

# Perspectives on Alaskan Economic Development – October 2003

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The Alaska Permanent Fund Corporation has recently initiated an ad hoc task force to address issues of job creation and economic development in Alaska. In May 2003, Fund Trustees and Staff convened with a group of the Fund's investment advisors to solicit outside counsel on the Alaskan economy and future development. In response to this initiative, we have prepared the following report. The report is divided into two main sections.

Section I provides background on the most salient economic issues Alaska faces in light of its historical development, current economic and fiscal status, and prospective changes in the nation's and state's economy and social structure. Though practically all of these issues are familiar to Fund Staff and Trustees, we believe they need to be repeated to focus squarely on Alaska's most pressing challenges.

Section II synthesizes the most important economic development actions the Permanent Fund could support based on our analysis.

In conducting our work (which we view as a means to initiate discussion and further consideration of these issues), we have reviewed an extensive body of material on the Alaskan economy and economic development as well as numerous other relevant sources, including materials identified by Fund Trustees and Staff.

Throughout this analysis, we highlight four analogous regional case studies (found in Boxes 1 through 4 alongside the main text of this report), describing experiences of Norway, Subic Bay (Philippines), Ireland and Montana and lessons that can be applied to Alaska's economic development challenges.

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## I. Background

The issues associated with Alaska's economic development are widely known to Fund Staff and Trustees, and there exist a number of excellent and current studies (which include materials and references provided by Eric Wohlforth, recent Chair of the Fund's Board of Trustees, at the May 2003 meeting of the task force) on the state's economic and fiscal challenges. In particular, we recognize the depth and quality of work undertaken by the State's Departments of Labor and Workforce Development, Revenue, and Community and Economic Development (among others), as well as the University of Alaska-Fairbanks and Anchorage (particularly the Institute for Social and Economic Research), the Alaska 20/20 initiative, and the Anchorage Economic Development Corporation (and their consultants), in addition to numerous other agencies (federal, state, and local) and private organizations. As part of this report, we provide a bibliography of the references we have reviewed, evaluated, and recommend to others interested in further detail. It is not our objective to replicate any of these valuable resources but instead to use them to highlight the most critical issues facing the state and the most compelling recommendations for dealing with those issues, particularly actions and positions supported by the Permanent Fund.

Alaska has enjoyed more than a decade of remarkable economic stability – over 15 years of positive employment growth, in contrast to the boom and bust periods of the 1970s and 1980s. Yet, in spite of this period of relative stability, there are ticking time bombs that threaten its employment base, fiscal health, levels of personal income, and overall quality of life for its resident population.

- ***Alaska's economic base remains dominated by oil.*** Today, over 40% of Alaska's base economy – the activities that generate domestic and foreign exports outside the state – is directly related to petroleum production (including state revenues and Permanent Fund dividends).<sup>1</sup> Although Alaska's economic base has diversified over the past decade (in part a result of expansion of other sectors and also due to the reduction in oil revenues), the long-anticipated decline in North Slope oil production from its peak in 1988 will continue to have an increasingly dampening effect on economic growth and fiscal revenues (barring development of ANWR or a natural gas pipeline).

Alaska has already experienced some of the negative effects of the “resource trap,” where there is a strong tendency for nations and/or regions experiencing oil discoveries or other natural resource

windfall to later suffer detrimental economic consequences (see Box 1 – Norway – Facing Common Challenges of Managing Oil Wealth).

**BOX 1 • Norway – Facing Common Challenges of Managing Oil Wealth\***

With a population of only 4.5 million, Norway is the third largest exporter of oil in the world, with significant production beginning in the 1970s. Unlike Alaska, Norway is only now reaching its peak years of oil production at approximately 3 million barrels per day (Alaska is currently just less than 1 million barrels per day). Like Alaska, it has yet to tap into the full potential of large reserves of natural gas, but this will not replace all of the economic and fiscal revenues generated by crude oil production.

Norway is viewed by many economic observers as an anomaly, a nation that has so far avoided the worst effects of the “resource trap” or “Dutch Disease”. If one looks at the economic performance of resource-rich (particularly oil-rich) countries versus those that are relatively resource poor, those that are resource-rich as a group have substantially underperformed the resource-poor countries according to multiple measures of economic performance and social well-being. The “Dutch Disease” refers to the severe decline in the Netherlands economy during the 1970s (particularly manufacturing) following the discovery of natural gas reserves in the 1960s. Although this “disease” is partly attributable to currency exchange valuations and the detrimental pricing of exports for international trade, there are other effects that are applicable at the sub-national level, including misallocation of oil production revenues, bloated government agencies, and non-diversified local economies.

Similar to Alaska, Norway created a special Petroleum Fund – similar to the Permanent Fund – with regular contributions and strict restraints on using earnings and/or principal for current fiscal expenditures. The Fund is valued at about \$120 billion, or about 45% of GDP. The Fund has two primary purposes: a) to smooth volatility in oil prices and exchange rates, to avoid a Dutch Disease scenario, and b) to provide pension payments to future retirees. Unlike the Permanent Fund, there is no direct payment of earnings to all residents.

In addition to funding an expensive welfare system (Norwegian workers have on average 25 sick days a year and work 26.5 hours per week), the Norwegian government used a large portion of its oil-generated revenues for investments enhancing its non-oil producing sectors of the economy. With wages rising precipitously during the mid-1970s, as the oil activities and wealth boosted the nation’s income levels, other sectors lost competitiveness internationally. Norway, like Alaska, has also had the challenge of addressing the economic needs of small communities, separated by fjords and mountains. Rural Norway’s political influence has led to the development of modern transportation infrastructure to connect these communities, enhancing flow of goods and labor. A substantial decline in oil prices in the mid-1980s led Norway and business leaders to adopt macro-economic and labor management policies to enhance the viability of faltering non-oil industries. Labor and management agreements kept wages lower, the government adopted a countercyclical strategy of using oil revenues for fiscal needs, and the early 1990s saw robust growth in the Norwegian economy, including its non-oil producing sectors such as chemicals, aluminum, electrical goods, shipbuilding, fish farming, engineering, and tourism.

