

ALASKA STATE LEGISLATURE
JOINT COMMITTEE ON LEGISLATIVE BUDGET AND AUDIT

February 25, 2005

8:07 a.m.

MEMBERS PRESENT

Senator Gene Therriault, Chair
Representative Ralph Samuels, Vice Chair
Senator Bert Stedman
Senator Lyda Green
Representative Mike Chenault
Representative Mike Hawker
Senator Gary Wilken, alternate
Representative Kevin Meyer, alternate

MEMBERS ABSENT

Senator Ben Stevens
Senator Lyman Hoffman
Representative Pete Kott
Representative Beth Kerttula
Representative Reggie Joule, alternate

OTHER LEGISLATORS PRESENT

Senator Thomas Wagoner

COMMITTEE CALENDAR

INFORMAL WORK SESSION ON THE ALASKA SCHOOL DISTRICT COST STUDY
BY ISER [INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH]

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

BRADFORD H. TUCK, Senior Researcher
Institute of Social and Economic Research (ISER)
University of Alaska Anchorage
Anchorage, Alaska
POSITION STATEMENT: Offered testimony on the ISER study.

ACTION NARRATIVE

CHAIR GENE THERRIAULT called the Joint Committee on Legislative Budget and Audit meeting to order at [8:07:39 AM](#). Senators Stedman, Green, and Wilken, and Representative Samuels, were present at the call to order. Representatives Chenault, Hawker, and Meyer, arrived as the meeting was in progress.

INFORMAL WORK SESSION ON THE ALASKA SCHOOL DISTRICT COST STUDY BY ISER [INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH]

[8:08:54 AM](#)

BRADFORD H. TUCK, Senior Researcher, Institute of Social and Economic Research [ISER], University of Alaska Anchorage, relayed that the two most significant differences between the school district cost factors studies, composed by the AIR [American Institutes for Research] and ISER, are the energy and salary compensation costs. The AIR study opted to design a model that estimated energy costs based on assumptions about the building efficiency and prototypes; the ISER study found a 40 percent error margin with AIR's energy cost methodologies. Therefore, the ISER study opted to use actual energy costs. The studies used different salary compensation methodologies to estimate personnel costs, specifically the teachers' and administrators' component. He related that AIR's study had a comparative wage index that was not relative to Alaska, and ISER discovered specification errors in the equation used to estimate the teachers' and administrators' compensation.

[8:12:02 AM](#)

MR. TUCK, in response to Chair Therriault, agreed that the energy and salary costs are the major differences between the aforementioned studies.

[8:12:58 AM](#)

CHAIR THERRIAULT asked Mr. Tuck to systematically review the ISER methodologies used to address the energy and salary cost factors.

[8:13:15 AM](#)

MR. TUCK related that ISER calculated the energy costs by using actual budget figures reported by the school districts. The actual costs were then applied to AIR's matrix of categorizing expenditures and divided by a per student energy cost for each district. Therefore, the formula would be as follows: the

energy cost for district 'X', divided by the energy cost per student for Anchorage, calculates the energy index for district 'X'. The ISER averaged the budget shares over a four fiscal year (FY) period, which was calculated into the energy component; he noted that averaging stabilizes the energy component figures and helps account for such things as different weather patterns.

MR. TUCK turned to pages 6 and 7 of the study entitled, "Alaska School District Cost Study Update" which details the differences between the ISER and AIR methodologies for compensation. He surmised that the AIR study didn't account for the following factors: the different districts' purchasing power, salary compensation is not of market equilibrium prices, and the existence of a queue that could imply quality differences in the pool of candidates. The ISER study incorporated a measure of "district purchasing power" that accounts for the amount allocated to school districts for operations, which in turn influences the compensation of the administrators and teachers, and doesn't reflect the market equilibrium price. The discrepancy between the quality of applicants supplied and the quantity demanded at a particular price defines a queue.

MR. TUCK pointed out that the ISER study added "community specific" data which addressed the concern that not all communities within a district are equally attractive to teachers or administrators. Therefore, the ISER study estimated the turnover rates of workers within particular districts given the following variables: the community, district, job, individual characteristics, and compensation. The ISER study analyzed the survival rates across the 53 Alaskan districts and the levels of adjustment needed to compensate a district, for the expectant survival rate within that district, to be equivalent to Anchorage.

