

ALASKA LEGISLATURE

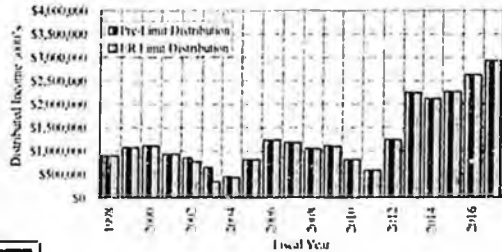
1881

HOUSE and SENATE FINANCE COMMITTEE FILES, 1999 - 2000

32

Distributed Income Scenario #28 - (Introducing Risk)

Distributed Income, Pre and Post Earnings Reserve Limitation

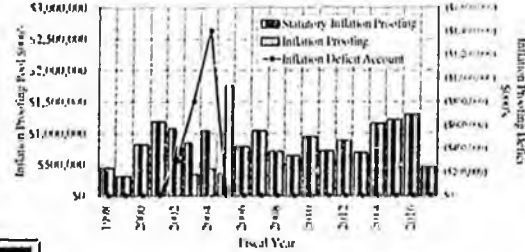


CAI

13

Inflation-proofing to Principal Scenario #28 - (Introducing Risk)

Statutory vs Actual Inflation Proofing



CAI

11

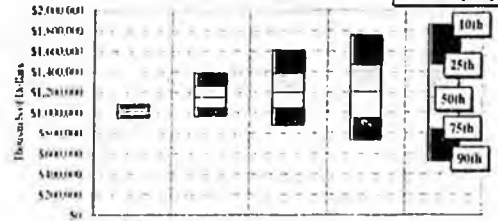
[Demo Model]

CAI

15

Distributed Income Base Case - Range of Results

Distributed Earnings



CAI

16

Applying the Model

Comparing the Status Quo to three variations on a Market-Value-Based Distribution Rule.

CAI

17

Base Case

- Actual results through December 1998.
- No appropriation from ER in FY 1999.
- 1999 Callan capital market assumptions.
- Asset Allocation: 48% Equity.
- Distributed Income: status quo.
- Inflation-Proofing: status quo.
- Earnings Reserve limitation: status quo.

CAI

18

Percent of Market Value - 4.5% Distribution

- Actual results through December 1998.
- No appropriation from ER in FY 1999.
- 1999 Callan capital market assumptions.
- Asset Allocation: 48% Equity.
- Distributed Income: 4.5% of 5-year average market value.
- Inflation-Proofing: status quo.
- Earnings Reserve limitation: status quo.



Percent of Market Value - 4.5% Distribution Inflation-Proofing stays in Earnings Reserve

- Actual results through December 1998.
- No appropriation from ER in FY 1999.
- 1999 Callan capital market assumptions.
- Asset Allocation: 48% Equity.
- Distributed Income: 4.5% of 5-year average market value.
- Inflation-Proofing: stays in Earnings Reserve.
- Earnings Reserve limitation: status quo.



Percent of Market Value - 5.5% Distribution Inflation-Proofing stays in Earnings Reserve

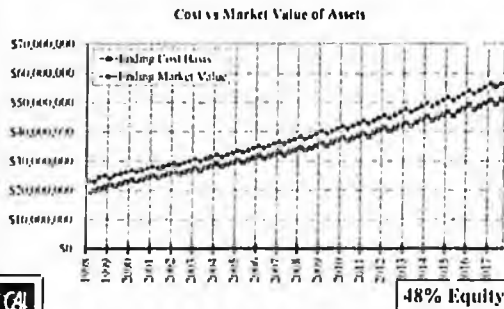
- Actual results through December 1998.
- No appropriation from ER in FY 1999.
- 1999 Callan capital market assumptions.
- Asset Allocation: 68% Equity.
- Distributed Income: 5.5% of 5-year average market value.
- Inflation-Proofing: stays in Earnings Reserve.
- Earnings Reserve limitation: status quo.



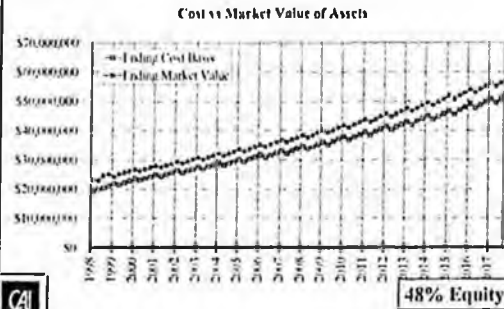
Fund Value Base - Median Results



Fund Value 4.5 % of MV - Median Results



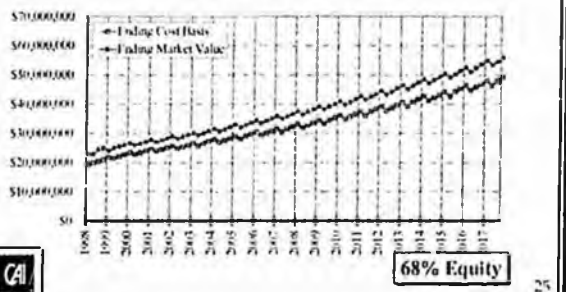
Fund Value 4.5 % of MV, IP in ER - Median Results



Fund Value

5.5 % of MV, IP in ER - Median Results

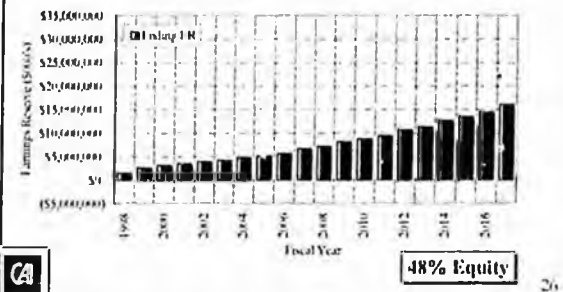
Cost vs Market Value of Assets



Reserve Account

Base Case - Median Results

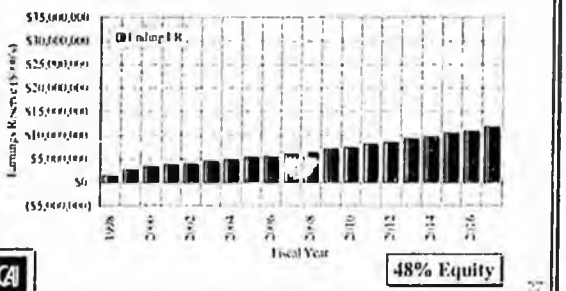
Earnings Reserve Account - Ending Balance



Reserve Account

4.5 % of MV - Median Results

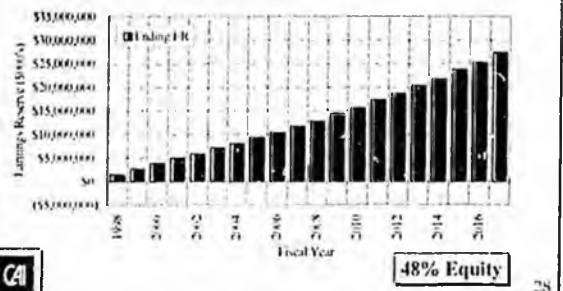
Earnings Reserve Account - Ending Balance



Reserve Account

4.5 % of MV, IP in ER - Median Results

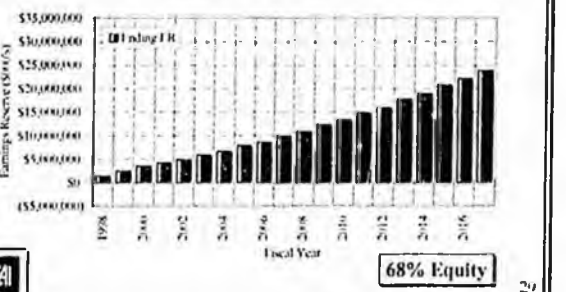
Earnings Reserve Account - Ending Balance



Reserve Account

5.5 % of MV, IP in ER - Median Results

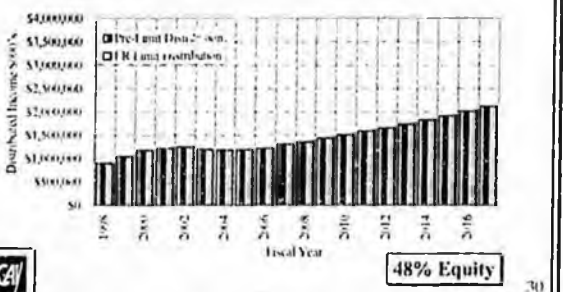
Earnings Reserve Account - Ending Balance



Distributed Income

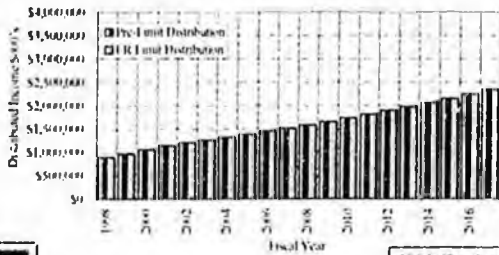
Base Case - Median Results

Distributed Income, Pre and Post Earnings Reserve Limitation



Distributed Income 4.5% of MV - Median Results

Distributed Income, Pre and Post Earnings Reserve Limitation

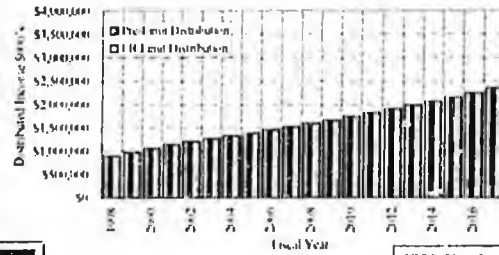


48% Equity

31

Distributed Income 4.5% of MV, IP in ER - Median Results

Distributed Income, Pre and Post Earnings Reserve Limitation



48% Equity

32

Distributed Income 5.5% of MV, IP in ER - Median Results

Distributed Income, Pre and Post Earnings Reserve Limitation

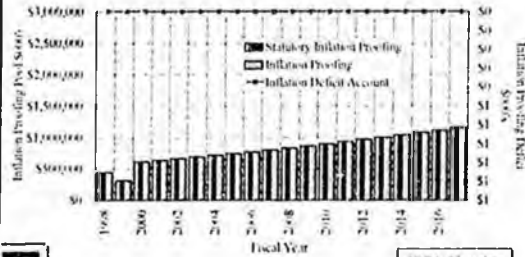


68% Equity

33

Inflation-proofing to Principal Base - Median Results

Statutory vs Actual Inflation Proofing

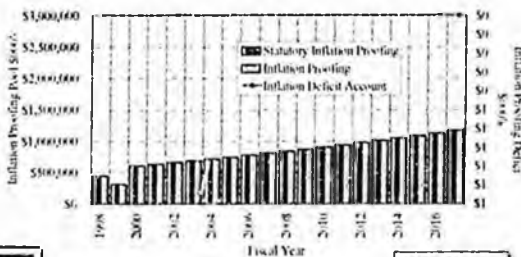


48% Equity

34

Inflation-proofing to Principal 4.5% of MV - Median Results

Statutory vs Actual Inflation Proofing

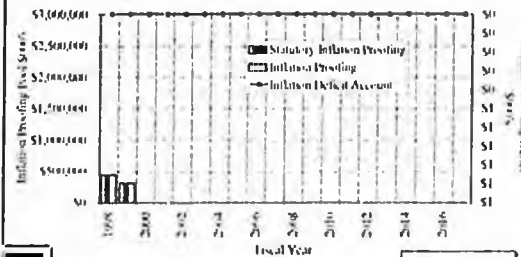


48% Equity

35

Inflation-proofing to Principal 4.5% of MV, IP in ER - Median Results

Statutory vs Actual Inflation Proofing

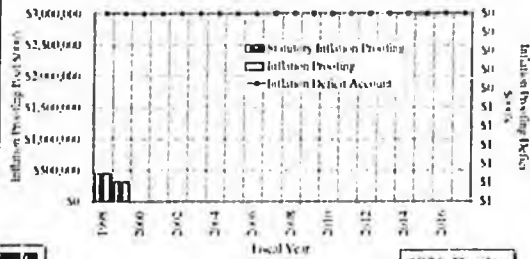


48% Equity

36

Inflation-proofing to Principal 5.5 % of MV, IP in ER - Median Results

Statutory vs Actual Inflation Proofing



68% Equity

37

Fund Value Base Case - Range of Results

Ending Market Value

48% Equity



	1999	2000	2001	2002	2003
10%	\$28,472,077	\$31,015,780	\$34,451,719	\$38,080,054	\$41,814,326
25%	\$27,352,314	\$29,423,436	\$31,473,226	\$33,166,006	\$33,122,089
50%	\$25,655,515	\$27,423,487	\$29,460,085	\$28,082,209	\$25,502,406
75%	\$24,701,786	\$25,162,442	\$25,136,085	\$25,431,501	\$25,700,124
90%	\$23,818,241	\$23,463,039	\$23,016,066	\$22,223,001	\$22,048,818



38

Fund Value 4.5 % of MV - Range of Results

Ending Market Value

48% Equity



	1999	2000	2001	2002	2003
10%	\$28,499,522	\$31,216,220	\$35,183,363	\$37,314,996	\$38,645,776
25%	\$27,354,575	\$29,132,250	\$31,080,040	\$31,667,776	\$31,740,520
50%	\$25,663,233	\$27,406,628	\$28,669,831	\$28,922,041	\$29,362,931
75%	\$24,730,891	\$25,207,018	\$25,480,412	\$25,644,332	\$25,910,664
90%	\$23,818,241	\$23,438,533	\$23,016,022	\$22,730,000	\$22,600,448

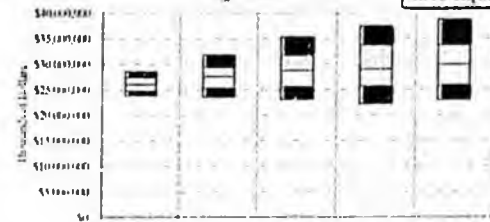


39

Fund Value 4.5 % of MV, IP in ER - Range of Results

Ending Market Value

48% Equity



	1999	2000	2001	2002	2003
10%	\$28,491,252	\$31,216,220	\$35,181,033	\$37,314,996	\$38,645,776
25%	\$27,354,575	\$29,132,250	\$31,080,040	\$31,667,776	\$31,740,520
50%	\$25,663,233	\$27,406,628	\$28,669,831	\$28,922,041	\$29,362,931
75%	\$24,730,891	\$25,207,018	\$25,480,412	\$25,644,332	\$25,910,664
90%	\$23,818,241	\$23,438,533	\$23,016,022	\$22,730,000	\$22,600,448



40

Fund Value 5.5 % of MV, IP in ER - Range of Results

Ending Market Value

68% Equity



	1999	2000	2001	2002	2003
10%	\$28,499,525	\$31,497,163	\$35,183,279	\$37,956,788	\$41,173,723
25%	\$27,354,536	\$29,112,003	\$31,325,333	\$33,668,211	\$35,556,374
50%	\$25,655,218	\$27,293,515	\$28,208,098	\$28,411,014	\$29,308,667
75%	\$24,730,860	\$25,026,576	\$25,180,668	\$24,842,592	\$24,600,020
90%	\$23,818,229	\$23,307,830	\$23,101,389	\$23,100,755	\$23,202,117



41

Earnings Reserve Balance Base Case - Range of Results

Ending Earnings Reserve Balance

48% Equity



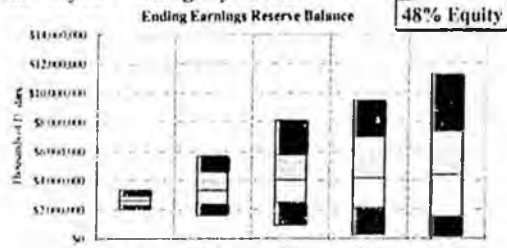
	1999	2000	2001	2002	2003
10%	\$1,180,124	\$5,201,014	\$7,152,000	\$8,447,301	\$9,662,154
25%	\$2,811,879	\$4,207,042	\$5,185,304	\$6,110,343	\$6,506,736
50%	\$2,535,535	\$3,696,830	\$3,710,308	\$3,652,241	\$3,927,740
75%	\$2,220,589	\$2,232,662	\$2,227,044	\$1,990,013	\$1,666,911
90%	\$2,012,646	\$1,581,822	\$851,308	\$0	\$0



42

Earnings Reserve Balance

-1.5 % of MV - Range of Results

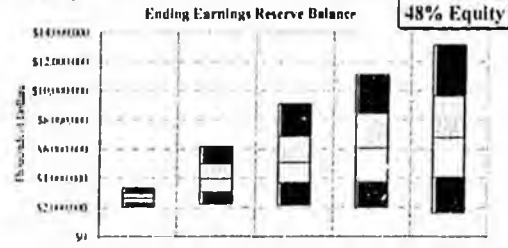


	1999	2000	2001	2002	2003
10%	\$3,327,316	\$3,664,227	\$8,080,935	\$9,487,652	\$11,239,928
25%	\$2,944,914	\$4,579,640	\$5,790,364	\$6,987,266	\$7,342,925
50%	\$2,740,896	\$3,297,809	\$4,183,527	\$4,133,944	\$4,367,698
75%	\$2,318,840	\$2,338,442	\$2,482,777	\$2,919,889	\$1,472,918
90%	\$1,031,145	\$1,097,079	\$14,833	\$21,311	...

CAI

Earnings Reserve Balance

4.5 % of MV, IP in ER - Range of Results

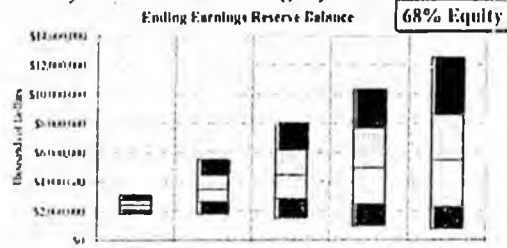


	1999	2000	2001	2002	2003
10%	\$3,327,316	\$6,144,011	\$9,080,814	\$11,666,602	\$11,134,759
25%	\$2,944,914	\$3,952,413	\$6,873,611	\$8,493,327	\$9,655,312
50%	\$2,740,896	\$3,919,943	\$3,976,612	\$6,048,118	\$6,784,366
75%	\$2,318,840	\$3,031,284	\$3,711,610	\$3,751,172	\$4,066,233
90%	\$1,031,145	\$2,236,294	\$2,133,406	\$2,650,027	\$1,634,928

CAI

Earnings Reserve Balance

5.5 % of MV, IP in ER - Range of Results

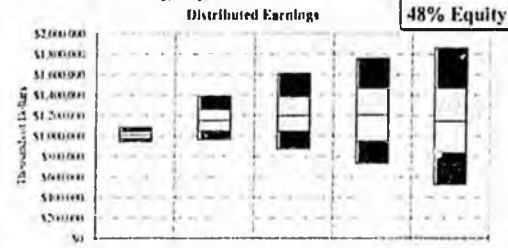


	1999	2000	2001	2002	2003
10%	\$1,111,366	\$5,402,640	\$8,042,186	\$10,295,514	\$12,403,442
25%	\$2,332,159	\$4,407,284	\$6,177,015	\$7,683,036	\$8,584,021
50%	\$2,102,215	\$3,472,784	\$4,442,805	\$4,944,874	\$5,455,977
75%	\$2,110,461	\$2,643,843	\$2,830,674	\$2,476,319	\$2,299,971
90%	\$1,226,044	\$1,802,637	\$1,563,634	\$2,78,965	\$2,80,937

CAI

Distributed Income

Base Case - Range of Results

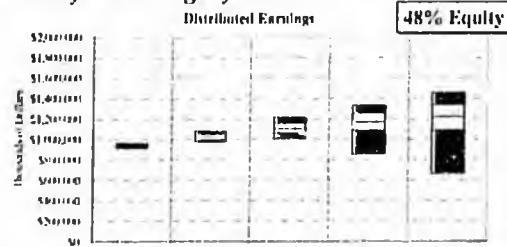


	1999	2000	2001	2002	2003
10%	\$1,082,488	\$1,384,267	\$1,602,959	\$1,756,355	\$1,856,466
25%	\$1,042,648	\$1,266,137	\$1,384,975	\$1,468,782	\$1,499,651
50%	\$1,007,166	\$1,148,858	\$1,199,251	\$1,205,002	\$1,142,829
75%	\$1,006,330	\$1,051,148	\$1,044,975	\$988,507	\$857,818
90%	\$946,531	\$966,128	\$874,533	\$713,713	\$525,149

CAI

Distributed Income

4.5 % of MV - Range of Results

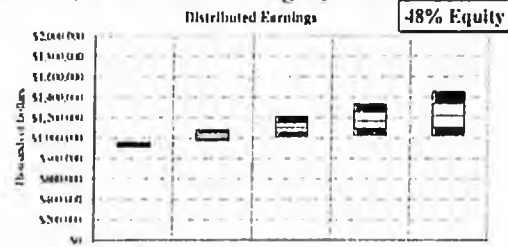


	1999	2000	2001	2002	2003
10%	\$957,877	\$1,081,746	\$1,214,267	\$1,333,258	\$1,434,463
25%	\$947,759	\$1,096,432	\$1,184,650	\$1,250,287	\$1,346,682
50%	\$935,479	\$1,023,954	\$1,102,302	\$1,168,011	\$1,225,040
75%	\$924,568	\$998,915	\$1,061,955	\$1,094,428	\$1,091,462
90%	\$916,561	\$926,041	\$1,006,565	\$855,192	\$644,064

CAI

Distributed Income

4.5 % of MV, IP in ER - Range of Results

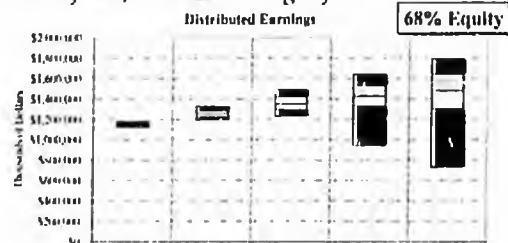


	1999	2000	2001	2002	2003
10%	\$957,877	\$1,081,746	\$1,214,267	\$1,333,258	\$1,434,463
25%	\$947,759	\$1,096,432	\$1,184,650	\$1,250,287	\$1,346,682
50%	\$935,479	\$1,023,954	\$1,102,302	\$1,168,011	\$1,225,040
75%	\$924,568	\$998,915	\$1,061,955	\$1,094,428	\$1,091,462
90%	\$916,561	\$926,047	\$1,018,828	\$1,029,881	\$1,031,187

CAI

Distributed Income

5.5 % of MV, IP in ER - Range of Results



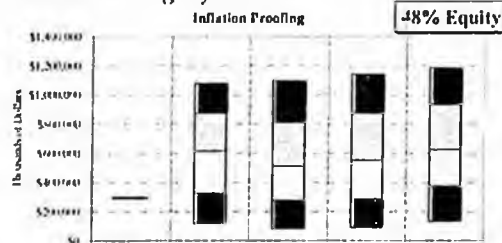
	1999	2000	2001	2002	2003
10%	\$1,177,478	\$1,327,069	\$1,499,000	\$1,682,004	\$1,748,400
25%	\$1,161,112	\$1,286,291	\$1,419,004	\$1,535,009	\$1,649,674
50%	\$1,138,101	\$1,236,042	\$1,380,008	\$1,489,325	\$1,479,440
75%	\$1,116,766	\$1,225,453	\$1,296,637	\$1,329,671	\$1,306,422
90%	\$1,126,000	\$1,190,318	\$1,244,000	\$941,706	\$736,115

CAI

19

Inflation-proofing to Principal

Base Case - Range of Results



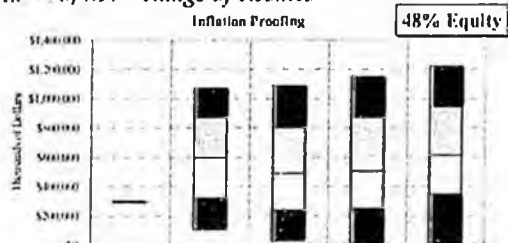
	1999	2000	2001	2002	2003
10%	\$392,572	\$1,077,704	\$1,092,629	\$1,142,691	\$1,184,857
25%	\$392,572	\$876,313	\$811,767	\$874,173	\$911,721
50%	\$392,572	\$614,129	\$511,241	\$511,998	\$624,412
75%	\$392,572	\$329,274	\$276,473	\$281,911	\$173,466
90%	\$392,572	\$119,750	\$83,306	\$92,530	\$112,500

CAI

20

Inflation-proofing to Principal

4.5 % of MV - Range of Results



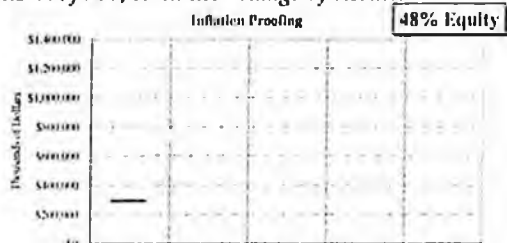
	1999	2000	2001	2002	2003
10%	\$392,572	\$1,298,522	\$1,655,876	\$1,148,303	\$1,221,727
25%	\$392,572	\$879,436	\$802,224	\$870,646	\$945,151
50%	\$392,572	\$595,248	\$490,148	\$595,540	\$613,346
75%	\$392,572	\$321,616	\$230,011	\$291,731	\$349,928
90%	\$392,572	\$104,176	\$28,864	\$0	\$0

CAI

21

Inflation-proofing to Principal

4.5 % of MV, IP in ER - Range of Results



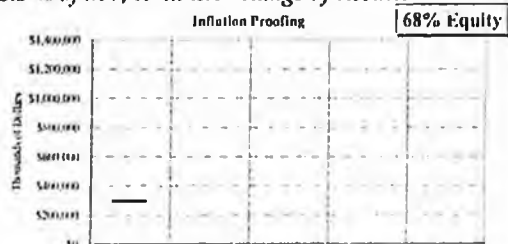
	1999	2000	2001	2002	2003
10%	\$392,572	\$0	\$0	\$0	\$0
25%	\$392,572	\$0	\$0	\$0	\$0
50%	\$392,572	\$0	\$0	\$0	\$0
75%	\$392,572	\$0	\$0	\$0	\$0
90%	\$392,572	\$0	\$0	\$0	\$0

CAI

22

Inflation-proofing to Principal

5.5 % of MV, IP in ER - Range of Results



	1999	2000	2001	2002	2003
10%	\$392,572	\$0	\$0	\$0	\$0
25%	\$392,572	\$0	\$0	\$0	\$0
50%	\$392,572	\$0	\$0	\$0	\$0
75%	\$392,572	\$0	\$0	\$0	\$0
90%	\$392,572	\$0	\$0	\$0	\$0

CAI

23

Key Findings

- The Permanent Fund can support its three objectives under the current distribution formula across most market outcomes.
- A market-value-based distribution rule can result in a more stable distribution stream than the current income-based distribution rule.
- Higher levels of distributed income require greater allocations to higher-return, higher-risk assets (i.e. equities.)
- Distributing income in excess of sustainable levels creates potential shortfalls in future distributions due to the Fund's requirement to preserve principal ("if you pay out more today, you must pay out less tomorrow.")