Recently, Norway faces a fast-aging population (the 55-66 age group will comprise nearly all population growth in the next decade), a bloated public sector (Federal outlays equal 43% of GDP), and stagnating economic expansion. To address the fiscal issue, Norway has adopted an aggressive program of privatization of government-subsidized industries and outsourcing of direct government functions. Unemployment remains low at 4.6% (high by Norwegian standards), and the outsourcing effort is partly aimed at not having the public sector absorb the remaining source of labor, particularly as an aging population begins to leave the workforce.

Overall, Norway has used its oil wealth to produce a standard of living that is one of the highest in the world, adopted a means to preserve this wealth for future fiscal and social needs, and been partly successful in growing its non-oil producing sectors. Yet, with a petroleum production curve about 10-15 years behind Alaska, Norway may indeed look to Alaska as an example what to do (or not to do!) as it faces similar challenges over the next decade. *(continued on next page)*

**BOX 1 • Norway – Facing Common Challenges of Managing Oil Wealth\* (continued)**

**Lessons for Alaska:**

- Alaska, as a state instead of a nation, has not faced the same immediate challenges that Norway, or the Netherlands, did due to destabilizing effects of an inflated currency on the export capacity of non-oil producing economic sectors (i.e., “Dutch Disease”). On the other hand, because this factor had a well-observed impact in Norway, the government and business leaders were able to address it by explicitly investing in and protecting its non-oil producing sectors. Because Alaska has not had this immediate type of feedback (by not having a separate currency), these negative impacts (while still real) have not been as obvious. The lesson for Alaska is that non-oil producing sectors are critical to the state’s long-term economic and fiscal health, and that oil wealth can be used to help finance other sources of economic growth.
- Norway made significant investments in physical infrastructure, including a well-developed transportation system connecting fragmented rural areas that has generally had positive impacts on non-oil producing industrial sectors as well as the flow of consumer goods and people. Its investments in education and social programs have not been as successful (Norway’s educational performance was recently ranked as mediocre). Alaska’s recent infrastructure investments, such as the upgrade and expansion of the Ted Stevens Anchorage International Airport and Glenn Highway reconstruction project, are appropriate uses of state and federal funds that will enhance its non-oil producing sectors over the long-term.
- Norway is now starting to face the fiscal realities of substantial social welfare spending programs generated by oil wealth and rethinking their long-term consequences. Alaska is recognizing this reality as well – for example by eliminating the Longevity Bonus for elderly residents depending upon how many years they have held residency in the state. The lesson is that both of these oil-wealthy economies must face hard choices between often painful shorter-term effects and making use of limited resources for longer term investments.

\* Much of this analysis from Eifert, B., A. Gelb and N.B. Tallroth (2002) *The Political Economy of Fiscal Policy and Economic Management in Oil Exporting Countries*: World Bank.

- **Alaska has always been, and continues to be, highly dependent upon Federal spending.**<sup>2</sup> Prior to construction of the Pipeline in the mid-1970s, Federal spending constituted about 40% of all employment and as much as 75% of the state’s economic base. Today, Federal government spending provides one-third of personal income, and Federal employees’ wage and salaries alone are responsible for 13% of all jobs in the state (this does not count the job impacts of grant and non-wage funding). Federal aid per Alaskan resident leads the nation at over \$10,000, with a 3 to 1 ratio of federal funds received versus federal income taxes paid. Growth in Federal spending per capita (in real dollars) has increased by over 25% since 1990, with annual growth rates near 6% in the latter half of the 1990s.

The good news is that this spending is diversified across multiple sources, including project grant funding (e.g., the Indian Health Service), formula grants (e.g., education grants to local school districts), highway and transportation construction (including expansion of the Ted Stevens Anchorage International Airport), benefits to individuals (e.g., Medicare/Medicaid, social security, Veterans benefits, etc.), and, of course, defense (which has decreased since 1993 corresponding with base

closures and realignment). Alaska’s congressional delegation has certainly been instrumental in procuring much of this funding, and there remain legitimate concerns regarding any future diminishment of the state’s national political influence. Significant portions of this Federal funding will always remain, regardless of who holds particular seats in the U.S. Congress or the Senate (for example, formula-based grants would not change, neither would most payments to individuals, as well as management activities associated with the approximately 225 million acres of land held by the Federal government, or over 60% of Alaska’s land area.) Yet, having 70% of state economic activity dependent on two major sectors (petroleum and the Federal government) means the state is particularly vulnerable.

- **The state is only now beginning to deal with a fiscal crisis that has been brewing for over a decade.** Alaska’s state budget has operated in deficit 10 of the past 12 years, with the almost-depleted Congressional Budget Reserve Fund (CBRF, with \$2.2 billion remaining) being tapped to make up the fiscal gap. Governor Murkowski’s spending vetoes will have their intended effect – reducing the amount of the CBRF necessary to plug the gap in 2004, and perhaps later years. These cuts will

also have a corresponding economic impact, in addition to the direct and indirect impacts of curtailing public services and payments to organizations and individuals.

If there is a positive spin to this predicament, it is that Alaska is not alone – by a long shot. Thirty-nine states in FY2003 faced budget shortfalls, and aggregate budget reserves (similar to the CBRF) dropped an aggregate 48% between FY2003 and FY2004.<sup>3</sup> Alaska, in many respects, is fortunate to have had a large reserve fund throughout its spending deficit period, with some of this reserve remaining (albeit dwindling) for softening the transition to a balanced budget. It is also privileged, unlike any state in the nation, for its citizens to enjoy the benefits of the \$25 billion Permanent Fund – what has become a global model for equitable distribution of oil wealth. As Scott Goldsmith has aptly noted, if one includes the assets of the Permanent Fund (which is growing) in evaluating the health of the state's asset base, the situation is not as dire as it seems.

But, unlike Norway, Alaska state government will likely never be in the fiscal surplus position it enjoyed during the 15 years or so following construction of the Pipeline – even under best-case scenarios of ANWR, natural gas pipeline development, or other similar large-scale project. Moreover, the state's revenue structure is such that each additional basic sector job added to the economy (i.e., tourism, air cargo, mining, engineering) costs more to state finances than what it generates – \$5,200 in public revenues versus \$6,300 in expenditures, a net loss of \$1,100.<sup>4</sup> This “disconnect” creates an unintended, though bizarre, incentive for state policymakers and legislators to ignore the impacts of other non-oil producing sectors of the economy.

