

**01/24/13  
ALASKA'S  
REVENUE  
FORECAST  
FY 14**

<TARGET><BILL></BILL><SUBJECT>01-24-13 ALASKA'S REVENUE  
FORECAST FY 14</SUBJECT><COMM>HFIN28</COMM></TARGET>



# Oil Production Forecast



*Bruce Tangeman, Department of Revenue*

*William C. Barron, Division of Oil and Gas*

*January 24, 2013*



## Statutory Concerns

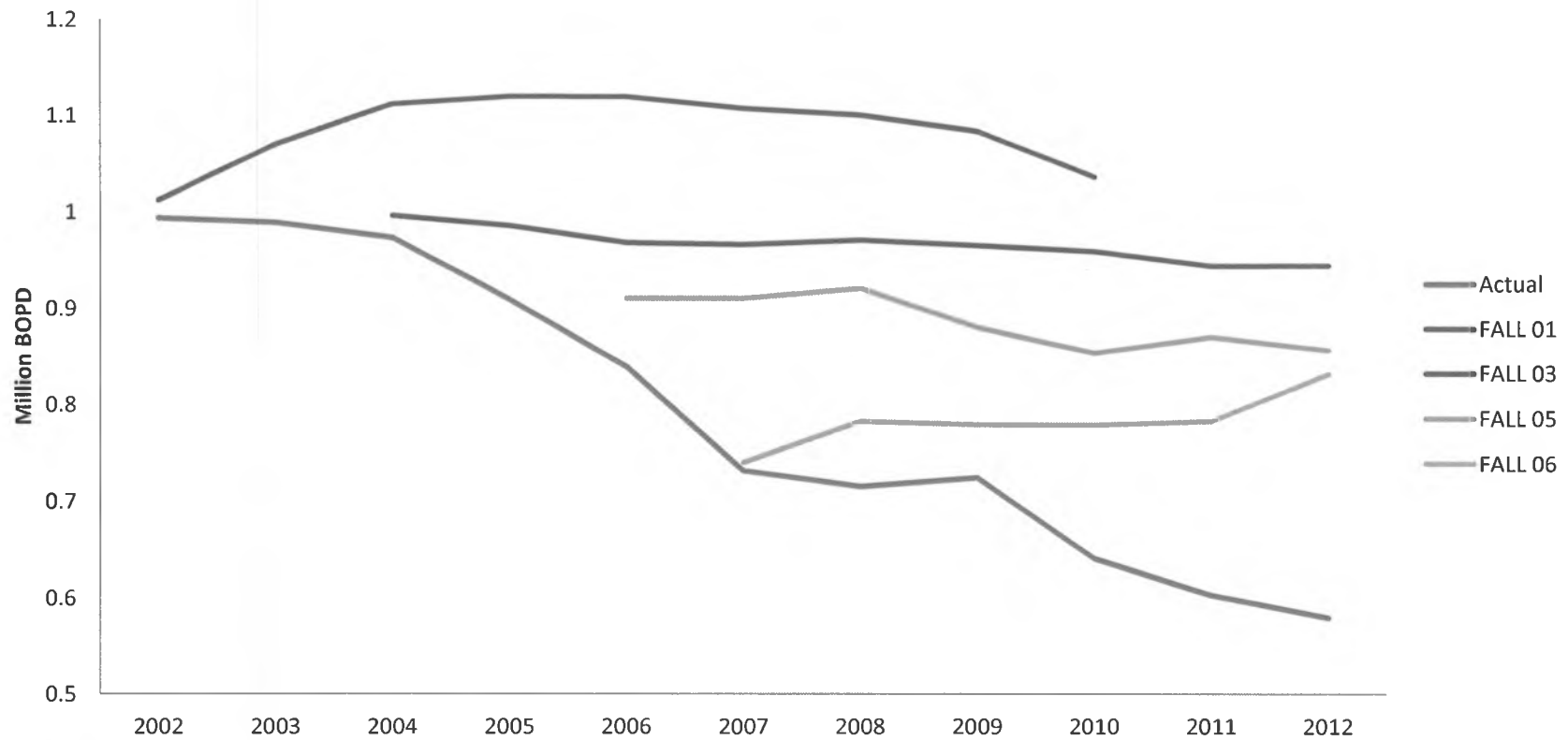
- AS 37.07.020 (b) – *Ten Year Fiscal Plan*.
  - Declares that OMB “must set out **significant assumptions used in the projection with sufficient detail to enable the legislature to rely on the fiscal plan** in understanding, evaluating, and resolving issues of state budgeting,”



# Comparing the Production Forecasts Over Time



## DOR Forecast Examples





## Legislative Direction

### *Request for improved production forecast that better incorporates variables:*

- “Is it possible for the department to come forward with a plan for providing more accountability to the productions forecasts?” ... “I’m looking at a graph, from your department, that shows the forecast, starting in 2001 to 2010, and it seems that the trend is that the department is optimistic in its forecast of the production. I’m wondering if you take into account, relooking at how you are assessing, how you’re figuring out what the forecast will be.”

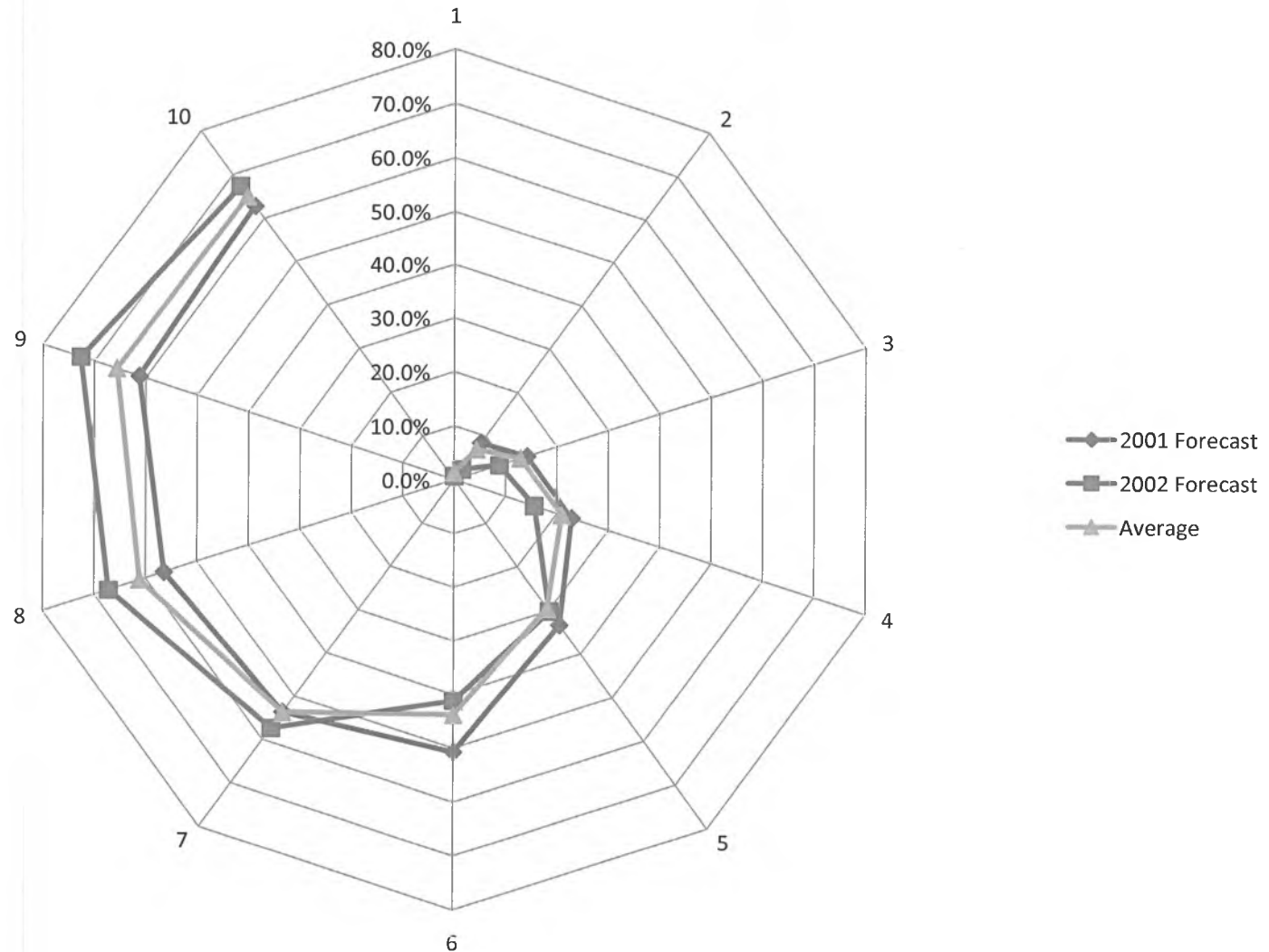
*Rep. Costello, House Finance Committee, February 18, 2011*

- “What I am asking is that I be given something that will give me more confidence that the projections that we see are, not necessarily 100% accurate, but that they have taken into account everything that they can, and we’ve got the best shot we can get.”

