# Economic Impacts of Alaska Fiscal Options Overview of Draft Report Conclusions

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#### This presentation summarizes the conclusions of ISER's draft report Economic Impacts of Alaska Fiscal Options (March 11, 2016)

The report is posted on ISER's website: www.iser.alaska.edu

References in brackets in the lower-left corner of these slides are to pages in the draft report which address the content of the slides.

We invite comments and questions on the draft report.

These should be sent to Gunnar Knapp at:

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It will be easier to address comments received by March 18, 2016.

We will prepare a final report incorporating responses to comments and questions by March 25, 2016.

The draft report and this presentation add new analysis and also incorporate minor changes from some of the analysis from previous presentations, reflecting additional work that we have done and also revisions to some calculations. None of these additions and changes substantively affect any of the conclusions that might be drawn from previous presentations.

#### **Presentation Outline**

- Study background
- Revenue impacts of taxes and dividend cuts
- Short-run economic impacts of fiscal options
- Regional differences in impacts of fiscal options
- Total economic impacts of reducing the deficit
- Other economic impacts of fiscal options

# Study background

Study authors

Gunnar Knapp Matt Berman Mouhcine Guettabi

ISER economics professors

#### What we studied, for selected fiscal options . . .

- Revenue impacts of taxes and dividend cuts
  - What share would non-residents pay?
  - What share would be offset by lower federal taxes?
  - What would be the relative impacts on different income groups?
- Short run economic impacts of spending cuts, taxes and dividend cuts. Per hundred million of deficit reduction:
  - What would be the impacts on Alaskans' incomes?
  - What would be the impacts on Alaska jobs?
- Regional economic impacts
  - How would the impacts of different options vary between regions?
- Total economic impacts of reducing the deficit
  - What would the total short-run impacts on income and jobs of reducing the deficit by different amounts?

#### **Fiscal Options We Studed**

| Option                      | Description   |  |  |  |
|-----------------------------|---|--|--|--|
| Spending cut: workers       | Spending cut achieved entirely by reducing state workforce  |  |  |  |
| Spending cut: broad-based   | Spending cut achieved by broad range of cuts to state spending  |  |  |  |
| Spending cut: capital       | Spending cut achieved by cutting the captal budget  |  |  |  |
| Spending cut: pay           | Spending cut achieved entirely by reducing pay of state workers   |  |  |  |
| Income tax: progressive     | Constant % of federal income tax liability  |  |  |  |
| Income tax: flat rate       | Constant % of federal taxable income  |  |  |  |
| Sales tax: more exclusions  | Sales tax excluding food at home, shelter, health care & education  |  |  |  |
| Sales tax: fewer exclusions | Sales tax excluding only health care and education  |  |  |  |
| Property tax                | Statewide tax on real and personal property with exclusions for property taxes paid to local governments  |  |  |  |
| Dividend cut                | Reducing dividends and using PF earnings that would have gone to dividends for general fund spending  |  |  |  |
| Saving less                 | Reducing savings of PF earnings that currently are saved in the PF principal (inflation proofing) or added to the PF earnings reserves, and using the money for general fund spending |  |  |  |
| Excise tax: motor fuels*    | Increase in state motor fuels tax   |  |  |  |
| Excise tax: alcohol*        | Increase in state alcoholic beverages tax   |  |  |  |
| Excise tax: tobacco*        | Increase in state tobacco tax   |  |  |  |

<sup>\*</sup> Options for which we analyzed only revenue impacts

#### We studied only <u>some</u> of Alaska's potential fiscal options

- We studied:
  - Options that are part of the broad political discussion
  - Options we had time, funding and expertise to analyze
- We didn't study
  - Complex options requiring detailed industry-specific expertise
    - Changes to oil credits or oil taxes
    - Changes to other resource industry taxes
  - Changes to how the state delivers services
    - K12 education, University of Alaska, Medicaid, etc.
  - "Re-plumbing" of state finances (SB114, SB128, etc.)

## We studied only <u>some</u> of the potential economic impacts of Alaska fiscal options

- We studied:
  - Revenue impacts
  - Short-run economic impacts
  - Total short-run economic impacts on Alaska economy
- We didn't study:
  - Long-run & indirect impacts
- What we could study was limited by:
  - Data
  - Complexity
  - Funding & time
- The impacts we didn't study are important
- This study is <u>only a start</u> at understanding potential economic impacts of fiscal options

#### We are <u>not advocating</u> for or against any fiscal options or choices

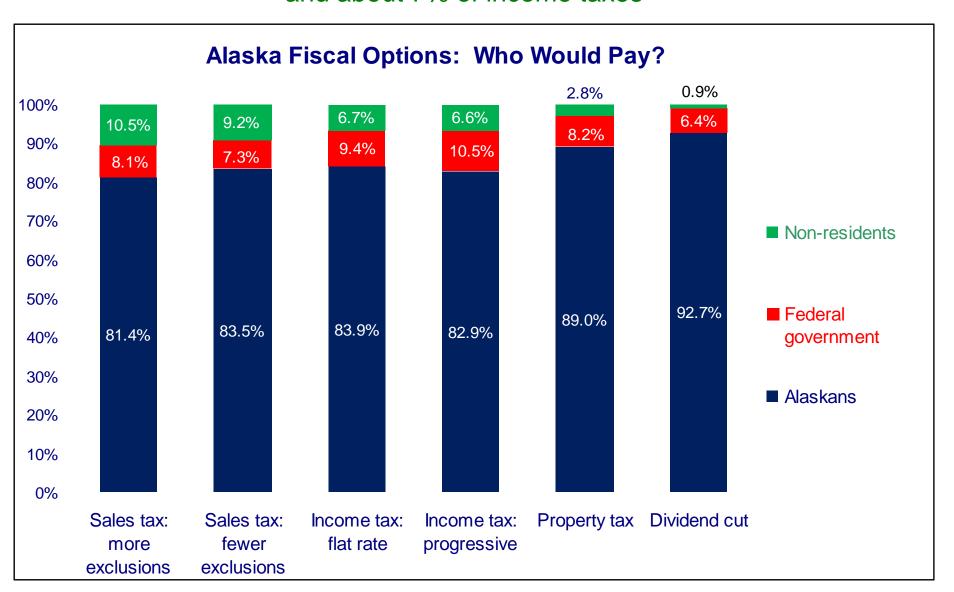
- Our only purpose is to help inform the fiscal discussion
- Our analysis:
  - Is <u>relevant</u> to our fiscal choices
  - Is <u>far from sufficient</u> as a sole basis for arguing for or against any fiscal options

#### We prepared this study independently

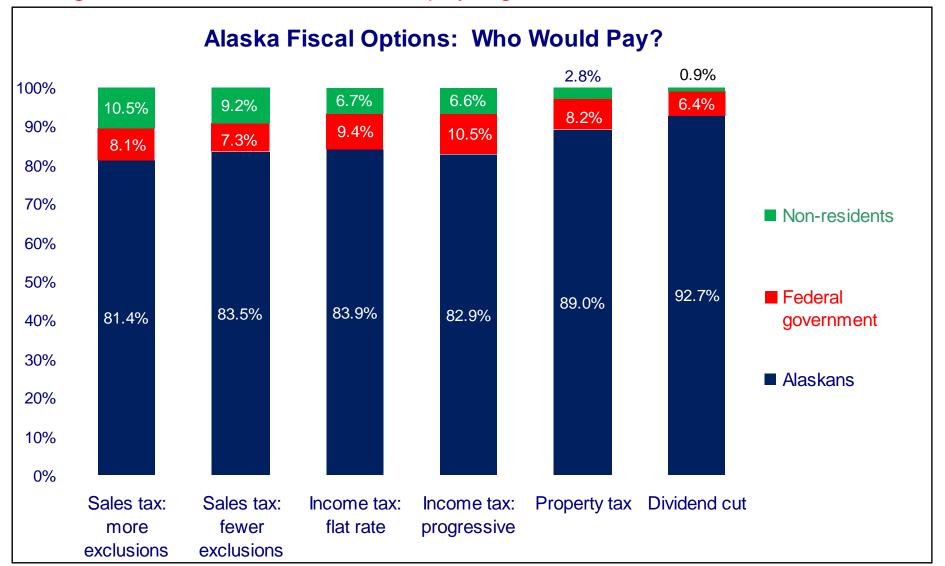
- The Department or Revenue and Office of Management and Budget funded this study
- They had no influence over our study design, analysis or conclusions
- Our findings are only what we report in our report and presentations
  - They are not necessarily what other people say they are