The next five to ten years will see one of the most marked shifts in the makeup of the state's fiscal structure— be it alternate sources of revenue and/or continued cuts in spending – and consequent effects on the makeup of state and local government.

- ***Alaska's population and workforce are aging and it is losing a large share of its high school and college-graduating residents.***<sup>5</sup> Like the rest of the nation, Alaska has a baby boom population entering their 50s and an echo-generation now entering their teens. Unlike the national average, Alaska is losing more than its fair share of population enter-

ing the workforce, having lost 21% of its population, or 24,000, in the 25-34 cohort during the 1990s. While the state has an increasing percentage of high school graduates attending college (at 44%, though still well below the national average of 56%), Alaska's college freshmen increasingly seek their higher education out of state. Although enrollment in the University of Alaska system has seen recent increases, estimates indicate that 60% of the state's college-bound students seek their education Outside.<sup>6</sup>

There are two perspectives on this trend – one alarming, and the other more positive.

The more negative perspective is that the state is facing a “brain-drain,” similar to the patterns seen in such states as North Dakota or Iowa, where decline in farming and job opportunities has forced the younger population cohorts permanently out of the states, resulting in an age structure dominated by older cohorts. Such a trend in Alaska would place even more pressure on state government to fund social and health services for aging residents (offset in part by federal government transfer payments) while not retaining income-generating, skilled workers who are the backbone of a healthy and growing economy.

A more optimistic perspective, and one that likely applies at least in part to the current situation, is that a significant segment of the “lost population” may either return at some point to the state – not necessarily after graduating from college but after a significant period of work experience – and/or be replaced by new flows of working-age in-migrants drawn to the state for work or other reasons (such as seeking a particular lifestyle). Though net migration (in-migrants less out-migrants) is negative for every age cohort of the population (with the sole exception of individuals 80 and over – a very small segment), the largest group of out- and in-migrants are individuals between 20 and 34 years. Though about 43,000 individuals left the state in this group between 1995 and 2000, 38,000 came to the state. This is indeed a negative net difference, though certainly not an entirely one-sided flow.

Alaska has always been a state comprised of migrants from Outside, having one of the highest rates of in- and out-migration flows in the nation. Although this transience can have destabilizing impacts on the state, it can also circulate new

sources of skills, income, and entrepreneurial opportunities.

- **Traditional resource-based industries, particularly fishing and forestry, have been on a long-term decline but remain critical lifelines to Southeast and other coastal communities.** A recent study, though based on data through 1994, found that over  $\frac{3}{4}$  of the basic sector income in Southeast Alaska can be traced to seafood (40%) and wood products (26%), with the remainder comprised of tourism (31%) and mining (<3%).<sup>7</sup> The Alaska fishery – which is really an evolving complex of different types of species, harvesting practices, and value-added activities – has been faced with increased global competition (e.g., Alaska’s share of world salmon supply has shrunk from about 40% in 1980 to well under 20% today), a depressed Japanese economy and yen for over a decade (traditionally the fisheries’ most lucrative market), and plunging wholesale prices. Current efforts to make the Alaska fisheries and seafood industry more competitive will help stem these long-term trends (i.e., change in management practices and permit systems, relaxed restrictions on harvesting technologies such as fish traps, enhanced marketing and quality control), but the most optimistic hopes for this industry are maintaining status quo or, at best, very modest growth.<sup>8</sup>

Alaska’s wood products industry, again still a lynchpin in numerous Alaskan communities, has an even bleaker outlook. Though supply issues and public lands logging restrictions tend to dominate headlines and the political process, the primary driver behind pulp mill closures and continued jobs losses is the long-term loss in demand for Alaska timber. A flagging Japanese economy, permanent changes in construction practices (eliminating demand for hemlock), and expanded sources of cheap supply in Scandinavia, Russia, and Asia have devastated the profitability of much of Alaska’s timber harvest potential. Efforts to find niche activities – such as wood veneer – will help soften this decline, but, like seafood, this industry will not be a sustaining component of the overall Alaskan economy.

This austere picture, though, does not diminish the importance of finding ways to support these industries through cost-effective means. Fishing and timber provide diversifying influences on the overall economic structure, as their performance has very little correlation to Alaska’s other industries, such as oil, tourism, and services. Though

seemingly counterintuitive, this has a stabilizing impact on the overall economy.

- **Income levels, once easily capable of offsetting the state’s high cost of living, have declined considerably, mainly due to occupational and industry shifts.** From 1961 through 1996, Alaska had per capita incomes above the national average – as much as 72% higher during the peak of Pipeline construction. Even considering the state’s notoriously high cost of living, income levels remained near or above the national average through the mid 1990s. Today, depending upon how income is defined, Alaska is at best at par with the national average before adjusting for the cost of living, and as much as 15% below the national average when regional cost of living factors are considered. Although real income has grown over the past decade (as has the nation’s), practically all of this growth can be attributed to increases in government transfers to individuals (including Permanent Fund dividends) and investment income; real wages and salaries have actually fallen.<sup>9</sup>

On the positive side, Alaska’s cost-of-living is now very close to that of the national average, depending upon which measure one uses (e.g., which types of goods and areas are surveyed).<sup>10</sup> Though a pound of hamburger is about 30% higher in Anchorage as it is in Seattle, housing and utilities are 30-40% less expensive. Kodiak remains an expensive location to buy groceries, while Fairbanks prices are about equal to Oakland’s. The lower differential in living costs reflects lower costs of transportation, greater competition for all types of goods and services delivered in Alaska, and an overall economy more closely integrated into the rest of the nation. The relative drop in income largely indicates changes in Alaska’s mix of industries and occupations, and the maturation of the Alaskan economy (though “mature” does not always mean “better”). A shift to the broad services sector (including everything from lawyers, to engineers, to cashiers, to flight attendants) on the whole pays less in wage income than jobs in construction, fishing, oil production, and mining. But, most of these new jobs are also more permanent, and are a reflection of the occupational and economic structure of the nation as a whole.

A services economy is not necessarily a weak economy – many services have the capability to be “basic” industries (such as tourism, software, logistics and transportation, financial services, and

specialized consulting) bringing outside dollars into the local economy. Today, the wealthiest and highest income areas of the nation, such as Washington, DC and Phoenix, are dominated by service industries of all kinds. The downside to this trend, though, is that many of Alaska's fastest growing industries and jobs are indeed lower paying – retail, many health care occupations, and restaurant and hotel work (though working the

slime line in a salmon cannery is not much better, other than having the opportunity to work long hours at overtime wages). It is possible for a region such as Alaska to have a healthy and well-paying services economy (see Box 2 – *Ireland- A Success Story in Technology-Based Development*), but it does not come automatically.

