

Technical Memorandum 2

Beaufort E.I.S.

Beaufort Sea Statewide and Regional Population  
And Economic Systems Impact Analysis

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*U.S. Department of the Interior*

Prepared for

Bureau of Land Management  
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## INTRODUCTION

In order to capture the important dimensions of uncertainty surrounding oil and gas development in the Beaufort Sea, the development patterns implied by three alternative discovery scenarios were examined and contrasted with the moderate base case described in Working Paper #1.

In addition, the high and low Beaufort scenarios are examined with respect to the high and low base cases in order to bracket the extremes of OCS impact and to test the sensitivity of the impacts to the base case.

OCS development in the Beaufort will lead to changes in those factors which have previously been isolated as important causes of growth--exogenous employment, personal income, and state expenditures. The change in these factors will be responsible for changes in employment, population, the state's fiscal position and the regional distribution of growth. These changes are the economic impacts of OCS development. This paper will explore the impacts in terms of both the magnitude of change and the process of economic growth.

We will examine the impact of each of the three separate development scenarios. The impacts will differ, since the scenarios vary in terms of their primary employment impact as well as in the revenues received by the state. Impacts are estimated by making separate runs of the MAP model which include alternate scenario assumptions; comparing these runs to the non-Beaufort base case, the impacts are isolated. The most important assumption made in this type of model is that the economy responds to

employment and revenues generated by Beaufort OCS development as it did to similar changes in the past. This implicit assumption underlies most uses of econometric models to project the future; for small, marginal changes like those assumed for the Beaufort, this assumption is not unreasonable.

The approach which will be taken in the following analysis is to attempt to answer five questions concerning the changes which result from OCS development in each scenario. Answers to these questions will provide a description of the economic impact of this development. The questions are as follows:

1. How is the growth of each of the aggregate indicators affected by OCS development? These indicators include employment, population, personal income, and state expenditures.
2. What are the significant causes of the changes of these indicators? The questions will attempt to assess the importance of exogenous employment changes and changes in state spending on growth.
3. How do the additional revenues change the fiscal picture of the state? This question will examine whether the OCS development leads to increased services and what its effect is on fund balances.
4. Does the composition of the change in employment differ from the base case? This question will examine whether the OCS development support observed base case trends in structural change.
5. What are the regional effects of these changes? This question will examine the changes in employment and population, which result in Anchorage, Fairbanks, and the North Slope because of OCS development.

### The Development Scenarios

Three Beaufort development scenarios were provided by the Alaska OCS Office of the Bureau of Land Management. These scenarios included the following assumptions for each scenario: production of oil and gas, employment, capital costs, and operating costs. These assumptions were used to generate assumptions about direct employment and state revenues which result from Beaufort development.

#### ASSUMPTIONS COMMON TO ALL SCENARIOS

Six assumptions are incorporated into each development scenario. First, it is assumed that discoveries will be half within state waters and half within federal waters. Production and offshore capital facilities are distributed in this same manner.

Second, it is assumed that a conventional scheme of bonus bidding will be used to lease the tracts. The total bonus is assumed to be \$100 million, half of which goes to the state. The state royalty rate of 12.5 percent is assumed for production from state tracts.

Third, it is assumed that discoveries of oil and gas on state-owned properties will be subject to state production taxes at current rates.

Fourth, it is assumed that oil and gas production from the Beaufort is transported via the TAPS and ALCAN pipeline rather than by new pipelines or alternate modes.

Fifth, the wellhead value of Beaufort OCS oil and gas is assumed to equal the Prudhoe wellhead minus transport cost. This OCS to TAPS transport cost was estimated to be between \$50-\$95 per barrel for oil and \$10-\$20 per MCF for gas. Real 1978 costs of \$.60 per barrel for oil and \$.15 per barrel for gas were assumed.

Sixth, 75 percent of the investment costs of platforms and onshore facilities were assumed to be tangibles subject to property tax, while 25 percent of the well costs were assumed to be tangibles.

#### SCENARIO SPECIFIC ASSUMPTION

Three Beaufort development scenarios are examined; high, moderate, and low development cases. Tables 1-7 provide information about production, employment, and revenues associated with each scenario.

High Case. Peak production in the high scenario is 91 million barrels of oil and 68 billion cubic feet of gas which begins in 1992 and lasts for five years before production begins to fall. Exploration begins in 1981 and development in 1986 as in all cases, and production begins in 1989. The peak employment occurs during development with 761 construction employees and 583 mining employees. Total revenues reach a peak of \$269.66 million in 1997.

Moderate Case. Production reaches its peak in 1992 in the moderate case at 65 million barrels of oil and 41 billion cubic feet of gas. Oil production is almost 40 percent of the peak high case production. Exploration begins in 1981 and reaches a peak of 479 in 1984. Peak employment for the scenario is reached in 1989 during the development phase with 1,082 employees. This is 20 percent less than in the high case. Employment in 2000 is 394. Revenues peak at \$157.8 million in 1997.

Low Case. Peak production is less than half the peak production in the high case. Peak employment occurs during development in 1989 at 740. This is about 55 percent of the high case peak employment. By 2000 low case employment

TABLE 1. BEAUFORT SEA E.I.S.  
SCENARIO PRODUCTION ASSUMPTIONS

	High Case		Moderate Case		Low Case	
	Oil (million bbls)	Gas (billion cf)	Oil (million bbls)	Gas (billion cf)	Oil (million bbls)	Gas (billion cf)
1989	45	34	15	11	11	8
1990	75	56	40	30	27	20
1991	90	68	54	41	35	26
1992	91	68	55	41	43	32
1993	91	68	55	41	43	32
1994	91	68	55	41	43	32
1995	91	68	54	41	43	32
1996	91	68	53	40	41	31
1997	89	67	52	39	39	29
1998	82	62	48	36	36	27
1999	70	53	43	32	32	24
2000	60	45	38	29	28	21

SOURCE: BLM-Alaska OCS Office

TABLE 2. BEAUFORT SEA E.I.S.  
BEAUFORT HIGH SCENARIO  
EMPLOYMENT IMPACTS

	Regional Distribution							
	Total		North Slope		Anchorage		Fairbanks	
	Mining	Construction	Mining	Construction	Mining	Construction		
1981	67	49	59	45	8		4	
1982	198	198	174	180	24		18	
1983	198	247	174	225	24		22	
1984	232	247	204	225	28		22	
1985	67	99	57	90	10		9	
1986	70	403	64	366	10		37	
1987	148	642	138	584	10		58	
1988	321	810	282	737	39		73	
1989	583	761	524	692	59		69	
1990	710	254	642	231	68		23	
1991	758	254	693	231	65		23	
1992	748	127	686	115	62		12	
1993	681	254	623	231	58		23	
1994	647	254	591	231	56		23	
1995	616	127	560	115	56		12	
1996	572	36	519	33	53		3	
1997	551	0	498	0	53		0	
1998	547	0	494	0	53		0	
1999	548	0	494	0	54		0	
2000	542	0	488	0	54		0	

SOURCE: BLM-Alaska OCS Office

TABLE 3. BEAUFORT SEA E.I.S.  
BEAUFORT HIGH SCENARIO  
DIRECT REVENUE EFFECTS  
(millions of nominal dollars)

	<u>Bonus</u> <sup>1</sup>	<u>Royalties</u> <sup>2</sup>	<u>Production Tax</u> <sup>3</sup>	<u>Property Tax</u> <sup>4</sup>	<u>Corporate Income Tax</u> <sup>5</sup>	<u>Total</u>
1979	50					50
1980						0
1981				.31		.31
1982				.44		.44
1983				.70		.70
1984				.71		.71
1985				.82		.82
1986				3.78		3.78
1987				9.21		9.21
1988				16.71		16.71
1989	37.28	31.68	24.88	4.51		98.35
1990	66.39	54.76	28.60	15.14		164.89
1991	83.70	70.31	32.35	18.58		204.94
1992	88.68	74.49	34.72	19.53		217.42
1993	93.17	78.25	38.43	20.55		230.40
1994	97.75	82.11	42.18	21.29		243.33
1995	102.57	86.16	44.34	19.72		252.79
1996	107.66	90.43	45.13	20.63		263.85
1997	110.60	92.90	45.23	20.93		269.66
1998	106.99	89.86	45.21	17.25		259.31
1999	95.86	80.52	45.04	14.17		235.59
2000	85.87	72.13	44.73	9.99		212.72

<sup>1</sup>BLM-Alaska OCS Office

<sup>2</sup>Royalties estimated at 12.5 percent of total wellhead value

<sup>3</sup>Production tax equals 12 percent of the nonroyalty portion of total wellhead value

<sup>4</sup>Tax at 20 mills of petroleum property value

<sup>5</sup>Corporate income tax at 9.4 percent of taxable petroleum income

TABLE 4. BEAUFORT SEA E.I.S.  
BEAUFORT MODERATE SCENARIO  
EMPLOYMENT IMPACTS

	Regional Distribution							
	Total		North Slope		Anchorage		Fairbanks	
	Mining	Construction	Mining	Construction	Mining	Construction		
1981	67	49	59	45	8		4	
1982	198	198	174	180	24		18	
1983	198	247	174	225	24		22	
1984	232	247	204	225	28		22	
1985	67	99	57	90	10		9	
1986	112	304	102	276	10		28	
1987	276	333	266	303	10		30	
1988	479	466	458	424	21		42	
1989	616	466	580	424	36		42	
1990	595	155	553	141	42		14	
1991	524	155	486	141	38		14	
1992	503	77	466	70	37		7	
1993	432	155	399	141	33		14	
1994	535	155	402	141	33		14	
1995	438	77	405	70	33		7	
1996	440	22	407	20	33		2	
1997	417	0	385	0	32		0	
1998	393	0	361	0	32		0	
1999	393	0	361	0	32		0	
2000	394	0	362	0	32		0	

SOURCE: BLM-Alaska OCS Office

TABLE 5. BEAUFORT SEA E.I.S.  
BEAUFORT MODERATE SCENARIO  
DIRECT REVENUE EFFECTS  
(millions of nominal dollars)

	<u>Bonus</u> <sup>1</sup>	<u>Royalties</u> <sup>2</sup>	<u>Production Tax</u> <sup>3</sup>	<u>Property Tax</u> <sup>4</sup>	<u>Corporate Income Tax</u> <sup>5</sup>	<u>Total</u>
1979	50					50
1980						0
1981				.31		.31
1982				.44		.44
1983				.70		.70
1984				.71		.71
1985				.82		.82
1986				3.03		3.03
1987				6.21		6.21
1988				11.01		11.01
1989	12.39		10.41	16.22	.43	39.45
1990	35.42		29.76	18.49	6.92	90.59
1991	50.24		38.58	20.69	9.91	119.42
1992	53.59		45.01	22.06	10.53	131.19
1993	56.30		47.28	24.18	11.16	138.92
1994	59.07		49.62	26.37	11.64	146.70
1995	60.95		51.20	27.60	9.89	149.64
1996	62.76		52.71	28.03	10.91	154.41
1997	64.60		54.27	28.00	10.97	157.84
1998	62.58		52.57	27.81	9.89	152.85
1999	58.80		49.39	27.50	7.77	143.46
2000	54.47		45.76	27.08	5.63	132.94

<sup>1</sup> BLM-Alaska OCS Office

<sup>2</sup> Royalties estimated at 12.5 percent of total wellhead value

<sup>3</sup> Production tax equals 12 percent of the nonroyalty portion of total wellhead value

<sup>4</sup> Tax at 20 mills of petroleum property value

<sup>5</sup> Corporate income tax at 9.4 percent of taxable petroleum income

TABLE 6. BEAUFORT SEA E.I.S.  
BEAUFORT LOW SCENARIO  
EMPLOYMENT IMPACTS

	Regional Distribution							
	Total		North Slope		Anchorage		Fairbanks	
	Mining	Construction	Mining	Construction	Mining	Construction		
1981	67	49	59	45	8		4	
1982	198	198	174	180	24		18	
1983	198	247	174	225	24		22	
1984	232	247	204	225	28		22	
1985	67	99	57	90	10		9	
1986	70	281	60	255	10		26	
1987	123	331	113	301	10		30	
1988	228	395	211	359	17		36	
1989	345	395	319	359	26		36	
1990	387	132	358	120	29		12	
1991	434	132	402	120	32		12	
1992	388	66	360	60	28		6	
1993	355	132	329	120	26		12	
1994	333	132	307	120	26		12	
1995	334	59	308	54	26		5	
1996	333	18	307	16	26		2	
1997	332	0	306	0	26		0	
1998	330	0	304	0	26		0	
1999	327	0	301	0	26		0	
2000	325	0	299	0	26		0	

SOURCE: BLM-Alaska OCS Office

TABLE 7. BEAUFORT SEA E.I.S.  
BEAUFORT MINIMUM SCENARIO  
DIRECT REVENUE EFFECTS  
(millions of nominal dollars)

	<u>Bonus</u> <sup>1</sup>	<u>Royalties</u> <sup>2</sup>	<u>Production Tax</u> <sup>3</sup>	<u>Property Tax</u> <sup>4</sup>	<u>Corporate Income Tax</u> <sup>5</sup>	<u>Total</u>
1979	50					50
1980						0
1981				.31		.31
1982				.44		.44
1983				.70		.70
1984				.71		.71
1985				.48		.48
1986				2.01		2.01
1987				4.75		4.75
1988				8.92		8.92
1989	9.09	7.63	13.29	.42		30.43
1990	25.90	21.75	15.05	4.97		67.67
1991	35.23	29.60	16.77	6.96		88.56
1992	45.43	38.16	17.58	9.64		110.81
1993	47.73	40.09	19.04	10.97		117.83
1994	50.07	42.06	20.43	10.60		123.16
1995	52.53	44.12	20.92	10.46		128.03
1996	52.70	44.27	20.37	10.71		128.05
1997	52.50	44.09	19.70	9.92		126.21
1998	50.92	42.77	18.89	9.28		121.86
1999	47.49	39.89	17.94	7.94		113.26
2000	43.49	36.53	16.82	6.41		103.25

<sup>1</sup>BLM-Alaska OCS Office

<sup>2</sup>Royalties estimated at 12.5 percent of total wellhead value

<sup>3</sup>Production tax equals 12 percent of the nonroyalty portion of total wellhead value

<sup>4</sup>Tax at 20 mills of petroleum property value

<sup>5</sup>Corporate income tax at 9.4 percent of taxable petroleum income

is 325, which is 82 percent of the intermediate case. Peak revenues from this production are \$128.1 million in 1996.

The impacts from each of these scenarios will depend on the effect of their direct employment and the increased state expenditures which result from the increased revenues.

### Moderate Case Impacts

This section will describe in detail the impacts of the moderate Beaufort development scenario. The impacts will be measured against the moderate Lower Cook base case. We will examine both the magnitudes and important structural changes associated with Beaufort development.

#### THE STATE

##### Employment

Table 8 compares the growth of total employment in the base case to employment growth with Beaufort development. Total employment is 6,704 or 2 percent greater by 2000. The major impacts occur after the beginning of development in 1987. When Beaufort direct employment is at its peak in 1989, the employment impact is 6,649 or 2.5 percent greater. The level of impact remains relatively constant after production begins. The increases caused by state expenditures and the expansion of the economy just counteract the falling Beaufort employment. The growth rate is only slightly higher with Beaufort development; employment grows at an average annual rate of 3.0 percent compared to 2.95 percent in the base case.

The other dimension of employment impact concerns the effect of Beaufort development on the structure of the economy. Table 9 compares the structure of the economy in each case as described by the distribution of

TABLE 8. EMPLOYMENT IMPACT  
BEAUFORT EIS  
BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO  
(thousands of employees)

**EM99 - ENDOGENOUS**

	LCOOKM	LCM.BFM	LCM.BFM_ER
1978	190,227	190,227	0.
1979	195,599	195,599	0.
1980	203,629	203,703	0.074
1981	216,872	217,282	0.409
1982	233,431	234,807	1.376
1983	237,797	239,683	1.887
1984	232,601	235,24	2.638
1985	234,583	236,085	1.502
1986	238,549	240,673	2.123
1987	246,151	248,932	2.782
1988	254,365	259,394	5.028
1989	263,697	270,346	6.649
1990	272,041	278,853	6.812
1991	277,827	284,682	6.854
1992	284,124	290,536	6.413
1993	290,93	297,339	6.409
1994	298,064	304,664	6.6
1995	306,861	313,563	6.703
1996	315,971	323,473	7.502
1997	326,908	333,683	6.775
1998	337,246	343,8	6.554
1999	349,393	355,849	6.456
2000	360,981	367,685	6.704

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LCOOKM = base case  
 LCM.BFM = Beaufort development case  
 LCM.BFM\_ER = impact of Beaufort development

TABLE 9. IMPACT ON EMPLOYMENT STRUCTURE  
BEAUFORT EIS  
BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO

EMSPP - DEFINITION			EMG9P - DEFINITION			EMNSP - DEFINITION		
	LCOOKM	LCM.BFM		LCOOKM	LCM.BFM		LCOOKM	LCM.BFM
1978	0.355	0.355	1978	0.412	0.412	1979	0.234	0.234
1979	0.366	0.366	1979	0.398	0.398	1979	0.236	0.236
1980	0.382	0.382	1980	0.379	0.379	1980	0.239	0.239
1981	0.392	0.392	1981	0.365	0.364	1981	0.243	0.244
1982	0.403	0.404	1982	0.346	0.345	1982	0.251	0.251
1983	0.403	0.404	1983	0.351	0.349	1983	0.246	0.247
1984	0.4	0.401	1984	0.367	0.365	1984	0.233	0.234
1985	0.406	0.406	1985	0.358	0.358	1985	0.236	0.236
1986	0.414	0.415	1986	0.347	0.346	1986	0.239	0.24
1987	0.422	0.424	1987	0.34	0.337	1987	0.238	0.239
1988	0.429	0.432	1988	0.333	0.329	1988	0.238	0.239
1989	0.436	0.44	1989	0.327	0.322	1989	0.237	0.238
1990	0.443	0.445	1990	0.321	0.318	1990	0.236	0.236
1991	0.448	0.45	1991	0.318	0.316	1991	0.234	0.234
1992	0.454	0.456	1992	0.312	0.31	1992	0.235	0.235
1993	0.461	0.463	1993	0.305	0.302	1993	0.235	0.235
1994	0.467	0.469	1994	0.298	0.296	1994	0.235	0.235
1995	0.475	0.477	1995	0.29	0.288	1995	0.235	0.235
1996	0.482	0.484	1996	0.283	0.28	1996	0.236	0.235
1997	0.489	0.491	1997	0.275	0.274	1997	0.236	0.235
1998	0.496	0.498	1998	0.268	0.267	1998	0.236	0.235
1999	0.503	0.505	1999	0.261	0.259	1999	0.236	0.236
2000	0.51	0.512	2000	0.254	0.252	2000	0.236	0.236

EMSPP = percent of total employment in transportation-communications UTILITIES, trade, finance, and service

EMG9P = percent of total employment in government

EMNSP = percent of total employment in mining, manufacturing, agriculture-forestry-fisheries, and construction

LCOOKM = base case

LCM.BFM = Beaufort development case

employment between three sectors: 1) the basic sector: mining, manufacturing, agriculture-forestry-fisheries, construction; 2) the support sector: transportation-communications-public utilities, trade, finance, and service industries; 3) the government sector: military, federal, and state and local government employment. Beaufort OCS development causes no significant change in the structure of the economy, and serves to reinforce the trend toward an increased importance of the support sector.

#### Population

The population impact is similar to the employment impact. By 2000 Alaska's population is 17,163 or 2.2 percent greater with Beaufort development. The growth rates differ only slightly between the Beaufort and base cases. With Beaufort development, population grows at an average annual rate of 2.9 percent between 1978 and 2000, compared to 2.7 percent in the base case. The pattern of migration is similar to the base case; the most important difference occurs in the peak Beaufort employment years of 1988 and 1989 when net migration is respectively 3,343 and 2,580 larger than in the base case. (See Table 10.)

#### Personal Income

Since wages and salaries are an important component of personal income, the impact of Beaufort development on personal income could be expected to be similar to the employment impact. Personal income is \$662.8 million higher in 2000 because of Beaufort development. This is 2.1 percent higher than in the base case. Growth during the projection period averages

TABLE 10. POPULATION IMPACT  
BEAUFORT EIS  
BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO

	Population (thousands)			Net Migration (thousands)		
	LCOOKM	LCM.BFM	LCM.BFM_ER	LCOOKM	LCM.BFM	LCM.BFM_ER
1978	422,768	422,768	0.	1978	-2,863	-2,863
1979	433,056	433,056	0.	1979	2,969	2,969
1980	447,479	447,581	0.101	1980	7,07	7,17
1981	470,144	470,708	0.565	1981	15,121	15,581
1982	498,753	500,676	1.923	1982	20,569	21,906
1983	512,816	515,663	2,847	1983	5,329	6,18
1984	513,129	517,279	4,15	1984	-8,495	-7,297
1985	520,431	523,434	3,003	1985	-1,042	-2,336
1986	529,915	533,921	4,006	1986	1,296	2,208
1987	544,194	549,331	5,138	1987	6,141	7,15
1988	559,594	568,233	8,639	1988	7,117	10,46
1989	576,785	588,286	11,501	1989	8,718	11,298
1990	593,007	605,587	12,58	1990	7,494	8,2
1991	605,943	619,294	13,35	1991	4,003	4,386
1992	619,34	632,738	13,398	1992	4,392	4,051
1993	633,416	647,273	13,857	1993	4,979	5,077
1994	648,041	662,617	14,576	1994	5,409	5,778
1995	664,857	680,059	15,202	1995	7,463	7,735
1996	682,329	699,049	16,72	1996	7,901	9,065
1997	702,45	718,767	16,317	1997	10,317	9,526
1998	722,155	738,539	16,384	1998	9,575	9,296
1999	744,522	761,074	16,552	1999	11,95	11,792
2000	766,513	783,676	17,163	2000	11,202	11,499

LCOOKM = base case

LCM.BFM = Beaufort development case

LCM.BFM\_ER = impact of Beaufort development

10.6 percent per year which is only slightly faster than the annual average growth of 10.5 percent in the base case. The importance of the high wage Beaufort employment can be seen since personal income peaks in 1984 and 1989 when Beaufort employment peaks.

The increase in personal income is an unbiased increase in welfare only if the increase is greater than the increase in population and prices. Table 11 compares the real per capita personal income between these cases. Real per capita income measures the average resident's command over goods and services. The greatest difference between the two cases occurs in 1989 when real per capita incomes are almost \$94 greater because of Beaufort development; this is also the year of peak Beaufort employment. After 1989 the difference declines as Beaufort employment becomes a less important part of total employment. By 2000 real per capita personal income is only \$13.40 greater than in the base case.

#### The State Fiscal Position

The development of the Beaufort OCS affects the state fiscal position in two ways. First, Beaufort development increases state revenues because of taxes and royalties earned from production on state lands. Secondly, Beaufort development will increase state expenditures. State expenditures will increase to maintain existing service levels or to expand service levels. Increases in population and prices lead to increased expenditures to maintain service levels. Increases in real per capita incomes lead to increases in expenditures to meet increased demands for services.