CAI

24

Capital Market Assumptions

Annualized Asset Class Assumptions

Asset Class	Return	Volatility	Correlation	Yield	Alpha
CPI	3.00%	1.00%	NA	NA	NA
Cash Equivalents	4.00%	0.70%	4.00%	0.20%	
Domestic Bonds	5.60%	5.50%	5.60%	0.60%	
Large Cap Domestic Equity	9.00%	15.00%	1.90%	0.90%	
Small Cap Domestic Equity	11.20%	25.30%	1.30%	2.00%	
International Equity	10.00%	21.50%	1.20%	1.35%	
Real Estate	8.00%	16.50%	6.50%	0.00%	
International Bonds	5.60%	11.00%	5.60%	1.50%	



55

Asset Allocation - 48% Equity

48% Equity Allocation

Asset Class	Jun-99	Jun-00	Jun-01
Cash Equivalents	0.5%	0.5%	0.0%
Domestic Bonds	40.9%	39.5%	40.0%
Active Large Cap Dom Eq	17.3%	15.5%	13.0%
Passive Large Cap Dom Eq	13.0%	13.0%	13.0%
Small Cap Domestic Equity	6.9%	5.0%	8.0%
International Equity	11.5%	13.0%	14.0%
Real Estate	7.7%	8.5%	10.0%
International Bonds	1.9%	2.0%	2.0%
Total	100%	100.00%	100.00%

Expected Return: 8.25%*



*Includes premium of active management

56

Asset Allocation - 68% Equity

68% Equity Allocation

Asset Class	Jun-99	Jun-00	Jun-01
Cash Equivalents	0.5%	0.0%	0.0%
Domestic Bonds	40.9%	30.0%	20.0%
Active Large Cap Dom Eq	17.3%	18.0%	20.0%
Passive Large Cap Dom Eq	13.0%	15.0%	20.0%
Small Cap Domestic Equity	6.9%	9.0%	10.0%
International Equity	11.5%	16.0%	18.0%
Real Estate	7.7%	10.0%	10.0%
International Bonds	1.9%	2.0%	2.0%
Total	100%	100.00%	100.00%

Expected Return: 9.15%*



*Includes premium of active management

57

Alaska Permanent Fund: Long-Term Investment Considerations



APFC Presentation to Senate Finance
March 31, 1999

Outline

- APFC focus: investment management and structures, not public policy
- Key assumptions
- How the Fund works
- A look at a distribution based on % of market value rather than % of income
- MOMA - correlated Monte Carlo simulation computer modeling



Role of the APFC



APFC mission

Maximize the value of Alaska's oil revenues through prudent long-term investment and protection of principal to produce income to benefit all current and future generations of Alaskans.

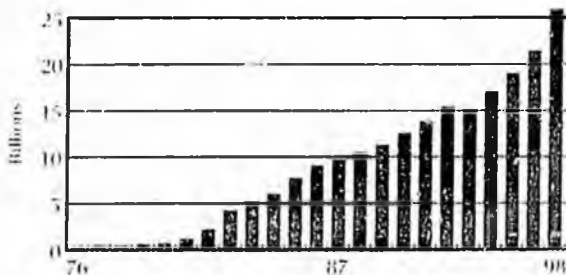
Key assumptions

- Alaskans made a series of decisions 20 years ago about the Permanent Fund which have served us well.



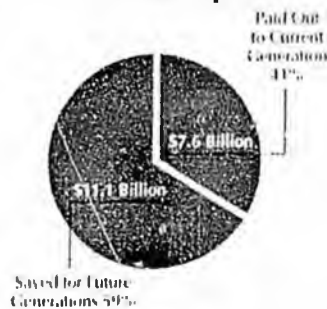
Historical perspective

Growth of Fund since inception



Historical perspective

Distribution of Fund income since inception



Key assumptions

- In the Trustees' view, it is not likely that the existing investment and distribution structures will work as well for Alaska in the next 20 years... and here's why...



Key assumptions

Increased volatility in capital markets

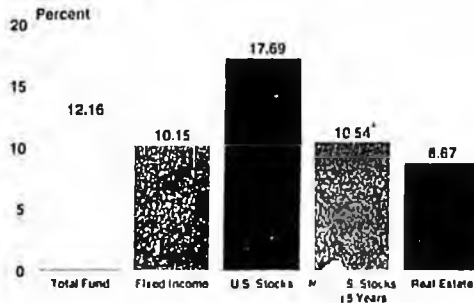
Asset Class	Index	Expected Return			Expected Risk		
		1990	1999	Change	1990	1999	Change
Equities							
Large Cap	S&P 500	9.0%	6.0%	-3.0%	15.0%	15.0%	0.0%
Mid-Cap	NYSE 250	10.0%	7.0%	-3.0%	18.0%	18.0%	0.0%
International	NYSE Intl	8.0%	5.0%	-3.0%	20.0%	20.0%	0.0%
Fixed Income							
Domestic	10 Yr	6.0%	5.0%	-1.0%	5.5%	5.5%	0.0%
International	NYSE Intl	6.5%	5.5%	-1.0%	11.0%	11.0%	0.0%
Other							
Real Estate	REIT	7.5%	6.0%	-1.5%	14.0%	14.0%	0.0%
Commodities	NYMEX	12.0%	12.0%	0.0%	35.0%	35.0%	0.0%
Cash Equiv	Money Mkt	6.0%	4.0%	-2.0%	1.0%	1.0%	0.0%
Leases	Oil	1.0%	1.0%	0.0%	1.0%	1.0%	0.0%



Historical perspective

Long-term total returns

15 years ended December 31, 1998



Key assumptions

- GASB 31, the new financial accounting standard, changes the way the APFC reports income in the earnings reserve account...

Statements of Assets, Liabilities, Principal and Earnings Reserve

Statement	February 28, 1998	February 28, 1997
Principal and Earnings Reserve		
Principal	\$2,452.2	\$2,471.0
Earnings Reserve	32.0	32.0
Earnings Reserve - Principal	1,211.6	1,211.6
Earnings Reserve - Other	1,080.6	1,080.6
Earnings Reserve - Other	2,288.2	2,288.2
TOTAL PRINCIPAL AND EARNINGS RESERVE	2,484.2	2,503.0
TOTAL ASSETS LESS DEBT AND LIABILITIES	5,242.0	5,242.0

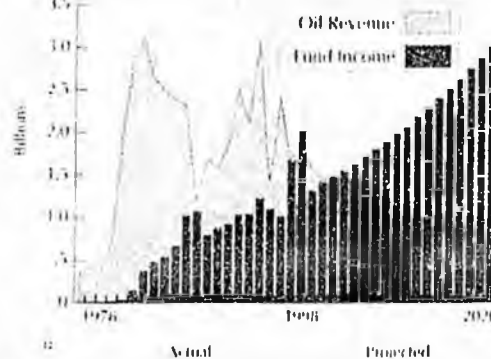
Key assumptions

- ... and that causes an inconsistency between current Generally Accepted Accounting Principles (GAAP) and state law, according to Morrison & Foerster and KPMG.
- The conflict arises in regards to the definition of "income available for distribution" ... more on that later.



Key assumptions

"Crossing of the lines in 1998"



Key assumptions

At the heart of APFC investment planning for the future will be the attempt to mediate among these conflicting objectives:

1. Maximize long-term total return.
2. Maximize annual spending distributions.
3. Preserve the *real* (i.e., inflation-adjusted) value of the Fund and the distributions.
4. Maximize the stability and predictability of spending distributions.



Key assumptions

Q. How much can be distributed while still preserving the real (i.e., inflation-adjusted) value of the fund?

A. If you want to preserve the real value of the Fund, you must not spend more than the real rate of return on your investments over the long term.



Key assumptions

And the real rate of return on your investments will be determined by:

1. Capital market returns
2. Your asset allocation



Key assumptions

Projected PF Realized and Total Rates of Return Based on the Fund's 1998 Asset Allocation and the 1999 Callan Capital Market Assumptions

ASSET CLASS	1998 ASSET ALLOCATION			1999 CALLAN CAPITAL MARKET ASSUMPTIONS		
	PERCENTAGE	EXPECTED RETURN	RISK ADJUSTED RETURN	PERCENTAGE	EXPECTED RETURN	RISK ADJUSTED RETURN
Domestic Equities						
Passively Managed	1.80%	7.50%	8.40%	11.63%	1.10%	1.21%
Actively Managed	1.80%	7.50%	8.40%	10.38%	1.02%	1.02%
Sub-Total				14.00%	2.02%	2.20%
International Equities						
Passively Managed	1.50%	8.50%	10.00%	4.90%	0.39%	0.49%
Actively Managed	1.50%	8.50%	10.00%	8.10%	0.81%	0.81%
Sub-Total				14.00%	1.20%	1.30%
Bonds						
Domestic	5.00%	0.00%	5.00%	40.00%	2.24%	2.24%
International	5.00%	0.00%	5.00%	2.00%	0.11%	0.11%
Sub-Total				42.00%	2.35%	2.35%
Real Estate	8.50%	1.50%	8.00%	10.00%	0.78%	0.80%
Total						7.74%

Key assumptions

Projected PF Realized and Total Rates of Return Based on the Fund's 1998 Asset Allocation and the 1999 Callan Capital Market Assumptions

ASSET CLASS	1998 ASSET ALLOCATION			1999 CALLAN CAPITAL MARKET ASSUMPTIONS		
	PERCENTAGE	EXPECTED RETURN	RISK ADJUSTED RETURN	PERCENTAGE	EXPECTED RETURN	RISK ADJUSTED RETURN
Domestic Equities						
Passively Managed	1.80%	7.50%	8.40%	10.77%	1.09%	1.18%
Actively Managed	1.80%	7.50%	8.40%	21.21%	2.28%	2.09%
Sub-Total				28.00%	3.35%	3.27%
International Equities						
Passively Managed	1.50%	8.50%	10.00%	4.90%	0.39%	0.49%
Actively Managed	1.50%	8.50%	10.00%	14.00%	1.20%	1.28%
Sub-Total				14.00%	1.59%	1.68%
Bonds						
Domestic	5.00%	0.00%	5.00%	40.00%	2.24%	2.24%
International	5.00%	0.00%	5.00%	2.00%	0.11%	0.11%
Sub-Total				42.00%	2.35%	2.35%
Real Estate	8.50%	1.50%	8.00%	10.00%	0.78%	0.80%
Total						7.74%

Key assumptions

Projected PF Realized and Total Rates of Return Based on the Fund's 1998 Asset Allocation and the 1999 Callan Capital Market Assumptions

ASSET CLASS	1998 ASSET ALLOCATION			1999 CALLAN CAPITAL MARKET ASSUMPTIONS		
	PERCENTAGE	EXPECTED RETURN	RISK ADJUSTED RETURN	PERCENTAGE	EXPECTED RETURN	RISK ADJUSTED RETURN
Domestic Equities						
Passively Managed	1.80%	7.50%	8.40%	10.92%	1.12%	1.20%
Actively Managed	1.80%	7.50%	8.40%	21.08%	2.28%	2.10%
Sub-Total				34.00%	3.40%	3.30%
International Equities						
Passively Managed	1.50%	8.50%	10.00%	4.90%	0.39%	0.49%
Actively Managed	1.50%	8.50%	10.00%	8.10%	0.81%	0.81%
Sub-Total				14.00%	1.20%	1.30%
Bonds						
Domestic	5.00%	0.00%	5.00%	40.00%	2.24%	2.24%
International	5.00%	0.00%	5.00%	2.00%	0.11%	0.11%
Sub-Total				42.00%	2.35%	2.35%
Real Estate	8.50%	1.50%	8.00%	10.00%	0.78%	0.80%
Total						7.74%

How the Fund works

Priority for use of Fund Income

Alaska Statutes (AS 37.13.140 and 145) provide the following priority for the payment of dividends and inflation-proofing:

- 1) First, dividends are calculated and paid;
then
- 2) Second, an amount of income sufficient to offset the effect of inflation is transferred to principal.

How the Fund works

Dividend Calculation

The dividend appropriation is the lesser of:

- 1) 1/2 of 21% of the sum of the last 5 years' realized earnings.
- Or
- 2) 1/2 of the earnings reserve account at the end of the current fiscal year.

Default to statute AS 37.13.140 and AS 37.13.145

How the Fund works

Income available for distribution

(calculation for the dividend distributed in October 1998)

<u>1st Step</u>		<u>2nd Step</u>
<u>Realized Income</u>		• Earnings reserve account at beginning of fiscal year was \$107 million.
FY94	\$1,088 million	• Add current year's, in this case FY98, realized earnings of \$2,595 million.
FY95	\$1,001 million	• Total is <u>\$2,702 million</u> available for distribution.
FY96	\$1,790 million	
FY97	\$2,035 million	
FY98	<u>\$2,595 million</u>	
	\$8,509 million	
multiply by 0.21 =		
<u>\$1,787 million</u>		
available for distribution.		

1/2 of the lower amount in Step 1 or 2 is transferred to the dividend fund and paid out to qualified applicants. Since the beginning of the dividend program, the 1st step calculation has always been the lower amount.

How the Fund works

Annual Permanent Fund Dividend

(calculation for dividend distributed in October 1998 continued)

- Step 1 is less than Step 2;
- The dividend pool is 1/2 of Step 1;
- \$1,787 million divided by 2 = \$893 million;
- Then, after some minor adjustments, divide by eligible applicants = 1998 dividend per person;
- FY98 dividend = \$1,540.88 per person.

How the Fund works

Hypothetical Calculation of Income available for distribution

(when alternative 2nd step would apply)

<u>1st Step</u>		<u>2nd Step</u>
<u>Realized Income</u>		• Earnings reserve account at beginning of fiscal year is \$107 million.
FY94	\$1,088 million	• Add current year's, in this case FY98, hypothetical realized earnings of \$'9 million.
FY95	\$1,001 million	• Total is <u>\$900 million</u> available for distribution.
FY96	\$1,790 million	
FY97	\$2,035 million	
FY98	<u>\$'9 million</u>	
	\$6,707 million	
multiply by 0.21 =		
<u>\$1,408 million</u> available for distribution.		

1/2 of the lower amount in Step 1 or 2 is transferred to the dividend fund and paid out to qualified applicants. In this hypothetical case, Step 2 is the lower amount.

How the Fund works

Annual Permanent Fund Dividend

(hypothetical calculation continued)

- Step 2 is less than Step 1;
- The dividend pool is 1/2 of Step 2;
- \$900 million divided by 2 = \$450 million;
- Then, after some minor adjustments, divide by eligible applicants = 1998 dividend per person;
- FY98 hypothetical dividend = \$756.06 per person.

How the Fund works

Inflation-Proofing

Specified in statute AS 37.13.145:

- Compute the average of the monthly U.S. Consumer Price Index for urban consumers for each of the two previous calendar years;
- Compute the percentage change between the first and second calendar year average; and
- Apply that rate to the value of the principal of Fund on the last day of the fiscal year.

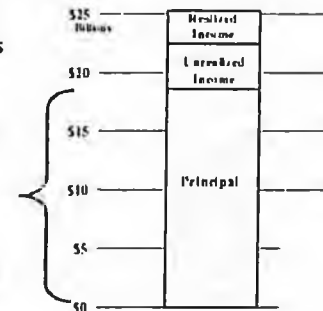
11

How the Fund works

Inflation-Proofing

- Only the principal is inflation-protected.

Principal amount of the Fund is multiplied times specific historical inflation rate to determine inflation-proofing amount.



12

How the Fund works

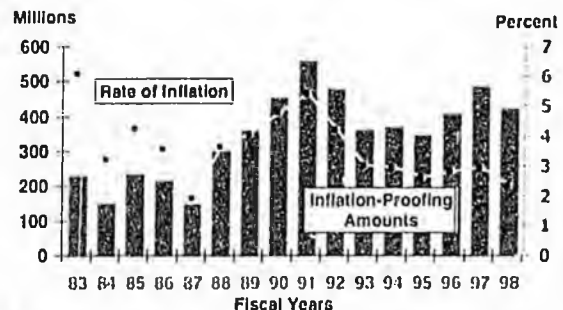
Inflation-Proofing (example)

- 2.34% change from average CPI for calendar year 1996 to average CPI for calendar 1997;
- Principal on June 30, 1998 was \$18,093 billion;
- Fund principal \$18,093 billion x 0.0234 CPI = \$423 million;
- \$423 million was appropriated and transferred from earnings reserve to principal.
- Transfer the inflation-proofing amount from earnings reserve to principal via an accounting entry.
- Assets do not really move.

13

How the Fund works

Inflation-proofing



Market value-based distribution

Distribution based on percentage of market value

- Trustee Hugh Malone first voiced support for this concept in the late 1980s
- Recommended for further study by the Commission on the Future of the PF in 1990
- Recommended by LRFPC in 1995



15

Market value-based distribution

State of New Mexico Investment Council -- 1998 annual report:

- The most significant accomplishment was the new distribution method that is now enshrined in the Constitution. Payouts from the two endowment Funds to support education and other designated state agencies will be based upon a percentage of the market value of each Fund. The selected percentage is pegged to the expected rate of return in the future, assuring that the Funds will be inflation-protected and will be available for future generations with their purchasing power intact.
- The second major achievement was the revision of the New Mexico investment restrictions in the Constitution and statutes. Those changes allow the the Funds to be invested like other large endowments, controlling risk and earning higher returns in every trust dollar.
- Distribution is 4.7% of 5-years' average market value (although there is a transition rule in effect right now); currently 62% is invested in equities.



Market value-based distribution

Advantages:

- Provides more predictability and stability in annual distributions
- Disconnects investment decisions from short-term spending considerations
- Spending provision becomes part of long-term investment strategy rather than tactical response to market cycles



The Trustees' Papers #6



"If the Permanent Fund is one of our major resources, how can it be used to advance all Alaskans' visions and values for the future?"



The Trustees' Papers #5



"Self-interest rightly understood."



For more information

For electronic copies of today's APFC PowerPoint presentations, send an email request to Jim Kelly, Director of Communications at jkelly@alaskapermfund.com



3/29/99
SFC Secretary**MEMORANDUM**
DEPARTMENT OF NATURAL RESOURCES**State of Alaska**
DIVISION OF OIL AND GASTO Senators Parnell and Torgerson
Co-chairs, Senate Finance

DATE: March 26, 1999

FROM: 
~~Ken Boyd~~
Director

TELEPHONE: 269-8800

SUBJECT: Hearing Documents

Sorry for the informality of the memo but my secretary is out today and this is the best I can do.

Enclosed are a number of things related to your request. I've numbered them to make it a little easier (I hope) to identify what each piece is.

Page Number

- 1 - 2 The OLD (1998) production forecast by field.
- 3 - 4 The OLD (1998) production forecast by lessee.
- 5 - 6 The NEW (1999) production forecast by field (DRAFT).
- 7 - 8 The NEW (1999) production forecast by lessee (DRAFT).
- 9 Map, Northern Alaska Activity
- 10 Map, Cook Inlet Activity
- 11 Chart, Projects Under Development (2/99)
- 12 Chart, Undeveloped Oil Accumulations (2/99)
- 13 Map, NPRA

TABLE 2A - OIL PRODUCTION FORECAST AND AVAILABLE ROYALTY OIL

THOUSANDS OF BARRELS PER DAY. INCLUDES OIL, CONDENSATE AND NGL'S	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
PRODUCTION FORECAST											
NORTH SLOPE											
Alpine	-	35	34	31	28	25	23	21	19	18	16
Badami	-	48	42	37	35	33	31	30	28	27	26
Endicott [1]	58	48	42	37	35	33	31	30	28	27	26
Greater Point McIntyre Area	180	151	129	109	92	80	73	66	61	56	51
Lisburne	10	11	11	10	9	8	8	7	7	6	6
Niakuk [2]	30	27	25	22	19	17	16	14	13	12	11
Point McIntyre	139	111	91	75	62	54	48	44	40	37	33
West Beach-N. Prudhoe Bay State	2	2	2	2	2	1	1	1	1	1	1
Kuparuk River Unit	265	278	285	275	266	255	235	219	203	189	178
Kuparuk	262	256	244	227	209	190	172	157	142	129	118
Tarn	4	10	19	17	16	15	13	12	11	10	10
West Sak	4	12	22	31	41	50	50	50	50	50	50
Liberty	-	-	-	38	47	40	34	29	24	21	19
Milne Point Unit	53	63	73	78	85	91	86	83	79	77	75
Milne Point	45	45	45	42	40	37	33	30	27	25	23
Sag River	4	6	6	5	4	4	3	3	2	2	2
Schrader Bluff	4	12	22	31	41	50	50	50	50	50	50
Northstar	-	-	-	50	50	46	39	34	29	26	23
Other Onshore [3]	-	-	-	30	30	28	25	23	20	18	18
Prudhoe Bay	700	660	630	610	589	568	545	515	481	447	415
Satellites [4]	5	14	23	32	35	35	37	37	34	31	28
TOTAL	1,263	1,249	1,246	1,320	1,317	1,263	1,191	1,114	1,031	957	891
COOK INLET [5]											
Beaver Creek	0.31	0.29	0.28	0.27	0.25	0.24	-	-	-	-	-
Granite Point	6.50	6.00	5.50	5.10	4.60	4.30	-	-	-	-	-
McArthur River	12.60	11.35	10.20	9.20	8.27	7.45	-	-	-	-	-
Swanson River	2.20	1.76	1.40	1.13	0.90	0.72	-	-	-	-	-
Middle Ground Shoal	5.50	5.00	4.50	4.00	3.60	3.30	-	-	-	-	-
Trading Bay	1.50	1.45	1.37	1.30	1.24	1.18	-	-	-	-	-
West McArthur River	1.26	0.88	0.62	0.43	0.30	0.21	-	-	-	-	-
TOTAL	29.87	26.73	23.87	21.43	19.16	17.40	-	-	-	-	-
STATE TOTAL	1,293	1,276	1,270	1,341	1,336	1,280	1,191	1,114	1,031	957	891
AVAILABLE ROYALTY OIL											
		Royalty Percent									
NORTH SLOPE											
Alpine	10.0% [9]	-	3	6	6	6	6	6	5	5	4
Badami	18.7%	6	6	5	5	4	4	4	3	3	3
Endicott [1]	14.4%	8	7	6	5	5	4	4	4	4	4
Greater Point McIntyre Area	12.5%	23	19	16	14	12	10	9	8	7	6
Lisburne	12.5%	1	1	1	1	1	1	1	1	1	1
Niakuk [2]	12.5%	4	3	3	3	2	2	2	2	2	1
Point McIntyre	12.5%	17	14	11	9	8	7	6	5	5	4
West Beach-N. Prudhoe Bay State	12.5%	0	0	0	0	0	0	0	0	0	0
Kuparuk River Unit	12.5%	33	35	36	34	33	32	29	27	25	22
Kuparuk	12.5%	33	32	31	28	26	24	22	20	18	15
Tarn	12.5%	1	2	2	2	2	2	2	1	1	1
West Sak	12.5%	1	2	3	4	5	6	6	6	6	6
Liberty	14.6% [10]	8	9	11	11	12	13	13	12	11	11
Milne Point Unit	14.6%	7	7	7	6	6	5	5	4	4	3
Milne Point	14.6%	1	1	1	1	1	0	0	0	0	0
Sag River	14.6%	1	1	1	1	1	0	0	0	0	0
Schrader Bluff	14.6%	1	2	3	5	6	7	7	7	7	7
Northstar	16.0% [11]	-	-	8	8	7	6	5	4	4	4
Other Onshore [3]	12.5%	-	-	8	8	7	6	5	4	3	2
Prudhoe Bay	12.5%	88	83	79	76	74	71	68	64	60	56
Satellites [4]	12.5%	1	2	3	4	4	4	5	4	4	4
TOTAL		160	160	159	164	163	157	148	139	129	111
COOK INLET [5]											
Beaver Creek	12.5% [12]	0.81	0.75	0.69	0.64	0.58	0.54	-	-	-	-
Granite Point	12.5%	1.58	1.42	1.28	1.15	1.03	0.93	-	-	-	-
McArthur River	12.5%	-	-	-	-	-	-	-	-	-	-
Swanson River	12.5% [12]	0.69	0.63	0.56	0.50	0.45	0.41	-	-	-	-
Middle Ground Shoal	12.5%	0.19	0.18	0.17	0.16	0.15	0.15	-	-	-	-
Trading Bay	12.5%	0.16	0.11	0.08	0.05	0.04	0.03	-	-	-	-
West McArthur River	12.5%	3.42	3.09	2.77	2.50	2.25	2.06	-	-	-	-
TOTAL		6.85	6.15	5.40	4.95	4.41	4.03	-	-	-	-
STATE TOTAL		163	163	161	167	165	159	148	139	129	111
IN-KIND ROYALTY OIL SALES											
Mapco [6]		35	35	35	35	35	-	-	-	-	-
Mapco #2 [7]		13	-	-	-	-	-	-	-	-	-
Tesoro [8]		32	-	-	-	-	-	-	-	-	-
TOTAL		80	35	35	35	35	35	-	-	-	-
IN-VALUE ROYALTY OIL TOTAL		83	128	126	132	130	124	148	139	129	111

NOTE: "-" = zero or no data; "0" = less than 0.001.