# Revenue Impacts of taxes and dividend cuts

#### Non-residents would pay about 9-11% of sales taxes and about 7% of income taxes

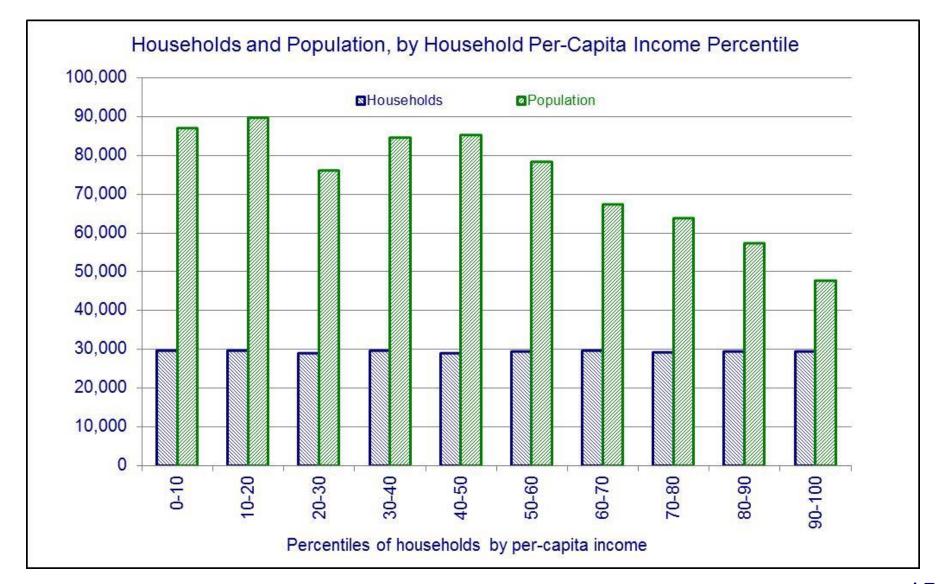


The impacts of state taxes and dividend cuts on Alaskans' incomes would be partially offset by reductions in their federal taxes. Higher-income households who pay higher tax rates would benefit most.



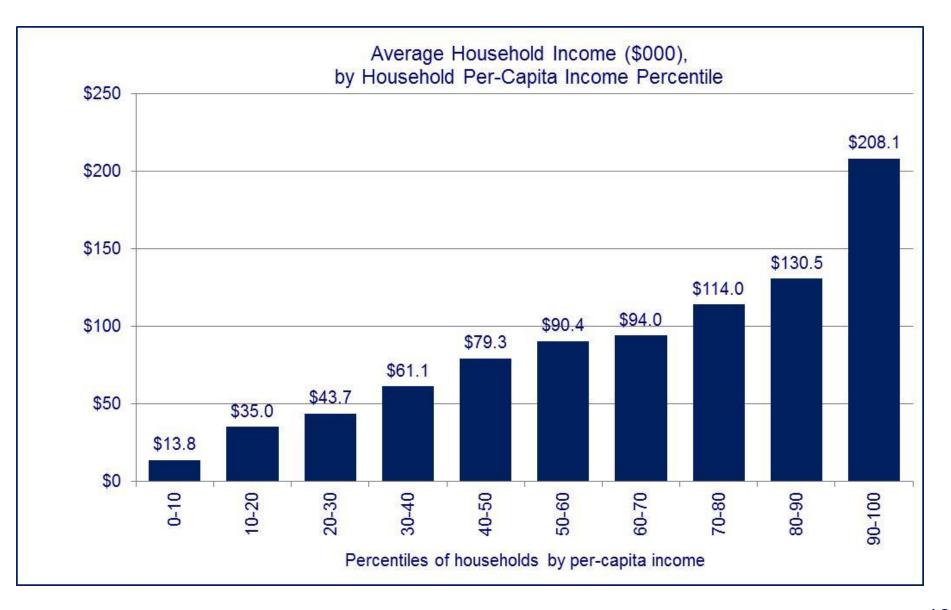
[Pages II-5, II-6] 14

We estimated effects of taxes and dividend cuts for 10 groups of Alaska households, grouped by their per-capita cash income in 2013, from the lowest 10% to the highest 10%



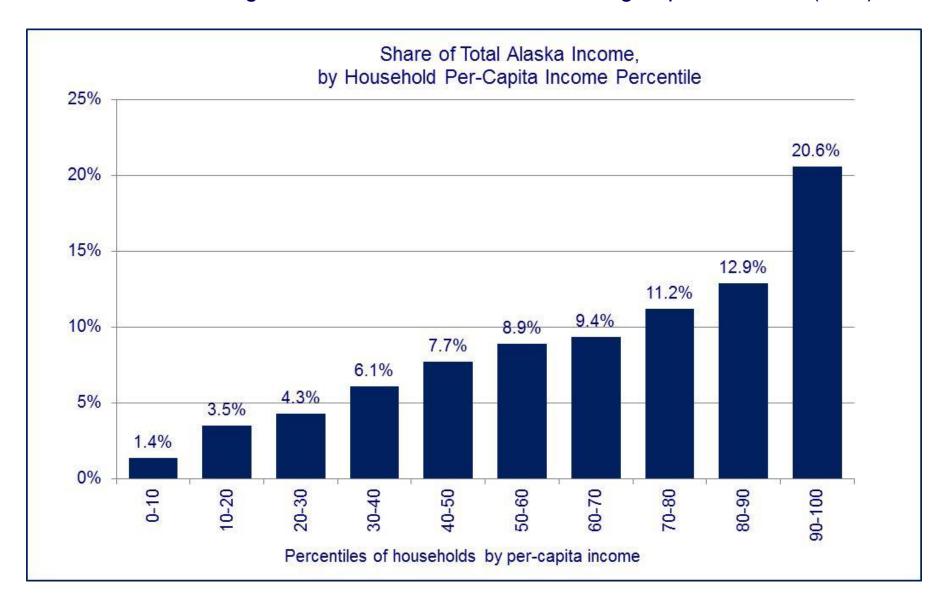
[Page II-1] 15

The three lowest-income groups had average household incomes of less than \$45,000. The highest-income group had an average household income of more than \$200,000.



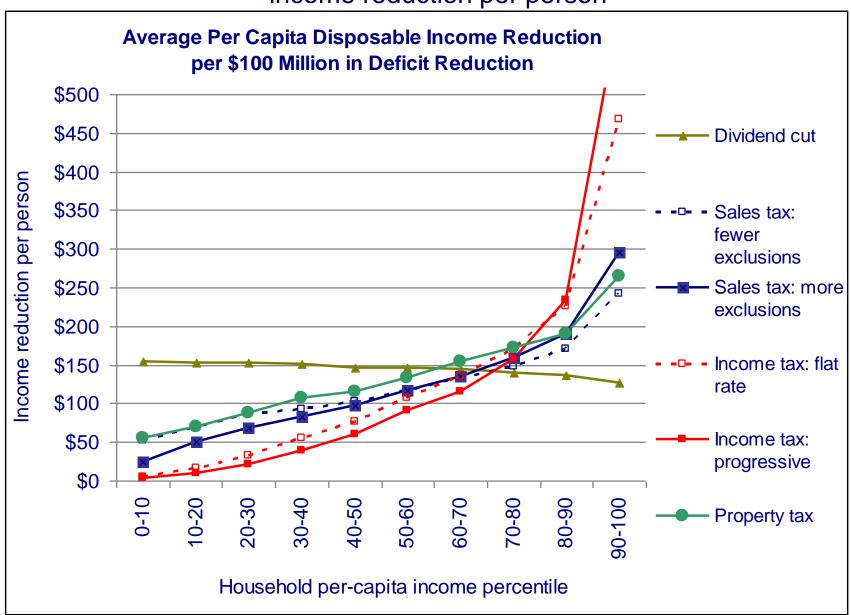
[Pages II-2, II-3]

The share of the highest income group in total income (21%) was almost as high as the shares of the bottom five groups combined (22%).

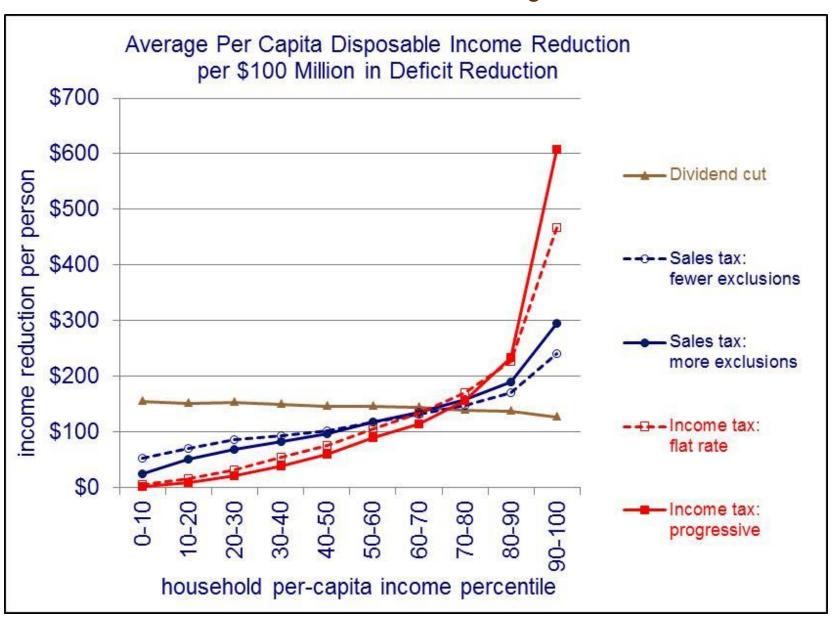


[Pages II-2, II-3]

