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Memo

To: Save Eielson Committee

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Subject: **THE DOD ECONOMIC ANALYSIS OF EIELSON
REALIGNMENT IS SERIOUSLY FLAWED**

The DOD analysis of the economic impact on Fairbanks of the realignment of Eielson air base concludes that the net loss of 2,940 military and civilian jobs at Eielson would result in the loss of 1,770 additional jobs in the Fairbanks MSA (Fairbanks North Star Borough). This would represent a loss of 8.6% of all jobs, based on an estimate of 54,469 total jobs in the Borough.

The loss of 8.6% of all jobs represents the 4th largest hit as a percentage among all 234 regions that would be effected by implementation of the BRAC recommendations. Netting out those bases recommended for closure, and thus available for redevelopment, the negative economic impact on Fairbanks would be exceeded in only one other region (Clovis, New Mexico).

Deficiencies in the DOD analysis fall into the following areas:

- **DOD ESTIMATE OF JOB LOSS IS TOO LOW AND MISLEADING--
Eielson jobs are anchor for fragile frontier economy of Fairbanks and
simple job count undervalues them**
 - Military pay among highest in region
 - Many industries like tourism only offer seasonal employment—military is year round
 - Many industries like mining are subject to cyclical fluctuations (remote mines first to close when price drops)—military is non-cyclical
 - Many jobs are part time—retail and services

- Many “jobs” (19%) are low paying “proprietors” (consisting of self employed and trustees]. Only about ¼ of this category represents the primary job of the worker. In Fairbanks these pay only half the national average for proprietors
- Fairbanks population is young and most work. It lacks a large population base not linked directly to current employment opportunities (senior citizens). This further adds to the fragility of the economy by making it more vulnerable to conditions in a few industries.

So each military job is more valuable to the economy than the average job. Adjusting for lower value seasonal, cyclical and part time jobs by converting all jobs to full-time equivalents (FTE) would be a better measure of the relative importance of military jobs and would push the percent job loss estimate over 10%. Furthermore, since military jobs pay more than the average in the community, an expansion of the analysis to show the percent loss in worker compensation in the community would be much larger than 8.6%. In fact the DIRECT loss of compensation of base employees is about 8.8% (\$188 million) even before the INDIRECT and INDUCED losses in the rest of the Fairbanks economy have been included.

- **DOD IMPACT METHODOLOGY INVALID FOR MEASURING LARGE IMPACTS IN SMALL REGIONS**

- The DOD methodology employing the IMPLAN input-output model (IO) is appropriate for virtually all the 234 regions that would be effected by the BRAC recommendations because their net impacts are less than 2% of total jobs
- IMPLAN (or any regional input-output model) is inappropriate to use when the economic impact is large enough, as is the case in Fairbanks, to result in structural changes to the economy
- IMPLAN assumes no structural change including:
 - Prices of goods and services are not impacted by the change
 - The supply of all inputs to production is unconstrained (infinitely elastic)
 - There are no economies of scale when business expands (linear production functions)
 - There is only one combination of inputs for production of goods and services in each industrial sector (linear production functions)
 - The share of inputs purchased locally vs. outside the region is fixed
 - The share of jobs taken by residents vs. non-residents is fixed
- When the size of the regional market shrinks in a small economy with capital intensive industries (high fixed costs), prices are likely to rise as the fixed costs are shared across a smaller customer base
- Refining, rail transportation, coal mining, all important in the Fairbanks region, are examples of these capital intensive industries with high fixed costs
- Shrinkage of the market could also lead to the elimination of other industries that would invalidate the use of the input-output methodology

Fairbanks is a small economy and the number of businesses in each industry is limited, sometimes to a single establishment. Furthermore it is isolated from other regional economies that can absorb and share in economic changes that impact the region. The IO model assumes the cost of doing business does not change for businesses when regional demand changes. That assumption works when the expected change is small, but when it is large and negative, there

will inevitably be cost increases in businesses with high fixed costs. The loss of a significant customer can drive up the cost for everyone because the fixed costs must then be borne by a smaller number of customers. In an extreme case, the sharing of fixed costs could become prohibitively expensive and a business, even an industry, could leave the market and region entirely.

This is partially due to the fact that Alaska is a small state in the early stages of economic development. Much of the economic infrastructure, supporting the expanding economy, is operating on a thin margin, by which we mean there are just barely enough customers to cover operating costs. The expectation is that continued economic growth will expand the customer base and eventually lower costs as the economy matures.

