

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 8672
1471 SCOM 55: JNT. SPEC. COMM. ON STATE TAX POLICY, 1986-1987

1271

	TAX LIABILITY PFD NON- TAXABLE
	SUM
AGI GROUP	
LOSS	547824.49
\$0 TO \$10000	3448219.05
\$10001 TO \$20000	20588905.15
\$20001 TO \$30000	33004165.89
\$30001 TO \$40000	42252960.29
\$40001 TO \$50000	46547320.56
\$50001 TO \$60000	44605319.14
\$60001 TO \$70000	42435032.58
\$70001 TO \$80000	39004746.98
\$80001 TO \$90000	33932050.43
\$90001 TO \$100000	27779428.14
\$100001 TO \$150000	70935134.31
\$150001 TO \$200000	14597778.60
\$200001 TO \$300000	2954918.56
\$300001 TO \$400000	1009540.49
OVER \$400000	4607912.90
TOTAL	428251257.55

	N	PCTN	WAGE & SALARY MEAN	ADJ GROSS INCOME MEAN	TAXABLE INCOME MEAN	NUMBER OF EXEMPTIONS MEAN	VALUE OF EXEMPTIONS MEAN	TAX LIABILITY PFD TAXABLE MEAN	PAID FROM FEDRL TAX MEAN
AGI GROUP									
LOSS	2264	1.03	9500.91	-21656.09	4032.87	2.80	10031.82	248.72	59.75
\$0 TO \$10000	38092	17.35	4552.78	5750.26	1508.72	1.48	5319.46	116.72	2.24
\$10001 TO \$20000	39603	18.04	13419.63	15652.98	8664.71	1.77	6357.16	572.08	18.45
\$20001 TO \$30000	31514	14.35	22702.35	26162.22	17454.76	2.12	7618.44	1111.98	94.95
\$30001 TO \$40000	26099	11.89	33887.76	37219.94	26982.49	2.50	8970.89	1692.49	231.76
\$40001 TO \$50000	21295	9.70	43466.56	47816.86	36430.56	2.79	10011.02	2265.90	444.39
\$50001 TO \$60000	16056	7.31	51364.98	58340.70	46301.82	2.95	10584.78	2861.73	701.61
\$60001 TO \$70000	12422	5.66	60569.66	69515.94	56935.32	3.08	11060.06	3502.69	909.39
\$70001 TO \$80000	9564	4.36	68790.62	81006.25	67971.47	3.19	11451.29	4166.89	1117.28
\$80001 TO \$90000	7028	3.20	76318.11	93462.12	80468.72	3.17	11368.98	4917.73	1425.30
\$90001 TO \$100000	4866	2.22	79164.82	108206.00	95148.06	3.21	11512.42	5799.12	1751.80
\$100001 TO \$150000	9346	4.26	89354.30	139680.94	126498.21	3.24	11615.12	7680.64	2289.24
\$150001 TO \$200000	1171	0.53	107892.21	220638.53	207767.98	3.17	11386.00	12555.15	3419.27
\$200001 TO \$300000	143	0.07	96745.36	355228.72	344396.10	2.64	9484.36	20744.66	5411.35
\$300001 TO \$400000	37	0.02	161267.92	466906.89	454747.97	2.97	10667.03	27374.39	7664.83
OVER \$400000	84	0.04	191266.93	927500.58	914268.43	3.27	11746.43	54945.25	14922.23
TOTAL	219584	100	33726.55	41346.55	32504.74	2.34	8388.18	2014.23	450.64

	TAX LIABILITY PFD NON- TAXABLE
	MEAN
AGI GROUP	
LOSS	241.97
\$0 TO \$10000	90.52
\$10001 TO \$20000	519.88
\$20001 TO \$30000	1047.29
\$30001 TO \$40000	1618.95
\$40001 TO \$50000	2185.83
\$50001 TO \$60000	2778.11
\$60001 TO \$70000	3416.12
\$70001 TO \$80000	4078.29
\$80001 TO \$90000	4828.12
\$90001 TO \$100000	5708.88
\$100001 TO \$150000	7589.89
\$150001 TO \$200000	12466.08
\$200001 TO \$300000	20663.77
\$300001 TO \$400000	27284.88
OVER \$400000	54856.11
TOTAL	1950.28

Liability to Collections

The projected time pattern generated from 1970 - 1979 accounting data can be used to translate the projected tax year collections presented in the tables below into gross receipts (col. 2), refunds (col. 3), and net receipts (col. 4) by quarter and fiscal year. The U. S. Consumer Price Index (col. 5) is used to deflate or inflate the net receipts in nominal dollars to real 1986 dollars (col. 6) so we can compare estimated 1988 through 1992 projected fiscal year collections to actual collections from 1975 through 1979.

TABLE 37
(PFD TAXABLE)
LIABILITY TO COLLECTIONS
TAX ALTERNATIVE THREE
LOW ECONOMIC SCENARIO

-----USING HISTORICAL DATA-----											
FY/Q	GROSS RECEIPTS (\$m nom)	REFUNDS (\$m nom)	NET RECEIPTS (\$m nom)	CPI	NET REC \$86 (\$m real)	FY/Q	GROSS RECEIPTS (\$m nom)	REFUNDS (\$m nom)	NET RECEIPTS (\$m nom)	CPI	NET REC \$86 (\$m real)
86				325.98		86				325.98	
75/1	\$18	\$1	\$17			88/1	\$0	\$1	(\$1)		
/2	\$25	\$0	\$25			/2	\$0	\$0	(\$0)		
/3	\$27	\$2	\$25			/3	\$1	\$3	(\$1)		
/4	\$34	\$14	\$21			/4	\$80	\$6	\$74		
TOTAL	\$104	\$16	\$87	155.16	\$184	TOTAL	\$81	\$9	\$72	338.66	\$69
76/1	\$36	\$2	\$34			89/1	\$106	\$5	\$101		
/2	\$46	\$1	\$45			/2	\$140	\$2	\$138		
/3	\$47	\$13	\$34			/3	\$136	\$16	\$120		
/4	\$50	\$16	\$34			/4	\$113	\$36	\$76		
TOTAL	\$178	\$31	\$147	166.17	\$288	TOTAL	\$495	\$60	\$435	354.17	\$401
77/1	\$53	\$3	\$50			90/1	\$110	\$6	\$103		
/2	\$62	\$1	\$61			/2	\$145	\$2	\$143		
/3	\$77	\$15	\$63			/3	\$141	\$20	\$121		
/4	\$60	\$22	\$38			/4	\$116	\$44	\$72		
TOTAL	\$252	\$41	\$210	175.80	\$390	TOTAL	\$511	\$72	\$439	370.39	\$386
78/1	\$46	\$3	\$43			91/1	\$113	\$5	\$108		
/2	\$43	\$1	\$42			/2	\$149	\$2	\$147		
/3	\$42	\$6	\$36			/3	\$145	\$16	\$129		
/4	\$50	\$25	\$25			/4	\$119	\$35	\$84		
TOTAL	\$181	\$36	\$146	187.62	\$253	TOTAL	\$525	\$57	\$468	387.35	\$394
79/1	\$43	\$10	\$33			92/1	\$115	\$5	\$110		
/2	\$42	\$1	\$41			/2	\$152	\$2	\$150		
/3	\$42	\$15	\$27			/3	\$148	\$15	\$132		
/4	\$47	\$31	\$16			/4	\$119	\$34	\$86		
TOTAL	\$174	\$57	\$117	205.22	\$186	TOTAL	\$534	\$55	\$478	405.09	\$385