[8:24:35 AM](#)

MR. TUCK related that the ISER study analyzed the types of compensation and community characteristics that influence an individual's decision to move. The ISER study used four categories of an individual's decision to move from one community to another, which includes the following: teachers changing to other teaching positions, teachers changing into administration positions, administrators changing into other administration positions, and administrators changing into teaching positions. He related the underlying economic hypothesis behind changing positions reflects an individual's

assessment that they're going to a better position. The ISER study applied a statistical technique that analyzed how much compensation would have to be adjusted so the probability of moving, from one district to another, is equal across all districts. He noted that the ISER approach addresses "supply type questions," essentially retaining and attracting the faculty and administrators to the [rural] school district positions.

[8:27:52 AM](#)

CHAIR THERRIault said the salary component is a large portion of any district's expenditures and location has little effect on those expenditures, but the salary component involves the [unrelated] issue of human irrationality into the equation. Thus, the ISER proposal suggests that people make decisions solely on the basis of salary, which doesn't account for the fact that individuals choose to live in specific communities for various reasons, such as a job for their spouse, the size of class, climate, distance from other family members, and offerings in the community. He said:

I am not sure, because of that human irrationalities factor, that we, number one, have enough money to overcome all of that. Nor, is it necessarily common sense that you would have to overcome all of that, but ... am I right that your [ISER] model really does go to that ideal situation where you would have enough money to overcome all of those community selection factors?"

[8:31:54 AM](#)

MR. TUCK replied that the ISER study doesn't assume all individuals are identical; hence, the model recognizes individual preferences and accounts for the fact that most moves are voluntary. He related that when teachers move from one place to another they're increasing their personal well-being which is incorporated into the model. In further response to Chair Therriault, he said that the estimation process included the variables of climate and remote distance, but there was no available data about family characteristics, such as marital status and family size. However, the study encompasses specificity about the types of teaching positions. He said:

[Chair Therriault's] point is valid in that this model is not going to predict how a particular individual is

going to respond to an offer, but the aspects of remoteness, the community make up, general access questions, and so forth, ... are part of analysis I think the analysis does address some of the issues [Chair Therriault] raised but clearly the data won't permit us to address some of the other issues that you raised, but ... in that the moves that we've observed ... that information does reflect the preferences of the individuals that are currently in the system, and in that sense ... the individual decisions about the kind of school they're going to, the family situation, jobs for spouses, [and] things like that ... is taken account of in the modeling.

[8:37:26 AM](#)

CHAIR THERRIAULT asked:

Was there ... any kind of a factor that ... quantified the districts that offer housing. It seems to be that if a district appeals to the younger, newer teacher, who's perhaps just coming out of college, has high student debt, is not married, they're trying to pay down their student loan, so if they can find a district that is able to offer some kind of a housing or housing stipend, that for the first couple of years of their teaching ... they may be attracted to that and therefore, give up some of the larger community amenities or go to a harsher climate while they try to pay down that debt and get a couple of years of experience. Was that factored in somehow, because I know that housing is not offered certainly uniform across the districts?

[8:38:28 AM](#)

MR. TUCK replied he was quite certain that the ISER study didn't have a specific variable that measured the housing benefit. However, the AIR study captured data from one year on housing, but the ISER study couldn't incorporate the entire sample period into its data without encountering problems. Therefore, benefit variables are not modeled explicitly in the study, because benefits like retirement are mostly uniform across the state. However, the ISER study mentions that health benefits vary across districts, in terms of contribution rates and the benefits derived from health packages for individuals and

employers. Better data would offer a more precise analysis, he noted.

[8:40:45 AM](#)

MR. TUCK, in response to Senator Wilken, said that the ISER study used actual cost expenditures on energy and calculated a per student figure, while the AIR study modeled the potential energy costs based on the school district's climatic zone.

[8:41:37 AM](#)

SENATOR WILKEN asked if the study factored in the hours of school use beyond [regular] public school hours.

[8:42:03 AM](#)

MR. TUCK replied no.

[8:42:05 AM](#)

SENATOR WILKEN recalled that in 1997 and 1998, during the Education Foundation Reform, the ISER study was critical of the McDowell study, which was the basis of the reform. The overall consensus [from the ISER study] was that the McDowell study wasn't correct, despite the fact that it was based on actual cost factors from audited statements, he surmised. He said that since then, the ISER study has done a "180," because in 1998 actual costs were "unacceptable," while the current study deems it as acceptable.