**BOX 2 • Ireland – A Success Story in Technology-Based Economic Development**

In the mid 1980s, Ireland was a war-torn country bordering on third-world nation status, with 17% unemployment, significant out-migration in nearly all of Ireland's regions for the past five decades, and income levels among the lowest in all of Europe. Between 1989 and 1998, Ireland experienced one of the most dramatic reversals of an economy deemed unfixable – with a labor force growing by an astonishing 25.6% (381.7% in internationally-traded services). GDP grew by an average 6.5% between 1990 and 2000 (the third fastest growth rate in the world), and unemployment dropped as low as 3.6% in 2001 and currently stands at 4.8% (July 2003). Ireland is now the leading exporter of software in the world (more than the U.S.), has a per capita income 104% that of the entire European Union (EU), compared to 79.4% as recently as 1994, and is the largest exporter on a per capita basis in the EU (nearly twice that of its nearest rival). Beginning in 1991, Ireland reversed its long period of net out-migration – in fact, between 1996 and 2002, all of the nation's nearly 30 counties had positive in-migration.

Ireland's transformation occurred for a mix of reasons, including: a loyal, affordable, and English-speaking labor force; information and communications technology that allowed the separation of production activities of technology-oriented companies such as Intel and Microsoft; favorable tax laws (a 10% corporation tax rate); and large public investments (internally and via the EU) in infrastructure and "human capital" (education and employee training).

Beginning in the 1980s, Ireland invested in an extensive telecommunications network that was subsequently upgraded to high speed broadband with fiber optic cable during the 1990s. The primary telecommunications company, Telecom Eireann, had been state-run until 1999 but still retains a near monopoly, providing 90% of service. This has hampered competitiveness in the sector and is a threat to Ireland's longer term success – Microsoft, for example, decided against basing their primary European digital communications operations in Ireland, opting instead for London, partly because of an overly regulated telecommunications environment. In spite of this, Ireland's early telecommunications investment was a critical component of its recent economic success.

Just as importantly, the Irish educational system was upgraded beginning in the 1980s – about 20 years after similar improvements were made in other EU countries such as Germany and the UK. Thus, the benefits of these "human capital" investments began to pay off only recently.

Finally, almost all of Ireland's success has been attributable to large and sustained levels of foreign direct investment (FDI), particularly by U.S. firms. This has been the fuel driving the recent expansion, but it also means that the country's economy is tied more directly to the volatility of the U.S. and global economy. Although the recent recession has not devastated Ireland's gains of the 1990s, its growth rate has stabilized, with overall employment falling by over 1% between 2002 and 2003 (a modest decline, but a tremendous drop from the accelerated rates of growth during the prior years). (*continued on next page*)

**BOX 2 • Ireland – A Success Story in Technology-Based Economic Development (continued)**

**Lessons for Alaska:**

- So-called “peripheral” regions – such as Ireland and Alaska – now have the potential to participate in an information-oriented economy, but any development is contingent upon: a) a leading and well-established information and telecommunications infrastructure; and b) a labor force that is educated and skilled. These are required conditions, but not necessarily sufficient ones.
- Alaska does not have the benefit of a lower wage workforce, as did Ireland, but it can partly offset this disadvantage by lowering barriers to entry, such as keeping corporate taxes low and reducing regulatory practices for outside businesses and the telecommunications industry.
- Significant technology-related development in places such as Ireland (or Alaska) is dependent upon outside investment (both foreign and domestic sources). Other than natural resources, outside private investment in Alaska has largely been limited to serving the local consumption needs of the Alaskan population – any move to attract outside investment for assets that are not immovable (i.e., resources) requires extremely favorable incentives.
- Outside investment in communications and information-oriented activities will also likely be highly centralized in Anchorage. In Ireland, while only about 1/3 of the total workforce is in Dublin, its primary city, nearly 73% of its technology and internationally-traded services employment is in the Dublin metropolitan area.

- ***Most of the state’s economic gains have been concentrated in its urban and metropolitan areas.*** Between 1990 and 2002, 87% of the state’s nearly 55,000 new jobs were created along the “Railroad Corridor,” or primarily the greater Anchorage and Fairbanks regions, though these areas represent only 64% of the state’s population base. This is no surprise, considering that these trends parallel that of the rest of the nation – a service-oriented economy is generally a metropolitan one. As the largest state in the nation with rural and native communities stretching as far apart as 2,400 miles (about the distance between Los Angeles and New York City), policymakers will continue to face the issue of trying to sustain these communities with the reality that future growth will inevitably concentrate in the state’s metropolitan economies.

These challenges – some as a result of trends beyond the control of any political body or organization and others that can indeed be influenced – are offset in part by positive trends and strengths of Alaska.

- ***In comparison to the nation and other states, Alaska’s economy has been healthy and stable.*** Though oil production continues to fall, Alaska’s employment has grown each of the past 16 years at a stable, though moderate, pace (about 2.4% per year). Activities surrounding both oil field development and production originally created a highly volatile economy during the 1970s and 1980s. Since 1990, Alaska is one of the most sta

ble economies in the country and has largely dodged the impacts associated with the latest recession. This is primarily a result of the state’s economy being comprised of activities that have low or negative correlation with the national economy.

- ***Alaska’s remoteness has accelerated the state’s use of information technology and telecommunications.*** Alaska will never be a Silicon Valley. But, public and private organizations’ foresight to provide the satellite and communications infrastructure have helped level the playing field for Alaska in its access to information and technology. Alaska was 2<sup>nd</sup> in the nation in 2000 in use of computers by households (65%), and 1<sup>st</sup> in the percentage of adults with internet access (69%).<sup>11</sup> This relationship between remoteness and technology usage is no accident: the six “web-savviest” countries in the world are similarly in northern climates or distant places, including (in order) Sweden, Denmark, Netherlands, Norway, Finland, and New Zealand (the United States is eighth, behind Switzerland).<sup>12</sup> Sweden and Finland, in particular, are world leaders in wireless telecommunications technology (the home countries of Ericsson and Nokia) and share many geographic and cultural characteristics with Alaska.