TABLE 38
1988 TAX ALTERNATIVE THREE
MODERATE ECONOMIC SCENARIO

	F	PCTN	WAGE & SALARY SUM	ADJ GROSS INCOME SUM	TAXABLE INCOME SUM	NUMBER OF EXEMPTIONS SUM	VALUE OF EXEMPTIONS SUM	TAX LIABILITY PFD TAXABLE SUM	PAID FROM FEDRL TAX SUM
AGI GROUP									
LOSS	3100	1.17	28281141.00	-61444490.96	13050612.80	8295.00	24885000.00	802867.07	192509.44
\$0 TO \$10000	59403	22.42	270128023.00	338555016.00	112263277.23	85667.00	257001000.00	8426346.28	156500.08
\$10001 TO \$20000	54784	20.68	728576580.00	851035482.08	513731088.97	98951.00	296853000.00	33682409.78	1117048.92
\$20001 TO \$30000	39411	14.88	891007933.00	1030107863.38	725125986.45	88043.00	264129000.00	46011697.89	3884640.59
\$30001 TO \$40000	31031	11.71	1030650179.00	1150799371.58	868683323.79	81746.00	245238000.00	54352999.43	7342828.55
\$40001 TO \$50000	23954	9.04	1032909499.00	1142649829.99	903678937.79	69458.00	208374000.00	56073826.01	11329421.42
\$50001 TO \$60000	17163	6.48	882968616.00	998647869.19	820618869.19	51769.00	155307000.00	50611612.15	12440614.93
\$60001 TO \$70000	12206	4.61	742422172.00	844152753.33	712851753.33	38244.00	114732000.00	43774065.20	11356004.34
\$70001 TO \$80000	8524	3.22	588115204.00	688799061.32	595524561.32	27190.00	81570000.00	36442563.68	9553284.13
\$80001 TO \$90000	5672	2.14	432324512.00	528886838.01	467107838.01	17968.00	53904000.00	28503290.28	8394351.80
\$90001 TO \$100000	3549	1.34	282732742.00	381335884.95	342742384.95	11218.00	33654000.00	20861993.10	6307408.58
\$100001 TO \$150000	5427	2.05	473620536.00	748821667.34	689442667.34	17285.00	51855000.00	41819080.04	12371937.27
\$150001 TO \$200000	470	0.18	47369847.00	101944043.67	97122293.67	1404.00	4212000.00	5863922.62	1574844.83
\$200001 TO \$300000	49	0.02	4666366.00	18125990.20	17725490.20	116.00	348000.00	1066679.41	263407.07
\$300001 TO \$400000	95	0.04	15666462.00	46314279.44	45156279.44	339.00	1017000.00	2717836.77	753060.43
OVER \$400000	83	0.03	17633031.00	85184874.61	84301374.61	256.00	768000.00	5065012.48	1353182.02
TOTAL	264921	100	7469072843.00	8893916334.10	7009126739.06	597949.00	1793847000.00	436076202.17	88691044.41

AGI GROUP	TAX LIABILITY PFD NON- TAXABLE	
	SUM	
LOSS	783036.77	
\$0 TO \$10000	6735796.63	
\$10001 TO \$20000	30623865.34	
\$20001 TO \$30000	43507559.19	
\$30001 TO \$40000	52120999.43	
\$40001 TO \$50000	54220736.27	
\$50001 TO \$60000	49237132.15	
\$60001 TO \$70000	42771105.20	
\$70001 TO \$80000	35731473.68	
\$80001 TO \$90000	28026470.26	
\$90001 TO \$100000	20564543.10	
\$100001 TO \$150000	41366560.04	
\$150001 TO \$200000	5837337.62	
\$200001 TO \$300000	1063529.41	
\$300001 TO \$400000	2709376.77	
OVER \$400000	5058082.48	
TOTAL	420567606.34	

	N	PCTN	WAGE & SALARY		ADJ GROSS INCOME		TAXABLE INCOME		NUMBER OF EXEMPTIONS		VALUE OF EXEMPTIONS		TAX LIABILITY		PAID FROM	
			MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
AGI GROUP																
LOSS	3100	1.17	9122.95		-19878.52		4209.88		2.88		8027.42		258.99			62.10
00 TO \$10000	59403	22.42	4567.38		5726.77		1889.86		1.44		4326.40		141.85			2.63
\$10001 TO \$20000	54784	20.68	13299.08		15570.76		9377.39		1.81		5418.61		614.82			20.39
\$20001 TO \$30000	39411	14.88	22608.10		26192.07		18399.08		2.23		6701.91		1167.48			98.57
\$30001 TO \$40000	31031	11.71	33213.57		37138.13		27994.05		2.63		7903.00		1751.57			236.63
\$40001 TO \$50000	23954	9.04	43120.54		47765.65		37225.60		2.90		8698.92		2340.90			472.97
\$50001 TO \$60000	17163	6.48	51446.05		58264.17		47813.25		3.02		9048.94		2948.88			724.85
\$60001 TO \$70000	12206	4.61	60824.36		69255.29		58401.75		3.13		9399.64		3586.27			930.36
\$70001 TO \$80000	8524	3.22	68995.21		80939.96		69864.45		3.19		9569.45		4275.29			1159.95
\$80001 TO \$90000	5672	2.14	76220.82		93376.91		82353.29		3.17		9503.53		5025.26			1479.96
\$90001 TO \$100000	3549	1.34	79665.47		107539.73		96574.35		3.16		9482.67		5878.27			1777.24
\$100001 TO \$150000	5427	2.05	87271.15		138031.64		127039.37		3.19		9555.00		7705.75			2279.70
\$150001 TO \$200000	470	0.18	100786.91		216902.22		206643.18		2.99		8961.70		12476.43			3350.73
\$200001 TO \$300000	49	0.02	95231.96		369918.17		361744.70		2.37		7102.04		21768.97			5375.65
\$300001 TO \$400000	95	0.04	164910.13		487518.73		475329.26		3.57		10705.26		28608.81			7926.95
OVER \$400000	83	0.03	212446.16		1026323.79		1015679.21		3.08		9253.01		61024.25			16303.40
TOTAL	264921	100	28193.39		33656.15		26457.42		2.26		6771.25		1646.06			334.78

