## Petroleum: Jobs and Revenues

by Scott Goldsmith

Institute of Social and Economic Research
University of Alaska Anchorage
afosg2@uaa.alaska.edu

Alaska State Legislature
House Resources Committee
February 25, 2013
Juneau, Alaska

Institute of Social and Economic Research
University of Alaska Anchorage

## Petroleum: Jobs and Revenues

Primary Financial Support from









### Basis for a Prosperous Economy







### The Alaska Economy Runs on \$\$\$ From Outside

- Sale of Resources
- Tourists
- Federal Spending
- Retirees







# As Those \$\$ Circulate Thru the Economy, They Support These Other Types of Businesses

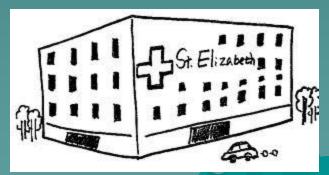














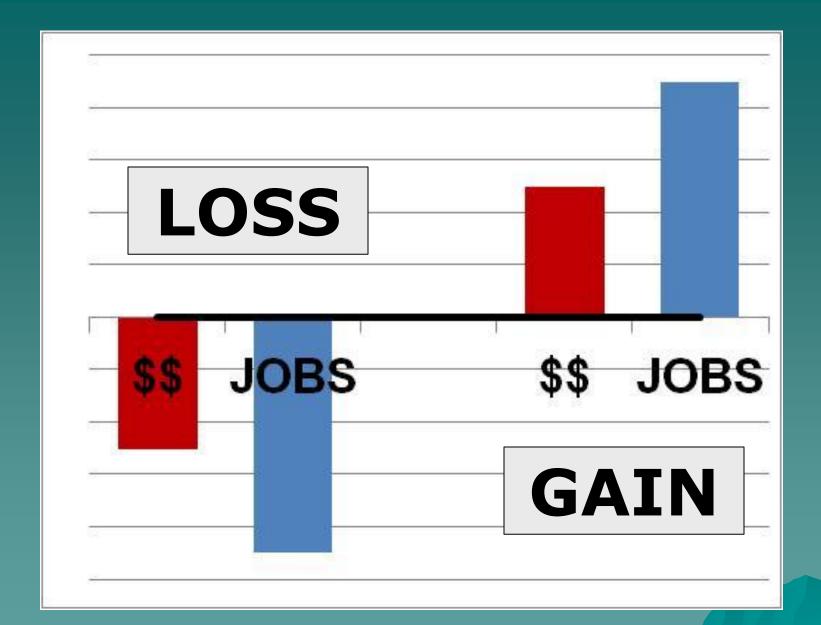


# What is the Impact on Jobs and Revenues from a Cut in Petroleum Taxes?

- State Revenues from Currently Anticipated Production Fall
- Budget Cuts Reduce Public and Private Jobs
- Increase in Petroleum Industry Investments Increases
   Private Jobs
- Increase in Oil Production increases state revenues
- Higher state revenues increases Public and Private Jobs











#### Not a Prediction





### What Happens to Investment When taxes Cut \$1 Billion?

If Alberta cuts its tax rates, will oil companies take that money and come to Alaska to invest?

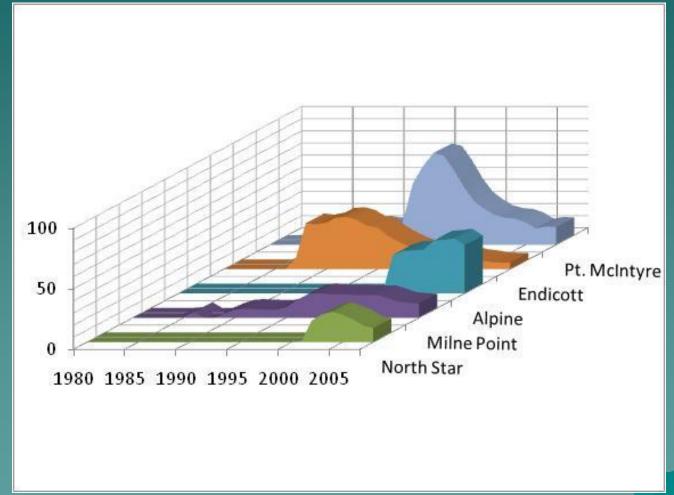
Or, Is Alaska different from every other oil rich region?

LEVERAGE



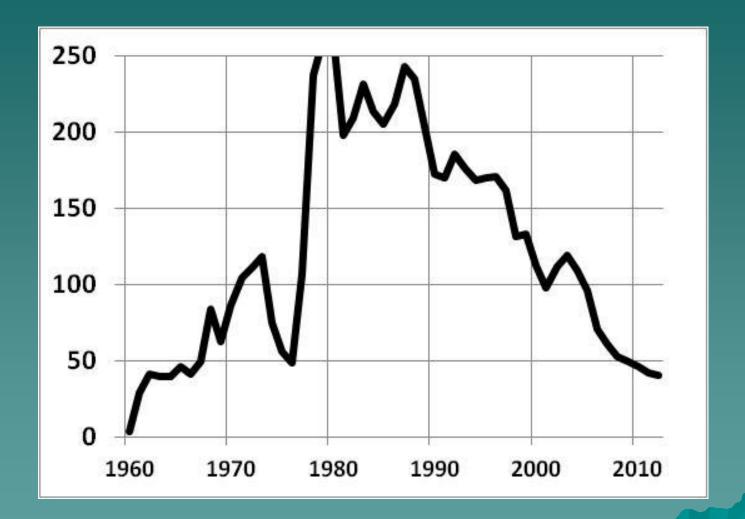


## Oil Development & Production: Each Project Unique





#### Jobs to Production Relationship







### How Does the State Spend its Money?

#### Responsible and Responsive



#### ALASKA'S FISCAL YEAR 2014 BUDGET PROPOSAL

#### Alaska's Budget by Source of Funds



- General Funds \$6.49 billion
- Federal Funds \$2.94 billion
- DFG/Other Funds \$3.35 billion Total: \$12.8 billion

#### The FY 2014 Budget Proposal Supports Alaska's Priorities:

#### Resource/Energy Development

Alaska's resources provide Alaskans with opportunity.