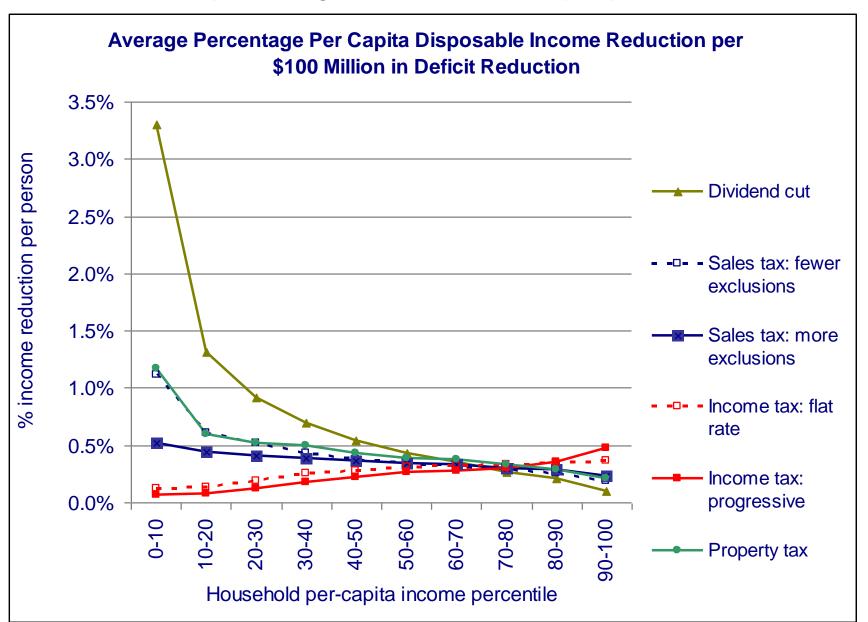
## How options affect different groups: income reduction per person



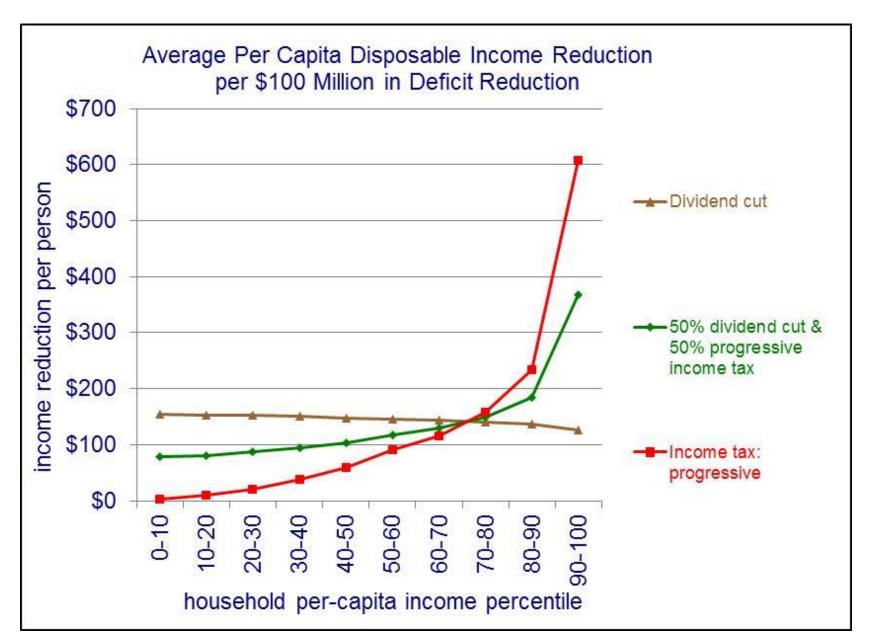
Dividend cuts cost lower-income households more --because less of their dividends go to federal taxes.



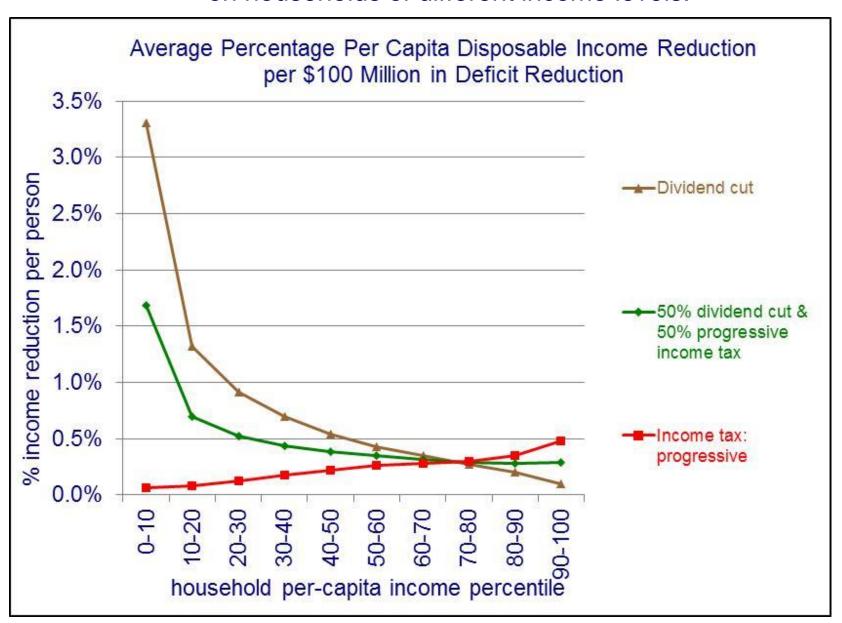
## How options affect different groups: percentage income reduction per person



#### Combinations of options would have intermediate effects on households of different income levels.



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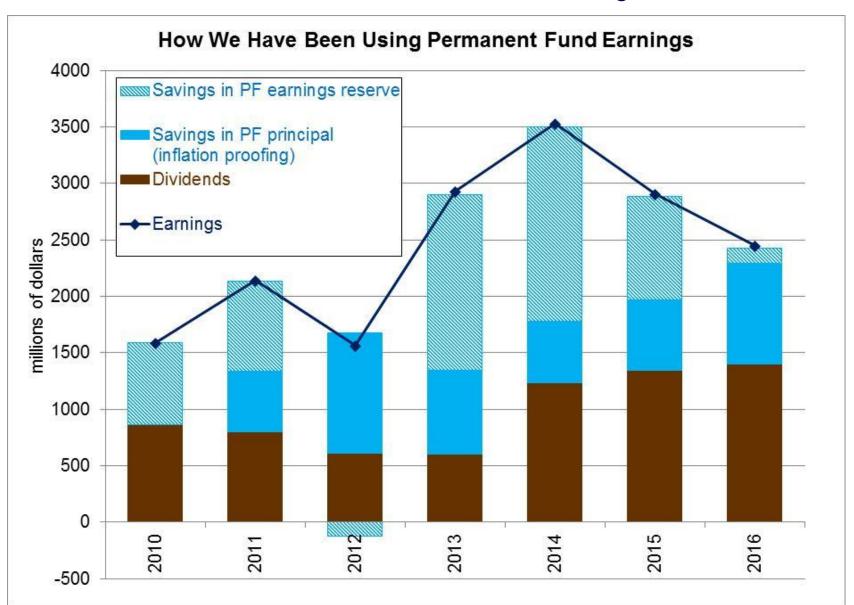


# Short-run economic impacts of fiscal options

Saving less (and using the money to fund government) would have no short-run economic impacts on the Alaska economy.

- Options for saving less include:
  - Reducing inflation-proofing transfers to PF principal
  - Adding less to the PF earnings reserve
- Saving less would not:
  - take any money out of the economy
  - have any short-run impacts on jobs or income
- But it would reduce:
  - our future investment earnings
  - how much savings we leave for future Alaskans

# From 2010 to 2015, we saved an average of \$1.4 billion annually of Permanent Fund realized earnings



Spending cuts, taxes, and dividend cuts would have significant short-run economic impacts.

They would *all* take significant amounts of money out of the economy.

But they would do so in different ways, with different impacts on different Alaskans and different relative impacts on public and private employment.