	TAX LIABILITY PFD NON- TAXABLE
	MEAN
AGI GROUP	
LOSS	252.59
\$0 TO \$10000	113.39
\$10001 TO \$20000	562.64
\$20001 TO \$30000	1103.94
\$30001 TO \$40000	1679.64
\$40001 TO \$50000	2263.54
\$50001 TO \$60000	2868.80
\$60001 TO \$70000	3504.10
\$70001 TO \$80000	4191.87
\$80001 TO \$90000	4941.20
\$90001 TO \$100000	5794.46
\$100001 TO \$150000	7622.36
\$150001 TO \$200000	12398.59
\$200001 TO \$300000	21704.68
\$300001 TO \$400000	28519.76
OVER \$400000	60940.75
TOTAL	1587.45

TABLE 39
1989 TAX ALTERNATIVE THREE
MODERATE ECONOMIC SCENARIO

	N	PCTN	WAGE & SALARY SUM	ADJ GROSS INCOME SUM	TAXABLE INCOME SUM	NUMBER OF EXEMPTIONS SUM	VALUE OF EXEMPTIONS SUM	TAX LIABILITY PFD TAXABLE SUM	PAID FROM FEDRL TAX SUM
AGI GROUP									
LOSS	3006	1.12	28070529.00	-64487886.75	14005505.36	8114.00	25456863.60	860898.06	214771.75
\$0 TO \$10000	56662	21.11	257635640.00	324767512.55	101609692.50	82012.00	257304448.80	7761324.73	149267.74
\$10001 TO \$20000	54308	20.24	720811102.00	844326250.27	497945908.19	97269.00	305171760.60	32849617.72	1059389.00
\$20001 TO \$30000	39735	14.81	897217379.00	1038269296.78	722179079.67	87008.00	272978899.20	45930920.39	3894861.32
\$30001 TO \$40000	31588	11.77	1055289336.00	1174989186.46	879729725.79	81557.00	255876931.80	55169643.99	7535060.00
\$40001 TO \$50000	24634	9.18	1062494637.00	1175937775.50	921387941.12	70535.00	221296509.00	57297692.47	11523910.16
\$50001 TO \$60000	17785	6.63	913542735.00	1035260965.56	842592591.76	53447.00	167684617.80	52065875.51	12790933.05
\$60001 TO \$70000	13042	4.86	791237713.00	903171006.17	757484094.97	40429.00	126841944.60	46587461.70	12095129.78
\$70001 TO \$80000	9356	3.49	643333916.00	757004148.90	649899883.50	29782.00	93438046.80	39825449.01	10752217.50
\$80001 TO \$90000	6388	2.38	486846827.00	595002856.86	522019467.06	20259.00	63560586.60	31892560.02	9347484.76
\$90001 TO \$100000	4223	1.57	333768399.00	456522662.61	407971046.41	13467.00	42251365.80	24857030.78	7481700.80
\$100001 TO \$150000	6717	2.50	592160693.00	933514844.65	856114317.05	21486.00	67410176.40	51965539.02	15358197.96
\$150001 TO \$200000	658	0.25	67581334.00	143041504.29	135868603.49	1992.00	6249700.80	8207508.21	2212744.60
\$200001 TO \$300000	78	0.03	6477017.00	32038015.94	31378083.94	180.00	564732.00	1888397.04	494919.05
\$300001 TO \$400000	90	0.03	13946040.00	45523451.28	44406919.88	311.00	975731.40	2672863.19	735332.89
OVER \$400000	80	0.03	15339488.00	76761347.92	75814674.32	264.00	828273.60	4555984.46	1262938.77
TOTAL	268350	100	7885752785.00	9471642938.98	7460407534.96	608112.00	1907890588.79	464441766.29	96908859.12

	TAX LIABILITY PFD NON- TAXABLE
	SUM
AGI GROUP	
LOSS	840330.32
\$0 TO \$10000	6096581.55
\$10001 TO \$20000	29876754.49
\$20001 TO \$30000	43330744.78
\$30001 TO \$40000	52783783.55
\$40001 TO \$50000	55283276.47
\$50001 TO \$60000	50555555.51
\$60001 TO \$70000	45449045.70
\$70001 TO \$80000	38993993.01
\$80001 TO \$90000	31321168.02
\$90001 TO \$100000	24478262.78
\$100001 TO \$150000	51366859.02
\$150001 TO \$200000	8152116.21
\$200001 TO \$300000	1882685.04
\$300001 TO \$400000	2664415.19
OVER \$400000	4548880.46
TOTAL	447624452.10

AGI GROUP	N	PCTN	WAGE & SALARY	ADJ GROSS INCOME	TAXABLE INCOME	NUMBER OF EXEMPTIONS	VALUE OF EXEMPTIONS	TAX LIABILITY PFD TAXABLE	PAID FROM FEDRL TAX
			MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
LOSS	3006	1.12	9338.17	-21510.30	4659.18	2.70	8468.68	286.39	71.45
\$0 TO \$10000	56662	21.11	4546.89	5759.00	1793.26	1.45	4541.04	136.98	2.63
\$10001 TO \$20000	54308	20.24	13272.65	15582.86	9168.92	1.79	5619.28	604.88	19.51
\$20001 TO \$30000	39735	14.81	22580.03	26186.52	18174.89	2.19	6869.99	1157.19	98.02
\$30001 TO \$40000	31588	11.77	33407.92	37257.48	27850.12	2.58	8100.45	1746.54	238.54
\$40001 TO \$50000	24634	9.18	43131.23	47798.46	37403.10	2.86	8983.38	2325.96	467.81
\$50001 TO \$60000	17785	6.63	51365.91	58281.88	47376.59	3.01	9428.43	2927.52	719.20
\$60001 TO \$70000	13042	4.86	60668.43	69330.70	58080.36	3.10	9725.65	3572.11	927.40
\$70001 TO \$80000	9356	3.49	68761.64	81058.37	69463.43	3.18	9986.97	4256.67	1149.23
\$80001 TO \$90000	6388	2.38	76212.72	93304.51	81718.76	3.17	9950.00	4992.57	1463.29
\$90001 TO \$100000	4223	1.57	79035.85	108155.10	96606.93	3.19	10005.06	5886.11	1771.66
\$100001 TO \$150000	6717	2.50	88158.51	139060.75	127454.86	3.20	10035.76	7736.87	2286.47
\$150001 TO \$200000	658	0.25	102707.19	217388.30	206487.24	3.03	9498.03	12473.42	3362.83
\$200001 TO \$300000	78	0.03	83038.68	410743.79	402283.13	2.31	7240.15	24210.22	6345.12
\$300001 TO \$400000	90	0.03	154956.00	505816.13	493410.22	3.46	10841.46	29698.48	8170.37
OVER \$400000	80	0.03	191743.60	959516.85	947683.43	3.30	10353.42	56949.81	15786.73
TOTAL	268350	100	29386.07	35380.50	27801.03	2.27	7109.71	1730.73	361.13