- · Roads to Resources \$18 million
- Gasline Development \$50 million
- Geologic Materials Center \$15 million
   Chinook Salmon Research \$10 million
- Strategic Minerals \$2.7 million
- · Permitting and Statewide Mapping \$7.3 million
- Sustainable Energy Fund \$125 million
- Susitna-Watana Hydro Project \$95 million
- Interior Energy \$50 million
- Weatherization/Home Energy \$51.5 million
- · Renewable Energy \$25 million

#### Education

Alaska's K-12 public education system prepares students for success in college or job-training programs.

- K-12 Education \$1.25 billion
- Alaska Performance Scholarships \$8 million
- Alaska Digital Learning Initiative \$5.9 million
- Early Learning \$14.6 million
- · School Construction \$46.2 million
- · Major Maintenance \$22.3 million

#### Transportation/Infrastructure

Alaska's economy depends on access and infrastructure to support development.

- Statewide Highway and Aviation \$971 million
- Alaska Marine Highway \$182 million
   Municipal Water and Sewer Projects \$34 million
- Village Safe Water \$56.5 million
- · State Funds to leverage federal and local \$141 million

#### **Public Safety**

The budget prioritizes safe homes and strong families.

- Choose Respect Initiative \$14.8 million
   18 New Alaska State Troopers \$3.7 million
- 15 New Village Public Safety Officers \$2.7 million
- Investigate/Prosecute child sexual abuse \$1.6 million
- Emergency Blood Bank of Alaska \$7 million

#### **Military Support**

We honor Alaska's military community.

- · Interior Alaska Veterans Cemetery \$2.5 million
- Homeland Security \$19.6 million
- Alaska Military Youth Academy \$11.1 million
- Veterans Services and Outreach \$2 million

"Our fiscal plan is built on our state's resources and spending discipline. We focus on priorities that grow our economy and strengthen our families – for Alaskans today and tomorrow."

Sean Parnell

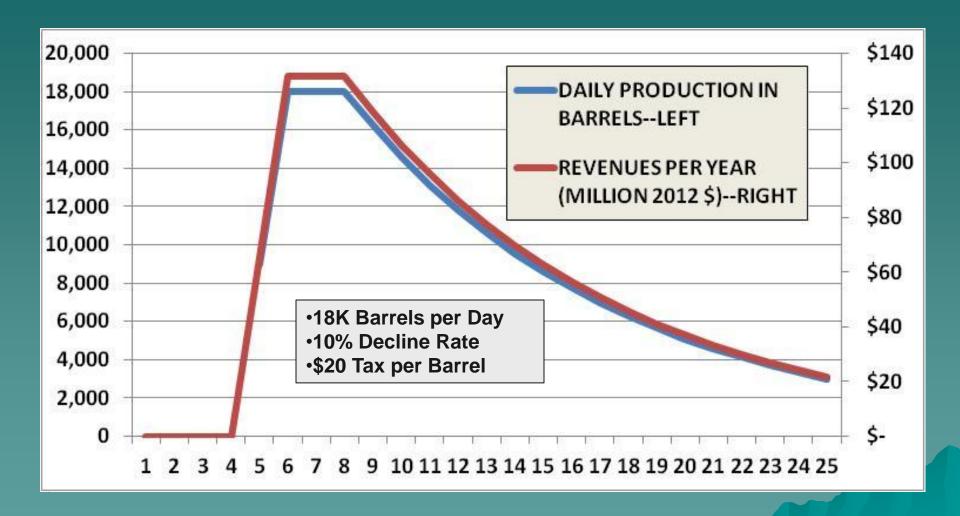
Responsible and Responsive • Alaska's FY 2014 Budget Proposal