[1] "Endicott" includes Endicott and Sag Delta.

[2] "Niakuk" includes Niakuk, West Niakuk (27), Niakuk 26, and Niakuk 29.

[3] "Other Onshore" includes one of several known discoveries which probably will be developed.

[4] "Satellites" includes Prudhoe Bay and Kuparuk satellite fields.

[5] The Cook Inlet forecast is arbitrarily cut off after 2003 because there are no public estimates of economic limits for the individual fields.

[6] The Mapco contract is for 35,000BPD of Prudhoe Bay Unit royalty production, it expires December 2003.

OLD 1998

	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Cumulative (Mbbbl)
PRODUCTION FORECAST												
NORTH SLOPE												277,765
Alpine	39	36	33	30	28	26	24	23	21	20	19	132,860
Badami	15	14	13	13	12	11	11	10	10	5	-	221,920
Endicott [1]	25	24	23	22	20	19	18	17	16	15	14	504,065
Greater Point McIntyre Area	46	43	38	35	33	29	26	24	22	19	18	48,180
Lisburne	5	5	4	4	4	4	3	3	3	2	2	100,375
Niakuk [2]	10	9	6	7	7	6	5	5	4	4	4	348,210
Point McIntyre	30	28	25	23	21	19	18	16	15	13	12	7,665
West Beach-N. Prudhoe Bay State	1	1	1	1	1	-	-	-	-	-	-	1,476,615
Kuparuk River Unit	168	159	151	143	135	124	117	111	106	98	90	1,075,655
Kuparuk	109	101	93	86	79	72	67	63	60	57	54	72,635
Tarn	9	8	8	7	7	6	6	6	6	3	-	330,325
West Sak	50	50	50	50	49	46	44	42	40	38	36	118,625
Liberty	17	15	13	12	11	5	-	-	-	-	-	544,945
Milne Point Unit	73	69	68	66	64	60	56	53	50	47	44	195,275
Milne Point	21	18	17	15	14	13	11	10	9	6	7	19,345
Sag River	2	1	1	1	1	1	1	1	1	1	1	330,325
Schrader Bluff	50	50	50	50	49	46	44	42	40	38	36	150,380
Northstar	20	18	16	15	13	12	11	10	-	-	-	105,850
Other Onshore [3]	17	15	14	12	11	10	9	8	7	7	6	3,493,050
Prudhoe Bay	391	374	359	342	323	307	291	276	262	249	236	177,025
Satellites [4]	25	22	20	19	18	16	15	13	10	8	8	7,205,465
TOTAL	836	789	748	709	668	619	578	545	504	468	435	
COOK INLET [5]												
Beaver Creek	-	-	-	-	-	-	-	-	-	-	-	599
Granite Point	-	-	-	-	-	-	-	-	-	-	-	11,680
McArthur River	-	-	-	-	-	-	-	-	-	-	-	21,561
Swanson River	-	-	-	-	-	-	-	-	-	-	-	2,960
Middle Ground Shoal	-	-	-	-	-	-	-	-	-	-	-	9,454
Trading Bay	-	-	-	-	-	-	-	-	-	-	-	2,935
West McArthur River	-	-	-	-	-	-	-	-	-	-	-	1,351
TOTAL												50,538
STATE TOTAL	836	789	748	709	668	619	578	545	504	468	435	7,258,003

	Royalty Percent	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
AVAILABLE ROYALTY OIL													
NORTH SLOPE													27,777
Alpine	10.0% [9]	4	4	3	3	3	3	2	2	2	2	2	22,188
Badami	16.7%	3	2	2	2	2	2	2	2	2	2	2	31,956
Endicott [1]	14.4%	4	3	3	3	3	3	3	3	3	2	2	63,008
Greater Point McIntyre Area	12.5%	6	5	5	4	4	4	3	3	3	2	2	6,023
Lisburne	12.5%	1	1	1	1	1	1	1	1	1	1	1	12,547
Niakuk [2]	12.5%	1	1	1	1	1	1	1	1	1	1	1	43,526
Point McIntyre	12.5%	4	4	3	3	3	2	2	2	2	2	2	958
West Beach-N. Prudhoe Bay State	12.5%	0	0	0	0	0	-	-	-	-	-	-	184,827
Kuparuk River Unit	12.5%	21	20	19	18	17	16	15	14	13	12	11	134,457
Kuparuk	12.5%	14	13	12	11	10	9	8	8	8	7	7	9,079
Tarn	12.5%	1	1	1	1	1	1	1	1	1	0	-	41,291
West Sak	12.5%	6	6	6	6	6	6	6	5	5	5	5	79,289
Liberty	[10]	11	10	10	10	9	9	8	8	7	7	6	28,413
Milne Point Unit	14.6%	3	3	2	2	2	2	2	1	1	1	1	2,815
Milne Point	14.6%	0	0	0	0	0	0	0	0	0	0	0	48,062
Sag River	14.6%	7	7	7	7	7	7	6	6	6	6	5	24,061
Schrader Bluff	14.6%	3	3	3	2	2	2	2	2	-	-	-	13,231
Northstar	16.0% [11]	3	3	2	2	1	1	1	1	1	1	1	436,631
Other Onshore [3]	12.5%	2	2	2	2	2	2	2	2	2	2	2	22,128
Prudhoe Bay	12.5%	49	47	45	43	40	38	36	35	33	31	30	905,142
Satellites [4]	12.5%	3	3	3	2	2	2	2	2	1	1	1	
TOTAL		105	99	94	89	84	79	74	70	64	59	55	
COOK INLET [5]													
Beaver Creek	[12]	-	-	-	-	-	-	-	-	-	-	-	1,460
Granite Point	12.5%	-	-	-	-	-	-	-	-	-	-	-	2,695
McArthur River	12.5%	-	-	-	-	-	-	-	-	-	-	-	1,182
Swanson River	[12]	-	-	-	-	-	-	-	-	-	-	-	367
Middle Ground Shoal	12.5%	-	-	-	-	-	-	-	-	-	-	-	169
Trading Bay	12.5%	-	-	-	-	-	-	-	-	-	-	-	5,872
West McArthur River	12.5%	-	-	-	-	-	-	-	-	-	-	-	
TOTAL													811,015
STATE TOTAL		105	99	94	89	84	79	74	70	64	59	55	

IN-KIND ROYALTY OIL SALES													76,650
Mapco [6]	-	-	-	-	-	-	-	-	-	-	-	-	4,745
Mapco #2 [7]	-	-	-	-	-	-	-	-	-	-	-	-	11,787
Tesoro [8]	-	-	-	-	-	-	-	-	-	-	-	-	93,182
TOTAL													

IN-VALUE ROYALTY OIL TOTAL													817,833
TOTAL	105	99	94	89	84	79	74	70	64	59	55		

[7] The Mapco #2 contract is for 11.6% of Prudhoe Bay Unit royalty production, it expires December 1998.
 [8] The Tesoro contract is for 30% of Prudhoe Bay Unit royalty production, it expires December 1998.
 [9] This percentage is the state's estimated share of the gross and does not include the royalty share attributable to Arctic Slope Regional Corporation.
 [10] Liberty field likely lies entirely within federal leases and so will pay no state royalty.
 [11] This is the estimated minimum state royalty share. It does not include federal royalty or the sliding scale Supplementary Royalty.
 [12] Beaver Creek and Swanson River fields lie entirely within federal leases and so pay no state royalty.
 Revised 3/10/98

TABLE 2B - OIL PRODUCTION FORECAST FOR PRODUCING AND DEVELOPING NORTH SLOPE FIELDS, BY LESSEE

THOUSANDS OF BARRELS PER DAY. INCLUDES OIL, CONDENSATE, AND NGLS

	Working Interest	Total Offtake (1)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PRODUCTION FORECAST FOR NORTH SLOPE														
Alpine					30	60	60	60	60	65	50	45	42	39
Arco	56.00%				17	34	34	34	34	31	28	25	24	22
Anadarko	22.00%				7	13	13	13	13	12	11	10	9	9
UTP	22.00%				7	13	13	13	13	12	11	10	9	9
Badami				35	34	31	28	25	23	21	19	18	16	15
BP	70.00%				25	24	22	20	18	15	13	13	11	11
FINA	30.00%				11	10	9	8	7	6	5	5	5	5
Endicott [2]			58	48	42	37	35	33	31	30	28	27	26	25
Amoco	10.33%		6	5	4	4	4	3	3	3	3	3	3	3
Arco	0.02%		0	0	0	0	0	0	0	0	0	0	0	0
BP	57.25%		33	27	24	21	20	19	18	17	16	15	15	14
CIRI	0.66%		0	0	0	0	0	0	0	0	0	0	0	0
Doyon	0.12%		0	0	0	0	0	0	0	0	0	0	0	0
Exxon	20.80%		12	10	9	8	7	6	6	6	6	6	5	5
NANA	0.40%		0	0	0	0	0	0	0	0	0	0	0	0
Unocal	10.41%		6	5	4	4	4	3	3	3	3	3	3	3
Greater Point McIntyre [3]			180	151	129	109	92	110	73	66	61	56	51	46
Arco	28.87%		52	44	37	31	27	22	21	19	18	16	15	13
BP	37.84%		68	57	49	41	35	30	28	25	23	21	19	17
Exxon	33.28%		60	50	43	35	31	27	24	22	20	19	17	15
Kuparuk River Unit [4]			266	278	285	275	266	255	235	219	203	189	178	168
Arco	55.19%		147	153	157	152	147	141	130	121	112	104	98	93
BP	39.15%		104	109	112	108	104	100	92	86	79	74	70	66
Chevron	0.11%		0	0	0	0	0	0	0	0	0	0	0	0
Exxon	0.22%		1	1	1	1	1	1	1	1	1	1	1	1
Mobil	0.37%		1	1	1	1	1	1	1	1	1	1	1	1
Unocal	4.97%		13	14	14	14	13	13	12	11	10	9	9	8
Milne Point Unit [5]			53	63	73	78	85	91	86	83	79	77	75	73
BP	91.19%		48	57	67	71	78	83	78	76	72	70	68	67
Oxy	8.81%		5	6	6	7	7	8	8	7	7	7	7	6
North Star						50	50	46	39	34	29	26	23	20
BP	98.08%					49	49	45	38	33	28	26	23	20
Murphy	1.92%					1	1	1	1	1	1	0	0	0
Prudhoe Bay Unit [6]			700	660	630	610	589	668	545	616	481	447	415	391
Arco	29.01%		203	191	183	177	171	165	158	149	140	130	120	113
BP	37.74%		264	249	238	230	222	214	206	194	182	169	157	148
Chevron	1.04%		7	7	7	6	6	6	5	5	5	4	4	4
Exxon	29.13%		204	192	183	178	172	165	159	150	140	130	121	114
Forcenergy	0.03%		0	0	0	0	0	0	0	0	0	0	0	0
Mobil	1.35%		9	9	9	8	8	7	7	7	6	6	6	5
Phillips	1.34%		9	9	8	8	8	7	7	6	6	6	6	5
Texaco	0.37%		3	2	2	2	2	2	2	2	2	2	2	1
TOTAL Amoco			6	5	4	4	4	3	3	3	3	3	3	3
TOTAL Anadarko					7	13	13	13	13	12	11	10	9	9
TOTAL Arco			402	388	394	394	378	362	342	320	297	275	257	241
TOTAL BP			518	524	513	542	527	509	476	446	414	388	363	342
TOTAL Chevron			8	7	7	7	6	6	6	5	5	4	4	4
TOTAL CIRI			0	0	0	0	0	0	0	0	0	0	0	0
TOTAL Doyon			0	0	0	0	0	0	0	0	0	0	0	0
TOTAL Exxon			276	253	236	222	210	199	190	179	167	155	144	135
TOTAL Fina				11	10	9	8	8	7	6	6	5	5	5
TOTAL Forcenergy			0	0	0	0	0	0	0	0	0	0	0	0
TOTAL Mobil			10	10	10	9	9	9	8	8	7	7	6	6
TOTAL Murphy						1	1	1	1	1	1	0	0	0
TOTAL NANA			0	0	0	0	0	0	0	0	0	0	0	0
TOTAL Oxy			5	6	6	7	7	8	8	7	7	7	6	6
TOTAL Phillips			9	9	9	8	8	8	7	7	6	6	6	5
TOTAL Tesaco			3	2	2	2	2	2	2	2	2	2	2	1
TOTAL UTP					7	13	13	13	13	12	11	10	9	9
TOTAL Unocal			19	19	19	18	17	16	15	14	13	12	12	11
TOTAL North Slope			1,257	1,235	1,223	1,250	1,205	1,158	1,002	1,023	950	885	826	777

PROJECTED NORTH SLOPE ROYALTY SHARE FROM ABOVE FIELDS	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	162	161	163	163	156	150	141	132	122	114	106	100

NOTE: "-" = zero or no data; "0" = less than 0.5.
 [1] Average from operator royalty statements of January through December 1997.
 [2] "Endicott" production includes Endicott and Sag Delta North.
 [3] "Greater Point McIntyre" production includes Lisburne, Niakuk, West Niakuk (27), Niakuk (28), Niakuk (29), North Prudhoe Bay State, Point McIntyre, and West Beach.
 [4] "Kuparuk River Unit" includes Kuparuk, Tarn, and West Sak.
 [5] "Milne Point" production includes Milne Point, Schrader Bluff, and Sag River.
 [6] "Prudhoe Bay Unit" includes Prudhoe Bay and Satellites.

OLD 1998 3

	Working Interest	Total Offtake (\$)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Cumulative (MMbbl)
PRODUCTION FORECAST FOR NORTH SLOPE													
Alpine			36	33	30	28	26	24	23	21	20	19	288,716
Arco	56.00%		20	18	17	16	15	13	13	12	11	11	155,548
Anadarko	22.00%		8	7	7	6	6	5	5	5	4	4	61,108
UTP	22.00%		8	7	7	6	6	5	5	5	4	4	61,108
Badarni			14	13	13	12	11	11	10	10	5	-	132,860
BP	70.00%		10	9	9	8	8	8	7	7	4	-	93,002
FINA	30.00%		4	4	4	4	3	3	3	3	2	-	39,858
Endicott [2]			24	23	22	20	19	19	17	16	15	14	256,230
Amoco	10.33%		2	2	2	2	2	2	2	2	2	1	22,934
Arco	0.02%		0	0	0	0	0	0	0	0	0	0	51
BP	57.25%		14	13	13	11	11	10	10	9	9	8	127,054
CIRI	0.66%		0	0	0	0	0	0	0	0	0	0	1,476
Doyon	0.12%		0	0	0	0	0	0	0	0	0	0	276
Exxon	20.80%		5	5	5	4	4	4	4	3	3	3	46,152
NANA	0.40%		0	0	0	0	0	0	0	0	0	0	885
Unocal	10.41%		2	2	2	2	2	2	2	2	2	1	23,092
Greater Point McIntyre [3]			43	38	35	33	29	26	24	22	19	18	504,065
Arco	28.87%		12	11	10	10	8	8	7	6	5	5	145,542
BP	37.84%		16	14	13	12	11	10	9	8	7	7	190,752
Exxon	33.28%		14	13	12	11	10	9	8	7	6	6	167,771
Kuparuk River Unit [4]			159	151	143	135	124	117	111	106	98	90	1,478,615
Arco	55.19%		88	83	79	75	68	65	61	59	54	50	816,072
BP	39.15%		62	59	56	53	49	46	43	41	38	35	578,832
Chevron	0.11%		0	0	0	0	0	0	0	0	0	0	1,612
Exxon	0.22%		0	0	0	0	0	0	0	0	0	0	3,224
Mobil	0.37%		1	1	1	0	0	0	0	0	0	0	5,414
Unocal	4.97%		8	8	7	7	6	6	6	5	5	4	73,461
Millne Point Unit [5]			69	68	66	64	60	56	53	50	47	44	544,945
BP	91.19%		53	52	50	58	55	51	48	46	43	40	496,940
Oxy	8.81%		6	6	6	6	5	5	5	4	4	4	48,005
North Star			18	16	15	13	12	11	10	-	-	-	150,380
BP	98.08%		18	16	15	13	12	11	10	-	-	-	147,493
Murphy	1.92%		0	0	0	0	0	0	0	-	-	-	2,887
Fruithoe Bay Unit [6]			374	359	342	323	307	291	276	262	249	236	3,512,030
Arco	29.01%		108	104	99	94	89	84	80	76	72	68	1,013,263
BP	37.74%		141	135	129	122	116	110	104	99	94	89	1,318,131
Chevron	1.04%		4	4	4	3	3	3	3	3	3	2	36,166
Exxon	29.13%		109	105	100	94	89	85	80	76	73	69	1,017,415
Forcenergy	0.03%		0	0	0	0	0	0	0	0	0	0	1,163
Mobil	1.35%		5	5	5	4	4	4	4	4	3	3	47,301
Phillips	1.34%		5	5	5	4	4	4	4	4	3	3	46,830
Texaco	0.37%		1	1	1	1	1	1	1	1	1	1	12,851
TOTAL Amoco			2	2	2	2	2	2	2	2	2	1	22,934
TOTAL Anadarko			8	7	7	6	6	5	5	5	4	4	61,108
TOTAL Arco			229	217	205	193	180	170	161	153	143	134	2,130,477
TOTAL BP			324	309	295	278	260	245	232	210	194	179	2,952,203
TOTAL Chevron			4	4	4	3	3	3	3	3	3	3	37,779
TOTAL CIRI			0	0	0	0	0	0	0	0	0	0	1,476
TOTAL Doyon			0	0	0	0	0	0	0	0	0	0	276
TOTAL Exxon			129	122	116	110	103	97	92	87	82	78	1,234,562
TOTAL Finna			4	4	4	4	3	3	3	3	2	-	39,858
TOTAL Forcenergy			0	0	0	0	0	0	0	0	0	0	1,163
TOTAL Mobil			6	5	5	5	5	4	4	4	4	4	52,715
TOTAL Murphy			0	0	0	0	0	0	0	0	0	0	2,887
TOTAL NANA			0	0	0	0	0	0	0	0	0	0	885
TOTAL Oxy			6	6	6	6	5	5	5	4	4	4	48,005
TOTAL Phillips			5	5	5	4	4	4	4	4	3	3	47,267
TOTAL Texaco			1	1	1	1	1	1	1	1	1	1	12,851
TOTAL UTP			8	7	7	6	6	5	5	5	4	4	61,108
TOTAL Unocal			10	10	9	9	8	8	7	7	6	6	90,553
TOTAL North Slope			737	701	666	628	588	554	524	487	453	421	6,804,037
			94	90	85	80	75	71	67	62	58	53	878,145

OLD 1998 4

TABLE 2A - OIL PRODUCTION FORECAST AND AVAILABLE ROYALTY OIL

DRAFT

THOUSANDS OF BARRELS PER DAY. INCLUDES OIL, CONDENSATE AND NGL'S

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
PRODUCTION FORECAST												
NORTH SLOPE												
Alpine	-	25	75	75	75	75	72	68	67	59	52	48
Badami	3	5	6	5	4	4	4	3	3	2	2	-
Duck Island Unit	47	44	39	35	31	28	24	20	17	15	13	11
Elder	5	5	5	5	4	3	2	1	1	1	1	-
Endicott (1)	42	39	34	30	27	25	22	19	16	14	12	11
Greater Point McIntyre Area (G ¹ MA)	140	112	96	84	74	65	56	50	45	40	35	31
Lisburne	7	7	7	7	7	7	7	6	6	5	5	4
Niakuk (2)	26	23	21	19	16	13	11	10	9	8	7	6
Point McIntyre	104	79	65	56	49	43	38	33	30	26	23	21
West Beach, N. Prudhoe Bay St.	3	3	3	3	3	2	1	1	1	1	1	1
Kuparuk River Unit	260	238	232	224	211	201	194	199	190	180	166	156
Kuparuk (3)	227	203	195	187	180	170	162	156	147	139	126	117
Tarn	22	22	22	22	17	14	12	10	9	8	7	7
Tabasco	9	10	10	10	7	6	5	4	4	3	3	3
West Sak	2	3	5	5	7	11	16	29	30	30	30	30
Liberty	-	-	-	13	40	40	40	34	29	24	21	18
Milne Point Unit	50	49	51	51	49	52	56	67	67	66	65	64
Milne Point	45	44	43	42	40	39	38	37	36	35	34	33
Saa River	-	-	2	2	2	2	2	1	1	1	1	1
Schrader Bluff	5	5	6	7	7	11	16	29	30	30	30	30
Northstar	-	-	5	60	60	52	42	34	29	24	20	16
Other Onshore (4)	-	-	-	-	35	35	29	23	20	18	17	15
Prudhoe Bay	616	566	530	515	513	493	474	453	425	397	378	343
Prudhoe Bay Pool (5)	610	555	516	487	462	439	417	398	376	354	339	309
Prudhoe Bay Satellites	6	11	14	28	51	54	57	55	49	43	39	34
TOTAL	1,116	1,039	1,033	1,062	1,092	1,045	990	949	891	825	768	702
COOK INLET (6)												
Beaver Creek	0.29	0.28	0.27	0.25	0.24	-	-	-	-	-	-	-
Granite Point	6.00	5.50	5.10	4.60	4.30	-	-	-	-	-	-	-
McArthur River	13.10	12.45	11.82	11.23	10.67	-	-	-	-	-	-	-
Middle Ground Shoal	5.82	5.53	6.25	4.99	4.74	-	-	-	-	-	-	-
Swanson River	2.15	1.83	1.56	1.32	1.13	-	-	-	-	-	-	-
Tradina Bay	1.82	1.73	1.64	1.56	1.48	-	-	-	-	-	-	-
West McArthur River	2.85	2.42	2.06	1.75	1.49	-	-	-	-	-	-	-
TOTAL	32.03	29.73	27.70	25.70	24.04	1,045	990	949	891	825	768	702
STATE	1,148	1,068	1,060	1,087	1,116	1,045	990	949	891	825	768	702

