



# High Oil Prices Give Alaskans a Second Chance: How Will We Use this Opportunity?

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Institute of Social and Economic Research • University of Alaska Anchorage

By Scott Goldsmith

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Think about this: 10 years ago, it looked as if Alaska was on the brink of a tough transition to a post-Prudhoe Bay economy. Oil production was half of what it had once been, the state's oil revenues were about \$2 billion, financial reserves were falling, and employment in the oil industry was down. The price of Alaska oil, adjusted to today's buying power, was \$27 a barrel—and that was high by historical standards.

Things have changed dramatically since then: a combination of much higher oil prices—about \$115 a barrel as this paper is being written—and revisions in the way the state calculates production taxes have caused state oil revenues to skyrocket, even though oil production is down 40% since 2002. We now find ourselves in a second huge oil-revenue boom, comparable to the one in the early 1980s (Figure 1).

But Alaskans who lived through that first boom remember how fast it ended, and how the economy fell into recession overnight—which quickly focused our attention on just how important oil is to Alaska. We promised that if another boom ever came around, we'd do a better job of managing our oil resources.

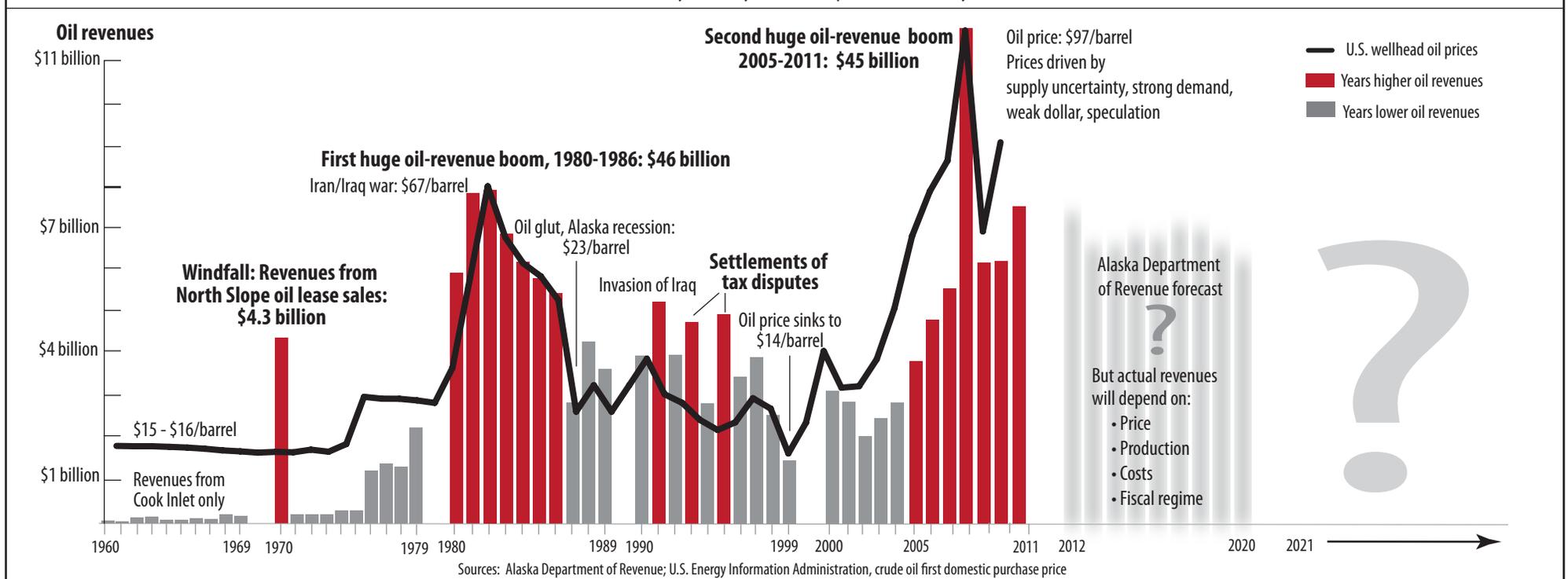
We now have that unexpected second chance, and the need to act is even more pressing. For decades, oil from huge, low-cost fields on state-owned land has supported much of the economy. But that oil is dwindling, and Alaska does face a difficult transition to a post-Prudhoe Bay economy.

Petroleum will still be the foundation of the economy, but developing new petroleum resources won't be as easy as previous development, and it won't be as profitable for the state. Other resource industries and the federal government will also still be important.