For more information, go to: omb.alaska.gov

Oil and the Alaska Economy



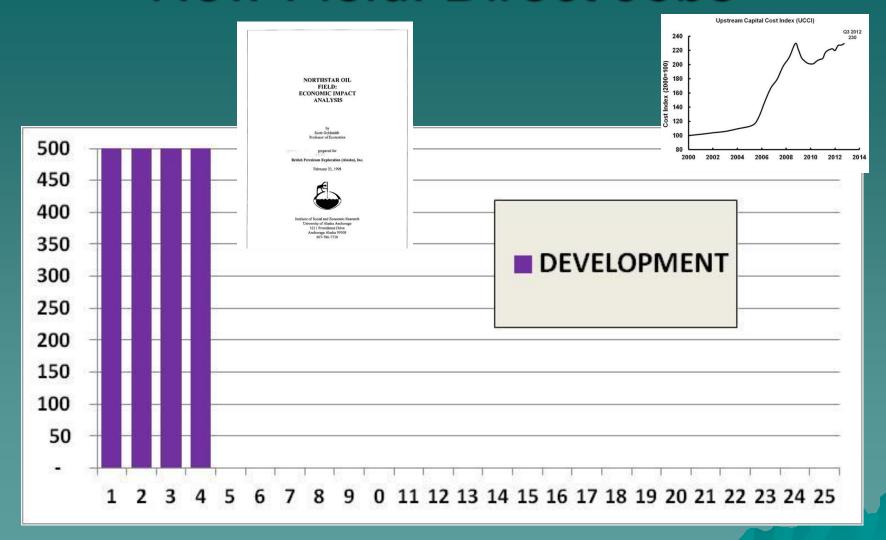
### Hypothetical \$1 Billion Field







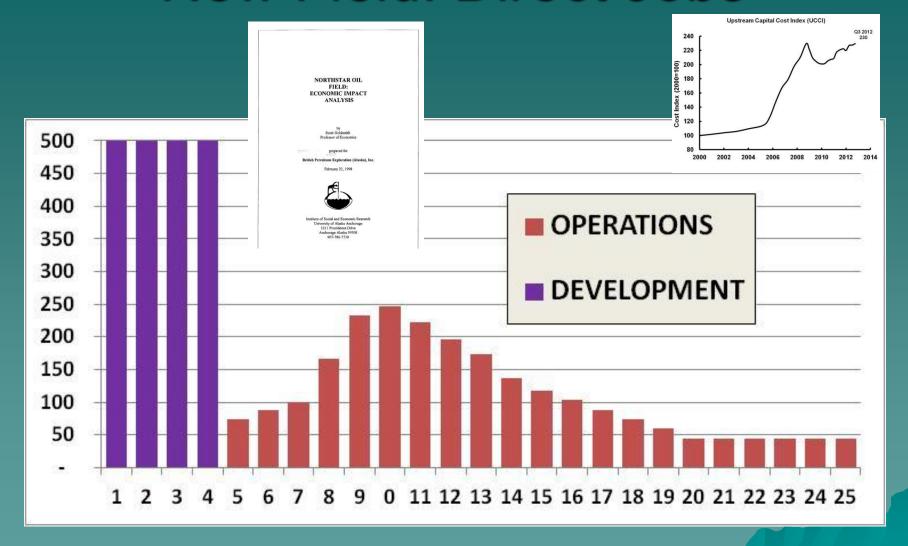
#### New Field: Direct Jobs







#### New Field: Direct Jobs







#### 25 Year Cumulative Totals

Production = 72 Million Barrels

Revenues = \$1.445 Billion (2012 \$)\*

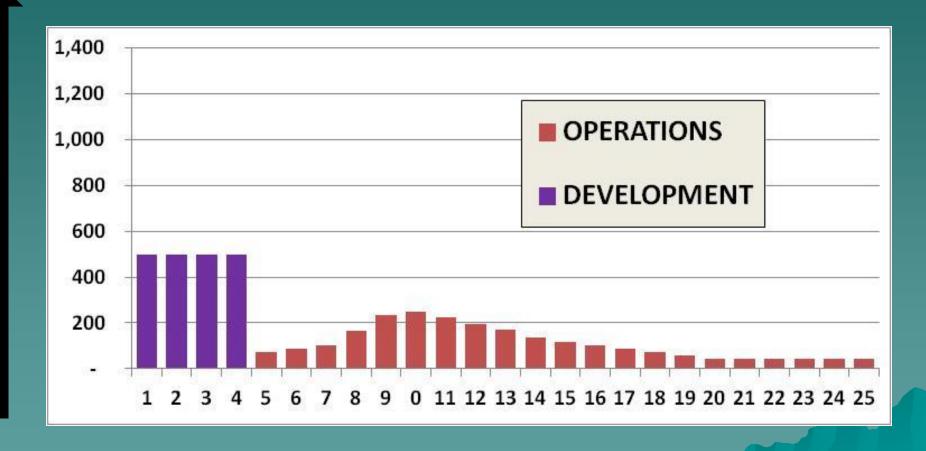
Direct Oil Patch Jobs = 4,349

\* NPV @ 5% = \$827 Million





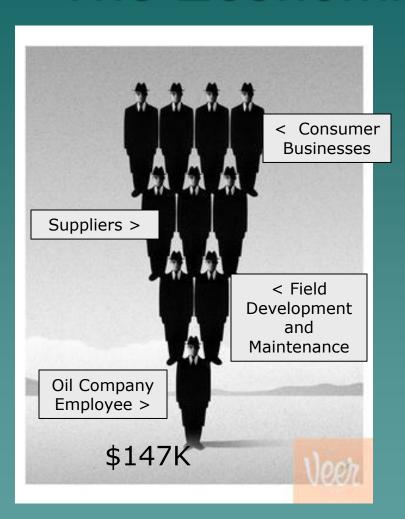
## Hypothetical Field: Make Room on Graph for Other Jobs







### Petroleum Job Pyramid: The Economic "MULTIPLIER"

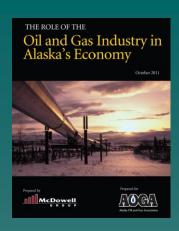


- Advertising
- Air Carriers
- Arctic Engineering
- Arctic Gear
- Aviation Fuel
- Catering
- Communications
- •Chemicals
- •Hazardous Waste
- Commercial Diving
- Construction Equipment
- Project Management
- •General Contractors
- •Control Systems
- Corrosion Control
- Drilling
- Electrical Contracting
- •Employee Services
- Environmental Engineering
- •Engineering Services
- Heavy Hauling
- Expediting
- Oilfield Supplies
- Geophysical Services
- Geological Services

- Hydraulic Supply
- Industrial Gases
- Inspection Services
- •Instrumentation Services
- Machining
- Logistics
- Maps
- Medical Services
- Mat Systems
- •Mud
- Permitting
- Photography
- Plumbing
- Soil Stabilization
- Safety Equipment
- Rigging Supplies
- Security
- •Seismic
- Steel Fabrication
- Storage Space
- Tank Fabrication
- Welding
- Vessel Charter