TABLE 11. INCOME IMPACT  
BEAUFORT EIS  
BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO

	Personal Income (millions of nominal dollars)				Real Per Capita Personal Income		
	LCOOKM	LCM.BFM	LCM.BFM_ER		LCOOKM	LCM.BFM	LCM.BFM_ER
1978	3509.98	3509.98	0.	1978	3633.32	3633.32	0.
1979	3929.	3929.	0.	1979	3764.17	3764.17	0.
1980	4585.4	4587.5	2,098	1980	3960.57	3961.6	1.027
1981	5390.94	5408.01	17,074	1981	4212.12	4220.28	8.16
1982	6457.18	6519.2	62.02	1982	4520.21	4544.9	24.684
1983	6932.58	7025.66	93,078	1983	4513.95	4545.36	31.41
1984	6676.57	6787.16	110,594	1984	4263.4	4303.07	39.668
1985	7071.61	7129.43	57,828	1985	4305.94	4318.98	13.047
1986	7883.18	7955.34	72,168	1986	4425.48	4450.14	24.66
1987	8806.87	8961.29	154,422	1987	4557.37	4600.35	42.977
1988	9854.96	10149.6	294,605	1988	4700.75	4777.6	76.852
1989	10952.2	11375.4	423,148	1989	4838.3	4931.84	93.539
1990	12101.2	12491.	389,809	1990	4963.66	5033.04	69.379
1991	13105.7	13474.7	369,023	1991	5032.85	5091.63	58.777
1992	14288.6	14644.1	355,559	1992	5137.21	5182.23	45.016
1993	15675.8	16052.1	376,332	1993	5250.29	5291.43	41.145
1994	17221.9	17656.7	434,746	1994	5370.55	5412.19	41.641
1995	19010.1	19480.2	470,094	1995	5505.6	5541.12	35.527
1996	21028.3	21621.6	593,328	1996	5648.64	5695.72	47.074
1997	23312.3	23853.2	540,91	1997	5801.23	5824.12	22.895
1998	25804.	26326.8	522,828	1998	5950.19	5964.51	14.316
1999	28610.2	29188.5	578,277	1999	6107.16	6119.63	12.469
2000	31695.4	32358.1	662,773	2000	6262.24	6275.63	13.395

LCOOKM = base case

LCM.BFM = Beaufort development case

LCM.BFM\_ER = impact of Beaufort development

State revenues from Beaufort development provide additional pressure to increase expenditures as they lead to increases in the general fund balances. Beaufort development affects state expenditures in all of these ways.

#### State Revenues

Revenues increase because of additional petroleum revenues and because the increased economic activity increases the endogenously generated revenues such as income taxes. Table 12 illustrates the effect on revenues of Beaufort development. Total revenues are \$302.9 million greater than in the base case by 2000. At this time, petroleum revenues account for 44 percent of this increase. At their peak in 1997, additional petroleum revenues account for 55.5 percent of the additional revenues. Prior to production in 1988, petroleum revenues are responsible for 32.3 percent of total additional revenues.

#### Expenditures

Table 13 shows the impact on state expenditures of Beaufort development. By 2000 state expenditures are 1.9 percent greater than the base case. The difference between the cases grows continually throughout the projection period; the impact is reduced only in 1986 as a result of the drop in Beaufort employment in 1985. Prior to production in 1988, Beaufort expenditures are only .9 percent greater than in the base case. With Beaufort development, expenditures grow at an average annual rate of 9.48 percent which is only slightly greater than the 9.39 percent

TABLE 12. STATE REVENUE IMPACT  
BEAUFORT EIS  
BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO

	General Fund Revenues (millions of nominal dollars)			Total Petroleum Revenues (millions of nominal dollars)		
	LCOOKM	LCM.BFM	LCM.BFM_ER	LCOOKM	LCM.BFM	LCM.BFM_ER
1978	1013.44	1013.44	0.	1978	450.1	450.1
1979	1336.4	1386.4	50.	1979	795.3	845.3
1980	1579.45	1583.1	3.645	1980	1004.1	1004.1
1981	1903.16	1907.82	4.661	1981	1253.8	1254.11
1982	2275.1	2282.31	7.211	1982	1509.6	1510.04
1983	2567.25	2577.98	10.728	1983	1678.3	1679.
1984	3150.18	3163.38	13.2	1984	2178.2	2178.91
1985	3545.48	3557.7	12.227	1985	2472.6	2473.42
1986	3695.75	3708.62	12.867	1986	2464.8	2467.83
1987	3908.72	3927.9	19.18	1987	2496.6	2502.81
1988	4118.08	4152.15	34.07	1988	2515.6	2526.61
1989	4318.41	4393.81	75.398	1989	2518.6	2558.05
1990	4346.76	4483.14	136.383	1990	2348.9	2439.49
1991	4431.42	4600.96	169.547	1991	2253.1	2372.52
1992	4600.38	4787.46	187.086	1992	2254.6	2385.79
1993	4793.32	4996.61	203.293	1993	2268.	2406.92
1994	4936.55	5159.53	222.98	1994	2216.8	2363.5
1995	5075.93	5316.8	240.867	1995	2152.8	2302.44
1996	5268.06	5530.82	262.766	1996	2127.5	2281.91
1997	5487.71	5772.33	284.621	1997	2115.5	2273.34
1998	5728.39	6017.83	289.437	1998	2108.4	2261.25
1999	5994.31	6287.37	293.062	1999	2112.3	2255.76
2000	6280.96	6583.85	302.891	2000	2114.1	2247.04

LCOOKM = base case

LCM.BFM = Beaufort development case

LCM.BFM\_ER = impact of Beaufort development

TABLE 13. STATE EXPENDITURE IMPACT  
BEAUFORT EIS  
BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO

	Total State Expenditures (millions of nominal dollars)				Real Per Capita State Expenditures		
	LCOOKM	LCM.BFM	LCM.BFM_ER		LCOOKM	LCM.BFM	LCM.BFM_ER
1978	1311.13	1311.13	0.	1978	1357.19	1357.19	0.
1979	1414.71	1414.71	0.	1979	1355.36	1355.36	0.
1980	1557.72	1560.96	3.25	1980	1345.46	1348.	2.538
1981	1767.66	1769.72	2.052	1981	1381.17	1381.08	-0.091
1982	2017.26	2023.44	6.181	1982	1412.08	1410.7	-1.381
1983	2326.86	2343.15	16.288	1983	1515.08	1515.95	0.872
1984	2516.	2539.21	23.209	1984	1606.59	1609.88	3.292
1985	2654.26	2674.68	20.42	1985	1616.19	1620.3	4.113
1986	2944.72	2953.64	8.919	1986	1653.13	1652.25	-0.877
1987	3273.47	3285.14	11.671	1987	1693.95	1686.47	-7.481
1988	3628.93	3662.39	33.463	1988	1731.	1723.99	-7.014
1989	3998.71	4062.04	63.331	1989	1766.48	1761.14	-5.343
1990	4365.86	4464.31	98.453	1990	1790.8	1798.8	8.004
1991	4690.56	4793.91	103.348	1991	1801.26	1811.44	10.187
1992	4996.24	5105.27	109.027	1992	1796.33	1806.65	10.321
1993	5356.54	5472.7	116.152	1993	1794.06	1804.02	9.956
1994	5766.57	5894.48	127.914	1994	1798.27	1806.81	8.538
1995	6196.75	6345.28	148.527	1995	1794.66	1804.9	10.236
1996	6730.7	6869.02	138.316	1996	1808.01	1809.5	1.489
1997	7319.41	7485.04	165.625	1997	1821.41	1827.57	6.161
1998	7975.18	8137.36	162.176	1998	1839.01	1843.57	4.556
1999	8672.29	8831.93	159.641	1999	1851.17	1851.67	0.496
2000	9442.14	9617.09	174.957	2000	1865.53	1865.15	-0.377

LCOOKM = base case

LCM.BFM = Beaufort development case

LCM.BFM\_ER = impact of Beaufort development

growth rate in the base case. The level of service as measured by real per capita expenditures remains close to the base case level.

#### Fund Balance

Since Beaufort development increases both revenues and expenditures, its effect on the fund balances will depend on the relative increases on revenues and expenditures. Table 14 shows that the effect of Beaufort development is to increase the fund balance. By 2000 the fund balance is \$1.5 billion or 16.2 percent greater than in the base case. The only difference in the state's fiscal position is magnitude. The fund balance peaks in 1995, which is the same year it peaks in the base case. After 1995 the fund balance is drawn down. The larger fund balance means that interest from the fund will also be larger. In 2000 extra interest is \$92.6 million greater than in the base case. This interest is a revenue which reduces the expenditure impact of Beaufort development.

Table 15 explains the difference in the fund balances. The difference between revenues and expenditures remains larger in the Beaufort case throughout the period. The other measure of the state's fiscal position is the ratio of state expenditures to personal income, which is not significantly different than in the base case. Beaufort development reinforces the trend toward a more normal relation between state government and the economy.

TABLE 14. FUND BALANCE IMPACT  
 BEAUFORT EIS  
 BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO

	Total Fund Balances (millions of nominal dollars)				Total Interest from the Fund (millions of nominal dollars)		
	LCOOKM	LCM.BFM	LCM.BFM_ER		LCOOKM	LCM.BFM	LCM.BFM_ER
1978	625.748	625.748	0.	1978	46.954	46.954	0.
1979	923.148	873.148	50.	1979	44.047	44.047	0.
1980	1144.96	1196.52	51.559	1980	59.332	61.894	3.562
1981	1622.91	1677.58	54.662	1981	81.484	85.156	3.672
1982	2272.13	2329.19	57.061	1982	115.642	119.531	3.889
1983	2964.41	3019.23	54.814	1983	161.868	165.925	4.057
1984	4085.48	4134.67	49.191	1984	211.192	215.091	3.9
1985	5504.57	5549.49	44.922	1985	290.778	294.283	3.506
1986	6855.28	6905.74	50.461	1986	391.339	394.546	3.207
1987	8152.06	8212.63	60.574	1987	487.158	490.753	3.595
1988	9366.57	9434.83	68.254	1988	579.179	583.491	4.302
1989	10474.4	10567.	92.648	1989	665.457	670.297	4.84
1990	11302.8	11452.8	150.012	1990	744.27	750.833	6.563
1991	11933.	12171.	237.988	1991	803.459	814.083	10.623
1992	12468.9	12809.	340.09	1992	848.72	865.564	16.844
1993	12896.8	13349.7	452.934	1993	887.38	911.438	24.058
1994	13126.2	13701.8	575.648	1994	918.492	950.52	32.028
1995	13133.1	13832.2	699.035	1995	935.684	976.375	40.692
1996	12894.9	13742.3	847.434	1996	937.274	986.679	49.405
1997	12394.8	13390.	995.184	1997	921.69	981.561	59.871
1998	11598.4	12748.8	1150.46	1998	887.774	958.069	70.294
1999	10498.5	11809.7	1311.15	1999	833.117	914.36	81.243
2000	9056.37	10525.4	1468.99	2000	757.224	849.787	92.564

LCOOKM = base case

LCM.BFM = Beaufort development case

LCM.BFM\_ER = impact of Beaufort development

TABLE 15. FISCAL POSITION IMPACT  
BEAUFORT EIS  
BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO

	<u>General Fund Revenues Minus General Fund Expenditures (millions of nominal dollars)</u>		<u>Total State Expenditures as a Percentage of Personal Income</u>	
	LCOOKM	LCM.BFM	LCOOKM	LCM.BFM
1978	-44.852	-44.852	1978	0.302
1979	197.4	247.4	1979	0.29
1980	321.812	323.371	1980	0.274
1981	477.954	481.057	1981	0.264
1982	649.219	651.617	1982	0.252
1983	692.28	690.034	1983	0.27
1984	1121.07	1115.44	1984	0.304
1985	1419.1	1414.83	1985	0.301
1986	1350.71	1356.25	1986	0.297
1987	1296.79	1306.9	1987	0.297
1988	1214.52	1222.2	1988	0.295
1989	1107.79	1132.19	1989	0.293
1990	828.392	885.756	1990	0.291
1991	630.275	718.25	1991	0.29
1992	535.874	637.973	1992	0.284
1993	427.902	540.746	1993	0.278
1994	229.367	352.082	1994	0.273
1995	6.957	130.344	1995	0.267
1996	-238.254	-89.855	1996	0.262
1997	-500.094	-352.344	1997	0.257
1998	-796.398	-641.117	1998	0.253
1999	-1099.86	-939.18	1999	0.248
2000	-1442.14	-1284.3	2000	0.244

LCOOKM = base case

LCM.BFM = Beaufort development case

## REGIONAL EFFECTS OF BEAUFORT DEVELOPMENT

Tables 16 through 19 describe the impact of Beaufort OCS development on population and employment in the North Slope, Southcentral, Anchorage, and Fairbanks. Anchorage, North Slope, and Fairbanks are affected directly by Beaufort development. OCS development in the Beaufort impacts the regional economies by increasing exogenous employment, personal income, and state expenditures. Each region will be influenced differently by these growth factors. The location of exogenous employment, distribution of state expenditures, the size of the local economies, and the region's interaction with other regions will determine the regional impact. OCS development will not change the process of the distribution of growth, and the regional impacts will be determined by them.

### North Slope Region

The population and employment impacts on the North Slope do not show a smooth increase throughout the projection period as at the state level. This is because of the enclave nature of Beaufort development. Enclave development limits the interaction with the local economy and the secondary effects of development. Because of this, direct employment increases in the Beaufort are responsible for the major impacts. The population and employment impact peak in 1989, the year of peak Beaufort employment. Beaufort employment accounts for approximately 75 percent of both the employment and the population impact. By 2000 the level of Beaufort employment has fallen to 362 which accounts for 65.8 percent of the total employment impact and 56.7 percent of the population impact.

TABLE 16. NORTH SLOPE IMPACT  
BEAUFORT EIS  
BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO

	<u>Population (thousands)</u>				<u>Employment (thousands)</u>		
	RRLM	RRLBM	RRLBM_ER		RRLM	RRLBM	RRLBM_ER
1978	7.155	7.155	0.	1978	4.463	4.463	0.
1979	7.301	7.301	0.	1979	4.581	4.581	0.
1980	7.568	7.569	0.002	1980	4.828	4.829	0.002
1981	7.556	7.682	0.125	1981	4.94	4.975	0.134
1982	8.023	8.459	0.436	1982	5.356	5.826	0.469
1983	7.853	8.371	0.518	1983	5.099	5.648	0.549
1984	7.176	7.749	0.573	1984	4.201	4.794	0.593
1985	7.359	7.601	0.242	1985	4.25	4.486	0.235
1986	7.453	7.964	0.511	1986	4.253	4.763	0.51
1987	7.579	8.336	0.757	1987	4.363	5.128	0.765
1988	7.657	8.82	1.163	1988	4.45	5.644	1.194
1989	7.717	9.063	1.346	1989	4.505	5.891	1.386
1990	7.763	8.765	1.002	1990	4.542	5.552	1.01
1991	7.881	8.873	0.992	1991	4.613	5.599	0.986
1992	7.966	8.789	0.823	1992	4.663	5.453	0.79
1993	7.963	8.786	0.824	1993	4.619	5.401	0.782
1994	7.972	8.803	0.832	1994	4.603	5.386	0.783
1995	8.062	8.823	0.761	1995	4.673	5.374	0.701
1996	8.14	8.862	0.722	1996	4.746	5.399	0.652
1997	8.236	8.902	0.666	1997	4.841	5.428	0.587
1998	8.31	8.946	0.636	1998	4.926	5.476	0.55
1999	8.402	9.035	0.633	1999	5.03	5.577	0.547
2000	8.534	9.173	0.638	2000	5.145	5.695	0.55

RRLM = base case

RRLBM = Beaufort case

RRLBM\_ER = Beaufort impact

### Southcentral Region

Southcentral has the smallest percentage impact of any of the four regions examined. The impacts are totally indirect since no Beaufort activity takes place in this region. By 2000 population is 1.6 percent higher and employment is 1.1 percent higher than the base case because of Beaufort development. The growth rates have increased slightly from 1.61 percent to 1.68 percent per year for population and from 2.49 percent to 2.54 percent per year for employment.

### Anchorage Region

Anchorage has served as a headquarters for petroleum and petroleum support firms. Because of this past relation, it is assumed that increased petroleum activity will lead to increased mining headquarters employment in Anchorage. Anchorage growth will also be influenced by the administrative and distributive role it fills for the state. Total employment in Anchorage is 3,489 greater than in the base case by 2000; this is a 2.0 percent increase. Population is 9,792 or 2.4 percent greater by 2000 because of Beaufort development by 2000. Development of the Beaufort OCS increases the growth rate of employment from 3.53 percent in the base case to 3.63 percent per year and of population from 3.38 percent to 3.49 percent per year. By 2000 over one-half of the statewide population and employment impacts occur in Anchorage.

### Fairbanks Region

The construction employment used for Beaufort development is assumed to have headquarters in Fairbanks; this provides a direct link between the

TABLE 17. SOUTHCENTRAL IMPACT  
BEAUFORT EIS  
BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO

	<u>Population (thousands)</u>				<u>Employment (thousands)</u>		
	RRLM	RRLBM	RRLBM_ER		RRLM	RRLBM	RRLBM_ER
1976	58.365	58.365	0.	1978	22.364	22.364	0.
1979	59.406	59.406	0.	1979	23.281	23.281	0.
1980	61.935	61.949	0.014	1980	24.97	24.979	0.009
1981	64.443	64.462	0.019	1981	26.878	26.893	0.015
1982	65.387	65.439	0.052	1982	27.969	28.011	0.042
1983	64.455	64.571	0.116	1983	27.226	27.3	0.074
1984	65.84	66.077	0.237	1984	27.58	27.724	0.144
1985	66.304	66.57	0.265	1985	27.861	27.975	0.115
1986	66.818	67.06	0.242	1986	28.224	28.325	0.101
1987	67.521	67.73	0.209	1987	28.798	28.883	0.085
1988	68.722	69.111	0.389	1988	29.592	29.793	0.201
1989	70.095	70.679	0.584	1989	30.5	30.807	0.307
1990	71.529	72.439	0.91	1990	31.376	31.821	0.445
1991	71.149	72.104	0.955	1991	31.348	31.777	0.429
1992	72.116	73.144	1.028	1992	31.916	32.343	0.427
1993	73.117	74.175	1.059	1993	32.52	32.936	0.416
1994	74.272	75.359	1.087	1994	33.183	33.595	0.412
1995	75.485	76.67	1.184	1995	33.933	34.375	0.443
1996	76.772	78.142	1.369	1996	34.705	35.246	0.54
1997	78.236	79.564	1.328	1997	35.617	36.083	0.466
1998	79.594	80.911	1.317	1998	36.431	36.866	0.435
1999	81.255	82.541	1.286	1999	37.438	37.838	0.401
2000	82.942	84.244	1.302	2000	38.429	38.833	0.404

RRLM = base case

RRLBM = Beaufort case

RRLBM\_ER = Beaufort impact

TABLE 18. ANCHORAGE IMPACT  
BEAUFORT EIS  
BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO

	Population (thousands)				Employment (thousands)		
	RRLM	RRLBM	RRLBMLER		RRLM	RRLBM	RRLBMLER
1978	193.217	193.217	0.	1978	88.516	88.516	0.
1979	198.976	198.976	0.	1979	91.381	91.381	0.
1980	207.218	207.265	0.047	1980	95.656	95.691	0.035
1981	219.408	219.738	0.33	1981	102.231	102.426	0.194
1982	234.925	236.08	1.155	1982	110.059	110.718	0.659
1983	244.123	245.794	1.671	1983	113.358	114.271	0.913
1984	244.244	246.577	2.333	1984	111.847	113.14	1.293
1985	248.686	250.291	1.605	1985	113.156	113.886	0.73
1986	255.043	257.229	2.186	1986	115.874	116.9	1.027
1987	263.364	266.412	3.049	1987	120.335	121.759	1.424
1988	272.233	277.288	5.055	1988	125.097	127.684	2.587
1989	282.073	288.803	6.73	1989	130.418	133.894	3.476
1990	291.515	298.542	7.027	1990	135.22	138.757	3.537
1991	299.831	307.213	7.382	1991	138.618	142.391	3.573
1992	308.244	315.683	7.439	1992	142.684	146.083	3.4
1993	317.262	324.947	7.685	1993	146.949	150.364	3.416
1994	326.513	334.697	8.184	1994	151.396	154.975	3.58
1995	337.173	345.678	8.505	1995	156.81	160.464	3.654
1996	348.265	357.544	9.279	1996	162.456	166.544	4.088
1997	360.901	370.002	9.101	1997	169.135	172.879	3.744
1998	373.559	382.751	9.192	1998	175.613	179.283	3.67
1999	387.732	397.115	9.384	1999	183.099	186.774	3.675
2000	401.184	410.976	9.792	2000	189.965	193.814	3.849

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RRLM = base case  
 RRLBM = Beaufort case  
 RRLBMLER = Beaufort impact

TABLE 19. FAIRBANKS IMPACT  
BEAUFORT EIS  
BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO

	<u>Population (thousands)</u>				<u>Employment (thousands)</u>		
	RRLM	RRLBM	RRLBM_ER		RRLM	RRLBM	RRLBM_ER
1978	57.826	57.826	0.	1978	31.292	31.292	0.
1979	60.19	60.19	0.	1979	32.149	32.149	0.
1980	63.172	63.187	0.014	1980	33.432	33.444	0.012
1981	68.425	68.497	0.072	1981	36.582	36.629	0.047
1982	78.464	78.711	0.247	1982	42.669	42.829	0.16
1983	82.374	82.781	0.407	1983	43.874	44.124	0.25
1984	78.1	78.747	0.647	1984	39.39	39.772	0.382
1985	79.734	80.187	0.453	1985	39.607	39.835	0.228
1986	82.162	82.799	0.637	1986	40.435	40.744	0.309
1987	85.564	86.453	0.89	1987	41.922	42.341	0.419
1988	89.073	90.576	1.503	1988	43.496	44.264	0.768
1989	92.777	94.795	2.018	1989	45.255	46.297	1.042
1990	96.193	98.342	2.149	1990	46.819	47.914	1.095
1991	99.049	101.383	2.334	1991	47.997	49.12	1.122
1992	101.956	104.308	2.352	1992	49.239	50.316	1.077
1993	104.971	107.44	2.47	1993	50.59	51.683	1.093
1994	108.114	110.772	2.658	1994	52.002	53.155	1.153
1995	111.752	114.525	2.773	1995	53.763	54.946	1.183
1996	115.495	118.541	3.046	1996	55.571	56.905	1.334
1997	119.751	122.756	3.005	1997	57.736	59.957	1.221
1998	123.894	126.95	3.056	1998	59.781	60.981	1.2
1999	128.597	131.739	3.142	1999	62.2	63.403	1.203
2000	133.305	136.621	3.316	2000	64.598	65.873	1.275

RRLM = base case

RRLBM = Beaufort case

RRLBM\_ER = Beaufort impact

Fairbanks economy and Beaufort development. Fairbanks also grows as a result of its regional center role. Employment is 1,275 greater in 2000 because of Beaufort development; this is 2.0 percent greater than in the base case. Beaufort development does not prevent the post-ALCAN decrease in employment in 1984. Population also experiences impacts which generally rise throughout the period. Population is 3,316 or 2.5 percent larger in 2000 because of Beaufort development.

#### The Impact of Alternate Beaufort Scenarios

To account for the uncertainty involved in OCS development, three alternative Beaufort scenarios were developed. These scenarios were discussed above. This section will report on the impacts of these scenarios on the Alaskan economy. The impacts will be discussed in terms of four dimensions: population, employment, state expenditures, and the fund balance. The major difference between the impacts is one of magnitude; the other dimensions of impact are similar. (Details of these can be found in Appendix A.) Tables 20 through 23 describe each of these major dimensions.

#### POPULATION

Population in the high development scenario is 24,093 greater than the base case in 2000; this is a 3.1 percent increase over the base. In the low development scenario, population in 2000 is only 13,658 or 1.8 percent greater than the base case by 2000. Year 2000 population impact in the high case is 40.0 percent greater than in the moderate case, while the low case is 20.4 percent less than the moderate case. Although there is

TABLE 20. POPULATION IMPACTS  
 BEAUFORT EIS  
 BEAUFORT HIGH - LOWER COOK INLET MODERATE  
 AND BEAUFORT LOW - LOWER COOK INLET MODERATE SCENARIO  
 (thousands)

	LCOOKM	LCM.BFH	LCM.BFH_ER	LCM.BFL	LCM.BFL_ER
1978	422.768	422.768	0.	422.768	0.
1979	433.056	433.056	0.	433.056	0.
1980	447.479	447.581	0.101	447.581	0.101
1981	470.144	470.708	0.565	470.708	0.565
1982	498.753	500.676	1.923	500.676	1.923
1983	512.816	515.663	2.847	515.663	2.847
1984	513.129	517.279	4.15	517.279	4.15
1985	520.431	523.434	3.003	523.434	3.003
1986	529.915	534.314	4.399	533.576	3.661
1987	544.194	550.122	5.928	548.203	4.01
1988	559.594	569.174	9.58	565.643	6.049
1989	576.785	590.049	13.264	584.644	7.859
1990	593.007	608.293	15.286	601.694	8.687
1991	605.943	623.68	17.737	615.998	10.054
1992	619.34	638.147	18.806	629.617	10.277
1993	633.416	653.924	20.509	644.486	11.07
1994	648.041	669.709	21.668	659.572	11.531
1995	664.857	687.204	22.347	676.794	11.937
1996	682.329	704.	21.671	694.249	11.92
1997	702.45	724.081	21.631	714.597	12.146
1998	722.155	744.156	22.001	734.662	12.507
1999	744.522	767.579	23.057	757.568	13.046
2000	766.513	790.606	24.093	780.171	13.658

LCOOKM = base case

LCM.BFH = Beaufort high case

LCM.BFH\_ER = Beaufort high impacts

LCM.BFL = Beaufort low case

LCM.BFL\_ER = Beaufort low impacts

a large difference in the low and high case population impacts, the growth rates differ only slightly, 2.89 percent per year in the high case compared to 2.82 percent per year in the low case.

