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SAFE LANDING: CHARTING A FLIGHT PATH THROUGH THE CLOUDS

by Scott Goldsmith



Everybody's got an idea about where to find the roughly \$1 billion we'll need to balance the state

budget every year from now on. It's hard to evaluate these proposals, because the budget is complicated—and it's hard to imagine how much \$1 billion really is.

If that weren't enough, the price of oil—which changes the size of the deficit—keeps jumping up and down, creating a moving target for any budget plan. Fluctuating oil prices lead to alternating gloom and euphoria.

Oil taxes and royalties pay for almost all general government operations. But Alaska oil production has dropped nearly 50 percent since 1988, shrinking oil revenues. Our estimate of a \$1 billion deficit in the General Fund is based on the average price of oil since 1985. It makes sense to consider solutions based on a deficit that size, but flexible enough to work when oil prices rise (like this year) or fall (like last year).

The state cut the General Fund about \$275 million between 1991 and 1998, as oil revenues fell. At the same time, Alaska's population grew by 45,000 and prices increased 20 percent. Continuing to cut the budget as the population grows and prices rise will eventually cripple services (like education) that the state constitution requires. And because oil revenues have shrunk faster than the budget, we've drawn about \$3 billion from the Constitutional Budget Reserve to fill the hole. At this rate, the reserve will be empty by 2003.

There's no shortage of suggestions for dealing with this problem, but there is a shortage of \$1 billion solutions. Think how much \$1 billion is: if a billionaire died and left you his money, you could spend \$1 million a year for 1,000 years.

This paper looks first at why some popular ideas can't raise \$1 billion a year, although they can certainly help. Then, in the foldout, we try to help Alaskans see through the clouds obscuring the "Safe Landing" strategy, which we first talked about in 1992. This strategy says that dealing with such a big deficit requires using a combination (and there are a number of possible combinations) of budget cuts, windfalls, Permanent Fund earnings, new taxes, and economic development.

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Several plans being considered do use some combination of "Safe Landing" measures. Rather than dissect specific plans, we present (in the foldout) six alternatives with different implications for public spending, state financial assets, and new revenue requirements.

Can We Find \$1 Billion A Year Like This?

- *Keep cutting the General Fund.* You can't get \$1 billion by targeting \$100,000 of fat here or a \$1 million of waste there. You have to eliminate state money for everything from Pioneers' Homes to the ferry system—and then cut basic services (like educating children or managing fish and game) by 25 percent.
- *Look outside the General Fund.* Aside from Permanent Fund dividends and inflation-proofing for the Permanent Fund, state spending from other funds is largely federal transfers for specific programs, bond proceeds for construction projects, and fees users pay for airports, the university, and other services.
- *Expect higher oil prices.* Oil prices would have to hit \$30 a barrel and keep rising to increase annual revenues by \$1 billion. They haven't been that high since the early 1980s.
- *Raise oil taxes.* Oil taxes would have to triple, to add \$1 billion to oil revenues. This sounds like a gamble, at a time when the industry is turning to less profitable marginal fields.
- *Earn more on the Permanent Fund.* Generating \$1 billion more annually would require a sustained 10 percent return, after inflation—double that of most large endowment funds.
- *Wait for a natural gas pipeline.* Revenues from a gas pipeline (which at best is years away) might be about \$200 million annually. We need five times that to reach \$1 billion.
- *Promote economic development.* Mining activity would need to grow 200 times larger to generate \$1 billion in revenues.
- *Buy or sell state assets.* No analysis has yet demonstrated that selling state assets or buying part of a pipeline could generate the level of returns we get from oil.
- *Tax the outsiders.* A personal income tax or a seasonal sales tax on nonresidents could raise about \$50 million annually. To get to \$1 billion, we'd need 20 times more.
- *Have a bake sale.* This assumes every man, woman, and child in Alaska would spend \$1,500—every year—on things like a state lottery or legalized gambling.

WHY SOME PAINLESS SOLUTIONS AREN'T

Many Alaskans are convinced there are painless ways to eliminate the budget deficit. But we shouldn't take these ideas at face value, without assessing how realistic they are, how much money they could raise, and what pain they would actually impose.