### Petroleum "MULTIPLIER"

Alaska Resident Employment and Labor Income in the Oil and Gas Industry, 2010

	Employment
Direct Impacts	
Primary Companies	3,997
Indirect Impacts	
Reported Oil & Gas Industry Support Services*	7,670
Other Support Services**	7,100
Other Indirect and Induced Impacts	
All Other Indirect and Induced	26,033
Grand Total (Direct, Indirect, and Induced)	44,800

<sup>\*</sup>Includes ADOLWD Oil and Gas Support Services Sectors 213111 and 213112.

$$45/4 = 10$$

$$45/(4+8) = 4$$

$$45/(4+8+7)=2.4$$

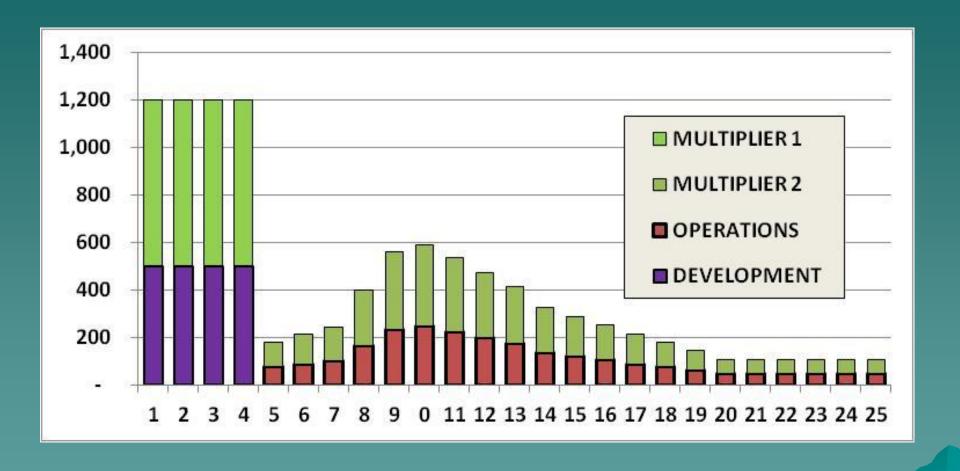
$$2.4 = 1 + 1.4$$





<sup>\*\*</sup>Other Support Services includes construction, transportation services, engineering and a variety of other business and professional services provided under contract to F