#### How we compared relative impacts of spending cuts, taxes, and dividend cuts

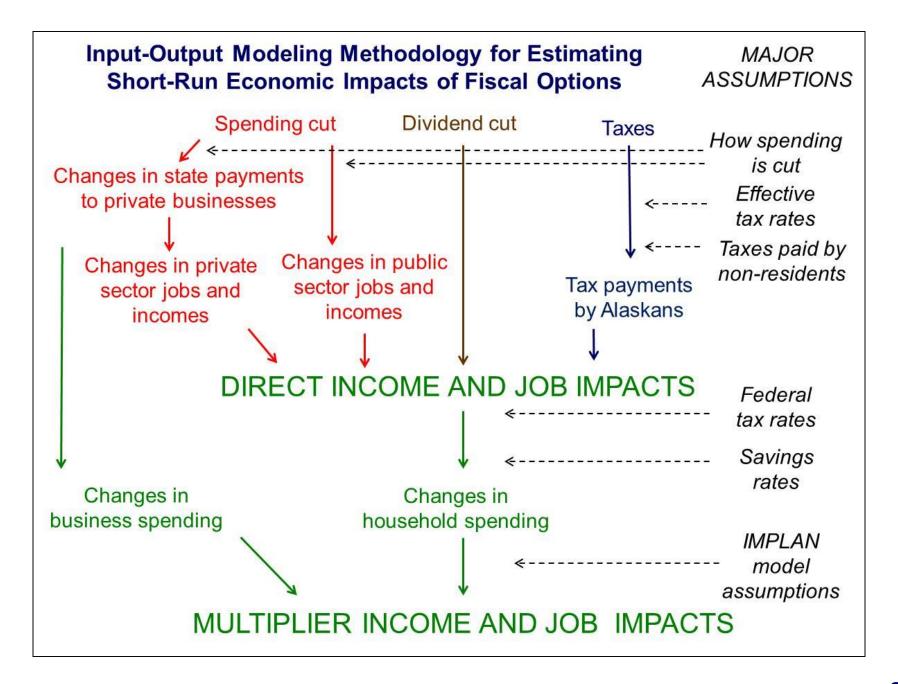
- Standard "economic impact analysis" using IMPLAN model
- Impacts per \$100 million of deficit reduction
- "Low" and "high" impact estimates
  - Based on different assumptions about how changes in income affect spending and "multiplier impacts"
  - "Low" and "High" assumptions estimated from different data sources
  - Earlier presentations presented "high" impact estimates
  - "Low" impact estimates slightly smaller, same <u>relative</u> impacts

#### Economic impacts of spending cuts depend on what is cut What is cut affects:

- Direct impacts on workers' incomes and jobs
  - Government workers
  - Contractor workers
- Impacts on contractor sales and spending
- Impacts of reductions in state services
  - Instructure development and maintenance
  - Resource management (fish catches, mine permitting)
  - Transportation (Marine Highway service, road plowing, etc.)
  - Quality of social services (schools, health care, parks, etc.)

You can't generalize about economic impacts of spending cuts.

Our estimates illustrate a range of potential impacts.



# Calculating economic impacts: direct income impacts

**Short-Run Economic Impacts per \$100 Million of Deficit Reduction** 

|                             | Direct        | Direct        | Ton or Benefit Reddeffor            |
|-----------------------------|---------------|---------------|-------------------------------------|
|                             | earned        | other         |                                     |
|                             | income        | income        | Why the direct income impact is     |
| Option                      | (\$ millions) | (\$ millions) | less than \$100 million             |
| Spending cut: workers       | 95            |               | Not all of the cut is to worker pay |
| Spending cut: broad-based   | 67            |               | Ш                                   |
| Spending cut: capital       | 42            |               | II                                  |
| Spending cut: pay           | 100           |               |                                     |
| Income tax: progressive     |               | 93            | Non-residents pay part of the tax   |
| Income tax: flat rate       |               | 93            | II                                  |
| Sales tax: more exclusions  |               | 89            | II                                  |
| Sales tax: fewer exclusions |               | 90            | =                                   |
| Property tax                |               | 97            | II .                                |
| Dividend cut                |               | 99            | Some dividend recipients leave      |
| Saving less                 |               | 0             |                                     |

# Calculating economic impacts: multiplier income impacts

#### Short-Run Economic Impacts per \$100 Million of Deficit Reduction

| Option                      | Direct<br>earned | Direct<br>other | Multi-<br>plier | Total |   |
|-----------------------------|------------------|-----------------|-----------------|-------|---|
| Spending cut: workers       | 95               |                 | 43              | 138   |   |
| Spending cut: broad-based   | 67               |                 | 48              | 115   |   |
| Spending cut: capital       | 42               |                 | 22              | 64    |   |
| Spending cut: pay           | 100              |                 | 43              | 143   | • |
| Income tax: progressive     |                  | 93              | 45              | 138   |   |
| Income tax: flat rate       |                  | 93              | 46              | 138   |   |
| Sales tax: more exclusions  |                  | 89              | 44              | 133   |   |
| Sales tax: fewer exclusions |                  | 90              | 45              | 135   |   |
| Property tax                |                  | 97              | 48              | 146   |   |
| Dividend cut                |                  | 99              | 50              | 149   | < |
| Saving less                 |                  |                 |                 | 0     |   |

Pay cuts have a smaller multiplier impact than dividend cuts because more of pay goes to federal taxes and savings

# Calculating economic impacts: job impacts

#### Short-Run Economic Impacts per \$100 Million of Deficit Reduction

|                             | Job Impacts<br>(FTE jobs) |       |       |  |
|-----------------------------|---------------------------|-------|-------|--|
|                             | Multi-                    |       |       |  |
| Option                      | Direct                    | plier | Total |  |
| Spending cut: workers       | 962                       | 715   | 1677  |  |
| Spending cut: broad-based   | 504                       | 754   | 1260  |  |
| Spending cut: capital       | 506                       | 425   | 931   |  |
| Spending cut: pay           |                           | 727   | 727   |  |
| Income tax: progressive     |                           | 786   | 786   |  |
| Income tax: flat rate       |                           | 798   | 798   |  |
| Sales tax: more exclusions  |                           | 775   | 775   |  |
| Sales tax: fewer exclusions |                           | 795   | 795   |  |
| Property tax                |                           | 854   | 854   |  |
| Dividend cut                |                           | 892   | 892   |  |
| Saving less                 |                           |       | 0     |  |

Job impacts are biggest for cutting government workers because they include direct losses of government jobs

Taxes and dividend cuts have only multiplier impacts on jobs.

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# Short-Run Economic Impacts per \$100 Million of Deficit Reduction (High Scenario)

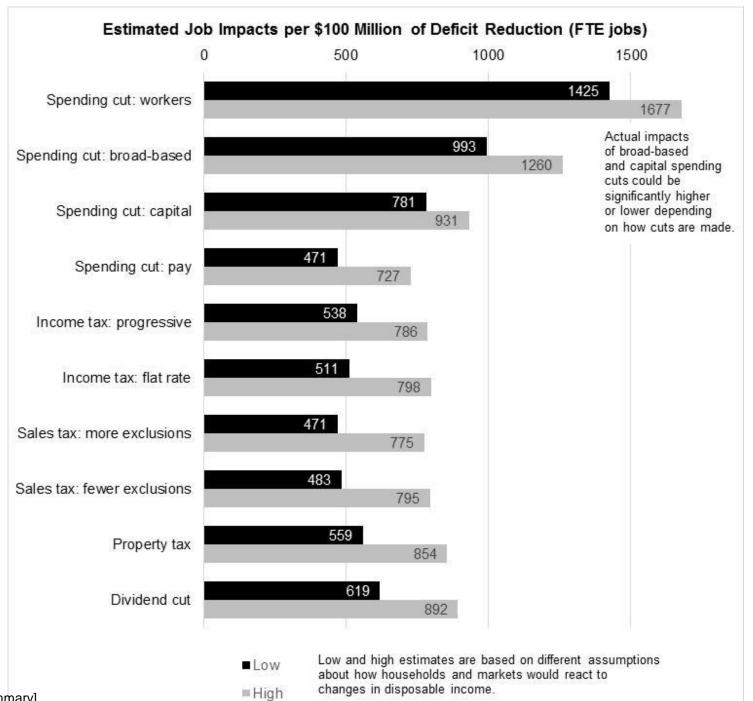
|                             | Income Impacts (millions of \$ of income) |       |       | Job Impacts<br>(FTE jobs) |        |       |       |
|-----------------------------|---|-------|-------|---------------------------|--------|-------|-------|
|                             | Direct Direct Multi-                      |       |       | Multi-                    |        |       |       |
| Option                      | earned                                    | other | plier | Total                     | Direct | plier | Total |
| Spending cut: workers       | 95  |       | 43    | 138                       | 962    | 715   | 1677  |
| Spending cut: broad-based   | 67  |       | 48    | 115                       | 504    | 754   | 1260  |
| Spending cut: capital       | 42  |       | 22    | 64                        | 506    | 425   | 931   |
| Spending cut: pay           | 100                                       |       | 43    | 143                       |        | 727   | 727   |
| Income tax: progressive     |   | 93    | 45    | 138                       |        | 786   | 786   |
| Income tax: flat rate       |   | 93    | 46    | 138                       |        | 798   | 798   |
| Sales tax: more exclusions  |   | 89    | 44    | 133                       |        | 775   | 775   |
| Sales tax: fewer exclusions |   | 90    | 45    | 135                       |        | 795   | 795   |
| Property tax                |   | 97    | 48    | 146                       |        | 854   | 854   |
| Dividend cut                |   | 99    | 50    | 149                       |        | 892   | 892   |
| Saving less                 |   |       |       | 0                         |        |       | 0     |