#### EMPLOYMENT

The employment impact is similar to the population impact. Employment in the high scenario case is 9,787, or 2.7 percent, greater by 2000 than in the base case. By 2000 employment is only 1.5 percent greater with the low Beaufort development scenario than in the base case. The high case employment impact is 46 percent greater than the moderate case, while the low case is 17.2 percent less. As in population, the growth rates differ only slightly, being 3.1 percent per year in the high case and 3.0 percent per year in the low.

#### EXPENDITURES

In both the high and low scenarios, state expenditures exhibit the same pattern as in the moderate case. By 2000 expenditures are \$284.1 million greater in the high case than in the base. This compares to a \$146.9 million difference in the low scenario. This expenditure impact is 62.4 percent greater than the moderate case for the high scenario and 83.9 percent of the moderate case for the low.

#### FUND BALANCE

The impact on the fund balance of these scenarios depends on the relative difference between revenues and expenditures. The revenues in the higher

TABLE 21. EMPLOYMENT IMPACTS  
 BEAUFORT EIS  
 BEAUFORT HIGH - LOWER COOK INLET MODERATE  
 AND BEAUFORT LOW - LOWER COOK INLET MODERATE SCENARIO  
 (thousands)

	LCOOKM	LCM.BFH	LCM.BFH_ER	LCM.BFL	LCM.BFL_ER
1978	190.227	190.227	0.	190.227	0.
1979	195.599	195.599	0.	195.599	0.
1980	203.629	203.703	0.074	203.703	0.074
1981	216.872	217.282	0.409	217.282	0.409
1982	233.431	234.807	1.376	234.807	1.376
1983	237.797	239.683	1.887	239.683	1.887
1984	232.601	235.24	2.638	235.24	2.638
1985	234.583	236.085	1.502	236.085	1.502
1986	238.549	240.963	2.413	240.417	1.868
1987	246.151	249.419	3.269	248.13	1.979
1988	254.365	259.922	5.556	257.608	3.243
1989	263.697	271.372	7.675	267.98	4.283
1990	272.041	280.463	8.423	276.538	4.498
1991	277.827	287.392	9.564	283.	5.173
1992	284.124	293.76	9.636	289.084	4.96
1993	290.93	301.226	10.295	296.212	5.282
1994	298.064	308.608	10.544	303.392	5.328
1995	306.861	317.274	10.413	312.189	5.329
1996	315.971	325.398	9.427	321.022	5.051
1997	326.908	335.894	8.986	331.909	5.
1998	337.246	346.169	8.923	342.321	5.075
1999	349.393	358.737	9.344	354.681	5.288
2000	360.981	370.768	9.787	366.534	5.553

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LCOOKM = base case  
 LCM.BFH = Beaufort high case  
 LCM.BFH\_ER = Beaufort high impacts

LCM.BFL = Beaufort low case  
 LCM.BFL\_ER = Beaufort low impacts

TABLE 22. STATE EXPENDITURE IMPACTS  
 BEAUFORT EIS  
 BEAUFORT HIGH - LOWER COOK INLET MODERATE  
 AND BEAUFORT LOW - LOWER COOK INLET MODERATE SCENARIO  
 (millions of nominal dollars)

	LCOOKM	LCM.BFH	LCM.BFH_ER	LCM.BFL	LCM.BFL_ER
1978	1311.13	1311.13	0.	1311.13	0.
1979	1414.71	1414.71	0.	1414.71	0.
1980	1557.72	1560.96	3.25	1560.96	3.25
1981	1767.66	1769.72	2.052	1769.72	2.052
1982	2017.26	2023.44	6.181	2023.44	6.181
1983	2326.86	2343.15	16.288	2343.15	16.288
1984	2516.	2539.21	23.209	2539.21	23.209
1985	2654.26	2674.68	20.42	2674.68	20.42
1986	2944.72	2953.64	8.919	2953.54	8.814
1987	3273.47	3288.94	15.474	3281.51	8.039
1988	3628.93	3669.96	41.026	3650.54	21.608
1989	3998.71	4069.03	70.322	4036.71	38.005
1990	4365.86	4501.82	135.957	4430.35	64.492
1991	4690.56	4841.14	150.582	4762.54	71.977
1992	4996.24	5177.83	181.59	5084.51	88.273
1993	5356.54	5557.69	201.145	5454.95	98.402
1994	5766.57	5993.31	226.742	5875.67	109.102
1995	6196.75	6450.93	254.172	6319.69	122.937
1996	6730.7	6958.32	227.625	6840.27	109.574
1997	7319.41	7540.15	220.738	7430.88	111.465
1998	7975.18	8201.48	226.305	8093.05	117.867
1999	8672.29	8921.4	249.109	8802.91	130.617
2000	9442.14	9726.25	284.109	9589.04	146.898

---

LCOOKM = base case  
 LCM.BFH = Beaufort high case  
 LCM.BFH\_ER = Beaufort high impacts

LCM.BFL = Beaufort low case  
 LCM.BFL\_ER = Beaufort low impacts

TABLE 23. FUND BALANCE IMPACTS  
 BEAUFORT EIS  
 BEAUFORT HIGH - LOWER COOK INLET MODERATE  
 AND BEAUFORT LOW - LOWER COOK INLET MODERATE SCENARIO  
 (millions of nominal dollars)

	LCOOKM	LCM.BFH	LCM.BFH_ER	LCM.BFL	LCM.BFL_ER
1978	625.748	625.748	0.	625.748	0.
1979	823.148	873.148	50.	873.148	50.
1980	1144.96	1196.52	51.559	1196.52	51.559
1981	1622.91	1677.58	54.662	1677.58	54.662
1982	2272.13	2329.19	57.061	2329.19	57.061
1983	2964.41	3019.23	54.814	3019.23	54.814
1984	4085.48	4134.67	49.191	4134.67	49.191
1985	5504.57	5549.49	44.922	5549.15	44.582
1986	6855.28	6907.08	51.801	6903.95	48.676
1987	8152.06	8216.09	64.027	8209.82	57.766
1988	9366.57	9440.96	74.391	9432.84	66.262
1989	10474.4	10650.5	176.168	10565.2	90.793
1990	11302.8	11596.9	294.16	11441.9	139.168
1991	11933.	12387.8	454.777	12142.4	209.355
1992	12468.9	13090.5	621.613	12766.3	297.395
1993	12896.8	13699.9	803.055	13290.4	393.594
1994	13126.2	14122.2	995.988	13622.	495.875
1995	13133.1	14329.6	1196.43	13735.5	602.375
1996	12894.9	14331.9	1437.07	13620.	725.156
1997	12394.8	14098.9	1704.08	13249.7	854.883
1998	11598.4	13577.9	1979.51	12586.7	988.273
1999	10498.5	12742.2	2243.64	11617.4	1118.87
2000	9056.37	11548.1	2491.7	10300.5	1244.13

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LCOOKM = base case  
 LCM.BFH = Beaufort high case  
 LCM.BFH\_ER = Beaufort high impacts  
  
 LCM.BFL = Beaufort low case  
 LCM.BFL\_ER = Beaufort low impacts

Beaufort cases provide a greater increase in revenues than expenditures. The larger the development, the larger is the year 2000 fund balance. The fund balance in 2000 is \$2.49 billion greater than the base in the high case, \$1.47 billion greater in the moderate case, and \$1.24 billion greater in the low case. By 2000 the fund balance has peaked in all cases and has begun to be drawn down.

#### The Cumulative Impacts of Beaufort OCS Development

An interesting question concerning this analysis is how dependent are the above impacts on the base case on which they are based. This section describes a test of the sensitivity of the impacts to the base case.

Two additional scenarios were run which combined the high Beaufort and high Lower Cook scenarios for a high case and the low Beaufort and low Lower Cook scenarios for a low case. The impact of Beaufort development in each of these cases is assessed in terms of the major dimensions of population, employment, state expenditures, and fund balances. This approach also allows us to estimate a range of possible impacts.

Tables 24 and 25 describe the impact of the high and low cases. By comparing the impacts to the high and low Beaufort cases with the moderate Lower Cook scenario, it can be seen that, at least within the range of these base cases, the impacts are independent of the base case. By 2000 the low case population impact is within 8 percent of the low case with moderate Lower Cook development. Comparing these same cases, we can see that the employment impact is within 2.2 percent between the cases. The

TABLE 24. IMPACT ON AGGREGATE INDICATORS  
BEAUFORT EIS  
BEAUFORT HIGH - LOWER COOK INLET HIGH SCENARIO

	<u>Population (thousands)</u>			<u>Total Employment (thousands)</u>		
	LCOOKL	L.BLOW	L.BLOW_ER	LCOOKL	L.BLOW	L.BLOW_ER
1978	422.83	422.83	0.	1978	190.273	190.273
1979	431.71	431.71	0.	1979	194.593	194.593
1980	444.03	444.131	0.101	1980	201.229	201.304
1981	464.456	465.025	0.569	1981	213.175	213.588
1982	492.762	494.694	1.932	1982	229.954	231.335
1983	506.556	509.417	2.862	1983	234.428	236.321
1984	506.252	510.494	4.242	1984	229.013	231.71
1985	512.917	516.023	3.106	1985	230.856	232.399
1986	521.748	525.559	3.811	1986	234.659	236.596
1987	536.328	540.489	4.16	1987	242.788	244.826
1988	551.561	557.775	6.214	1988	251.081	254.405
1989	568.712	576.778	8.065	1989	260.554	264.939
1990	584.516	594.391	9.875	1990	268.741	274.054
1991	596.971	608.818	11.847	1991	274.325	280.668
1992	609.791	621.921	12.13	1992	280.364	286.415
1993	623.167	636.761	13.595	1993	286.875	293.614
1994	637.215	651.586	14.372	1994	293.782	300.672
1995	653.435	667.906	14.472	1995	302.336	308.874
1996	670.146	684.058	13.911	1996	311.146	316.932
1997	689.653	703.273	13.619	1997	321.839	327.171
1998	708.714	722.433	13.719	1998	331.912	337.139
1999	730.388	744.543	14.155	1999	343.762	349.151
2000	751.647	766.407	14.76	2000	355.03	360.704

LCOOKL = Lower Cook Inlet low scenario base case

L.BLOW = Beaufort low scenario case

L.BLOW\_ER = Beaufort low scenario impacts

TABLE 24 (Continued)

	Total Expenditures (millions of nominal dollars)				Fund Balance (millions of nominal dollars)		
	LCOOKL	L.BLOW	L.BLOWLER		LCOOKL	L.BLOW	L.BLOWLER
1978	1311.13	1311.13	0.	1978	625.803	625.803	0.
1979	1414.71	1414.71	0.	1979	822.066	872.066	50.
1980	1549.01	1552.25	3.241	1980	1145.91	1197.48	51.564
1981	1742.31	1744.37	2.058	1981	1634.43	1689.1	54.667
1982	1982.38	1988.67	6.288	1982	2300.7	2357.69	56.997
1983	2300.	2316.48	16.478	1983	3006.51	3061.14	54.626
1984	2500.96	2524.51	23.542	1984	4133.36	4182.23	48.871
1985	2634.43	2655.15	20.715	1985	5559.38	5603.68	44.301
1986	2921.96	2930.9	8.934	1986	6918.28	6966.87	48.59
1987	3250.56	3258.69	8.13	1987	8223.57	8281.55	57.977
1988	3613.43	3635.52	22.096	1988	9441.92	9508.48	66.559
1989	3985.86	4024.24	38.378	1989	10550.7	10642.1	91.355
1990	4348.55	4414.58	66.027	1990	11381.2	11522.2	140.965
1991	4669.21	4754.52	85.305	1991	12014.1	12221.2	207.086
1992	4966.67	5076.06	109.391	1992	12555.5	12841.6	286.078
1993	5321.24	5433.81	112.566	1993	12990.	13367.9	377.852
1994	5724.08	5854.03	129.945	1994	13227.8	13700.8	472.969
1995	6148.09	6296.87	148.777	1995	13244.3	13812.5	569.18
1996	6674.02	6802.04	128.016	1996	13017.1	13698.4	681.293
1997	7253.63	7372.01	118.379	1997	12529.7	13335.3	805.652
1998	7901.19	8018.78	117.594	1998	11746.9	12683.5	936.551
1999	8589.32	8718.51	129.191	1999	10661.	11726.1	1065.02
2000	9347.52	9494.9	147.379	2000	9233.62	10420.9	1187.24

LCOOKL = Lower Cook Inlet low scenario base case

L.BLOW = Beaufort low scenario case

L.BLOWLER = Beaufort low scenario impacts

TABLE 25. IMPACT ON AGGREGATE INDICATORS  
BEAUFORT EIS  
BEAUFORT HIGH - LOWER COOK INLET HIGH SCENARIO

	<u>Population (thousands)</u>			<u>Total Employment (thousands)</u>		
	LCOOKH	L.BHI	L.BHI_ER	LCOOKH	L.BHI	L.BHI_ER
1978	422.83	422.83	0.	1978	190.273	190.273
1979	431.71	431.71	0.	1979	194.593	194.593
1980	444.03	444.131	0.101	1980	201.229	201.304
1981	466.924	467.49	0.566	1981	215.	215.41
1982	494.607	496.551	1.943	1982	231.073	232.444
1983	517.489	520.37	2.881	1983	242.131	244.015
1984	524.765	528.832	4.066	1984	241.427	243.97
1985	535.24	538.429	3.189	1985	244.521	246.152
1986	543.113	547.396	4.283	1986	246.233	248.548
1987	556.267	562.208	5.941	1987	252.341	255.636
1988	570.73	580.11	9.379	1988	259.419	264.862
1989	588.198	601.229	13.031	1989	268.627	276.192
1990	605.056	619.997	14.941	1990	277.139	285.404
1991	619.149	636.486	17.336	1991	283.478	292.872
1992	633.619	651.98	18.361	1992	290.23	299.693
1993	648.853	668.819	19.966	1993	297.54	307.621
1994	664.519	685.565	21.047	1994	305.074	315.378
1995	682.402	704.103	21.701	1995	314.289	324.472
1996	700.884	722.137	21.253	1996	323.77	333.092
1997	722.1	743.439	21.339	1997	335.14	344.082
1998	742.911	764.615	21.704	1998	345.915	354.789
1999	766.485	789.226	22.741	1999	358.568	367.846
2000	789.734	813.465	23.731	2000	370.688	380.379

LCOOKH = Lower Cook Inlet high scenario base case

L.BHI = Beaufort high scenario case

L.BHI\_ER = Beaufort high scenario impacts

TABLE 25 (Continued)

	<u>Total Expenditures</u> (millions of nominal dollars)				<u>Fund Balance</u> (millions of nominal dollars)		
	LCOOKH	L.BHI	L.BHI_ER		LCOOKH	L.BHI	L.BHI_ER
1978	1311.13	1311.13	0.	1978	625.803	625.803	0.
1979	1414.71	1414.71	0.	1979	822.066	872.066	50.
1980	1549.01	1552.25	3.241	1980	1145.91	1197.48	51.564
1981	1742.31	1744.37	2.058	1981	1636.87	1691.53	54.664
1982	1999.31	2005.57	6.261	1982	2295.49	2352.5	57.011
1983	2317.48	2334.01	16.533	1983	3001.43	3056.05	54.624
1984	2566.42	2589.51	23.09	1984	4111.71	4160.7	48.988
1985	2756.6	2781.42	24.82	1985	5493.96	5534.77	40.812
1986	3017.17	3031.06	13.885	1986	6820.21	6863.03	42.812
1987	3301.17	3319.82	18.656	1987	8116.77	8167.47	50.699
1988	3632.78	3675.67	42.885	1988	9346.27	9403.42	57.152
1989	4004.46	4076.6	72.143	1989	10470.6	10625.2	154.574
1990	4380.6	4515.82	135.219	1990	11313.9	11583.5	269.547
1991	4718.54	4870.23	151.695	1991	11955.6	12381.4	425.766
1992	5038.19	5220.02	181.832	1992	12499.1	13087.5	588.383
1993	5409.88	5611.53	201.648	1993	12932.4	13697.4	765.051
1994	5829.33	6055.82	226.496	1994	13166.6	14119.7	953.086
1995	6269.45	6522.72	253.277	1995	13178.2	14326.8	1148.64
1996	6812.28	7041.63	229.348	1996	12945.8	14328.7	1382.85
1997	7411.58	7638.41	226.836	1997	12453.	14093.8	1640.77
1998	8080.25	8315.48	235.223	1998	11665.4	13569.9	1904.46
1999	8792.09	9049.76	257.668	1999	10576.4	12732.1	2155.68
2000	9580.05	9872.43	292.375	2000	9147.31	11537.1	2389.75

LCOOKH = Lower Cook Inlet high scenario base case

L.BHI = Beaufort high scenario case

L.BHI\_ER = Beaufort high scenario impacts

high cases are similarly related with the year 2000 employment impact within 1.0 percent, and the population impact within 1.5 percent.

Those variables describing the fiscal position of the state also show extremely close impacts. By 2000 FUND is \$2.5 billion greater than the base case with a moderate Lower Cook and a high Beaufort. This is only 4.3 percent greater than the increased fund balance with a high Lower Cook and high Beaufort. The low Beaufort cases differ by only 4.8 percent in 2000. The year 2000 state expenditures impact differs by only .3 percent in the high case and 2.9 percent in the low case.

These differences are well within the confidence limits of the MAP model. These similar impacts illustrate the limited sensitivity of the impacts to the base case. Analyzing these impact cases also allows us to place limits on the Beaufort impact. Employment impacts should range between 5,500 and 9,800. Population impacts will be between 14,000 and 24,000.

#### The Sensitivity of the Results to the State Expenditure Rule

An assumption about the growth of state government expenditures was made in the base case. This is a speculative expenditure rule, since there is little evidence to support the choice of any particular rule. This section will examine the effect of this rule on the impacts of Beaufort development. This sensitivity of the results will be examined by comparing the impacts of Beaufort development scenarios with a moderate Lower

Cook scenario base case to the same case when state expenditures are constrained to equal their base case levels.

Increased state expenditures is one of the major possible causes of impact from Beaufort development. One way to examine the proportion of impact which results from this factor is to examine what would happen to the major variables if state expenditures remained as in the base case. The section allows us to see in some sense the direct impact of Beaufort development and the proportion of impact caused by state expenditure increases.

Tables 26 and 27 show the three Beaufort impacts (with moderate Lower Cook) when state expenditures are constrained to the base levels; by comparing these to the unconstrained impacts, we can assess the effect of the spending rule. Increased state expenditures are responsible for 33 percent of the population impact in the high case, 29.2 percent in the moderate case, and 29.4 percent in the low case in 2000. State expenditures are responsible for 39.2 percent of the employment impact by 2000 in the high case, 35.1 percent in the moderate, and 35.1 percent in the low case. Close to one-third of the employment and population impacts of Beaufort OCS development are a result of state expenditures increasing in accordance with our assumed spending rule.

TABLE 26. POPULATION AND EMPLOYMENT IMPACTS  
BEAUFORT EIS  
NO STATE EXPENDITURE RESPONSE

	<u>Population (thousands)</u>			<u>Total Employment (thousands)</u>		
	XL.BH_ER	XL.BM_ER	XL.BL_ER	XL.BH_ER	XL.BM_ER	XL.BL_ER
1978	0.	0.	0.	1978	0.	0.
1979	0.	0.	0.	1979	0.	0.
1980	0.	0.	0.	1980	0.	0.
1981	0.477	0.477	0.477	1981	0.352	0.352
1982	1.62	1.62	1.62	1982	1.167	1.167
1983	2.124	2.124	2.124	1983	1.382	1.382
1984	3.037	3.037	3.037	1984	1.885	1.885
1985	1.919	1.919	1.919	1985	0.828	0.828
1986	3.68	3.288	2.945	1986	2.055	1.764
1987	5.047	4.389	3.38	1987	2.802	2.414
1988	7.971	7.306	5.101	1988	4.57	4.239
1989	10.676	9.219	6.418	1989	6.024	5.201
1990	10.941	9.185	6.455	1990	5.576	4.632
1991	12.821	9.735	7.594	1991	6.481	4.649
1992	12.923	9.568	7.339	1992	6.029	4.179
1993	14.118	9.92	7.917	1993	6.52	4.214
1994	14.456	10.33	8.027	1994	6.421	4.309
1995	14.641	10.682	8.312	1995	6.108	4.27
1996	14.321	12.167	8.344	1996	5.522	5.148
1997	14.403	11.255	8.566	1997	5.328	4.134
1998	14.837	11.442	8.883	1998	5.438	4.102
1999	15.478	11.68	9.254	1999	5.705	4.137
2000	16.103	12.159	9.649	2000	5.953	4.352

XL.BH\_ER = impact of Beaufort high scenario with expenditures equal to base case levels

XL.BM\_ER = impact of Beaufort moderate scenario with expenditures equal to base case levels

XL.BL\_ER = impact of Beaufort low scenario with expenditures equal to base case levels

TABLE 27. FUND BALANCE IMPACTS  
 BEAUFORT EIS  
 NO STATE EXPENDITURE RESPONSE  
 (millions of nominal dollars)

	XL.BH_ER	XL.BM_ER	XL.BL_ER
1978	0.	0.	0.
1979	50.	50.	50.
1980	53.562	53.562	53.562
1981	58.173	58.173	58.173
1982	65.225	65.225	65.225
1983	75.521	75.521	75.521
1984	88.164	88.164	88.164
1985	100.742	100.742	100.402
1986	117.121	115.777	113.93
1987	144.945	138.578	133.012
1988	191.465	176.418	162.711
1989	352.824	254.723	221.684
1990	578.203	393.684	325.141
1991	860.395	568.648	457.09
1992	1178.06	766.801	622.297
1993	1535.14	988.043	807.844
1994	1934.14	1235.47	1013.19
1995	2374.96	1507.61	1240.45
1996	2857.97	1810.33	1485.21
1997	3380.36	2143.67	1746.86
1998	3933.53	2492.31	2026.16
1999	4510.83	2857.35	2321.7
2000	5116.77	3245.88	2634.11

---

XL.BH\_ER = impact of Beaufort high scenario with expenditures equal  
 to base case levels  
 XL.BM\_ER = impact of Beaufort moderate scenario with expenditures  
 equal to base case levels  
 XL.BL\_ER = impact of Beaufort low scenario with expenditures equal  
 to base case levels

## SUMMARY AND CONCLUSIONS

The impact of Beaufort development can be assessed in terms of the five questions raised in the first section of this paper. The answers to these questions should uncover the major dimensions of Beaufort impact.

As measured by its impact on the aggregate indicators, Beaufort OCS development should have a relatively small impact on the state's economy. Beaufort development will result in a population impact of 24,000 by 2000 in the highest impact case; this impact occurs over approximately twenty years. This is relatively insignificant compared to the 100,000 increase in population that Alaska experienced between 1970 and 1975. Depending on the size of discovery, the population impacts should range between 14,000 and 24,000 in 2000; while the employment impacts should be between 5,500 and 9,800.

The most important causes of growth associated with Beaufort development are increases in exogenous employment and increases in state expenditures. Each of these is dominant in different periods of the analysis. The importance of Beaufort OCS employment is greater during the exploration and development stages. In the moderate case, Beaufort employment accounts for 16.3 percent of the employment impact. By 2000 Beaufort employment accounts for only 5.9 percent of the employment impact. State expenditures become important after state revenues increase. By 2000 state expenditures are responsible for approximately one-third of the employment and population impacts.

The impact of Beaufort OCS development on the state's fiscal position is primarily one of magnitudes. The revenue impact of Beaufort is greater than the expenditure impact throughout the projection period, so the fund balance is greater at the end of the projection period than in the base case. This does not change two trends observed in the base case. By 2000 the fund balance has peaked and is beginning to be drawn down as expenditures are met out of the fund balance. Beaufort development has not eliminated the cyclical effects of petroleum-dependent revenues. The reduction of dependence on state expenditures, as measured by the ratio of state expenditures to personal income, which was found in the base case is reinforced by Beaufort development. The economy grows faster than state expenditures.