Other measures of the “technology economy,” though, find Alaska lacking, including private and public spending in research and development,

broadband telecommunications infrastructure, high-tech jobs, and venture capital. Again, some of these factors will likely never be possible to make substantial progress in Alaska (for instance, venture capital), while others can be influenced through policy and private and public investment (i.e., telecommunications infrastructure).

- **Other growing basic sectors of the economy have had a noticeable impact.** Tourism and air cargo are two sectors of the economy that bring in “pure” Outside dollars. Total visits to Alaska have increased by approximately 30% since 1993,<sup>13</sup> and tourism is estimated to account for one in eight private sector jobs in the state.<sup>14</sup> As cruise traffic continues to increase (and the growth of Seattle-based cruises has been particularly positive), tourism will assume an even larger role.

Air cargo is another sector that has grown substantially, effectively since 1990. Anchorage is now

third in the world in total air cargo traffic (by weight), behind only Hong Kong and Memphis. The air cargo industry worldwide is expected to grow as much as 7% annually over the next decade, and its geographic configuration has evolved significantly. Air cargo cities serve different functions – some as destinations, some as regional distribution hubs, and others as refueling stops. Anchorage’s air cargo role began primarily for refueling purposes, but has since had other growth in its distribution function, including limited ancillary activities. Anchorage may have the potential in expanding this role (see *Box 3 – Subic Bay, Philippines – Air Cargo as an Economic Development Strategy*), representing a positive scenario. Conversely, it could go the direction of Bangor, Maine – primarily a refueling stop for transatlantic flights, but diminishing in importance as airplane technology facilitates greater flight ranges.<sup>15</sup>

**BOX 3 • Subic Bay, Philippines – Air Cargo as an Economic Development Strategy\***

Subic Bay is a deep water port 70 miles north of Manila. Long a U.S. military installation in the Pacific, the U.S. handed control of the facilities to the Philippine government in 1992, in part because the base was buried in ash after the eruption of Mt. Pinatubo in 1991 and growing demands by Filipinos to regain control of U.S. military bases.

The Philippine government adopted a redevelopment strategy for Subic Bay shortly after the installation was handed over, focusing on attracting foreign direct investment (FDI) by creating special economic zones (including facilitating trade outside the legal boundaries of Philippines customs territory). Redevelopment investment began, projected at \$6.3 billion over 10-years, financed in part by sale of government land and supplementing the \$8 billion in infrastructure remaining as part of the U.S. military facilities. Taiwanese investors developed the Subic Bay Industrial Park, commencing in 1993, which was shortly followed by Fed Ex choosing Subic Bay as its primary (and first) Asian hub in 1995. Subic Bay’s central location in the Pacific-Asian region – halfway between Singapore and Tokyo with close access to mainland regions – was a critical factor in Fed Ex’s decision. This location allows Fed Ex to offer premium same-day services, where a good manufactured in Asia can be delivered to a North American market effectively on the same day it is produced. The Philippine government accommodated Fed Ex’s selection by relaxing restrictions on the frequency and routes of U.S.-based carriers, in what has now become a model agreement for U.S. air cargo locations globally.

Fed Ex’s hub operations spurred almost immediate related development. Two major electronics manufacturers – Acer and TEMIC – located shipping and production facilities at Subic Bay. TEMIC was able to improve its delivery cycle time by 32% because of its reconfigured distribution system, facilitated by Fed Ex’s services. Another key factor in Subic Bay’s redevelopment was the proximity to low-cost labor – in the Philippines and elsewhere in Asia. Also, the development authority successfully tapped into multiple sources of FDI, beginning with Taiwan, and then followed by Japanese investors when Taiwanese production became more inward-focused as the Taiwan economy stagnated beginning in 1998. By 2000, the employment at Subic Bay was over 34,000, exceeding the total employment ever associated with the military base. (*continued on next page*)

**BOX 3 • Subic Bay, Philippines – Air Cargo as an Economic Development Strategy\* (continued)**

**Lessons for Alaska:**

- Subic Bay is positioned to serve the primary producers and markets of Pacific-Asia as Anchorage is to North America – once considered a peripheral location, but then becoming a key hub in air cargo traffic for the broader Asian region. This hub is more than a refueling stop, but a central node in a modern, quick-delivery air distribution system.
- The success of Subic Bay was dependent upon two key factors: 1) the close involvement of the Philippine government (including an almost too-powerful local development authority) with a complete focus on economic development; and 2) the role of foreign direct investment – by Fed Ex and Taiwanese and Japanese producers. The government and development authority were particularly aggressive in reducing or eliminating barriers to this investment.
- Though Alaska does not share some of the most important features of Subic Bay (i.e., low-cost labor force and large-scale production capacity), it can help fulfill its potential as an air cargo hub facility with the possibility of greater value-added activities and not simply as a refueling stop.

\* Description and analysis based largely on Bowen, J.T., T.R. Leinbach and D. Mabazza (2002) Air Cargo Services, the State and Industrialization Strategies in the Philippines: The Redevelopment of Subic Bay, *Regional Studies*, 36, 5, 451-167.

- ***Alaskans are more knowledgeable about what makes their economy work than residents in other states.*** People living in Alaska are particularly sensitive to what factors drive their economy. Ask any Alaskan what the main sectors of the state’s economy are, and it is likely one will receive a more consistent and accurate answer than if one were to query a resident of Atlanta. In our experience, the state’s university economists, Department of Labor and Workforce Development staff, and researchers and administrators in numerous other agencies provide some of the most accessible and relevant information on the state’s economy. The Buy Alaska program, for example (aimed at retaining dollars in the local economy through “import substitution” by making purchases from local vendors when possible) is one of the few of its kind in the nation and most certainly the only one commonly recognized by many state residents.

Alaskans are also particularly aware of investments and jobs held by non-residents. A recent report, for example, highlights the finding that approximately 62,000 of Alaska’s 308,000 jobs are held by residents outside the state.<sup>16</sup> This awareness, overall, is a strength, although such emphasis may have a tendency to mask more fundamental issues (i.e., we believe the focus should be on how to make a region’s overall economy more competitive nationally and globally, based on the most cost-efficient use of labor and factor inputs, as opposed to measures which may have a short-

term benefit for residents but deter future investment).

