

HOUSE FINANCE COMMITTEE
March 17, 2011
1:46 p.m.

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CALL TO ORDER

Co-Chair Stoltze called the House Finance Committee meeting to order at 1:46 p.m.

MEMBERS PRESENT

Representative Bill Stoltze, Co-Chair
Representative Bill Thomas Jr., Co-Chair
Representative Anna Fairclough, Vice-Chair
Representative Mia Costello
Representative Mike Doogan
Representative Bryce Edgmon
Representative Les Gara
Representative David Guttenberg
Representative Mark Neuman

MEMBERS ABSENT

Representative Reggie Joule
Representative Tammie Wilson

ALSO PRESENT

Representative Mike Hawker; Senator Cathy Giessel; Dr. Scott Goldsmith, Institute of Social and Economic Research, University of Alaska Anchorage.

SUMMARY

HB 110 PRODUCTION TAX ON OIL AND GAS

HB 110 was HEARD and HELD in committee for further consideration.

Vice-chair Fairclough discussed the merits and success of the "Pick. Click. Give." program and thanked Co-Chair Thomas for introducing the bill.

#hb110

HOUSE BILL NO. 110

"An Act relating to the interest rate applicable to certain amounts due for fees, taxes, and payments made and property delivered to the Department of Revenue; relating to the oil and gas production tax rate; relating to monthly installment payments of estimated oil and gas production tax; relating to oil and gas production tax credits for certain expenditures, including qualified capital credits for exploration, development, and production; relating to the limitation on assessment of oil and gas production taxes; relating to the determination of oil and gas production tax values; making conforming amendments; and providing for an effective date."

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DR. SCOTT GOLDSMITH, INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH (ISER), UNIVERSITY OF ALASKA ANCHORAGE, provided a PowerPoint presentation titled "Alaska's Petroleum Industry: Transformative, But is it Sustainable?" (copy on file). The presentation had two objectives, the first was to demonstrate the transformative impact that that petroleum had on the economy; the second, was to answer whether petroleum as an industry could sustain itself and the prosperity that Alaskans had come to expect for the next 50 or more years. He looked back 50 years to provide a view of Alaska's economy at statehood. He explained it was important to help understand how far Alaska had come as an economy; however, it was difficult for many Alaskans to see back to 1959 because they were either too young or had more recently arrived to the state. Approximately 90 percent of the state's citizens had only known the current Alaskan economy and viewed it as "normal." He emphasized that it was anything but normal. He provided a list of important features that pertained to Alaska's economy at statehood ("1960 Economic Structure," Page 2):

- Small: 90 thousand jobs
- Thin: Limited support businesses
- Seasonal: Summer private jobs 2x winter
- Transient: Seasonal and temporary
- Federal Domination: 1/2 jobs with fed
- Infrastructure underdeveloped
- Limited Tax Base

- Poor: Income 10-20% below US average

Dr. Goldsmith explained that the economic characteristics on Page 2 were largely the result of the economic structure of the time or the "economic base." The activities that brought money into Alaska from "outside" were the driving forces behind the economy. Although there was a belief that natural resources provided the economic foundation of the state, in 1960 it was possible to trace 80 percent of all market jobs directly or indirectly to the activities of the federal government. The federal government provided money for military payroll, for a large construction program that supported private construction and other infrastructure workers, and for the management of federal lands and other programs. He delineated that most trade and services jobs were supported by the payrolls of federal workers and their private infrastructure partners. Seafood was the largest private natural resource industry; however, together with mining and timber, natural resources only accounted for 15 percent of jobs on an annual basis. He expounded that because fishing was seasonal that most activity was concentrated during the summer months. Tourism was only just beginning in 1960 and there were not many other things going on.

Dr. Goldsmith presented a depiction of what Alaska's current economy would have looked like without the presence of the petroleum industry ("Alaska Today: No Oil" Page 3):

- Small: 187 thousand jobs
- Thin
- Seasonal
- Transient
- Federal domination
- Infrastructure underdeveloped
- Limited tax base
- Poor: Income 10-20% below US average

Dr. Goldsmith delineated that although no two people would conduct the experiment in the same way, the broad outlines of the absence of petroleum on the economy were clear. He shared that there would be 187,000 jobs, which was twice the number in 1960; however, the other characteristics of the economy would be very similar to those at the time of statehood. He explained that the economic characteristics would be similar because the economic structure would not

have changed significantly (Page 4: "2007 Economic Structure Without Petroleum"). The economy would have benefited from the following: private sector job growth that would have come from natural resources such as fishing, mining, and timber; the rise in tourism; and the state's location that would have resulted in an air cargo industry. Growth would not have come easily and the economy would still be dominated by federal spending for military and civilian programs. He contended that without petroleum Alaska would currently look similar to Maine, which was dependent on natural resources, tourism, and federal spending, with a limited tax base, and ageing infrastructure and population.

