

# Research Summary

No. 83



## How Much Might Closing the State Budget Gap Cost Alaska Families?

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Institute of Social and Economic Research · University of Alaska Anchorage

February 2017

Alaska's state government has a huge hole in its budget, created by plummeting oil revenues. The state has cut spending for the past several years, but in fiscal year 2017 a \$3 billion gap remains between what it spends and what it collects (see back page). Closing that gap will require new revenues and more budget cuts—but different ways of balancing the budget would have different effects on Alaska families.

We estimated how several revenue-raising measures—three kinds of taxes and a cut in Permanent Fund dividends—would affect households with and without children. But we didn't estimate effects of spending cuts. While it's clear some cuts—in school funding, for instance—would directly affect children, many other programs, from public safety to transportation, benefit all households. It's impossible to compare how cuts in such programs would affect those with and without children.

• *A cut in PFDs would be by far the costliest measure for Alaska families. Households with children would pay about 2.5 times more per person than those without children, for every \$100 million of revenue raised. A big reason is that children receive PFDs—so PFDs make up a bigger share of income for households with children.*

• *Sales taxes would be the next costliest for households with children. Again, those households tend to have lower incomes; sales taxes are the same for everyone, so they take a bigger share of the income of poorer households.*

• *All measures except a graduated income tax would cost households with children more of their per-person incomes than those*

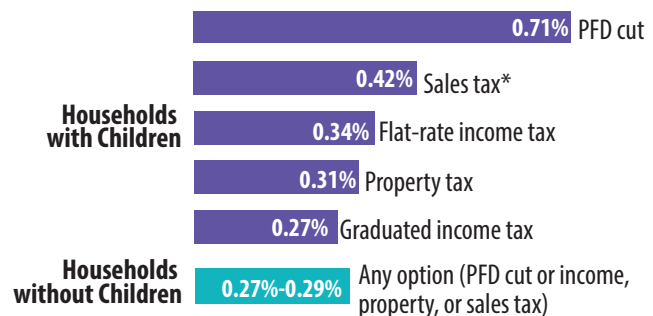
without children. Such a tax—tied to federal income taxes paid—would cost households with and without children close to the same share of per-person income.

• *The effects of any of the fiscal options on incomes of households without children would be much the same—roughly 0.27% to 0.29% of per-person income, for every \$100 million of revenue raised. PFD cuts wouldn't fall as hard on these households, mostly because their incomes tend to be higher and a bigger share of the PFD cut would be offset by reduced federal taxes.*

• *Non-residents would pay a share of any of the potential taxes, reducing the burden on Alaska households.*

### Figure 1. How Much Might Different Ways of Raising Revenues Cost Alaska Households Per Person Annually?

(Percent Loss of Per-Person Disposal Income per \$100 million in Revenue Raised)



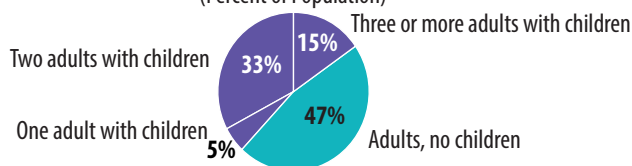
\*Either a 4% sales tax excluding food and shelter or a 3% tax including those items costs Alaska households on average the same share of income.

### Figure 2. Snapshot of Alaska Households (Average 2014-2015)

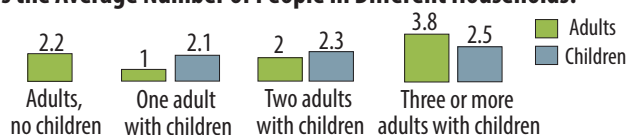
#### How Many People Live in Alaska Households?<sup>a</sup>