*Rep. Doogan, House Finance Committee, February 18, 2011*



# Forecast Errors by Years in Advance being Forecast



1/23/2013

Source: Alaska Department of Revenue Fall Revenue Forecasts ; <http://www.tax.alaska.gov/programs/sourcebook/index.aspx>



## Department of Revenue Response

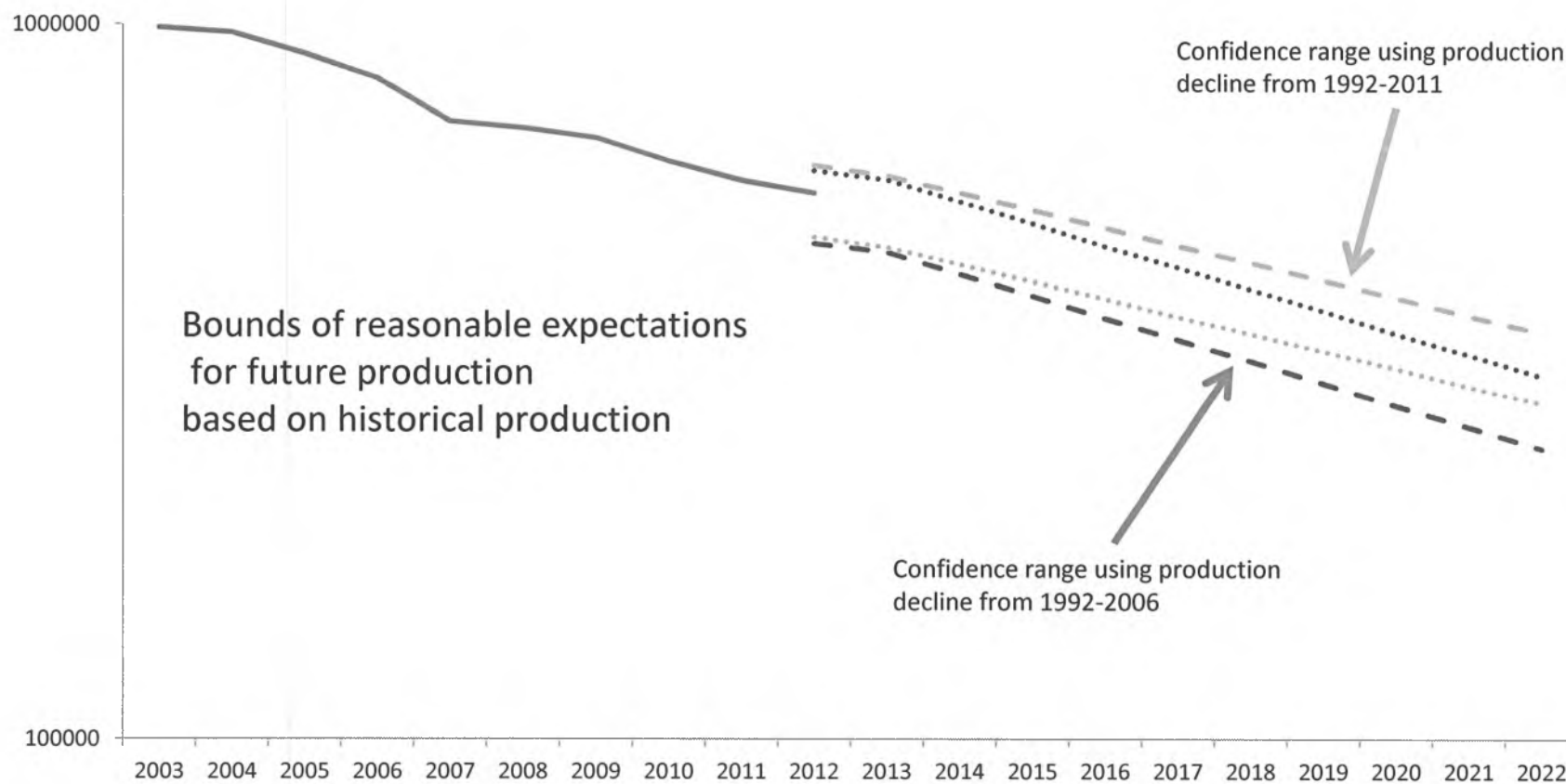


- Addressing consistent over-estimation of production began in 2009.
- In 2012, a DOR team analyzed past forecasts comparing them to actual production.
  - This developed a reasonable range of “confidence bands” for future production.



# Historical Production

## ANS Production





# Components of the Production Forecast

- **Currently Producing (“Old Oil”):**
  - Oil from wells that are in production and following typical reservoir engineering optimization without major investment.
- **Under Development (UD):**
  - Oil from projects that will add incremental oil to existing fields or will bring new fields into production.
  - Project must have senior management approval and be allocated funds in the company’s budget.
- **Under Evaluation (UE):**
  - Oil from projects that are likely to occur in the future, but have not met the requirements of the previous category.
  - Requires that oil reserves are known and recovery is technically possible with current technology.
- ***Under Development + Under Evaluation = “New Oil”***

*\*\*\*These definitions are not equivalent to those used by the Society of Petroleum Engineers (SPE) or Securities & Exchange Commission (SEC) and should not be used as such\*\*\**



## The concept of risk

“**Risk** is the probability of an event occurring and the potential impact of that occurrence”

*Cost Control and Risk Mitigation in Major Projects, Caddy, Fluor Daniel Inc., SPE 1993*

“Good E&P business decisions require assessment of both technical and non-technical risk”

*Assessing Non-Technical Risks in Oil and Gas Exploration and Production, Barker, Steele, Heaton, SPE, 1998.*

“The ability to convey the relative riskiness of various O&G projects in a consistent manner is an elusive and desirable goal.”

*Development and Implementation of an Integrated Risk Assessment Methodology. Cutten, Evoy, Grecu. SPE conference paper 1993*



# Accounting for the Risks Appropriately

- **“Currently Producing”** oil was **not** risked in this forecast
- The **“New Oil”** portion of the forecast was adjusted for these risks starting in FY2015
- The **“Under Evaluation”** portion of the forecast was risked at a greater rate than **“Under Development”**
- **Technical and Non-Technical** risk must be considered



# Risk Factor 1: Delays



Historical predictions of new fields coming on line.

*"Over 35% of projects are over budget and exceed cycle time by over 10%"*

Booze Allen & Hamilton

Years Forward	Number of Predictions	Number Correct	Percent Correct
1 Year	12	12	100%
2 Year	13	10	77%
3 Year	14	4	29%
4 Year	13	3	23%
5 Year	17	4	24%
6 Year	16	0	0%
7 Year	6	1	17%
8 Year	2	0	0%
9 Year	3	0	0%



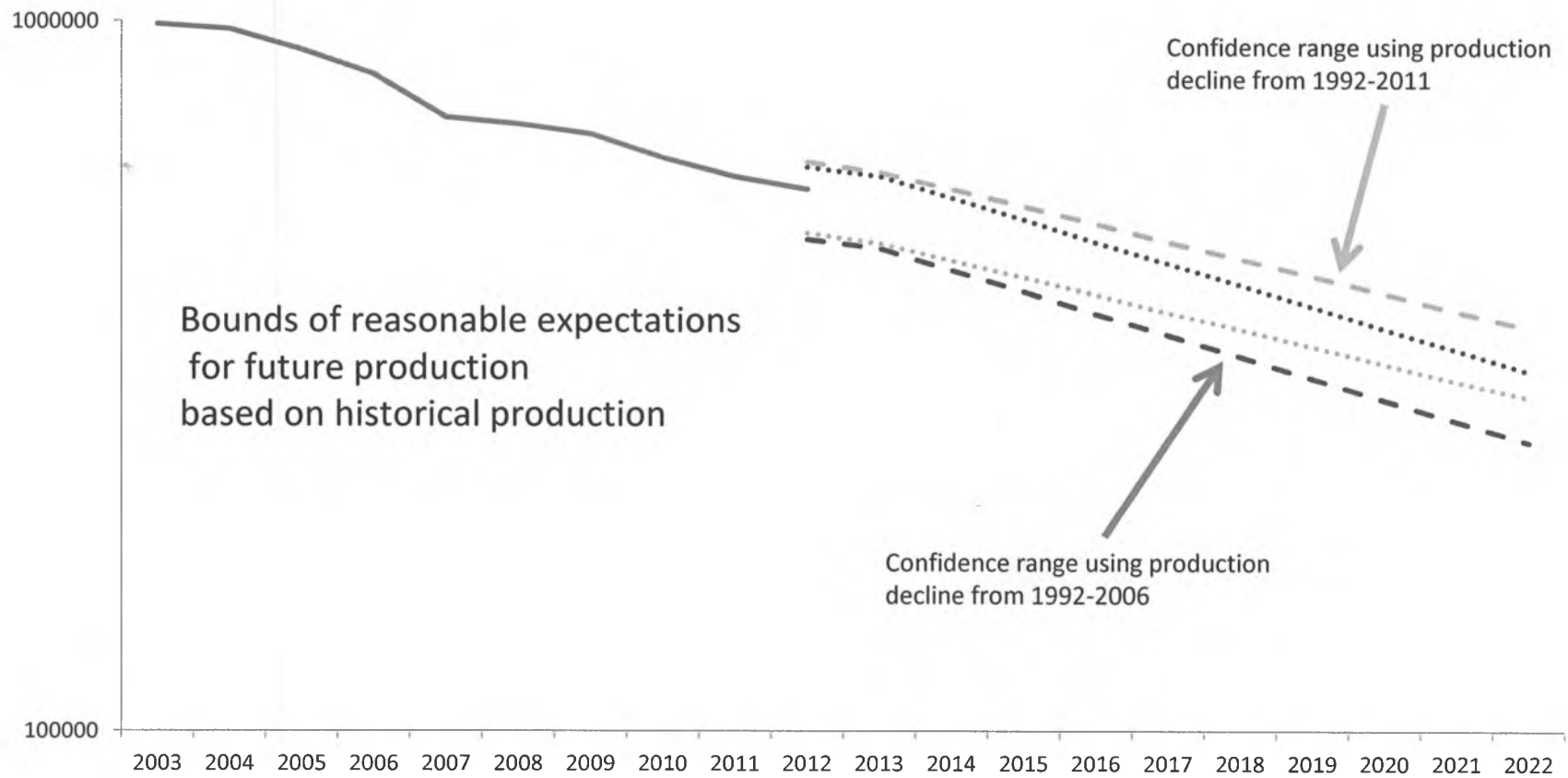
## Risk Factor 2: Performance Deviates from Expectations