Beaufort development reinforces the structural change found in the base case. Over the projection period, the support sector continues to grow in importance.

The largest impact of Beaufort OCS development occurs in Anchorage which has over half of the impact. This reinforces the base case concentration of employment and population in Anchorage. The major impacts on the North Slope, which has the largest direct effect, occur in the enclave sector. The assumed limited interaction between Beaufort development and the local economy is responsible for this minimal impact.

## Appendix A

### Detail Scenarios

This appendix provides the detailed information on each scenario which is not available in the text. The data is arranged by scenario. The data dictionary which is included provides the key to interpreting the data.

## VARIABLE DICTIONARY

### Regions

When variable is followed by Ri, denotes regional variable:

R1 = North Slope	R5 = Anchorage
R4 = Southcentral	R7 = Fairbanks

### Variables

POP	= population (thousands)
MIGNET	= net migration (thousands)
EM99	= total employment (thousands)
EMSPP	= employment percent in transportation-communication UTILITIES, service, trade, finance
EMG9P	= employment percent in government
EMNSP	= employment percent in mining, manufacturing, construction, agriculture-forestry-fisheries
PI	= personal income (millions of nominal dollars)
PIRC	= real per capita income
E99S	= total state government expenditures (millions of nominal dollars)
E99SRPC	= real per capita state expenditures
REVGF	= total general fund revenues (millions of nominal dollars)
RP9S	= total petroleum revenues (millions of nominal dollars)
FUND	= total fund balance (millions of nominal dollars)
RINS	= fund interest (millions of nominal dollars)
SIMP	= general fund revenues minus general fund expenditures (millions of nominal dollars)
EXBITES	= state expenditures as a percent of personal income
RPI	= relative price index (1957 = 100)
EM1EX	= mining and exogenous construction employment (thousands)
EMS4	= transportation-communication-utilities, construction employment (thousands)
EMS5	= trade, service, finance employment (thousands)
EMRR	= manufacturing, agriculture-forestry-fisheries employment (thousands)
EMGR	= government employment (thousands)

## Variable Dictionary (continued)

### Cases

LCOOKH = Lower Cook High Scenario Base Case

LCOOKM = Lower Cook Moderate Scenario Base Case

LCOOKL = Lower Cook Low Scenario Base Case

L.BHI = Beaufort High - Lower Cook High Scenario

L.BLOW = Beaufort Low - Lower Cook Low Scenario

LCM.BFH = Beaufort High - Lower Cook Moderate Scenario

LCM.BFM = Beaufort Moderate - Lower Cook Moderate Scenario

LCM.BFL = Beaufort Low - Lower Cook Moderate Scenario

BEAUFORT MODERATE - LOWER COOK INLET MODERATE SCENARIO

## RRLEB

	EM1EXR5	EMS4R5	EMS5R5	EMRRR5	EMG9R5
1978	1.33	12.183	37.627	2.109	35.107
1979	1.366	12.751	39.954	2.249	34.892
1980	1.366	13.646	43.465	2.38	34.733
1981	1.397	14.886	47.934	2.555	35.456
1982	1.414	16.429	53.531	2.692	36.181
1983	1.422	17.016	55.016	2.856	37.227
1984	1.426	16.753	53.459	3.01	37.969
1985	1.408	17.156	54.269	3.173	37.416
1986	1.407	17.946	56.652	3.354	36.953
1987	1.408	18.862	60.011	3.537	37.225
1988	1.419	19.915	63.96	3.723	37.733
1989	1.434	21.019	68.033	3.909	38.414
1990	1.44	21.894	71.016	4.108	39.054
1991	1.415	22.509	73.311	4.303	39.445
1992	1.438	23.166	75.858	4.525	39.488
1993	1.431	24.01	78.952	4.745	39.463
1994	1.431	24.9	82.191	4.953	39.522
1995	1.431	25.966	86.088	5.194	39.614
1996	1.498	27.149	90.299	5.452	39.733
1997	1.43	28.448	94.689	5.722	39.954
1998	1.43	29.738	99.075	5.979	40.126
1999	1.43	31.268	104.32	6.251	40.29
2000	1.43	32.713	109.301	6.522	40.496

## RRLEB

	EM1EXR7	EMS4R7	EMS5R7	EMRRR7	EMG9R7
1978	0.243	5.14	9.119	0.457	16.265
1979	0.243	5.389	9.799	0.49	16.125
1980	0.243	5.776	10.813	0.526	16.003
1981	1.534	6.087	12.064	0.563	16.283
1982	4.352	6.693	14.554	0.601	16.564
1983	4.182	7.093	15.192	0.635	16.985
1984	0.487	7.214	14.051	0.687	17.292
1985	0.252	7.447	14.351	0.703	17.034
1986	0.271	7.774	15.107	0.741	16.802
1987	0.273	8.158	16.181	0.788	16.891
1988	0.285	8.577	17.408	0.834	17.088
1989	0.285	9.02	18.67	0.876	17.365
1990	0.257	9.381	19.633	0.924	17.626
1991	0.253	9.628	20.38	0.968	17.779
1992	0.249	9.888	21.21	1.036	17.782
1993	0.257	10.217	22.191	1.081	17.756
1994	0.257	10.56	23.228	1.131	17.767
1995	0.25	10.979	24.471	1.194	17.795
1996	0.257	11.434	25.797	1.256	17.834
1997	0.243	11.933	27.189	1.326	17.919
1998	0.243	12.414	28.57	1.37	17.982
1999	0.243	12.992	30.223	1.439	18.043
2000	0.243	13.587	31.902	1.512	18.123

## RRLEB

	EM1EXR1	EMS4R1	EMS5R1	EMRRR1	EMG9R1
1978	1.951	0.8	0.695	0.	0.995
1979	2.002	0.846	0.709	0.	0.997
1980	2.11	0.928	0.736	0.	1.008
1981	2.061	1.029	0.761	0.	1.076
1982	2.592	1.24	0.829	0.	1.135
1983	2.369	1.253	0.781	0.	1.245
1984	1.702	1.091	0.691	0.	1.304
1985	1.461	1.091	0.674	0.	1.258
1986	1.666	1.17	0.7	0.	1.234
1987	1.881	1.266	0.732	0.	1.272
1988	2.193	1.393	0.778	0.	1.323
1989	2.301	1.463	0.802	0.	1.385
1990	1.95	1.425	0.81	0.	1.436
1991	1.932	1.453	0.813	0.	1.462
1992	1.805	1.463	0.806	0.	1.473
1993	1.73	1.495	0.809	0.	1.476
1994	1.68	1.534	0.813	0.	1.485
1995	1.612	1.579	0.821	0.	1.494
1996	1.64	1.633	0.831	0.	1.507
1997	1.525	1.694	0.842	0.	1.524
1998	1.502	1.758	0.852	0.	1.541
1999	1.503	1.84	0.872	0.	1.556
2000	1.506	1.926	0.892	0.	1.573

## RRLEB

	EM1EXR4	EMS4R4	EMS5R4	EMRRR4	EMG9R4
1978	0.775	3.133	8.453	4.371	5.742
1979	1.078	3.275	8.843	4.537	5.692
1980	1.731	3.541	9.486	4.731	5.585
1981	2.402	3.85	10.083	4.87	5.797
1982	2.578	4.07	10.466	5.018	5.994
1983	1.58	3.967	10.38	5.202	5.321
1984	1.259	3.974	10.637	5.4	5.594
1985	1.241	4.065	10.823	5.558	6.449
1986	1.221	4.176	11.061	5.754	6.298
1987	1.118	4.266	11.402	5.904	6.381
1988	1.159	4.395	11.822	6.103	6.54
1989	1.194	4.54	12.3	6.266	6.748
1990	1.229	4.675	12.74	6.5	6.948
1991	0.768	4.644	12.916	6.66	7.09
1992	0.777	4.718	13.222	6.869	7.109
1993	0.779	4.815	13.574	7.043	7.113
1994	0.779	4.915	13.943	7.252	7.14
1995	0.779	5.04	14.4	7.479	7.17
1996	0.816	5.176	14.887	7.724	7.22
1997	0.779	5.321	15.368	7.954	7.289
1998	0.779	5.452	15.818	8.172	7.357
1999	0.779	5.617	16.388	8.439	7.419
2000	0.779	5.786	16.968	8.659	7.492

## POP - ENDOGENOUS

	LC000KM	LCM,BFL	LCM,BFL_ER
1978	422.768	422.768	0.
1979	433.056	433.056	0.
1980	447.479	447.581	0.101
1981	470.144	470.708	0.565
1982	498.753	500.676	1.923
1983	512.816	515.663	2.847
1984	513.129	517.279	4.15
1985	520.431	523.434	3.003
1986	529.915	533.576	3.661
1987	544.194	548.203	4.01
1988	559.594	565.643	6.049
1989	576.785	584.644	7.859
1990	593.007	601.694	8.687
1991	605.943	615.998	10.054
1992	619.34	629.617	10.277
1993	633.416	644.486	11.07
1994	648.041	659.572	11.531
1995	664.857	676.794	11.937
1996	682.329	694.249	11.92
1997	702.45	714.597	12.146
1998	722.155	734.662	12.507
1999	744.522	757.568	13.046
2000	766.513	780.171	13.658

## MIGNET - ENDOGENOUS

	LC000KM	LCM,BFL	LCM,BFL_ER
1978	-2.863	-2.863	0.
1979	2.969	2.969	0.
1980	7.07	7.17	0.101
1981	15.121	15.581	0.46
1982	20.569	21.906	1.337
1983	5.329	6.18	0.851
1984	-8.495	-7.297	1.199
1985	-1.042	-2.336	-1.294
1986	1.296	1.862	0.567
1987	6.141	6.381	0.24
1988	7.117	9.041	1.924
1989	8.718	10.343	1.625
1990	7.494	8.08	0.586
1991	4.003	5.113	1.111
1992	4.392	4.322	-0.069
1993	4.979	5.494	0.516
1994	5.409	5.581	0.172
1995	7.463	7.584	0.121
1996	7.901	7.603	-0.298
1997	10.317	10.282	-0.036
1998	9.575	9.684	0.108
1999	11.95	12.238	0.288
2000	11.202	11.557	0.355

BEAUFORT LOW - LOWER COOK INLET MODERATE SCENARIO

## ENG9P - DEFINITION

LCOOKM LCM.BFL

1978	0.412	0.412
1979	0.398	0.398
1980	0.379	0.379
1981	0.365	0.364
1982	0.346	0.345
1983	0.351	0.349
1984	0.367	0.365
1985	0.358	0.358
1986	0.347	0.346
1987	0.34	0.338
1988	0.333	0.33
1989	0.327	0.324
1990	0.321	0.319
1991	0.318	0.316
1992	0.312	0.31
1993	0.305	0.303
1994	0.298	0.296
1995	0.29	0.289
1996	0.283	0.282
1997	0.275	0.274
1998	0.268	0.267
1999	0.261	0.259
2000	0.254	0.253

## EMSPP - DEFINITION

LCOOKM LCM.BFL

1978	0.355	0.355
1979	0.366	0.366
1980	0.382	0.382
1981	0.392	0.392
1982	0.403	0.404
1983	0.403	0.404
1984	0.4	0.401
1985	0.406	0.406
1986	0.414	0.415
1987	0.422	0.423
1988	0.429	0.431
1989	0.436	0.439
1990	0.443	0.445
1991	0.448	0.45
1992	0.454	0.455
1993	0.461	0.463
1994	0.467	0.469
1995	0.475	0.476
1996	0.482	0.483
1997	0.489	0.491
1998	0.496	0.497
1999	0.503	0.505
2000	0.51	0.512

## EM99 - ENDOGENOUS

	LCOOKM	LCM,BFL	LCM,BFL_ER
1978	190.227	190.227	0.
1979	195.599	195.599	0.
1980	203.629	203.703	0.074
1981	216.872	217.282	0.409
1982	233.431	234.807	1.376
1983	237.797	239.683	1.887
1984	232.601	235.24	2.638
1985	234.583	236.085	1.502
1986	238.549	240.417	1.868
1987	246.151	248.13	1.979
1988	254.365	257.608	3.243
1989	263.697	267.98	4.283
1990	272.041	276.538	4.498
1991	277.827	283.	5.173
1992	284.124	289.084	4.96
1993	290.93	296.212	5.282
1994	298.064	303.392	5.328
1995	306.861	312.189	5.329
1996	315.971	321.022	5.051
1997	326.908	331.909	5.
1998	337.246	342.321	5.075
1999	349.393	354.681	5.288
2000	360.981	366.534	5.553

## EMNSP - DEFINITION

	LCOOKM	LCM,BFL
1978	0.234	0.234
1979	0.236	0.236
1980	0.239	0.239
1981	0.243	0.244
1982	0.251	0.251
1983	0.246	0.247
1984	0.233	0.234
1985	0.236	0.236
1986	0.239	0.24
1987	0.238	0.239
1988	0.238	0.239
1989	0.237	0.238
1990	0.236	0.236
1991	0.234	0.235
1992	0.235	0.235
1993	0.235	0.235
1994	0.235	0.235
1995	0.235	0.235
1996	0.236	0.235
1997	0.236	0.235
1998	0.236	0.236
1999	0.236	0.236
2000	0.236	0.236

E770 - EINBUCHERWERTH  
E995

	LCOOKM	LCM.BFL	LCM.BFL_ER
1978	1311.13	1311.13	0.
1979	1414.71	1414.71	0.
1980	1557.72	1560.96	3.25
1981	1767.66	1769.72	2.052
1982	2017.26	2023.44	6.181
1983	2326.86	2343.15	16.288
1984	2516.	2539.21	23.209
1985	2654.26	2674.68	20.42
1986	2944.72	2953.54	8.814
1987	3273.47	3281.51	8.039
1988	3628.93	3650.54	21.608
1989	3998.71	4036.71	38.005
1990	4365.86	4430.35	64.492
1991	4690.56	4762.54	71.977
1992	4996.24	5084.51	88.273
1993	5356.54	5454.95	98.402
1994	5766.57	5875.67	109.102
1995	6196.75	6319.69	122.937
1996	6730.7	6840.27	109.574
1997	7319.41	7430.88	111.465
1998	7975.18	8093.05	117.867
1999	8672.29	8802.91	130.617
2000	9442.14	9589.04	146.898

E995RPC - DEFINITION

	LCOOKM	LCM.BFL	LCM.BFL_ER
1978	1357.19	1357.19	0.
1979	1355.36	1355.36	0.
1980	1345.46	1348.	2.538
1981	1381.17	1381.08	-0.091
1982	1412.08	1410.7	-1.381
1983	1515.08	1515.95	0.872
1984	1606.59	1609.88	3.292
1985	1616.19	1620.3	4.113
1986	1653.13	1653.15	0.025
1987	1693.95	1688.3	-5.65
1988	1731.	1726.46	-4.538
1989	1766.48	1761.22	-5.26
1990	1790.8	1794.79	3.991
1991	1801.26	1805.75	4.496
1992	1796.33	1804.1	7.773
1993	1794.06	1803.22	9.158
1994	1798.27	1806.93	8.658
1995	1794.66	1804.83	10.167
1996	1808.01	1812.61	4.593
1997	1821.41	1824.33	2.92
1998	1839.01	1840.37	1.364
1999	1851.17	1852.02	0.854
2000	1865.53	1866.39	0.865

## PI - ENDOGENOUS

	LCOOKM	LCM.BFL	LCM.BFL_ER
1978	3509.98	3509.98	0.
1979	3929.	3929.	0.
1980	4585.4	4587.5	2.098
1981	5390.94	5408.01	17.074
1982	6457.16	6519.2	62.02
1983	6932.58	7025.66	93.078
1984	6676.57	6787.16	110.594
1985	7071.61	7129.43	57.828
1986	7883.18	7940.91	57.73
1987	8806.87	8911.92	105.051
1988	9854.96	10036.	181.047
1989	10952.2	11223.6	271.371
1990	12101.2	12362.2	260.984
1991	13105.7	13402.9	297.223
1992	14288.6	14585.5	296.922
1993	15675.8	15997.8	322.039
1994	17221.9	17580.1	358.148
1995	19010.1	19377.6	367.516
1996	21028.3	21392.6	364.293
1997	23312.3	23695.3	383.012
1998	25804.	26233.6	429.598
1999	28610.2	29102.1	491.852
2000	31695.4	32256.6	561.234

## PIRPC - ENDOGENOUS

	LCOOKM	LCM.BFL	LCM.BFL_ER
1978	3633.32	3633.32	0.
1979	3764.17	3764.17	0.
1980	3960.57	3961.6	1.027
1981	4212.12	4220.28	8.16
1982	4520.21	4544.9	24.684
1983	4513.95	4545.36	31.41
1984	4263.4	4303.07	39.668
1985	4305.94	4318.98	13.047
1986	4425.48	4444.66	19.172
1987	4557.37	4585.04	27.672
1988	4700.75	4746.31	45.559
1989	4838.3	4896.81	58.508
1990	4963.66	5008.1	44.441
1991	5032.85	5081.83	48.98
1992	5137.21	5175.25	38.035
1993	5250.29	5288.35	38.062
1994	5370.55	5406.33	35.785
1995	5505.6	5534.05	28.457
1996	5648.64	5668.83	20.184
1997	5801.23	5817.43	16.203
1998	5950.19	5965.59	15.398
1999	6107.16	6122.81	15.645
2000	6262.24	6278.43	16.187

## FUND - ENDOGENOUS

	LCOOKM	LCM.BFL	LCM.BFL_ER
1978	625.748	625.748	0.
1979	823.148	873.148	50.
1980	1144.96	1196.52	51.559
1981	1622.91	1677.58	54.662
1982	2272.13	2329.19	57.061
1983	2964.41	3019.23	54.814
1984	4085.48	4134.67	49.191
1985	5504.57	5549.15	44.582
1986	6855.28	6903.95	48.676
1987	8152.06	8209.82	57.766
1988	9366.57	9432.84	66.262
1989	10474.4	10565.2	90.793
1990	11302.8	11441.9	139.168
1991	11933.	12142.4	209.355
1992	12468.9	12766.3	297.395
1993	12896.8	13290.4	393.594
1994	13126.2	13622.	495.875
1995	13133.1	13735.5	602.375
1996	12894.9	13620.	725.156
1997	12394.8	13249.7	854.893
1998	11598.4	12586.7	988.273
1999	10498.5	11617.4	1118.87
2000	9056.37	10300.5	1244.13

## RINS - DEFINITION

	LCOOKM	LCM.BFL	LCM.BFL_ER
1978	46.954	46.954	0.
1979	44.047	44.047	0.
1980	58.332	61.894	3.562
1981	81.484	85.156	3.672
1982	115.642	119.531	3.889
1983	161.868	165.925	4.057
1984	211.192	215.091	3.9
1985	290.778	294.283	3.506
1986	391.339	394.522	3.183
1987	487.158	490.628	3.47
1988	579.179	583.285	4.106
1989	665.457	670.158	4.701
1990	744.27	750.699	6.429
1991	803.459	813.308	9.848
1992	848.72	863.525	14.805
1993	887.38	908.405	21.025
1994	918.492	946.31	27.818
1995	935.684	970.724	35.04
1996	937.274	979.835	42.561
1997	921.69	972.911	51.221
1998	887.774	948.142	60.368
1999	833.117	902.886	69.769
2000	757.224	836.194	78.97

## REVGF - DEFINITION

	LCOOKM	LCM.BFL	LCM.BFLLER
1978	1013.44	1013.44	0.
1979	1336.4	1386.4	50.
1980	1579.45	1583.1	3.645
1981	1903.16	1907.82	4.661
1982	2275.1	2282.31	7.211
1983	2567.25	2577.98	10.728
1984	3150.18	3163.38	13.2
1985	3545.48	3557.36	11.887
1986	3695.75	3707.1	11.352
1987	3908.72	3924.02	15.301
1988	4118.08	4143.48	25.395
1989	4318.41	4373.35	54.937
1990	4346.76	4446.4	99.645
1991	4431.42	4557.93	126.512
1992	4600.38	4757.11	156.73
1993	4793.32	4966.05	172.738
1994	4936.55	5124.3	187.754
1995	5075.93	5279.71	203.781
1996	5268.06	5481.52	213.465
1997	5487.71	5709.82	222.105
1998	5728.39	5959.53	231.137
1999	5994.31	6233.18	238.867
2000	6280.96	6527.9	246.941

## RP9S - DEFINITION

	LCOOKM	LCM.BFL	LCM.BFLLER
1978	450.1	450.1	0.
1979	795.3	845.3	50.
1980	1004.1	1004.1	0.
1981	1253.8	1254.11	0.31
1982	1509.6	1510.04	0.44
1983	1678.3	1679.	0.7
1984	2178.2	2178.91	0.71
1985	2472.6	2473.08	0.48
1986	2464.8	2466.81	2.01
1987	2496.6	2501.35	4.75
1988	2515.6	2524.52	8.92
1989	2519.6	2549.13	30.53
1990	2348.9	2416.57	67.67
1991	2253.1	2341.66	88.56
1992	2254.6	2365.41	110.81
1993	2268.	2386.34	118.34
1994	2216.8	2339.96	123.16
1995	2152.8	2280.83	128.03
1996	2127.5	2255.55	128.05
1997	2115.5	2241.71	126.21
1998	2109.4	2230.26	121.86
1999	2112.3	2225.56	113.26
2000	2114.1	2217.35	103.25

RPI - ENDOGENOUS

	LCOOKM	LCM.BFL	LCM.BFL_ER
1978	228.508	228.508	0.
1979	241.028	241.028	0.
1980	258.728	258.721	-0.007
1981	272.22	272.228	0.007
1982	286.429	286.483	0.054
1983	299.483	299.742	0.259
1984	305.195	304.915	-0.281
1985	315.564	315.365	-0.199
1986	336.149	334.837	-1.312
1987	355.103	354.553	-0.549
1988	374.635	373.816	-0.819
1989	392.46	392.032	-0.429
1990	411.115	410.25	-0.865
1991	429.751	428.155	-1.596
1992	449.034	447.622	-1.462
1993	471.365	469.384	-1.982
1994	494.835	493.009	-1.826
1995	519.342	517.373	-1.969
1996	545.587	543.569	-2.019
1997	572.074	570.	-2.074
1998	600.518	598.574	-1.943
1999	629.23	627.419	-1.811
2000	660.311	658.539	-1.771

## SIMP - DEFINITION

LCOOKM LCM.BFL

1978	-44.852	-44.852
1979	197.4	247.4
1980	321.812	323.371
1981	477.954	481.057
1982	649.219	651.617
1983	692.28	690.034
1984	1121.07	1115.44
1985	1419.1	1414.49
1986	1350.71	1354.81
1987	1296.79	1305.88
1988	1214.52	1223.01
1989	1107.79	1132.32
1990	828.392	876.769
1991	630.275	700.463
1992	535.874	623.91
1993	427.902	524.102
1994	229.367	331.648
1995	6.957	113.457
1996	-238.254	-115.473
1997	-500.094	-370.367
1998	-796.398	-663.008
1999	-1099.86	-969.266
2000	-1442.14	-1316.88

## EXBITS - DEFINITION

LCOOKM LCM.BFL

1978	0.302	0.302
1979	0.29	0.29
1980	0.274	0.275
1981	0.264	0.264
1982	0.252	0.25
1983	0.27	0.269
1984	0.304	0.302
1985	0.301	0.301
1986	0.297	0.296
1987	0.297	0.294
1988	0.295	0.291
1989	0.293	0.289
1990	0.291	0.289
1991	0.29	0.288
1992	0.284	0.283
1993	0.278	0.278
1994	0.273	0.273
1995	0.267	0.267
1996	0.262	0.262
1997	0.257	0.257
1998	0.253	0.252
1999	0.248	0.247
2000	0.244	0.243