	TAX LIABILITY PFD NON- TAXABLE
	MEAN
AGI GROUP	
LOSS	279.55
\$0 TO \$10000	107.60
\$10001 TO \$20000	550.14
\$20001 TO \$30000	1090.49
\$30001 TO \$40000	1671.01
\$40001 TO \$50000	2244.19
\$50001 TO \$60000	2842.60
\$60001 TO \$70000	3484.82
\$70001 TO \$80000	4167.81
\$80001 TO \$90000	4903.13
\$90001 TO \$100000	5796.42
\$100001 TO \$150000	7647.29
\$150001 TO \$200000	12389.23
\$200001 TO \$300000	24136.99
\$300001 TO \$400000	29604.61
OVER \$400000	56861.01
TOTAL	1668.06

TABLE 40
1990 TAX ALTERNATIVE THREE
MODERATE ECONOMIC SCENARIO

	N	PCTN	WAGE & SALARY SUM	ADJ GROSS INCOME SUM	TAXABLE INCOME SUM	NUMBER OF EXEMPTIONS SUM	VALUE OF EXEMPTIONS SUM	TAX LIABILITY PD TAXABLE SUM	PAID FROM FEDERAL TAX SUM
AGI GROUP									
LOSS	2925	1.09	26365568.00	-59283482.17	12785719.14	7950.00	26084745.00	787526.79	192237.83
\$0 TO \$10000	53944	20.14	244905721.00	308713792.33	92333065.77	77609.00	254642889.90	7075103.24	133916.20
\$10001 TO \$20000	52742	19.70	703208749.00	821126187.45	478190844.15	93055.00	305322760.50	31520753.19	1022498.69
\$20001 TO \$30000	39408	14.72	893115999.00	1028639440.14	710315166.03	84237.00	276390020.70	45200539.41	3848250.88
\$30001 TO \$40000	31554	11.78	1062534280.00	1173442339.22	871851394.21	80088.00	262776736.80	54660124.73	7491232.92
\$40001 TO \$50000	24721	9.23	1067862265.00	1177443432.09	915177720.65	69872.00	229257019.20	56909383.24	11317667.49
\$50001 TO \$60000	18138	6.77	932249695.00	1056722125.05	854613776.65	53910.00	176884101.00	52803274.60	12963983.69
\$60001 TO \$70000	13563	5.06	822511897.00	939857608.90	783153088.70	41827.00	137238569.70	48166001.32	12489144.91
\$70001 TO \$80000	10073	3.76	695422872.00	814731935.87	695239337.97	31954.00	104844269.40	42606056.28	11493425.54
\$80001 TO \$90000	6963	2.60	532100419.00	649054524.68	566389491.68	22062.00	72387628.20	34606313.50	10117572.39
\$90001 TO \$100000	4660	1.74	370013362.00	504648932.17	449283663.87	14755.00	48412630.50	27374571.83	8244947.66
\$100001 TO \$150000	7947	2.97	701929743.00	1102877983.44	1006764962.94	25661.00	84196307.10	61121721.78	18150384.29
\$150001 TO \$200000	853	0.32	89488808.00	186064265.47	176168480.37	2641.00	8665385.10	10643932.82	2872000.80
\$200001 TO \$300000	109	0.04	9900570.00	42186195.84	41153574.44	274.00	899021.40	2477230.47	627972.21
\$300001 TO \$400000	108	0.04	15989348.00	53490334.51	52147781.81	357.00	1171352.70	3139138.91	844963.37
OVER \$400000	74	0.03	14865466.00	74469794.42	73576011.52	240.00	787464.00	4421136.69	1225183.64
TOTAL	267782	100	8182464762.00	9874179409.39	7779144079.85	606492.00	1989960901.19	483512808.79	103035387.46

	TAX LIABILITY PFD NON- TAXABLE
	SUM
AGI GROUP	
LOSS	767143.15
\$0 TO \$10000	5539983.95
\$10001 TO \$20000	28691450.65
\$20001 TO \$30000	42618909.96
\$30001 TO \$40000	52311083.65
\$40001 TO \$50000	54910663.24
\$50001 TO \$60000	51276826.60
\$60001 TO \$70000	46989185.32
\$70001 TO \$80000	41714360.28
\$80001 TO \$90000	33983369.50
\$90001 TO \$100000	26957019.83
\$100001 TO \$150000	60405897.78
\$150001 TO \$200000	10570108.82
\$200001 TO \$300000	2469214.47
\$300001 TO \$400000	3128866.91
OVER \$400000	4414560.69
TOTAL	466748644.79

	N	PCTN	WAGE & SALARY MEAN	ADJ GROSS INCOME MEAN	TAXABLE INCOME MEAN	NUMBER OF EXEMPTIONS MEAN	VALUE OF EXEMPTIONS MEAN	TAX LIABILITY PFD TAXABLE MEAN	PAID FROM FEDRL TAX MEAN
AGI GROUP									
LOSS	2925	1.09	9013.87	-20309.52	4371.19	2.72	8917.86	269.24	65.72
\$0 TO \$10000	53944	20.14	4540.00	5749.72	1711.65	1.44	4720.50	131.16	2.48
\$10001 TO \$20000	52742	19.70	13332.99	15603.35	9066.60	1.76	5788.99	597.64	19.39
\$20001 TO \$30000	39408	14.72	22663.32	26149.41	18024.64	2.14	7013.55	1146.99	97.65
\$30001 TO \$40000	31554	11.78	33673.52	37239.13	27630.46	2.54	8327.84	1732.27	237.41
\$40001 TO \$50000	24721	9.23	43196.56	47687.15	37020.25	2.83	9273.78	2302.07	457.82
\$50001 TO \$60000	18138	6.77	51397.60	58337.32	47117.31	2.97	9752.13	2911.20	714.74
\$60001 TO \$70000	13563	5.06	60643.80	69377.55	57741.88	3.08	10118.60	3551.28	920.82
\$70001 TO \$80000	10073	3.76	69038.31	81043.66	69020.09	3.17	10408.45	4220.73	1141.01
\$80001 TO \$90000	6963	2.60	76418.27	93375.70	81342.74	3.17	10396.04	4970.03	1453.05
\$90001 TO \$100000	4660	1.74	79402.01	108317.01	96412.80	3.17	10388.98	5874.37	1769.30
\$100001 TO \$150000	7947	2.97	88326.38	138813.34	126684.91	3.23	10594.73	7691.17	2283.93
\$150001 TO \$200000	853	0.32	104910.68	218129.27	206528.11	3.10	10158.72	12478.23	3366.94
\$200001 TO \$300000	109	0.04	90830.92	387029.32	377555.73	2.51	8247.90	22726.89	5761.21
\$300001 TO \$400000	108	0.04	148049.52	495280.88	482849.83	3.31	10845.86	29066.10	7823.73
OVER \$400000	74	0.03	200884.68	1020134.17	994270.43	3.24	10641.41	50745.09	16556.60
TOTAL	267782	100	30556.44	36956.06	29050.29	2.26	7431.27	1805.62	384.77