Field	Predicted peak production	Reality	Comment
Badami	~30-35K bpd	Peaked at 18K bpd, rapidly declined to ~1,400 bpd	BP shut down production, Savant currently reviving
Aurora	~15-20K bpd	Peaked at ~10,500 bpd	
Polaris Waterflood	~12-15K bpd	Peaked at ~4,750 bpd	
Prudhoe Bay Satellites	~40K bpd	Peaked at ~50 bpd	



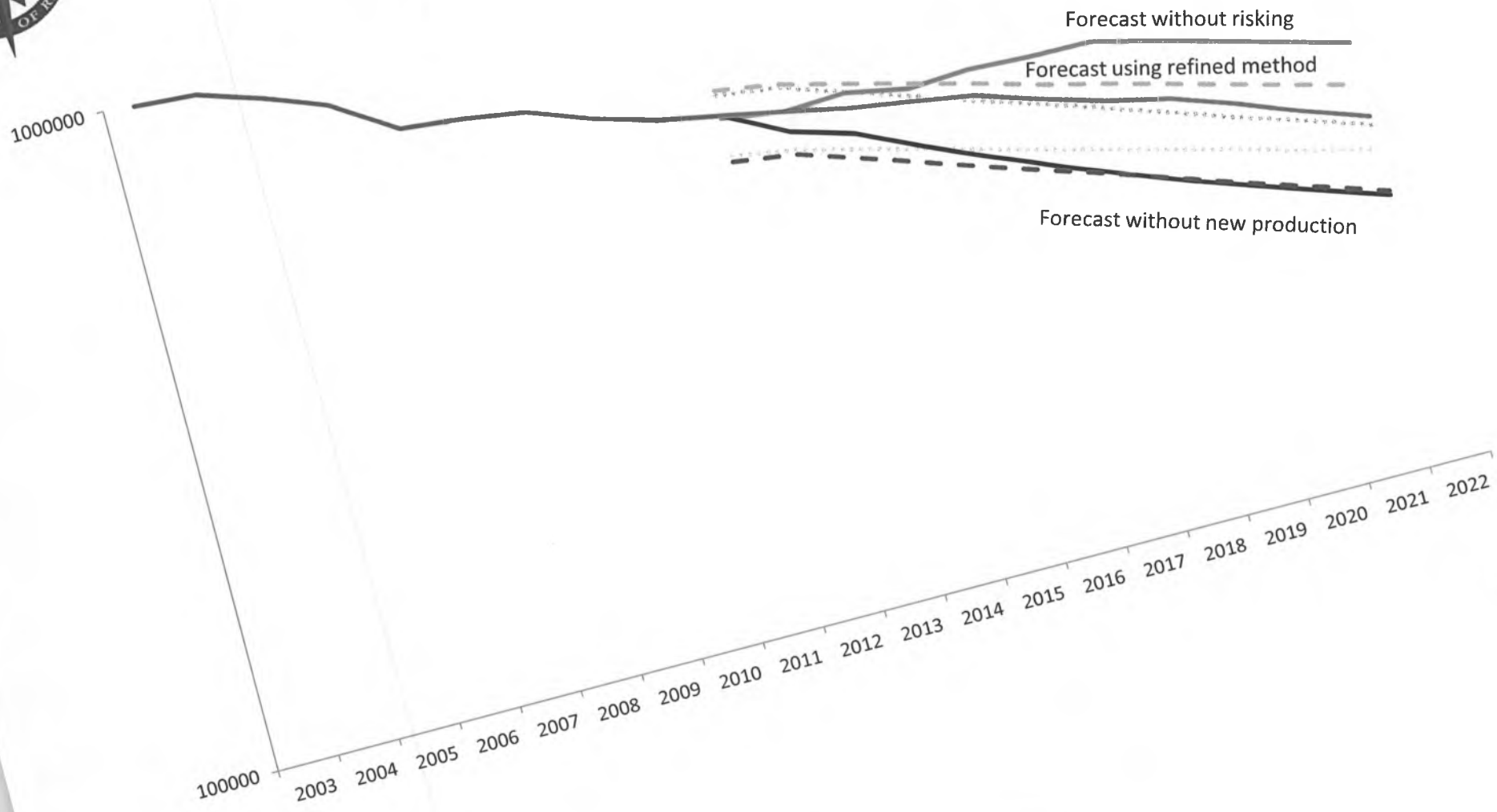