#### New Field: Total Oil Patch Jobs

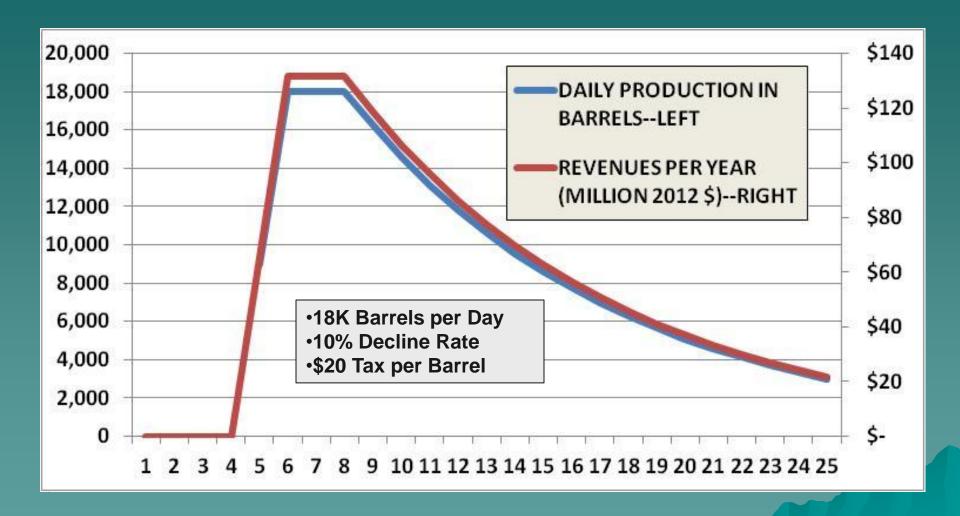


Add 6,088 for total of 10,437





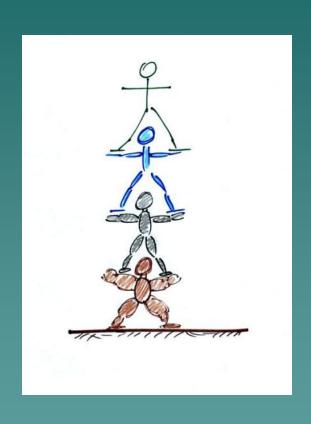
### Hypothetical \$1 Billion Field







## State Spending Bang per Buck & Multipliers



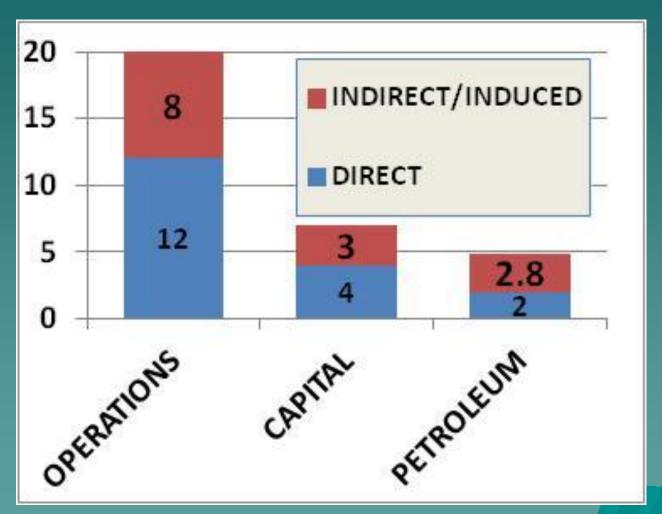
OPERATIONS 20/12 = 1.66

CAPITAL 7/4 = 1.75





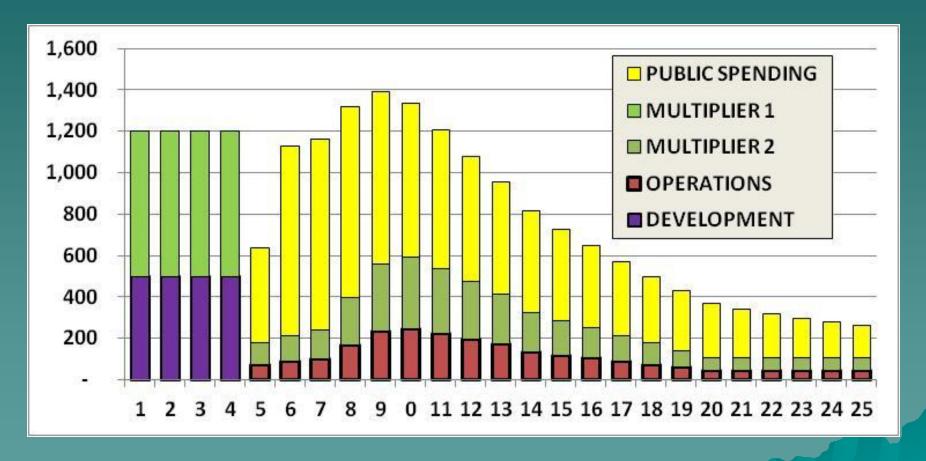
### Bang per Buck & Multipliers







## New Field: Total Jobs including Public Capital Spending

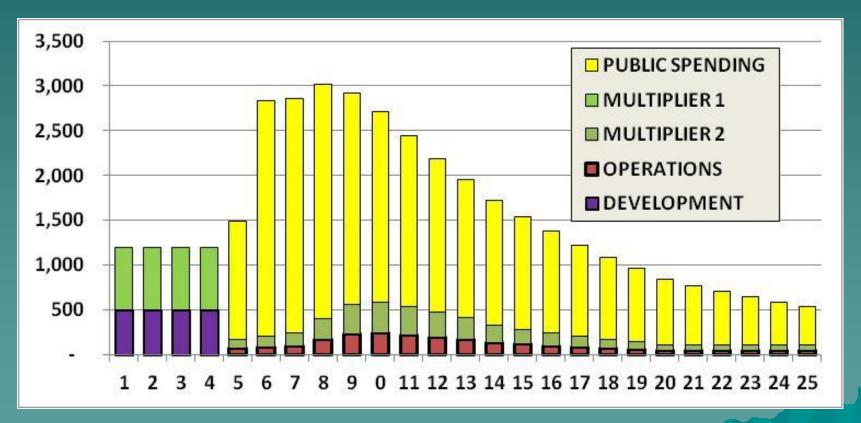


Add 10,117 for grand total of 20,554





## New Field: Total Jobs including Public Operations Spending

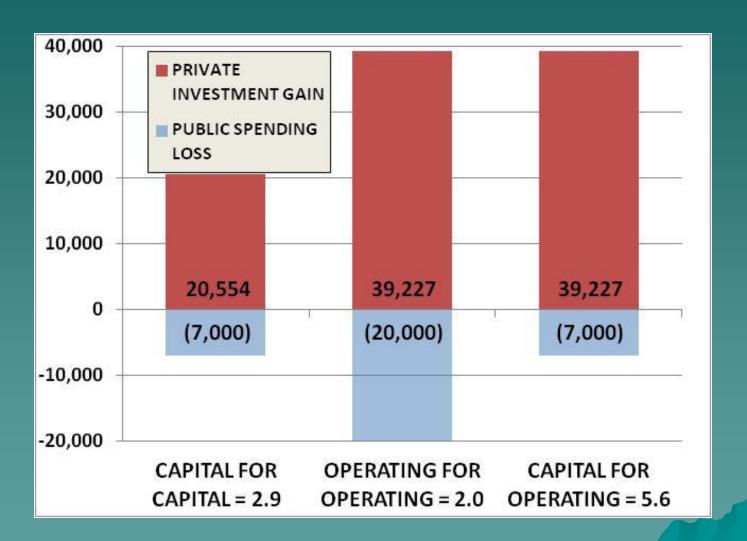


Add 28,790 for grand total of 39,227