AVAILABLE ROYALTY OIL

	Royalty Percent	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
NORTH SLOPE													
Alpine	10.0% (9)	-	3	8	8	8	8	7	7	7	6	5	5
Badami	16.7%	1	1	1	1	1	1	1	1	1	0	0	-
Duck Island Unit	14.2%	7	6	6	5	4	4	3	3	2	2	2	2
Elder	12.5%	1	1	1	1	1	0	0	0	0	0	0	-
Endicott (1)	14.4%	6	6	5	4	4	4	3	3	2	2	2	4
Greater Point McIntyre Area (G ¹ MA)	13.0%	19	15	13	11	10	9	7	7	6	5	5	4
Lisburne	12.5%	1	1	1	1	1	1	1	1	1	1	1	1
Niakuk (2)	12.5%	3	3	3	2	2	2	2	2	2	2	2	3
Point McIntyre	13.8%	14	11	9	8	7	6	5	5	4	4	3	3
West Beach, N. Prudhoe Bay St.	12.5%	0	0	0	0	0	0	0	0	0	0	0	0
Kuparuk River Unit	12.5%	33	30	29	28	26	25	24	25	24	23	21	20
Kuparuk (3)	12.5%	28	25	24	23	23	21	20	20	18	17	16	15
Tarn	12.5%	3	3	3	3	2	2	1	1	1	1	1	1
Tabasco	12.5%	1	1	1	1	1	1	1	1	0	0	0	0
West Sak	12.5%	0	0	1	1	1	1	2	4	4	4	4	4
Liberty	0.0% (10)	-	-	-	-	-	-	-	-	-	-	-	-
Milne Point Unit	14.6%	7	7	7	7	7	8	8	10	10	10	9	9
Milne Point	14.6%	7	6	6	6	6	6	6	5	5	5	5	5
Saa River	14.6%	-	-	0	0	0	0	0	0	0	0	0	0
Schrader Bluff	14.6%	1	1	1	1	1	2	2	4	4	4	4	4
Northstar	16.0% (11)	-	-	1	10	10	8	7	5	5	4	3	3
Other Onshore (4)	12.6%	-	-	-	-	4	4	4	3	3	2	2	2
Prudhoe Bay	12.5%	77	71	66	64	64	62	59	57	53	50	47	43
Prudhoe Bay Pool (5)	12.5%	76	69	65	61	58	55	52	50	47	44	42	39
Prudhoe Bay Satellites	12.5%	1	1	2	4	6	7	7	7	6	6	5	4
TOTAL		143	132	130	134	134	128	121	116	109	101	95	87
COOK INLET (6)													
Beaver Creek	0.0% (12)	-	-	-	-	-	-	-	-	-	-	-	-
Granite Point	12.5%	1	1	1	1	1	-	-	-	-	-	-	-
McArthur River	12.5%	2	2	1	1	1	-	-	-	-	-	-	-
Middle Ground Shoal	12.5%	1	1	1	1	1	-	-	-	-	-	-	-
Swanson River	0.0% (12)	-	-	-	-	-	-	-	-	-	-	-	-
Tradina Bay	12.5%	0	0	0	0	0	-	-	-	-	-	-	-
West McArthur River	12.5%	0	0	0	0	0	-	-	-	-	-	-	-
TOTAL		4	3	3	3	3	-	-	-	-	-	-	-
STATE		146	136	133	137	137	128	121	116	109	101	95	87

IN-KIND ROYALTY OIL SALES

Mapco 1 (7)	35	35	35	35	35	-	-	-	-	-	-	-	-
Mapco 3 (8)	26	24	24	24	25	-	-	-	-	-	-	-	-
TOTAL	61	59	59	59	60	128	121	116	109	101	95	87	

IN-VALUE ROYALTY OIL

	86	74	75	78	77	128	121	116	109	101	95	87
--	----	----	----	----	----	-----	-----	-----	-----	-----	----	----

(1) 'Endicott' includes Endicott and Saa Delta.
 (2) 'Niakuk' includes all Niakuk wells.
 (3) 'Kuparuk' includes Kuparuk River Unit Enhanced Oil Recovery (EOR) barrels taken as credit against royalty.
 (4) 'Other Onshore' includes one of several known discoveries which probably will be developed.
 (5) 'Prudhoe Bay Pool' includes NGL's produced from Prudhoe Bay pool then sent, via Oilktok pipeline, to Kuparuk field. 30,000 Bad until the end of 2008 and 15,000 Bad thereafter.
 (6) The Cook Inlet forecast is arbitrarily cut off after 2003 because there are no public estimates of economic limits for the individual fields.
 (7) The Mapco 1 contract is for 35,000BPD of Prudhoe Bay Unit royalty production. The contract expires December 2003.

5
New 1999

DRAFT

THOUSANDS OF BARRELS PER DAY. INCLUDES OIL, CONDENSATE AND NGLs											Cumulative (MMbbl)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
PRODUCTION FORECAST											
NORTH SLOPE											
Alpine	41	36	30	28	26	24	23	22	21	20	350,409
Badami	-	-	-	-	-	-	-	-	-	-	14,600
Duck Island Unit	11	10	10	9	9	8	8	7	7	6	149,103
Elder	-	-	-	-	-	-	-	-	-	-	11,863
Endicott (1)	11	10	10	9	9	8	8	7	7	6	137,240
Greater Point McIntyre Area (GPMA)	28	26	23	19	17	15	13	11	10	9	362,471
Lisburno	4	4	4	3	3	3	3	2	2	2	37,413
Niakuk (2)	5	4	4	3	3	2	2	2	1	1	69,533
Point McIntyre	18	17	15	13	12	10	9	8	7	6	246,766
West Beach, N. Prudhoe Bay St.	1	1	1	-	-	-	-	-	-	-	8,760
Kuparuk River Unit	146	133	115	104	91	81	75	70	65	59	1,236,255
Kuparuk(3)	108	97	83	74	63	57	53	49	45	42	978,200
Tarn	6	5	3	2	2	1	1	1	1	1	70,263
Tabasco	2	2	2	2	1	1	1	1	1	-	30,843
West Sak	30	29	27	26	25	22	20	19	18	16	156,950
Liberty	16	15	13	12	11	5	-	-	-	-	119,355
Milne Point Unit	61	58	54	51	49	44	40	37	33	29	416,498
Milne Point	30	28	26	24	23	21	19	17	15	13	248,781
Saa River	1	1	1	1	1	1	1	1	-	-	7,848
Schrader Bluff	30	29	27	26	25	22	20	19	18	16	159,870
Northstar	13	10	8	6	5	-	-	-	-	-	139,978
Other Onshore (4)	14	12	11	10	9	8	7	7	6	5	100,770
Prudhoe Bay	326	309	293	276	260	244	230	217	199	189	3,009,790
Prudhoe Bay Pool(5)	297	284	271	257	245	232	221	210	199	189	2,798,455
Prudhoe Bay Satellites	29	25	22	19	15	12	9	7	-	-	211,335
TOTAL	655	608	556	514	476	429	396	370	339	316	5,899,228
COOK INLET (6)											
Beaver Creek	-	-	-	-	-	-	-	-	-	-	485
Granite Point	-	-	-	-	-	-	-	-	-	-	9,308
McArthur River	-	-	-	-	-	-	-	-	-	-	21,632
Middle Ground Shoal	-	-	-	-	-	-	-	-	-	-	9,605
Swanson River	-	-	-	-	-	-	-	-	-	-	2,213
Trudna Bay	-	-	-	-	-	-	-	-	-	-	3,004
West McArthur River	-	-	-	-	-	-	-	-	-	-	3,856
TOTAL	-	-	-	-	-	-	-	-	-	-	50,803
STATE	655	608	556	514	476	429	396	370	339	316	5,950,031

AVAILABLE ROYALTY OIL												
	Royalty Percent	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
NORTH SLOPE												
Alpine	10.0% (9)	4	4	3	3	3	2	2	2	2	2	35,077
Badami	16.7%	-	-	-	-	-	-	-	-	-	-	2,499
Duck Island Unit	14.2%	2	1	1	1	1	1	1	1	1	1	21,297
Elder	12.5%	-	-	-	-	-	-	-	-	-	-	1,528
Endicott (1)	14.4%	2	1	1	1	1	1	1	1	1	1	19,815
Greater Point McIntyre Area (GPM)	13.0%	-	-	-	-	-	-	-	-	-	-	40,341
Lisburno	12.5%	1	1	1	1	1	1	1	1	1	1	7,277
Niakuk (2)	12.5%	3	3	3	2	2	2	2	1	1	1	15,288
Point McIntyre	13.8%	1	1	0	0	0	0	0	0	0	0	29,920
West Beach, N. Prudhoe Bay St.	12.5%	1	1	0	0	0	0	0	0	0	0	2,167
Kuparuk River Unit	12.5%	2	2	2	2	1	1	1	1	1	1	116,940
Kuparuk	12.5%	0	0	0	-	-	-	-	-	-	-	91,820
Tarn	12.5%	18	17	14	13	11	10	9	9	8	7	50,575
Tabasco	12.5%	0	0	0	0	0	0	0	0	0	0	3,901
West Sak	12.5%	4	4	3	3	3	3	3	2	2	2	19,664
Liberty	0.0% (10)	-	-	-	-	-	-	-	-	-	-	-
Milne Point Unit	14.6%	9	8	8	7	7	6	6	5	5	4	60,654
Milne Point	14.6%	4	4	4	3	3	3	3	2	2	2	36,251
Saa River	14.6%	0	0	0	0	0	0	0	0	0	0	1,195
Schrader Bluff	14.6%	4	4	4	4	4	3	3	3	3	2	23,314
Northstar	16.0% (11)	2	2	1	1	1	-	-	-	-	-	22,455
Other Onshore (4)	12.5%	2	2	1	1	1	1	1	1	1	1	12,642
Prudhoe Bay	12.5%	41	39	37	35	33	31	29	27	25	24	376,269
Prudhoe Bay Pool (5)	12.5%	37	36	34	32	31	29	28	26	25	24	349,853
Prudhoe Bay Satellites	12.5%	4	3	3	2	2	2	1	1	-	-	26,463
TOTAL		87	81	74	69	64	58	54	50	46	43	750,784
COOK INLET (6)												
Beaver Creek	0.0% (12)	-	-	-	-	-	-	-	-	-	1	365
Granite Point	12.5%	-	-	-	-	-	-	-	-	-	-	1,209
McArthur River	12.5%	-	-	-	-	-	-	-	-	-	-	2,750
Middle Ground Shoal	12.5%	-	-	-	-	-	-	-	-	-	-	1,246
Swanson River	0.0% (12)	-	-	-	-	-	-	-	-	-	1	365
Trudna Bay	12.5%	-	-	-	-	-	-	-	-	-	-	421
West McArthur River	12.5%	-	-	-	-	-	-	-	-	-	2	528
TOTAL		-	-	-	-	-	-	-	-	-	4	6,656
STATE		87	81	74	69	64	58	54	50	46	45	757,440

IN-KIND ROYALTY OIL SALES												
Mapco 1 (7)	-	-	-	-	-	-	-	-	-	-	-	63,875
Mapco 3 (8)	-	-	-	-	-	-	-	-	-	-	-	44,888
TOTAL		-	-	-	-	-	-	-	-	-	-	108,763
IN-VALUE ROYALTY OIL		87	81	74	69	64	58	54	50	46	45	648,677

(6) The Mapco 3 contract reserves to Mapco an annually increasing percentage of Prudhoe Bay Unit (Prudhoe Bay+GPMA) royalty product 1999: 27.0%, 2000: 28.5%, 2001: 30.0%, 2002: 32.0%, 2003: 33.5%. The contract expires December 2003.
 (7) Alpine's estimated state royalty share. It does not include the royalty share attributable to Arctic Slope Regional Corporation.
 (8) This forecast allocates no Liberty production to state leases but the field will pay an assumed 27% of its revenue.
 (9) Northstar's estimated minimum state royalty share. It does not include federal royalty or revenue nor the sliding scale state Supplemental.
 (10) Beaver Creek and Swanson River fields lie entirely within federal leases and so pay no state royalty.
 Revised 3/26/99

New 1999 6

DRAFT

TABLE 2B - OIL PRODUCTION FORECAST FOR PRODUCING AND DEVELOPING NORTH SLOPE FIELDS, BY LESSEE

THOUSANDS OF BARRELS PER DAY. INCLUDES OIL, CONDENSATE, AND NGU

	Working Interest	Total Oil/acre(1)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
PRODUCTION FORECAST FOR NORTH SLOPE (2)														
Alpine			-	25	75	75	75	75	72	68	67	59	52	49
Arco	56.00%		-	14	42	42	42	42	40	38	38	33	29	27
Anadarko	22.00%		-	6	17	17	17	17	16	15	15	13	11	11
UTP (3)	22.00%		-	6	17	17	17	17	16	15	15	13	11	11
Badami			3	5	5	5	4	4	4	3	3	2	2	-
BP	70.00%		2	4	4	4	3	3	3	2	2	1	1	-
FINA	30.00%		1	2	2	2	1	1	1	1	1	1	1	-
Duck Island Unit (4)			47	44	39	35	31	28	24	20	17	15	13	11
Amoco	10.20%		5	4	4	4	3	3	2	2	2	2	1	0
Arco	0.02%		0	0	0	0	0	0	0	0	0	0	0	0
BP	58.77%		28	26	23	21	18	16	14	12	10	9	7	6
CIRI	0.02%		0	0	0	0	0	0	0	0	0	0	0	0
Dovon	0.13%		0	0	0	0	0	0	0	0	0	0	0	0
Exxon	20.31%		10	9	8	7	6	6	5	4	3	3	3	2
NANA	0.39%		0	0	0	0	0	0	0	0	0	0	0	0
Unocal	10.16%		5	4	4	4	3	3	2	2	2	2	1	1
Greater Point McIntyre (5)			140	112	96	84	74	65	56	50	45	40	35	31
Arco	28.72%		40	32	28	24	21	19	16	14	13	11	10	9
BP	36.43%		51	41	35	31	27	23	20	18	16	14	13	11
Exxon	34.85%		49	39	33	29	26	22	20	17	16	14	12	11
Kuparuk River Unit (6)			260	238	232	224	211	201	194	199	190	180	166	156
Arco	54.95%		143	131	127	123	116	110	107	109	104	99	91	86
BP	39.05%		102	93	91	87	82	78	76	78	74	70	65	61
Chevron	0.11%		0	0	0	0	0	0	0	0	0	0	0	0
Exxon	0.21%		1	0	0	0	0	0	0	0	0	0	0	0
Mobil	0.36%		1	1	1	1	1	1	1	1	1	1	1	1
Unocal	5.32%		14	13	12	12	11	11	10	11	10	10	9	8
Milne Point Unit (7)			50	49	51	51	49	52	56	67	67	66	65	64
BP	91.56%		45	45	46	47	45	48	51	61	61	60	60	59
Oxy	8.44%		4	4	4	4	4	4	5	6	6	6	5	5
North Star			-	-	5	60	60	52	42	34	29	24	20	16
BP	98.08%		-	-	5	59	59	51	41	33	28	24	20	16
Murphy	1.92%		-	-	0	1	1	1	1	1	1	0	0	0
Prudhoe Bay Unit (8)			616	566	530	515	513	493	474	453	425	397	378	343
Arco	28.97%		178	164	154	149	143	137	131	123	115	110	110	99
BP	38.52%		237	218	204	198	198	190	183	174	164	153	146	132
Chevron	0.61%		4	3	3	3	3	3	3	3	3	2	2	2
Exxon	29.04%		179	164	154	150	149	143	138	132	123	115	110	100
Forceneray	0.03%		0	0	0	0	0	0	0	0	0	0	0	0
Mobil	1.14%		7	6	6	6	6	6	6	6	6	5	4	4
Phillips	1.33%		8	8	7	7	7	7	6	6	6	5	5	5
Texaco	0.36%		2	2	2	2	2	2	2	2	2	1	1	1
TOTAL Amoco			5	4	4	4	3	3	2	2	2	2	1	1
TOTAL Anadarko			-	6	17	17	17	16	15	15	13	11	11	11
TOTAL Arco			361	341	351	338	328	314	300	293	278	258	240	221
TOTAL BP			465	426	407	446	432	410	388	378	356	332	311	285
TOTAL Chevron			4	4	3	3	3	3	3	3	3	3	2	2
TOTAL CIRI			0	0	0	0	0	0	0	0	0	0	0	0
TOTAL Dovon			0	0	0	0	0	0	0	0	0	0	0	0
TOTAL Exxon			238	213	196	186	181	172	162	153	143	132	125	113
TOTAL FINA			1	2	2	2	1	1	1	1	1	1	1	-
TOTAL Forceneray			0	0	0	0	0	0	0	0	0	0	0	0
TOTAL Mobil			8	7	7	7	7	6	6	6	6	5	5	4
TOTAL Murphy			-	-	0	1	1	1	1	1	1	0	0	0
TOTAL NANA			0	0	0	0	0	0	0	0	0	0	0	0
TOTAL Oxy			4	4	4	4	4	5	6	6	6	6	5	5
TOTAL Phillips			8	8	7	7	7	7	6	6	6	5	5	5
TOTAL Texaco			2	2	2	2	2	2	2	2	2	1	1	1
TOTAL UTP (3)			-	6	17	17	17	17	16	15	15	13	11	11
TOTAL Unocal			19	17	16	15	14	14	13	13	12	11	10	9
TOTAL North Slope			1,115	1,039	1,033	1,049	1,017	970	922	893	842	783	731	669
PROJECTED NORTH SLOPE ROYALTY SHARE FROM ABOVE FIELDS														
			143	132	130	134	134	128	121	116	109	101	95	87

(1) Averages from operator royalty statements of January through December 1998.
 (2) "Liberty" and "Other Onshore" are not included.
 (3) UTP is wholly owned by Arco.
 (4) "Duck Island Unit" production includes Elder, Endicott and Sea Delta North.
 (5) "Greater Point McIntyre" production includes Lisburne, all Niakuk wells, North Prudhoe Bay State, Point McIntyre, and West Beach.
 (6) "Kuparuk River Unit" includes Kuparuk Tarn and West Sak.
 (7) "Milne Point" production includes Milne Point, Schrader Bluff, and Sea River.
 (8) "Prudhoe Bay Unit" includes Prudhoe Bay and Satellites.
 Revised 3/26/99.

New 1999 7

DRAFT









THOUSANDS OF BARRELS PER DAY, INCLUDES OIL, CONDENSATE, AND NGLs


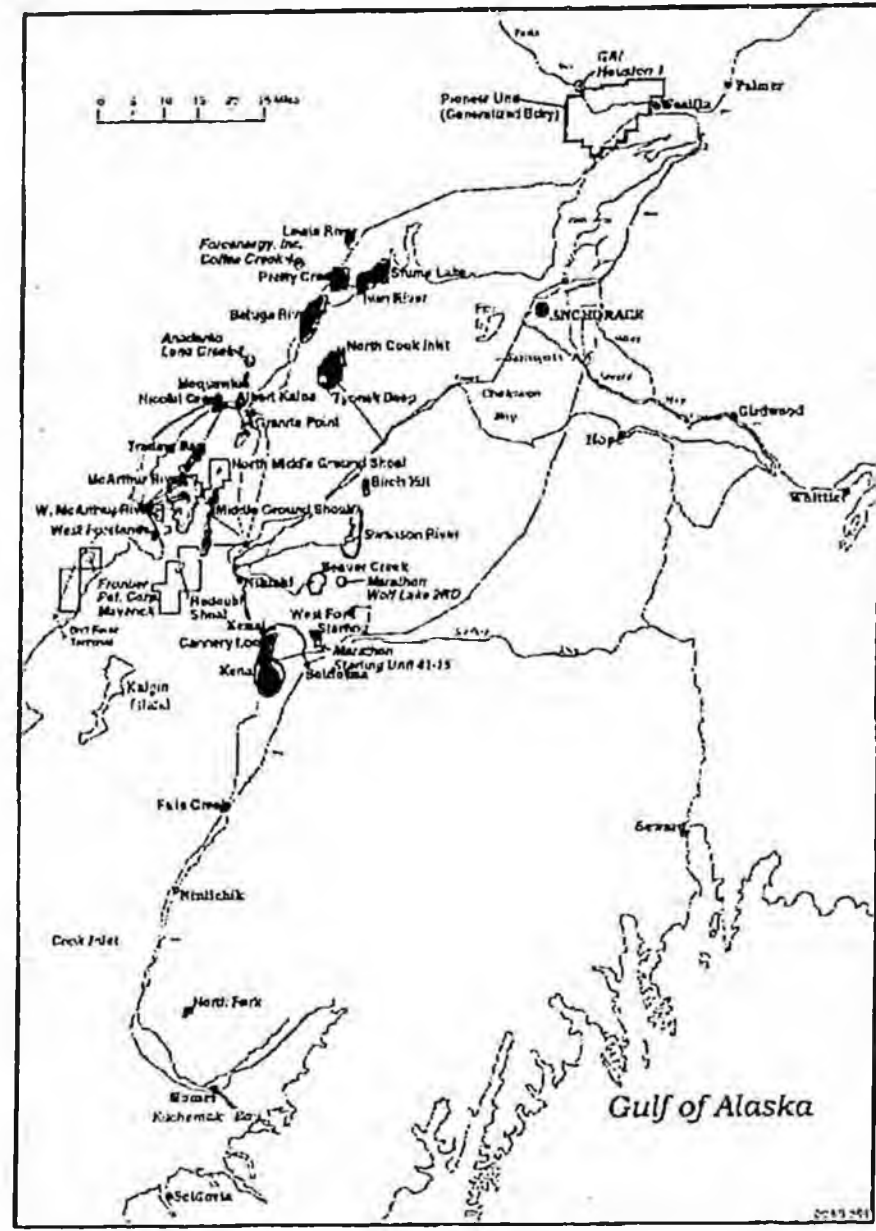
	Working Interest	Total Office(1)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cumulative (Mbbbl)
PRODUCTION FORECAST FOR NORTH SLOPE													
Alpine			41	36	30	28	26	24	23	22	21	20	350,409
Arco	56.00%		23	20	17	16	15	13	13	12	11	11	196,433
Anadarko	22.00%		9	8	7	6	6	5	5	5	5	4	77,170
UTP	22.00%		9	8	7	6	6	5	5	5	5	4	77,170
Badami			-	-	-	-	-	-	-	-	-	-	14,600
BP	70.00%		-	-	-	-	-	-	-	-	-	-	10,476
FINA	30.00%		-	-	-	-	-	-	-	-	-	-	4,490
Duck Island Unit (4)			11	10	10	9	9	8	8	7	7	6	149,103
Amoco	10.20%		1	1	1	1	1	1	1	1	1	1	15,244
Arco	0.02%		0	0	0	0	0	0	0	0	0	0	30
BP	58.77%		6	6	6	5	5	5	5	4	4	4	87,842
CIRI	0.02%		0	0	0	0	0	0	0	0	0	0	27
Doyon	0.13%		0	0	0	0	0	0	0	0	0	0	194
Exxon	20.31%		2	2	2	2	2	2	2	1	1	1	30,357
NANA	0.39%		0	0	0	0	0	0	0	0	0	0	583
Unocal	10.16%		1	1	1	1	1	1	1	1	1	1	15,186
Greater Point McIntyre (5)			28	26	23	19	17	15	13	11	10	9	362,471
Arco	28.72%		8	7	6	5	5	4	4	3	3	2	104,207
BP	36.43%		10	9	8	7	6	5	5	4	3	3	132,181
Exxon	34.85%		10	9	8	7	6	5	5	4	3	3	126,440
Kuparuk River Unit (6)			145	133	115	104	91	81	75	70	65	59	1,236,255
Arco	54.95%		80	73	63	57	50	45	41	38	35	32	679,623
BP	39.05%		57	52	45	40	36	32	29	27	25	23	482,900
Chevron	0.11%		0	0	0	0	0	0	0	0	0	0	1,360
Exxon	0.21%		0	0	0	0	0	0	0	0	0	0	2,597
Mobil	0.36%		1	0	0	0	0	0	0	0	0	0	4,452
Unocal	5.32%		8	7	6	6	5	4	4	4	3	3	65,788
Milne Point Unit (7)			61	58	54	51	49	44	40	37	33	29	416,498
BP	91.56%		56	53	49	47	44	40	37	33	30	27	381,680
Oxy	8.44%		5	5	5	4	4	4	3	3	3	2	35,183
North Star			13	10	8	6	5	-	-	-	-	-	139,978
BP	98.08%		13	10	8	6	5	-	-	-	-	-	137,648
Murphy	1.92%		0	0	0	0	0	-	-	-	-	-	2,695
Prudhoe Bay Unit (8)			326	309	293	276	260	244	230	217	199	189	3,009,790
Arco	28.97%		94	90	85	80	75	71	67	63	58	55	872,042
BP	38.52%		126	119	113	106	100	94	89	84	77	73	1,159,512
Chevron	0.61%		2	2	2	2	2	1	1	1	1	1	18,362
Exxon	29.04%		95	90	85	80	76	71	67	63	58	55	874,149
Forconergy	0.03%		0	0	0	0	0	0	0	0	0	0	903
Mobil	1.14%		4	4	3	3	3	3	3	2	2	2	34,316
Phillips	1.33%		4	4	4	4	3	3	3	3	3	3	40,035
Texaco	0.36%		1	1	1	1	1	1	1	1	1	1	10,837
TOTAL Amoco			1	1	1	1	1	1	1	1	1	1	15,208
TOTAL Anadarko			9	8	7	6	6	5	5	5	5	4	77,090
TOTAL Arco			205	190	171	158	145	133	124	117	107	101	1,851,619
TOTAL BP			267	249	229	212	196	176	164	152	140	129	2,390,660
TOTAL Chevron			2	2	2	2	2	1	1	1	1	1	19,720
TOTAL CIRI			0	0	0	0	0	0	0	0	0	0	26
TOTAL Doyon			0	0	0	0	0	0	0	0	0	0	194
TOTAL Exxon			107	101	95	89	83	78	73	68	63	59	1,033,243
TOTAL FINA			-	-	-	-	-	-	-	-	-	-	4,380
TOTAL Forconergy			0	0	0	0	0	0	0	0	0	0	903
TOTAL Mobil			4	4	4	4	3	3	3	3	3	2	38,762
TOTAL Murphy			0	0	0	0	0	-	-	-	-	-	2,688
TOTAL NANA			0	0	0	0	0	0	0	0	0	0	581
TOTAL Oxy			5	5	5	4	4	4	3	3	3	2	35,152
TOTAL Phillips			4	4	4	4	3	3	3	3	3	3	40,030
TOTAL Texaco			1	1	1	1	1	1	1	1	1	1	10,835
TOTAL UTP			9	8	7	6	6	5	5	5	5	4	77,090
TOTAL Unocal			9	8	7	6	6	5	5	4	4	4	80,918
TOTAL North Slope			625	582	532	493	457	416	389	363	334	311	5,679,100
PROJECTED NORTH SLOPE ROYALTY SHARE FROM ABOVE FIELDS													
			87	81	74	69	64	58	54	50	46	43	750,784