# Historical Production

## ANS Production





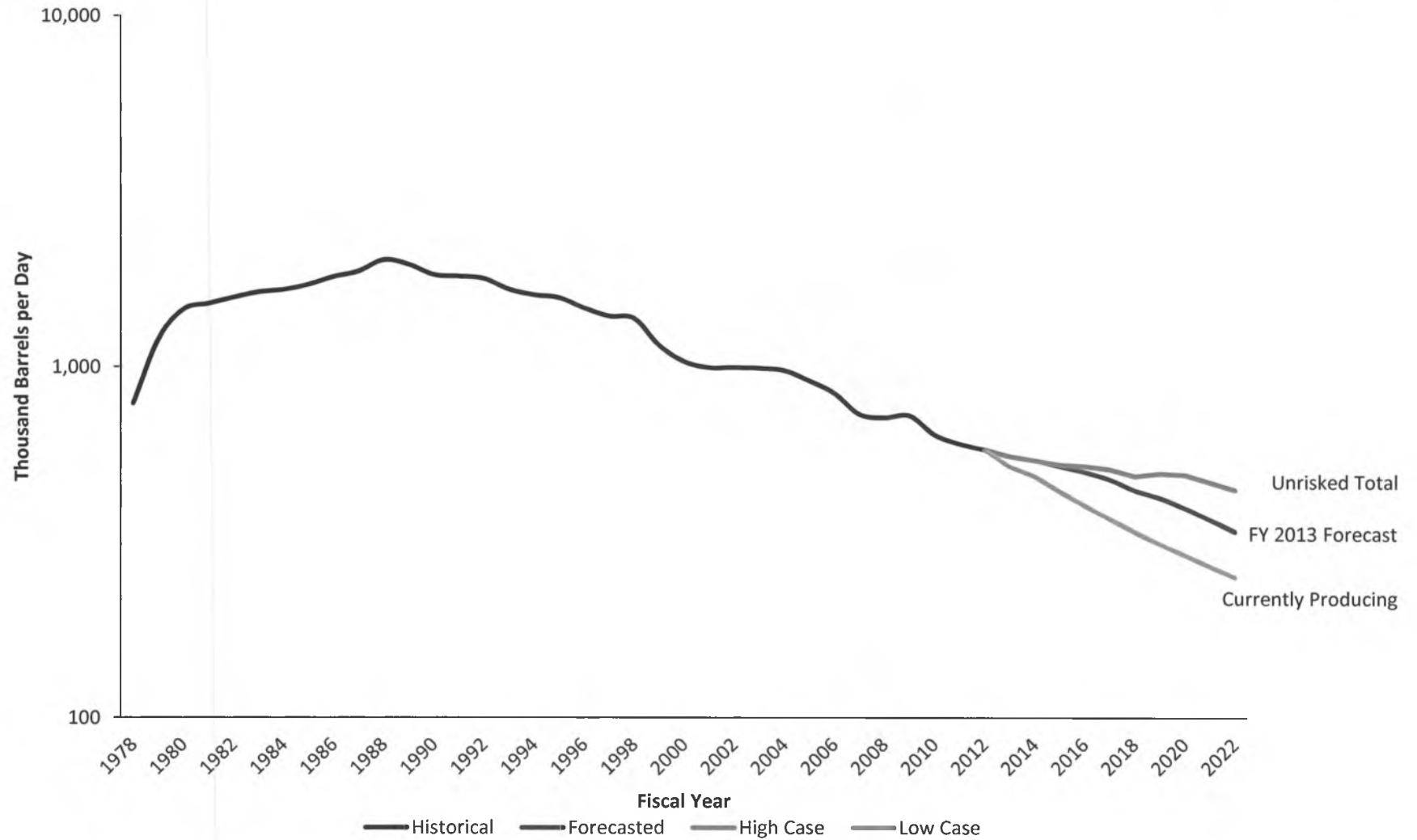
# Applying the refined method



1/23/2013

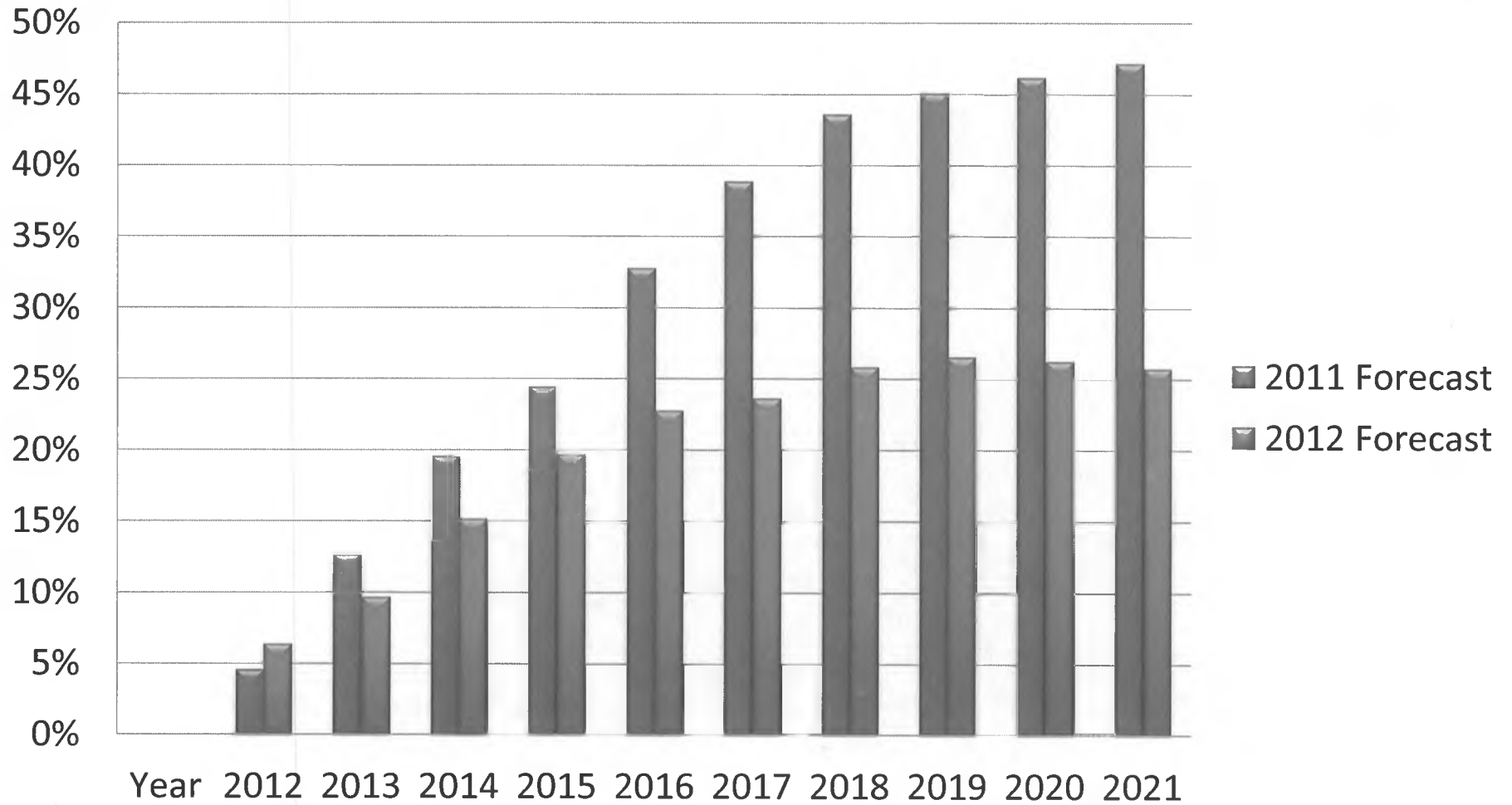


# Applying the refined method



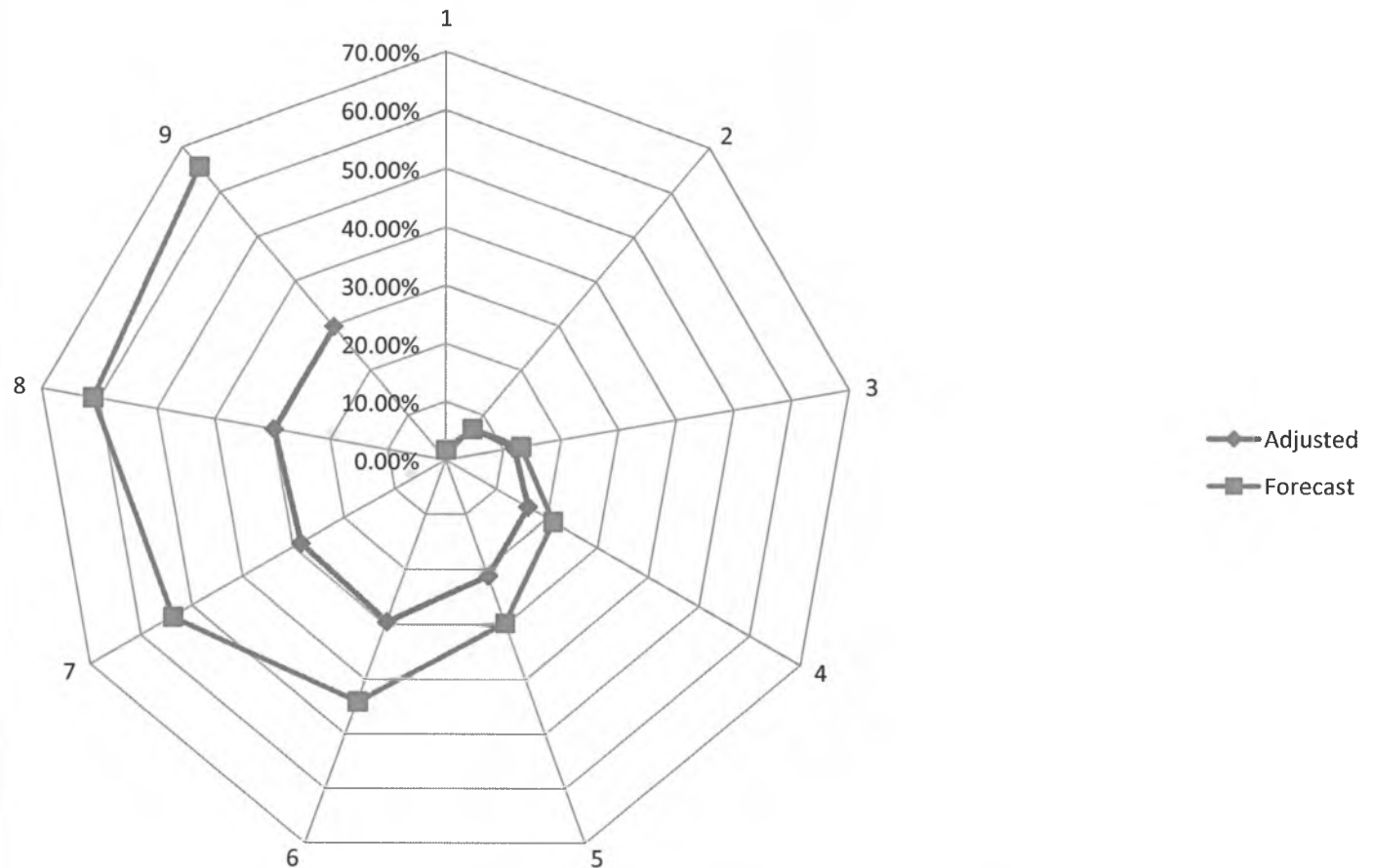


# New Oil share of Total Production





# Testing the refined method





This will be an ongoing process...