## POPR4 - DEFINITION

	RRLM	RRLBL	RRLBLLER
1978	58.365	58.365	0.
1979	59.406	59.406	0.
1980	61.935	61.949	0.014
1981	64.443	64.462	0.019
1982	65.387	65.439	0.052
1983	64.455	64.571	0.116
1984	65.84	66.077	0.237
1985	66.304	66.57	0.265
1986	66.818	67.058	0.239
1987	67.521	67.696	0.176
1988	68.722	69.015	0.293
1989	70.095	70.49	0.394
1990	71.529	72.15	0.621
1991	71.149	71.857	0.708
1992	72.116	72.901	0.785
1993	73.117	73.945	0.828
1994	74.272	75.129	0.857
1995	75.485	76.424	0.939
1996	76.772	77.724	0.952
1997	78.236	79.198	0.962
1998	79.594	80.561	0.967
1999	81.255	82.243	0.988
2000	82.942	83.96	1.018

## EM99R4 - DEFINITION

	RRLM	RRLBL	RRLBLLER
1978	22.364	22.364	0.
1979	23.281	23.281	0.
1980	24.97	24.977	0.009
1981	26.878	26.893	0.015
1982	27.969	28.011	0.042
1983	27.226	27.3	0.074
1984	27.58	27.724	0.144
1985	27.861	27.975	0.115
1986	28.224	28.318	0.095
1987	28.798	28.852	0.053
1988	29.592	29.717	0.125
1989	30.5	30.682	0.181
1990	31.376	31.659	0.283
1991	31.348	31.668	0.32
1992	31.916	32.247	0.331
1993	32.52	32.86	0.341
1994	33.183	33.52	0.338
1995	33.933	34.294	0.361
1996	34.705	35.045	0.34
1997	35.617	35.945	0.328
1998	36.431	36.75	0.319
1999	37.438	37.761	0.323
2000	38.429	38.764	0.335

## POPR1 - DEFINITION

	RRLM	RRLBL	RRLBLLLER
1978	7.155	7.155	0.
1979	7.301	7.301	0.
1980	7.568	7.569	0.002
1981	7.558	7.682	0.125
1982	8.023	8.459	0.436
1983	7.853	8.371	0.518
1984	7.176	7.749	0.573
1985	7.359	7.601	0.242
1986	7.453	7.886	0.433
1987	7.579	8.142	0.563
1988	7.657	8.428	0.771
1989	7.717	8.636	0.919
1990	7.763	8.463	0.701
1991	7.881	8.639	0.758
1992	7.966	8.611	0.645
1993	7.963	8.646	0.683
1994	7.972	8.634	0.662
1995	8.062	8.655	0.593
1996	8.14	8.685	0.545
1997	8.236	8.762	0.526
1998	8.31	8.834	0.524
1999	8.402	8.925	0.524
2000	8.534	9.061	0.527

## EM99R1 - DEFINITION

	RRLM	RRLBL	RRLBLLLER
1978	4.463	4.463	0.
1979	4.581	4.581	0.
1980	4.828	4.829	0.002
1981	4.84	4.975	0.134
1982	5.356	5.926	0.469
1983	5.099	5.648	0.549
1984	4.201	4.794	0.593
1985	4.25	4.486	0.235
1986	4.253	4.682	0.429
1987	4.363	4.922	0.559
1988	4.45	5.225	0.775
1989	4.505	5.434	0.93
1990	4.542	5.234	0.692
1991	4.613	5.359	0.745
1992	4.663	5.275	0.612
1993	4.619	5.267	0.648
1994	4.603	5.222	0.619
1995	4.673	5.213	0.54
1996	4.746	5.23	0.484
1997	4.841	5.301	0.46
1998	4.926	5.382	0.456
1999	5.03	5.485	0.456
2000	5.145	5.6	0.455

## POPR7 - DEFINITION

	RRLM	RRLBL	RRLBLLER
1978	57.826	57.826	0.
1979	60.19	60.19	0.
1980	63.172	63.187	0.014
1981	68.425	68.497	0.072
1982	78.464	78.711	0.247
1983	82.374	82.781	0.407
1984	78.1	78.747	0.647
1985	79.734	80.187	0.453
1986	82.162	82.737	0.575
1987	85.564	86.245	0.682
1988	89.073	90.112	1.039
1989	92.777	94.151	1.373
1990	96.193	97.678	1.486
1991	99.049	100.818	1.769
1992	101.956	103.772	1.816
1993	104.971	106.959	1.988
1994	108.114	110.224	2.11
1995	111.752	113.924	2.172
1996	115.495	117.675	2.18
1997	119.751	122.003	2.252
1998	123.894	126.252	2.358
1999	128.597	131.092	2.495
2000	133.305	135.956	2.651

## EM99R7 - DEFINITION

	RRLM	RRLBL	RRLBLLER
1978	31.292	31.292	0.
1979	32.149	32.149	0.
1980	33.432	33.444	0.012
1981	36.582	36.629	0.047
1982	42.669	42.829	0.16
1983	43.874	44.124	0.25
1984	39.39	39.772	0.382
1985	39.607	39.835	0.228
1986	40.435	40.708	0.273
1987	41.922	42.221	0.299
1988	43.496	43.994	0.498
1989	45.255	45.927	0.673
1990	46.819	47.545	0.726
1991	47.997	48.85	0.853
1992	49.239	50.078	0.84
1993	50.59	51.495	0.905
1994	52.002	52.938	0.935
1995	53.763	54.704	0.941
1996	55.571	56.471	0.9
1997	57.736	58.641	0.905
1998	59.781	60.715	0.934
1999	62.2	63.189	0.989
2000	64.598	65.655	1.057

## POPR5 - DEFINITION

	RRLM	RRLBL	RRLBLLER
1978	193.217	193.217	0.
1979	198.976	198.976	0.
1980	207.218	207.265	0.047
1981	219.408	219.738	0.33
1982	234.925	236.08	1.155
1983	244.123	245.794	1.671
1984	244.244	246.577	2.333
1985	248.686	250.291	1.605
1986	255.043	257.02	1.977
1987	263.364	265.743	2.38
1988	272.233	275.761	3.528
1989	282.073	286.685	4.612
1990	291.515	296.389	4.875
1991	299.831	305.416	5.584
1992	308.244	313.953	5.709
1993	317.262	323.421	6.159
1994	326.513	332.995	6.482
1995	337.173	343.832	6.659
1996	348.265	354.913	6.648
1997	360.901	367.711	6.809
1998	373.559	380.628	7.069
1999	387.732	395.163	7.431
2000	401.184	408.999	7.815

## EMY99R5 - DEFINITION

	RRLM	RRLBL	RRLBLLER
1978	88.516	88.516	0.
1979	91.381	91.381	0.
1980	95.656	95.691	0.035
1981	102.231	102.426	0.194
1982	110.059	110.718	0.659
1983	113.358	114.271	0.913
1984	111.847	113.14	1.293
1985	113.156	113.886	0.73
1986	115.874	116.773	0.9
1987	120.335	121.351	1.016
1988	125.097	126.766	1.669
1989	130.418	132.662	2.244
1990	135.22	137.56	2.34
1991	138.818	141.523	2.705
1992	142.684	145.31	2.626
1993	146.949	149.767	2.818
1994	151.396	154.285	2.889
1995	156.81	159.706	2.896
1996	162.456	165.227	2.77
1997	169.135	171.913	2.778
1998	175.613	178.472	2.859
1999	183.099	186.113	3.015
2000	189.965	193.151	3.186

## RRLBL

	EM1EXR5	EMS4R5	EM55R5	EMRRR5	EMG9R5
1978	1.33	12.183	37.627	2.109	35.107
1979	1.366	12.751	39.954	2.249	34.892
1980	1.366	13.646	43.465	2.38	34.733
1981	1.397	14.886	47.934	2.555	35.456
1982	1.414	16.429	53.531	2.692	36.181
1983	1.422	17.016	55.016	2.856	37.227
1984	1.426	16.753	53.459	3.01	37.969
1985	1.408	17.156	54.269	3.173	37.416
1986	1.406	17.926	56.548	3.354	36.951
1987	1.408	18.793	59.689	3.537	37.206
1988	1.415	19.764	63.27	3.723	37.663
1989	1.424	20.819	67.16	3.909	38.266
1990	1.425	21.701	70.237	4.108	38.836
1991	1.426	22.369	72.781	4.303	39.237
1992	1.425	23.038	75.38	4.525	39.338
1993	1.423	23.908	78.573	4.745	39.356
1994	1.423	24.781	81.731	4.953	39.425
1995	1.423	25.831	85.578	5.194	39.516
1996	1.423	26.922	89.399	5.452	39.611
1997	1.423	28.279	94.067	5.722	39.782
1998	1.423	29.603	98.587	5.979	39.952
1999	1.423	31.154	103.898	6.251	40.181
2000	1.423	32.597	108.865	6.522	40.403

## RRLBL

	EM1EXR7	EMS4R7	EM55R7	EMRRR7	EMG9R7
1978	0.243	5.14	9.119	0.457	16.265
1979	0.243	5.389	9.799	0.49	16.125
1980	0.243	5.776	10.813	0.526	16.003
1981	1.534	6.087	12.064	0.563	16.283
1982	4.352	6.693	14.554	0.601	16.564
1983	4.182	7.093	15.192	0.635	16.985
1984	0.487	7.214	14.051	0.687	17.292
1985	0.252	7.447	14.351	0.703	17.034
1986	0.269	7.769	15.08	0.741	16.801
1987	0.273	8.134	16.095	0.788	16.883
1988	0.279	8.527	17.227	0.834	17.057
1989	0.279	8.951	18.438	0.876	17.298
1990	0.255	9.311	19.425	0.924	17.528
1991	0.255	9.578	20.238	0.968	17.685
1992	0.249	9.841	21.079	1.036	17.715
1993	0.255	10.18	22.087	1.081	17.709
1994	0.255	10.516	23.098	1.131	17.724
1995	0.248	10.929	24.323	1.194	17.751
1996	0.245	11.344	25.536	1.256	17.779
1997	0.243	11.867	27.008	1.326	17.842
1998	0.243	12.361	28.426	1.37	17.905
1999	0.243	12.949	30.098	1.439	17.995
2000	0.243	13.542	31.768	1.512	18.082

## RRLBL

	EM1EXR1	EMS4R1	EMS5R1	EMRRR1	EMG9R1
1978	1.951	0.8	0.695	0.	0.995
1979	2.002	0.846	0.709	0.	0.997
1980	2.11	0.928	0.736	0.	1.008
1981	2.061	1.029	0.761	0.	1.076
1982	2.592	1.24	0.829	0.	1.135
1983	2.369	1.253	0.781	0.	1.245
1984	1.702	1.091	0.691	0.	1.304
1985	1.461	1.091	0.674	0.	1.258
1986	1.603	1.158	0.693	0.	1.234
1987	1.726	1.235	0.715	0.	1.269
1988	1.882	1.327	0.743	0.	1.315
1989	1.975	1.387	0.763	0.	1.369
1990	1.736	1.369	0.781	0.	1.417
1991	1.794	1.411	0.793	0.	1.446
1992	1.69	1.43	0.79	0.	1.461
1993	1.64	1.47	0.796	0.	1.467
1994	1.565	1.503	0.798	0.	1.478
1995	1.501	1.546	0.805	0.	1.487
1996	1.463	1.596	0.813	0.	1.499
1997	1.447	1.665	0.828	0.	1.515
1998	1.446	1.736	0.842	0.	1.532
1999	1.444	1.818	0.862	0.	1.55
2000	1.444	1.904	0.882	0.	1.568

## RRLBL

	EM1EXR4	EMS4R4	EMS5R4	EMRRR4	EMG9R4
1978	0.775	3.133	8.453	4.371	5.742
1979	1.078	3.275	8.843	4.537	5.692
1980	1.731	3.541	9.486	4.731	5.585
1981	2.402	3.85	10.083	4.87	5.797
1982	2.578	4.07	10.466	5.018	5.994
1983	1.58	3.967	10.38	5.202	6.321
1984	1.259	3.974	10.637	5.4	6.594
1985	1.241	4.065	10.823	5.558	6.449
1986	1.221	4.176	11.056	5.754	6.298
1987	1.118	4.261	11.38	5.904	6.379
1988	1.159	4.384	11.775	6.103	6.528
1989	1.194	4.521	12.232	6.266	6.722
1990	1.229	4.651	12.663	6.5	6.905
1991	0.779	4.629	12.872	6.66	7.045
1992	0.779	4.704	13.18	6.869	7.077
1993	0.779	4.804	13.54	7.043	7.089
1994	0.779	4.903	13.906	7.252	7.119
1995	0.779	5.026	14.358	7.479	7.15
1996	0.779	5.145	14.781	7.724	7.196
1997	0.779	5.3	15.301	7.954	7.256
1998	0.779	5.435	15.767	8.172	7.323
1999	0.779	5.606	16.352	8.439	7.397
2000	0.779	5.775	16.934	8.659	7.473

## POP - ENDOGENOUS

	LCOOKM	LCM,BFH	LCM,BFH_ER
1978	422.768	422.768	0.
1979	433.056	433.056	0.
1980	447.479	447.581	0.101
1981	470.144	470.708	0.565
1982	498.753	500.676	1.923
1983	512.816	515.663	2.847
1984	513.129	517.279	4.15
1985	520.431	523.434	3.003
1986	529.915	534.314	4.399
1987	544.194	550.122	5.928
1988	559.594	569.174	9.58
1989	576.785	590.049	13.264
1990	593.007	608.293	15.286
1991	605.943	623.68	17.737
1992	619.34	638.147	18.806
1993	633.416	653.924	20.509
1994	648.041	669.709	21.668
1995	664.857	687.204	22.347
1996	682.329	704.	21.671
1997	702.45	724.081	21.631
1998	722.155	744.156	22.001
1999	744.522	767.579	23.057
2000	766.513	790.606	24.093

## MIGNET

	LCOOKM	LCM,BFH	LCM,BFH_ER
1978	-2.863	-2.863	0.
1979	2.969	2.969	0.
1980	7.07	7.17	0.101
1981	15.121	15.581	0.46
1982	20.569	21.906	1.337
1983	5.329	6.18	0.851
1984	-8.495	-7.297	1.199
1985	-1.042	-2.336	-1.294
1986	1.296	2.6	1.304
1987	6.141	7.533	1.392
1988	7.117	10.581	3.464
1989	8.718	12.086	3.368
1990	7.494	9.08	1.586
1991	4.003	5.971	1.968
1992	4.392	4.92	0.528
1993	4.979	6.138	1.16
1994	5.409	6.001	0.592
1995	7.463	7.571	0.107
1996	7.901	6.67	-1.23
1997	10.317	9.786	-0.531
1998	9.575	9.494	-0.082
1999	11.95	12.568	0.618
2000	11.202	11.785	0.583

BEAUFORT HIGH - LOWER COOK INLET MODERATE SCENARIO

## EMSP

## LCOOKM LCM.BFH

1978	0.355	0.355
1979	0.366	0.366
1980	0.382	0.382
1981	0.392	0.392
1982	0.403	0.404
1983	0.403	0.404
1984	0.4	0.401
1985	0.406	0.406
1986	0.414	0.415
1987	0.422	0.424
1988	0.429	0.432
1989	0.436	0.44
1990	0.443	0.446
1991	0.448	0.451
1992	0.454	0.457
1993	0.461	0.464
1994	0.467	0.47
1995	0.475	0.478
1996	0.482	0.484
1997	0.489	0.491
1998	0.496	0.498
1999	0.503	0.506
2000	0.51	0.512

## EMNSP - DEFINITION

## LCOOKM LCM.BFH

1978	0.234	0.234
1979	0.236	0.236
1980	0.239	0.239
1981	0.243	0.244
1982	0.251	0.251
1983	0.246	0.247
1984	0.233	0.234
1985	0.236	0.236
1986	0.239	0.24
1987	0.238	0.24
1988	0.238	0.24
1989	0.237	0.238
1990	0.236	0.237
1991	0.234	0.235
1992	0.235	0.235
1993	0.235	0.235
1994	0.235	0.235
1995	0.235	0.235
1996	0.236	0.235
1997	0.236	0.235
1998	0.236	0.235
1999	0.236	0.235
2000	0.236	0.235

## EM99 - ENDOGENOUS

	LC00KM	LCM.BFH	LCM.BFH_LER
1978	190.227	190.227	0.
1979	195.599	195.599	0.
1980	203.629	203.703	0.074
1981	216.872	217.282	0.409
1982	233.431	234.807	1.376
1983	237.797	239.683	1.887
1984	232.601	235.24	2.638
1985	234.583	236.085	1.502
1986	238.549	240.963	2.413
1987	246.151	249.419	3.269
1988	254.365	259.922	5.556
1989	263.697	271.372	7.675
1990	272.041	280.463	8.423
1991	277.827	287.392	9.564
1992	284.124	293.76	9.636
1993	290.93	301.226	10.295
1994	298.064	308.608	10.544
1995	306.861	317.274	10.413
1996	315.971	325.398	9.427
1997	326.908	335.894	8.986
1998	337.246	346.169	8.923
1999	349.393	358.737	9.344
2000	360.981	370.768	9.787

## EMG9F - DEFINITION

	LC00KM	LCM.BFH
1978	0.412	0.412
1979	0.398	0.398
1980	0.379	0.379
1981	0.365	0.364
1982	0.346	0.345
1983	0.351	0.349
1984	0.367	0.365
1985	0.358	0.358
1986	0.347	0.345
1987	0.34	0.336
1988	0.333	0.328
1989	0.327	0.321
1990	0.321	0.317
1991	0.318	0.314
1992	0.312	0.308
1993	0.305	0.301
1994	0.298	0.295
1995	0.29	0.288
1996	0.283	0.281
1997	0.275	0.274
1998	0.268	0.267
1999	0.261	0.259
2000	0.254	0.252

## E99S - ENDOGENOUS

	LCOOKM	LCM.BFH	LCM.BFH_LER
1978	1311.13	1311.13	0.
1979	1414.71	1414.71	0.
1980	1557.72	1560.96	3.25
1981	1767.66	1769.72	2.052
1982	2017.26	2023.44	6.181
1983	2326.86	2343.15	16.288
1984	2516.	2539.21	23.209
1985	2654.26	2674.68	20.42
1986	2944.72	2953.64	8.919
1987	3273.47	3288.94	15.474
1988	3628.93	3669.96	41.026
1989	3998.71	4069.03	70.322
1990	4365.86	4501.82	135.957
1991	4690.56	4841.14	150.582
1992	4996.24	5177.83	181.59
1993	5356.54	5557.69	201.145
1994	5766.57	5993.31	226.742
1995	6196.75	6450.93	254.172
1996	6730.7	6958.32	227.625
1997	7319.41	7540.15	220.738
1998	7975.18	8201.48	226.305
1999	8672.29	8921.4	249.109
2000	9442.14	9726.25	284.109

## E99SRPC - DEFINITION

	LCOOKM	LCM.BFH	LCM.BFH_LER
1978	1357.19	1357.19	0.
1979	1355.36	1355.36	0.
1980	1345.46	1348.	2.538
1981	1381.17	1381.08	-0.091
1982	1412.08	1410.7	-1.381
1983	1515.08	1515.95	0.872
1984	1606.59	1609.88	3.292
1985	1616.19	1620.3	4.113
1986	1653.13	1651.16	-1.97
1987	1693.95	1685.57	-8.381
1988	1731.	1724.77	-6.232
1989	1766.48	1759.9	-6.586
1990	1790.8	1806.27	15.468
1991	1801.26	1817.56	16.308
1992	1796.33	1817.9	21.572
1993	1794.06	1816.51	22.443
1994	1798.27	1821.2	22.933
1995	1794.66	1820.52	25.858
1996	1808.01	1824.61	16.598
1997	1821.41	1833.24	11.828
1998	1839.01	1846.52	7.51
1999	1851.17	1856.8	5.633
2000	1865.53	1871.82	6.289

## PI - ENDOGENOUS

	LCOOKM	LCM.BFH	LCM.BFH_LER
1978	3509.98	3509.98	0.
1979	3929.	3929.	0.
1980	4585.4	4587.5	2.098
1981	5390.94	5408.01	17.074
1982	6457.18	6519.2	62.02
1983	6932.58	7025.66	93.078
1984	6676.57	6787.16	110.594
1985	7071.61	7129.43	57.828
1986	7883.18	7973.36	90.18
1987	8806.87	9001.1	194.23
1988	9854.96	10188.5	333.52
1989	10952.2	11443.8	491.602
1990	12101.2	12596.9	495.676
1991	13105.7	13656.8	551.137
1992	14288.6	14863.9	575.301
1993	15675.8	16313.3	637.508
1994	17221.9	17927.6	705.633
1995	19010.1	19723.4	713.297
1996	21028.3	21681.6	653.297
1997	23312.3	23965.6	653.316
1998	25804.	26530.5	726.531
1999	28610.2	29462.9	852.715
2000	31695.4	32671.1	975.766

## PIRPC - ENDOGENOUS

	LCOOKM	LCM.BFH	LCM.BFH_LER
1978	3633.32	3633.32	0.
1979	3764.17	3764.17	0.
1980	3960.57	3961.6	1.027
1981	4212.12	4220.28	8.16
1982	4520.21	4544.9	24.684
1983	4513.95	4545.36	31.41
1984	4263.4	4303.07	39.668
1985	4305.94	4318.98	13.047
1986	4425.48	4457.27	31.785
1987	4557.37	4612.98	55.605
1988	4700.75	4788.18	87.43
1989	4838.3	4949.49	111.191
1990	4963.66	5054.34	90.68
1991	5032.85	5127.35	94.496
1992	5137.21	5218.59	81.379
1993	5250.29	5331.91	81.621
1994	5370.55	5447.66	77.113
1995	5505.6	5566.2	60.605
1996	5648.64	5685.4	36.758
1997	5801.23	5826.85	25.621
1998	5950.19	5973.21	23.023
1999	6107.16	6132.14	24.98
2000	6262.24	6287.62	25.376

## FUND

	LCOOKM	LCM.BFH	LCM.BFH_LER
1978	625.748	625.748	0.
1979	823.148	873.148	50.
1980	1144.96	1196.52	51.559
1981	1622.91	1677.58	54.662
1982	2272.13	2329.19	57.061
1983	2964.41	3019.23	54.814
1984	4085.48	4134.67	49.191
1985	5504.57	5549.49	44.922
1986	6855.28	6907.08	51.801
1987	8152.06	8216.09	64.027
1988	9366.57	9440.96	74.391
1989	10474.4	10650.5	176.168
1990	11302.8	11596.9	294.16
1991	11933.	12387.8	454.777
1992	12468.9	13090.5	621.613
1993	12896.8	13699.9	803.055
1994	13126.2	14122.2	995.988
1995	13133.1	14329.6	1196.43
1996	12894.9	14331.9	1437.07
1997	12394.8	14098.9	1704.08
1998	11598.4	13577.9	1979.51
1999	10498.5	12742.2	2243.64
2000	9056.37	11548.1	2491.7

## RINS - DEFINITION

	LCOOKM	LCM.BFH	LCM.BFH_LER
1978	46.954	46.954	0.
1979	44.047	44.047	0.
1980	58.332	61.894	3.562
1981	81.484	85.156	3.672
1982	115.642	119.531	3.889
1983	161.868	165.925	4.057
1984	211.192	215.091	3.9
1985	290.778	294.283	3.506
1986	391.339	394.546	3.207
1987	487.158	490.847	3.689
1988	579.179	583.723	4.544
1989	665.457	670.727	5.27
1990	744.27	756.711	12.441
1991	803.459	824.243	20.783
1992	848.72	880.851	32.131
1993	887.38	931.3	43.92
1994	918.492	975.23	56.738
1995	935.684	1006.05	70.355
1996	937.274	1021.8	84.524
1997	921.69	1023.19	101.504
1998	887.774	1008.11	120.333
1999	833.117	972.864	139.747
2000	757.224	915.579	158.355

## REVGF - DEFINITION

	LC000KM	LCM.BFH	LCM.BFH_LER
1978	1013.44	1013.44	0.
1979	1336.4	1386.4	50.
1980	1579.45	1583.1	3.645
1981	1903.16	1907.82	4.661
1982	2275.1	2282.31	7.211
1983	2567.25	2577.98	10.728
1984	3150.18	3163.38	13.2
1985	3545.48	3557.7	12.227
1986	3695.75	3709.96	14.211
1987	3908.72	3933.09	24.367
1988	4118.08	4161.21	43.129
1989	4318.41	4477.27	158.852
1990	4346.76	4570.55	223.797
1991	4431.42	4709.43	278.012
1992	4600.38	4908.15	307.773
1993	4793.32	5132.04	338.727
1994	4936.55	5308.13	371.578
1995	5075.93	5478.38	402.453
1996	5268.06	5697.43	429.375
1997	5487.71	5938.31	450.602
1998	5728.39	6192.29	463.895
1999	5994.31	6465.83	471.52
2000	6280.96	6765.21	484.254