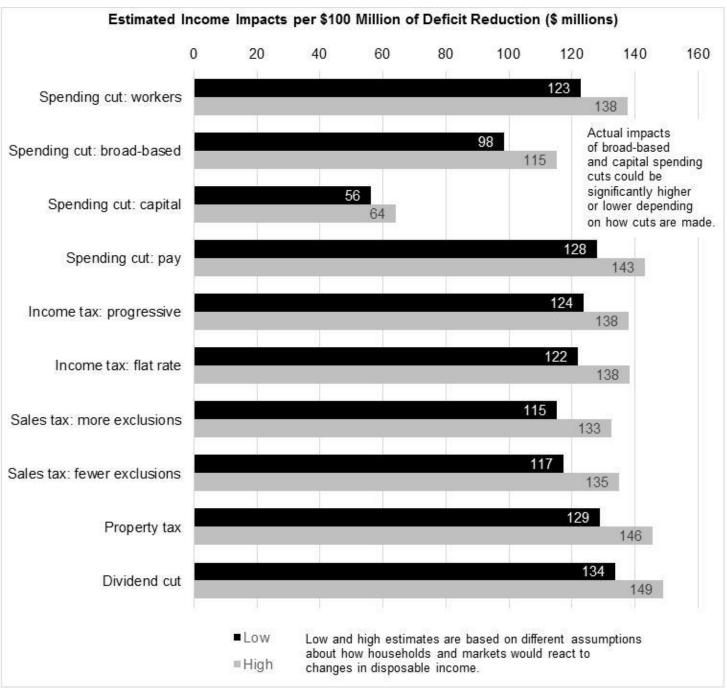
[Chapter III]

#### Summary of Fiscal Options & Estimated Impacts per \$100 Million of Deficit Reduction

|                             |                                      |                                | Short-run     | Short-run   |
|-----------------------------|--------------------------------------|--------------------------------|---------------|-------------|
|                             |                                      |                                | income        | job         |
| Fiscal                      |                                      |                                | impacts       | impacts     |
| Option                      | Direct economic impacts              | Who would be most affected     | (\$ millions) | (FTE jobs)  |
| Spending cut: workers       | Reduce gov't jobs & pay              | Gov't workers                  | 123 - 138     | 1425 - 1677 |
| Chanding out based board    | Reduce gov't jobs & pay              | Gov't workers                  | 00 115        | 993 - 1260  |
| Spending cut: broad-based   | Reduce other gov't purchases         | Gov't contractors & workers    | 98 - 115      |             |
| Spending cut: capital       | Reduce gov't capital spending        | Construct. ind. & workers      | 56 - 64       | 781 - 931   |
| Spending cut: pay           | Reduce gov't employee pay            | Gov't workers                  | 128 - 143     | 471 - 727   |
| Income tax: progressive     |                                      | Higher income Aleskons         | 124 - 138     | 538 - 786   |
| Income tax: flat rate       | D 1 A1 1                             | Higher income Alaskans         | 122 - 138     | 511 - 798   |
| Sales tax: more exclusions  | Reduce Alaskans<br>disposable income | M 1' 0 1 '                     | 115 - 133     | 471 - 775   |
| Sales tax: fewer exclusions | disposable meone                     | Medium & lower income Alaskans | 117 - 135     | 483 - 795   |
| Property tax                |                                      | Alaskalis                      | 129 - 146     | 559 - 854   |
| Dividend cut                | Reduce Alaskans' income              | Lower income Alaskans          | 134 - 149     | 619 - 892   |
| Saving less                 | No short-term impacts                | Future Alaskans                |               |             |

Note: The numbers shown for income and job impacts represent low and high estimates of impacts based on different assumptions about how households and markets would react to changes in disposable income.





## The economic impacts of reducing the deficit will depend on what combination of options we use.

#### **Short-Run Economic Impacts per \$100 Million of Deficit Reduction**

|                             | Total im each           | •        | In<br>combir           | ons                     |             |
|-----------------------------|-------------------------|----------|------------------------|-------------------------|-------------|
|                             | Income<br>(\$ millions) | FTE jobs | % of deficit reduction | Income<br>(\$ millions) | FTE<br>jobs |
| Spending cut: workers       | 138                     | 1677     |                        |                         |             |
| Spending cut: broad-based   | 115                     | 1260     | 25%                    | 29                      | 315         |
| Spending cut: capital       | 64                      | 931      |                        |                         |             |
| Spending cut: pay           | 143                     | 727      |                        |                         |             |
| Income tax: progressive     | 138                     | 786      | 25%                    | 34                      | 197         |
| Income tax: flat rate       | 138                     | 798      |                        |                         |             |
| Sales tax: more exclusions  | 133                     | 775      |                        |                         |             |
| Sales tax: fewer exclusions | 135                     | 795      |                        |                         |             |
| Property tax                | 146                     | 854      |                        |                         |             |
| Dividend cut                | 149                     | 892      | 25%                    | 37                      | 223         |
| Saving less                 | 0                       | 0        | 25%                    | 0                       | 0           |
| Combination of options      | 101                     | 735      |                        | 101                     | 735         |

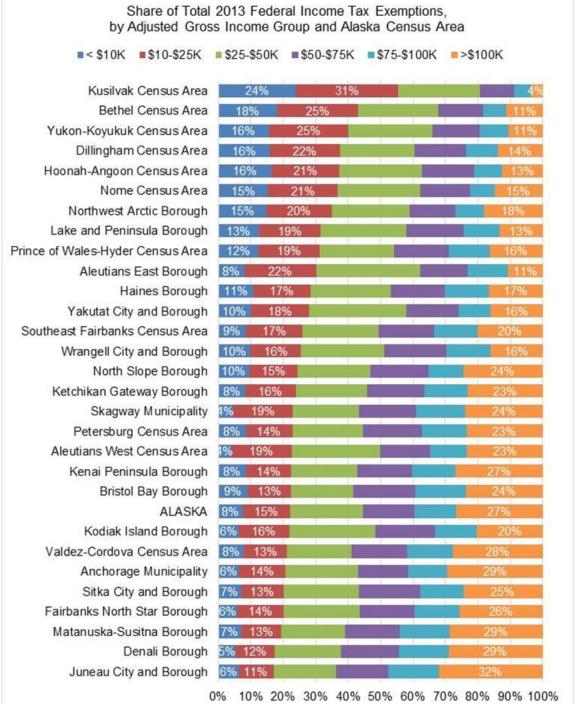
[Chapter III]

### **Examples of Ranges of Estimated Economic Impacts Per \$100 Million of Deficit Reduction Resulting from Selected Potential Combinations of Fiscal Options**

|  | Option   |      |      | Two | options |     |     | Four options |     |     |     |     |
|--|--|------|------|-----|---------|-----|-----|--------------|-----|-----|-----|-----|
|  | Spending cut: workers                          |      |      |     |         |     |     |              |     |     |     |     |
|  | Spending cut: broad-based                      | 50%  | 50%  |     | 50%     |     |     | 33%          | 33% | 33% |     | 25% |
| Examples                                   | Spending cut: capital                          |      |      |     |         |     |     |              |     |     |     |     |
| of   | Spending cut: pay                              |      |      |     |         |     |     |              |     |     |     |     |
| potential<br>combinations<br>of<br>options | Income tax: progressive                        | 50%  |      | 50% |         |     | 50% | 33%          |     | 33% | 33% | 25% |
|  | Income tax: flat rate                          |      |      |     |         |     |     |              |     |     |     |     |
|  | Sales tax: more exclusions                     |      |      |     |         |     |     |              |     |     |     |     |
|  | Sales tax: fewer exclusions                    |      |      |     |         |     |     |              |     |     |     |     |
|  | Property tax                                   |      |      |     |         |     |     |              |     |     |     |     |
|  | Dividend cut                                   |      | 50%  | 50% |         | 50% |     | 33%          | 33% |     | 33% | 25% |
|  | Saving less                                    |      |      |     | 50%     | 50% | 50% |              | 33% | 33% | 33% | 25% |
|  | Total income impact (millions of \$ of income) |      |      |     |         |     |     |              |     |     |     |     |
|  | Low scenario                                   | 111  | 116  | 129 | 49      | 67  | 62  | 119          | 77  | 74  | 86  | 89  |
| Range of                                   | High scenario                                  | 127  | 132  | 143 | 58      | 74  | 69  | 134          | 88  | 84  | 96  | 101 |
| estimated impacts                          | Total jobs impact<br>(FTE jobs in Alaska)      |      |      |     |         |     |     |              |     |     |     |     |
|  | Low scenario                                   | 765  | 806  | 578 | 496     | 309 | 269 | 716          | 537 | 510 | 386 | 537 |
|  | High scenario                                  | 1023 | 1076 | 839 | 630     | 446 | 393 | 980          | 717 | 682 | 560 | 735 |