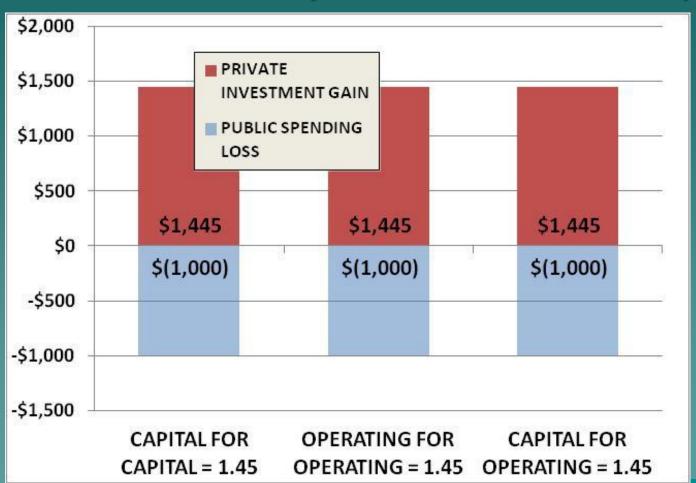
#### Cumulative Jobs Generated







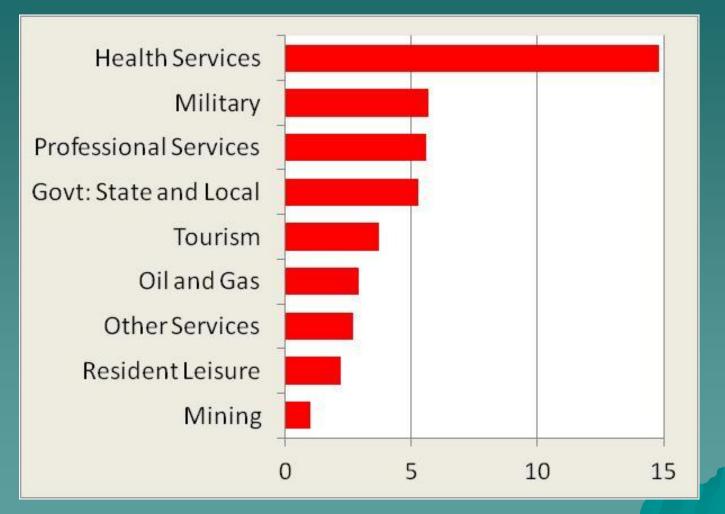
### Cumulative Revenues Generated (Million 2012 \$)







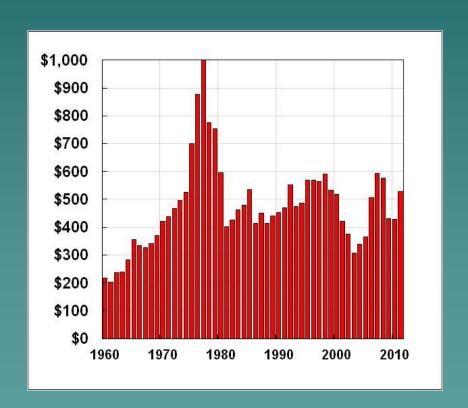
#### Job Growth Since 2001 How Much Due to Govt Investment?

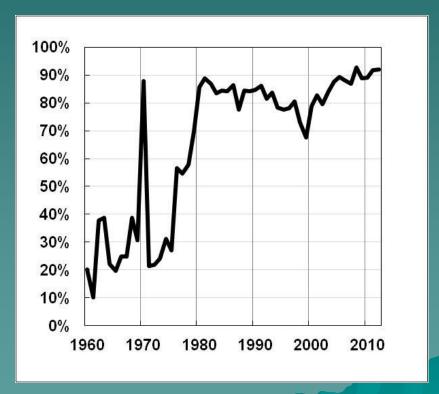






### Progress Toward Fiscal Diversification

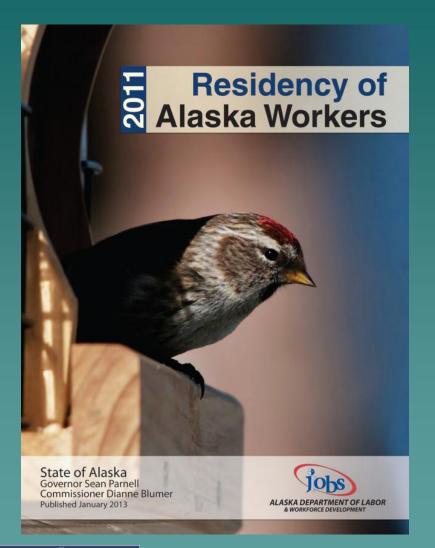








#### Non-Residents?

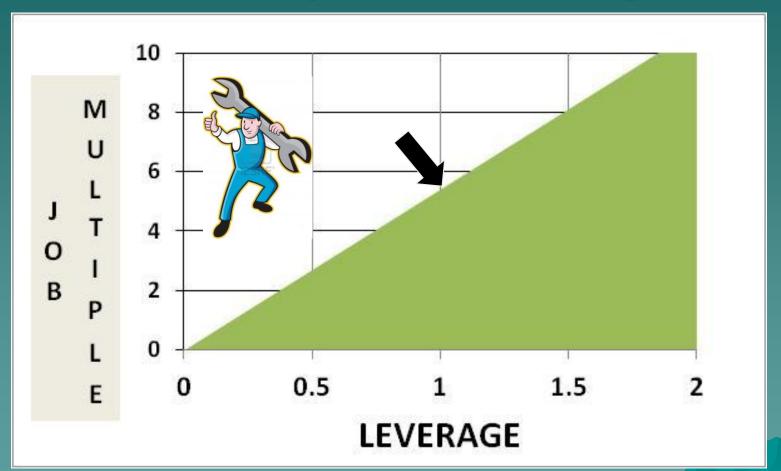


Non-Resident Worker Share	Industry
77	Seafood Processing
42	Visitor (Accomodations)
35	Metal Mining
31	OIL AND GAS
20	Construction
7	State Govt





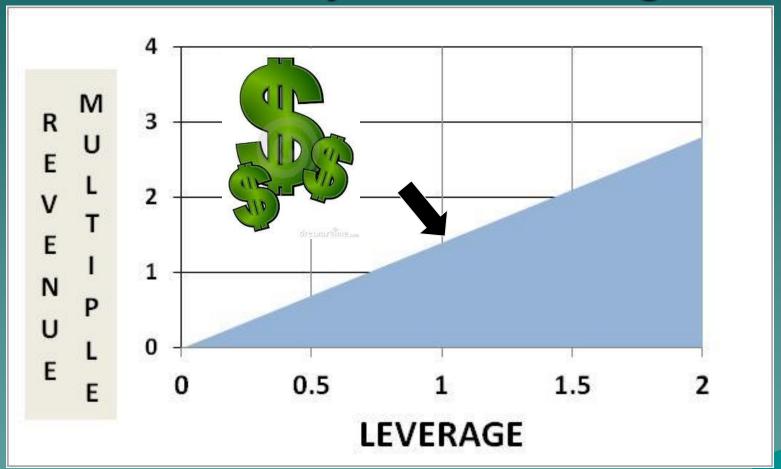
### Jobs Sensitivity to "Leverage"