- *Keep cutting the General Fund.* If the General Fund had grown with population and inflation since 1991, it would now be about \$1 billion larger than it is. Some Alaskans believe that state operations are still bloated with unnecessary programs, left over from the era of high oil revenues. But years of budget restraint and a growing population mean that further cuts are much more likely to damage public services and the economy now.

To save \$1 billion, we would have to eliminate every activity not required by the state constitution and cut every remaining program by 25 percent. We realize that only the courts can determine exactly what is constitutionally mandated. But here's an illustrative sample of the kinds of things that would be likely to go: state subsidies for the Pioneers' Homes and the marine highway system; the Longevity Bonus; all alcohol, drug abuse, and mental health programs; youth corrections, child care, and foster care; fire suppression; all campuses of the University of Alaska except Fairbanks; and the entire departments of Community and Economic Development, Labor, and Military and Veterans Affairs. Privatizing services (another popular suggestion) doesn't eliminate their cost—although it may reduce costs and would reduce government employment. Some services have in fact been privatized; non-profits contract to provide health services. But government monitoring of private providers is an additional expense.

- *Look outside the General Fund.* Since only about a third of the nearly \$7 billion annual state budget appropriation is from the General Fund, it's popular to suggest we could cover the \$1 billion General Fund deficit by cutting that much from the rest of the budget. After the General Fund, the largest budget category is federal transfers, which are for specific purposes. Almost as large are appropriations of Permanent Fund earnings to pay for dividends and for protecting the fund from inflation. Federal money can't be used to fill the budget gap, but the legislature can use Permanent Fund earnings for any purpose.

The rest of the money outside the General Fund (often referred to as "off budget") amounted to \$1.5 billion in 1999. About \$450 million of that was not spending at all, but rather transfers between agencies. Another \$400 million was to authorize bond sales for construction projects. A good share was money people paid for services—including what students paid the University of Alaska for tuition, dormitory fees, and other expenses and what airport users paid in fees at the state's international airports in Anchorage and Fairbanks. It also included management fees for the Permanent Fund's investment portfolio and public employees' retirement accounts.

None of these activities have ever been paid for out of the General Fund. Some off-budget items were formerly in the General Fund, raising suspicions that the state hasn't been cutting the budget but just shifting items around. Such off-budget spending is small, however, compared with the budget deficit, and it pays for activities many Alaskans support.

- *Expect higher oil prices.* Oil prices always surprise us, but we can't count on them going up and staying up. Currently above \$20 per barrel, the price of oil has more than doubled from its low point last winter. It is above the trend, which since 1986 has been for real (inflation-adjusted) prices to drop 2 percent a year. It is most likely prices will continue to fluctuate around that trend. Oil revenues also depend on production, which has trended down 4 percent a year. Finally, as the oil producers concentrate on marginal fields, where the state's severance tax is reduced by the economic limit factor (ELF), the revenue per each dollar of oil sales will fall. Considering all these factors, the price of oil would need to jump above \$30 per barrel—and keep going up each year—to fill the fiscal gap.

- *Raise taxes on the oil industry.* Since oil has provided virtually all general state revenues for 20 years, some people think we can continue to get what we need by raising oil taxes. Since 1977, when North Slope oil started flowing, the state government has collected about \$55 billion in oil revenues (which includes not only taxes but also royalties, since the state owns Prudhoe Bay and adjoining fields). But production and the market price of oil have been trending down for more than a decade. Today, the real market value of Alaska oil production is only 25 percent of what it was at its peak in 1981. New technologies, economies of scale, and other changes have reduced the costs of finding and producing oil on the North Slope. The industry can now squeeze more out of producing fields and can develop fields that wouldn't have been profitable just a few years ago. The continuing challenge for the industry is to keep costs low enough to profit from investing in new fields that may only be one percent as large as Prudhoe Bay (the largest field ever discovered in North America). The industry also has to deal with the risks that exploration wells may come up dry and that new fields may not meet production forecasts—which means profitable fields have to pay for those that aren't.