Moreover, citizens, business leaders, and policy-makers have been taking meaningful steps towards many of the issues we have highlighted above – the Vision Anchorage economic development plan prepared by Chabin Concepts Team, and the Alaska 20/20 partnerships, are two good examples of such an effort. In other regions that have gone through similar transitions, studies have found that one of the biggest mistakes communities have made is adopting a passive attitude, “waiting for a white knight to appear and instantly transform their local economy.”<sup>17</sup> While ANWR development or quick approval of a Natural Gas Pipeline may indeed be real possibilities, there seems a growing recognition in Alaska that highly proactive efforts in all areas of the economy and fiscal management are increasingly essential to the state’s long-term health.

## II. Economic Development Priorities the Permanent Fund Can Support

There is a good deal of mixed evidence as to the efficacy of formal economic development initiatives. One recent study evaluated programs across all states (except Hawaii and Alaska!) and the long-term relationship to overall economic growth.<sup>18</sup> The conclusion of the study was that, with the sole exception of increasing manufacturing employment via direct recruiting, such efforts had effectively no overall effect on long-term economic growth. In fact, there was some negative relationship between these programs and growth in finance, insurance, and real estate (FIRE) industries, likely because of the “smokestack-chasing” focus of many of these programs at the expense of growth-oriented service industries.

Although governments are often ineffective at choosing the right industries for direct subsidy and support that will be the main engines of growth, they can create a competitive environment so that multiple types of economic activity can flourish. As we have already alluded to, Alaska’s state agencies, local governments and development authorities, and other private, non-profit, and public sector organizations have engaged in numerous efforts. Some have been effective – for example, the Alaska Industrial Development and Export Authority’s financing support for the Red Dog Mine haul road – while others have not (i.e., the Alaska Seafood International fish plant in Anchorage).

In this initial report, it is not our intent to provide specific recommendations as to the execution or funding of particular actions, but instead to list a set of priorities for Fund Staff, Trustees, and the ad hoc task force to consider. Further, we do not believe it is clear yet as to the specific role the Fund can take, other than advisory or supportive of particular positions.

With this in mind, here is a summary of what we see to be the state’s highest economic development priorities:

- **Address the state’s fiscal gap.** This process, long deferred, is now just underway. It will involve both new methods of raising revenues via non-petroleum sources, downscaling or eliminating entire programs, and changing the entire fiscal structure of state government. The state must also eradicate the growth-inhibiting incentives of the “Alaska disconnect,” where new non-oil producing employment is a net drag on state finances.

Like Norway, Alaska can explore opportunities to privatize certain functions currently performed by state government. These can include an array of activities from waste management, to medical services, to security facilities, to payroll systems. Because government retains effectively a monopoly on many functions it currently serves, there exist no incentives for local or outside private organizations to fulfill these functions. Privatization can create healthy competition, cost-effectiveness (or elimination of unnecessary functions), and long-term job creation for activities better served outside the public sector.

- **Continue support for future petroleum and natural gas-related development.** In Governor Murkowski’s first *State of the State* address earlier this year, he noted that the plan for raising state revenues revolved around a single word – *oil*. In many respects, the state has relied solely upon this single industry for nearly the past three decades in addressing almost all of its economic and social needs. Clearly, it is in the state’s best interest to maximize its support of this industry, forcefully maintain its national political standing, and continue seeking the possibility of developing a large-scale project such as ANWR or the Natural Gas Pipeline. Moreover, the state should continue to explore cost-effective and environmentally-feasible infrastructure projects (such as the proposed extension of the North Slope Haul Road or Chignik to Naknek road) to enhance the attractiveness of future development.
- **Proactively support development of the state’s digital and telecommunications infrastructure.** Practically by necessity, Alaska needs to lead the nation in its communications and digital infrastructure because it is increasingly dependent upon it for its linkages to the Lower 48 and the rest of the world. Many individuals and companies are indeed more “footloose” in that they do not need to be tied to any particular place, as long as they have the necessary tools to conduct their lives and work, and, most importantly, to communicate and travel to other places on a frequent basis. Alaska can capitalize on this change – both in its relationship to Outside as well as its internal communications – by ensuring that all communities are linked to the most modern technologies. As with Ireland, investment in such technologies is an essential component of modern economic development.

- **Emphasize retaining and attracting a skilled and educated workforce.** If Alaska has any intent on replicating the type of success Ireland has had in its transformation to information-based economic development, it must create the environment to foster development of “human capital.” A recent study of digital development in rural areas found that the most critical element distinguishing between those places that had and had not successfully harnessed new information and telecommunications technologies for economic growth was the availability of labor with the education and skills to use these technologies.<sup>19</sup> Alaska has reputable and quality higher educational programs that serve both state and Outside populations. Like Ireland, investments in higher, adult, and K-12 education will have longer-term payoffs, but the solutions are not simply providing more funding via already-strapped budgets. They also require partnering with businesses and other organizations to

target effectively the educational and skill needs of the state’s most promising growth sectors.

Further, creating a pool of 21<sup>st</sup> century-skilled laborers is more than educating one’s own – it also means welcoming outsiders and creating the right quality-of-life and other inviting place-based characteristics (such as cultural amenities and community-based programs) to encourage new migrants to move to and stay in the state. Alaska has the potential to increase its in-migration rates and bring new skills, income, and job opportunities to the state via entrepreneurial development (see *Box 4 – Montana – Transitioning from a Resource to and Amenity-Based Economy*). New residents should not be viewed as a threat – stealing a limited pool of jobs away from the existing population – but as a potential resource, as Montana has found.

**BOX 4 • Montana – Transitioning From a Resource to an Amenity-Based Economy\***

Montana is the 9<sup>th</sup> smallest state in the nation, with a population of just over 900,000. Long dominated by resource industries – including mining, agriculture, and wood products – the state has had a similar history to Alaska in its boom-bust economic fluctuations. It also shares changes in its economic structure, where a diversity of service industries – including engineering, business services, health, education, and tourism – have been the fastest growing sectors and now comprise most of the state’s jobs. Having gone through periods of out-migration or at least very modest growth through the 1980s, the last decade saw the state’s population grow by over 100,000, or nearly 13%. Like Alaska, Montana has enjoyed solid employment growth, expanding by an average of 12,000 workers during the 1990s, and retaining an unemployment rate of 4.7% through the current recession. Because its economy has a very small base of manufacturing as well as other industries linked closely to the national economy, its downturns have not correlated well with the nation, including the recession of the early 1990s.