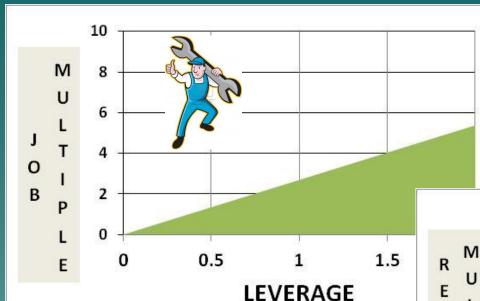


### Revenues: Sensitivity to "Leverage"

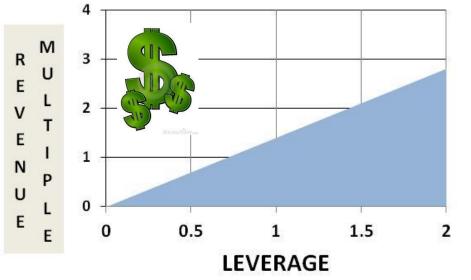




#### Sensitivity to Leverage

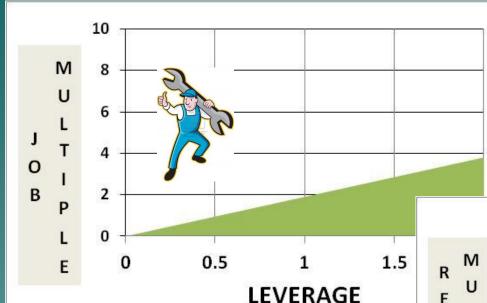


### CAPITAL SPENDING

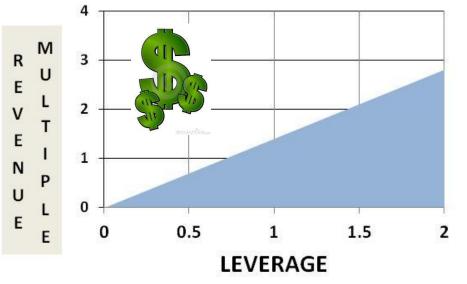




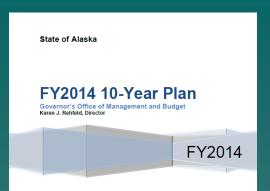
### Sensitivity to Leverage



### OPERATIONS SPENDING

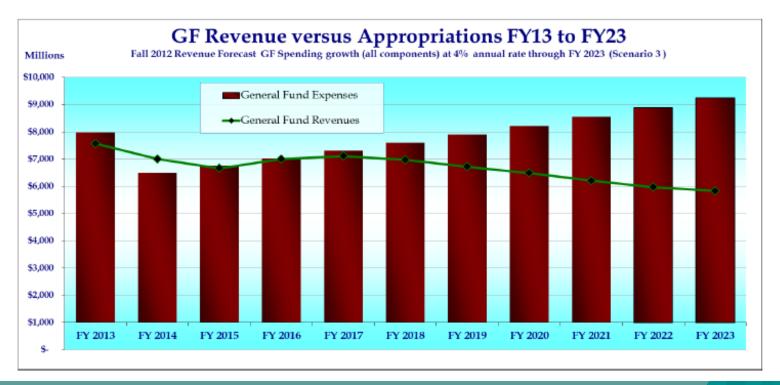




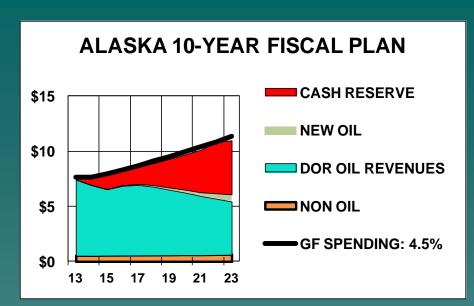


#### State Fiscal Plan

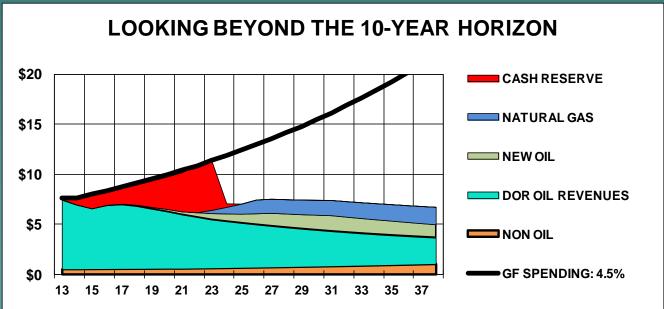
Scenario 3: Governor's FY2014 Budget with 4% Annual GF Expenditure Growth beginning in FY2015