Deciding on an "appropriate" state share of oil income will always be controversial. That decision should be based not on past conditions but on future expectations about oil markets. The state should constantly re-examine its share as market conditions change—and recognize that there is a trade-off between the state share of revenues and the industry's incentive to find and develop new fields. And given the shrinking oil tax base, it's unrealistic to expect that the state could take an additional \$1 billion per year, without seriously compromising the \$5 billion in new investment the industry has said it plans over the next five years.

• *Earn more on the Permanent Fund.* It makes sense to get the best possible return on the Permanent Fund. Because the fund is so big, a one percent increase in returns could generate \$250 million more per year. But with a higher return comes greater risk of loss. The unusually strong stock market in recent years has produced an annual return above the target level the fund trustees set. But the stock market won't produce double-digit returns indefinitely. A 5 percent real return on investment is consistent with the long-term expectation for similar large endowment funds. We might be able to do better, but we'd be foolhardy to expose our largest asset to excess risk.

• *Wait for a natural gas pipeline.* When the large reserves of natural gas on Alaska's North Slope find a market—which under the best of conditions can't happen for several more years—the state government will collect production, property, and income taxes, as well as royalties on the one-eighth share of gas it owns. How much revenue gas production could generate is constrained by the high cost of getting the gas to market. The higher the transportation and production costs, the lower the wellhead value—which is the basis for determining production taxes and royalty revenues.

At current gas prices and estimated costs, the wellhead value would not support significant production taxes or royalties. Revenues would come from property and corporate income taxes on transporting and processing the gas. Petroleum income and property taxes in 1998 totalled about \$250 million. It's unlikely that adding a gas pipeline and an LNG facility would quadruple those income and property tax revenues.

• *Promote economic development.* Booms in mining, tourism, and the air cargo industry have created thousands of Alaska jobs in the 1990s, but haven't had perceptible effects on General Fund revenues. Most development actually worsens Alaska's fiscal problem—because it increases the demand for public services without generating revenues to pay for them. Development is not to blame for this "Alaska disconnect." It happens because Alaska has no broad-based tax, like a personal income tax. Alaska does have a corporate income tax, which (excluding oil) generates about \$50 million annually—a rate consistent with that in other states. But most other states also have personal income taxes, which produce five times more revenue than corporate income taxes.

There is an enormous difference in scale between the large tax base from oil production and that from other resource industries. That difference makes it unrealistic to believe other resource development can fill the gap left by reduced oil production. It would take, for example, several hundred world-class coal and hard-rock mining operations to produce state revenues comparable to those from oil.

• *Buy or sell state assets.* The state government owns natural resources, which it manages for the welfare of all Alaskans. The state could concentrate more on managing resources for a financial return. Frequent suggestions include charging more for the use of state resources, selling resources to private developers to stimulate economic growth, or buying assets that the state itself could manage to promote economic growth.

The value of limited entry permits for commercial fisheries reflects the profitability of fishing in Alaska waters (although with today's soft markets, the current value of many permits is less than permit holders paid). In the past, state analyses have suggested that a one percent tax on entry permits could generate around \$10 million per year.

Selling state land would theoretically generate revenues twice—once from the land sale itself and later from economic development. Oil produced on state land generates about \$1 billion in state revenues annually. To produce that much income from resources with lower market values, the state would have to undertake a truly gigantic land disposal program. There is no evidence the market could support that level of land sales or leases. Also, the "Alaska disconnect," discussed earlier, means economic development would likely drive up the cost of government more than it would help pay for it.

Buying ownership in either the oil pipeline or a gas pipeline has recently been proposed as a way of raising revenues. Whether such an investment would generate a high enough return to offset the loss of property and corporate income taxes has not yet been demonstrated. Without better analysis, we don't know how much pipeline ownership could contribute to closing the fiscal gap.

• *Tax the outsiders.* Some Alaskans believe taxes on nonresidents working in or visiting Alaska could cover the deficit. A personal income tax would be the simplest way to garner a share of nonresident earnings. But since nonresident workers earn less than \$1 billion a year, the state could only collect about \$50 million from them annually. Another way would be to tax visitors to the state—say through a seasonal sales tax. Again, visitors spend about \$1 billion in Alaska each year—so we could expect a seasonal sales tax to generate about \$50 million.