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Dr. Goldsmith reasoned that Alaska's economic picture did not look more positive because it was an "island" economy. He moved to Page 5 titled "Alaska: An Island Economy," and discussed that similar to other islands, Alaska was remote and had a small population. The state's remoteness meant that the cost of transporting goods in from suppliers and out to markets was high compared to other locations, and the state's small population meant that there was a lack of "economies of scale" in the production of goods for export. The two characteristics put Alaska at a competitive disadvantage that was almost impossible to overcome with the exception of some "niche" markets that could include seafood, tourism, and mining. He detailed that strategic location could also work to an island's advantage. Niche markets were not typically large enough to financially sustain an entire population; therefore, subsistence and foreign aid were also necessary for the well being of the economy. He asserted that Alaska was an island economy at statehood, and because of geography, had remained an island economy.

Dr. Goldsmith discussed three components of petroleum's contribution to the state's economy that doubled the size of the economy and significantly changed the state's characteristics. First, was its contribution through oil patch activity ("Petroleum Jobs: Oil Patch Related" Page 6). He relayed that a recent study had estimated that 42,000 jobs were a result of oil patch activities such as exploration, development, production, transportation, and processing. He opined that the study had underestimated the number of jobs by approximately 20,000 for a variety of

reasons. He elaborated that the petroleum payroll was much larger than the job count suggested. The graph on Page 7 compared the petroleum payroll (in black) to other resource industries such as fishing and tourism that were the next largest payrolls on the graph and directly employed many more workers ("Petroleum Jobs: Oil Patch Payroll (Million \$)"). Petroleum jobs were the highest paying in the state and averaged over \$100,000 per year, whereas the average annual tourism wage was \$29,000. He contended that because many tourism jobs lasted approximately four months that the wage for each individual job was closer to \$10,000. He communicated that high wages meant high purchasing power filtered through the rest of the economy and supported jobs in the trade and service sectors.

Dr. Goldsmith discussed that petroleum's second contribution to the economy was due to a small number of petroleum producer jobs, such as BP, Conoco, and Exxon, that sustained a larger number of oil and gas support jobs in drilling companies, etc. The smaller businesses were then able to support a more expansive range of transportation, engineering, warehousing, utilities, financial, legal, fabrication, and camp businesses. He explained that the petroleum industry job configuration resembled an upside down pyramid and that the top was represented by businesses that were supported by the payrolls from the large oil companies at the bottom (Page 8: "Petroleum Jobs: Oil Patch Support"). On Page 9 titled "General Fund Oil Revenues," he discussed that the second component of the petroleum contribution to the economy came from revenues that it generated for state and local governments. The red bars on the graph represented oil revenues that were currently \$5 billion to \$6 billion annually and the black line represented the petroleum share of total general fund revenues, which was currently 90 percent. He relayed that 90 percent was an underestimate of oil's importance to state general fund revenues. The number was closer to 95 percent with the inclusion of activities that supported petroleum production, such as corporate taxes paid by drillers, construction and engineering firms, etc. He reported that 98 percent of Alaska's resource revenues had come from petroleum since statehood.

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Representative Gara wondered how many support industry companies paid corporate taxes. He discussed that a

significant number of companies, doctors, lawyers, and businesses in the state avoided paying corporate taxes by avoiding the "C corporation" classification. Dr. Goldsmith could not provide a specific number. He disclosed that the share of businesses that actually paid corporate income taxes was less than 10 percent. The Department of Revenue (DOR) did not provide a breakout that showed which companies were paying corporate income tax.

Dr. Goldsmith addressed Page 10 titled "Petroleum Jobs: Funded by Petroleum Revenues." He discussed that the \$5 billion to \$6 billion annual oil revenues created jobs in state and local government, construction, and for other businesses that worked with the state government. The jobs tended to be year-round and high paying and the payroll filtered through the economy to provide support sector jobs. He estimated that approximately 50,000 jobs in the state were attributable to state spending of petroleum revenues and with the inclusion of the Permanent Fund Dividend (PFD), the total was close to 60,000.

Dr. Goldsmith introduced the third category he called "spinoffs from oil wealth" ("Spinoffs from Petroleum," Page 11). He mentioned four spinoffs that accounted for 60,000 additional jobs: a light tax burden on resource industries; public spending in support of economic development; services to senior citizens; and seasonal stability. He moved to Page 12 titled "Alaska Petroleum Revenues," where he estimated that 60,000 jobs had been created as a result of the \$157 billion in oil revenues and that the majority went to businesses, to the reduction of household tax burdens, and to expand public spending. Approximately 24 percent had been saved and had consisted of PFD deposits, accumulations in the Constitutional Budget Reserve (CBR) and in the general fund. Page 13 titled "Petroleum Spinoff: Lite Tax Burden on Households," showed that the current household tax burden in the absence of petroleum could have been \$2,300 per capita based on national average rates for state income tax and state sales tax.

Dr. Goldsmith turned to Page 14 titled "Petroleum Spinoff: Lite Resource Industry Tax Burden." He observed that household taxes would not generate enough revenue to support a level of public spending that compared with other states. The resource industries would receive pressure to increase their contribution to the cost of government because it was not possible to tax the federal government.