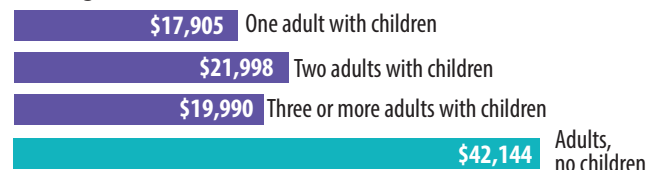
#### What Kinds of Households Do Alaskans Live In?<sup>a</sup> (Percent of Population)



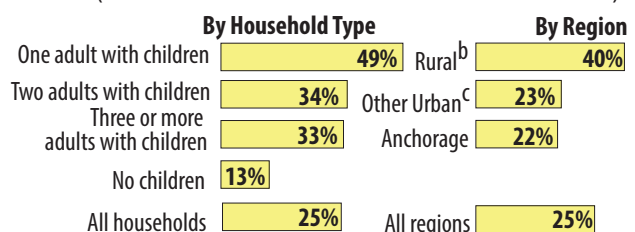
#### What's the Average Number of People in Different Households?<sup>a</sup>



#### Average Per-Person Annual Income of Different Households



#### What Percentage of Households Have Low Per-Person Incomes? (In Lowest 25% of Alaska Household Income Distribution)



<sup>a</sup>Excludes an estimated 675 children not living in households but in group quarters—dormitories, shelters, or detention centers. The census doesn't provide information on their economic status.

<sup>b</sup>Rural Alaska includes all areas outside Anchorage, the rest of the Railbelt, and the Juneau, Haines, and Ketchikan boroughs.

<sup>c</sup>The Railbelt, excluding Anchorage, and the Juneau, Haines, and Ketchikan boroughs.

Source: American Community Survey, Microdata Samples

## How Do Alaska Households Compare?

The differences among households (Figure 2) help explain the differences in the effects of various revenue-raising measures. Nearly half the state's households have no children under 18, and on average they have much higher per-person incomes. That's partly because in households with only adults, more people are likely to work—but also, some of these households are middle-aged or older couples with good incomes and grown-up children.

In households with children under 18, per-person incomes are lower, because they're spread among working adults and children.

## What About Low-Income Households?

As Figure 2 also shows, some types of households are likelier than others to have low incomes. Nearly half of single adults with children, a third of households with two or more adults with children, and 40% of all rural households have per-person incomes at the bottom of the Alaska household income distribution.

Figure 3 shows how much per-person income (in dollars) various measures would cost low-income households with and without children.

- All measures except a property tax and a graduated income tax would cost low-income households with children more than those without children.
- A PFD cut would cost low-income households with children the most of any measure—two to three times as much per-person as sales or property taxes, and 10 times more than a graduated income tax, for every \$100 million of revenue raised.
- A property tax and a PFD cut would cost low-income households without children the most. The property tax would be costly to these households because they tend to spend more of their income on housing.

## What's the Basis for Our Estimates?

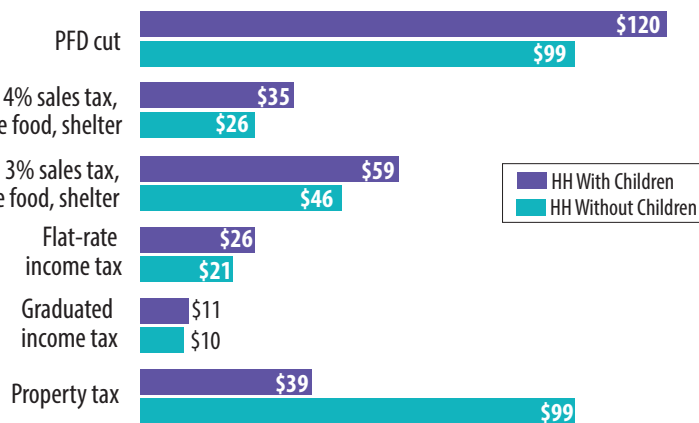
We looked largely at the same options analyzed in an earlier report on state fiscal options (see Figure 4 sources), but we focused on effects on families. Figure 4 shows assumptions we used for each option, and how much revenue each might raise annually. To compare across options, we estimated income effects per \$100 million of revenue raised. We also looked at the effects of increasing taxes on gasoline and alcohol, but those measure don't have the potential to raise as much revenue as the broader-based measures.