• *Have a bake sale.* The sheer magnitude of Alaska's budget shortfall dwarfs a whole gamut of well-intentioned proposals that include everything from re-imposing a school tax (which used to collect \$10 per resident) to establishing a state lottery. Raising \$1 billion through such proposals would require collecting more than \$1,500 for every Alaskan each year.

The cases analyzed in the foldout are based on a spreadsheet model ISER developed to compare the critical elements of various proposed plans for balancing the state budget. Details are available from Scott Goldsmith. Call 907-786-7710 or e-mail inquiries to the author at afosg2@uaa.alaska.edu.

THE LEVEL PLAYING FIELD: COMMON ASSUMPTIONS OF THE SIX ALTERNATIVES

The state's General Fund deficit is about \$1 billion and growing. But future oil revenues, returns on the Permanent Fund, and other variables will determine the future size of the deficit and the resources available to close it. Proponents of different budget plans don't always use the same assumptions about important variables. So some of the differences among plans are the result of different assumptions, rather than of differences in how the plans work. To make valid comparisons, we need common assumptions. Below are the key assumptions common to the six alternatives presented in the foldout. They are reasonable today, but the future will of course not turn out exactly as we assume here.

Inflation—3 percent per year. This was the average annual rate between 1979 and 1998.

Oil Revenues—The spring 1999 forecast of the Alaska Department of Revenue (DOR) through 2003, when the oil price is projected to be \$16 per barrel. (Although the oil price is above \$20 a barrel today, for more than a decade it has continually been drawn back toward the average reflected in the DOR projection.) Thereafter, revenues are constant in nominal dollars, but falling 3 percent each year in real (inflation-adjusted) dollars. Since 1988, when production peaked, production has on average declined 4 percent annually, the real oil price declined 2 percent annually, and real state oil revenues declined 6 percent annually.

Rate of Return on Financial Assets—5 percent above inflation, for assets held for the long term (which includes all but a small share needed to maintain liquidity and cover annual variations in oil revenues). This is within the range of rates of return targeted by endowment funds nationally.

Non-Oil General Fund Revenues—3 percent nominal (or constant real) growth annually. The real annual growth rate since 1980, excluding investment earnings, has been 1 percent.

Population—1.1 percent annual growth. The average between 1979 and 1998 was 2 percent a year.

What If These Assumptions Are off the Mark?

A higher rate of return on financial assets or higher oil revenues would do the most to reduce the fiscal gap in the coming years. A 6 percent rate of return on assets would generate an additional \$250 million annually. If oil prices stayed at \$20 per barrel for an entire year, oil revenues would increase by \$300 million. Managing the fiscal gap would be much easier if financial returns or oil prices were at these levels—but it's not wise to count on it.

FISCAL DRAG: HOW WILL THE ECONOMY BE AFFECTED BY CLOSING THE FISCAL GAP?

No matter how the state closes the fiscal gap, it will take money out of the economy. The resulting job loss ("fiscal drag") will depend on the mix of policies the state uses. Below are some rough rules of thumb for the resulting job loss from closing a \$1 billion gap. It could occur all at once, or be stretched out over several years.

Continuing budget cuts would first mean loss of state jobs, construction money, and grants to local governments and non-profits, and then losses throughout private industry. (Loss of public services would further hobble the economy, but we haven't quantified that effect.)

Using Permanent Fund earnings and reducing dividends would mean less money in the economy and widespread private job losses.

Imposing new taxes on households, like reducing dividends, would lead to job losses throughout the economy.

Job Loss from Taking \$1 Billion From Three Sources

	Cut Operating Budget	Impose Personal Income Tax	Reduce PF Dividend
Public Job Loss	10,200	0	0
Private Job Loss	8,400	10,000	11,000
Total Job Loss	18,600	10,000	11,000

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Institute of Social and Economic Research
University of Alaska Anchorage
G. Williamson McDiarmid, Director
3211 Providence Drive
Anchorage, Alaska 99508
(907) 786-7710

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Anchorage, Alaska