...of assessing the risk associated with Under Development and Under Evaluation.

“The ability to convey the relative riskiness of various O&G projects in a consistent manner is an elusive and desirable goal.”

*Development and Implementation of an Integrated Risk Assessment Methodology.* Cutten, Evoy, Grecu. SPE conference paper 1993

1/24/13



---

# State of Alaska

## An Update on the State's Savings Accounts

---

January 24, 2013

Department of Revenue  
Treasury Division

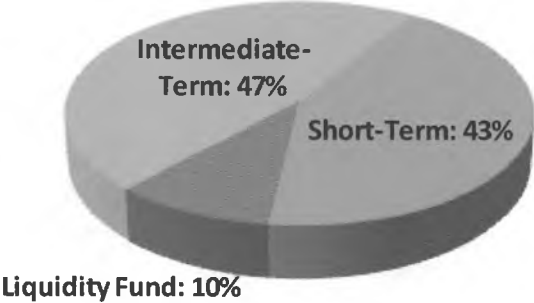
---

# **1: Comparative Analysis of State Operating and Savings Funds**

---

# General Fund and other non segregated investments

Fiduciary oversight: Commissioner of Revenue

		General Fund (and other nonsegregated investments)	
Investment Objective		Moderate Risk, Short to Intermediate investment horizon	
Target Asset Allocation		 <p>Intermediate-Term: 47% Short-Term: 43% Liquidity Fund: 10%</p>	
		Actuals	Benchmark*
Market Value (in 000s)	12/31/2010	\$6,589,600	-
	12/31/2011	\$9,207,700	-
	12/31/2012	\$11,670,000	-
Returns (6/30/12)	FY12	1.52%	1.04%
Returns (12/31/12)	YTD	1.00%	0.49%
	FYTD	0.37%	0.26%
	3 Year Actuals	1.79%	1.39%
	5 Year Actuals	2.60%	2.14%
<b>Projected 10 Year Return</b>		<b>2.87%</b>	

\*Short-term: 3-month U.S. Treasury Bill; Intermediate-term: Barclays 1-3 Year Gov't Bond Index

*Current Fiscal Year market values and stated returns are unaudited, preliminary, and include some estimates*

# Constitutional Budget Reserve Fund (main & sub)

Fiduciary oversight: Commissioner of Revenue

		Constitutional Budget Reserve (main fund)		Constitutional Budget Reserve (sub fund)	
Investment Objective		Moderate Risk, Intermediate investment horizon		High Risk, Moderately Long investment horizon	
Target Asset Allocation					
		Actuals	Benchmark*	Actuals	Benchmark*
Market Value (in 000s)	12/31/2010	\$5,029,000	-	\$4,928,400	-
	12/31/2011	\$5,290,600	-	\$4,955,400	-
	12/31/2012	\$5,770,800	-	\$5,511,200	-
Returns (6/30/12)	FY12	3.22%	2.80%	0.48%	-0.12%
Returns (12/31/12)	YTD	1.91%	1.42%	11.22%	11.05%
	FYTD	0.78%	0.66%	6.18%	6.09%
	3 Year Actuals	3.29%	2.94%	7.57%	7.29%
	5 Year Actuals	3.95%	3.60%	2.64%	2.58%
<b>Projected 10 Year Return</b>		<b>3.01%</b>		<b>6.31%</b>	

\*Short-term: 3-month U.S. Treasury Bill; Intermediate-term: Barclays 1-3 Year Govt. Bond Index; Broad Market: Barclays U.S. Aggregate; Domestic Equity: Russell 3000 Stock Index; International Equity: MSCI EAFE

Current Fiscal Year market values and stated returns are unaudited, preliminary, and include some estimates

# Power Cost Equalization Fund

Fiduciary oversight: Commissioner of Revenue



		Power Cost Equalization Fund	
Investment Objective		High Risk, Moderately Long investment horizon	
Target Asset Allocation		<p>International Equity: 26%</p> <p>Broad Market: 25%</p> <p>Domestic Equity: 49%</p>	
		Actuals	Benchmark*
Market Value (in 000s)	12/31/2010	\$352,600	-
	12/31/2011	\$716,300	-
	12/31/2012	\$787,500	-
Returns (6/30/12)	FY12	1.67%	1.19%
Returns (12/31/12)	YTD	13.70%	12.93%
	FYTD	7.38%	6.80%
	3 Year Actuals	9.00%	8.22%
	5 Year Actuals	3.87%	3.12%
<b>Projected 10 Year Return</b>		<b>7.00%</b>	

\*Broad Market: Barclays U.S. Aggregate; Domestic Equity: Russell 3000 Stock Index; International Equity: MSCI EAFE

Current Fiscal Year market values and stated returns are unaudited, preliminary, and include some estimates

# Public School Trust Fund (Principal and Income accounts)

Fiduciary oversight: Commissioner of Revenue

		Public School Trust Fund (Principal)		Public School Trust Fund (Income)	
Investment Objective		Moderate Risk, Long Term investment horizon		Low Risk, Short investment horizon	
Target Asset Allocation		<p><b>International Equity: 15%</b></p>  <p><b>Domestic Equity: 27%</b>      <b>Broad Market: 58%</b></p>		 <p><b>Short-Term Fixed Income: 100%</b></p>	
		Actuals	Benchmark*	Actuals	Benchmark*
Market Value (in 000s)	12/31/2010	\$407,600	-	\$15,700	-
	12/31/2011	\$433,400	-	\$14,300	-
	12/31/2012	\$487,200	-	\$10,400	-
Returns (6/30/12)	FY12	5.84%	6.29%	0.40%	0.06%
Returns (12/31/12)	YTD	10.71%	10.86%	0.49%	0.11%
	FYTD	4.93%	4.92%	0.19%	0.07%
	3 Year Actuals	9.22%	9.39%	0.46%	0.11%
	5 Year Actuals	5.11%	4.92%	0.89%	0.52%
<b>Projected 10 Year Return</b>		<b>5.59%</b>		<b>2.75%</b>	

\*Short-term: 3-month U.S. Treasury Bill; Broad Market: Barclays U.S. Aggregate; Domestic Equity: Russell 3000 Stock Index

*Current Fiscal Year market values and stated returns are unaudited, preliminary, and include some estimates*

# PERS & TRS

Fiduciary oversight: Alaska Retirement Management Board

## PERS Retirement Defined Benefit Pension / Health

## TRS Retirement Defined Benefit Pension / Health

Investment Objective		Moderate Risk, Long Term investment horizon		Moderate Risk, Long Term investment horizon	
Target Asset Allocation		<ul style="list-style-type: none"> <li>■ 14% Fixed Income</li> <li>■ 27% Domestic Equity</li> <li>■ 23% International / Global Equity</li> <li>■ 16% Real Assets</li> <li>■ 14% Alternatives / Infrastructure</li> <li>■ 6% Cash</li> </ul>		<ul style="list-style-type: none"> <li>■ 14% Fixed Income</li> <li>■ 27% Domestic Equity</li> <li>■ 23% International / Global Equity</li> <li>■ 16% Real Assets</li> <li>■ 14% Alternatives / Infrastructure</li> <li>■ 6% Cash</li> </ul>	
		Actuals	Benchmark*	Actuals	Benchmark*
Market Value (in 000s)	12/31/2010	\$10,901,800	-	\$4,603,700	-
	12/31/2011	\$10,873,100	-	\$4,545,200	-
	12/31/2012	\$12,016,500	-	\$5,018,600	-
Returns (6/30/12)	FY12	0.52%	1.02%	0.59%	1.02%
Returns (12/31/12)	YTD	11.87%	10.03%	11.92%	10.03%
	FYTD	5.63%	4.55%	5.68%	4.55%
	3 Year Actuals	8.06%	8.62%	8.17%	8.62%
	5 Year Actuals	1.53%	2.01%	1.54%	2.01%
<b>Long-Term Actuarial Assumed ROR</b>		<b>8.00%</b>		<b>8.00%</b>	

\*The ARMB Benchmark is a diversified weighted composite comprised of the following indexes by weight: 27.0% Russell 3000; 23.0% MSCI ACWI ex-US; 14.4% Barclays Intermediate Treasury; 9.6% NCREIF Total; 6.0% 3-Month U.S. Treasury Bill+5.0%; 3.2% Barclays U.S. TIPS; 2.7% MSCI EAFE; 2.7% S&P 500; 2.7% Russell 2000; 1.8% Citi WGBI Non-U.S.; 1.8% HiYld II; 1.6% NCREIF Farmland; 1.6% NCREIF Timberland; 2.0% 3-month U.S. Treasury Bill

Current Fiscal Year market values and stated returns are unaudited, preliminary, and include some estimates

# APFC

Fiduciary oversight: Alaska Permanent Fund Corporation Board

Investment Objective		Long Term Investment Goal is to achieve a real rate of return of 5% per year	
Target Asset Allocation		<ul style="list-style-type: none"> <li>■ 36% Stocks</li> <li>■ 20% Bonds</li> <li>■ 12% Real Estate</li> <li>■ 12% PE / Absolute Return</li> <li>■ 4% Infrastructure Investments</li> <li>■ 2% Cash</li> <li>■ 2% Public / Private Credit</li> <li>■ 12% Other</li> </ul>	
		Actuals	Benchmark*
Market Value (in 000s)	12/31/2010	\$38,425,100	-
	12/31/2011	\$38,646,700	-
	12/31/2012	\$43,654,800	-
Returns (6/30/12)	FY12	0.02%	-0.21%
Returns (12/31/12)	YTD	12.58%	13.12%
	FYTD	7.34%	7.37%
	3 Year Actuals	8.15%	7.86%
	5 Year Actuals	2.27%	1.60%
<b>Projected 10 Year Return</b>		<b>7.00%</b>	

\*The APFC Benchmark is a diversified weighted composite comprised of 20% Barclays Global Corp. Index + 80% MSCI All Country Index for Company Exposure; 75% NCREIF + 25% Barclays US TIPS Index for Real Assets; Barclays Global Treasury Index (Hedged) for Fixed Income; and 3 Month T-Bill for Cash.