	TAX LIABILITY P/D NON- TAXABLE
	MEAN
AGI GROUP	
LOSS	262.27
\$0 TO \$10000	102.70
\$10001 TO \$20000	544.00
\$20001 TO \$30000	1081.48
\$30001 TO \$40000	1657.83
\$40001 TO \$50000	2221.22
\$50001 TO \$60000	2827.04
\$60001 TO \$70000	3464.51
\$70001 TO \$80000	4141.21
\$80001 TO \$90000	4880.56
\$90001 TO \$100000	5784.77
\$100001 TO \$150000	7601.09
\$150001 TO \$200000	12391.69
\$200001 TO \$300000	22653.34
\$300001 TO \$400000	28970.99
OVER \$400000	59656.23
TOTAL	1743.02

TABLE 41
1991 TAX ALTERNATIVE THREE
MODERATE ECONOMIC SCENARIO

	N	PCTN	WAGE & SALARY SUM	ADJ GROSS INCOME SUM	TAXABLE INCOME SUM	NUMBER OF EXEMPTIONS SUM	VALUE OF EXEMPTIONS SUM	TAX LIABILITY PFD TAXABLE SUM	PAID FROM FEDRL TAX SUM
AGI GROUP									
LOSS	2826	1.05	26151717.00	-58930891.94	13232457.15	7702.00	26428642.80	812253.74	206797.43
\$0 TO \$10000	51193	19.07	233394604.00	292786918.06	82582252.75	74429.00	255395670.60	6357076.19	122147.60
\$10001 TO \$20000	51365	19.14	686318284.00	799113086.17	456138304.79	90083.00	309110806.20	30075759.46	960092.44
\$20001 TO \$30000	39219	14.61	889736838.00	1022530539.62	697377972.92	82853.00	284301784.20	44376178.30	3799309.46
\$30001 TO \$40000	31792	11.85	1071210898.00	1181316606.58	870469704.91	79365.00	272333061.00	54562460.60	7476603.34
\$40001 TO \$50000	25107	9.35	1086818833.00	1197238525.45	924169008.81	69920.00	239923488.00	57457212.53	11392842.50
\$50001 TO \$60000	18680	6.94	959615727.00	1087936586.28	873345010.88	55022.00	188802490.80	53960604.65	13257555.05
\$60001 TO \$70000	14172	5.28	862239297.00	983541884.84	813410134.24	43674.00	149862963.60	50030000.05	12980124.62
\$70001 TO \$80000	10701	3.99	734716610.00	866083961.40	734339276.20	33882.00	116262694.80	45002452.57	12088821.85
\$80001 TO \$90000	7572	2.82	576125158.00	705032371.02	611844727.42	23906.00	82031048.40	37386667.65	10876714.54
\$90001 TO \$100000	5223	1.95	412975522.00	565674142.95	501083315.95	16559.00	56820552.60	30532038.96	9204619.46
\$100001 TO \$150000	9204	3.43	813480190.00	1285842525.18	1170104913.78	29707.00	101936599.80	71035590.83	20994394.11
\$150001 TO \$200000	1073	0.40	113944305.00	231801267.08	218668417.68	3371.00	11567249.40	13214041.06	3616272.24
\$200001 TO \$300000	143	0.05	15670147.00	52588873.08	51206514.48	349.00	1197558.60	3083478.87	804852.83
\$300001 TO \$400000	44	0.02	7005312.00	22124906.06	21571247.26	142.00	487258.80	1298258.84	332590.66
OVER \$400000	79	0.03	15733671.00	86653603.57	85677122.17	251.00	861281.40	5147539.33	1428588.95
TOTAL	268393	100	8505137113.00	10321334905	8125220381.34	611215.00	2097323150.99	504331613.52	107547127.07

	TAX LIABILITY PFD NON- TAXABLE
	SUM
AGI GROUP	
LOSS	793947.43
\$0 TO \$10000	4954935.17
\$10001 TO \$20000	27368298.29
\$20001 TO \$30000	41842678.38
\$30001 TO \$40000	52228182.29
\$40001 TO \$50000	55450140.53
\$50001 TO \$60000	52400700.65
\$60001 TO \$70000	48804608.05
\$70001 TO \$80000	44060356.57
\$80001 TO \$90000	36710683.65
\$90001 TO \$100000	30064998.96
\$100001 TO \$150000	70206294.83
\$150001 TO \$200000	13120105.06
\$200001 TO \$300000	3072390.87
\$300001 TO \$400000	1294274.84
OVER \$400000	5140627.33
TOTAL	487513222.88