He expounded that the non-petroleum resource industries would have to increase their tax contribution by 400 percent above current levels. He opined that an increase of that amount was unrealistic but that an increase above current levels would be likely. He added that higher taxes tended to drive away business and without petroleum the non-petroleum resources would have suffered. The existence of petroleum had taken some of the tax burden off of the shoulders of the other resources. He moved on to Page 15 titled "Petroleum Spinoff: Enhanced Public Spending." He detailed that increased public spending had been good for business and for Alaskans' quality of life. Public spending had reduced costs and increased customer bases for businesses and had helped to keep labor costs down for employers. The goods and services made the state more appealing to senior citizens who used to leave the state when they retired, but currently made up the fastest growing segment of the population. He equated seniors to year-round tourists that did not leave during the winter months.

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Dr. Goldsmith discussed the fourth important spinoff from petroleum called seasonal stability (Page 16: "Petroleum Spinoff: Stability"). He reiterated his earlier remarks that when Alaska first became a state there had been a significant number of jobs in the summer, but that the economy essentially closed down in the winter. He communicated that under the circumstances businesses that supported the resource industry had a hard time becoming established. Page 16 showed the monthly employment levels from 2007 in the seafood dominated Bristol Bay Borough (upper left graph) and the tourism dominated Denali Borough (lower left graph). He highlighted that employment was high in the boroughs only during the summer months and that non-residents accounted for a large share of the jobs. He added that the seasonal industries were still a part of the state's economy; however, oil and public sector jobs were year-round and supported businesses throughout the state.

Dr. Goldsmith addressed Page 17 titled "Petroleum Transforms Alaska Economy." He pointed out that currently oil patch, petroleum revenue, and spinoff jobs combined made up half of the 375,000 jobs in Alaska. A pie chart on the right-hand side of the page showed that petroleum made Alaska's economic structure much more diversified. He

explained that the graph illustrated the concept of the "three legged stool," with one-third represented by petroleum jobs, one-third represented by the federal government jobs, and one-third represented by the remainder of jobs including the seafood, mining, timber, and other industries. The economic characteristics were much more positive:

- Depth; lots of support businesses
- Non-seasonal
- Less transient
- No federal domination
- Rich infrastructure
- Large tax base
- Prosperous

Dr. Goldsmith turned to Page 18: "A Troubling Indicator: Oil Barrels per Capita." The graph indicated in per capita terms that during the positive economic transformation, the production of oil had been declining. He explained that news of the decline had been slow to emerge for three reasons. First, despite the decline, state employment had continued to grow; therefore, people had underestimated petroleum's importance for the economy. Second, the high price of oil had diverted attention from the production decline. Third, official state production and revenue projections only looked forward one decade; therefore, it was easy to pretend that the future looked "rosy" ("Looking Ahead: The Official Story (Extended)," Page 19). A graph on Page 19 showed the production decline that would occur beyond 2020. He questioned whether the production decline was a signal that Alaska would return to its island economy status and that revenue, employment, and spinoff benefits would decline.

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Representative Doogan asked what the purple section represented on Page 18: "A troubling Indicator: Oil Barrels per Capita" [Note: The "purple" section appears in blue in the presentation available on BASIS]. Dr. Goldsmith answered that the purple section represented Cook Inlet and the section in gray represented the North Slope. He added that at the peak there were four barrels per capita per day and that currently there was one barrel per day.

Dr. Goldsmith discussed five commonly suggested strategies related to the decline beginning on Page 20: "Strategies Moving Forward #1: Gasline." He argued that none of the strategies that he would cover would have sufficient strength to offset the petroleum decline. The first strategy was the commercialization of gas. He contended that a gasline would generate jobs, but its revenues would not be able to replace oil revenues because the tax base for gas was much smaller than the tax base for oil on a BTU basis. The chart on Page 20 compared the current market value of oil that was \$14.00 and gas that was \$6.00 on a one million BTU basis. He explained that the energy value of oil was worth much more than that of gas. Additionally, it would cost approximately \$1.00 to transport one million BTU of oil through TAPS [Trans-Alaska Pipeline System] and approximately \$4.00 to transport gas through a \$30 billion to \$40 billion gasline. He underlined that there was a significant difference between the value of oil and the value of gas and that revenues from a gasline would not be able to offset the decline in petroleum revenue.

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Dr. Goldsmith relayed that the second strategy identified that non-petroleum natural resources would fill a void created by an oil production decline: "Strategies Moving Forward #2 Non-Petroleum Natural Resources" (Page 21). He looked at job growth over the past 20 years in mining, tourism, and seafood and applied the same growth looking forward 20 years; the majority of the very modest growth was in tourism. Mining had a growth of 1000 jobs, tourism had growth of 10,000 jobs, and there was no additional growth in the seafood industry job market. He used the page to indicate that the other economic drivers did not "pack the revenue punch" that oil did. He reported that the state would need to bring in \$2,000 per tourist in order to replace \$3 billion of petroleum revenues.

Co-Chair Stoltze asked whether taxes comprised the \$2,000 per tourist figure. Dr. Goldsmith replied that it related to taxes and fees.

Dr. Goldsmith noted that it was more than each tourist currently spent during their visit to the state. The figure would equate to a tax of \$20 per salmon and \$4,000 in tax per one ounce of gold.

Co-Chair Stoltze asked whether it would equate to \$4,000 in tax on gold that was currently selling for \$1,400. Dr. Goldsmith replied in the affirmative.