Current Fiscal Year market values and stated returns are unaudited, preliminary, and include some estimates

---

---

## **2: FY2011 Investment Revenue Forecast**

---

---

## FY2013 Investment Revenue Forecast

All Amounts in \$ Millions

Prepared January 22, 2013 by the State of Alaska - Department of Revenue

FY 2012 Actuals	
	Actual through 06-30-12
<b>UNRESTRICTED</b>	
Investments	104.8
Interest Paid by Others	3.0
<b>TOTAL UNRESTRICTED</b>	<b>107.8</b>
<b>RESTRICTED</b>	
Investments - Designated GF	9.2
Investments - Other Restricted	18.5
<i>CBRF - Main Account</i>	166.7
<i>CBRF - Special Sub Account</i>	24.4
<b>CBRF - Total</b>	<b>191.1</b>
Other Treasury Managed Funds	25.4
Alaska Permanent Fund	(99.9)
<b>TOTAL RESTRICTED</b>	<b>144.3</b>
<b>GRAND TOTAL</b>	<b>252.1</b>

FY 2013 Forecast - Based on actuals through Dec 31, 2012			
	Actual through 12-31-12	Forecast through 06-30-13	Total FY13
<b>UNRESTRICTED</b>			
Investments	33.5	25.1	58.6
Interest Paid by Others	0.5	2.2	2.7
<b>TOTAL UNRESTRICTED</b>	<b>34.0</b>	<b>27.3</b>	<b>61.3</b>
<b>RESTRICTED</b>			
Investments - Designated GF	2.9	2.1	5.0
Investments - Other Restricted	6.0	4.1	10.1
<i>CBRF - Main Account</i>	42.9	26.0	68.9
<i>CBRF - Special Sub Account</i>	320.8	162.3	483.1
<b>CBRF - Total</b>	<b>363.7</b>	<b>188.3</b>	<b>552.0</b>
Other Treasury Managed Funds	22.8	13.1	35.9
Alaska Permanent Fund	2,879.3	N/A*	2,879.3
<b>TOTAL RESTRICTED</b>	<b>3,274.7</b>	<b>207.6</b>	<b>3,482.3</b>
<b>GRAND TOTAL</b>	<b>3,308.7</b>	<b>234.9</b>	<b>3,543.6</b>

### Notes:

FY2013 investment forecasts include actual data through Dec 31, 2012 and projections for the remainder of FY2013.

Due to financial market volatility, forecasts shown are subject to review and adjustment.

\*Please refer to APFC Fund Financial History & Projections as of Dec. 31, 2012 for mid case and quartile projections.

*Current Fiscal Year market values and stated returns are unaudited, preliminary, and include some estimates*



ALASKA STATE LEGISLATURE  
**HOUSE FINANCE COMMITTEE**

State Capitol, Room 519

Rep. Alan Austerman, Co-Chair

Rep. Bill Stoltze, Co-Chair

Thursday, January 24, 2013

1:30 PM

Agenda:

FY14 Governor's Budget Overview:

Department of Education and Early Development

**Alaska's Revenue Forecast, including change in methodology**

Bryan Butcher, Commissioner,

Department of Revenue

Bruce Tangeman, Deputy Commissioner,

Department of Revenue

William Barron, Director, Division of Oil & Gas,

Department of Natural Resources

Angela Rodell, Deputy Commissioner, Treasury Division,

Department of Revenue

1/24/13



*Presentation to the  
House Finance Committee  
January 24, 2013  
Alaska Department of Revenue*



# Outline



- **Fall 2012 Revenue Forecast**
  - Ten-year overview
  - Comparison to Spring 2012 Forecast
  - Total Revenue
  - Unrestricted Revenue
  - Oil and Non-Oil Revenue
- **Components of Production Tax Forecast**
  - Oil Production
  - Oil Price



# Fall 2012 Revenue Forecast



# Price, Production, State General Fund Unrestricted Revenues FY 2012 -2022



	Actual	Forecast				
	2012	2013	2014	2015	2016	2017
ANS WC Oil Price (\$/bbl)	\$112.65	\$108.67	\$109.61	\$111.67	\$114.88	\$116.22
Total ANS Production (State + Federal) (ths bbls/day)	579.1	552.8	538.4	518.6	499.7	476.1
General Fund Unrestricted Revenues (million)	\$9,485	\$7,512	\$7,002	\$6,659	\$6,999	\$7,105

	Forecast					
	2018	2019	2020	2021	2022	
ANS WC Oil Price (\$/bbl)	\$117.16	\$118.29	\$119.74	\$121.42	\$123.34	
Total ANS Production (State + Federal) (ths bbls/day)	442.9	421.6	394.8	365.9	338.5	
General Fund Unrestricted Revenues (million)	\$6,970	\$6,719	\$6,487	\$6,209	5,969	

Source: Fall 2012 Revenue Sources Book



# Comparison

## Fall 2012 forecast with Spring 2012 forecast

### FY 2013

	Spring 2012	Fall 2012	Difference	Change
Oil Price (ANS West Coast per barrel)	\$110.44	\$108.67	(\$1.77)	-1.63%
Avg ANS oil Production (ths barrels/day)	563	553	(10.00)	-1.78%
Unrestricted GF Revenue (million)	\$8,440.10	\$7,511.70	(\$928.40)	-11.00%

### FY 2014

Oil Price (ANS West Coast per barrel)	\$109.12	\$109.61	\$0.49	0.45%
Avg ANS oil Production (ths barrels/day)	567	538	(29.00)	-5.11%
Unrestricted GF Revenue (million)	\$7,680.40	\$7,001.90	(\$678.50)	-8.83%

### Two Year Totals

Two year average price (ANS West Coast per barrel)	\$109.78	\$109.14	(\$0.64)	-0.58%
Two year average production (ths barrels/day)	565	546	(19.50)	-3.45%
Two year unrestricted GF Revenue (million)	\$16,120.50	\$14,513.60	(\$1,606.90)	-9.97%

Sources: Department of Revenue Spring 2012 Revenue Forecast and Fall 2012 Revenue Forecast



# Total Revenue Forecast

FY 12, 13 & 14 (millions \$)



Revenue Type	Actual	Forecast	
	FY 2012	FY 2013	FY 2014
<b>Unrestricted General Fund</b>			
Oil Revenue	\$ 8,857.8	\$ 6,904.0	\$ 6,399.0
Non-Oil Revenue*	\$ 519.6	\$ 541.5	\$ 535.5
Investment Revenue	\$ 107.8	\$ 66.2	\$ 67.5
<b>Total Unrestricted Revenue</b>	<b>\$ 9,485.2</b>	<b>\$ 7,511.7</b>	<b>\$ 7,001.9</b>
<b>Designated General Fund</b>			
Non-Oil Revenue*	\$ 268.2	\$ 311.7	\$ 310.0
Investment Revenue	\$ 34.6	\$ 41.4	\$ 33.7
<b>Subtotal</b>	<b>\$ 302.8</b>	<b>\$ 353.1</b>	<b>\$ 343.7</b>
<b>Other Restricted Revenue</b>			
Oil Revenue	\$ 1,021.7	\$ 1,138.0	\$ 858.4
Non-Oil Revenue*	\$ 184.5	\$ 209.9	\$ 210.8
Investment Revenue	\$ 109.7	\$ 3,286.0	\$ 3,369.5
<b>Subtotal</b>	<b>\$ 1,315.9</b>	<b>\$ 4,633.9</b>	<b>\$ 4,438.7</b>
<b>Federal Revenue</b>			
Oil Revenue	\$ 4.8	\$ 2.7	\$ 2.7
Federal Receipts	\$ 2,455.5	\$ 2,822.7	\$ 2,822.7
<b>Subtotal</b>	<b>\$ 2,460.3</b>	<b>\$ 2,825.4</b>	<b>\$ 2,825.4</b>
<b>Total State Revenue</b>	<b>\$ 13,564.2</b>	<b>\$ 15,324.1</b>	<b>\$ 14,609.7</b>