## Regional differences in economic impacts of fiscal options

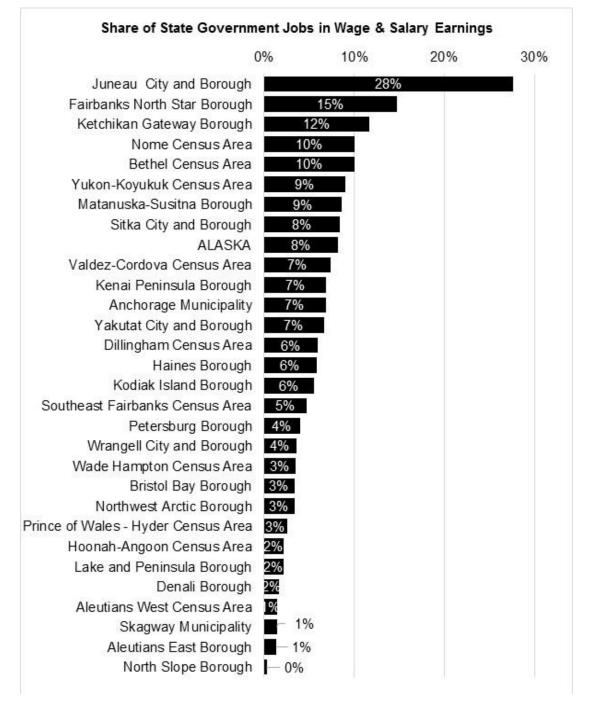
Income distribution varies for different regions of Alaska



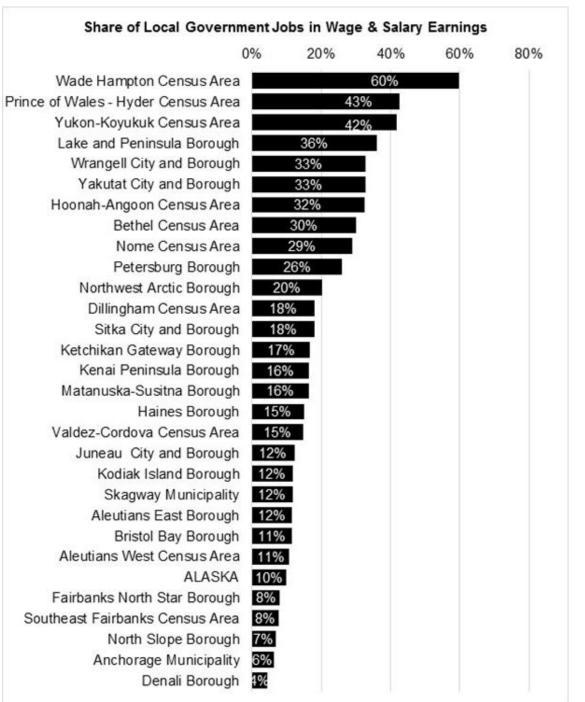
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[Pages IV-1, IV-2]

Regional economic impacts of state spending cuts would depend on how important state government jobs and income are in the regional economy. Some regions are much more dependent than others.



Regional economic impacts of cuts to revenue sharing, K-12 education, and other ways that state spending helps fund local government would depend on how important local government jobs are in the regional economy. Some regions are much more dependent than others.



# Total economic impacts of reducing the deficit

## Estimated income and job impacts of reducing the deficit by different amounts using different options

Estimated Impacts of Reducing the Deficit by Selected Total Amounts Using Different Potential Combinations of Fiscal Options

|  |                           |        |        |        | Four options |       |       |        |        |        |  |        |
|--|---------------------------|--------|--------|--------|--------------|-------|-------|--------|--------|--------|--|--------|
|  | Spending cut: broad-based | 50%    | 50%    |        | 50%          |       |       | 33%    | 33%    | 33%    |  | 25%    |
| Combinations                           | Income tax: progressive   | 50%    |        | 50%    |              |       | 50%   | 33%    |        | 33%    | 33%  | 25%    |
| of fiscal options                      | Dividend cut              |        | 50%    | 50%    | 0%           | 50%   |       | 33%    | 33%    |        | 33%  | 25%    |
| options                                | Saving less               |        |        |        | 50%          | 50%   | 50%   |        | 33%    | 33%    | 8     0       6     33%       6     33%       33%     33%       6     33%       8     96       0     386       2     560       0     429       2     478       1     1,928       2     1       2,798     3       3     858       4     956       1     5,595       7     1,286       1     1,715       1     7       1,913     2       33     7,712       143     11,190       14     2       19     2,391       2     2,391 | 25%    |
| Estimated impacts                      | Income: Low scenario      | 111    | 116    | 129    | 49           | 67    | 62    | 119    | 77     | 74     | 86   | 89     |
| of reducing defcit                     | Income: High scenario     | 127    | 132    | 143    | 58           | 74    | 69    | 134    | 88     | 84     | 96   | 101    |
| by \$100 million                       | Jobs: Low scenario        | 765    | 806    | 578    | 496          | 309   | 269   | 716    | 537    | 510    | 386  | 537    |
| by \$100 million                       | Jobs: High scenario       | 1,023  | 1,076  | 839    | 630          | 446   | 393   | 980    | 717    | 682    | 560  | 735    |
| Estimated impacts                      | Income: Low scenario      | 555    | 580    | 643    | 246          | 334   | 309   | 593    | 387    | 370    | 429  | 445    |
| of reducing defcit                     | Income: High scenario     | 633    | 660    | 717    | 288          | 372   | 345   | 670    | 440    | 422    | 478  | 503    |
| by \$500 million                       | Jobs: Low scenario        | 3,826  | 4,029  | 2,892  | 2,481        | 1,547 | 1,345 | 3,582  | 2,686  | 2,551  | 1,928  | 2,687  |
| by \$500 million                       | Jobs: High scenario       | 5,116  | 5,380  | 4,196  | 3,150        | 2,230 | 1,966 | 4,898  | 3,587  | 3,411  | 2,798  | 3,673  |
| Estimated immedia                      | Income: Low scenario      | 1,110  | 1,160  | 1,286  | 492          | 668   | 618   | 1,185  | 773    | 740    | 858  | 889    |
| Estimated impacts                      | Income: High scenario     | 1,265  | 1,320  | 1,434  | 576          | 745   | 690   | 1,340  | 880    | 844    | 956  | 1,005  |
| of reducing defcit<br>by \$1.0 billion | Jobs: Low scenario        | 7,652  | 8,057  | 5,784  | 4,963        | 3,094 | 2,690 | 7,164  | 5,371  | 5,102  | 3,856  | 5,373  |
| by \$1.0 billion                       | Jobs: High scenario       | 10,232 | 10,761 | 8,393  | 6,300        | 4,461 | 3,932 | 9,795  | 7,174  | 6,821  | 5,595  | 7,346  |
| Patient diament                        | Income: Low scenario      | 1,665  | 1,740  | 1,930  | 738          | 1,002 | 927   | 1,778  | 1,160  | 1,110  | 1,286  | 1,334  |
| Estimated impacts                      | Income: High scenario     | 1,898  | 1,981  | 2,152  | 864          | 1,117 | 1,035 | 2,010  | 1,320  | 1,265  | 1,434  | 1,508  |
| of reducing defeit                     | Jobs: Low scenario        | 11,479 | 12,086 | 8,676  | 7,444        | 4,641 | 4,034 | 10,747 | 8,057  | 7,652  | 5,784  | 8,060  |
| by \$1.5 billion                       | Jobs: High scenario       | 15,348 | 16,141 | 12,589 | 9,450        | 6,691 | 5,898 | 14,693 | 10,761 | 10,232 | 33%<br>33%<br>86<br>96<br>386<br>560<br>429<br>478<br>1,928<br>2,798<br>858<br>956<br>3,856<br>5,595<br>1,286<br>1,434<br>5,784<br>8,393<br>1,715<br>1,913<br>7,712<br>11,190<br>2,144<br>2,391<br>9,640<br>13,988<br>2,573<br>2,869<br>11,568   | 11,019 |
| Patient diament                        | Income: Low scenario      | 2,220  | 2,320  | 2,573  | 984          | 1,337 | 1,236 | 2,371  | 1,547  | 1,480  | 1,715  | 1,778  |
| Estimated impacts                      | Income: High scenario     | 2,531  | 2,641  | 2,869  | 1,152        | 1,489 | 1,379 | 2,680  | 1,761  | 1,687  | 1,913  | 2,010  |
| of reducing defcit<br>by \$2.0 billion | Jobs: Low scenario        | 15,305 | 16,114 | 11,568 | 9,926        | 6,188 | 5,379 | 14,329 | 10,743 | 10,203 | 7,712  | 10,747 |
| by \$2.0 billion                       | Jobs: High scenario       | 20,464 | 21,521 | 16,785 | 12,600       | 8,921 | 7,864 | 19,590 | 14,348 | 13,643 | 11,190   | 14,693 |
| Patient diese at                       | Income: Low scenario      |        |        |        |              |       |       | 2,964  | 1,933  | 1,850  | 2,144  | 2,223  |
| Estimated impacts                      | Income: High scenario     |        |        |        |              |       |       | 3,350  | 2,201  | 2,109  | 2,391  | 2,513  |
| of reducing defeit                     | Jobs: Low scenario        |        |        |        |              |       |       | 17,911 | 13,428 | 12,754 | 9,640  | 13,433 |
| by \$2.5 billion                       | Jobs: High scenario       |        |        |        |              |       |       | 24,488 | 17,934 | 17,053 | 13,988   | 18,366 |
| Dating at all tops                     | Income: Low scenario      |        |        |        |              |       |       | 3,556  | 2,320  | 2,220  | 2,573  | 2,667  |
| Estimated impacts                      | Income: High scenario     |        |        |        |              |       |       | 4,020  | 2,641  | 2,531  | 2,869  | 3,015  |
| of reducing defeit                     | Jobs: Low scenario        |        |        |        |              |       |       | 21,493 | 16,114 | 15,305 | 11,568   | 16,120 |
| by \$3.0 billion                       | Jobs: High scenario       |        |        |        |              |       |       | 29,385 | 21,521 | 20,464 | 16,785   | 22,039 |