Co-Chair Stoltze remarked that the numbers were sobering. Dr. Goldsmith agreed. He reminded the committee that the figures were representative of the amount that would be required from tourists to make up the \$3 billion from petroleum revenue.

Co-Chair Stoltze wondered how much the state would have to charge for a pack of cigarettes. Dr. Goldsmith thought it would be around \$1,000.

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Representative Doogan asked for clarification that it would be necessary to charge an amount equal to the revenue that was generated by oil. Dr. Goldsmith replied that using tourism as the only resource to make up for the loss of \$3 billion in oil revenue would mean that \$2,000 per tourist would be necessary.

Representative Doogan determined that the number would be lower when mining, tourism, and seafood industries were combined to share the amount generated by petroleum.

Co-Chair Stoltze clarified that the chart was hypothetical. Mr. Goldsmith agreed.

Dr. Goldsmith discussed the third strategy on Page 22: "Strategies Moving Forward #3: Traditional Economic Development." He observed that Alaskans had been lured in the past into the pursuit of value added and economic diversification development strategies that were typically supported by outside experts and that usually had not been successful. Examples included, fish processing plants, the Alpetco petrochemical plant, aluminum reduction, server farms, dairy farming, etc. He reported that past experience and economic realities would not and should not discourage economic boosters; however, the state should be very cautious about spending its revenues on projects that promised to replace petroleum. A Google search on Alaska economic development strategic plans had 374,000 results or one for every two Alaskans. He emphasized that a significant amount of economic development strategizing had

occurred, but that it had not produced any revenues for the state general fund.

Dr. Goldsmith examined the fourth strategy on Page 23: "Strategies Moving Forward #4: Speculatively Invest in Infrastructure." The strategy was modeled after the Norwegian economy and argued that investment in infrastructure would reduce the price of energy and transportation and open the door for profitable non-petroleum resource investment opportunities. He observed that it was dangerous to invest in something that could not provide certainty of a long-term return in the form of jobs or revenues to the state. He addressed the fifth strategy that related to the development of the state's renewable energy sources on Page 24: "Strategies Moving Forward #5: Develop Renewable Energy." The strategy would be good for the environment, help to stabilize prices for consumers and businesses, and temporarily generate employment opportunities, but it would not create revenue for Alaska.

Dr. Goldsmith offered three possibilities for the future of the state based on the petroleum decline and the experience of the past 30 years (Page 25: "What is the Economic Future of Alaska?"). The first possibility titled "We Are the Chosen Ones," was that Alaska's luck had saved the day in the past with the Prudhoe Bay oil discovery and high oil prices and that luck would continue in the future. The second possibility titled "The Big Crash," recognized that the mid-1980s oil price crash could happen again in the future and have a devastating impact on Alaska's economy. The third possibility was titled "The Slow Squeeze." He discussed that the economy had experienced a moderate, steady growth in the 1990s, but that flat oil prices and falling production had diminished oil revenues. Without the CBR that was used to balance the state's budget in the 1990s, dramatic budget cuts and tax increases would have damaged the economy. He opined that state spending and the economy could drop off in the event of flattening oil prices and diminished exploration and development.

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Dr. Goldsmith relayed that there was at least one other future scenario (Page 26: "Undiscovered Potential North Slope Resources: Technically Recoverable"). Under the fourth scenario the state was still rich in petroleum and the production decline figures were based on production

only on state lands in Cook Inlet and the North Slope between the Colville and Canning Rivers. Production from the state lands had been approximately 16 billion barrels and there were DOR forecasts of 4.5 billion barrels that remained in known and unknown fields; however, the total market value of the 16 billion barrels was worth approximately \$500 billion in 2010 and the average price was between \$25 and \$30 per barrel. He professed that the market value of the remaining oil may be approximately \$450 billion; therefore the state may have been only halfway through its inventory.

Representative Hawker wondered about the large dollar value for gas that was shown on Page 26. He believed that there would need to be a substantial shift in world commodities market prices in order to gain a significant increase in income from gas. He referred to Dr. Goldsmith's earlier testimony that gas would not replace oil and that currently gas prices were approximately \$4. The cost of getting the gas to market was close to \$4, which indicated there was not currently a substantial margin remaining in gas. Dr. Goldsmith responded that between technically recoverable barrels of oil and TCFs [Trillion Cubic Feet] of gas that the action in the short run would be in oil. He relayed that the state's potential gas resources were impressive looking forward a couple of generations.

Dr. Goldsmith continued to discuss Page 26. He communicated that the 4.5 billion barrel oil estimate for Colville/Canning (first cell, middle column of the graph) was "conventional" oil. In addition, there were 34 billion to 35 billion of technically recoverable barrels of oil on federal lands including ANWR [Alaska National Wildlife Refuge], OCS - Beaufort [Outer Continental Shelf], OCS - Chukchi, and NPRA [National Petroleum Reserve-Alaska]. There were unconventional reserves in heavy and viscous oil and shale oil that were not included on the chart. The chart showed that there was still significant petroleum and gas development potential on the North Slope. He cautioned that it was important to remember that the movement of oil and gas to market was still very expensive (Page 27: "Alaska's North Slope"). The market price needed to support the high cost of transportation in order for the production of the potential resources to occur. He discussed several factors that contributed to transportation cost including, size, distance, and physics. He elaborated that new conventional production on state lands would be from

smaller oil fields that lacked the economies of scale of Prudhoe Bay. Production from federal lands would occur farther away from TAPS and OCS drilling would be offshore. He explained that heavy and viscous oil would be technically challenging to produce and transport and that shale oil was too new to speculate about. Additionally, extracting more out of the legacy fields would involve expensive new technologies.