## RF9S - DEFINITION

	LC000KM	LCM.BFH	LCM.BFH_LER
1978	450.1	450.1	0.
1979	795.3	845.3	50.
1980	1004.1	1004.1	0.
1981	1253.8	1254.11	0.31
1982	1509.6	1510.04	0.44
1983	1678.3	1679.	0.7
1984	2178.2	2178.91	0.71
1985	2472.6	2473.42	0.82
1986	2464.8	2468.58	3.78
1987	2496.6	2505.81	9.21
1988	2515.6	2532.31	16.71
1989	2518.6	2636.95	118.35
1990	2348.9	2513.75	164.85
1991	2253.1	2458.04	204.94
1992	2254.6	2472.02	217.42
1993	2268.	2498.4	230.4
1994	2216.8	2459.52	242.72
1995	2152.8	2405.59	252.79
1996	2127.5	2391.35	263.85
1997	2115.5	2385.16	269.66
1998	2108.4	2367.71	259.31
1999	2112.3	2347.89	235.59
2000	2114.1	2326.82	212.72

RPI - ENDOGENOUS

	LCOOKM	LCM,BFH	LCM,BFH_ER
1978	228.508	228.508	0.
1979	241.028	241.028	0.
1980	258.728	258.721	-0.007
1981	272.22	272.228	0.007
1982	286.429	286.483	0.054
1983	299.483	299.742	0.259
1984	305.195	304.915	-0.281
1985	315.564	315.365	-0.199
1986	336.149	334.791	-1.359
1987	355.103	354.691	-0.411
1988	374.635	373.84	-0.796
1989	392.46	391.846	-0.615
1990	411.115	409.725	-1.389
1991	429.751	427.067	-2.684
1992	449.084	446.33	-2.753
1993	471.365	467.875	-3.491
1994	494.835	491.385	-3.449
1995	519.342	515.634	-3.708
1996	545.587	541.703	-3.885
1997	572.074	568.033	-4.041
1998	600.518	596.863	-3.655
1999	629.23	625.956	-3.275
2000	660.311	657.236	-3.074

## SIMP

## LCOOKM LCM.BFH

1978	-44.852	-44.852
1979	197.4	247.4
1980	321.812	323.371
1981	477.954	481.057
1982	649.219	651.617
1983	692.28	690.034
1984	1121.07	1115.44
1985	1419.1	1414.83
1986	1350.71	1357.59
1987	1296.79	1309.01
1988	1214.52	1224.88
1989	1107.79	1209.57
1990	828.392	946.386
1991	630.275	790.894
1992	535.874	702.707
1993	427.902	609.344
1994	229.367	422.301
1995	6.957	207.395
1996	-238.254	2.395
1997	-500.094	-233.086
1998	-796.398	-520.973
1999	-1099.86	-835.73
2000	-1442.14	-1194.09

## EXBITES - DEFINITION

## LCOOKM LCM.BFH

1978	0.302	0.302
1979	0.29	0.29
1980	0.274	0.275
1981	0.264	0.264
1982	0.252	0.25
1983	0.27	0.269
1984	0.304	0.302
1985	0.301	0.301
1986	0.297	0.295
1987	0.297	0.292
1988	0.295	0.288
1989	0.293	0.286
1990	0.291	0.288
1991	0.29	0.287
1992	0.284	0.283
1993	0.278	0.277
1994	0.273	0.273
1995	0.267	0.267
1996	0.262	0.263
1997	0.257	0.258
1998	0.253	0.253
1999	0.248	0.248
2000	0.244	0.244

## POPR4 - DEFINITION

	RRLM	RRLBH	RRLBH_LER
1978	58.365	58.365	0.
1979	59.406	59.406	0.
1980	61.935	61.949	0.014
1981	64.443	64.462	0.019
1982	65.387	65.439	0.052
1983	64.455	64.571	0.116
1984	65.84	66.077	0.237
1985	66.304	66.57	0.265
1986	66.818	67.072	0.254
1987	67.521	67.709	0.188
1988	68.722	69.085	0.363
1989	70.095	70.695	0.6
1990	71.522	72.578	1.048
1991	71.149	71.97	0.821
1992	72.116	73.481	1.365
1993	73.117	74.644	1.527
1994	74.272	75.856	1.584
1995	75.485	77.234	1.748
1996	76.772	77.735	0.963
1997	78.236	79.92	1.684
1998	79.594	81.364	1.77
1999	81.255	83.032	1.777
2000	82.942	84.77	1.828

## EM99R4 - DEFINITION

	RRLM	RRLBH	RRLBH_LER
1978	22.364	22.364	0.
1979	23.281	23.281	0.
1980	24.97	24.979	0.009
1981	26.878	26.893	0.015
1982	27.969	28.011	0.042
1983	27.226	27.3	0.074
1984	27.58	27.724	0.144
1985	27.861	27.975	0.115
1986	28.224	28.338	0.114
1987	28.798	28.875	0.076
1988	29.592	29.783	0.192
1989	30.5	30.822	0.322
1990	31.376	31.911	0.535
1991	31.348	31.715	0.367
1992	31.916	32.551	0.635
1993	32.52	33.203	0.684
1994	33.183	33.864	0.681
1995	33.933	34.655	0.722
1996	34.705	34.925	0.219
1997	35.617	36.218	0.6
1998	36.431	37.038	0.608
1999	37.438	38.036	0.598
2000	38.429	39.044	0.615

## POPR1 - DEFINITION

	RRLM	RRLBH	RRLBHLLER
1978	7.155	7.155	0.
1979	7.301	7.301	0.
1980	7.568	7.569	0.002
1981	7.558	7.682	0.125
1982	8.023	8.459	0.436
1983	7.853	8.371	0.518
1984	7.176	7.749	0.573
1985	7.359	7.601	0.242
1986	7.453	8.032	0.579
1987	7.579	8.539	0.96
1988	7.657	9.019	1.362
1989	7.717	9.358	1.641
1990	7.763	9.033	1.271
1991	7.881	9.828	1.947
1992	7.966	9.206	1.239
1993	7.963	9.259	1.296
1994	7.972	9.249	1.277
1995	8.062	9.177	1.115
1996	8.14	9.961	1.821
1997	8.236	9.159	0.923
1998	8.31	9.209	0.899
1999	8.402	9.309	0.907
2000	8.534	9.445	0.911

## EM99R1 - DEFINITION

	RRLM	RRLBH	RRLBHLLER
1978	4.463	4.463	0.
1979	4.581	4.581	0.
1980	4.828	4.829	0.002
1981	4.84	4.975	0.134
1982	5.356	5.826	0.469
1983	5.099	5.648	0.549
1984	4.201	4.794	0.593
1985	4.25	4.486	0.235
1986	4.253	4.833	0.58
1987	4.363	5.33	0.967
1988	4.45	5.835	1.366
1989	4.505	6.181	1.676
1990	4.542	5.813	1.27
1991	4.613	6.593	1.98
1992	4.663	5.864	1.201
1993	4.619	5.866	1.247
1994	4.603	5.811	1.209
1995	4.673	5.695	1.022
1996	4.746	6.525	1.779
1997	4.841	5.636	0.795
1998	4.926	5.685	0.759
1999	5.03	5.791	0.761
2000	5.145	5.903	0.757

## POPR7 - DEFINITION

	RRLM	RRLEH	RRLEHLER
1978	57.826	57.826	0.
1979	60.19	60.19	0.
1980	63.172	63.187	0.014
1981	68.425	68.497	0.072
1982	78.464	78.711	0.247
1983	82.374	82.781	0.407
1984	78.1	78.747	0.647
1985	79.734	80.187	0.453
1986	82.162	82.863	0.701
1987	85.564	86.585	1.021
1988	89.073	90.717	1.644
1989	92.777	95.063	2.286
1990	96.193	98.782	2.589
1991	99.049	102.276	3.227
1992	101.956	105.279	3.324
1993	104.971	108.579	3.608
1994	108.114	112.043	3.929
1995	111.752	115.783	4.031
1996	115.495	119.856	4.361
1997	119.751	123.705	3.954
1998	123.894	127.861	3.968
1999	128.597	132.922	4.326
2000	133.305	137.918	4.612

## EM99R7 - DEFINITION

	RRLM	RRLEH	RRLEHLER
1978	31.292	31.292	0.
1979	32.149	32.149	0.
1980	33.432	33.444	0.012
1981	36.582	36.629	0.047
1982	42.669	42.829	0.16
1983	43.874	44.124	0.25
1984	39.39	39.772	0.382
1985	39.607	39.835	0.228
1986	40.435	40.789	0.354
1987	41.922	42.413	0.492
1988	43.496	44.342	0.846
1989	45.255	46.443	1.189
1990	46.819	48.168	1.349
1991	47.997	49.518	1.521
1992	49.239	50.869	1.63
1993	50.59	52.318	1.728
1994	52.002	53.835	1.832
1995	53.763	55.589	1.826
1996	55.571	57.274	1.703
1997	57.736	59.37	1.634
1998	59.781	61.365	1.584
1999	62.2	63.926	1.728
2000	64.598	66.448	1.85

## POPR5 - DEFINITION

	RRLM	RRLBH	RRLBH_LER
1978	193.217	193.217	0.
1979	198.976	198.976	0.
1980	207.218	207.265	0.047
1981	219.408	219.738	0.33
1982	234.925	236.08	1.155
1983	244.123	245.794	1.671
1984	244.244	246.577	2.333
1985	248.686	250.291	1.605
1986	255.043	257.463	2.42
1987	263.364	266.958	3.594
1988	272.233	278.	5.767
1989	282.073	289.983	7.91
1990	291.515	300.195	8.68
1991	299.831	310.235	10.404
1992	308.244	318.901	10.657
1993	317.262	328.642	11.38
1994	326.513	338.754	12.241
1995	337.173	349.687	12.514
1996	348.265	361.321	13.055
1997	360.901	373.262	12.361
1998	373.559	385.87	12.311
1999	387.732	400.867	13.135
2000	401.184	414.966	13.782

## EM99R5 - DEFINITION

	RRLM	RRLBH	RRLBH_LER
1978	88.516	88.516	0.
1979	91.381	91.381	0.
1980	95.656	95.691	0.035
1981	102.231	102.426	0.194
1982	110.059	110.718	0.659
1983	113.358	114.271	0.913
1984	111.847	113.14	1.293
1985	113.156	113.886	0.73
1986	115.874	117.043	1.169
1987	120.335	122.01	1.675
1988	125.097	127.988	2.891
1989	130.418	134.453	4.035
1990	135.22	139.624	4.404
1991	138.818	143.936	5.118
1992	142.684	147.827	5.143
1993	146.949	152.4	5.451
1994	151.396	157.105	5.709
1995	156.81	162.463	5.653
1996	162.456	167.904	5.447
1997	169.135	174.152	5.017
1998	175.613	180.549	4.936
1999	183.099	188.404	5.306
2000	189.965	195.567	5.604

## RRLBH

	EM1EXR5	EMS4R5	EMSSR5	EMRRR5	EMG9R5
1978	1.33	12.183	37.627	2.109	35.107
1979	1.366	12.751	39.954	2.249	34.892
1980	1.366	13.646	43.465	2.38	34.733
1981	1.397	14.886	47.934	2.555	35.456
1982	1.414	16.429	53.531	2.692	36.181
1983	1.422	17.016	55.016	2.856	37.227
1984	1.426	16.753	53.459	3.01	37.969
1985	1.408	17.156	54.269	3.173	37.416
1986	1.418	17.964	56.757	3.354	36.955
1987	1.408	18.889	60.197	3.537	37.239
1988	1.437	19.941	64.146	3.723	37.772
1989	1.457	21.093	68.426	3.909	38.455
1990	1.466	22.064	71.601	4.108	39.14
1991	1.315	22.787	74.475	4.303	39.609
1992	1.46	23.475	76.996	4.525	39.756
1993	1.456	24.37	80.295	4.745	39.783
1994	1.453	25.267	83.546	4.953	39.895
1995	1.454	26.31	87.324	5.194	40.007
1996	1.232	27.323	91.203	5.452	40.082
1997	1.451	28.643	95.449	5.722	40.21
1998	1.451	29.961	99.935	5.979	40.304
1999	1.452	31.551	105.386	6.251	40.54
2000	1.452	33.017	110.432	6.522	40.777

## RRLBH

	EM1EXR7	EMS4R7	EMSSR7	EMRRR7	EMG9R7
1978	0.243	5.14	9.119	0.457	16.265
1979	0.243	5.389	9.799	0.49	16.125
1980	0.243	5.776	10.813	0.526	16.003
1981	1.534	6.087	12.064	0.563	16.283
1982	4.352	6.693	14.554	0.601	16.564
1983	4.182	7.093	15.192	0.635	16.985
1984	0.487	7.214	14.051	0.687	17.292
1985	0.252	7.447	14.351	0.703	17.034
1986	0.282	7.779	15.13	0.741	16.803
1987	0.301	8.158	16.218	0.788	16.898
1988	0.316	8.575	17.44	0.834	17.106
1989	0.312	9.033	18.754	0.876	17.384
1990	0.266	9.44	19.784	0.924	17.665
1991	0.239	9.705	20.689	0.968	17.852
1992	0.255	10.005	21.532	1.036	17.904
1993	0.266	10.347	22.552	1.081	17.899
1994	0.266	10.697	23.608	1.131	17.935
1995	0.255	11.11	24.82	1.194	17.971
1996	0.209	11.478	26.087	1.256	17.99
1997	0.243	12.008	27.42	1.326	18.034
1998	0.243	12.491	28.799	1.37	18.061
1999	0.243	13.098	30.536	1.439	18.154
2000	0.243	13.703	32.242	1.512	18.248

## RRLBH

	EM1EXR1	EMS4R1	EMS5R1	EMRRR1	ENG9R1
1978	1.951	0.8	0.695	0.	0.995
1979	2.002	0.846	0.709	0.	0.997
1980	2.11	0.928	0.736	0.	1.008
1981	2.061	1.029	0.761	0.	1.076
1982	2.592	1.24	0.829	0.	1.135
1983	2.369	1.253	0.781	0.	1.245
1984	1.702	1.091	0.691	0.	1.304
1985	1.461	1.091	0.674	0.	1.258
1986	1.732	1.18	0.706	0.	1.234
1987	2.034	1.298	0.749	0.	1.275
1988	2.331	1.426	0.795	0.	1.33
1989	2.513	1.512	0.828	0.	1.392
1990	2.129	1.473	0.833	0.	1.448
1991	2.464	1.615	0.895	0.	1.476
1992	2.07	1.544	0.844	0.	1.505
1993	2.044	1.584	0.853	0.	1.5
1994	1.961	1.619	0.854	0.	1.509
1995	1.813	1.646	0.853	0.	1.519
1996	2.092	1.846	0.931	0.	1.529
1997	1.638	1.744	0.863	0.	1.554
1998	1.635	1.805	0.874	0.	1.556
1999	1.636	1.891	0.895	0.	1.571
2000	1.632	1.977	0.915	0.	1.589

## RRLEH

	EM1EXR4	EMS4R4	EMS5R4	EMRRR4	ENG9R4
1978	0.775	3.133	8.453	4.371	5.742
1979	1.078	3.275	8.843	4.537	5.692
1980	1.731	3.541	9.486	4.731	5.585
1981	2.402	3.85	10.083	4.87	5.797
1982	2.578	4.07	10.466	5.018	5.994
1983	1.58	3.967	10.38	5.202	6.321
1984	1.259	3.974	10.637	5.4	6.594
1985	1.241	4.065	10.823	5.558	6.449
1986	1.23	4.178	11.068	5.754	6.299
1987	1.118	4.264	11.395	5.904	6.383
1988	1.159	4.391	11.811	6.103	6.546
1989	1.194	4.54	12.307	6.266	6.756
1990	1.229	4.695	12.785	6.5	6.965
1991	0.7	4.637	12.891	6.66	7.127
1992	0.779	4.754	13.324	6.869	7.15
1993	0.779	4.859	13.703	7.043	7.189
1994	0.778	4.958	14.067	7.252	7.213
1995	0.779	5.083	14.525	7.479	7.247
1996	0.661	5.121	14.702	7.724	7.294
1997	0.779	5.339	15.425	7.954	7.329
1998	0.779	5.478	15.905	8.172	7.41
1999	0.779	5.647	16.486	8.439	7.47
2000	0.779	5.818	17.071	8.659	7.547

## POP - ENDOGENOUS

	LCOOKH	L.BHI	L.BHILER
1978	422.83	422.83	0.
1979	431.71	431.71	0.
1980	444.03	444.131	0.101
1981	466.924	467.49	0.566
1982	494.607	496.551	1.943
1983	517.489	520.37	2.881
1984	524.765	528.832	4.066
1985	535.24	538.429	3.189
1986	543.113	547.396	4.283
1987	556.267	562.208	5.941
1988	570.73	580.11	9.379
1989	588.198	601.229	13.031
1990	605.056	619.997	14.941
1991	619.149	636.486	17.336
1992	633.619	651.98	18.361
1993	648.853	668.819	19.966
1994	664.519	685.565	21.047
1995	682.402	704.103	21.701
1996	700.884	722.137	21.253
1997	722.1	743.439	21.339
1998	742.911	764.615	21.704
1999	766.485	789.226	22.741
2000	789.734	813.465	23.731

## MIGNET - ENDOGENOUS

	LCOOKH	L.BHI	L.BHILER
1978	-2.801	-2.801	0.
1979	1.558	1.558	0.
1980	5.02	5.121	0.101
1981	15.482	15.944	0.462
1982	19.755	21.11	1.355
1983	14.286	15.152	0.864
1984	-1.747	-0.668	1.079
1985	1.659	0.639	-1.02
1986	-0.877	0.118	0.995
1987	4.56	6.085	1.524
1988	5.804	9.055	3.251
1989	8.685	12.03	3.345
1990	7.837	9.319	1.482
1991	4.865	6.79	1.925
1992	5.147	5.643	0.497
1993	5.801	6.878	1.077
1994	6.094	6.623	0.529
1995	8.157	8.258	0.101
1996	8.518	7.534	-0.984
1997	11.006	10.611	-0.395
1998	10.258	10.172	-0.086
1999	12.716	13.317	0.6
2000	11.994	12.537	0.542

**BEAUFORT HIGH - LOWER COOK INLET HIGH SCENARIO**

## EMG9P - DEFINITION

LCOOKH L.BHI

1978	0.412	0.412
1979	0.4	0.4
1980	0.383	0.383
1981	0.365	0.365
1982	0.347	0.345
1983	0.344	0.342
1984	0.355	0.353
1985	0.351	0.351
1986	0.344	0.343
1987	0.338	0.335
1988	0.33	0.326
1989	0.323	0.318
1990	0.317	0.314
1991	0.314	0.311
1992	0.308	0.305
1993	0.301	0.298
1994	0.294	0.292
1995	0.286	0.284
1996	0.279	0.278
1997	0.271	0.27
1998	0.265	0.263
1999	0.257	0.256
2000	0.25	0.249

## EMNSP - DEFINITION

LCOOKH L.BHI

1978	0.234	0.234
1979	0.235	0.235
1980	0.237	0.238
1981	0.243	0.244
1982	0.25	0.251
1983	0.249	0.25
1984	0.237	0.238
1985	0.237	0.237
1986	0.239	0.24
1987	0.239	0.24
1988	0.239	0.24
1989	0.238	0.239
1990	0.237	0.238
1991	0.235	0.236
1992	0.235	0.235
1993	0.235	0.235
1994	0.235	0.235
1995	0.235	0.235
1996	0.236	0.235
1997	0.236	0.235
1998	0.236	0.235
1999	0.236	0.235
2000	0.236	0.235

## EM99 - ENDOGENOUS

	L.COOKH	L.BHI	L.BHI.LER
1978	190.273	190.273	0.
1979	194.593	194.593	0.
1980	201.229	201.304	0.074
1981	215.	215.41	0.41
1982	231.073	232.444	1.371
1983	242.131	244.015	1.884
1984	241.427	243.97	2.544
1985	244.521	246.152	1.631
1986	246.233	248.548	2.315
1987	252.341	255.636	3.296
1988	259.419	264.862	5.442
1989	268.627	276.192	7.565
1990	277.139	285.404	8.264
1991	283.478	292.872	9.394
1992	290.23	299.693	9.462
1993	297.54	307.621	10.081
1994	305.074	315.378	10.303
1995	314.289	324.472	10.183
1996	323.77	333.092	9.322
1997	335.14	344.082	8.942
1998	345.915	354.789	8.875
1999	358.568	367.846	9.278
2000	370.688	380.379	9.691

## EMSPP - DEFINITION

	L.COOKH	L.BHI
1978	0.355	0.355
1979	0.365	0.365
1980	0.38	0.38
1981	0.391	0.392
1982	0.403	0.403
1983	0.407	0.408
1984	0.408	0.409
1985	0.411	0.412
1986	0.417	0.417
1987	0.424	0.426
1988	0.431	0.434
1989	0.439	0.442
1990	0.445	0.448
1991	0.451	0.454
1992	0.457	0.46
1993	0.464	0.467
1994	0.47	0.473
1995	0.478	0.481
1996	0.485	0.487
1997	0.493	0.495
1998	0.499	0.501
1999	0.507	0.509
2000	0.513	0.516

## E99S - ENDOGENOUS

	LCOOKH	L.BHI	L.BHI_LER
1978	1311.13	1311.13	0.
1979	1414.71	1414.71	0.
1980	1549.01	1552.25	3.241
1981	1742.31	1744.37	2.058
1982	1999.31	2005.57	6.261
1983	2317.48	2334.01	16.533
1984	2566.42	2589.51	23.09
1985	2756.6	2781.42	24.82
1986	3017.17	3031.06	13.885
1987	3301.17	3319.82	18.656
1988	3632.78	3675.67	42.895
1989	4004.46	4076.6	72.143
1990	4390.6	4515.82	135.219
1991	4718.54	4870.23	151.695
1992	5038.19	5220.02	181.832
1993	5409.88	5611.53	201.648
1994	5829.33	6055.82	226.496
1995	6269.45	6522.72	253.277
1996	6812.28	7041.63	229.348
1997	7411.58	7638.41	226.836
1998	8080.25	8315.48	235.223
1999	8792.09	9049.76	257.668
2000	9580.05	9872.43	292.375

## E99SRPC - DEFINITION

	LCOOKH	L.BHI	L.BHI_LER
1978	1356.99	1356.99	0.
1979	1359.	1359.	0.
1980	1350.64	1353.19	2.553
1981	1373.16	1373.08	-0.08
1982	1404.92	1403.53	-1.395
1983	1495.36	1496.38	1.028
1984	1597.01	1590.58	3.566
1985	1629.3	1635.63	6.336
1986	1663.09	1663.47	0.379
1987	1691.33	1685.3	-6.023
1988	1716.14	1711.41	-4.732
1989	1748.24	1744.06	-4.188
1990	1770.66	1787.04	16.381
1991	1781.47	1799.41	17.935
1992	1777.66	1800.48	22.815
1993	1776.37	1800.19	23.82
1994	1780.6	1804.91	24.3
1995	1777.21	1804.11	26.901
1996	1789.92	1807.75	17.829
1997	1802.66	1816.34	13.677
1998	1819.71	1829.86	10.149
1999	1831.26	1839.57	8.31
2000	1845.34	1854.24	8.901

PI - ENDOGENOUS

	LCOOKH	L.BHI	L.BHI_ER
1978	3511.53	3511.53	0.
1979	3894.95	3894.95	0.
1980	4484.46	4486.54	2.086
1981	5317.07	5334.16	17.098
1982	6409.74	6472.7	62.957
1983	7151.24	7244.54	93.293
1984	7197.9	7303.1	105.203
1985	7531.45	7590.48	59.039
1986	8170.99	8255.23	84.238
1987	8983.81	9168.14	184.332
1988	10020.7	10342.7	321.969
1989	11155.6	11627.9	472.344
1990	12364.8	12845.5	480.648
1991	13437.1	13970.7	533.547
1992	14679.6	15237.9	558.379
1993	16122.4	16739.4	616.977
1994	17725.7	18407.	681.285
1995	19575.5	20267.1	691.629
1996	21661.5	22307.3	645.793
1997	24027.	24679.1	652.094
1998	26611.1	27330.3	719.266
1999	29528.9	30369.5	840.609
2000	32738.7	33697.7	959.062