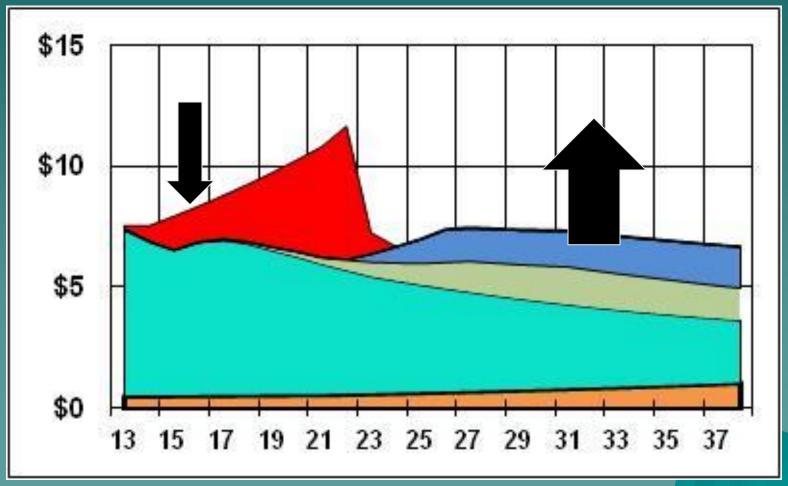


# Looking Beyond 10 Years



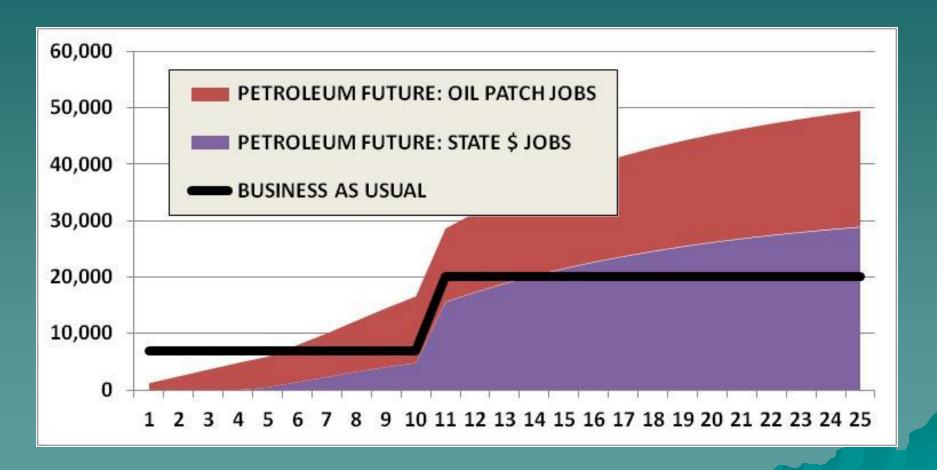


### Move Towards Sustainability





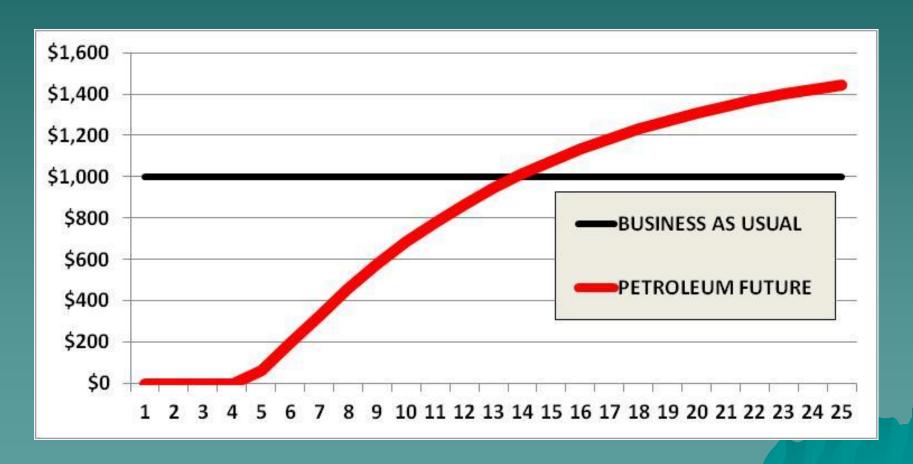
### Continuous Spending for 25 Years: Jobs







### Continuous Spending for 25 Years: Revenue



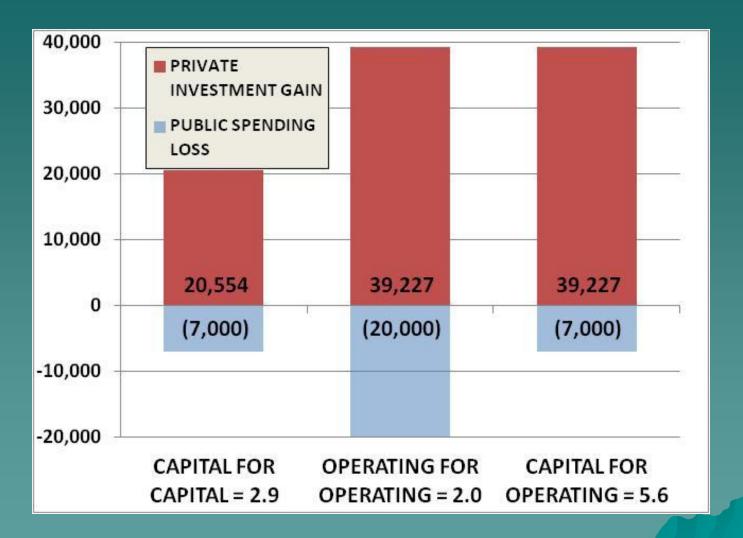




## Non-Petroleum Strategies for Continuing Economic Prosperity

- Natural Resource Development
- Value Added Processing
- Economic Diversification
- Infrastructure Investments in Power and
- Transportation
- Footloose Industry
- Renewable Energy

#### Cumulative Jobs Generated







## Petroleum: Jobs and Revenues

by
Scott Goldsmith
Institute of Social and Economic Research
University of Alaska Anchorage

Alaska State Legislature
House Resources Committee
February 25, 2013
Juneau, Alaska

afosg2@uaa.alaska.edu

Institute of Social and Economic Research
University of Alaska Anchorage