Co-Chair Stoltze noted that Tom Barrett, President, Alyeska Pipeline Service Company, would speak to the committee the following day and that the committee should inquire about the challenges of moving smaller quantities of the different grades of oil.

Dr. Goldsmith continued on Page 27 and explained that some analysts believed the costs would be too high to justify further production; however, the opportunity for further production was clearly available. He asked what production of some of the oil and gas could mean for jobs, income, and public revenues in the future on Page 28 titled: "Daily Oil Production per Worker (Barrels)." He conveyed that historically, production per employee had fallen (indicated on the large graph), but total employment had grown over time (shown on the small graph on the lower left). The bad news was that the cost of getting each barrel of oil out of the ground had increased in terms of worker time; however, the good news was that employment had not fallen despite production decline.

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Dr. Goldsmith addressed that in the future it was possible that development of additional resources could significantly add to employment ("One Petroleum Employment Projection," Page 29). The graph was a petroleum related jobs projection from a recent ISER study on the potential impacts of OCS development on employment from 2008 to 2050. It showed that the employment generated by OCS development could impact total employment similarly to Prudhoe Bay development and span more than a generation. He discussed Page 30 titled: "How to Get Those Petroleum Jobs." He relayed that the jobs were not guaranteed and in order to maximize the chance of achieving the jobs it was important to work to open federal lands to development including OCS, ANWR, and NPRA, which would help make the national security and the economic health of the nation better. He noted that

the argument that the oil would not be available for 10 years had been made in the past and had been incorrect. Additionally, it was important to adopt a rational and positive attitude with the oil industry to cultivate continued development on state lands.

Representative Hawker asked how the oil and gas economy would sustain the substantial decline in daily oil production per worker (shown on Page 28) with an increase in 40,000 jobs in oil field support (shown on Page 29). He wondered how the cost per barrel was impacted. Dr. Goldsmith explained that the graph on Page 29 only provided an overlay of the additional jobs associated with strong oil and gas development over the next 40 years in the Chukchi and Beaufort Seas. He clarified that the bottom purple section on Page 29 represented the oil field employment.

Representative Hawker asked whether the purple section on Page 29 that represented direct employment from petroleum was the number that correlated to the previous page. Dr. Goldsmith replied in the affirmative. He added that everything on top of the oil field employment was related to indirect jobs generated elsewhere in the economy or jobs generated by the revenues from OCS activity.

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Representative Hawker wondered what the required oil production per worker would be in 2020 when factoring in the charts from Pages 28 and 29. He surmised that the petroleum employment projection on Page 29 increased up to 10,000 in 2020. Dr. Goldsmith was not certain what the number would be in 2020. He opined that the prospects of the OCS would have to be large and potentially profitable before the oil industry would invest in production. He believed that the productivity per worker in terms of the oil produced would be larger on the big fields in the OCS than it was currently on production of state lands. He doubted it would reach the productivity level that Prudhoe Bay had at the beginning of its lifetime.

Representative Hawker surmised that the chart titled "One Petroleum Employment Projection," presumed the "hypothetical" that the state would bring on very significant volumes of production from currently undeveloped and prohibited resources. Dr. Goldsmith

responded that he was correct. Dr. Goldsmith pointed out that the number of jobs generated by oil patch activity was currently approximately 60,000; however, the chart on Page 29 showed that the peak was approximately 50,000. He explained that the chart showed a picture of the upside potential that would be presented given OCS development and economically producible discoveries. He added that the analysis had begun two and a half years earlier and that the schedule for OCS had slipped two and a half years, but the picture was the same.

Representative Doogan asked whether the chart on Page 29 showed the total jobs generated by oil production. He remarked that the chart was confusing and made it look like there were 50,000 direct employment jobs from petroleum. Dr. Goldsmith explained that the chart had four separate sections and that the bottom section shown in purple represented the jobs that were directly related to the production, exploration, development, and transportation of oil. The analysis that had been conducted a couple of years earlier included gas production because the cost of gas had been higher and projected to increase.

Representative Doogan wondered whether the bulk of the jobs on the chart were support positions. Dr. Goldsmith responded that they were various support functions and included drillers, truckers, engineering firms, in addition to all of the jobs in Anchorage that resulted from workers buying homes and spending money in urban areas, etc.

Representative Doogan wondered whether it would include workers such as baristas, etc. Dr. Goldsmith responded yes.