\*Except federal and investment

Source: Fall 2012 *Revenue Sources Book*

Alaska Department of Revenue



# General Fund Unrestricted Revenue (million \$)



Revenue Type	Actual		Forecast			
	2012	Percent	2013	Percent	2014	Percent
<b>Petroleum Revenue</b>						
Net Royalty (less PF & SF)	\$2,031.7	21.4%	\$1,881.0	25.0%	\$1,914.0	27.3%
Production Tax	\$6,146.1	64.8%	\$4,353.2	58.0%	\$3,778.8	54.0%
Corporate Income Tax	\$568.8	6.0%	\$558.2	7.4%	\$606.9	8.7%
Property Tax	\$111.2	1.2%	\$111.6	1.5%	\$99.3	1.4%
<b>Total Petroleum Revenue</b>	<b>\$8,857.8</b>	<b>93.4%</b>	<b>\$6,904.0</b>	<b>91.9%</b>	<b>\$6,399.0</b>	<b>91.4%</b>
<b>Non-petroleum Revenue</b>	<b>\$627.4</b>	<b>6.6%</b>	<b>\$607.7</b>	<b>8.1%</b>	<b>\$602.9</b>	<b>8.6%</b>
<b>Total Revenue</b>	<b>\$9,485.2</b>	<b>100.0%</b>	<b>\$7,511.7</b>	<b>100.0%</b>	<b>\$7,001.9</b>	<b>100.0%</b>

NOTE: This presentation only includes the portion of revenue that is included in the "Unrestricted General Fund" category.

\*Other includes Charges for Services, Fines and Forfeitures, Licenses & Permits, Rents & Royalties, and Miscellaneous.

Source: Fall 2012 Revenue Sources Book



# Unrestricted Non-Oil Revenue

(million \$)



Revenue Type	2012		2013		2014	
	Revenue	% Total	Revenue	% Total	Revenue	% Total
<b>Taxes</b>						
Corporate Income	\$98.5	15.7%	\$111.2	18.3%	\$113.7	18.9%
Mining License Tax	\$40.7	6.5%	\$58.3	9.6%	\$64.0	10.6%
Insurance Premium	\$54.8	8.7%	\$57.9	9.5%	\$58.8	9.8%
Tobacco	\$45.6	7.3%	\$45.7	7.5%	\$45.8	7.6%
Motor Fuel	\$40.9	6.5%	\$40.7	6.7%	\$40.6	6.7%
Other Taxes	<u>\$70.0</u>	11.2%	<u>\$65.5</u>	10.8%	<u>\$66.9</u>	11.1%
<b>Subtotal Taxes</b>	<b>\$350.5</b>	55.9%	<b>\$379.3</b>	62.4%	<b>\$389.8</b>	64.6%
<b>Investments</b>	<b>\$107.8</b>	17.2%	<b>\$66.2</b>	10.9%	<b>\$67.5</b>	11.2%
<b>Other *</b>	<b><u>\$169.1</u></b>	27.0%	<b><u>\$162.2</u></b>	26.7%	<b><u>\$145.7</u></b>	24.2%
<b>Total Non-Oil</b>	<b>\$627.4</b>	100.0%	<b>\$607.7</b>	100.0%	<b>\$603.0</b>	100.0%

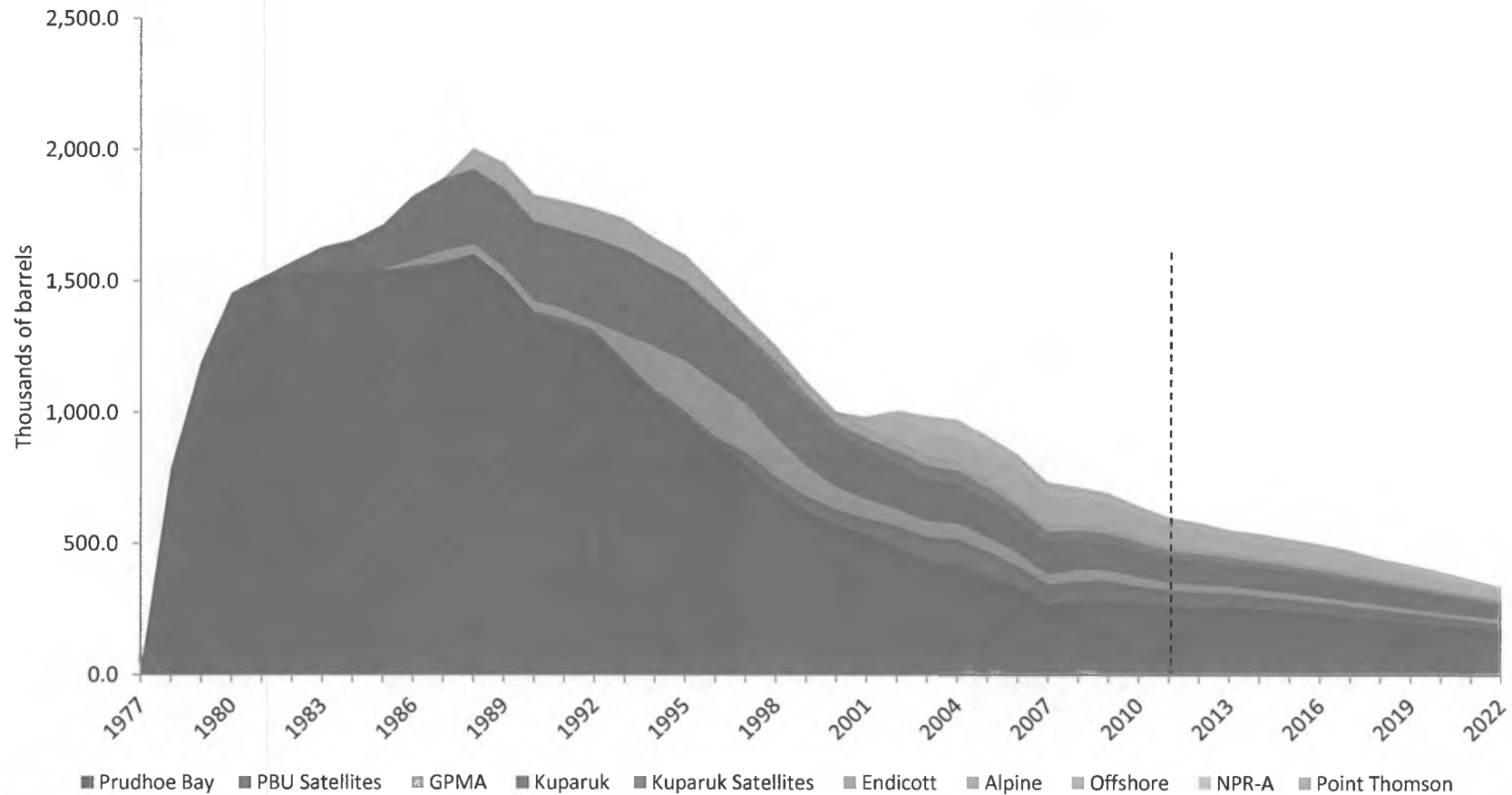
NOTE: This presentation only includes the portion of revenue that is included in the "Unrestricted General Fund" category.

\*Other includes Charges for Services, Fines and Forfeitures, Licenses & Permits, Rents & Royalties, and Miscellaneous.