	N	PCTN	WAGE & SALARY	ADJ GROSS INCOME	TAXABLE INCOME	NUMBER OF EXEMPTIONS	VALUE OF EXEMPTIONS	TAX LIABILITY PFD TAXABLE	PAID FROM FEDRL TAX
			MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
AGI GROUP									
LOSS	2826	1.03	9253.97	-20904.89	4682.40	2.73	9351.96	287.42	73.18
\$0 TO \$10000	51193	19.07	4559.11	5746.33	1613.16	1.45	4988.88	124.18	2.39
\$10001 TO \$20000	51365	19.14	13361.59	15592.75	8880.33	1.75	6017.93	585.53	18.69
\$20001 TO \$30000	39219	14.61	22686.37	26124.95	17781.64	2.11	7249.08	1131.50	96.87
\$30001 TO \$40000	31792	11.85	33694.35	37213.85	27380.15	2.50	8566.09	1716.23	235.17
\$40001 TO \$50000	25107	9.35	43287.48	47742.49	36809.22	2.78	9556.04	2288.49	453.77
\$50001 TO \$60000	18680	6.96	51371.29	58309.39	46752.94	2.95	10107.20	2888.68	709.72
\$60001 TO \$70000	14172	5.28	60841.05	69473.89	57395.58	3.08	10574.58	3530.20	915.90
\$70001 TO \$80000	10701	3.99	68658.69	81094.00	68623.43	3.17	10864.66	4205.44	1129.69
\$80001 TO \$90000	7572	2.82	76086.26	93245.92	80803.58	3.16	10833.47	4937.49	1436.44
\$90001 TO \$100000	5223	1.95	79068.64	108345.94	95937.84	3.17	10878.91	5845.69	1762.32
\$100001 TO \$150000	9204	3.43	88383.33	139735.11	127130.04	3.23	11075.25	7717.90	2281.01
\$150001 TO \$200000	1073	0.40	106192.27	216031.00	203791.63	3.14	10780.29	12315.04	3370.24
\$200001 TO \$300000	143	0.05	109581.45	367754.36	358087.51	2.44	8374.54	21562.79	5628.34
\$300001 TO \$400000	44	0.02	159211.64	502838.77	490255.62	3.23	11074.06	29505.88	7558.88
OVER \$400000	79	0.03	199160.39	1096881.06	1084520.53	3.18	10902.30	65158.73	18083.40
TOTAL	268393	100	31689.12	38541.35	30273.59	2.28	7814.37	1879.03	408.14

AGI GROUP	TAX LIABILITY PFD NON- TAXABLE
	MEAN
LOSS	280.94
\$0 TO \$10000	96.79
\$10001 TO \$20000	532.82
\$20001 TO \$30000	1066.90
\$30001 TO \$40000	1642.81
\$40001 TO \$50000	2208.55
\$50001 TO \$60000	2805.18
\$60001 TO \$70000	3443.73
\$70001 TO \$80000	4117.41
\$80001 TO \$90000	4848.21
\$90001 TO \$100000	5756.27
\$100001 TO \$150000	7627.80
\$150001 TO \$200000	12227.50
\$200001 TO \$300000	21485.25
\$300001 TO \$400000	29415.34
OVER \$400000	65071.23
TOTAL	1816.42

TABLE 42
1992 TAX ALTERNATIVE THREE
MODERATE ECONOMIC SCENARIO

	N	PCTN	WAGE & SALARY SUM	ADJ GROSS INCOME SUM	TAXABLE INCOME SUM	NUMBER OF EXEMPTIONS SUM	VALUE OF EXEMPTIONS SUM	TAX LIABILITY PFD TAXABLE SUM	PAID FROM FEDRL TAX SUM
AGI GROUP									
LOSS	2782	1.03	25603313.00	-59702639.05	11455782.37	7712.00	27670656.00	705950.06	173310.50
\$0 TO \$10000	48792	18.13	223074635.00	278533905.75	74264960.12	71311.00	255863868.00	5737763.75	120369.43
\$10001 TO \$20000	50190	18.65	676856501.00	781699606.62	437070798.72	87589.00	314269332.00	28825677.70	925686.31
\$20001 TO \$30000	38976	14.48	888895439.00	1015967845.12	685925171.17	80948.00	290441424.00	43635169.17	3766836.16
\$30001 TO \$40000	32175	11.96	1106841949.00	1198468641.04	876834833.99	78924.00	283179312.00	54942236.59	7650592.62
\$40001 TO \$50000	25484	9.47	1115540797.00	1217226964.02	932556988.44	70076.00	251432688.00	57968586.39	11463229.55
\$50001 TO \$60000	18908	7.53	972929669.00	1100596817.88	877852717.88	54889.00	196941732.00	54233083.07	13325054.77
\$60001 TO \$70000	14503	5.39	880193746.00	1006003243.51	827274559.51	44089.00	158191332.00	50878617.57	13233723.88
\$70001 TO \$80000	11144	4.14	765860468.00	901551955.07	759264427.07	35168.00	126182784.00	46535497.62	12522147.69
\$80001 TO \$90000	8039	2.99	611409955.00	749701168.29	647265140.29	25269.00	90665172.00	39550340.42	11447838.10
\$90001 TO \$100000	5768	2.14	455260282.00	625050219.33	550579703.33	18361.00	65879268.00	33551118.20	10111182.61
\$100001 TO \$150000	10728	3.99	956129483.00	1494754712.25	1354509524.25	34613.00	124191444.00	82236379.45	24404433.93
\$150001 TO \$200000	1357	0.50	144745472.00	297047438.64	279447590.64	4346.00	15593448.00	16887239.44	4572845.90
\$200001 TO \$300000	170	0.06	16224039.00	62192474.87	60351062.87	449.00	1611012.00	3634887.77	947458.93
\$300001 TO \$400000	28	0.01	4277365.00	13337617.96	12937605.96	99.00	355212.00	778944.36	210569.82
OVER \$400000	85	0.03	18159817.00	82022574.16	80793058.16	307.00	1101516.00	4855263.49	1346759.61
TOTAL	269129	100	8862002930.00	10764452545	8468383924.77	614150.00	2203570199.99	524956755.05	116222039.81

	TAX LIABILITY PTD NON- TAXABLE
	SUM
AGI GROUP	
LOSS	687346.94
\$0 TO \$10000	4455897.61
\$10001 TO \$20000	26224247.92
\$20001 TO \$30000	41155510.27
\$30001 TO \$40000	52610090.04
\$40001 TO \$50000	55953419.31
\$50001 TO \$60000	52671163.07
\$60001 TO \$70000	49636473.57
\$70001 TO \$80000	45555865.62
\$80001 TO \$90000	38835908.42
\$90001 TO \$100000	33034782.20
\$100001 TO \$150000	81270571.45
\$150001 TO \$200000	16766855.44
\$200001 TO \$300000	3621063.77
\$300001 TO \$400000	776256.36
OVER \$400000	4847583.49
TOTAL	508103035.48