Much of Montana’s recent population growth can be attributed to an influx of new migrants from other parts of the country, particularly to the western portion of the state where the scenic and recreational amenities are concentrated. These new migrants have a number of characteristics, different than those of the past, including: a) higher than average net worth; b) high education levels (62% have college degrees versus 49% for existing residents); c) high levels of non-wage income including dividends, transfer payments (such as social security) and rents from real estate holdings, and d) a propensity for starting sole proprietor or small service-oriented businesses with clients outside Montana (i.e., creation of so-called “basic” sources of income). Places such as Bozeman and Kalispell (near the entrance of Glacier National Park on Flathead Lake) have seen the most rapid gains in population and employment.

The diversification of Montana’s employment base has also stemmed from other sources. Montana State University in Bozeman has seen a 285% rise in its research funding to over \$66 million annually. The major university towns of Bozeman and Missoula have also offered cultural and other amenities to the new migrants. Though Montana is not a high tech hotbed, it has attracted a significant share of startups and technology related manufacturing such as a silicon processing plant and 800-service call centers. NASA recently designated a military base in Great Falls as the site of its X-33 Space Shuttle testing grounds. Again, many of the new jobs – in business, education, health and other services – can be directly linked to people moving to the region for reasons of quality of life, even if it means a sacrifice in wages. Recent studies of migration in the intermountain West indicate a reversal of the usual thinking that “people follow jobs.” In fact, researchers from the University of Arizona and Northern Colorado in an extensive analysis of population and employment trends in the Rocky Mountain West found that, indeed, job growth followed recent migration.<sup>20</sup> Moreover, they found this trend most prevalent in areas with proximity to large tracts of U.S. Forest Service and other public lands. And, this growth is far more than that attributable to seasonal tourism – communities in nearby places as Jackson, Wyoming, for example, have eliminated public subsidies of tourism, recognizing that a large part of their growth is attributable to permanent residents and jobs attracted there for quality of life, and not yearly tourist volumes.

*(continued on next page)*

**BOX 4 • Montana – Transitioning From a Resource to an Amenity-Based Economy\* (continued)**

Montana's ongoing transformation is much less one of any explicit campaign or economic development program on the part of any governmental entity than the recipient of broader trends occurring in the nation's social and economic structure. Increases in net worth by urban dwellers, increase in second home ownership, a growing desire by aging baby boomers to migrate from congested urban areas, and improvements in communications technology and air access to allow "lone eagles" to locate their business in locations of their choosing have each contributed to these trends.<sup>21</sup> Though Montana's economy remains largely dependent on resources, its sectoral mix has shifted and, in contrast to other places such as Appalachia that have been unable to make this transition, Montana has so far been successful.

**Lessons for Alaska:**

- New residents moving to the Alaska should not necessarily be viewed as a threat, stealing a limited supply of available jobs and using public services, but they can often be a valuable economic resource. Retirees or Lower 48 dwellers moving to the state for quality of life reasons may bring other sources of income to the state and often unseen sources of employment, such as the "lone eagles" who peddle their services to Outside over a DSL and a fax line. These types of businesses and income are often missed by conventional statistics, as their income is frequently non-wage based and proprietorships and partnerships are often not counted in employment figures.
- Alaska shares many of the same attributes with Montana – a small state, traditionally dependent on resources including oil, seeing an economic structure shift to one more like the nation, and having natural and cultural amenities increasingly sought after by urban dwellers. Maintaining an attractive quality of life with the infrastructure, transportation connections (i.e., air service), environmental, and educational and other services have been essential components of Montana's growth and likely one that new migrants to Alaska have sought as well.
- Shifting to more amenity-based economic activities is much less of a direct exercise in traditional economic development – targeting specific industries and businesses to locate in the state using a package of tax and other incentives. For Montana, in many respects, its unexpected success happened with little to no formal government involvement. For Alaska, government and development organizations can recognize that these types of population shifts and economic sources of growth are viable sectors and help facilitate their growth, as opposed to any concrete recruitment initiatives.

\* See series of radio commentaries by T. Power, various years, found at [www.umn.edu/econ/kufm.htm](http://www.umn.edu/econ/kufm.htm) for a good review of Montana's ongoing economic transition.

- **Actively recruit air cargo-related logistics, distribution, and selected manufacturing, and enact incentives to promote Anchorage's global competitiveness as an air cargo hub.** Alaska's fast-growing air cargo industry will soon be facing an important turning point: a) will it go the way of Bangor, Maine and lose its role primarily as a refueling stop because of advances in air technology; or b) does it have the characteristics to become a Subic Bay and function as a crucial node in the global air cargo system, with a portfolio of distribution and production functions surrounding it?

We believe it has the potential to be more of the latter than the former, but many highly proactive initiatives must be undertaken to get there. Attracting traditional manufacturers to Alaska has been attempted in the past with effectively zero success. The obvious reasons of remoteness, climate, and high labor costs negate even the most aggressive

recruiting strategies. But, as the Vision Anchorage Economic Development Plan prepared by Chabin Concepts Team has proposed, we concur that there is the possibility of attracting certain types of businesses that require high-value on-demand air service, such as pharmaceuticals, perishables, and certain types of electronics. These ancillary activities do not necessarily mean that they require production in Alaska, but Anchorage can function as a central distribution facility, which means more than simply moving a cargo shipment from one airplane to another.

We believe more research is warranted in this area – particularly evaluating ways in which Anchorage and Alaska can create a competitive environment with other nodes in the system (i.e., establishing special economic zones, enhancing and communicating the cost-savings associated with shorter air times and modern hub logistics systems, etc.).

- **Recognize that not every community can be saved.** One of the most difficult challenges policymakers and economic development officials faces is that of making choices between maximizing long-term returns on investment for a state or region at large and preserving communities and industries in decline, at large expense. As an example, billions of dollars have been spent for over half a century in former coal-mining regions of Appalachia in an attempt to develop those regions, and it is only now that many of these programs have been deemed almost entirely ineffective.