## Why is the State Budget So Much in the Red?

Figure 5 summarizes what happened to the state budget. As recently as FY 2012, the state collected \$9 billion in oil revenues—more than

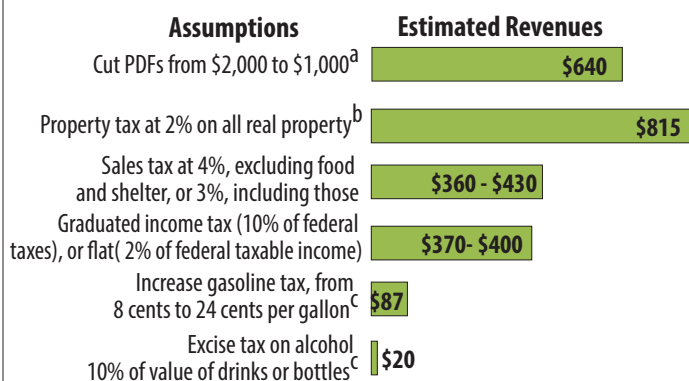
**Figure 3. How Much Might Different Ways of Raising Revenues Cost Low-Income Households per Person Annually?\***

(In Dollars of Disposable Income Per Person for \$100 million of Revenues Raised)



\*Households with incomes in the lowest 25% of the Alaska household income distribution.

**Figure 4. How Much Might Revenue Options Raise?**  
(In Millions of Dollars Per Year)



<sup>a</sup> Assumes 640,000 recipients.

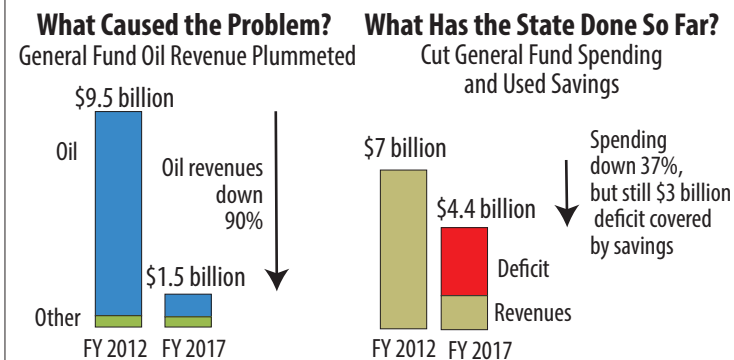
<sup>b</sup> After credits to property owners for local property taxes they already pay.

<sup>c</sup> In addition to gasoline and alcohol taxes the state already collects.

Sources: Gunnar Knapp, Matthew Berman, and Mouhcine Guettabi, *Short-Run Economic Impacts of Alaska Fiscal Options*, Institute of Social and Economic Research, UAA, March 2016; authors' estimates

enough to cover state General Fund spending. That was when oil prices were still \$100 per barrel. Then, in the past several years, oil prices have been far lower, dropping as low as \$30 a barrel. Sharply lower prices, together with a long-term decline in North Slope oil production, have made oil revenues a small fraction of what they were before—and despite cuts in state spending, a \$3 billion gap remains in FY 2017.

**Figure 5. Why Does the State Have Such a Big Deficit?**



Sources: Alaska Department of Revenue, *Fall 2016 Revenue Sources Book*; Legislative Finance, *Informational Paper 17-1*

## About the Authors and Acknowledgments

Matthew Berman is a professor of economics at ISER and Random Reamey is a research graduate assistant. This summary is based on their report, *Effect of Alaska State Fiscal Options on Children and Families*. The findings in this publication are theirs, and shouldn't be attributed to research sponsors, ISER, or the University of Alaska Anchorage.

Alaska Children's Trust, UA Strategic Investment Funds, and the National Science Foundation, award #1216399, supported this research.



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