	N	PCTN	WAGE & SALARY MEAN	ADJ GROSS INCOME MEAN	TAXABLE INCOME MEAN	NUMBER OF EXEMPTIONS MEAN	VALUE OF EXEMPTIONS MEAN	TAX LIABILITY PFD TAXABLE MEAN	PAID FROM FEDRL TAX MEAN
AGI GROUP									
LOSS	2782	1.03	9203.20	-21514.46	4117.82	2.77	9946.32	253.76	62.30
\$0 TO \$10000	48792	18.13	4571.95	5735.52	1522.07	1.46	5243.97	117.60	2.47
\$10001 TO \$20000	50190	18.65	13485.88	15611.82	8708.32	1.75	6261.59	574.33	18.44
\$20001 TO \$30000	38976	14.48	22806.23	26120.78	17598.65	2.08	7451.80	1119.54	96.65
\$30001 TO \$40000	32175	11.96	34400.68	37302.93	27252.05	2.45	8801.22	1707.61	237.78
\$40001 TO \$50000	25484	9.47	43774.16	47822.53	36593.82	2.75	9866.30	2274.71	449.82
\$50001 TO \$60000	18908	7.03	51455.98	58278.89	46427.58	2.90	10415.79	2868.26	704.73
\$60001 TO \$70000	14503	5.39	60690.46	69451.38	57041.62	3.04	10907.49	3508.14	912.48
\$70001 TO \$80000	11144	4.14	68724.02	81038.38	68132.13	3.16	11322.93	4175.83	1123.67
\$80001 TO \$90000	8039	2.99	76055.47	93409.07	80515.63	3.14	11278.17	4919.81	1424.04
\$90001 TO \$100000	5768	2.14	78928.62	108402.74	95454.18	3.18	11421.51	5816.77	1752.98
\$100001 TO \$150000	10728	3.99	89124.67	139384.06	126259.28	3.23	11576.38	7665.58	2274.84
\$150001 TO \$200000	1357	0.50	106665.79	218900.10	205930.43	3.20	11491.12	12444.54	3369.82
\$200001 TO \$300000	170	0.06	95435.52	365838.09	355006.25	2.64	9476.54	21381.69	5573.29
\$300001 TO \$400000	28	0.01	152763.04	476343.50	462057.36	3.54	12686.14	27819.44	7520.35
OVER \$400000	85	0.03	213644.91	964971.46	950506.57	3.61	12959.01	57120.75	15844.23
TOTAL	269129	100	32928.46	40085.70	31465.89	2.28	8187.78	1950.58	431.85

	TAX LIABILITY PFD NON- TAXABLE
	MEAN
AGI GROUP	
LOSS	247.07
\$0 TO \$10000	91.32
\$10001 TO \$20000	522.50
\$20001 TO \$30000	1055.92
\$30001 TO \$40000	1635.12
\$40001 TO \$50000	2195.63
\$50001 TO \$60000	2785.65
\$60001 TO \$70000	3422.50
\$70001 TO \$80000	4087.93
\$80001 TO \$90000	4830.94
\$90001 TO \$100000	5727.25
\$100001 TO \$150000	7575.56
\$150001 TO \$200000	12355.83
\$200001 TO \$300000	21300.38
\$300001 TO \$400000	27723.44
OVER \$400000	57030.39
TOTAL	1887.95

Liability to Collections

The projected time pattern generated from 1970 - 1979 accounting data can be used to translate the projected tax year collections presented in the tables below into gross receipts (col. 2), refunds (col. 3), and net receipts (col. 4) by quarter and fiscal year. The U. S. Consumer Price Index (col. 5) is used to deflate or inflate the net receipts in nominal dollars to real 1986 dollars (col. 6) so we can compare estimated 1988 through 1992 projected fiscal year collections to actual collections from 1975 through 1979.

TABLE 43
(PFD TAXABLE)
LIABILITY TO COLLECTIONS
TAX ALTERNATIVE THREE
MODERATE ECONOMIC SCENARIO

FY/Q	GROSS RECEIPTS (\$m nom)	REFUNDS (\$m nom)	NET RECEIPTS (\$m nom)	CPI	NET REC \$86 (\$m real)
86				325.98	
88/1	\$0	\$1	(\$1)		
/2	\$0	\$0	(\$0)		
/3	\$1	\$3	(\$1)		
/4	\$87	\$6	\$82		
TOTAL	\$89	\$9	\$79	338.66	\$76
89/1	\$116	\$5	\$111		
/2	\$153	\$2	\$151		
/3	\$149	\$16	\$132		
/4	\$126	\$36	\$89		
TOTAL	\$543	\$60	\$483	354.17	\$445
90/1	\$123	\$6	\$117		
/2	\$163	\$2	\$161		
/3	\$158	\$20	\$138		
/4	\$132	\$44	\$88		
TOTAL	\$576	\$72	\$504	370.39	\$443
91/1	\$128	\$5	\$123		
/2	\$169	\$2	\$168		
/3	\$165	\$16	\$149		
/4	\$137	\$35	\$103		
TOTAL	\$600	\$57	\$543	387.35	\$457
92/1	\$134	\$5	\$129		
/2	\$177	\$2	\$175		
/3	\$172	\$15	\$157		
/4	\$139	\$34	\$105		
TOTAL	\$621	\$55	\$566	405.09	\$455

METHOD

General Description of the Modelling Process

Alaska repealed its individual income tax beginning with tax year 1979. Because no data on state tax collections is available after that time the first task of this analysis was the development of a data base. These data sources were examined:

1. Statistics of Income data for years 1964-81.
2. Federal tape data for years 77, 78 and 81 to 85.
3. State income tax tapes for years 76 - 79.

The second step in the analysis was to conveniently and accurately summarize the information in these data bases. Tax analysis needs to consider both the aggregate level of income and the distribution across income classes of that income. Income distributions are frequently analyzed with some variant of lognormal or Pareto frequency distributions. This analysis used the lognormal distribution to analyze and summarize the information in the various available data bases.

The third step in this study was to examine how the parameters describing these income distributions varied over time as economic conditions changed. These historical relationships were then used to forecast how the income distribution might look in future years given a forecast of key economic variables. In addition to the distribution a forecast of the number of joint and non-joint returns was developed, again based on historical relationships to key economic variables.

At this point the analysis can predict the number of returns likely to be received in future years and the distribution of these returns across income classes. In the next step we sampled returns from the most recent federal tape in proportion to the estimated frequencies with adjustments made to reflect probable relationships between state and federal filings. Each return selected in the sample has information on income, exemptions and deductions.

The predicted distribution and the sampled returns provides a characterization of the state income tax base in future years. Tax structures can be varied by changing rates, exemption amounts and deductions. Revenue impacts are determined by running different tax structures against this base of tax returns.

The inflation rates used to index tax structure elements were those in the Petroleum Revenue forecast produced in December 1986.(20)

Data Description, Limitations and Use

Statistics of Income Data

Source: Statistics of Income Individual Income Tax Returns Department of
the Treasury Internal Revenue Services

Period of Availability: 1964-81

Type of Information: For all returns and joint returns by adjusted gross
income class:

Number of returns

Adjusted Gross Income less deficit

Salaries and wages - number of return and amount

Total number of exemptions

Total income tax - number of returns and amount

Description: This series of reports presents information based on a stratified sample of unaudited individual income tax returns filed by U.S. citizens and residents. Estimates in a given year's report are primarily based on returns for that income year but may reflect a small number of late filings from prior years. Data at the state level is based on the state address reported on the tax return.

