resources

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March 23, 2011

Senator Johnny Ellis
Alaska Senate
State Capitol Room 119
Juneau, AK 99801

Forwarded by email

Dear Senator Ellis:

Funding is urgently needed for a new engineering building at the University of Alaska Anchorage.

Ballooning School of Engineering enrollments have created a space crisis. If funding was available today, the time consuming process of design, procurement, and construction would not allow a new building to be occupied for upwards of 10 years. Enrollments have tripled in the last 10 years. The word **crisis** is well justified.

The UAA School of Engineering (SOE) provides direct ready access to an engineering education for the more than 50 percent of Alaska's population located in Anchorage and Mat-Su. It also draws from the entire state. Enrollments will continue to grow, if faculty and facilities keep pace to accommodate them.

Beginning about 1998, a concentrated seven-year effort resulted in accredited programs in computer, electrical, and mechanical engineering. Prior to 2005, it was necessary to leave the area to obtain this type of higher education. High School graduates and working residents seeking continuing education are only beginning to recognize and take advantage of the new programs. Enrollment demands must be served.

Unfortunately, the UA 2010 Engineering Report initiated by Regents in response to this dramatic enrollment growth is only marginally competent. UAA needs 140,000 sq.ft. of additional engineering classroom and laboratory space by 2015, which is greatly understated in the Report. This is another example of typical regional politics, which have compromised development at UAA since the beginning.

At the UAA SOE, laboratory equipment is now rotated in and out of storage to meet multi-disciplinary class schedules. This compromising handicap is no way to operate a school of engineering. Accreditation is at risk. Hiring and retention of high quality faculty will suffer. Enrollments may have to be capped.

I have helped to push development of higher education in Anchorage and Southcentral Alaska, since Anchorage Community College only existed in evenings at West High School and on Elmendorf Air Force Base. Since the late '90s, my efforts have been focused upon providing local access to contemporary engineering educations. I have a unique perspective about this from long-time engagement as a physical scientist and engineer, and also as a senior official in the Alaska Section of the Institute of Electrical and Electronics Engineers (IEEE). It is extremely important to meet the public demand for higher education where it exists.

If we don't provide ready local access, the majority of our youth seeking an engineering education will attend universities Outside. After graduation, they seek nearby employment and get married, resulting in a lost resource to Alaska. Our youths are one natural resource we cannot afford to keep shipping Outside. Home-grown Alaskan engineering graduates provide a stable workforce that does not constantly transfer in and out of the state. Important economic factors are involved.

A stable engineering workforce contributes to the existing economy, and importantly to a developing economy. There is a need to move away from an economy almost totally based on extraction of natural resources. Resident engineers can also establish new industries based on innovative products. Ready access to a public higher education is necessary to bring this about. The key word is Access!

I am well connected from past service on a number of internal UAA bodies dating to 1980, including Chair of the Chancellor's Advisory Council and founder of the SOE Advisory Board. However at the present time I am not a member of an internal body, which provides latitude to independently represent the public's best interest. My background offers insight about current and future university program needs, and also the legislative process. I am aware of the internal push for funding.

I know you have strongly supported UAA in the past, and unfortunately the UA Administration is only now beginning to utilize $2M of your prior $10M appropriation for additional engineering planning at UAA and UAF. Again, regional politics are at work, and UA President Gamble's unwise Fisher Report is going to greatly complicate matters. Over the many years, this has been highly frustrating.

While contacting you I have felt a need to re-establish credibility, because it has been some time since I've worked directly with the Legislature on university matters. This was ongoing in earlier years. I will be happy to serve as a resource for coordination and in-depth information, on or off the radar. Please support the urgent need to fund a new engineering building at UAA.

Sincerely,

Robert L. Baldwin

/s/ Robert L. (Bob) Baldwin
Managing Principal

From: Ben Walker [mailto:benjamin.walker.ieee@gmail.com]
Sent: Monday, April 04, 2011 11:36 AM
To: Sen. Lesil McGuire
Cc: Sen. Johnny Ellis
Subject: Support for SB107: Engineering Building at UAA

Hello Senator Lesil McGuire. I am a resident in the Sand Lake Area and a student at UAA in the School of Engineering. I ask that you support this bill. After 4 years it is very clear that we need better facilities for engineering education.
There is a lack of proper lab space and insufficient/inappropriate classrooms available. For example, having a programming course in a room without computers to learn/practice on.

Thank you for your consideration.

Ben Walker