But no single resource will be able to match the enormous value of Prudhoe Bay oil. To keep Alaska prosperous, the state will need to take a more active role in managing its assets, particularly its petroleum assets. Alaska's people—and the institutions put in place since statehood—will shape decisions about how to move forward. This short paper summarizes the considerable assets Alaska will bring to the transition. We hope it will help Alaskans focus on the challenge of moving past Prudhoe Bay.

**Figure 1. State Oil Revenues and Average U.S. Wellhead Oil Prices Per Barrel, 1960- 2011, In Today's Buying Power (2010 Dollars)**

Revenues in state fiscal years (July-June) • Oil prices in calendar years



## THE CHALLENGE

Two-thirds of the economic growth since statehood, as measured by jobs and income, can be traced to petroleum production, petroleum revenues, and petroleum spinoffs that have given a boost to other industries and households throughout the state.<sup>1</sup> Although these effects are most obvious in urban Alaska, they reach into every corner of the state—through generous public spending, low taxes, and the Permanent Fund dividend.

This prosperity has come from giant, low-cost fields—the largest being Prudhoe Bay—that the state owns on the North Slope. But now, those fields are in serious decline. As Figure 2 shows, we've used 80% of this high-revenue oil, with only about 20% of the identified 23 billion barrels of reserves remaining. Still, despite this situation, two things are currently creating a sense of complacency among Alaskans. There's a lot of petroleum employment right now, because more people are needed to squeeze the last reserves out of these fields. Also, high oil prices are bringing the state big revenues, even as production drops. Together, high employment and high prices have diverted our attention from the reality: when there is no oil left in the barrel, the associated jobs and revenues will also be gone.

And although it's impossible to predict how future events will unfold, Alaska's experience in the late 1980s—when a crash in oil prices ended the first huge oil-revenue boom—provides a glimpse of what could happen. Virtually all Alaskans were affected—by losing jobs, seeing the value of their houses plummet, or watching friends leave the state.

But luckily, the future doesn't have to be a repeat of the past. The state can play a significant role in shaping the transition to post-Prudhoe Alaska, by strategic use of all its assets. Alaskans need to keep in mind, however, that surprises—good and bad—will also continue to play a part in Alaska's future.

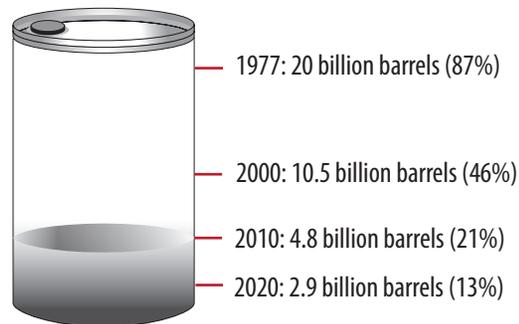
## PETROLEUM ASSETS

### Remaining Conventional Oil

• *The state might collect another \$59 billion in revenues from existing production in the next decade, which could be used to cushion the transition—but those revenues aren't guaranteed.* The remaining 20% of the high-revenue oil from state lands is worth much more, per barrel, than the 80% already produced. That's

**Figure 2. How Much Conventional Oil Remains on State-Owned Land?**

Estimated oil as of 1960: 22.8 billion barrels (100%)



Source: Alaska Department of Natural Resources, historical production and projected future production

because oil prices are so much higher today than in that past. The state revenues forecast depends on oil prices remaining high, but it also assumes that in the future production won't decline as fast, dropping just 2% a year through 2020, compared with 6% a year in the past.

But the production rate on state lands—and the associated jobs and revenues—depends on investment decisions of petroleum companies. Those companies require a return on their investments consistent with opportunities elsewhere. Alaskans need to consider how to structure a tax policy that will not only bring in revenues in the short run, but encourage continued production at levels that keep the oil pipeline economically viable and future revenues flowing.

### Natural Gas

• *A significant number of new jobs would be associated with finding and producing natural gas on state lands—but uncertainty in world gas markets means gas development isn't likely to happen as soon as many Alaskans hope.* There are known to be large reserves of natural gas on state lands on the North Slope. Some of that gas is already being put to use; it's reinjected into the ground to help boost production of high-value oil. The state has taken a number of steps to encourage construction of a gas pipeline, but the timeline is at least 10 years out—and today's market conditions can't be used as a basis for forecasting potential future state revenues from natural gas. It's likely gas will play a growing role in Alaska's future, but we can't rely on it as a centerpiece of a transition strategy.