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Dr. Goldsmith voiced that the current challenge was how to get the petroleum jobs. He asked whether the development of resources could generate the public revenues that Alaska had grown accustomed to ("Fiscal Terms," Page 31). He relayed that the answer was "no." He used a hypothetical oil field in the "matrix" on Page 32 ("State Revenues (million\$/year): Hypothetical Field") to determine what oil revenues would be generated from production under various scenarios and conditions. He compared a field on state land (far left hand column) that generated \$838 million annually to a federal field in the OCS more than six miles offshore (far right hand column) that generated \$0.00. He clarified

that the state would receive revenue from the economic activity; however, it would have to capture revenues from onshore activity.

Vice-chair Fairclough wondered whether he had done research to determine the existence of increased exploration on state versus federal property following the implementation of the new tax [Alaska Clear and Equitable Share (ACES)]. She had asked the Department of Natural Resources, but had not received a clear answer. Dr. Goldsmith had not done any research. He thought it was possible that the Alaska Oil and Gas Conservation Commission had the data.

Vice-chair Fairclough was interested in analyzing the ACES structure. She believed that there had been a migration of development from state land to federal land that had followed the adoption of ACES in order to avoid the new tax.

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Dr. Goldsmith focused on the ability to maintain public spending from petroleum and jobs created from the spending with increased oil production and employment with less petroleum revenues ("Petroleum Wealth (Billion \$)," Page 33). He argued that the way people think about petroleum revenue needed to be changed and that the state could not continue to "mindlessly collect the revenues, pat ourselves on the back when we put a few dollars away in a savings account, spend a few dollars when we have a short term surplus, and just hope for the best." The petroleum wealth needed to be inventoried and managed as an asset. Page 33 showed his present value estimate of the state's wealth, which was \$126 billion that consisted of \$45 billion of financial assets that were derived from past revenues, and \$81 billion in potential tax and royalty revenues from undeveloped petroleum. He discussed how the wealth should be managed ("What is My Annual Share," Page 34). He cited the common belief that the state's natural resources belonged to all Alaskans; with that belief in mind every Alaskan should have an equal share of the net worth. He provided a calculation that assumed that Alaskans cared about all future generations of Alaskans, that petroleum was annually growing one percent sustained by the petroleum industry, and that future generations of Alaskans would not be richer or poorer than the current generation. He calculated that \$7,200 was the maximum amount of wealth

that could currently be distributed annually to each Alaskan, while the value for future generations was maintained. He explained that with a distribution of \$7,200 that each Alaskan would receive the same amount, adjusted for inflation, each year in perpetuity until another economic driver could replace petroleum jobs and revenues.

Dr. Goldsmith estimated that the state could spend \$5 billion in the current year and could preserve Alaska's net worth for future generations ("Wealth Preservation Strategy: Implementation = Spending Cap," Page 35). Additional spending would need to come from sources outside of petroleum wealth. He ascertained that "if spending is preserving our net worth, then whatever petroleum revenues are not spent must go into income generating investments." He opined that movement away from the present budget strategy focused on current petroleum revenues would be required in response to a shift to net asset fiscal management. He highlighted several advantages of the shift that included: the ability to avoid an economic crash, which otherwise seemed inevitable; the fiscal burden would not be passed on to the following generation, because each generation would receive an equal share of the wealth; those who benefited from public expenditures also paid for the public expenditures; the state would show the world that it could handle its wealth responsibly; and the fiscal policy and wealth management would be de-coupled, which would take the pressure off of oil and other industries to perpetually provide revenues to fund the budget.

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Dr. Goldsmith presented a chart that showed how a wealth management plan would work over time ("Wealth Preservation Strategy: The Long View," Page 36). It spanned from the date of first oil production on the North Slope in 1978 when all of the state's wealth was "in the ground" to the future date of 2050 when all of the oil would have been produced. He explained that under the strategy that the net asset value of the state's combined assets would grow over time at one percent with the population. The green arrow at the top of the chart showed where the state was currently with its wealth split between oil in the ground and money in the bank.

Dr. Goldsmith concluded that the answer to the question of whether the state's petroleum economy was sustainable was

"maybe" ("Can We Do It," Page 37). He detailed that there was no guarantee that petroleum could sustain Alaska's economy for the next 50 years and that it would require luck. He communicated that petroleum offered the best chance for continued prosperity. He emphasized that without a proactive stance, the state would "be like the frog, who doesn't realize she is slowly cooking in a pot of boiling water." In the past, the state had been both smart and lucky, but it needed to be smarter as it could not count on good luck forever. He professed that Alaska needed to take the words of Yogi Berra to heart, "the future ain't what it used to be."

Representative Doogan wondered whether the \$7,200 figure on Page 34 was reflective of current spending and what the number included. Dr. Goldsmith replied that because the state was in a surplus the current spending of financial assets included the PFD and petroleum revenues. He explained that presently the state did not spend all of the petroleum revenues that were collected due to the current surplus environment. The portion that was spent went towards funding the general fund.

Representative Doogan asked what would happen in the event that the state spent more money than it brought in during the present year. He wondered whether the spending would be encompassed in the \$7,200 figure. Dr. Goldsmith responded that in order to maintain the value of the state's assets that any draw from the CBR or general fund would need to be included in the figure. He added that in a deficit year that it would be necessary to look at a combination of categories that included petroleum revenues into the general fund, draws from the CBR and the general fund, and the PFD.