New 1999 8

Cook Inlet Activity

Map Legend

-  Unit Boundary
-  Oil Field / Accumulation
-  Gas Field / Accumulation
-  Selected Wells
-  Proposed / Active Wells
-  Platform
-  Pipelines
-  Production Facility

Projects Under Development

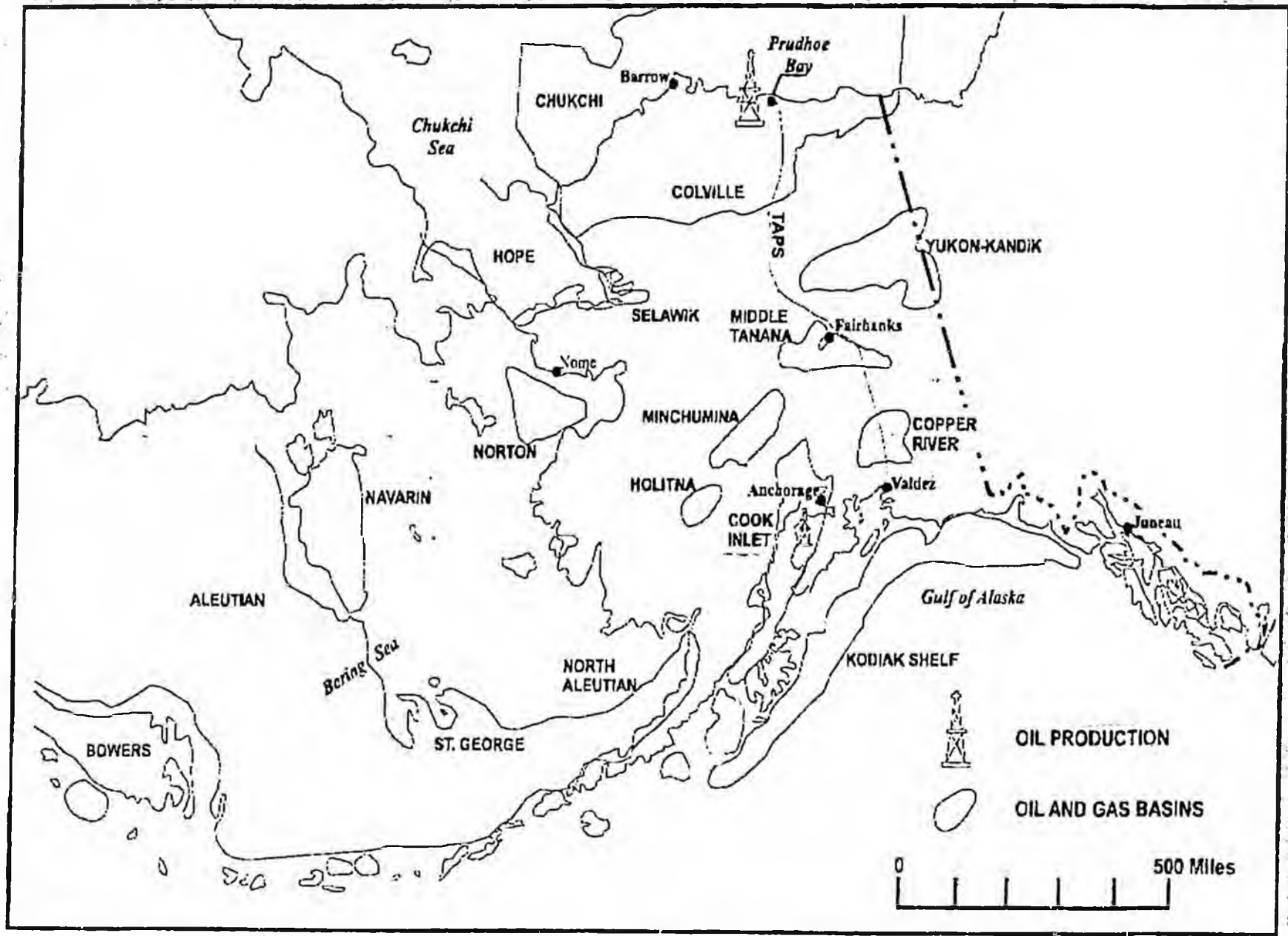
Northern Alaska (February 1999)

Project	Status	Expected Start Up Date	Expected Peak Production Rate (x 1,000 bbls/d)
Badami	Production started, but currently shut-in	N.A.	?
Northstar**	Ice road construction and EIS work underway	2001 ?	60
Alpine	Construction work underway	2000	70
Prudhoe Bay Satellites	Exploration/delineation/testing underway	1998 *	40
Kuparuk River Satellites	Exploration/delineation/testing underway	1998	29
West Sak	Initial development underway	1998	16
Schrader Bluff	Expansion work slowed; under review	N.A.	16

* Various Facility Sharing Agreements Needed Prior to Start-Up

** Construction of modules halted, moving forward with permitting

Alaska Oil and Gas Basins



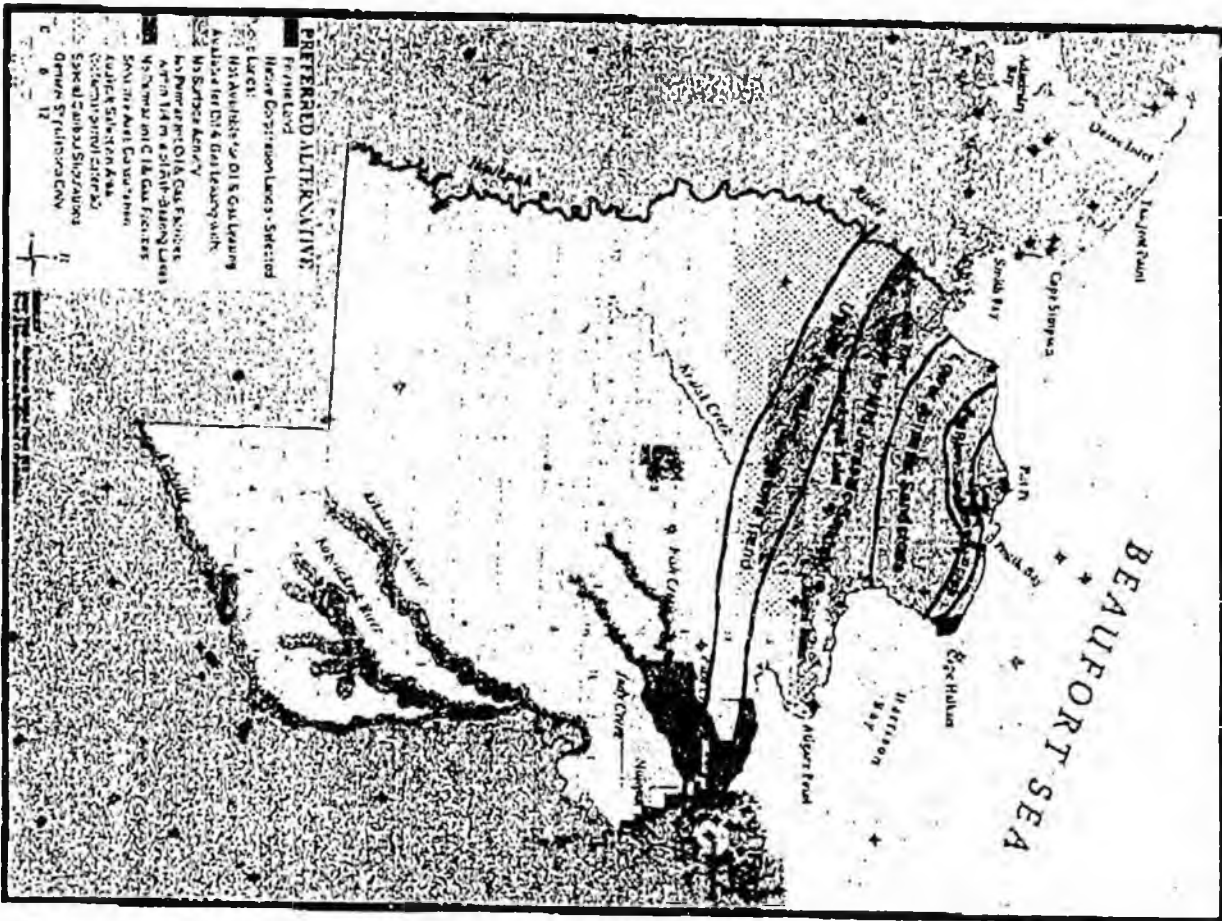
P. 02

FRA NO. 5023502

DIRECTOR'S OFFICE

NOV 10 11 11

National Petroleum Reserve-Alaska (NPR-A) Northeast Planning Area



State of Alaska
 Department of Natural Resource
 Division of Oil & Gas
 550 West 7th Avenue, Suite 800
 Anchorage, AK 99501-3510
 (907) 269-8784



Fax Cover Sheet

TO:	DEB/SEN POWELL	PHONE:	
COMPANY:		FAX NO.:	
FROM:	KEO BYD	PHONE:	(907)
		FAX NO.:	(907) 269-8938
DATE:	3/29/99	TIME:	

CC:

Number of pages including cover sheet: 2

- Urgent
 For Review
 Please Comment
 As You Requested
 FYI

Message:

THIS BECOMES PAGE 14 (LAST PAGE)
 of HANDOUT for TODAY'S SEN
 FINANCE COMMITTEE
 SORRY FOR THE LATENESS -
 DIDN'T OCCUR TO ME TO USE
 THIS UNTIL LAST NITE!

Undeveloped Oil Accumulations

Northern Alaska (February 1999)

Name	Discovery Date	Estimated Recoverable Reserves	Comments
Point Thomson	1977	200 MMBO 3.5 TCFG	Near ANWR; gas, condensate, and oil
Flaxman Island	1975	? Oil	Tertiary turbidites , in Pt. Thomson Unit
Sourdough	1994	? Oil	Adjacent to ANWR, in Pt. Thomson Unit
Kuvlum	1992	325 MMBO	East Beaufort OCS, tested at 3400 BOPD
Tern Is./Liberty	1982	120 MMBO	Mikkelson Bay area OCS
Hammerhead	1986	? Oil	OCS waters north of Pt. Thomson
Colville Delta	1985	? Oil	Near Kuparuk Field
Fiord	1992	? Oil	Two intervals at 1245 BOPD
Kalubik	1992	? Oil	Two intervals at 1610 BOPD
Northstar *	1984	144 MMBO	Beaufort Sea, including Seal Island
Prudhoe Bay *	Satellites	241 MMBO	Several separate accumulations

* Development in progress or planned in the near term.

MMBO - millions of barrels of oil

TCFG - trillions of cubic feet of gas

SENATE FINANCE COMMITTEE
LOG NOTES
03/29/99

LOG	SPEAKER	DISCUSSION
000	Co-chair Parnell	Reconvened the committee for DFYS Audit Review. He noted there will be two individuals to testify regarding this review.
	Pat Davidson	Director, Division of Legislative Audit was invited to join the committee. January 1998 audit of Division of Health and Social Services. FY 97 DFYS social workers did not consistently conduct the department. 1. Legislature consider additional funding for social workers. 2. DFYS should report back to the Legislature how this was used. 3. Admin Services should report how funding was used. Reports of harm be investigated.
	Co-chair Parnell	Asked explain "work load adjustment"
	Ms. Davidson	Delay or never investigate harm if it is a minor harm. She continued specific position requests. Filled October 1998 Sept. 14, 1998 statute for child protection. No evidence funds used inappropriately in 1998. DFYS cannot investigate each report of harm. Made significant progress to provide training for staff. Deficiencies in case management status. Recommends DFYS upgrade .
	Co-chair Parnell	Page 22 of audit report. Asked she explain prior recommendations no 5 and 8.
	Ms. Davidson	Responds. When agency faced with workload that funding doesn't allow complete address must develop priorities. Difficult decisions must be made by management. Should not be left to individual social worker. Falls in line with recommendation #8 regarding workload. This is large agency, large staff involved. Need to develop workload measurement tool. How much time is a standard report of harm. Found no substantial progress on these two prior recommendations.
	Senator Phillips	Concerned with page 24, prior recommendation #7.
	Ms. Davidson	Does fall in line. Department always trying to respond to matters. Will be enhanced with better information system.
	Senator Phillips	Re: Division of Legislative Audit's current position on prior recommendation.

SENATE FINANCE COMMITTEE
LOG NOTES
03/29/99

	Co-chair Parnell	Referred to Audit Report. Sort of sterile government terms. Asked definition of "child protection".
	Ms. Davidson	More children at risk. Department needs to recognize and respond.
	Karen Perdue	<p>Commissioner, Department of Health and Social Services was invited to join the committee. Introduced Russ Webb, Deputy Commissioner and Theresa Tanoury, Child Protection. She referred to their audit handout. Hired 28 new employees and got them trained by January.</p> <p>Re: Audit Number 1 released 8 recommendations.</p> <p>Re: Audit Number 2 released 6 recommendations.</p> <p>They have 30 offices and performance has increased dramatically in answering calls. Major progress in Mat-Su and Ketchikan. Fairbanks took dip same as Anchorage over summer because of training. Kenai and Juneau have increased. Increase in number of families receiving ongoing services. Trying to comply with new law asking them to act faster.</p>
	Co-chair Parnell	Reports of Harm graph. Took in more calls and more cases assigned to CP workers. Is that what the increase shows?
	Ms. Perdue	Numbers go up and down.
	Co-chair Parnell	Trying to distinguish depts graph and audit report graph.
	Ms. Perdue	One month more priority ones and cases take longer to investigate. Response time is more.
	Co-chair Parnell	Percentage assigned for investigation. Asked for clarification.
	Ms. Perdue	<p>Brief update on Anchorage. Knew they needed to focus on training because they had large turnover. Have to go see the child. Were getting a new case assigned every 3.5 hours. These were physically impossible to handle. Lost many case workers.</p> <p>Refers to Response to March 1998 Audit and January 1999 Follow-Up Audit. Have seen an improvement since January. Like law but tremendously impacting the department. February this year 44 child adjudications. As example. Focused in implementing the new law.</p> <p>Performance measures in missions and measures. Seems to be tracking and really likes them.</p> <p>Training: Have had workers pay for their</p>

SENATE FINANCE COMMITTEE

LOG NOTES

03/29/99

		own training.
	Co-chair Parnell	Legislature budgeted training last year. Is this not enough?
	Ms. Perdue	Faced with specialized training for workers.
	Co-chair Parnell	Training monies only been encumbered recently.
	Ms. Perdue	Has to do with RSA. Training is ongoing. Academy opened in August. Does not disagree with any recommendations. #5 and #8 within their work plan. Refers to chart on page 8 of handout. Explained Report of Harm Prioritization. Priority 3 has been workload adjusted. Offices doing this at their own speed. However, this is not appropriate. Trying to bring everyone up to the same level. Can't just take on workers to investigate cases, must have workers to provide follow-up. Can be improved. Cannot ask social worker to investigate more than two cases per day. No call comes in simple. Stories very complicated. Unless child is being tortured it is a subtle rating. Is everyone using the same information to rate calls. Working on having everyone using the same rating system.
	Senator Phillips	Is this handout current procedure?
	Russ Webb	From March audit last year. This procedure has been in place for many years.
	Senator Phillips	Is there an update?
	Russ Webb	We have policy. Difficulty is applying that policy. One has to be applied consistently so all understand rating of priorities. Priority 1 and 2 are never allowed to remain uninvestigated. Question arises to workload and staff.
	Ms. Perdue	Does not like work load adjustment.
	Senator Phillips	Have you achieved perfection?
	Ms. Tanoury	Explained that when three reports received on one child they do investigate. Imminent danger is not there. Someone goes to check on the child. Only low risk priorities are not responded to immediately.
	Russ Webb	Perhaps when one actually goes an investigates the call the priority is higher and more risk and danger to the child. Case worker struggles with the decisions that must be made.
	Senator Phillips	Audit report said there is not an established policy.
	Pat Davidson	What you have is a very rough cut. Looking for policy it has to be more than a three way cut. General guidance is out there,

SENATE FINANCE COMMITTEE
LOG NOTES
03/29/99

		however not sufficiently for consistent across the state response.
	Russ Webb	Believes they have not achieved perfection and there is room for improvement.
	Senator Kelly	Referred to priority handout. 70 - 90 days to do training? If prioritization carried out by fully trained staff operating at full capacity?
	Ms. Davidson	Prioritization is for initial reports of harm. HB 375 addressed when children were in custody.
	Senator Kelly	Prioritization schedule does not seem to be that lacking. Trained staff and fully up to speed, perhaps this wouldn't be this way. Audit was a bit premature because audit was being done when new workers were coming on and not fully trained and up to speed at the time.
	Ms. Davidson	Agrees that the audit was a little premature. Did not expect to see increase in reports of harm. Prioritization for first three cuts is reasonable. However, they see so much happening at all levels. And social workers where do you put them. Problem must be identified. Management must refine workload measurement.
	Ms. Perdue	Theory they would never go back on an office. Does not want to put too much faith in computer. This is complicated and tough decisions must be made. Trying to bring everyone up. There is still a great unevenness within the State. Risk assessment tool. They do have a lot of homework to do. And they are trying.
	Co-chair Parnell	Reports of harm in January down.
	Ms. Perdue	Thanked for new help given. Some positions went into ongoing and community care licensing.
	Senator Phillips	Case load standards?
	Russ Webb	Is in audit response. Would be happy to provide in further detail.
	Senator Wilken	Re: page 5 Child Protection Status Report. (Tape switch side B at log #586.)
	Ms. Perdue	Explained briefly.
	Senator Wilken	A year from now looking at standards and measurements are these the five we will see? Or are there more categories of success and failure?
	Ms. Perdue	Performance measures which are in packet.
	Co-chair Parnell	Cautioned that will wrap this up in about a five minutes.
	Senator Phillips	Have you hired now staff in Anchorage?
	Ms. Perdue	Yes. Mat-Su and Kenai pulled out of Anchorage area so they could get the

SENATE FINANCE COMMITTEE
LOG NOTES
03/29/99

		attention they needed.
	Russ Webb	Responds. There is no particular average. Initial investigation, court time, etc.
	Senator Kelly	Concern with reports of harm.
	Ms. Perdue	HB 375 teachers are mandated reporters. But they cannot get back to them.
	Ms. Tanoury	Meet once a month with mandated reporters. Mostly hear about low risk kids in classes. Coming into class hungry.
	Ms. Perdue	Pilot project in Mat-Su. Hungry child living in home with no running water and parents between jobs. This is not a protection matter.
	Senator Kelly	Actions taken resulted in better protection?
	Ms. Tanoury	Has increased communication between department and mandated reporters. Feels situation will improve.
	Senator Green	Breakdown in priorities. How do you base response time for priority three?
	Russ Webb	Less timely on priority 2's and clear they are not timely on priority 3's. But they really must respond to all calls because they really never know the actual extent.
	Co-chair Parnell	Workload adjustment?
	Ms. Perdue	Something they have been doing for years and would like to get out of it. However, something they have three year plan in budget that would get them to no more work load adjustment.
	Co-chair Parnell	Part of Smart Start?
	Ms. Perdue	Yes.
	Senator Wilken	Suggested audit was premature. He felt audit not premature, but drawing conclusions was premature. Huge project, huge task. Must be vigilant, however not an indication of lack of support for the project. He will continue to support.
	Co-chair Parnell	Moved in to Balanced Budget. Cautions committee they are still in order.
		(brief at ease) Reconvened the committee. Trying to keep everyone on time.
	Wilson Condon	Commissioner, department of Revenue was invited to join the committee. Spring forecast be ready first of next week. Oil roughly at \$14.50/barrel. Over next five years expected revenue will be \$1 billion 400 million. That's what is expected on an average. May be some up and down periods over the next five years. Refers to Constitutional Budget Reserve Exhausted. Page 2, Annualize \$1.00/barrel impact on

SENATE FINANCE COMMITTEE
LOG NOTES
03/29/99

		General Fund Unrestricted Revenue. Referred to graph. More than 50% decline 1990 to 2000. Dollar change worth less than half to us.
	Senator Torgerson	\$14.50 anticipated use?
	Commissioner Condon	Figure they will arrive at within a couple of dimes.
	Senator Torgerson	Working on looking at budget over 20-year time frame? Any suggestions or recommendations?
	Commissioner Condon	Oil prices will increase with inflation going forward. History a guide, then you would question that conclusion. North Slope oil averaging about \$16/barrel.
	Senator Torgerson	Wasn't much help.
	Commissioner Condon	Believes if one takes \$16/barrel will be
	Co-chair Parnell	How do the experts project out in 20 years? What measures are used?
	Commissioner Condon	Make judgments about what's going to happen in terms of demand, response to the demand, where will the supply come from, what's going to happen technologically. Also must factor in a political judgment. In response to Senator Wilken, staff has also done their own projections.
	Senator Wilken	Change is projections?
	Commissioner Condon	Yes. How much oil is available. (tape change to #70, Side A)
	Senator Phillips	Any projection to replace diminishing oil? Relates to jobs and ANWR.
	Commissioner Condon	Would be easy to calculate but could not give number presently.
	Senator Wilken	General number under which pipeline wouldn't work?
	Commissioner Condon	Estimate is 300,000 barrels/day would not perhaps be economical.
	Senator Leman	Tring to figure out big drop this fiscal year and next fiscal year. Looking at charts with general decline in production, looks.
	Senator Phillips	When do we reach 300,000 barrels/day?
	Commissioner Condon	About year 2020. Based on today's information.
	Co-chair Parnell	Comments to Ken Boyd on line.
	Ken Boyd	Director, Oil and Gas Refers to his memorandum dated 3/26/99 Pages 5 & 6 current. Compared page 1 and 5. Starts with North Slope (Alpine) Alpine will come on a little later in year 2000. In response to Senator Parnell explained totals. "State total" is total of all columns.
	Co-chair Parnell	Production a little bit down?
	Ken Boyd	Things have changed over night.

SENATE FINANCE COMMITTEE
LOG NOTES
03/29/99

Senator Wilken	9% reduction? He figures about 16% reduction.
Mr. Boyd	Responds.
Senator Wilken	Further query? Difference in reduction. Asked that be reconciled.
Mr. Boyd	Page 9, map. Can provide individual copy if need be.
Senator Torgerson	Please identify projects listed on page 11.
Mr. Boyd	Offered brief clarification. Page 12.
Senator Torgerson	Projected increase.
Mr. Boyd	Referred to several satellites. Estimate not an absolute number.
Senator Torgerson	Added 50,000 barrels/day.
Mr. Boyd	Totals are there. See page 12. Undeveloped Oil Accumulations - Kuvlum and Tern Island/Liberty described. Fiord will get results shortly. Northstar waiting to see what the federal agencies battling each other come up with. Page 13 map. National Petroleum Reserve-Alaska (NPR-A) Will have to wait and see what happens in May.
Senator Torgerson	Query. Doesn't see Aurora.
Mr. Boyd	Aurora discovered last Friday. This is just a satellite. Will know more about Thompson by September.
Senator Torgerson	Wants everything included if we know they are out there. Doesn't want any thing left out.
Mr. Boyd	Will be able to tell what is included and what was left out due to time.
Senator Torgerson	What do you have for the new platform at Cook Inlet?
Mr. Boyd	Did not focus on Cook Inlet for this presentation. Can provide this information. Does not have any present data.
Senator Torgerson	No other data?
Mr. Boyd	All kinds of estimates.
Senator Torgerson	Mood to speculate. Should be able to put in a plan for production.
Mr. Boyd	Mo public available data at this time.
Senator Torgerson	Asked Mr. Boyd's comments on ARCO - British Petroleum merger.
Mr. Boyd	Each company has a settlement agreement. Gave a few insights. As the day passes it will sink in.
Senator Torgerson	Possible increase in gas production. Any comments?
Mr. Boyd	Numbers can't get much higher than what they are. Understands 90 some odd thousand is the limit. Numbers can't get much bigger.