### Federal Lands and Non-Conventional Sources

• *Developing petroleum on federal lands onshore and offshore, as well as non-conventional sources on state lands, could produce thousands of jobs.* The potential of federal lands is huge, as are the estimated resources from unconventional sources like heavy oil. The timing of any development on federal lands is uncertain, and depends not only on economics and technology but also regulation, litigation, and legislation—over which the state has limited influence. Development of high-cost, non-conventional sources on state lands will also be affected by state tax policy. Whenever these resources are developed, they would generate employment that could match or exceed historical petroleum employment in Alaska. But potential state revenues from these resources are modest; they tend to be more remote and expensive to produce, and revenues would be shared with the federal government.

### Money in the Bank

• *The state has big savings that can help pay for state government in the future, but it must continue to build those savings now.* The state currently has about \$55 billion of financial assets in three accounts built on petroleum revenues—the Permanent Fund, the Constitutional Budget Reserve, and the General Fund (including but not limited to the Statutory Budget Reserve). These accounts represent the state's attempt to convert its non-sustainable oil reserves into a sustainable asset that can generate revenues long after the last drop of oil has been produced.

The size of these accounts is impressive—but even so their earnings aren't yet big enough to pay for much of state expenses—particularly since half the earnings of the largest account, the Permanent Fund, is dedicated to paying Permanent Fund dividends. But if we continue adding to those savings, they can eventually replace a substantial share of oil revenues from state lands.<sup>2</sup>

## OTHER NATURAL RESOURCES

• Alaska's other natural resource industries will continue to support part of the economy—but their potential to grow is limited. Minerals, seafood, timber, and our other natural resources, including the state's natural beauty, have always supported part of the economy.<sup>3</sup> With targeted public investments, appropriate regulatory policies, and other development strategies, these resource industries can continue to prosper. But their modest size, growth potential, and limited profitability mean that expecting these other natural resource industries to replace petroleum is not realistic.

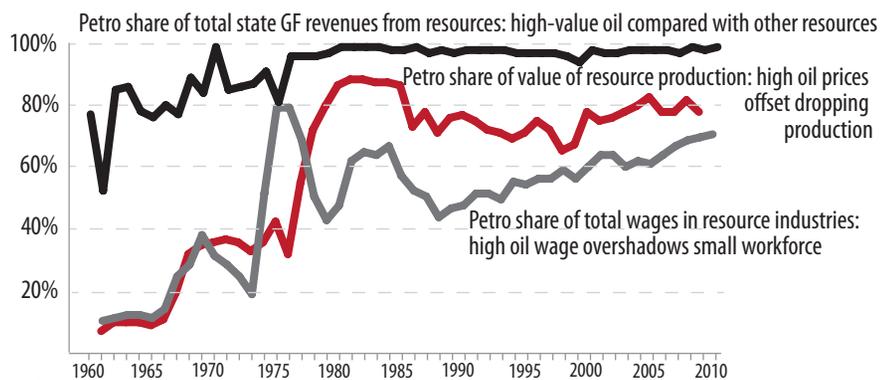
The dominance of petroleum among our natural resource industries is clear in the three measures shown in Figure 3.<sup>4</sup> Since 1977, petroleum has accounted for 60% of all wages paid in resource industries, 83% of the total value of resource production, and 98% of all state General Fund revenues from resource production. The figure also shows that despite continuing efforts to build on our resource base, nothing has changed petroleum's dominance since oil began flowing through the pipeline.

Many Alaskans find it hard to believe that other resources can't rival petroleum. Alaska is often described—correctly—as a storehouse of resources, waiting only for a key to unlock them. But there is no magic key. Alaska is an “island economy”—with high costs, distance from markets, and absence of scale economies. Only very valuable resources are economic to develop. Also, activities that Alaskans can readily see—like tourism—can seem more important than their dollar value indicates.

## FEDERAL GOVERNMENT

• Federal spending supports an estimated one-third of jobs in Alaska, and it will continue to be important for the economy—but future federal spending won't grow as it did in the past. A large share of Alaska's economic resilience, even as petroleum production was dropping, can be traced to growth in federal spending since the 1990s.<sup>5</sup> But given the federal government's budget woes, Alaska and other states are likely to see cuts—and even if new activities of the federal government were to bring new jobs, the state cannot directly tax the federal government and collect revenues, the way it does from petroleum and other private industries.

**Figure 3. How Does Petroleum Contribute to Total Natural Resource Production?\***



\* Excludes tourism

Sources: Alaska Departments of Revenue, Labor, Natural Resources, Fish and Game, Commerce, Community, and Economic Development; U.S. Forest Service; U.S. Department of Agriculture

## SHAPING ALASKA'S FIRST 50 YEARS: UNIQUE LEGISLATION AND INSTITUTIONS

In 1959, the federal government owned 99% of Alaska land and controlled the natural resources. Much of the first 50 years of statehood have been shaped by new laws and institutions governing ownership and use of the land and the resources that are the foundation of the economy.<sup>6</sup> These laws and institutions will also provide the context for the transition to the post-Prudhoe Bay era.