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Vice-chair Fairclough asked whether the \$7,200 took into account the PERS/TRS [Public Employees' Retirement System/Teachers' Retirement System] liability. Dr. Goldsmith replied that it did not take into account how the money would be spent; however, if the PERS/TRS liability caused the spending out of the general fund to exceed the \$7,200 limit it would become necessary to locate money from elsewhere in order to maintain the value of the assets.

Representative Gara asked what an income tax would have to be to cover the current operating budget of \$8.9 billion in non-federal money in order to replace oil revenue in the event of production decline and eventual pipeline shutdown.

Co-Chair Thomas replied that it would be \$16,000.

Co-Chair Stoltze asked whether the \$16,000 was for tax payers or per capita. Dr. Goldsmith responded that the loss of the \$8 billion to the economy would cause a significant percentage of the population to leave the state. He explained that it was necessary to determine what the size of the economy would look like in the absence of oil revenue and to then determine what an income or sales tax would have to be on the remaining residents in order to pay for the same size of government. He did not know the answer to that. He referred to Page 13 showed that the burden on households in the event of a state income and sales tax would be \$2300 per capita. Given Alaska's current population the total revenue from income and sales tax would amount to approximately \$1.7 billion. He explained that it would be necessary to multiply the tax by four or five to reach the \$8 billion figure.

Representative Gara wondered whether Alaska would gain any ground by putting \$2 billion per year into savings in a scenario in which the state was lucky and oil prices remained high for five to ten years.

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Dr. Goldsmith responded that the state was currently lucky for the fourth time in its history and that it should take advantage of the luck by saving as much as possible for an uncertain future.

Co-Chair Stoltze wondered whether Alaska had sufficient time to save enough money in a state retirement account similar to a 401 K before the oil was gone, assuming continued spending and increases. Dr. Goldsmith believed that with forward thinking by the state it was possible. The state was currently blessed with high oil prices that provided the state with surpluses. He communicated that DOR had projected very high oil revenues for at least the next ten years.

Representative Doogan remarked that a member at the committee table had a proposal to put another \$10 billion into the permanent fund.

Co-Chair Stoltze asked how much the state was currently spending on state operations from the permanent fund.

Representative Costello wondered whether Dr. Goldsmith agreed with the bill's [HB 110] premise that ACES and the progressivity were discouraging investment in Alaska. She discussed that the bill changed how the progressivity was applied to the current tax structure and included a 40 percent tax credit on infield work. Dr. Goldsmith responded that incentives matter and a tax regime that was made more attractive to the industry would attract more production. He thought that it was difficult to determine how much, when, or how it would increase production; however, he was confident that it would. He believed that it was important to rethink the current oil tax policy because ACES had been developed in a lower priced environment and the current high oil prices were an uncharted territory that could continue forever. He elaborated that it was an important factor to determine what Alaska could be in relation to itself and to other locations.

Representative Costello wondered whether the marginal and effective tax shift to the left caused by the progressivity adjustment in HB 110 was sufficient to make Alaska more competitive with world markets.

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Dr. Goldsmith did not know how far the shift to left should be. He believed it would be very beneficial for the state to know what the opportunities were for new oil developments on the North Slope and what the associated cost structures were. He explained that it was possible to statistically get a sense of how a change in tax rate impacted production in North Dakota where there were a lot of small and easily accessible drilling operations going on; however, it was more challenging in Alaska because there were a limited number of projects and it was hard to know how far to move the tax structure to "kick" an unprofitable well into profitability.

Co-Chair Thomas wondered whether incentivizing the production of new oil with tax credits and a different tax

rate would spur oil and job development. He did not believe it was necessary to lower the tax rate for "old" legacy oil wells. Dr. Goldsmith replied that ACES had attempted to address that there were some very profitable fields that could withstand a higher tax rate; however, new developments could not support the same high rate. He reasoned that it was not possible to balance the two with one tax rate; therefore, ACES had provided a high tax rate combined with tax credits. He believed that it had been an interesting concept, but that it had not been entirely successful. He relayed that it was necessary to compromise between taxing a high rate for current revenues and taxing a lower rate for long-term revenues.

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Representative Edgmon wondered how long it would take to put together a composite economic picture that used present value calculations, inflation adjustments, and population trends. He recognized that Alaska was in a tough situation but it was necessary to consider the state spending aspects. Dr. Goldsmith asked for clarification on the question.

Representative Edgmon asked how long it would take to compile a report that included a timeline that showed when the state would need to dip into savings and the formula programs that required state support, using the assumption that there would be a reduction to oil taxes and a subsequent \$1 billion to \$2 billion revenue shortfall as a backdrop. Dr. Goldsmith did not think it would take very long. He recommended the Office of Management and Budget (OMB) 10-year report that used DOR 10-year forecast and overlaid it with a forecast of general fund spending. He believed the report was a very useful tool and that the forecast should be pushed out beyond 10 years given that under current assumptions that there would be economic surpluses for the next 10 years. He explained that looking farther than 10 years into the future with different revenue regimes and expenditure growth rates would help to provide a fuller and richer picture that indicated where the vulnerability was.