SENATE FINANCE COMMITTEE
LOG NOTES
03/29/99

Senator Wilken	Refers to commissioner Condon's testimony slow down to 300,000/barrels/day. Do you agree?
Mr. Boyd	Yes.
Senator Wilken	Keep track of number of drill rigs operating on the slope over past 3 years and next 1 - 2 years.
Mr. Boyd	Will send requested information to Senator Wilken.
Co-chair Parnell	Thanked Mr. Boyd. Called Department of Labor. Discuss population.
Greg Williams	Department of Labor was invited to join the committee. Will give brief overview on population projections. Projections go out 20 years. Assumptions made are continuation of historical trends. Age distribution in Alaska has some large and small groups of people. Refers to the baby boom. Most dominant factor is natural increase. Have seen booms and busts that do not last long periods of time. School age population and the elderly. Substantial increase starting now. Going to see significant increases. Substantial strain on resources by that time. Other group of interest is school age children. Fairly flat.
Co-chair Parnell	Asked for break-out over next five years. Concern Anchorage has lost jobs. What is impact on migration and children not in school.
Mr. Williams	Responds.
Co-chair Parnell	Asked for forecast over next five years and take into account current economic status, loss of jobs.
Mr. Williams	Difficult project. Not prepared to do this. These numbers have been just released. The current changes account for relatively little school enrollment. Result of aging of trough born about 1975. Differential shift by regions.
Co-chair Parnell	Governor planning for increase in student population. What are the realistic assumptions to be made?
Senator Wilken	Age 5 - 17. Hearing in Mat-Su Valley.
Co-chair Parnell	Adjourned meeting at approximately 11:20 a.m.

CALLAN ASSOCIATES^{INC}

GREGORY C. ALLEN
EXECUTIVE VICE PRESIDENT
DIRECTOR OF OPERATIONS



71 STEVENSON STREET, SUITE 1300
SAN FRANCISCO, CALIFORNIA 94105
TEL: 415.974.5060 FAX: 415.974.5911
EMAIL: allen@callan.com

Alaska State Legislature

Chairman,
Judiciary Committee
State Capitol
Juneau, Alaska 99801-1182
(907) 465-3873
Fax: (907) 465-3922



50 Front Street
Suite 203
Ketchikan, Alaska 99901
(907) 225-8088
Fax: (907) 225-0713

Senator Robin L. Taylor

Cuts and Consolidation

Privitization

Resource Development

District A:

Hyder • Ketchikan • Kupreanof • Meyers Chuck • Petersburg • Saxman • Sitka • Wrangell

INDEX

	Page Numbers
I. Alaska CPR Paper	1 - 2
II. Scenario Summary	3
III. 1998 DNR Land Sales	4 - 5
IV. Proposed Sales @ 30% sales price - \$1500/acre	6
V. Proposed Sales @ 25% sales price - \$1000/acre (5% down - 10 yr)	7
VI. Proposed Sales @ 25% sales price - \$1000/acre (10% down - 10 yr)	8
VII. Proposed Sales @ DNR Average Price \$4609/ac (5% Down - 10 yr)	9
VIII. Proposed Sales @ DNR Average Price \$4609/ac (10% Down - 10 yr)	10
IX. Proposed Sales @ DNR Average Price (5% Down - 15 yr)	11
X. Proposed Sales @ DNR Average Price (10% Down - 15 yr)	12

Alaska State Legislature

Chairman,
Judiciary Committee

State Capitol
Juneau, Alaska 99801-1182
(907) 465-3673
Fax: (907) 465-3922



50 Front Street
Suite 203
Ketchikan, Alaska 99901
(907) 225-8088
Fax: (907) 225-0713

Senator Robin L. Taylor

ALASKA CPR

Recently a friend of mine suffered a heart attack. Fortunately, a bystander immediately recognized the symptoms and administered CPR. My friend has recovered now, and by watching his diet and exercising, his future looks bright. Alaska needs CPR and we need it NOW! The CPR we need is Cuts and Consolidation, Privatization, and Resource Development.

Over the past few years, Alaskans have watched as state leaders used our state reserve accounts instead of living within the state's income. Our economy has suffered one seizure after another:

- Fish prices have slid to historic lows
- Over 4,000 family support resource jobs in Southeast Alaska have been lost
- Opening of the AJ mine in Juneau was stopped
- The price of oil has sunk to a forty year low... 85% of our state's income depends on the price of oil.
- Over 6,000 oil industry and related jobs have been lost in the last six months

Despite these crises no effort has been made by the administration to reduce spending in any state agency. Instead our Governor wants to steal over 500 million dollars out of the wallets of working families and wants them to pay for 600 new state employees.

My CPR plan leaves your money in your pocket and creates new wealth for Alaskans.

1. *Cut and Consolidate* - We must reduce the size of state government and stop wasteful duplication in state agencies.
2. *Privatize* - Private enterprise can provide many government services more efficiently and at lower cost. Every state in the union, except Alaska, has experienced significant savings without the loss of essential services, by using the private sector where appropriate. This will also provide more opportunities for private sector development.

District A:

Hyder • Ketchikan • Kupreanof • Meyers Chuck • Petersburg • Saxman • Sitka • Wrangell

Attention: Lacey Travis
 Free Delivery Coffee Supplies
 Monthly Specials

Coffee, Tea, Cocoa,
 Sugar, Creamer, Cups,
 Cleaning & Maintenance



For the Month of April 1999

<u>Item</u>	<u>Brand</u>	<u>Original</u>	<u>Special</u>
Coffee:	Gourmet Medallion	\$ 38.95	\$ 35.75
	Maxwell FrRst Decaf	\$ 45.95	\$ 41.45
Sweetener:	Dixie Sugar Packets	\$ 10.95	\$ 10.15
Creamer:	Coffee Mate Fr Vanilla Can	\$ 2.95	\$ 1.95
Cocoas:	SwissMiss Sugar Free Cocoa	\$ 8.95	\$ 7.45
Teas:	Hot Spiced Cider	\$ 4.95	\$ 3.95



Official Business

Alaska State Senate

Senate Finance Committee

Mail Stop 3100
State Capitol
Juneau, Alaska 99801-1182

AGENDA

WEDNESDAY, 31 MARCH 1999

8:00 A.M.

- SB 9 PERS CREDIT FOR NONCERTIFIED EMPLOYEES
- SB 85 CREDITED SERVICE FOR TEMP EMPLOYEES:
PERS
- SB 33 TASK FORCE ON PRIVATIZATION

BALANCED BUDGET PLAN PRESENTATIONS:

**JIM KELLY
PERMANENT FUND CORPORATION**

(CONTINUED NEXT PAGE)

WEDNESDAY, 31 MARCH 1999

(PAGE 2)

6:00 P.M.

SB 101 DEFINITION OF DISASTER

**SB 24 REGULATIONS: ADOPTION AND JUDICIAL
REVIEW**

**SB 113 FINANCES OF ALASKA HOUSING FINANCE
CORPORATION**

SB 42 1999 REVISOR'S BILL

SB 84 CIGARETTE SALES: AGREEMENT/ESCROW

(BILLS PREVIOUSLY HEARD AND/OR SCHEDULED)

3. *Resource Development*- We need to develop and sell resources including land. At statehood, Alaska received over 103 million acres of land. These lands were selected for their valuable timber, mineral, agricultural and oil potential. Today less than 3/10 of 1% of Alaska is privately owned. If we sell 250,000 acres of land annually at 30% of the 1998 average sales price for land sold by DNR, we will generate annual revenues in excess of 350 million dollars a year. If we use DNR's actual average sales price, revenues will be in excess of 1 Billion dollars a year.

Our state owned forest is 25% larger than all the forests in Alberta, Canada. Alberta employs over 42,000 people in direct timber industry jobs, 4 times more people than the peak employment during our pipeline days. Presently, our forests support only a handful of workers and "millions of bugs". If we continue with the current administration's policies our children will inherit barren grasslands.

Let's try a little CPR, get this state back on its feet, then with a little TLC, a healthy diet and letting the people of Alaska exercise their inherent rights to own a piece of this great land, our future will be bright, and we won't be bleeding money away from working families.

Alaska State Legislature

Chairman,
Judiciary Committee
Administrative Regulations
Revenue Committee

Vice Chairman,
Resources Committee



Senator Robin L. Taylor

State Capitol
Juneau, Alaska 99801-1182
(907) 465-3873
Fax: (907) 465-3922

50 Front Street
Suite 203
Ketchikan, Alaska 99901
(907) 225-8086
Fax: (907) 225-0713

The State of Alaska has 103 million acres of state land. These lands hold tremendous values in timber, agricultural, recreational, and other resources. The following scenarios are based on the actual 1998 Land Sales as documented by the Division of Lands.

Calculations were based on the average sales price of state land sold in 1998 of \$4609 per acre. If you were very conservative and only budgeted based on sales prices of \$1000 per acre (less than 1/4th the prices generated last year), the revenues to be generated in future years are shown on the next page.

District A:

Hyder • Ketchikan • Kupreanof • Meyers Chuck • Petersburg • Saxman • Sitka • Wrangell

State of Alaska
1998 Land Sales

PARCEL	SUBDIVISION	Extra Detail	MIN BID	BID AMT	ACREAGE	\$/ACRE
6	Coffman cove		12,000.00	14,200.00	1.08	13,148.1
9	Coffman Cove		12,800.00	13,676.00	1.17	11,688.9
10	Coffman Cove	Waterfront	35,000.00	43,821.61	1.47	29,810.6
12	Coffman Cove		10,900.00	13,000.00	0.93	13,978.5
18	Naukati Bay West		15,700.00	20,557.00	2.09	9,835.9
19	Naukati Bay West		11,700.00	20,557.00	1.56	13,177.6
24	Naukati Bay East		15,800.00	23,500.00	2.78	8,453.2
28	Thorne Bay	Waterfront	22,000.00	80,175.00	4.80	16,703.1
29	Thorne Bay		24,000.00	40,100.00	4.63	8,660.9
30	Thorne Bay	Waterfront	23,000.00	36,000.00	4.92	7,317.1
31	Thorne Bay		39,000.00	42,002.00	4.16	10,096.6
32	Thorne Bay	Waterfront	31,000.00	43,261.00	4.32	10,014.1
33	Whale Passage		18,000.00	25,000.00	2.77	9,025.3
34	Whale Passage		41,000.00	71,387.00	2.71	26,342.1
41	Chase		7,900.00	10,010.00	15.71	637.2
52	Peters Creek		8,900.00	10,252.00	4.68	2,190.6
54	Peters Creek		9,800.00	12,556.00	4.90	2,562.4
55	Peters Creek		10,000.00	15,106.99	5.00	3,021.4
56	Peters Creek		8,200.00	21,002.00	4.09	5,135.0
57	Peters Creek		10,000.00	23,500.00	5.00	4,700.0
58	Peters Creek		9,900.00	13,600.00	4.93	2,758.6
59	Peters Creek		8,800.00	10,005.99	4.86	2,058.8
61	Peters Creek		9,600.00	15,125.00	4.79	3,157.6
64	Peters Creek		8,200.00	10,256.00	4.30	2,385.1
69	Robe Lake		29,000.00	32,159.00	4.91	6,549.7
70	Robe Lake		30,000.00	31,323.00	5.00	6,264.6
73	Robe Lake		20,000.00	27,007.00	4.64	5,820.5
74	Robe Lake		15,000.00	21,092.00	3.95	5,339.7
76	Robe Lake		28,000.00	32,000.00	4.27	7,494.1
80	Robe Lake		30,000.00	30,500.00	5.00	6,100.0
81	Robe Lake		26,000.00	31,111.00	4.86	6,401.4
82	Robe Lake		21,000.00	26,110.00	4.96	5,264.1

State of Alaska
1998 Land Sales

PARCEL	SUBDIVISION	Extra Detail	MIN BID	BID AMT	ACREAGE	\$/ACRE
83	Robe Lake		19,000.00	24,110.00	4.93	4,890.5
88	Chena Hot springs II		7,800.00	19,000.00	4.75	4,000.0
89	Chena Hot SpringsII		5,000.00	6,150.00	3.01	2,043.2
90	Chena Hot SpringsII		5,400.00	6,000.00	4.91	1,222.0
91	Chena Hot SpringsII		5,400.00	6,000.00	4.94	1,214.6
94	Delta		5,000.00	7,098.00	4.99	1,422.4
95	Delta		5,200.00	6,669.00	4.99	1,336.5
96	Delta		5,000.00	6,000.00	4.99	1,202.4
97	Eagle		7,700.00	9,220.00	4.72	1,953.4
98	Eagle		6,400.00	7,000.00	4.88	1,434.4
101	McCloud		6,500.00	15,503.00	5.23	2,964.2
102	McCloud		11,000.00	14,187.80	8.84	1,605.0
103	Tenderfoot		5,500.00	5,651.25	4.71	1,199.8
105	Tenderfoot		6,100.00	10,010.00	4.68	2,138.9
106	Tenderfoot		6,700.00	10,010.00	4.77	2,098.5
108	Tok		14,000.00	20,100.00	5.06	3,972.3
110	Tok/Tetlin		13,200.00	18,001.00	7.12	2,528.2
111	Tok/Tetlin		14,000.00	15,200.00	5.00	3,040.0
112	Tok/Tetlin		10,900.00	14,000.00	4.78	2,928.9
113	Tok/Tetlin		10,990.00	14,000.00	4.78	2,928.9
	TOTALS		772,990.00	1,093,862.64	237.32	312,217.2
	Average Price per Acre =		4,609.00			
	Total Acreage to be sold/yr		250,000.0			
	Revenues Generated *		\$1,152,250,000			
Revenues generated were 42% more than the minimum bid which represented the appraised price.						
*This is the total if paid in full at time of sale.						
NOTE: See next sheet for different payment scenarios.						

**Revenue Scenario for
Proposed Land Sales**

10% Down -10% Interest
10 Year Term

Sales price 30% of 1998 Land Sales by DNR.... \$1500/acre.

YEAR	Total acreage sold	Average \$ per Acre	Total Sales Price	10% down	Annual Payments @ 10% Int.	Total Annual Revenue
1	250,000	1500	375,000,000	37,500,000		37,500,000
2	250,000	1500	375,000,000	37,500,000	53,521,048	91,021,048
3	250,000	1500	375,000,000	37,500,000	53,521,048	144,542,096
4	250,000	1500	375,000,000	37,500,000	53,521,048	198,063,144
5	250,000	1500	375,000,000	37,500,000	53,521,048	251,584,192
6	250,000	1500	375,000,000	37,500,000	53,521,048	305,105,240
7	250,000	1500	375,000,000	37,500,000	53,521,048	358,626,288
8	250,000	1500	375,000,000	37,500,000	53,521,048	412,147,336
9	250,000	1500	375,000,000	37,500,000	53,521,048	465,668,384
10	250,000	1500	375,000,000	37,500,000	53,521,048	519,189,432
NOTE: If the land sold for cash, the total revenues would be \$375,000,000 per year. The above scenario reresents a 10% down, 10% interest, 10 year term financed by the state.						
After 10 years, we would have sold only 2% of the 103 million acres we were granted at statehood.						

**Revenue Scenario for
Proposed Land Sales**

5% Down -10% Interest
10 Year Term

Sales Price \$1000/acre

YEAR	Total acreage sold	Average \$ per Acre	Total Sales Price	5% down	Annual Payments @ 10% Int.	Total Annual Revenue
1	250,000	1000	250,000,000	12,500,000		12,500,000
2	250,000	1000	250,000,000	12,500,000	37,662,960	50,162,960
3	250,000	1000	250,000,000	12,500,000	37,662,960	87,825,920
4	250,000	1000	250,000,000	12,500,000	37,662,960	125,488,880
5	250,000	1000	250,000,000	12,500,000	37,662,960	163,151,840
6	250,000	1000	250,000,000	12,500,000	37,662,960	200,814,800
7	250,000	1000	250,000,000	12,500,000	37,662,960	238,477,760
8	250,000	1000	250,000,000	12,500,000	37,662,960	276,140,720
9	250,000	1000	250,000,000	12,500,000	37,662,960	313,803,680
10	250,000	1000	250,000,000	12,500,000	37,662,960	351,466,640

Revenue Scenario for
Proposed Land Sales

10% Down -10% Interest
10 Year Term

Sales Price \$1000/acre

Sales Price \$1000/acre

YEAR	Total acreage sold	Average \$ per Acre	Total Sales Price	10% down	Annual Payments @ 10% Int.	Total Annual Revenue
1	250,000	1000	250,000,000	25,000,000		25,000,000
2	250,000	1000	250,000,000	25,000,000	35,680,704	60,680,704
3	250,000	1000	250,000,000	25,000,000	35,680,704	96,361,408
4	250,000	1000	250,000,000	25,000,000	35,680,704	132,042,112
5	250,000	1000	250,000,000	25,000,000	35,680,704	167,722,816
6	250,000	1000	250,000,000	25,000,000	35,680,704	203,403,520
7	250,000	1000	250,000,000	25,000,000	35,680,704	239,084,224
8	250,000	1000	250,000,000	25,000,000	35,680,704	274,764,928
9	250,000	1000	250,000,000	25,000,000	35,680,704	310,445,632
10	250,000	1000	250,000,000	25,000,000	35,680,704	346,126,336

**Revenue Scenario for
Proposed Land Sales**

5% Down - 10% Interest
10 Year Term

YEAR	Total acreage sold	Average \$ per Acre	Total Sales Price	5% down	Annual Payments @ 10% Int.	Total Annual Revenue
1	250,000	4609	1,152,250,000	57,612,500		57,612,500
2	250,000	4609	1,152,250,000	57,612,500	173,588,586	231,201,086
3	250,000	4609	1,152,250,000	57,612,500	173,588,586	404,789,672
4	250,000	4609	1,152,250,000	57,612,500	173,588,586	578,378,258
5	250,000	4609	1,152,250,000	57,612,500	173,588,586	751,966,844
6	250,000	4609	1,152,250,000	57,612,500	173,588,586	925,555,430
7	250,000	4609	1,152,250,000	57,612,500	173,588,586	1,099,144,016
8	250,000	4609	1,152,250,000	57,612,500	173,588,586	1,272,732,602
9	250,000	4609	1,152,250,000	57,612,500	173,588,586	1,446,321,188
10	250,000	4609	1,152,250,000	57,612,500	173,588,586	1,619,909,774

**Revenue Scenario for
Proposed Land Sales**

10% Down - 10% Interest
10 Year Term

	YEAR	Total acreage sold	Average \$ per Acre	Total Sales Price	10% down	Annual Payments @ 10% Int.	Total Annual Revenue
	1	250,000	4,609	1,152,250,000	115,225,000		115,225,000
	2	250,000	4,609	1,152,250,000	115,225,000	164,452,344	279,677,344
	3	250,000	4,609	1,152,250,000	115,225,000	164,452,344	444,129,688
	4	250,000	4,609	1,152,250,000	115,225,000	164,452,344	608,582,032
	5	250,000	4,609	1,152,250,000	115,225,000	164,452,344	773,034,376
	6	250,000	4,609	1,152,250,000	115,225,000	164,452,344	937,486,720
	7	250,000	4,609	1,152,250,000	115,225,000	164,452,344	1,101,939,064
	8	250,000	4,609	1,152,250,000	115,225,000	164,452,344	1,266,391,408
	9	250,000	4,609	1,152,250,000	115,225,000	164,452,344	1,430,843,752
	10	250,000	4,609	1,152,250,000	115,225,000	164,452,344	1,595,296,096

Revenue Scenario for
Proposed Land Sales

5% Down -10% Interest
15 Year Term

YEAR	Total acreage sold	Average \$ per Acre	Total Sales Price	5% down	Annual Payments @ 10% Int.	Total Annual Revenue
1	250,000	4609	1,152,250,000	57,612,500		57,612,500
2	250,000	4609	1,152,250,000	57,612,500	133,727,088	191,339,588
3	250,000	4609	1,152,250,000	57,612,500	133,727,088	325,066,676
4	250,000	4609	1,152,250,000	57,612,500	133,727,088	458,793,764
5	250,000	4609	1,152,250,000	57,612,500	133,727,088	592,520,852
6	250,000	4609	1,152,250,000	57,612,500	133,727,088	726,247,940
7	250,000	4609	1,152,250,000	57,612,500	133,727,088	859,975,028
8	250,000	4609	1,152,250,000	57,612,500	133,727,088	993,702,116
9	250,000	4609	1,152,250,000	57,612,500	133,727,088	1,127,429,204
10	250,000	4609	1,152,250,000	57,612,500	133,727,088	1,261,156,292

**Revenue Scenario for
Proposed Land Sales**

10% Down - 10% Interest
15 Year Term

	YEAR	Total acreage sold	Average \$ per Acre	Total Sales Price	10% down	Annual Payments @ 10% Int.	Total Annual Revenue
	1	250,000	4,609	1,152,250,000	115,225,000		115,225,000
	2	250,000	4,609	1,152,250,000	115,225,000	141,156,372	256,381,372
	3	250,000	4,609	1,152,250,000	115,225,000	141,156,372	397,537,744
	4	250,000	4,609	1,152,250,000	115,225,000	141,156,372	538,694,116
	5	250,000	4,609	1,152,250,000	115,225,000	141,156,372	679,850,488
	6	250,000	4,609	1,152,250,000	115,225,000	141,156,372	821,006,860
	7	250,000	4,609	1,152,250,000	115,225,000	141,156,372	962,163,232
	8	250,000	4,609	1,152,250,000	115,225,000	141,156,372	1,103,319,604
	9	250,000	4,609	1,152,250,000	115,225,000	141,156,372	1,244,475,976
	10	250,000	4,609	1,152,250,000	115,225,000	141,156,372	1,385,632,348

.. Senator Parnell by request ..



Alas Alaska

It took a bargain struck by Seward and
A Russian king for us to have this land
Where we can live with whale and bear and tide,
And sleep beneath a sun that cannot hide.

Still unfulfilled, we waited out the day
That statehood's passage brought the feds to bay
Before that boon, things never had been right,
'Cause distant rule's as bad as rule by might.

Foundation laid, we turned to work and play.
But now we know there's one more stone to lay:
Without a full and steady flow of cash,
Economy and government will crash.

We have the means, which Prudhoe's wells provide,
Yet how to end this roller coaster ride?
Look not too far - the answer's here and plain:
Just spend no more than our wealth will sustain.

When considering statehood for Alaska, Congress knew that we would need wealth, as well as the tax power, to provide the money required for government. Therefore, it gave us land containing natural resources.

The amount of money that derives from the sale of those natural resources is enormous, **but it fluctuates**. Nevertheless the State treats the money as revenue to be spent rather than as capital to be invested. Consequently, spending goes up and down. Governmental programs, and an economy that depends on continuous spending, are always in jeopardy.

"Money is with propriety considered as the vital principle of the body politic; as that which sustains its life and motion, and enables it to perform its most essential functions." Those are the words of Alexander Hamilton in that classic treatise on government, "The Federalist". He warned that unless the "supply" of money is both "adequate" and "**regular**" (emphasis added), a government will "--- sink into a fatal atrophy, and in a short course of time perish."

The stone that is missing from Alaska's foundation is STABILITY, both fiscal and economic.

Proposal

How government is financed in Alaska

The state enjoys a silent endowment composed of the proceeds of the disposition of its natural resources.

The federal government gave the natural resources to the state. It was understood that in addition to the taxing power, which every state has, Alaska would need wealth to pay for government. Several funds make up the endowment, which has not been formalized: the Budget Reserve Fund, the General Fund (the natural resource proceeds in it), the Alaska Permanent Fund and the Earnings Reserve Account.

There's a problem

The Legislature can invade the endowment's principal and spend it as if it were revenue.

Part of the principal (the part that is the Permanent Fund) cannot be spent. The state constitution prohibits it.

The amount of that spendable principal varies considerably because the natural resource proceeds, which feed the endowment, fluctuate.