[8:43:30 AM](#)

MR. TUCK remarked, "It wouldn't be the first time that economists had different perspectives on different days." In further response to Senator Wilken, he said that the ISER study opted to use actual costs because the estimated values proposed [by AIR] "... were so far off that if the school district was forced to live with those [cost factors], it would probably have significant program impacts." He noted that the context of the ISER study was to legitimate the energy factors and the actual costs were more appropriate than the [error margin] found in AIR's forecast methodology. He recalled that Senator Wilken's question, regarding whether the building is used outside of [regular] public school hours is a valid one, but it is also an imperial question. For instance, it costs money to run the lights but at the same time when the lights are running they're

generating heat, which is necessary to maintain the building temperature. He pointed out that the AIR study was trying to budget for climate conditions and energy costs for a long-term capital plan, however it was an expensive process and they fell short. He reiterated that the ISER study opted to use actual costs because school district budgets would be cut 40 percent based on the AIR methodology.

[8:47:27 AM](#)

SENATOR WILKEN turned to the second paragraph on page 7 of the Alaska School District Cost Update, and said:

I am intrigued by [the ISER] concept of purchasing power across the state. I thought that [the] formula, ... contemplate[s] and account[s] for purchasing power; when we run accounts for economies of scale through the school size we account for location by the [DCF] factors Doesn't that take care of the purchasing power issue; and are you saying that because some areas of the state don't choose to contribute for education to support their education, therefore, they don't pay their teachers properly or enough, and therefore, other parts of the state should pick-up the effects of that decision? Is that what paragraph two says?

[8:48:36 AM](#)

MR. TUCK said, "well, I hope not," but the person responsible, Matthew Berman, for the aforementioned section is not available to better answer that question. Although [Mr. Tuck] is not an expert on the school formula, he related his belief that the purchasing power of some districts provide them the ability to fund their education more than the minimum required.

[8:49:43 AM](#)

SENATOR WILKEN asked if the aforementioned [ISER concept of purchasing power] was compensated for by the size and the location of the school, in the formula. He related that the [ISER proposal] would make the actual costs allocated from the state, \$4,000 to \$21,000 per student.

MR. TUCK said he didn't know [if the purchasing power was already accounted for in the formula].

SENATOR WILKEN added that he wants to return to that issue in order to clarify what the study is trying to convey.

[8:50:15 AM](#)

SENATOR WILKEN opined that the study turns to the issue of salary in rural areas. He said, "I am a little perplexed at that too, because the data doesn't seem to show that [salary] has the effect that [the ISER] seems to be placing on it." He turned to a 2002 study prepared at the request of Mark Hamilton; he related his belief that Mr. Hamilton understands, that Alaska only produces one-third of its teachers, and Alaska needs more teachers from Alaska to teach, particularly in the rural areas, he noted. He turned to the Alaska School District Cost Study Update, page 7, which relates that the queues in certain areas are shorter because of salary, and an additional allocation of \$82 million to drive salaries would allow the queues to be equally long or equally short across the state. However, the aforementioned data is contradictory to what the data from the 2002 study shows, he said. He referred to figure 6, from the 2002 study entitled, "Retaining Quality Teachers for Alaska" which details the reasons teachers quit, the following reasons are listed in order from the most significant to the least significant:

Reasons	Urban	Rural
family and personal reasons	two-thirds	55 percent
perusing another career	50 percent	50 percent
dissatisfied with their job description or responsibilities	44 percent	48 percent
better salary or benefits	14 percent	24 percent
disagreement with the [education] reforms	eight percent	seven percent

SENATOR WILKEN referred to the aforementioned 2002 study and turned to figure 7, which lists the nine factors for educators changing districts, the factors are listed as follows in order from the most common reasons to the least:

Reasons	Urban	Rural
personal and family reasons	100 percent	75 percent
the need to live somewhere else	50 percent	67 percent

teach in another district or community	36 percent	57 percent
dissatisfied with community support	third percent	56 percent
better housing	38 percent	36 percent
better medical care	zero percent	30 percent
better education for their children	zero percent urban	25 percent
disagreement with the [education] reforms		14 percent
better salary and benefits		14 percent

SENATOR WILKEN referred again the aforementioned 2002 study, and turned to figure 8, which asked educators their reasoning for either quitting, retiring, or moving, and 75 percent of rural Alaska educators claimed they were satisfied with their salary and benefits. Therefore, he related his belief that according to the 2002 study, salary is not the problem and it seems to be "way down" on the list of factors individuals consider when moving from one district to another.