Representative Edgmon wanted a model that projected into the future that also provided information on current implications, available savings, and liquid assets without the use of Permanent Fund earnings or tax increases that

would allow the state to function while it waited for further oil development.

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Representative Gara referred to Dr. Goldsmith's comment that ACES had a high tax rate. When ACES had been developed it had been explained that a lower tax rate on less profitable fields and a higher tax rate on more profitable ones was accomplished with a 25 percent tax rate and progressivity that did not kick-in until each field had \$30 worth of profit. Dr. Goldsmith believed that he was right and that ACES had a number of "interesting" features.

Representative Hawker wondered what thoughts were underlying Mr. Goldsmith's characterization of ACES as "interesting." Dr. Goldsmith responded that one of the most interesting things was the way that ACES attempted to deal with the challenge of determining how to tax legacy fields at a high rate and new development at a lower rate. He believed that the fact that it was an economic challenge made it interesting.

Representative Hawker asked for verification that Mr. Goldsmith thought that ACES attempted to tax legacy fields at a higher rate and new fields at a lower rate. Dr. Goldsmith agreed, but did not claim to be an expert on ACES.

Representative Hawker wondered why the state would want to tax an already "stressed" legacy field at a higher rate than a young and "vigorous" field. He believed that the saying "the best place to find oil was in an oil field," may have been inconsistent with Mr. Goldsmith's analysis of ACES. He discussed that the cost of additional production on mature legacy fields was much higher on a per barrel basis. Dr. Goldsmith replied that squeezing another one percent out of a field like Prudhoe Bay or Kuparuk would be the equivalent to developing a new satellite or finding a new field. He believed that it would be beneficial to apply new technology to the existing fields, which would have comparable to much higher marginal costs than new field development. He opined that the tax structure should incentivize the higher costs on the legacy fields. He explained that a legacy field that had existing daily production of \$80 per barrel that increased to \$120 held a profit that was not reflected by an increase in cost. He

delineated that in a situation in which the sole concern related to current revenues that the knowledge of "perfect information" would allow the state to set tax rates that would "skim off" as much excess profit as possible.

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Representative Hawker wondered whether the state should currently skim as much "take" as possible or whether it was wiser to moderate the short-term skim for a long-term sustained skim. Dr. Goldsmith believed that the state should not try to maximize the skim because the risk associated to activities in the oil patch tended to be overlooked. Aside from the issue of the ability for the state's tax rate to compete with other locations, the rate of return needed to be higher to compensate for the extreme risk associated with investing large amounts of capital on activities that may or may not pay off in the short-run or long-run.

Representative Doogan thought that Dr. Goldsmith's presentation had gotten much more sophisticated and had changed from 30 years earlier. Dr. Goldsmith remarked that Alaska had experienced a significant amount of good luck over the years. He looked back towards the beginning of oil production when the state had expected to get a maximum of 10 billion barrels of oil in Prudhoe Bay and Kuparuk; however, the state was looking at a 20 year to 30 year lifetime for the oil industry and there had been 16 billion barrels of oil produced on the North Slope that was still going strong. With luck and good planning the state was looking at enough remaining petroleum to sustain the economy for many generations.

Representative Edgmon wondered what a forecast for a downward curve in federal spending in Alaska would look like. Dr. Goldsmith remarked that federal funding was going down to approximately \$60 million per year for particular areas such as the Denali Commission and clean water and sewer. He detailed that it would be necessary to work very hard to maintain future funding for the state's highways and airports, which were big contributors to the state capital budget each year. He relayed that a future change to the formula for highway funding would be very important for the state to be concerned with. Military spending was the other big uncertainty; however, it had held up well in the past few years.

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Vice-chair Fairclough wondered whether he was tracking the decline in earmarks and the evident decline in resources from Washington D.C. that had been provided by former Senator Ted Stevens (the "Stevens' Effect"). Dr. Goldsmith replied he did try to track money coming into the state; however, the federal reporting was really "lousy." He relayed that earmarks only accounted for approximately \$8 billion to \$9 billion per year in total federal dollars provided to Alaska and the funds were divided between capital and operating grants, social security, retirement, military, and non-profits.

Vice-chair Fairclough wondered whether there was a way to track money that came into the state for the Bureau of Indian Affairs and tribal entities and to determine whether funds were dropping for these areas as well. Dr. Goldsmith replied that in theory there was a way to track the funds, but the tracking that occurred in Washington D.C. was inadequate.

Vice-chair Fairclough wondered whether he had any advice to help policy makers gain public engagement and support from Alaskans on the development of a proactive plan to save and protect the next generation's future. She thanked Dr. Goldsmith for participating in the fiscal policy subcommittee working groups.

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Dr. Goldsmith responded that it was important to make the message simple and to pound the message home. He believed that the "three legged stool" analysis provided a clear and simple message that was easy to understand.

Vice-chair Fairclough remarked that zero production times \$250 per barrel equaled taxes for Alaskans.

HB 110 was HEARD and HELD in committee for further consideration.

#

ADJOURNMENT

[3:29:59 PM](#)

The meeting was adjourned at 3:29 PM.