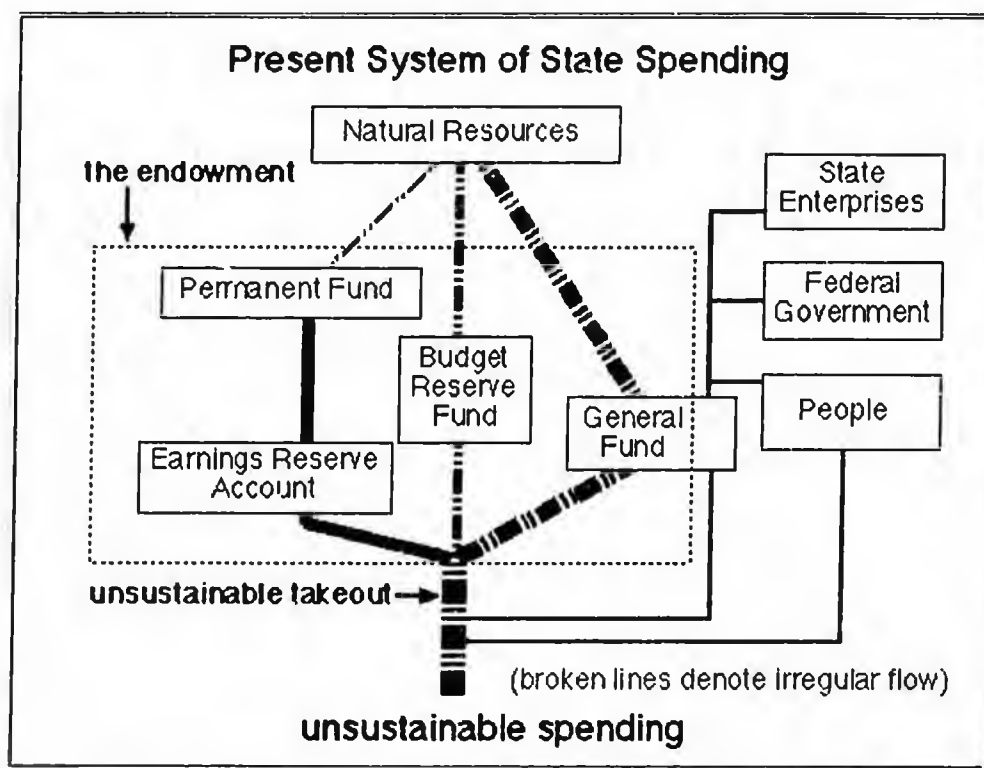
When there's a lot of spendable principal, particularly in the General Fund, the Legislature spends more than what is sustainable -- indeed it has no way to determine what is sustainable.

Subsequently, when there's much less spendable principal, spending must be cut.

State programs and services are curtailed.

And the economy suffers, because it's dependent on continuous state spending.

Spending was cut in 1986. The economy collapsed.



The solution

Have the Legislature spend from the endowment at a sustainable rate.

In this outline, rate of spending is amount spent per year. The rate is sustainable if it's reasonable to expect that it generally won't decrease, in real (inflation-adjusted) terms.

And that takes a new system of spending

- The endowment has to be formalized.

That would consolidate all of the endowment's assets into a single fund (call it the Alaska Fund), retain in the endowment both investment income and gains, and prohibit spending from the endowment.

- And invested for long-term appreciation.
- Each year, its expected real growth from investment would be taken out for spending.

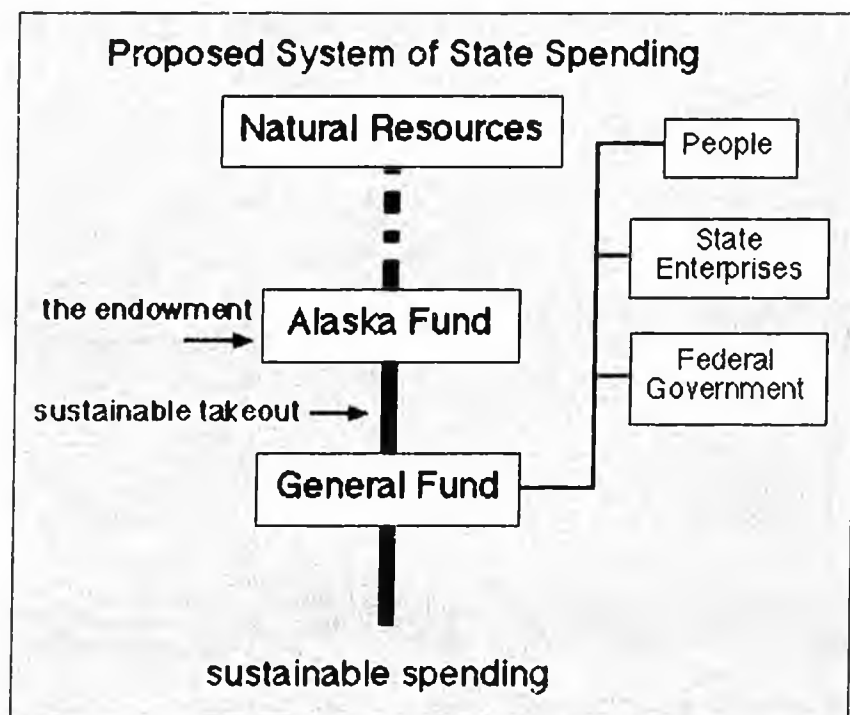
The expected real growth of the endowment from investment would be a function of an assumed rate of real total return (the same rate would apply in all years) and the average of the endowment's market value at the end of each of a prescribed number of preceding quarters.

- That rate of spending from the endowment would be the highest sustainable.

Highest, because taking out more than the growth from investment could jeopardize an endowment fed by fluctuating natural resource proceeds. Sustainable, because it's reasonable to expect that the size of the endowment, as averaged, generally wouldn't decrease, in real terms (although in a given year it would decrease, at least in real terms, if the growth from investment were less than the amount taken out and if that year's natural resource proceeds didn't make up the difference).

- If an accumulated surplus of revenue from the endowment and other sources exceeded a prescribed amount, the excess would be added to the endowment.

In the event of a substantial increase in price or production of oil, the endowment could grow so much that the state would have more revenue than it needs. Arguably, that would be the case now if this system had been installed before North Slope production began. The excess, if not added to the endowment, would accumulate and eventually be spent, again raising the rate of spending to an unsustainable level.



The effect of the new system

• Curtailment of state programs and services, and resulting economic busts, would be much less likely to occur.

An incidental advantage

• A meaningful budget would become feasible, because during the budgetary process the Legislature would be able to make a reasonably accurate estimate of revenue available for spending.

Transition to the new system

• During a period of many years the rate of spending from the endowment would be gradually decreased, at least in real terms, to the rate that is the highest sustainable.

A transition is necessary because the current rate of spending from the endowment is much greater than what is sustainable.

• The length of the period would be determined with the objective of providing the most money for spending during the period, yet allowing the endowment to grow.

Incongruously, a determination of the length of the transitional period must be based, in part, on the official forecast of natural resource proceeds.

Method of adoption

• The new system, with the transition, requires a constitutional amendment, because it limits the authority of the Legislature.

Constitutional amendments are proposed by the Legislature and approved by the people.

Obstacles

• The temptation to keep on spending from the endowment at an unsustainable rate rather than face the cuts that adoption of the new system would entail.

The cuts would be substantial, but manageable. As compared with the devastatingly abrupt cuts, which might occur under the present system, they would be gradual.

• The misconception that the new system necessarily would eliminate the dividend program.

That program, like most other governmental programs, is not constitutionally protected. Both now and under what's proposed, it is for the Legislature to decide whether to continue or eliminate it. And the fact that the Permanent Fund would no longer exist, having been consolidated with other funds into a new fund, is irrelevant. The revenue from the new fund would be the same as the revenue from the Permanent Fund - public money available for spending on public services and programs. (Including the dividend program. No one seems to doubt the authority of the Legislature to spend public money on that.)

NEXT constitutional amendment

CONSTITUTION OF THE STATE OF ALASKA

(proposed amendment)

ARTICLE IX, SECTION 18 - ALASKA FUND

(a) Money derived by the State

(1) from the disposition, by the State or the United States, of land, minerals, forestial resources or biological marine resources; and

(2) from taxes

(A) on the reservation, production, transportation or processing of those natural resources; and

(B) on property used in, or corporate income from, the exploration, production, disposition, transportation or processing of those natural resources; and

(3) from claims, against the United States or others, for deprivation of that money, or that land or those natural resources; and

(4) from the liquidation of State enterprises

shall constitute the Alaska Fund, which shall be invested and reinvested for long-term appreciation. Investment income and realized appreciation shall be retained in the fund and reinvested. Investments shall be made in accordance with standards prescribed by law.

(b) The fund's assets shall not be appropriated, except that every fiscal year an amount equal to 5.5 percent of the average of the fund's market value at the end of each of the quarters of the three calendar years immediately preceding shall be permanently withdrawn from the fund as revenue.

(c) For the purposes of (a), oil, gas, coal, sand, gravel, stone and water, without limitation, are minerals.

ARTICLE IX, SECTION 19 - SURPLUS

To the extent that, at the end of a fiscal year, accumulated surplus of unrestricted revenue is greater in amount than five percent of unrestricted revenue expended that year, it shall be added to the Alaska Fund.

ARTICLE XV, SECTION 29 - SPENDING (TRANSITION)

(a) The percentage prescribed in Article IX, Section 18, added in 2000, for determining the amount of money withdrawn annually from the Alaska Fund, shall be inapplicable in fiscal years 2002 through 2014. The applicable percentage shall be 9.6 in the first year of that period and decrease each fiscal year thereafter, geometrically, until the first year after that period, when it shall attain its permanent value.

(b) The assets of the Alaska Permanent Fund (Article IX, Section 15), the Budget Reserve Fund (Article IX, Section 17) and the Earnings Reserve Account (AS 37.13.145) shall be transferred to the Alaska Fund.

(c) For the purpose of establishing the value of the Alaska Fund, as required by Article IX, Section 18, added in 2000, the fund shall be deemed to have existed in fiscal years 1999, 2000 and 2001, and to have been composed of the then assets of the Alaska Permanent Fund, the Budget Reserve Fund and the Earnings Reserve Account. Also for that purpose, in fiscal years 2000, 2001 and 2002, average value shall be based on value at the end of a fiscal year rather than, as required by Section 18, at the end of a calendar quarter.

(d) Article IX, Sections 18 & 19, added in 2000, shall not affect existing dedications.

(e) Article IX, Sections 15, 16 & 17, and Article XV, Sections 27 & 28, are repealed.

(f) Article IX, Sections 18 & 19, added in 2000, and this section shall be effective July 1, 2001.

NEXT endowment

Data: Dept. of Revenue (projections: fall, 1998)
 Transitional withdrawal: 10.0% in 2002 to sustainable withdrawal in 2016
 Sustainable withdrawal: 5.5%
 Total return: 9.0%
 Inflation: 3.0%
 Alaska Permanent Fund, cost, end 1999, 2000, & 2001, respectively: 19,021; 19,839;
 20,724
 Alaska Permanent Fund, unrealized appreciation, end 1999, 2000, & 2001, respectively:
 2,600; 2,998; 3,436
 Budget Reserve Fund, cost, end 1999, 2000, & 2001, respectively: 2,943; 2,237; 1,629
 Earnings Reserve Account, cost, end 1999, 2000, & 2001, respectively: 1,936; 1,795; 1,691

Unit: one million dollars

Proposed System of State Spending Endowment

Fiscal Year	1 Begin	2 Resource Proceeds	3 Withdrawal (7x6)	4 Total Return [rate x (1+2-3)]	5 End (1+2-3+4)	6 End (3-yr. average)	7 Withdrawal Percentage	8 End (FY 2002 \$)
1999					26,500			
2000					26,869			
2001					27,480			
2002	27,480	1,248	2,695	2,343	28,376	26,950	10.0	28,376
2003	28,376	1,258	2,642	2,429	29,421	27,575	9.6	28,564
2004	29,421	1,242	2,610	2,525	30,578	28,426	9.2	28,822
2005	30,578	1,127	2,592	2,620	31,734	29,458	8.8	29,041
2006	31,734	1,066	2,578	2,720	32,942	30,577	8.4	29,268
2007	32,942	1,026	2,565	2,826	34,229	31,751	8.1	29,526
2008	34,229	974	2,552	2,939	35,590	32,968	7.7	29,806
2009	35,590	926	2,540	3,058	37,034	34,254	7.4	30,112
2010	37,034	852	2,531	3,182	38,537	35,618	7.1	30,421
2011	38,537	814	2,523	3,314	40,142	37,054	5.8	30,766
2012	40,142	793	2,517	3,458	41,876	38,571	6.5	31,160
2013	41,876	758	2,512	3,611	43,732	40,185	6.3	31,593
2014	43,732	722	2,511	3,775	45,718	41,917	6.0	32,066
2015	45,718	706	2,513	3,952	47,864	43,776	5.7	32,593
2016	47,864	669	2,517	4,141	50,157	45,771	5.5	33,160
2017	50,157	641	2,635	4,335	52,498	47,913	5.5	33,697
2018	52,498	616	2,760	4,532	54,887	50,173	5.5	34,204
2019	54,887	594	2,888	4,733	57,325	52,514	5.5	34,683
2020	57,325	574	3,020	4,939	59,819	54,903	5.5	35,137

Notes

Endowment. The State has an endowment, but it has not been formalized. It is composed of the proceeds of the disposition of natural resources. Various funds make up the endowment. In the proposed system the assets of the Budget Reserve Fund, the Alaska Permanent Fund and the Earnings Reserve Account are transferred (as presented here, at the beginning of fiscal 2002) to a new fund, the Alaska Fund, which then constitutes the endowment.

In the proposed system all natural resource proceeds go into the endowment, and all investment income and gains remain in the endowment.

Value of the endowment. In the proposed system the average market value of the endowment at the end of a prescribed number of preceding calendar quarters (as presented here, three fiscal years) is the basis for determining the amount that is withdrawn from it for spending.

Natural resource proceeds. The natural resource proceeds are deposited into the endowment when they are received (as presented here, each year's receipts are treated as if they are deposited at the beginning of the fiscal year).

Withdrawal from the endowment. In the proposed system the amount withdrawn from the endowment for spending in a fiscal year is a function of the withdrawal percentage and the value of the endowment. Withdrawals are made as the money is needed for spending during the year (as presented here, withdrawals are treated as if they are made at the beginning of the year).

Assigned values. The values assigned here to length of transition, sustainable withdrawal percentage, rate of total return, et cetera, should be taken as illustrative only. Thus, it's the same system whether the sustainable withdrawal percentage is six or five.

NEXT	<u>fiscal gap</u>
BACK	<u>constitutional amendment</u>
BACK	<u>proposal</u>
BACK	<u>opening page</u>

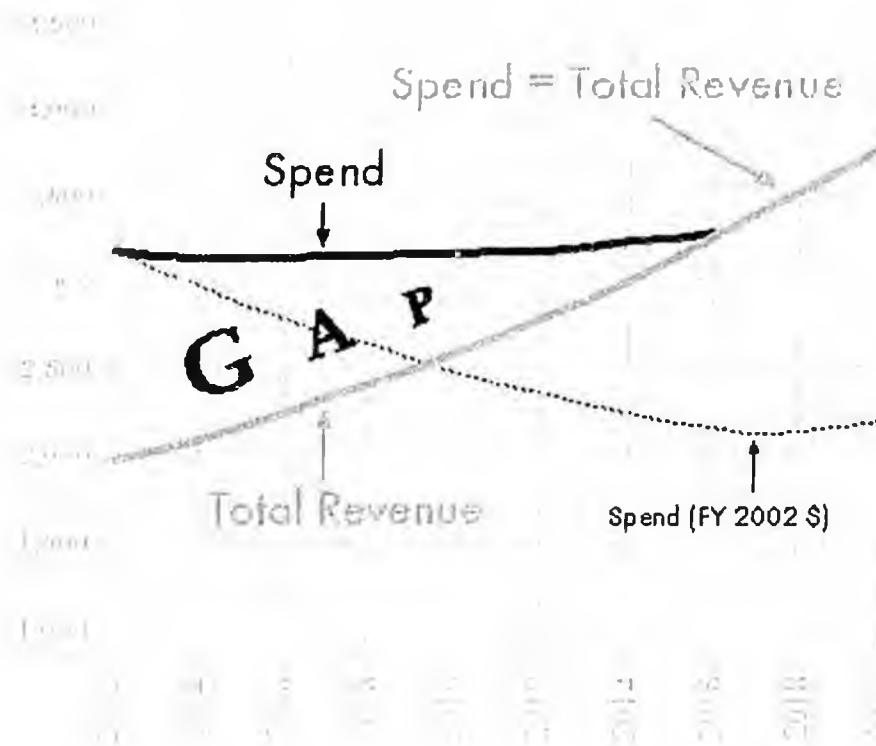
Data: Dept. of Revenue (projections: fall, 1998)
 Transitional withdrawal: 10.0% in 2002 to sustainable withdrawal in 2016
 Sustainable withdrawal: 5.5%
 Total return: 9.0%
 Inflation: 3.0%
 Conventional revenue increase: 3.0% during transition and 1.0% after transition
 Alaska Permanent Fund, cost, end 1999, 2000, & 2001, respectively: 19,021; 19,839;
 20,724
 Alaska Permanent Fund, unrealized appreciation, end 1999, 2000, & 2001, respectively:
 2,600; 2,998; 3,436
 Budget Reserve Fund, cost, end 1999, 2000, & 2001, respectively: 2,943; 2,237; 1,629
 Earnings Reserve Account, cost, end 1999, 2000, & 2001, respectively: 1,936; 1,795; 1,691

Unit: one million dollars

Proposed System of State Spending Fiscal Gap

Fiscal Year	1 Endowment Withdrawal (sustainable)	2 Conventional Revenue	3 Total Revenue (1+2)	4 Spend (3+6)	5 Gap (3-4)	6 Endowment Withdrawal (unsustainable)	7 Spend (FY 2002 \$)
1999				3,296			
2000				?			
2001				?			
2002	1,482	484	1,966	3,179	-1,213	1,213	3,179
2003	1,517	498	2,015	3,140	-1,126	1,126	3,049
2004	1,563	513	2,077	3,123	-1,046	1,046	2,944
2005	1,620	529	2,149	3,120	-971	971	2,855
2006	1,682	544	2,226	3,122	-896	896	2,774
2007	1,746	561	2,307	3,125	-818	818	2,696
2008	1,813	578	2,391	3,129	-738	738	2,621
2009	1,884	595	2,478	3,135	-656	656	2,549
2010	1,959	613	2,572	3,144	-572	572	2,482
2011	2,038	631	2,669	3,154	-485	485	2,417
2012	2,121	650	2,771	3,167	-395	395	2,356
2013	2,210	670	2,880	3,182	-302	302	2,299
2014	2,305	690	2,995	3,201	-206	206	2,245
2015	2,408	710	3,118	3,223	-105	105	2,195
2016	2,517	717	3,235	3,235	0	0	2,139
2017	2,635	725	3,360	3,360	0	0	2,157
2018	2,760	732	3,491	3,491	0	0	2,176
2019	2,888	739	3,627	3,627	0	0	2,195
2020	3,020	747	3,766	3,766	0	0	2,212
			52,093	61,624			

Endowment, end 2020: 59,819



Notes

Endowment Withdrawal (sustainable). During transition, which as presented here begins in fiscal 2002, the withdrawal from the endowment has a sustainable and an unsustainable component.

Conventional Revenue. Conventional revenue is the revenue that derives from sources separate from the endowment. As presented here, for fiscal 2002, conventional revenue is equal to the conventional revenue officially estimated for fiscal 2001, increased at the rate of inflation. It increases each year at that rate until transition ends. After transition it increases at a lower rate. (The increase beyond what is officially estimated is included only to illustrate the effect that it has on the fiscal gap and is not a component of the proposed system.)

Total Revenue. In the proposed system this consists of conventional revenue and the sustainable amount withdrawn from the endowment.

Spend. The budget adopted for fiscal 1999 was \$3.296 billion, which includes the dividend program. To hit the target suggested here of \$3.179 billion in fiscal 2002, it would be necessary to reduce spending by \$117 million in fiscal 2000 and 2001, combined. And this assumes that the fiscal 1999 budget is not supplemented.

The budget, as presented here, consists of the expenditures in the so-called "general fund budget" and the expenditure for the dividend program. It does not include (1) the expenses of state enterprises, to the extent that they are funded by their own income or reserves and (2) expenditures for various services and programs, to the extent that they are either federally funded or for which revenue is dedicated, legally or otherwise.

During the transitional period spending is equal to total revenue and the unsustainable amount withdrawn from the endowment, combined. Thereafter,

spending is equal to total revenue.

Gap. A fiscal gap is the amount by which spending exceeds revenue. Temporarily, it can be bridged by spending capital (taking more than a sustainable amount out of the endowment). Permanent closure is achieved when spending is limited to the sustainable withdrawal from the endowment and conventional revenue, combined.

There is a misconception that the fiscal gap can be closed, permanently, by lowering the level of spending (or increasing revenue). Overlooked is the fact that the fluctuating natural resource proceeds, which the state mistakenly treats as revenue, can decrease enough in a single year, let alone in the long term, to produce a fiscal gap at almost any level of spending.

Under the present system with natural resource proceeds treated as revenue, it is folly to think that the gap can be closed permanently. The official estimate is that such "revenue" will decrease radically in the years to come. Thus, it is inevitable that a fiscal gap would follow a "permanent closure". And a sudden drop in the price of oil could reopen the gap even sooner.

The proceeds of natural resources are not sustainable. However, the income from their investment, which is revenue, is sustainable.

Endowment Withdrawal (unsustainable). During the transitional period the unsustainable component of the withdrawal from the endowment serves to bridge the fiscal gap as it gradually narrows. When the transitional period ends, the gap closes, permanently.