### Alaska Constitution (1956)

• Established a framework for the new state, but left Alaskans broad flexibility to build government structures.<sup>7</sup> Voters must approve any amendments.

• Reflects the importance of natural resources for Alaska, in a unique resource clause that calls for “utilization, development, and conservation” of the state's resources for the “maximum benefit of its people” and reserving fish, wildlife, and waters “for the people for common use.”<sup>8</sup>

### Alaska Statehood Act (1959)

• Changed Alaska from territory with weak powers and undeveloped or non-existent institutions to a state with the same rights and powers as all other U.S. states.

• Awarded the state authority to select 103 million acres of federal land, to provide an economic base. Those selections turned out to include North Slope land that has provided the state's oil wealth for 40 years.

### 1971 Alaska Native Claims Settlement Act (ANCSA) and Alaska Native Corporations

• Awarded Alaska Natives \$1 billion and rights to select 44 million acres of federal land. The law called for creation of unique new business corporations—owned by Alaska Native shareholders—to manage the land and money. Some of these corporations are still struggling to be profitable. But others now rank among Alaska's biggest businesses, and are the best example of Alaska-owned businesses benefiting from resource development.

• Included a provision authorizing the U.S. Department of the Interior to close large areas to state and Alaska Native land selections and decide how much to add to parks and other national conservation areas. That led to passage of ANILCA, in 1980 (see below).

### Alaska Permanent Fund (1976)

• Established after Alaskans in 1976 approved a constitutional amendment requiring at least 25% of royalties from natural resource production to be saved in a fund the legislature couldn't spend—a “permanent” fund. Analysts say the fund may not have been unique at the time, but it was certainly rare.

• Could be opened to spending through a new constitutional amendment. But the fund has a very strong constituency among Alaskans, largely because of something that is probably unequaled anywhere: Permanent Fund dividends—which are annual payments to all Alaska residents from the *earnings* of the Permanent Fund. The legislature can't spend the fund principal, but it can spend the earnings.

### 1980 Alaska National Interest Lands Conservation Act (ANILCA)

• Added 104 million acres of federal land to national parks, wildlife refuges, and other conservation areas, bringing the total national conservation areas in Alaska to about 150 million acres. It passed after a decade-long fight between those who wanted more land left open for development and those who wanted more kept undeveloped.

• Requires that rural Alaskans have preference for subsistence hunting and fishing on federal lands. That provision has put the state at odds with the federal government, because the Alaska Supreme Court has ruled that the resource clause of the state constitution (see above) prohibits the state from allocating resources among Alaskans based on where they live. As a consequence, the federal government has taken over from the state management of subsistence activities on federal lands.

## PEOPLE

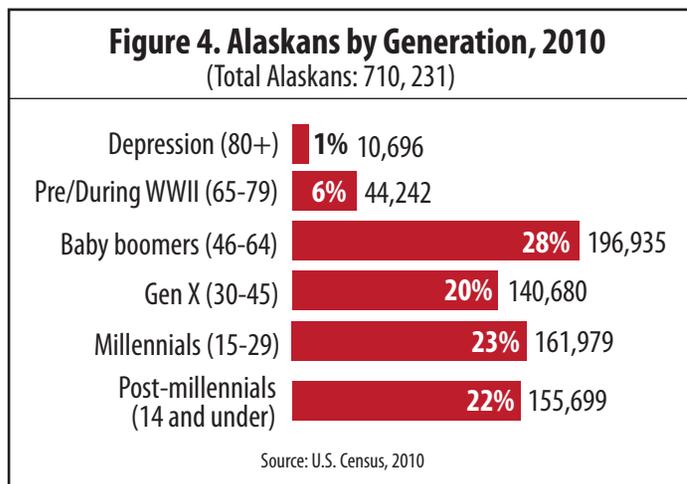
Many of us who will make decisions about how to move to a post-Prudhoe Bay era weren't here when oil started flowing through the pipeline, or when an earlier generation of Alaskans made decisions that created our unique Alaska institutions. Likewise, the next generation of Alaskans—those who grow up here and those who move here later—will bear the consequences of our decisions.

The U.S. census gives us some information about how succeeding generations of Alaskans have changed the composition of the population over time. We have become not only more numerous, but older, more urban, more stable, and more ethnically and culturally diverse, particularly among younger Alaskans.