PIRPC - ENDOGENOUS

	LCOOKH	L.BHI	L.BHI_ER
1978	3634.39	3634.39	0.
1979	3741.57	3741.57	0.
1980	3910.16	3911.21	1.044
1981	4190.41	4198.68	8.266
1982	4504.	4529.52	25.516
1983	4614.23	4644.54	30.309
1984	4450.98	4485.86	34.879
1985	4451.5	4463.64	12.137
1986	4503.91	4530.54	26.633
1987	4602.79	4654.15	51.359
1988	4733.78	4815.52	81.742
1989	4870.25	4974.59	104.34
1990	4997.86	5083.39	85.527
1991	5073.2	5161.77	88.562
1992	5179.46	5255.84	76.375
1993	5293.91	5370.	76.094
1994	5414.42	5486.07	71.645
1995	5549.14	5605.73	56.594
1996	5691.53	5726.81	35.281
1997	5843.98	5868.48	24.5
1998	5992.96	6014.21	21.254
1999	6150.53	6173.37	22.84
2000	6306.29	6329.2	22.902

FUND - ENDOGENOUS

	LCOOKH	L.BHI	L.BHI_ER
1978	625.803	625.803	0.
1979	822.066	872.066	50.
1980	1145.91	1197.48	51.564
1981	1636.87	1691.53	54.664
1982	2295.49	2352.5	57.011
1983	3001.43	3056.05	54.624
1984	4111.71	4160.7	48.988
1985	5493.96	5534.77	40.812
1986	6820.21	6863.03	42.812
1987	8116.77	8167.47	50.699
1988	9346.27	9403.42	57.152
1989	10470.6	10625.2	154.574
1990	11313.9	11583.5	269.547
1991	11955.6	12381.4	425.766
1992	12499.1	13087.5	588.383
1993	12932.4	13697.4	765.051
1994	13166.6	14119.7	953.086
1995	13178.2	14326.8	1148.64
1996	12945.8	14328.7	1382.85
1997	12453.	14093.8	1640.77
1998	11665.4	13569.9	1904.46
1999	10576.4	12732.1	2155.68
2000	9147.31	11537.1	2389.75

RINS - DEFINITION

	LCOOKH	L.BHI	L.BHI_ER
1978	46.954	46.954	0.
1979	44.051	44.051	0.
1980	58.256	61.818	3.562
1981	81.551	85.223	3.672
1982	116.619	120.508	3.889
1983	163.503	167.556	4.053
1984	213.783	217.669	3.886
1985	292.614	296.106	3.492
1986	390.596	393.516	2.919
1987	484.704	487.763	3.059
1988	576.709	580.32	3.611
1989	664.035	668.098	4.063
1990	744.009	754.938	10.929
1991	804.242	823.302	19.061
1992	850.303	880.404	30.1
1993	889.493	931.087	41.594
1994	920.981	975.059	54.077
1995	938.514	1005.88	67.362
1996	940.429	1021.61	81.179
1997	925.257	1022.96	97.708
1998	891.852	1007.75	115.901
1999	837.811	972.304	134.493
2000	762.677	914.875	152.198

## REVGF - DEFINITION

	LCOOKH	L.BHI	L.BHI_ER
1978	1013.49	1013.49	0.
1979	1335.25	1385.25	50.
1980	1574.58	1578.22	3.645
1981	1895.94	1900.6	4.661
1982	2269.7	2276.91	7.213
1983	2573.	2583.79	10.79
1984	3178.96	3192.07	13.112
1985	3589.96	3602.15	12.184
1986	3731.59	3745.47	13.879
1987	3932.25	3955.58	23.336
1988	4135.54	4176.96	41.414
1989	4337.59	4494.22	156.629
1990	4371.32	4592.18	220.859
1991	4463.33	4738.36	275.027
1992	4639.96	4944.3	304.34
1993	4840.18	5175.09	334.91
1994	4990.67	5357.72	367.051
1995	5137.84	5535.21	397.375
1996	5338.64	5763.22	424.578
1997	5568.28	6015.	446.719
1998	5820.93	6280.63	459.695
1999	6100.84	6566.74	465.898
2000	6404.38	6881.73	477.352

## RP99 - DEFINITION

	LCOOKH	L.BHI	L.BHI_ER
1978	450.1	450.1	0.
1979	795.3	845.3	50.
1980	1004.1	1004.1	0.
1981	1253.8	1254.11	0.31
1982	1509.6	1510.04	0.44
1983	1678.3	1679.	0.7
1984	2178.2	2178.91	0.71
1985	2472.6	2473.42	0.82
1986	2464.8	2468.58	3.78
1987	2496.6	2505.81	9.21
1988	2515.6	2532.31	16.71
1989	2518.6	2636.95	118.35
1990	2348.9	2513.75	164.85
1991	2253.1	2458.04	204.94
1992	2254.6	2472.02	217.42
1993	2268.	2498.4	230.4
1994	2216.8	2459.52	242.72
1995	2152.8	2405.59	252.79
1996	2127.5	2391.35	263.85
1997	2115.5	2385.16	269.66
1998	2108.4	2367.71	259.31
1999	2112.3	2347.89	235.59
2000	2114.1	2326.82	212.72

RPI	LCOOKH	L.BHI	L.BHILER
1978	228.508	228.508	0.
1979	241.133	241.133	0.
1980	258.286	258.279	-0.007
1981	271.742	271.749	0.007
1982	287.719	287.776	0.057
1983	299.481	299.741	0.26
1984	308.165	307.954	-0.31
1985	316.1	315.829	-0.271
1986	334.036	332.871	-1.165
1987	350.879	350.391	-0.498
1988	370.898	370.23	-0.668
1989	389.42	388.775	-0.646
1990	408.887	407.58	-1.307
1991	427.792	425.237	-2.555
1992	447.298	444.682	-2.615
1993	469.363	466.074	-3.289
1994	492.656	489.406	-3.249
1995	516.952	513.487	-3.465
1996	543.017	539.406	-3.611
1997	569.375	565.667	-3.709
1998	597.703	594.327	-3.375
1999	626.38	623.331	-3.049
2000	657.37	654.513	-2.857

## SIMP - DEFINITION

	LCOOKH	L.BHI
1978	-44.797	-44.797
1979	196.263	246.263
1980	323.848	325.412
1981	490.952	494.052
1982	658.619	660.966
1983	705.944	703.556
1984	1110.29	1104.65
1985	1382.25	1374.08
1986	1326.26	1328.26
1987	1296.56	1304.45
1988	1229.49	1235.95
1989	1124.37	1221.79
1990	843.301	958.275
1991	641.711	797.93
1992	543.441	706.059
1993	433.27	609.937
1994	234.25	422.285
1995	11.59	207.141
1996	-232.371	1.84
1997	-492.801	-234.879
1998	-787.598	-523.902
1999	-1089.01	-837.793
2000	-1429.1	-1195.04

EXBITS	LCOOKH	L.BHI
1978	0.301	0.301
1979	0.292	0.292
1980	0.279	0.279
1981	0.264	0.264
1982	0.251	0.25
1983	0.261	0.26
1984	0.287	0.286
1985	0.293	0.294
1986	0.294	0.293
1987	0.293	0.289
1988	0.29	0.284
1989	0.288	0.281
1990	0.285	0.283
1991	0.284	0.282
1992	0.279	0.278
1993	0.273	0.273
1994	0.268	0.268
1995	0.262	0.263
1996	0.257	0.258
1997	0.252	0.253
1998	0.248	0.249
1999	0.243	0.244
2000	0.239	0.24

## POPR4 - DEFINITION

	RRLH	RRBH	RRBH_ER
1978	58.417	58.417	0.
1979	58.62	58.62	0.
1980	60.122	60.135	0.014
1981	63.326	63.346	0.019
1982	65.832	65.891	0.06
1983	68.109	68.245	0.137
1984	70.946	71.216	0.269
1985	70.882	71.194	0.312
1986	70.353	70.598	0.245
1987	70.648	70.87	0.221
1988	71.651	72.034	0.382
1989	73.001	73.628	0.627
1990	74.458	75.524	1.066
1991	74.136	74.988	0.852
1992	75.181	76.567	1.386
1993	76.264	77.802	1.538
1994	77.477	79.071	1.594
1995	78.754	80.505	1.751
1996	80.086	81.094	1.008
1997	81.6	83.32	1.72
1998	82.995	84.795	1.8
1999	84.701	86.511	1.81
2000	86.42	88.274	1.854

## EM99R4 - DEFINITION

	RRLH	RRBH	RRBH_ER
1978	22.385	22.385	0.
1979	22.893	22.893	0.
1980	24.071	24.08	0.009
1981	26.404	26.419	0.015
1982	28.149	28.194	0.044
1983	29.242	29.322	0.08
1984	30.555	30.706	0.151
1985	30.346	30.484	0.138
1986	29.96	30.062	0.102
1987	30.256	30.348	0.092
1988	30.889	31.086	0.198
1989	31.766	32.101	0.335
1990	32.643	33.188	0.544
1991	32.645	33.028	0.383
1992	33.247	33.895	0.648
1993	33.887	34.58	0.693
1994	34.57	35.261	0.69
1995	35.345	36.074	0.729
1996	36.131	36.377	0.247
1997	37.061	37.684	0.624
1998	37.886	38.515	0.629
1999	38.911	39.531	0.62
2000	39.915	40.549	0.634

## POPR1 - DEFINITION

	RRLH	RRBH	RRBH_LER
1978	7.155	7.155	0.
1979	7.306	7.306	0.
1980	7.567	7.569	0.002
1981	7.536	7.66	0.124
1982	7.937	8.368	0.43
1983	7.825	8.34	0.515
1984	7.189	7.763	0.574
1985	7.447	7.69	0.243
1986	7.544	8.123	0.579
1987	7.662	8.63	0.967
1988	7.728	9.098	1.37
1989	7.79	9.442	1.652
1990	7.841	9.117	1.277
1991	7.97	9.936	1.966
1992	8.067	9.315	1.248
1993	8.072	9.379	1.306
1994	8.089	9.376	1.287
1995	8.188	9.311	1.123
1996	8.274	10.125	1.851
1997	8.378	9.312	0.934
1998	8.459	9.369	0.91
1999	8.559	9.477	0.918
2000	8.701	9.623	0.922

## EM99R1 - DEFINITION

	RRLH	RRBH	RRBH_LER
1978	4.463	4.463	0.
1979	4.569	4.569	0.
1980	4.797	4.799	0.002
1981	4.807	4.943	0.133
1982	5.286	5.75	0.464
1983	5.136	5.688	0.552
1984	4.297	4.899	0.602
1985	4.383	4.627	0.244
1986	4.36	4.948	0.588
1987	4.448	5.428	0.98
1988	4.514	5.91	1.396
1989	4.565	6.253	1.687
1990	4.604	5.881	1.277
1991	4.684	6.678	1.995
1992	4.741	5.95	1.209
1993	4.703	5.959	1.256
1994	4.692	5.91	1.218
1995	4.769	5.798	1.029
1996	4.847	6.65	1.803
1997	4.948	5.752	0.804
1998	5.039	5.806	0.768
1999	5.15	5.92	0.77
2000	5.274	6.04	0.766

## POPR7 - DEFINITION

	RRLH	RRBH	RRBH_ER
1978	57.829	57.829	0.
1979	60.066	60.066	0.
1980	62.846	62.861	0.014
1981	68.114	68.188	0.074
1982	77.689	77.937	0.248
1983	82.566	82.964	0.397
1984	79.523	80.098	0.575
1985	81.618	82.079	0.46
1986	83.808	84.449	0.641
1987	87.096	88.057	0.961
1988	90.512	92.039	1.528
1989	94.31	96.458	2.149
1990	97.876	100.328	2.452
1991	101.01	104.033	3.024
1992	104.137	107.298	3.161
1993	107.401	110.821	3.42
1994	110.778	114.496	3.719
1995	114.65	118.482	3.833
1996	118.625	122.754	4.129
1997	123.135	126.966	3.831
1998	127.543	131.389	3.847
1999	132.532	136.723	4.191
2000	137.565	142.036	4.471

## EM99R7 - DEFINITION

	RRLH	RRBH	RRBH_ER
1978	31.297	31.297	0.
1979	32.032	32.032	0.
1980	33.143	33.156	0.012
1981	36.328	36.376	0.048
1982	42.134	42.292	0.158
1983	44.278	44.52	0.242
1984	40.571	40.91	0.339
1985	41.049	41.288	0.239
1986	41.544	41.862	0.317
1987	42.807	43.276	0.469
1988	44.204	44.994	0.79
1989	45.955	47.081	1.126
1990	47.562	48.847	1.285
1991	48.865	50.297	1.431
1992	50.2	51.758	1.558
1993	51.657	53.302	1.646
1994	53.159	54.9	1.741
1995	55.011	56.755	1.743
1996	56.906	58.517	1.611
1997	59.171	60.761	1.589
1998	61.321	62.863	1.542
1999	63.86	65.538	1.678
2000	66.397	68.193	1.795

## POPR5 - DEFINITION

	RRLH	RRBH	RRBH_ER
1978	193.232	193.232	0.
1979	198.461	198.461	0.
1980	205.817	205.864	0.047
1981	217.936	218.267	0.331
1982	232.67	233.832	1.162
1983	245.689	247.373	1.683
1984	249.531	251.793	2.262
1985	255.914	257.589	1.675
1986	261.569	263.979	2.409
1987	269.477	273.052	3.575
1988	278.018	283.649	5.631
1989	288.086	295.837	7.75
1990	297.919	306.386	8.467
1991	306.915	317.053	10.139
1992	315.96	326.33	10.37
1993	325.656	336.715	11.059
1994	335.548	347.41	11.862
1995	346.868	359.	12.131
1996	358.607	371.36	12.753
1997	371.953	384.103	12.15
1998	385.343	397.466	12.123
1999	400.322	413.246	12.925
2000	414.586	428.136	13.55

## EM99R5 - DEFINITION

	RRLH	RRBH	RRBH_ER
1978	88.534	88.534	0.
1979	90.937	90.937	0.
1980	94.601	94.636	0.035
1981	101.359	101.554	0.195
1982	108.879	109.536	0.657
1983	115.191	116.101	0.911
1984	115.894	117.125	1.232
1985	117.944	118.73	0.786
1986	119.622	120.763	1.141
1987	123.39	125.063	1.673
1988	127.652	130.465	2.813
1989	132.959	136.915	3.956
1990	137.886	142.191	4.306
1991	141.814	146.811	4.997
1992	145.953	150.984	5.031
1993	150.519	155.84	5.321
1994	155.224	160.783	5.559
1995	160.907	166.421	5.514
1996	166.806	172.152	5.346
1997	173.777	178.751	4.974
1998	180.558	185.455	4.897
1999	188.391	193.643	5.251
2000	195.605	201.138	5.533

## RRBH

	EM1EXR5	EMS4R5	EMS5R5	EMRRR5	EMG9R5
1978	1.33	12.186	37.642	2.109	35.107
1979	1.33	12.683	39.613	2.249	34.885
1980	1.33	13.475	42.653	2.38	34.669
1981	1.388	14.746	47.407	2.555	35.226
1982	1.316	16.254	53.007	2.692	35.889
1983	1.45	17.325	56.614	2.856	37.141
1984	1.512	17.436	56.639	3.01	38.109
1985	1.563	17.921	57.405	3.173	38.317
1986	1.565	18.506	58.971	3.353	37.843
1987	1.536	19.331	62.015	3.536	37.924
1988	1.565	20.325	65.73	3.723	38.151
1989	1.585	21.496	70.051	3.908	38.753
1990	1.594	22.498	73.353	4.108	39.387
1991	1.449	23.278	76.439	4.302	39.899
1992	1.588	24.018	79.143	4.524	40.083
1993	1.584	24.963	82.62	4.744	40.159
1994	1.581	25.905	86.029	4.952	40.296
1995	1.582	27.003	90.002	5.193	40.428
1996	1.37	28.075	94.098	5.451	40.525
1997	1.579	29.465	98.574	5.721	40.676
1998	1.579	30.841	103.258	5.978	40.801
1999	1.58	32.498	108.948	6.251	41.048
2000	1.58	34.033	114.226	6.521	41.305

	EM1EXR7	EMS4R7	EMS5R7	EMRRR7	EMG9R7
1978	0.243	5.141	9.122	0.457	16.265
1979	0.243	5.364	9.714	0.49	16.121
1980	0.243	5.713	10.615	0.526	15.973
1981	1.534	6.043	11.948	0.563	16.176
1982	4.079	6.611	14.389	0.601	16.431
1983	4.182	7.174	15.537	0.635	16.946
1984	0.487	7.465	14.866	0.687	17.356
1985	0.252	7.734	15.158	0.703	17.444
1986	0.277	7.965	15.672	0.741	17.206
1987	0.301	8.302	16.657	0.768	17.208
1988	0.316	8.69	17.816	0.834	17.277
1989	0.312	9.154	19.142	0.876	17.517
1990	0.266	9.574	20.218	0.924	17.776
1991	0.242	9.861	21.184	0.968	17.982
1992	0.255	10.185	22.097	1.035	18.05
1993	0.266	10.547	23.173	1.081	18.067
1994	0.266	10.914	24.281	1.131	18.114
1995	0.255	11.349	25.56	1.194	18.159
1996	0.213	11.736	26.878	1.256	18.198
1997	0.243	12.298	28.311	1.326	18.242
1998	0.243	12.804	29.76	1.37	18.282
1999	0.243	13.435	31.576	1.439	18.381
2000	0.243	14.071	33.374	1.512	18.494

	EM1EXR1	EMS4R1	EM55R1	EMRRR1	EMG9R1
1978	1.951	0.8	0.695	0.	0.995
1979	2.002	0.84	0.705	0.	0.997
1980	2.11	0.914	0.728	0.	1.008
1981	2.061	1.02	0.755	0.	1.07
1982	2.43	1.228	0.818	0.	1.124
1983	2.369	1.279	0.794	0.	1.239
1984	1.702	1.146	0.719	0.	1.307
1985	1.461	1.146	0.702	0.	1.289
1986	1.704	1.22	0.726	0.	1.269
1987	2.034	1.332	0.765	0.	1.304
1988	2.331	1.458	0.809	0.	1.348
1989	2.513	1.546	0.842	0.	1.408
1990	2.129	1.506	0.847	0.	1.461
1991	2.497	1.656	0.912	0.	1.491
1992	2.07	1.586	0.861	0.	1.522
1993	2.044	1.63	0.871	0.	1.519
1994	1.961	1.669	0.874	0.	1.529
1995	1.813	1.699	0.873	0.	1.54
1996	2.138	1.908	0.955	0.	1.55
1997	1.638	1.806	0.885	0.	1.578
1998	1.635	1.87	0.898	0.	1.579
1999	1.636	1.962	0.92	0.	1.595
2000	1.632	2.054	0.941	0.	1.614

### RRBH

	EM1EXR4	EMS4R4	EM55R4	EMRRR4	EMG9R4
1978	0.789	3.136	8.458	4.371	5.742
1979	0.831	3.227	8.754	4.537	5.69
1980	1.193	3.42	9.269	4.731	5.58
1981	2.198	3.778	9.952	4.87	5.764
1982	2.78	4.096	10.417	5.018	5.931
1983	2.857	4.262	10.852	5.202	6.294
1984	2.999	4.395	11.398	5.4	6.608
1985	2.347	4.42	11.532	5.621	6.605
1986	1.878	4.421	11.561	5.817	6.478
1987	1.718	4.47	11.804	5.966	6.528
1988	1.753	4.581	12.165	6.165	6.632
1989	1.788	4.733	12.66	6.328	6.828
1990	1.823	4.891	13.148	6.563	7.025
1991	1.25	4.841	13.28	6.722	7.193
1992	1.373	4.963	13.727	6.931	7.223
1993	1.373	5.075	14.123	7.105	7.269
1994	1.372	5.179	14.501	7.314	7.299
1995	1.373	5.311	14.975	7.541	7.337
1996	1.191	5.357	15.181	7.786	7.387
1997	1.373	5.579	15.908	8.016	7.428
1998	1.373	5.722	16.398	8.234	7.512
1999	1.373	5.898	16.994	8.501	7.576
2000	1.373	6.069	17.588	8.721	7.657

## POP - ENDOGENOUS

	LCOOKL	L.BLOW	L.BLOWLER
1978	422.83	422.83	0.
1979	431.71	431.71	0.
1980	444.03	444.131	0.101
1981	464.456	465.025	0.569
1982	492.762	494.694	1.932
1983	506.556	509.417	2.862
1984	506.252	510.494	4.242
1985	512.917	516.023	3.106
1986	521.748	525.559	3.811
1987	536.328	540.489	4.16
1988	551.561	557.775	6.214
1989	568.712	576.778	8.065
1990	584.516	594.391	9.875
1991	596.971	608.818	11.847
1992	609.791	621.921	12.13
1993	623.167	636.761	13.595
1994	637.215	651.586	14.372
1995	653.435	667.906	14.472
1996	670.146	684.058	13.911
1997	689.653	703.273	13.619
1998	708.714	722.433	13.719
1999	730.388	744.543	14.155
2000	751.647	766.407	14.76

## MIGNET - ENDOGENOUS

	LCOOKL	L.BLOW	L.BLOWLER
1978	-2.801	-2.801	0.
1979	1.558	1.558	0.
1980	5.02	5.121	0.101
1981	13.013	13.478	0.465
1982	20.475	21.816	1.341
1983	5.265	6.121	0.856
1984	-8.913	-7.637	1.276
1985	-1.47	-2.757	-1.287
1986	0.859	1.469	0.61
1987	6.669	6.904	0.235
1988	7.145	9.079	1.934
1989	8.866	10.528	1.662
1990	7.252	8.814	1.561
1991	3.702	5.373	1.672
1992	4.003	3.93	-0.073
1993	4.477	5.602	1.126
1994	5.046	5.45	0.404
1995	7.092	6.817	-0.275
1996	7.374	6.462	-0.912
1997	9.953	9.356	-0.597
1998	9.192	9.019	-0.172
1999	11.529	11.705	0.176
2000	10.75	11.095	0.345

BEAUFORT LOW - LOWER COOK INLET LOW SCENARIO

## EMG9P - DEFINITION

## LCOOKL L.BLOW

1978	0.412	0.412
1979	0.4	0.4
1980	0.383	0.383
1981	0.368	0.368
1982	0.348	0.346
1983	0.352	0.35
1984	0.37	0.368
1985	0.361	0.36
1986	0.349	0.348
1987	0.342	0.34
1988	0.335	0.332
1989	0.329	0.325
1990	0.323	0.32
1991	0.32	0.317
1992	0.314	0.312
1993	0.307	0.304
1994	0.3	0.298
1995	0.292	0.291
1996	0.285	0.284
1997	0.277	0.276
1998	0.27	0.269
1999	0.263	0.261
2000	0.256	0.255

## EMNSP - DEFINITION

## LCOOKL L.BLOW

1978	0.234	0.234
1979	0.235	0.235
1980	0.237	0.238
1981	0.242	0.242
1982	0.25	0.251
1983	0.246	0.247
1984	0.233	0.233
1985	0.236	0.236
1986	0.239	0.239
1987	0.238	0.239
1988	0.238	0.239
1989	0.236	0.237
1990	0.236	0.236
1991	0.234	0.234
1992	0.234	0.234
1993	0.235	0.235
1994	0.235	0.235
1995	0.235	0.235
1996	0.236	0.235
1997	0.236	0.235
1998	0.236	0.236
1999	0.236	0.236
2000	0.236	0.236

## EM99 - ENDOGENOUS

	LCOOKL	L.BLOW	L.BLOWLER
1978	190.273	190.273	0.
1979	194.593	194.593	0.
1980	201.229	201.304	0.074
1981	213.175	213.588	0.413
1982	229.954	231.335	1.381
1983	234.428	236.321	1.892
1984	229.013	231.71	2.698
1985	230.856	232.399	1.543
1986	234.659	236.596	1.936
1987	242.788	244.826	2.038
1988	251.081	254.405	3.325
1989	260.554	264.939	4.385
1990	268.741	274.054	5.313
1991	274.325	280.668	6.344
1992	280.364	286.415	6.051
1993	286.875	293.614	6.738
1994	293.782	300.672	6.889
1995	302.336	308.874	6.538
1996	311.146	316.932	5.786
1997	321.839	327.171	5.333
1998	331.912	337.139	5.228
1999	343.762	349.151	5.389
2000	355.03	360.704	5.674