Note: Units for income impacts are millions of dollars. Units for job impacts are FTE jobs. Table omits combination of options and total deficit reduction which would require reductions of more than \$1 billion from any single option. Table calculated by extrapolating from the estimated impacts of reducing the deficit by \$100 million shown in Table III-7.

#### How big is Alaska's economy?

Selected Estimates of Alaska Income and Employment, 2014

| =                    |  |         |
|----------------------|--|---------|
| Incomo               | Personal income                          | 39,793  |
| Income (\$ millions) | Earnings by place of work                | 30,059  |
|                      | Wages and salaries                       | 20,683  |
| Employment           | Total full-time and part-time employment | 465,130 |
| Employment           | Wage and salary jobs                     | 367,291 |
| (jobs)               | Other jobs                               | 97,839  |

Source: Bureau of Economic Analysis, SA30 Economic Profile (updated September 30, 2015), www.bea.gov.

### Estimated <u>percentage income impacts</u> of reducing the deficit by different amounts using different options

Estimated Income Impacts of Reducing the Deficit by Selected Total Amounts Using Different Potential Combinations of Fiscal Options,

Expressed as a Share of Estimated Total Alaska Personal Income in 2014 (\$39.8 billion)

|                 |                           |      |      |      |         |      |      |       |       |         |  | Four    |
|-----------------|---------------------------|------|------|------|---------|------|------|-------|-------|---------|--|---------|
|                 |                           |      |      | Two  | options |      |      |       | Three | options |  | options |
| Combinations    | Spending cut: broad-based | 50%  | 50%  |      | 50%     |      |      | 33%   | 33%   | 33%     |  | 25%     |
|                 | Income tax: progressive   | 50%  |      | 50%  |         |      | 50%  | 33%   |       | 33%     | 33%  | 25%     |
| of fiscal —     | Dividend cut              |      | 50%  | 50%  |         | 50%  |      | 33%   | 33%   |         | 33%  | 25%     |
| options         | Saving less               |      |      |      | 50%     | 50%  | 50%  |       | 33%   | 33%     | optics   25   25   33%   25   33%   25   33%   25   33%   25   33%   25   33%   25   33%   25   33%   25   33%   35   35   35   35   35   35   | 25%     |
| \$100 million   | Income: Low scenario      | 0.3% | 0.3% | 0.3% | 0.1%    | 0.2% | 0.2% | 0.3%  | 0.2%  | 0.2%    | 0.2%   | 0.2%    |
| \$100 million   | Income: High scenario     | 0.3% | 0.3% | 0.4% | 0.1%    | 0.2% | 0.2% | 0.3%  | 0.2%  | 0.2%    | 0.2%   | 0.3%    |
| ¢500:11:        | Income: Low scenario      | 1.4% | 1.5% | 1.6% | 0.6%    | 0.8% | 0.8% | 1.5%  | 1.0%  | 0.9%    | 1.1%   | 1.1%    |
| \$500 million   | Income: High scenario     | 1.6% | 1.7% | 1.8% | 0.7%    | 0.9% | 0.9% | 1.7%  | 1.1%  | 1.1%    | 1.2%   | 1.3%    |
| \$1.0 billion   | Income: Low scenario      | 2.8% | 2.9% | 3.2% | 1.2%    | 1.7% | 1.6% | 3.0%  | 1.9%  | 1.9%    | 2.2%   | 2.2%    |
| \$1.0 dillon    | Income: High scenario     | 3.2% | 3.3% | 3.6% | 1.4%    | 1.9% | 1.7% | 3.4%  | 2.2%  | 2.1%    | 2.4%   | 2.5%    |
| ¢1 5 1.:11: a.s | Income: Low scenario      | 4.2% | 4.4% | 4.8% | 1.9%    | 2.5% | 2.3% | 4.5%  | 2.9%  | 2.8%    | 3.2%   | 3.4%    |
| \$1.5 billion   | Income: High scenario     | 4.8% | 5.0% | 5.4% | 2.2%    | 2.8% | 2.6% | 5.1%  | 3.3%  | 3.2%    | 6       0         6       33%         33%       33%         6       33%         6       33%         6       0.2%         6       0.2%         6       1.1%         7       1.2%         7       2.2%         7       2.4%         7       3.2%         7       3.6%         7       4.3%         7       4.8%         7       5.4%         7       6.0%         8       6.5% | 3.8%    |
| ¢2 0 1.:11:     | Income: Low scenario      | 5.6% | 5.8% | 6.5% | 2.5%    | 3.4% | 3.1% | 6.0%  | 3.9%  | 3.7%    | 4.3%   | 4.5%    |
| \$2.0 billion   | Income: High scenario     | 6.4% | 6.6% | 7.2% | 2.9%    | 3.7% | 3.5% | 6.7%  | 4.4%  | 4.2%    | 4.8%   | 5.1%    |
| ¢2.5.1.11       | Income: Low scenario      |      |      |      |         |      |      | 7.4%  | 4.9%  | 4.6%    | 5.4%   | 5.6%    |
| \$2.5 billion   | Income: High scenario     |      |      |      |         |      |      | 8.4%  | 5.5%  | 5.3%    | 6.0%   | 6.3%    |
| ¢2 0 1 '11'     | Income: Low scenario      |      |      |      |         |      |      | 8.9%  | 5.8%  | 5.6%    | 6.5%   | 6.7%    |
| \$3.0 billion   | Income: High scenario     |      |      |      |         |      |      | 10.1% | 6.6%  | 6.4%    | 7.2%   | 7.6%    |

Note: Table omits combination of options and total deficit reduction which would require reductions of more than \$1 billion from any single option.

## Estimated <u>percentage job impacts</u> of reducing the deficit by different amounts using different options

Estimated Income Impacts of Reducing the Deficit by Selected Total Amounts Using Different Potential Combinations of Fiscal Options,

Expressed as a Share of Estimated Total Alaska Personal Income in 2014 (\$39.8 billion)