SENATOR WILKEN pointed out that The Alaska Partnership for Teacher Enhancement grant is \$6.5 million and the program is currently in its fifth to sixth year. He related his belief that its goals are noble and worthy of [legislative] support. The main objective of the grant is have more Alaskan teachers and more specifically rural Alaskan teachers. He said:

And there are ... 14 different initiatives on the \$6.5 million grant, none of which have anything to do with increasing salaries or benefits, or those types of things, so I find it interesting that we would spend that kind of money and not perhaps zero-in on what [the ISER] report asserts to be the main reason why we don't have more teachers in rural Alaska ... With all due respect ... I am not sure that [the ISER] study wasn't a conclusion waiting for a study, because I don't think that given what [the ISER group] has done and what others are doing ... the basis of [the ISER] argument, that the queues are a function of money, holds up at all. In fact, I would say that there are many other things that we should be working on,

[including the following:] that is community support, better housing, those types of things that keep people, [and] better medical care. Those types of things that help not only the teachers in the community, but help the community itself. That's what we ought to be focusing on, and not just driving salaries hoping that it will attract more teachers because clearly from the studies [conducted previously] it appears it wouldn't I am a little skeptical of [ISER's] left turn from the AIR study to [the updated ISER] study Not sure that is the basis upon which this legislature ought to consider spreading around \$82 million.

[8:57:19 AM](#)

MR. TUCK commented that the ISER study is not arguing that the queues are "a function of dollars," but recognizes that the queues are impacted by a number of different factors. He referred the committee to the ISER study, pages 42 and 43, the appendix tables entitled, "Estimating the Percent of New Hires that are Districts' First Choice Candidates," which shows the number of equations for the different variables that effect new hire percentages, which include the following: remoteness, climate, student loans, and funding. He reiterated that queues are not solely dependent upon the function of wage, but that the queues reflect a combination of factors, such as the community, the individual, and the job characteristics. He related that the ISER study was trying to study if altering compensation could normalize the aforementioned variables that effect queues.

MR. TUCK, in further response to Senator Wilken, said he was "somewhat familiar" with the 2002 teacher retention study, and he understands Senator Wilken's reaction to the different conclusions of the study. However, he related his belief, that the current ISER study is similar to the aforementioned study because they both address the factors that cause people to leave their positions. However, the ISER study analyzes the amount of compensation needed to offset the aspects of the job that would cause them to change positions. He reiterated that the ISER study proposed, that given moving and retention patterns, the compensation level could offset those other factors.

[9:03:58 AM](#)

CHAIR THERRIAULT said that the ISER proposal does not address that the additional funding accrued to districts would actually

be used for salary. He noted that currently, whether it's from a "robust and varied pool of teachers," all the districts are filling all their positions. Therefore, if the legislature were to ramp-up dollars would the experience be similar in that all the queues for every job position, specifically for the smaller districts, could overcome the other compensations and ensure that the money actually flowed into salaries. He said that there is nothing in the current formula that would drive those dollars into paychecks. He asked if the ISER proposal would completely upset any kind of collective bargaining process.

[9:05:35 AM](#)

MR. TUCK related that Senator Therriault points out some issues that could arise with the implementation of the new index. The ISER study doesn't fully address those issues and he suggested that the legislature would be in a better position to address that. He reiterated that the basic question that the ISER study addressed was how to adjust compensation to allow districts to offset other factors.

[9:06:57 AM](#)

REPRESENTATIVE HAWKER said that the ISER methodology has been focusing on a "desirability index." He related his belief that in order to be consistent, the ISER methodology needs be extended for the larger districts to include a school-by-school comparison.

[9:07:37 AM](#)

MR. TUCK clarified that analysis was conducted at the community level, which accounted for moves and turnovers. Those results reflect the weighted average of the communities within the district. He said:

I guess you could extend the analysis to the community levels, but it would mean not just the teacher administrative portions of it, but the all of the components of the index would have to be developed at the community level. Currently, the reportings from the school districts, that include multi-community districts, it would require that [the] reporting would change [meaning] the data requirement would go up substantially What is implied in the index is that for a particular region ... is the differential is implicit and ... [its] up to the integrity and

ability of the district administration to make the adjustments within the district."

CHAIR THERRIAULT offered that consultants often differ on the proposed changes to the school equations due to their different methodologies.

ADJOURNMENT

9:10:22 AM.

There being no further business before the committee, the Legislative Budget and Audit Committee meeting was adjourned at 9:10 a.m.