The isolation of the economy also limits the ability of the infrastructure sector to spread fixed costs and make other operational adjustments that could minimize the impact of loss of a customer. Eielson is interconnected to the electric power grid adjacent to the railroad (which is not interconnected with the rest of the US) so that realignment would change the characteristics of the grid. Compensating for that change would have to be done within the isolated confines of Alaska without the opportunity to spread the necessary adjustments across the entire interconnected grid in the rest of the US.

- **DOD ANALYSIS IGNORES OTHER SERIOUS DIMENSIONS OF IMPACTS**

- Population loss—the loss of more 10% or more of workers would lead to comparable out migration of population
- Housing market—loss of population would lead to excess vacancies in the housing stock so the residential housing market would shut down for several years, resulting in :
 - Job losses in construction, finance, trade and other businesses serving that market
 - Further job losses from the related multiplier effect
 - Decline in property values
 - Loss of household wealth and related drop in household consumption negatively impacting trade and service businesses
 - Deterioration of the quality of the housing stock as homes stand vacant
 - Loss of skilled labor force as workers leave the region when their jobs are eliminated
- Commercial real estate market will also experience excess vacancies which will result in similar negative effects on the economy
- Labor market—The loss of military spouses, which are a captive supply of skilled labor, will make it more difficult and expensive to attract workers in certain occupations to this frontier region
- Isolation –unlike other regions the closest economic center with over 100 thousand population is Anchorage—357 miles away according to the DOD analysis. This isolation of the Fairbanks economy means that local residents and businesses will feel the full impact of the private job loss without the opportunity to look for and find substitute employment and business opportunities in surrounding regions.

- Cumulative effect on state of 4 rounds of base closures—Adak, King Salmon, and McGrath have not redeveloped to any significant extent
 - Public revenue decline—Local revenues from property taxes will fall with the drop in property values. Local revenues from sales taxes will fall with the drop in aggregate household incomes.
 - Public services—schools and other public facilities will become underutilized. Criteria 7 of the BRAC evaluation states “Ability of infrastructure of both the existing and potential receiving communities to support forces, missions, and personnel”. This criteria ignores the problems associated with the excess capacity of public facilities that would result from population DECLINE.
- **DOD ESTIMATES LACK DOCUMENTATION TO ALLOW INDEPENDENT VALIDATION OF RESULTS**
 - The IMPLAN model has no military sector so private sector employment wage rate proxies for military occupations may not be valid
 - Military wages are higher in Fairbanks than other locations in DOD analysis suggesting the INDUCED impact should be higher, but the economic “multiplier” in the Fairbanks analysis is lower
 - Facility upgrades and new capital construction at Eielson may have been excluded from the analysis
 - The job losses from cutbacks in state and local public services due to a 10% population decline may have been excluded from the analysis.
- **DOD ANALYSIS OF REGIONAL ECONOMIC CONDITIONS IS SUPERFICIAL AND LACKS CONTEXT—DOD reports the regional unemployment rate, per capita income, and employment growth rate, but provides no interpretation**
 - Fairbanks unemployment rate has always been above US
 - Growth in per capita personal income has lagged the US and its level is below the US average after the cost of living is taken into account
 - Employment growth has been strong in recent years but continued growth in the Fairbanks economy is expected to be slower due to reductions in federal and state spending—two important sources of recent economic growth
- **A STRONG FAIRBANKS ECONOMY IS A LYNCHPIN FOR THE CONTINUED DEVELOPMENT OF THE ALASKA ECONOMY**
 - Base realignment does not allow for redevelopment
 - Redevelopment options are limited in remote regions
 - Fairbanks is the economic center for all of Northern Rural Alaska—a region that includes not only the North Slope oil and gas fields and other energy and mineral resources, but also dozens of smaller communities composed primarily of Alaska Natives. Any weakening of the Fairbanks economy that negatively effects the ability to deliver goods and services to this vast region could have wide ranging

- negative effects on both private and public economies (Indian Health Service and other federal agencies are working to bring economic development to the region)
- Fairbanks provides a source of employment opportunities for a rapidly growing young Alaska Native population

A number of the contracts at Eielson are with corporations owned by Alaska Native Corporations. One of the greatest challenges for the state economy in Alaska is absorbing the growth in the number of Alaska Natives entering the labor market. Part of any successful strategy to accomplish this is to be able to provide a range of opportunities for young Native men and women in the workplace. It is much easier to bring Alaska Natives into the work place if the economy is growing than if it is stagnant or declining. And it is much cheaper to provide jobs than deal with the consequences of high secular unemployment in Native American regions. Fairbanks is one of the most attractive urban locations for bringing Alaska Natives into the work force because of its close proximity to rural Alaska.