[e-mail your comments and questions](#)

[comments and questions received](#)

[your governor, senators and representatives](#)

[BACK](#) [endowment](#) [constitutional amendment](#) [proposal](#) [opening page](#)

Web Site:

Written by Roger Cremo

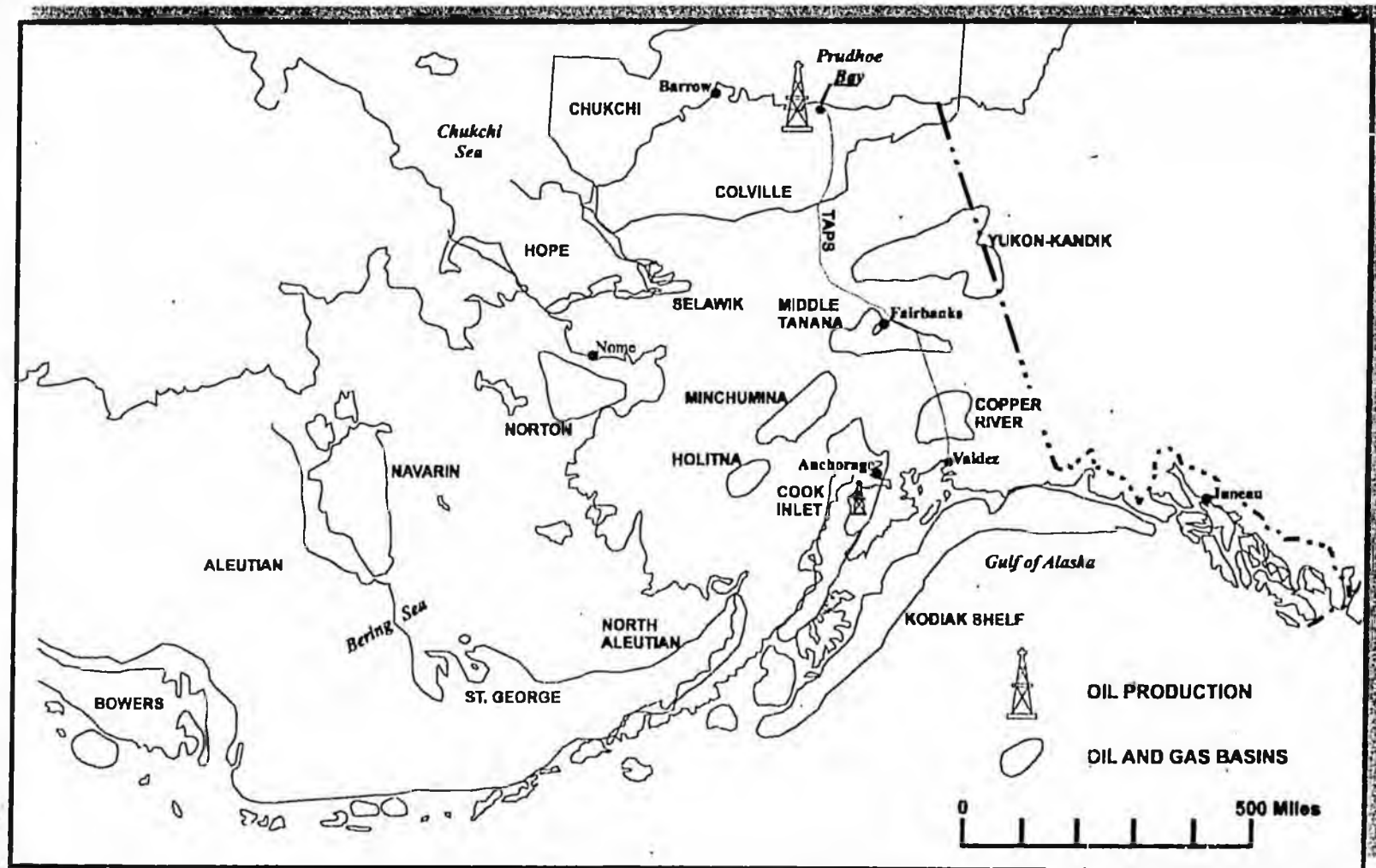
(last updated 12/27/98)

Source Code and Graphic Arts

by

[para-comm unlimited](#)

Alaska Oil and Gas Basins



Month/Year

Constitutional Budget Reserve Exhausted

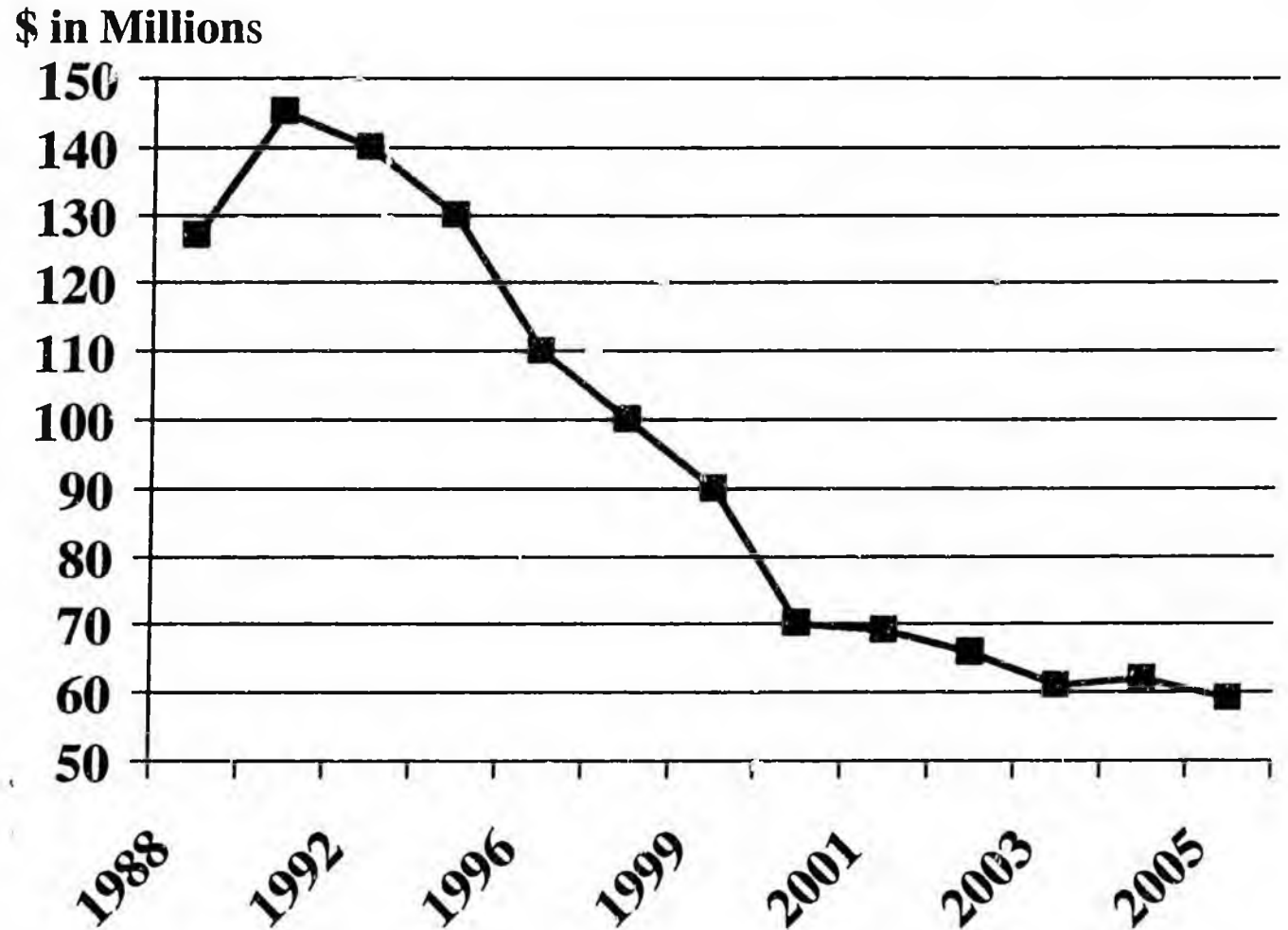
Operating Budget Annual Change	Average ANS Oil Price at West Coast Destination			
	\$10.50	\$12.50	\$14.50 Current Forecast	\$16.50
Up 1%	Nov-01	Mar-02	Jul-02	Feb-03
0.0%	Dec-01	Apr-02	Sep-02	May-03
Majorities' Budget-Cut Plan	Jan-02	Jun-02	Dec-02	Sep-03

Matrix based on DOR Spring 1999 Production Forecast.

Annualize \$1.00 per Barrel Impact on General Fund Unrestricted Revenue

FY 1988 - 2005

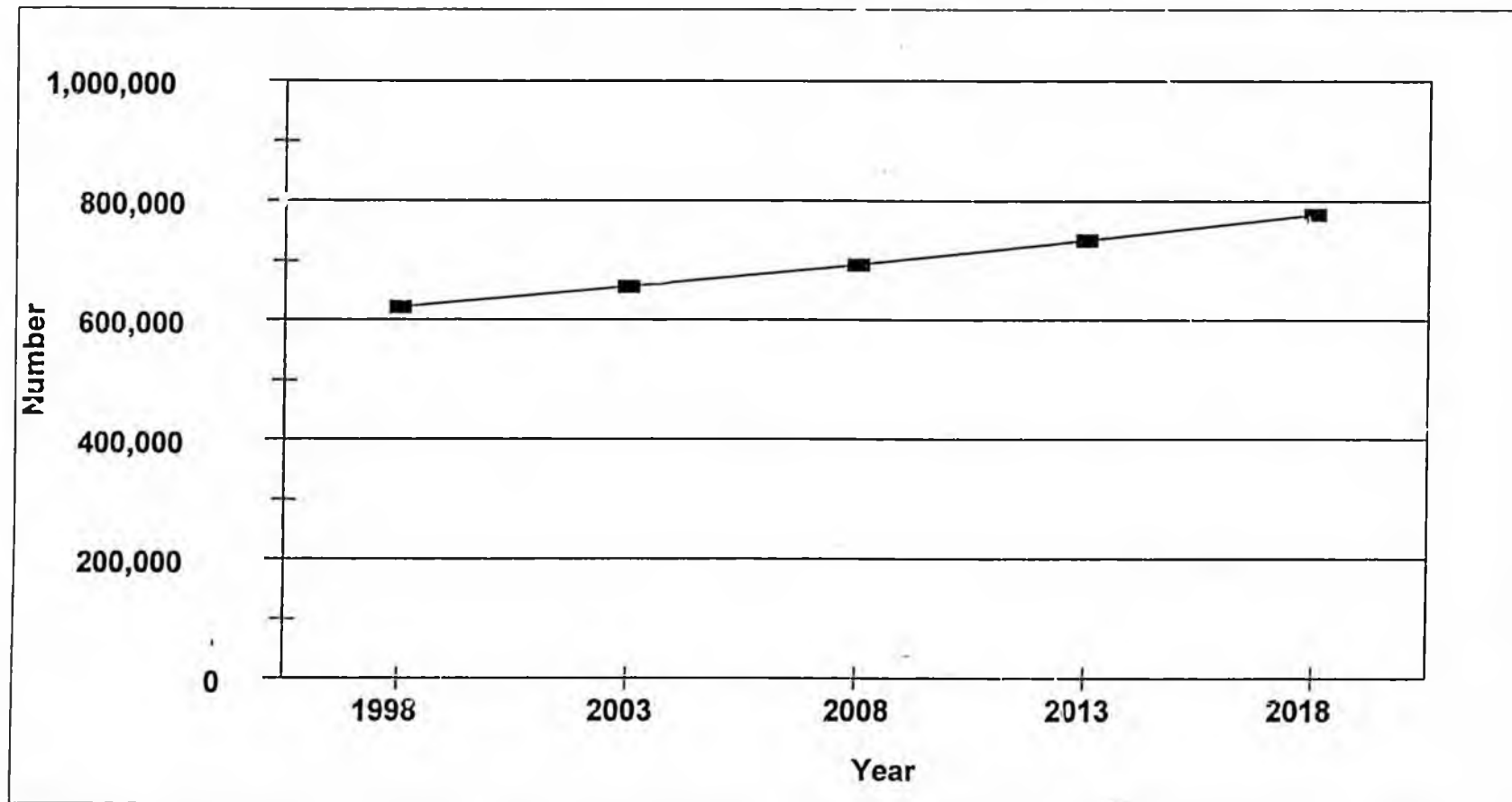
Year	\$ in Millions
1988	127
1990	145
1992	140
1994	130
1996	110
1998	100
1999	90
2000	70
2001	69
2002	66
2003	61
2004	62
2005	59



3/24/99
SFC secretary



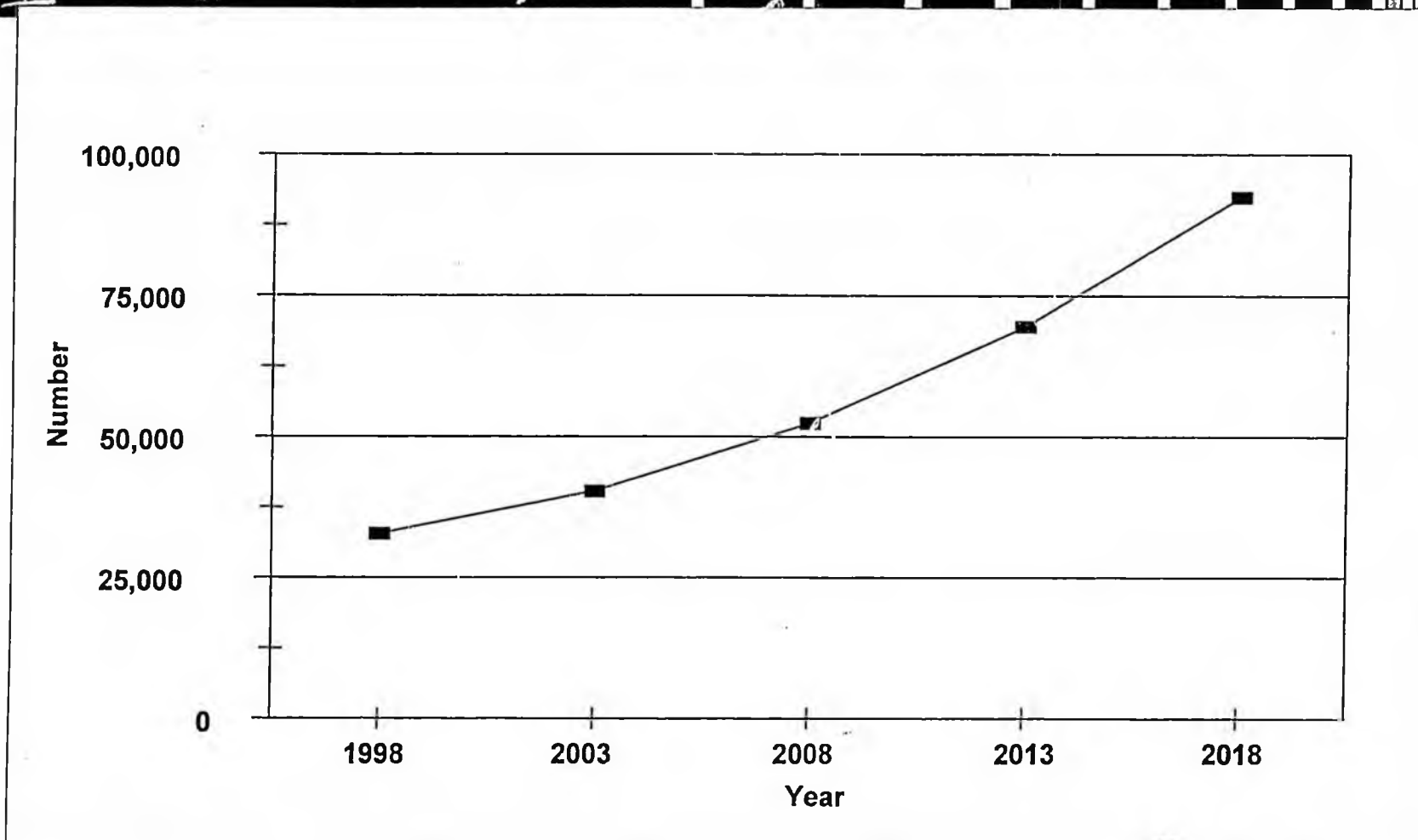
Alaska Population Projections 1998 to 2018 - Statewide



Alaska Department of Labor, Research and Analysis Section, Demographics Unit.

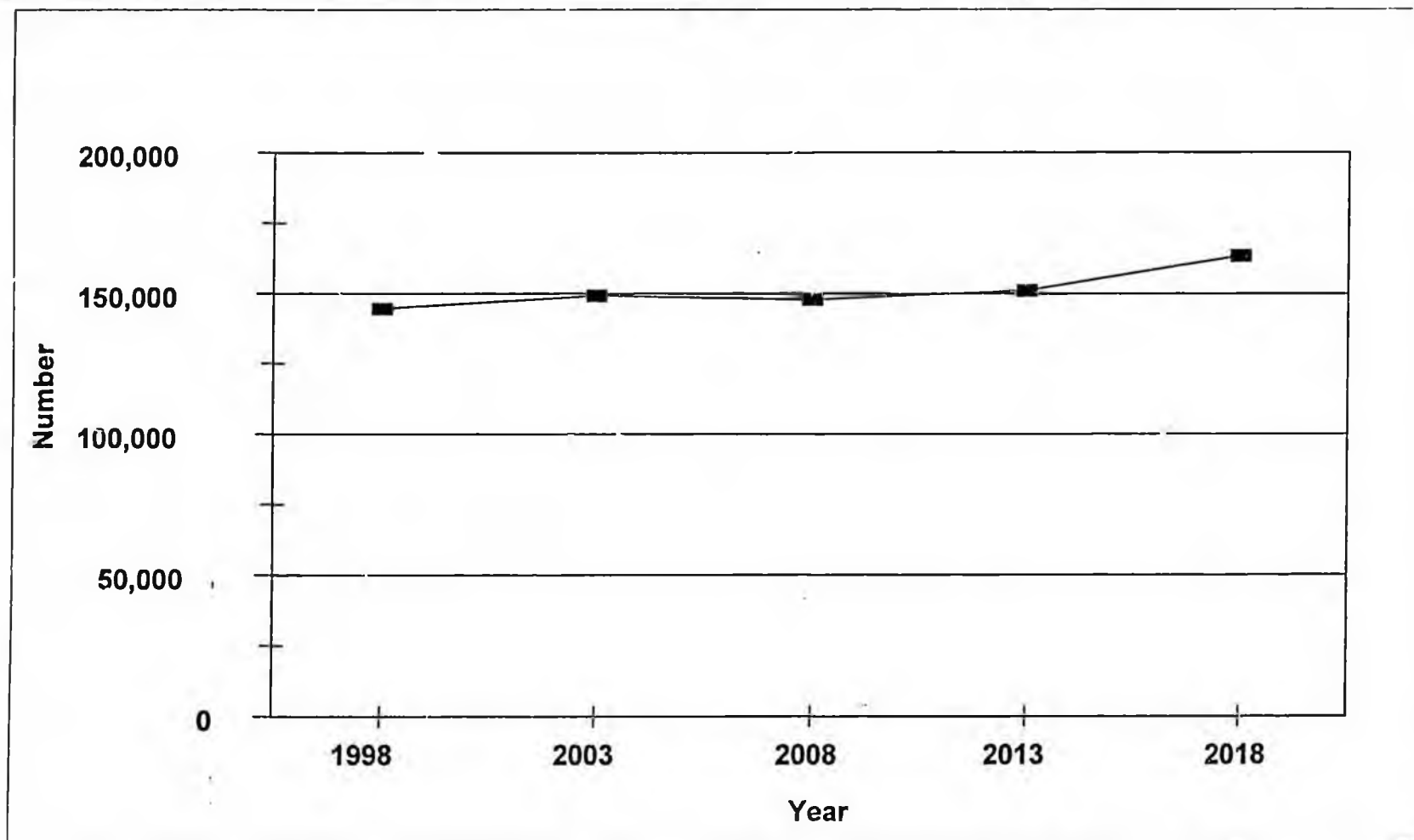


Alaska Population Projections 1998 to 2018 - 65+ Years of Age





Alaska Population Projections 1990 to 2018 - Age 5-17



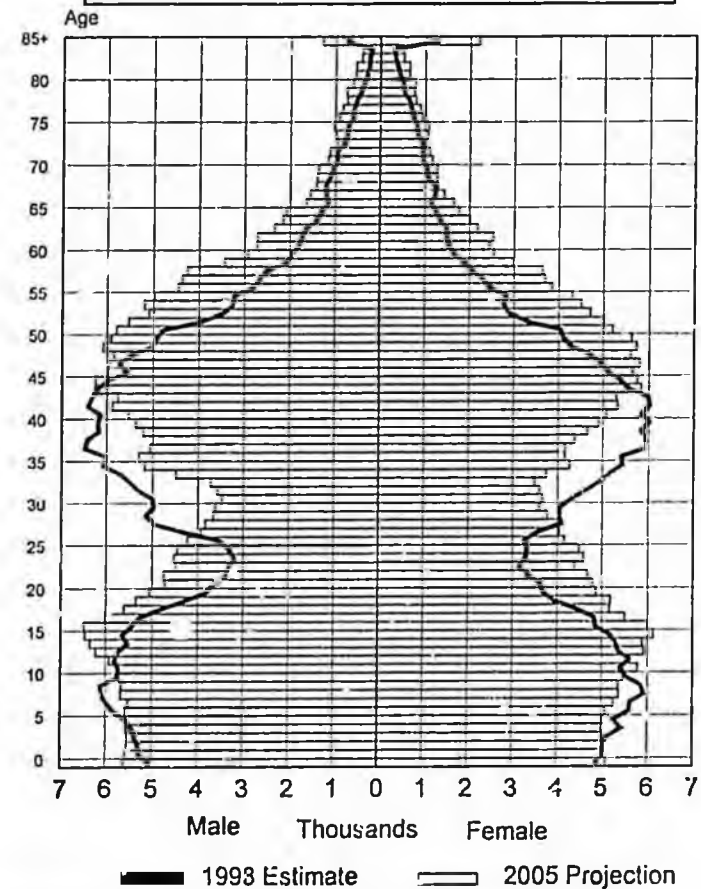
Alaska Department of Labor, Research and Analysis Section, Demographics Unit.



Alaska Middle Series Population Projection by Age and Male/Female, 2005

- Baby Boom in their most productive years of employment
- Echo Boom in High School
- Fewer Elementary age children

Alaska Middle Series Population Projection
By Age and Male/Female, 2005



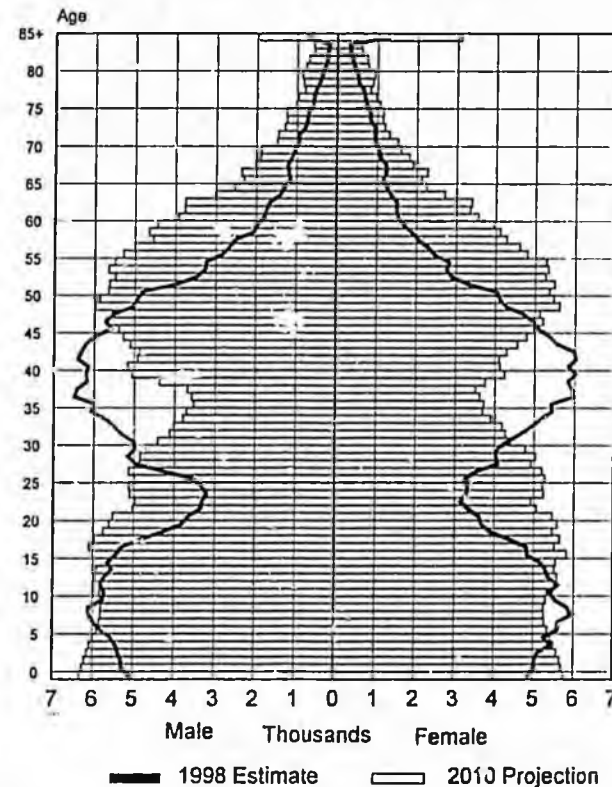
Alaska Department of Labor, Research & Analysis Section, Demographics Unit.



Alaska Middle Series Population Projection by Age and Male/Female, 2010

- Leading edge of Baby Boom begins reaching retirement age
- Echo Boom enters the labor force
- Echo Boom begins to have families

Alaska Middle Series Population Projection
By Age and Male/Female, 2010



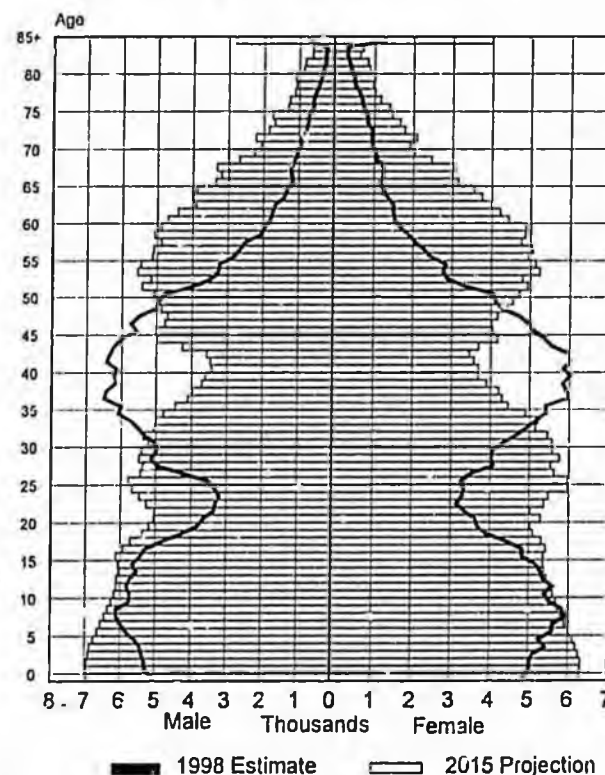
Alaska Department of Labor, Research & Analysis Section, Demographics Unit



Alaska Middle Series Population Projection by Age and Male/Female, 2015

- Senior population begins to increase significantly
- Children of Echo Boom impacting schools

Alaska Middle Series Population Projection
By Age and Male/Female, 2015



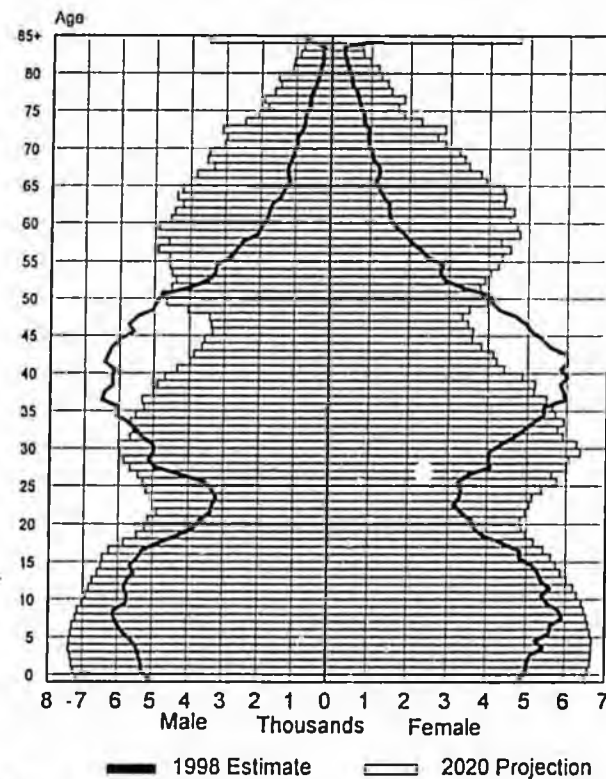
Alaska Department of Labor, Research & Analysis Section, Demographics Unit.



Alaska Middle Series Population Projection by Age and Male/Female, 2020

- Baby Boom reaches their Golden Years
- Natural increase continues to drive school age population growth

Alaska Middle Series Population Projection
By Age and Male/Female, 2020



Alaska Department of Labor, Research & Analysis Section, Demographics Unit