This list of priorities is only a start, and, again, we hope sufficient to initiate a meaningful dialogue among Fund Trustees, Staff, members of the special task force, and other interested parties. We look forward to our continuing work as this effort progresses.

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ENDNOTES

- <sup>1</sup> See Goldsmith, Scott (1999) *Alaska Gross State Product 1961-1998*. Anchorage: Institute of Social and Economic Research, University of Alaska Anchorage and related economic analysis found at [www.akrdc.org/akfuture/buildbase.html](http://www.akrdc.org/akfuture/buildbase.html).
- <sup>2</sup> See ISER economic database at <http://www.iser.uaa.alaska.edu/iser/people/Scott/Container.htm> and presentation entitled "Federal Spending in Alaska" delivered by Scott Goldsmith and Eric Larson, May5-6, 2003 at Conference on "Improving Delivery of Federal Funding for Alaska Tribal Programs," found at [www.alaskaneconomy.uaa.alaska.edu/sectoral/sectoral.htm](http://www.alaskaneconomy.uaa.alaska.edu/sectoral/sectoral.htm).
- <sup>3</sup> See National Association of State Budget Officers, "Fiscal Survey of States, 2003" found at [www.nasbo.org](http://www.nasbo.org) and "State Budget and Tax Actions, 2003" at National Council of State Legislatures at [www.ncsl.org](http://www.ncsl.org).
- <sup>4</sup> See "The Alaska Citizen's Guide to the Budget," Institute of Social and Economic Research, [citizensguide.uaa.alaska.edu/11.BUDGET\\_FAQs/11.1.1\\_AK\\_Disconnect\\_Detail.htm](http://citizensguide.uaa.alaska.edu/11.BUDGET_FAQs/11.1.1_AK_Disconnect_Detail.htm).
- <sup>5</sup> For an excellent, and current, discussion of domestic migration patterns, see the recently released census reports, He, W. and J. Schachter (2003) *Internal Migration of the Older Population*. Washington, DC: US Census Bureau.; Perry, M. (2003) *State-to-State Migration Flows*. Washington, DC: US Census Bureau; and Franklin, R. (2003) *Domestic Migration across Regions, Divisions, and States*. Washington, DC: US Census Bureau, all found at [www.census.gov/population/www/cen2000/migration.html](http://www.census.gov/population/www/cen2000/migration.html).
- <sup>6</sup> See "University of Alaska President's Report 2001-2002" found at [www.alaska.edu/pres/reports/](http://www.alaska.edu/pres/reports/) and "University of Alaska: Issues and Answers" found at [www.alaska.edu/state/archives/2001newsletters/fy02issues\\_answers.pdf](http://www.alaska.edu/state/archives/2001newsletters/fy02issues_answers.pdf).
- <sup>7</sup> See Hartman, Jeff (2002) *Economic Impact Analysis of the Seafood Industry in Southeast Alaska: Importance, Personal Income, and Employment in 1994*. Juneau, Alaska: Alaska Department of Fish and Game, Division of Commercial Fisheries.
- <sup>8</sup> See Knapp, G. (2003) *Options for Restructuring Alaska Salmon Fisheries*. Anchorage: Institute of Social and Economic Research found at [www.alaskaneconomy.uaa.alaska.edu](http://www.alaskaneconomy.uaa.alaska.edu).
- <sup>9</sup> See ISER Alaska Economic Database, Table 8, produced by Scott Goldsmith at [www.iser.uaa.alaska.edu/iser/people/Scott/Container.htm](http://www.iser.uaa.alaska.edu/iser/people/Scott/Container.htm) and Department of Labor and Workforce Development, State of Alaska (2001) *Alaska Economic Trends, July 2001*. Juneau, Alaska: The State of Alaska.
- <sup>10</sup> For an excellent analysis of Alaska's cost-of-living, see Fried, N. B. Windisch-Cole, and D. Robinson (2002), "The Cost of Living," *Alaska Economic Trends*, June 2002, p. 3-17.
- <sup>11</sup> See U.S. Department of Commerce, National Telecommunications & Information Administration (2000) *Toward Digital Inclusion*. Washington, DC; Atkinson, R. (2002) *The 2002 State New Economy Index*. Washington, DC: Progressive Policy Institute; Alaska Science and Technology Foundation (2002) *2002 Alaska Science & Technology Innovation Index*. Anchorage.
- <sup>12</sup> Study conducted by IBM and intelligence unit of The Economist, found at [www-1.ibm.com/services/files/ibv\\_eiu2003.pdf](http://www-1.ibm.com/services/files/ibv_eiu2003.pdf).
- <sup>13</sup> Northern Economics Inc. (2003) *Fall/Winter 2001-02 Secondary Arrival Report*. Anchorage: State of Alaska, Department of Community and Economic Development.
- <sup>14</sup> McDowell Group (1999) *Alaska Visitor Industry Economic Impact Study*. Juneau: Alaska Department of Commerce and Economic Development, Division of Tourism.

- <sup>15</sup> Loughlin, M.J. (1998) *Overseas Air Cargo Service, Airborne Export-Producing Industries and U.S. Cities 1980-1995*. Doctoral Dissertation in Geography: The University of Minnesota.
- <sup>16</sup> *Alaska's Jobs for Alaska's People* by Commonwealth North (Draft 20, June 25, 2003) is the most current example of this focus.
- <sup>17</sup> Mayer, H.J. and M.R. Greenberg (2001) "Coming Back from Economic Despair: Case Studies of Small- and Medium-Size American Cities," *Economic Development Quarterly*, 15, 3, p. 208.
- <sup>18</sup> See Saiz, Martin (2001) "Using Program Attributes to Measure and Evaluate State Economic Development Strategies," *Economic Development Quarterly*, 15, 1, 45-57.
- <sup>19</sup> Malecki, Edward J. (2003) "Digital Development in Rural Areas: Potentials and Pitfalls," *Journal of Rural Studies*, 19, 2003 Issue, 201-14.
- <sup>20</sup> See Vias, A. (1999) "Jobs Follow People in the Rural Rocky Mountain West," *Rural Development Perspectives*, 14, 2, 14-23.
- <sup>21</sup> See Beyers, W.B. and D.P. Lindahl (1997) "Lone Eagles and High Fliers in Rural Producer Services," *Rural Development Perspectives*, 11, 3, 2-10.

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