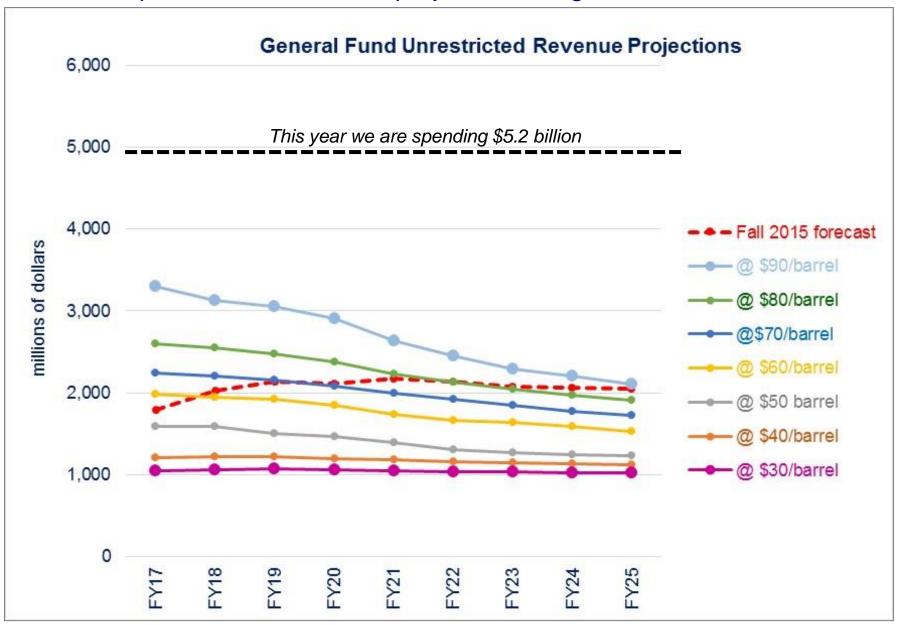
|                 |                           |      |      |      |         |      |      |       |       |         |  | Four    |
|-----------------|---------------------------|------|------|------|---------|------|------|-------|-------|---------|--|---------|
|                 |                           |      |      | Two  | options |      |      |       | Three | options |  | options |
| Combinations    | Spending cut: broad-based | 50%  | 50%  |      | 50%     |      |      | 33%   | 33%   | 33%     |  | 25%     |
|                 | Income tax: progressive   | 50%  |      | 50%  |         |      | 50%  | 33%   |       | 33%     | 33%  | 25%     |
| of fiscal —     | Dividend cut              |      | 50%  | 50%  |         | 50%  |      | 33%   | 33%   |         | 33%  | 25%     |
| options         | Saving less               |      |      |      | 50%     | 50%  | 50%  |       | 33%   | 33%     | optics   25   25   33%   25   33%   25   33%   25   33%   25   33%   25   33%   25   33%   25   33%   25   33%   35   35   35   35   35   35   | 25%     |
| \$100 million   | Income: Low scenario      | 0.3% | 0.3% | 0.3% | 0.1%    | 0.2% | 0.2% | 0.3%  | 0.2%  | 0.2%    | 0.2%   | 0.2%    |
| \$100 million   | Income: High scenario     | 0.3% | 0.3% | 0.4% | 0.1%    | 0.2% | 0.2% | 0.3%  | 0.2%  | 0.2%    | 0.2%   | 0.3%    |
| ¢500:11:        | Income: Low scenario      | 1.4% | 1.5% | 1.6% | 0.6%    | 0.8% | 0.8% | 1.5%  | 1.0%  | 0.9%    | 1.1%   | 1.1%    |
| \$500 million   | Income: High scenario     | 1.6% | 1.7% | 1.8% | 0.7%    | 0.9% | 0.9% | 1.7%  | 1.1%  | 1.1%    | 1.2%   | 1.3%    |
| \$1.0 billion   | Income: Low scenario      | 2.8% | 2.9% | 3.2% | 1.2%    | 1.7% | 1.6% | 3.0%  | 1.9%  | 1.9%    | 2.2%   | 2.2%    |
| \$1.0 dillon    | Income: High scenario     | 3.2% | 3.3% | 3.6% | 1.4%    | 1.9% | 1.7% | 3.4%  | 2.2%  | 2.1%    | 2.4%   | 2.5%    |
| ¢1 5 1.:11: a.s | Income: Low scenario      | 4.2% | 4.4% | 4.8% | 1.9%    | 2.5% | 2.3% | 4.5%  | 2.9%  | 2.8%    | 3.2%   | 3.4%    |
| \$1.5 billion   | Income: High scenario     | 4.8% | 5.0% | 5.4% | 2.2%    | 2.8% | 2.6% | 5.1%  | 3.3%  | 3.2%    | 6       0         6       33%         33%       33%         6       33%         6       33%         6       0.2%         6       0.2%         6       1.1%         7       1.2%         7       2.2%         7       2.4%         7       3.2%         7       3.6%         7       4.3%         7       4.8%         7       5.4%         7       6.0%         8       6.5% | 3.8%    |
| ¢2 0 1.:11:     | Income: Low scenario      | 5.6% | 5.8% | 6.5% | 2.5%    | 3.4% | 3.1% | 6.0%  | 3.9%  | 3.7%    | 4.3%   | 4.5%    |
| \$2.0 billion   | Income: High scenario     | 6.4% | 6.6% | 7.2% | 2.9%    | 3.7% | 3.5% | 6.7%  | 4.4%  | 4.2%    | 4.8%   | 5.1%    |
| ¢2.5.1.11       | Income: Low scenario      |      |      |      |         |      |      | 7.4%  | 4.9%  | 4.6%    | 5.4%   | 5.6%    |
| \$2.5 billion   | Income: High scenario     |      |      |      |         |      |      | 8.4%  | 5.5%  | 5.3%    | 6.0%   | 6.3%    |
| ¢2 0 1 '11'     | Income: Low scenario      |      |      |      |         |      |      | 8.9%  | 5.8%  | 5.6%    | 6.5%   | 6.7%    |
| \$3.0 billion   | Income: High scenario     |      |      |      |         |      |      | 10.1% | 6.6%  | 6.4%    | 7.2%   | 7.6%    |

Note: Table omits combination of options and total deficit reduction which would require reductions of more than \$1 billion from any single option.

#### How much do we need to reduce the deficit?

- A very important question
- We didn't study it
- The answer depends in part on what you assume about:
  - Future oil revenues
  - How much we are willing to draw down our savings

#### Alaska Department of Revenue projections for general fund revenues . . .



We can't <u>sustain</u> general fund spending over time that is more than our unrestricted general fund revenues.

This year (FY16) we are spending \$5.2 billion for government

Over the next 10 years our general fund revenues from current sources will probably be about \$1.5-\$2.5 billion.

We will have to reduce the difference between our general fund spending and our general fund revenues by between \$2.7 and \$3.7 billion

How much and how fast we will have to reduce it depends on our future revenues and how far we are willing to draw down our savings.

We have lost billions of dollasr of oil revenues.

We <u>will</u> experience significant economic impacts of adjusting to lower oil revenues.

- Impacts of spending cuts we've already made:
  - Impacts of capital budget cuts on construction industry
  - Delayed because capital projects take several years
  - Actual capital spending will decline as money from past large capital budgets runs out
- Impacts of future adjustments we will have to make
  - Spending cuts
  - Taxes
  - Dividend cuts

#### How fast do we need to reduce the deficit?

## Fully closing the deficit this year could have a significant impact on an already weakened economy

- We are already experiencing impacts of:
  - Oil industry job losses
  - Lower oil industry investment
  - State capital budget reductions
  - Mining industry downturn
  - Low salmon prices
- The future impacts of these negative factors are uncertain
- They would be increased by large:
  - Spending cuts
  - New taxes
  - Dividend cuts



Not making significant progress towards closing the deficit this year—and planning for how we will close the rest of it—would also have significant negative economic consequences.

- Increasing business and household uncertainty about:
  - future state spending, state services and taxes
  - whether Alaska will remain a good place to invest and live
- Reduced business and household investment
- Negative effects on public and private employee morale, turnover and recruitment
- Certain further downgrading of Alaska's credit rating.

#### Our economic adjustment to lower oil revenues will be smoother if

- We substantially reduce the deficit this year
- We clearly demonstrate this year to Alaskans, businesses, and investors that:
  - we can and will finish closing the deficit
  - make needed further changes to spending, revenues and uses of Permanent Fund earnings to achieve sustainable state finances
- Reduce business and household uncertainty about future state spending and how we will pay for it
- Build confidence in Alaska's fiscal future.

## Other economic impacts of fiscal options

### We studied only <u>some</u> of the potential economic impacts of Alaska fiscal options

- We didn't study long-run & indirect impacts
- The impacts we didn't study are important
- This study is <u>only a start</u> at understanding potential economic impacts of fiscal options
- Many other questions remain to be answered
- Our study briefly lists—but does not analyze—<u>some</u> of the other potential economic impacts of spending cuts, taxes, and dividend cuts
  - There are many
  - Some could be subjects of full studies

#### Other potential economic impacts of spending cuts . . .

- Impacts of reductions in state services?
- Impacts on economic development and future revenues?
- Impacts on future state costs and spending?
- Impacts of cost shifting to local governments and service users?
- Impacts on federal matching funding?
- Impacts on public employee work force?

#### Other potential economic impacts of <u>taxes</u> . . .

- Some level of taxes is a "necessary evil," but:
  - What level is necessary?
  - What kinds are "least evil?"
- Shifting of purchases to non-Alaska retailers?
- Reduced incentives to invest in Alaska?
- Reduced competitiveness of Alaska resource industries?
- Higher labor costs?
- Administration and enforcement costs?
- Public "skin in the game" and more attention to state spending?
- Fixing the "Alaska disconnect" so that growth pays for itself?

#### Other potential economic impacts of <u>dividend cuts</u>...

- Ability of lower-income Alaskans to live in high-cost rural areas?
- Ability of Alaskans to accumulate wealth for "big-ticket" investments such as homes and college
- Impacts on Alaska wage rates?
- Impacts on how many and what kind of people move to or from Alaska?
- Impacts on extent to which Alaskans feel they have a stake in the Permanent Fund and are committed to growing and protecting it?

Alaska's fiscal choices will significantly affect Alaska's future economy and society.

We should think not only about their short-term economic impacts but also about their longer-term economic and social impacts.