But that snapshot tells us little about who we are, and nothing about what we think is most important for a post-Prudhoe Alaska. It is useful to think about the population divided into cohorts by age, as shown in Figure 4.

All generations are influenced by shared life experiences that shape their beliefs and behavior. Alaskans in the oldest cohorts remember the struggle for statehood and the tough times during the Great Depression and World War II that fostered self-reliance in the Last Frontier. Many of the baby-boom generation came here at the start of the Prudhoe Bay era and have seen the state move from modest means to unimaginable wealth. Many younger Alaskans have lived their entire lives as rentiers—people who live on income from property or investment—with the government providing public services paid for entirely from oil wealth they had no role in acquiring.

Decision-making today is largely in the hands of older Alaskans and will be influenced by their perceptions of what Alaska is and should be. But the Alaska of the future envisioned by the younger cohorts could be a very different place, and they should also have a voice in decisions. In deciding how to move into the future, we need to think not only about ourselves, but about keeping Alaska prosperous for those generations to come.



## CONCLUSIONS

The transition to a post-Prudhoe economy is the biggest challenge Alaska will face in the next 10 years. Fortunately, Alaska has a lot of potential for developing and producing significant new petroleum resources. Also, if high oil prices and other factors hold, there's a possibility the state can collect many more billions in oil revenues before the conventional reserves on state lands are used up. Alaskans can come together and use these resources, against the background of our unique institutions, to forge a smooth and successful transition.

But any number of roadblocks could derail a smooth transition. We all have a natural tendency to avoid decisions that require sacrifice in the near term to achieve a longer term goal. Obvious challenges to planning for the future include not focusing on the problem, not believing it's urgent, not understanding the issues, and not trusting government to act in the interests of the average Alaskan. Also, wishful thinking could win out over analysis based on reality.

We hope this summary will be at least one step in the direction of overcoming these challenges and keeping Alaska on track for the coming decades.

## NOTES

1. For more on the economic role of oil in Alaska's economy, see Scott Goldsmith, "Oil Pumps Alaska's Economy to Twice the Size," *Understanding Alaska Summary 17*, Institute of Social and Economic Research, University of Alaska Anchorage, February 2011. For a detailed analysis of the historical relationship of the state and the oil industry, see Jerry McBeath, Matthew Berman, Jonathan Rosenberg, and Mary Ehrlander, *The Political Economy of Oil in Alaska*, Lynne Rienner Publishers, 2008.
2. For a discussion of the potential future role of financial assets in funding state government, see Scott Goldsmith, "How Much Should Alaska Save?" *Web Note 7*, Institute of Social and Economic Research, University of Alaska Anchorage, February 2011.
3. For an assessment of the economic importance of the state's scenic beauty and other parts of the ecosystem, see Steve Colt, "What's the Economic Importance of Alaska's Healthy Ecosystems?" *Research Summary 61*, Institute of Social and Economic Research, University of Alaska Anchorage, March 2001.
4. For perspective on the importance of Prudhoe Bay oil in Alaska's resource production history, see Terrence Cole and Pamela Cravez, "Blinded by Riches: the Prudhoe Bay Effect," *Understanding Alaska Summary 3*, Institute of Social and Economic Research, University of Alaska Anchorage, February 2004.
5. See Scott Goldsmith, "What Drives the Alaska Economy?" *Understanding Alaska Summary 13*, Institute of Social and Economic Research, University of Alaska Anchorage, December 2008.
6. For a description of how Alaska land ownership and management developed, see Teresa Hull and Linda Leask, "Dividing Alaska, 1867-2000," *Alaska Review of Social and Economic Conditions*, Institute of Social and Economic Research, University of Alaska Anchorage, November 2000.
7. To learn the history of Alaska's constitution, see Victor Fischer, *Alaska's Constitutional Convention*, University of Alaska Press, 1975.
8. For a detailed discussion of the resource clause and all other provisions of the state constitution, see Gordon Harrison, *Alaska's Constitution: A Citizen's Guide*, Fourth Edition, Alaska Legislative Affairs Agency, 2002.

## The Author

Scott Goldsmith has studied the Alaska economy for more than 35 years; he is a professor of economics at ISER.

## Who is ISER?

The Institute of Social and Economic Research is part of the College of Business and Public Policy at UAA. It was created through an act of the Alaska Legislature in 1961, and over the past 50 years ISER researchers have studied virtually all major public policy issues in Alaska. A central part of ISER's mission is helping Alaskans better understand their state and think about the issues it faces. Learn more about ISER at:

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