Source: Fall 2012 Revenue Sources Book



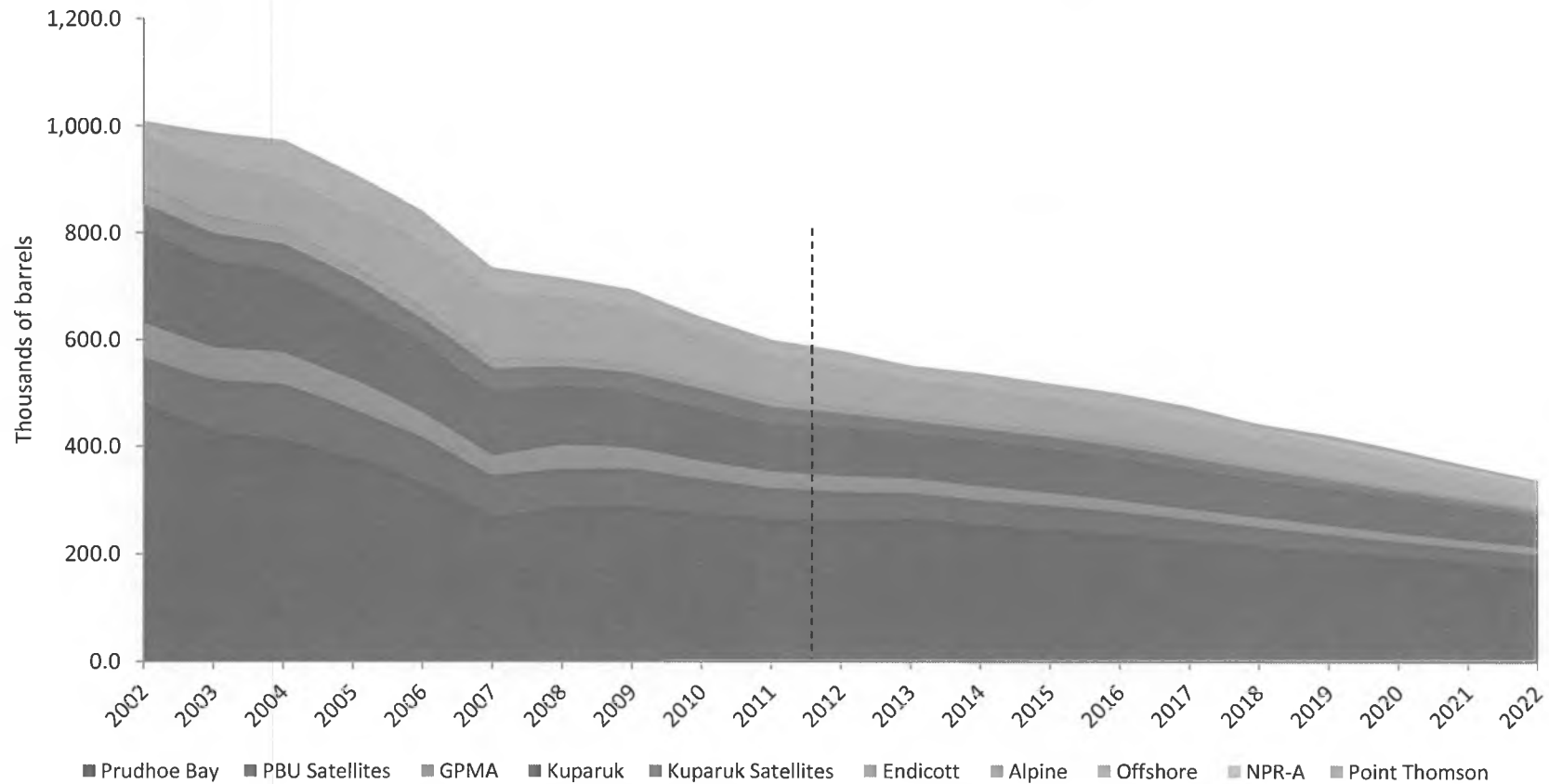
# Production History and Forecast



Source: Alaska Department of Revenue Fall 2012 Revenue Sources Book: <http://www.tax.alaska.gov/programs/documentviewer/viewer.aspx?2682f>



# Production History and Forecast



Source: Alaska Department of Revenue Fall 2012 Revenue Sources Book: <http://www.tax.alaska.gov/programs/documentviewer/viewer.aspx?2682f>



# Fall 2012 Oil Price Forecast



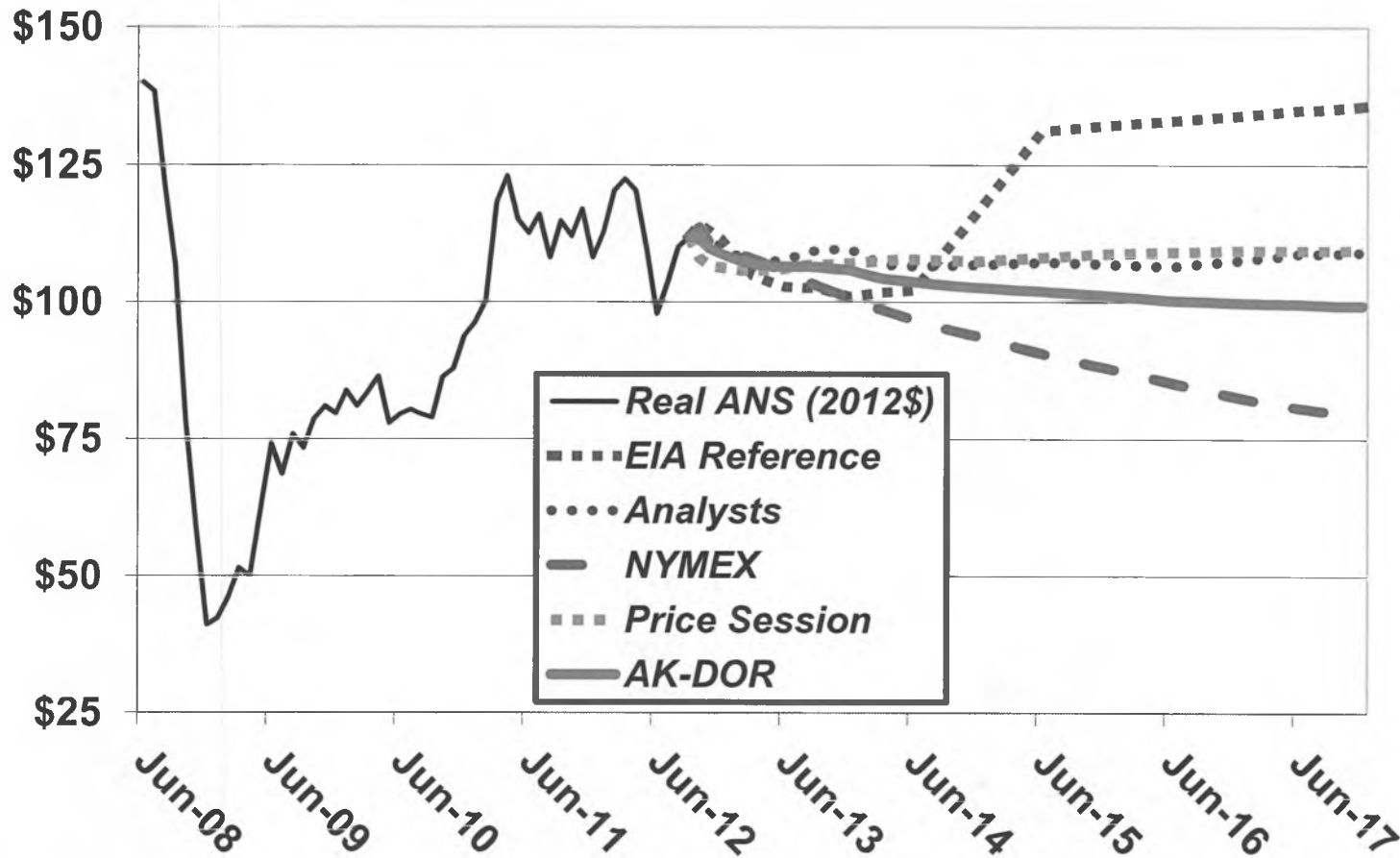
# Price Forecast Methodology



- **Four components to price forecast**
  - DOR oil price forecast session October 2, 2012 with 31 participants from DOR, DNR, DOL, OMB, University, Legislative Finance and outside participants
    - Consider supply, demand, geopolitics, financial markets, outside expert forecasts, etc.
    - Asked to forecast Alaska North Slope (ANS) crude price directly, not to forecast West Texas Intermediate and adjust, as in previous years, due to widening differential of ANS to WTI.
  - Energy Information Agency (EIA) forecast
  - New York Mercantile Exchange (NYMEX) – futures market
  - Analyst forecast
- Forecast is an average of DOR participant forecast from Forecasting Session “blended” (averaged) equally with NYMEX, EIA, and analysts to derive price forecast.



# Price Forecasts as of October 2012



Note: All estimates are for ANS prices, some were converted by Department of Revenue from WTI to ANS.  
Sources: DOR, Bloomberg, NYMEX, Energy Information Agency



# General Fund Unrestricted Revenue Price Sensitivity FY 2013-2015



Year	2013	2014	2015
<b>Production</b> (ths bbls/day)	552.8	538.4	518.6
<b>Forecast Price</b>	\$108.67	\$109.61	\$111.67
<b>Revenue</b> (million \$)	\$7,512	\$7,002	\$6,659

<b>ANS (\$/barrel)</b>	<b>GF Unrestricted Revenue (Million \$)</b>		
\$50	\$2,860	\$1,850	\$1,870
\$60	\$3,190	\$2,300	\$2,090
\$70	\$3,520	\$2,940	\$2,670
\$80	\$4,210	\$3,830	\$3,420
\$90	\$5,160	\$4,880	\$4,270
\$100	\$6,360	\$5,960	\$5,250
\$110	\$7,670	\$7,060	\$6,450
\$120	\$9,140	\$8,480	\$7,780
\$130	\$10,640	\$10,040	\$9,230
\$140	\$11,990	\$11,570	\$10,800
\$150	\$13,400	\$12,830	\$12,010



# The End Questions?