## EMSPP - DEFINITION

	LCOOKL	L.BLOW
1978	0.355	0.355
1979	0.365	0.365
1980	0.38	0.38
1981	0.39	0.39
1982	0.402	0.403
1983	0.402	0.403
1984	0.397	0.399
1985	0.403	0.404
1986	0.412	0.412
1987	0.42	0.421
1988	0.428	0.429
1989	0.435	0.437
1990	0.441	0.444
1991	0.443	0.449
1992	0.452	0.454
1993	0.459	0.461
1994	0.465	0.468
1995	0.473	0.475
1996	0.479	0.481
1997	0.487	0.489
1998	0.494	0.495
1999	0.501	0.503
2000	0.508	0.509

## E99S - ENDOGENOUS

	LCOOKL	L.BLOW	L.BLOWLER
1978	1311.13	1311.13	0.
1979	1414.71	1414.71	0.
1980	1549.01	1552.25	3.241
1981	1742.31	1744.37	2.058
1982	1982.38	1988.67	6.288
1983	2300.	2316.48	16.478
1984	2500.96	2524.51	23.545
1985	2634.43	2655.15	20.712
1986	2921.96	2930.9	8.934
1987	3250.56	3258.69	8.133
1988	3613.43	3635.52	22.096
1989	3985.86	4024.24	38.378
1990	4348.55	4414.58	66.027
1991	4669.21	4754.52	85.305
1992	4966.67	5076.06	109.391
1993	5321.24	5433.81	112.566
1994	5724.08	5854.03	129.945
1995	6148.09	6296.87	148.777
1996	6674.02	6802.04	128.016
1997	7253.63	7372.01	118.379
1998	7901.19	8018.78	117.594
1999	8589.32	8716.51	129.191
2000	9347.52	9494.9	147.379

## E99SRPC - DEFINITION

	LCOOKL	L.BLOW	L.BLOWLER
1978	1356.99	1356.99	0.
1979	1359.	1359.	0.
1980	1350.64	1353.19	2.553
1981	1379.57	1379.47	-0.096
1982	1403.41	1402.07	-1.337
1983	1507.61	1508.5	0.882
1984	1611.71	1614.9	3.186
1985	1622.65	1626.49	3.844
1986	1659.89	1659.69	-0.194
1987	1700.41	1694.23	-6.177
1988	1740.12	1735.33	-4.792
1989	1779.04	1773.08	-5.958
1990	1803.18	1804.43	1.256
1991	1814.67	1818.06	3.397
1992	1808.71	1819.05	10.343
1993	1806.55	1815.	8.458
1994	1810.25	1818.6	8.353
1995	1806.37	1818.7	12.328
1996	1819.85	1826.15	6.296
1997	1833.09	1835.63	2.541
1998	1850.87	1850.18	-0.688
1999	1863.46	1861.65	-1.808
2000	1877.92	1876.26	-1.661

## PI - ENDOGENOUS

	LCOOKL	L.BLOW	L.BLOWLER
1978	3511.53	3511.53	0.
1979	3894.95	3894.95	0.
1980	4484.46	4486.54	2.086
1981	5244.78	5262.	17.223
1982	6334.34	6396.68	62.336
1983	6852.55	6946.91	94.363
1984	6554.42	6669.02	114.602
1985	6925.97	6987.07	61.102
1986	7725.39	7786.51	61.121
1987	8671.69	8781.25	109.555
1988	9727.42	9913.41	185.988
1989	10806.6	11086.9	280.246
1990	11933.8	12253.5	319.73
1991	12901.3	13293.1	391.848
1992	14051.8	14420.5	368.637
1993	15401.	15821.9	420.902
1994	16913.6	17391.3	477.656
1995	18665.1	19112.5	447.453
1996	20633.2	21028.3	395.109
1997	22869.9	23252.4	382.562
1998	25307.8	25731.8	423.969
1999	28046.8	28540.9	494.082
2000	31056.4	31629.	572.68

## PIRPC - ENDOGENOUS

	LCOOKL	L.BLOW	L.BLOWLER
1978	3634.39	3634.39	0.
1979	3741.57	3741.57	0.
1980	3910.16	3911.21	1.044
1981	4152.75	4161.16	8.414
1982	4484.53	4509.71	25.18
1983	4491.69	4523.79	32.098
1984	4223.98	4266.04	42.059
1985	4265.98	4280.15	14.168
1986	4388.57	4409.3	20.727
1987	4536.28	4565.43	29.152
1988	4684.37	4731.84	47.465
1989	4823.38	4884.79	61.406
1990	4948.41	5008.54	60.129
1991	5014.04	5083.12	69.082
1992	5117.22	5167.69	50.473
1993	5228.62	5284.82	56.203
1994	5348.95	5402.72	53.777
1995	5483.99	5520.23	36.234
1996	5626.21	5645.52	19.309
1997	5779.56	5789.92	10.359
1998	5928.41	5937.12	8.719
1999	6084.83	6094.37	9.535
2000	6239.27	6250.18	10.902

FUND - ENDOGENOUS

	LCOOKL	L.BLOW	L.BLOWLER
1978	625.803	625.803	0.
1979	822.066	872.066	50.
1980	1145.91	1197.48	51.564
1981	1634.43	1689.1	54.667
1982	2300.7	2357.69	56.997
1983	3006.51	3061.14	54.626
1984	4133.36	4182.23	48.871
1985	5559.38	5603.68	44.301
1986	6918.28	6966.87	48.59
1987	8223.57	8281.55	57.977
1988	9441.92	9508.48	66.559
1989	10550.7	10642.1	91.355
1990	11381.2	11522.2	140.965
1991	12014.1	12221.2	207.086
1992	12555.5	12841.6	286.078
1993	12990.	13367.9	377.852
1994	13227.8	13700.8	472.969
1995	13244.3	13812.5	568.18
1996	13017.1	13698.4	681.293
1997	12529.7	13335.3	805.652
1998	11746.9	12683.5	936.551
1999	10661.	11726.1	1065.02
2000	9233.62	10420.9	1187.24

RINS - DEFINITION

	LCOOKL	L.BLOW	L.BLOWLER
1978	46.954	46.954	0.
1979	44.051	44.051	0.
1980	58.256	61.818	3.562
1981	61.551	85.223	3.672
1982	116.449	120.338	3.889
1983	163.868	167.92	4.052
1984	214.139	218.025	3.886
1985	294.129	297.613	3.483
1986	395.176	398.339	3.163
1987	491.569	495.032	3.464
1988	584.185	588.305	4.121
1989	670.731	675.453	4.722
1990	749.615	756.084	6.469
1991	808.954	818.928	9.974
1992	854.396	869.042	14.646
1993	893.44	913.673	20.233
1994	925.017	951.733	26.716
1995	942.797	976.234	33.437
1996	945.057	985.225	40.167
1997	930.245	978.396	48.151
1998	897.218	954.14	56.922
1999	843.516	909.664	66.148
2000	768.601	843.802	75.201

## REVGF - DEFINITION

	LCOOKL	L.BLOW	L.BLOWLER
1978	1013.49	1013.49	0.
1979	1335.25	1385.25	50.
1980	1574.58	1578.22	3.645
1981	1893.48	1898.14	4.664
1982	2263.96	2271.17	7.218
1983	2558.49	2569.23	10.746
1984	3143.16	3156.51	13.342
1985	3536.01	3548.15	12.144
1986	3684.69	3696.32	11.63
1987	3897.78	3913.41	15.621
1988	4108.43	4134.24	25.809
1989	4308.66	4364.12	55.457
1990	4334.92	4436.98	102.059
1991	4416.92	4549.95	133.023
1992	4582.27	4747.17	164.895
1993	4771.64	4951.88	180.238
1994	4910.89	5108.45	197.559
1995	5046.53	5260.12	213.59
1996	5234.	5452.75	218.746
1997	5447.93	5670.36	222.422
1998	5682.88	5911.42	228.539
1999	5941.86	6177.56	235.703
2000	6219.78	6464.18	244.406

## RP9S - DEFINITION

	LCOOKL	L.BLOW	L.BLOWLER
1978	450.1	450.1	0.
1979	795.3	845.3	50.
1980	1004.1	1004.1	0.
1981	1253.8	1254.11	0.31
1982	1509.6	1510.04	0.44
1983	1678.3	1679.	0.7
1984	2178.2	2178.91	0.71
1985	2472.6	2473.08	0.48
1986	2464.8	2466.81	2.01
1987	2496.6	2501.35	4.75
1988	2515.6	2524.52	8.92
1989	2518.6	2549.13	30.53
1990	2348.9	2416.57	67.67
1991	2253.1	2341.66	88.56
1992	2254.6	2365.41	110.81
1993	2268.	2386.34	118.34
1994	2216.8	2339.96	123.16
1995	2152.8	2280.83	128.03
1996	2127.5	2255.55	128.05
1997	2115.5	2241.71	126.21
1998	2108.4	2230.26	121.86
1999	2112.3	2225.56	113.26
2000	2114.1	2217.35	103.25

## RPI - ENDOGENOUS

	LCOOKL	L.BLOW	L.BLOWLER
1978	228.508	228.508	0.
1979	241.133	241.133	0.
1980	258.286	258.279	-0.007
1981	271.917	271.924	0.007
1982	286.659	286.718	0.059
1983	301.169	301.447	0.277
1984	306.516	306.224	-0.292
1985	316.531	316.351	-0.181
1986	337.392	336.009	-1.383
1987	356.429	355.863	-0.566
1988	376.484	375.601	-0.883
1989	393.953	393.502	-0.451
1990	412.582	411.601	-0.981
1991	431.016	429.546	-1.47
1992	450.313	448.689	-1.624
1993	472.672	470.164	-2.507
1994	496.229	494.021	-2.208
1995	520.873	518.38	-2.492
1996	547.244	544.515	-2.729
1997	573.774	571.054	-2.72
1998	602.345	599.924	-2.421
1999	631.081	629.005	-2.076
2000	662.223	660.293	-1.93

## SIMP - DEFINITION

LCOOKL L.BLOW

1978	-44.797	-44.797
1979	196.263	246.263
1980	323.848	325.412
1981	488.518	491.621
1982	666.263	668.593
1983	705.817	703.447
1984	1126.85	1121.1
1985	1426.03	1421.46
1986	1358.9	1363.19
1987	1305.29	1314.68
1988	1218.35	1226.93
1989	1108.8	1133.6
1990	830.535	880.142
1991	632.864	698.986
1992	541.359	620.352
1993	434.543	526.316
1994	237.773	332.891
1995	16.52	111.73
1996	-227.219	-114.105
1997	-487.402	-363.043
1998	-782.766	-651.867
1999	-1085.87	-957.402
2000	-1427.42	-1305.2

## EXBITES - DEFINITION

LCOOKL L.BLOW

1978	0.301	0.301
1979	0.292	0.292
1980	0.279	0.279
1981	0.268	0.267
1982	0.252	0.251
1983	0.27	0.269
1984	0.308	0.305
1985	0.305	0.304
1986	0.301	0.3
1987	0.299	0.296
1988	0.297	0.293
1989	0.296	0.291
1990	0.294	0.29
1991	0.293	0.29
1992	0.288	0.286
1993	0.282	0.28
1994	0.276	0.275
1995	0.269	0.269
1996	0.265	0.265
1997	0.26	0.259
1998	0.255	0.255
1999	0.251	0.25
2000	0.246	0.246

## POPR1 - DEFINITION

	RRLL	RRBL	RRBL_ER
1978	7.155	7.155	0.
1979	7.306	7.306	0.
1980	7.567	7.569	0.002
1981	7.54	7.664	0.124
1982	7.985	8.417	0.433
1983	7.814	8.329	0.515
1984	7.148	7.718	0.57
1985	7.32	7.562	0.241
1986	7.407	7.838	0.431
1987	7.524	8.084	0.56
1988	7.603	8.369	0.766
1989	7.664	8.577	0.913
1990	7.707	8.417	0.71
1991	7.823	8.597	0.775
1992	7.902	8.565	0.663
1993	7.893	8.602	0.708
1994	7.899	8.589	0.691
1995	7.985	8.602	0.618
1996	8.057	8.62	0.562
1997	8.15	8.685	0.536
1998	8.22	8.75	0.53
1999	8.308	8.836	0.528
2000	8.436	8.966	0.531

## EM99R1 - DEFINITION

	RRLL	RRBL	RRBL_ER
1978	4.463	4.463	0.
1979	4.569	4.569	0.
1980	4.797	4.799	0.002
1981	4.79	4.923	0.133
1982	5.301	5.766	0.465
1983	5.047	5.592	0.545
1984	4.155	4.745	0.589
1985	4.202	4.436	0.234
1986	4.201	4.627	0.427
1987	4.316	4.872	0.556
1988	4.403	5.175	0.772
1989	4.463	5.388	0.926
1990	4.499	5.202	0.703
1991	4.566	5.329	0.763
1992	4.612	5.241	0.628
1993	4.564	5.234	0.669
1994	4.546	5.187	0.641
1995	4.613	5.168	0.556
1996	4.681	5.173	0.492
1997	4.773	5.235	0.462
1998	4.854	5.308	0.455
1999	4.954	5.407	0.453
2000	5.064	5.517	0.453

## POPR4 - DEFINITION

	RRLL	RRBL	RRBL_ER
1978	58.417	58.417	0.
1979	58.62	58.62	0.
1980	60.122	60.135	0.014
1981	61.971	61.99	0.018
1982	63.485	63.537	0.052
1983	62.697	62.811	0.114
1984	63.694	63.927	0.233
1985	64.159	64.427	0.268
1986	64.661	64.906	0.245
1987	65.802	65.984	0.181
1988	66.99	67.286	0.296
1989	68.395	68.792	0.397
1990	69.808	70.549	0.742
1991	69.427	70.316	0.889
1992	70.357	71.33	0.973
1993	71.31	72.398	1.088
1994	72.437	73.588	1.15
1995	73.62	74.817	1.197
1996	74.865	76.013	1.148
1997	76.306	77.405	1.099
1998	77.644	78.718	1.074
1999	79.285	80.366	1.08
2000	80.955	82.065	1.11

## EM99R4 - DEFINITION

	RRLL	RRBL	RRBL_ER
1978	22.385	22.385	0.
1979	22.893	22.893	0.
1980	24.071	24.08	0.009
1981	25.68	25.695	0.015
1982	27.055	27.097	0.042
1983	26.408	26.481	0.073
1984	26.608	26.751	0.143
1985	26.898	27.014	0.116
1986	27.265	27.362	0.097
1987	28.06	28.115	0.055
1988	28.833	28.99	0.127
1989	29.8	29.983	0.183
1990	30.668	31.034	0.366
1991	30.64	31.078	0.438
1992	31.191	31.632	0.441
1993	31.775	32.263	0.488
1994	32.428	32.925	0.496
1995	33.166	33.647	0.481
1996	33.924	34.332	0.409
1997	34.827	35.18	0.353
1998	35.634	35.958	0.324
1999	36.633	36.955	0.322
2000	37.616	37.952	0.336

## POPR5 - DEFINITION

	RRLL	RRBL	RRBL_ER
1978	193.232	193.232	0.
1979	198.461	198.461	0.
1980	205.817	205.864	0.047
1981	216.962	217.295	0.333
1982	232.139	233.298	1.158
1983	241.17	242.849	1.679
1984	240.926	243.316	2.39
1985	244.94	246.604	1.664
1986	250.953	253.01	2.058
1987	259.275	261.743	2.468
1988	268.077	271.701	3.624
1989	277.816	282.553	4.736
1990	287.019	292.497	5.478
1991	295.022	301.518	6.496
1992	303.085	309.743	6.658
1993	311.692	319.141	7.449
1994	320.578	328.52	7.942
1995	330.859	338.829	7.97
1996	341.482	349.169	7.687
1997	353.71	361.299	7.599
1998	365.935	373.655	7.72
1999	379.636	387.669	8.033
2000	392.61	401.026	8.416

## EM99R5 - DEFINITION

	RRLL	RRBL	RRBL_ER
1978	88.534	88.534	0.
1979	90.937	90.937	0.
1980	94.601	94.636	0.035
1981	100.558	100.754	0.197
1982	108.453	109.115	0.662
1983	111.782	112.699	0.917
1984	110.11	111.44	1.329
1985	111.321	112.075	0.754
1986	113.95	114.888	0.938
1987	118.632	119.685	1.052
1988	123.425	125.144	1.718
1989	128.778	131.084	2.306
1990	133.481	136.235	2.754
1991	136.94	140.241	3.301
1992	140.65	143.835	3.185
1993	144.737	148.302	3.565
1994	149.036	152.73	3.694
1995	154.292	157.816	3.524
1996	159.747	162.905	3.158
1997	166.257	169.217	2.959
1998	172.553	175.502	2.949
1999	179.832	182.911	3.079
2000	186.49	189.752	3.262

## POPR7 - DEFINITION

	RRLL	RRBL	RRBL_ER
1978	57.829	57.829	0.
1979	60.066	60.066	0.
1980	62.846	62.861	0.014
1981	67.914	67.99	0.076
1982	77.839	78.092	0.254
1983	81.686	82.102	0.416
1984	77.234	77.923	0.689
1985	78.738	79.218	0.479
1986	81.042	81.666	0.624
1987	84.445	85.175	0.73
1988	87.907	89.006	1.099
1989	91.566	93.013	1.448
1990	94.886	96.595	1.709
1991	97.601	99.704	2.102
1992	100.385	102.54	2.155
1993	103.248	105.694	2.446
1994	106.256	108.879	2.623
1995	109.758	112.391	2.633
1996	113.334	115.893	2.549
1997	117.442	119.978	2.535
1998	121.429	124.028	2.6
1999	125.959	128.693	2.724
2000	130.478	133.356	2.878

## EM99R7 - DEFINITION

	RRLL	RRBL	RRBL_ER
1978	31.297	31.297	0.
1979	32.032	32.032	0.
1980	33.143	33.156	0.012
1981	36.138	36.187	0.049
1982	42.199	42.362	0.163
1983	43.415	43.67	0.255
1984	38.887	39.29	0.404
1985	39.064	39.304	0.24
1986	39.859	40.154	0.295
1987	41.409	41.729	0.32
1988	42.997	43.524	0.527
1989	44.767	45.476	0.709
1990	46.298	47.178	0.88
1991	47.419	48.492	1.073
1992	48.607	49.651	1.044
1993	49.895	51.07	1.175
1994	51.254	52.479	1.225
1995	52.959	54.128	1.169
1996	54.701	55.745	1.044
1997	56.807	57.785	0.978
1998	58.788	59.764	0.977
1999	61.134	62.158	1.024
2000	63.447	64.544	1.096

## RRBL

	EM1EXR1	EMS4R1	EMSSR1	EMRRR1	EMG9R1
1978	1.951	0.8	0.695	0.	0.995
1979	2.002	0.84	0.705	0.	0.997
1980	2.11	0.914	0.728	0.	1.008
1981	2.061	1.01	0.75	0.	1.07
1982	2.592	1.222	0.818	0.	1.123
1983	2.369	1.237	0.772	0.	1.228
1984	1.702	1.071	0.681	0.	1.293
1985	1.461	1.07	0.664	0.	1.248
1986	1.603	1.136	0.682	0.	1.222
1987	1.726	1.215	0.706	0.	1.257
1988	1.882	1.307	0.734	0.	1.302
1989	1.975	1.366	0.754	0.	1.359
1990	1.788	1.352	0.775	0.	1.407
1991	1.853	1.393	0.787	0.	1.437
1992	1.718	1.41	0.783	0.	1.454
1993	1.696	1.448	0.79	0.	1.459
1994	1.62	1.48	0.791	0.	1.469
1995	1.525	1.519	0.796	0.	1.479
1996	1.47	1.564	0.801	0.	1.49
1997	1.447	1.629	0.815	0.	1.503
1998	1.446	1.696	0.828	0.	1.518
1999	1.444	1.775	0.847	0.	1.535
2000	1.444	1.857	0.866	0.	1.553

## RRBL

	EM1EXR4	EMS4R4	EMSSR4	EMRRR4	EMG9R4
1978	0.789	3.136	8.458	4.371	5.742
1979	0.831	3.227	8.754	4.537	5.69
1980	1.193	3.42	9.269	4.731	5.58
1981	1.759	3.677	9.778	4.87	5.752
1982	2.154	3.933	10.22	5.018	5.928
1983	1.209	3.85	10.166	5.202	6.233
1984	0.747	3.838	10.393	5.4	6.537
1985	0.747	3.928	10.572	5.558	6.396
1986	0.744	4.038	10.801	5.754	6.235
1987	0.775	4.155	11.176	5.904	6.317
1988	0.81	4.278	11.577	6.103	6.467
1989	0.845	4.416	12.041	6.266	6.676
1990	0.906	4.556	12.513	6.5	6.859
1991	0.444	4.539	12.735	6.66	7.009
1992	0.437	4.607	13.021	6.869	7.048
1993	0.445	4.708	13.392	7.043	7.055
1994	0.445	4.807	13.759	7.252	7.083
1995	0.437	4.92	14.177	7.479	7.115
1996	0.432	5.026	14.56	7.724	7.153
1997	0.43	5.171	15.054	7.954	7.202
1998	0.43	5.302	15.506	8.172	7.26
1999	0.43	5.468	16.082	8.439	7.331
2000	0.43	5.637	16.659	8.659	7.405

## RRBL

	EM1EXR5	EMS4R5	EMS5R5	EMRRR5	EMG9R5
1978	1.33	12.186	37.642	2.109	35.107
1979	1.33	12.683	39.613	2.249	34.885
1980	1.33	13.475	42.653	2.38	34.669
1981	1.338	14.62	46.778	2.555	35.212
1982	1.354	16.182	52.539	2.692	35.812
1983	1.354	16.788	54.11	2.856	36.813
1984	1.358	16.501	52.343	3.01	37.689
1985	1.34	16.883	53.069	3.173	37.129
1986	1.338	17.643	55.307	3.354	36.641
1987	1.34	18.543	58.632	3.537	36.9
1988	1.347	19.517	62.225	3.723	37.392
1989	1.356	20.569	66.112	3.909	38.053
1990	1.398	21.489	69.371	4.108	38.631
1991	1.403	22.161	71.92	4.303	39.079
1992	1.38	22.786	74.347	4.525	39.219
1993	1.401	23.655	77.565	4.745	39.212
1994	1.402	24.514	80.668	4.953	39.269
1995	1.377	25.497	84.256	5.194	39.368
1996	1.362	26.504	87.775	5.452	39.423
1997	1.355	27.793	92.207	5.722	39.533
1998	1.355	29.067	96.559	5.979	39.657
1999	1.355	30.574	101.716	6.251	39.864
2000	1.355	31.977	106.546	6.522	40.072

## RRBL

	EM1EXR7	EMS4R7	EMS5R7	EMRRR7	EMG9R7
1978	0.243	5.141	9.122	0.457	16.265
1979	0.243	5.364	9.714	0.49	16.121
1980	0.243	5.713	10.615	0.526	15.973
1981	1.534	6.004	11.81	0.563	16.171
1982	4.352	6.616	14.334	0.601	16.395
1983	4.182	7.026	14.995	0.635	16.797
1984	0.487	7.13	13.772	0.687	17.164
1985	0.252	7.35	14.037	0.703	16.903
1986	0.269	7.67	14.757	0.741	16.66
1987	0.273	8.046	15.819	0.788	16.744
1988	0.279	8.444	16.956	0.834	16.935
1989	0.279	8.867	18.163	0.876	17.202
1990	0.263	9.243	19.194	0.924	17.436
1991	0.263	9.511	19.998	0.968	17.615
1992	0.253	9.756	20.787	1.036	17.662
1993	0.264	10.095	21.797	1.081	17.644
1994	0.264	10.425	22.786	1.131	17.655
1995	0.252	10.81	23.932	1.194	17.685
1996	0.246	11.191	25.053	1.256	17.696
1997	0.243	11.687	26.45	1.326	17.731
1998	0.243	12.161	27.814	1.37	17.773
1999	0.243	12.731	29.432	1.439	17.853
2000	0.243	13.307	31.048	1.512	17.934