Limitations:

The sample used to generate the reports is quite small and estimates are subject to some sampling error. While the sampling design insures that a minimum number of returns are selected from a small state like Alaska the presence of variation among possible samples needs to be recognized.

A second problem involves the level of detail presented in the reports. For instance about 80 percent of Federal Income tax paid by Alaskan residents in 1981 came from returns in two income classes \$30,000 to 50,000 and \$50,000 to 100,000. Given such broad groupings it is difficult to develop summary measures such as means or percentiles to characterize the returns in the income group. For tax estimating purposes it is important to know how returns are distributed within an income class and as a consequence this distribution needs to be estimated.

A final problem is that the data provides no information on persons earning income in Alaska but paying federal tax as a resident of another state.

Alaska Individual Income Tax Data

Source: Alaska Individual Income Tax Computer Tapes Department of Revenue, State of Alaska

Period of Availability: 1976-81, previous years lack complete information

Type of Information: For all returns:

- Adjusted Gross Income Federal
- Adjusted Gross Income Alaska
- Taxable income
- Total number of exemptions
- Total income tax

Description: The Alaska individual income tax data was collected to help administer the individual income tax program. These tapes include returns from persons owing income tax to the State, regardless of residence. The tapes have information on individual income tax returns submitted during the transaction year, regardless of the tax year of the return.

We combined the records from the same tax year into data sets, assuming that late filers tended to resemble the other records. This assumption was made with all the return data bases and is discussed above in the section on the Federal Income Tax Tapes.

Limitations: The short time span of this data limited its usefulness. The data was collected primarily to account for refunds and payments; and therefore, the accuracy of the basic income information was never verified.

Use: This data was used in a 1977 match with the 1977 Federal data base, as described above. It was also used to develop an out-of-state filer data base. This was used in addition to records from the Statistics of Income and Federal Income Tax analysis as both these are limited to returns filed from Alaskan addresses.

The out-of-state filers are migrants (in or out), non-resident workers, Alaska residents temporarily out of state (such as students or patients), and Alaskans at military stations or with delegations representing the State in various locations (such as Washington D. C.). Non-residents and part-year residents apportion their income, deductions and exemptions based on either percentage of income earned in this state compared to elsewhere, the source of deduction expenditures, or site of property which is the basis for deductions. These records do not resemble the in-state filers and have to be modelled separately.

Federal Income Tax Tapes

Source: Federal Individual Income Tax Computer Tapes, Department of Treasury, Internal Revenue Service

Period of Availability: 1977-84, (1979 and 1980 non-available)

Type of Information: For all returns:
Most fields on the Form 1040 and attached schedules

Description: The Federal individual income tax data was collected to help administer the individual income tax program. The state receives these tapes under the federal information exchange program. These tapes include returns from persons submitting their returns from Alaskan addresses. The tapes have information on individual income tax returns submitted during the transaction year and the previous tax year. Before the data is used, all identifying information such as name, social security number, address and character codes was removed from the data set.

Use: The tape data was then used as a benchmark for testing the accuracy of the SOI sample data (see description above). This data was used in a 1977 match with the 1977 Alaska data base, described above.

This was done to identify characteristics of the two groups of taxpayers whose status on the federal tape is inaccurate for state tax purposes: (1) filers who would owe state income tax but do not appear on the federal tax tape, and (2) filers who appear on the federal tape but file no state tax return.

The first group is composed mostly on nonresidents who earn part (or all) of their income in Alaska but file their federal income tax return from an address in another state. This group can also contain both inmigrants and outmigrants, as well as residents temporarily living out of the state (such as students, elected federal officials and their staffs, and Alaskans serving in the military). This group has been significant enough that it was estimated and included in the study data.

The second group is composed mostly of nonresident military living in the state whose income is taxed by the federal government but was not taxed by the state under old law. It also includes people whose only source of income is interest on federal government obligations. This group is small and has relatively small average adjusted gross income, thus no adjustment was made for them.

The latest year of the federal data (1984) was used to estimate the income tax liability generated by different income tax structures. The method for this is described above (see the first page of the METHOD section of this report).

Limitations: The short time span of this data limited its usefulness. The data is compiled on the assumption that late filers from the previous year adequately represent late filers for the current year. This same assumption is made when the IRS compiles its Statistics of Income publications. Since the SOI data was used to estimate the income distribution used in this study, the assumption was maintained.

This assumption has two primary disadvantages. First, it only allows for one year of late filers, while state income tax data prior to 1979 shows that multiple year late and amended filing are plentiful. Second, this assumption implies that one year late filers have roughly the same characteristics year to year. Analysis of the data suggests that this has been a fairly reasonable approximation of the past; however, whether this will remain true in an economic downturn or with a change in tax law is not known.

Cash Flow Data

Source: Cash Flow Computer Tapes Department of Revenue, State of Alaska

Period of Availability: 1970-86, (1980 is missing)

Type of Information: For all receipts:
Tax type
Tax amount received
Tax submitter
Date received

Description: The Department of Revenue Cash Flow data is an accounting system used to keep track of all monies that flow through the department.

Use: This data was used to determine the time pattern of payment for each tax year. From this pattern, we can translate the liability information in quarterly gross collections.

PBA Reports

Source: Monthly Revenue Journal, Department of Administration, State of Alaska

Period of Availability: 1969-86

Type of Information: For each month:
Tax type
Tax total received
Tax total refunded

Description: The PBA system was the State's automated accounting system until very recently (1986).

Use: We were unable to use the data tapes but used summary reports on receipts and refunds of individual income taxes to estimate the time pattern of collections. No information on the individual, individual amounts or tax year was available from these summary reports. The total receipts were used to compare and verify Cash Flow System totals. The refund information was the only good information we had on outflows, and as noted before was not identifiable by tax year. It was used to estimate a relationship between refunds and prior tax year receipts and to develop a quarterly refund pattern.

FOOTNOTES

- (1) Petroleum Revenue, Alaska Department of Revenue, December 1986
- (2) Ibid.
- (3) 1982 Tax Capacity of the Fifty States, Advisory Commission on Intergovernmental Relations, May 1985.
- (4) Ibid.
- (5) Guide to the New Tax Reform Law, Price Waterhouse, October 1986.
- (6) Ibid. p. vii.
- (7) Ibid. p. ix.
- (8) Ibid.
- (9) See data description in the METHOD section of this report.
- (10) The Book of the States (1986-87 edition), The Council of State Governments, 1986.
- (11) "The Impact of Collapse of the World Oil Market on the Alaska Economy", Scott Goldsmith, Institute for Social and Economic Research, University of Alaska, March 1986.
- (12) Revenue Sourcebook, Alaska Department of Revenue, (January 1987).
- (13) Fuel, Conservation, & Individual Credits Relative to the Individual Income Tax, Alaska Department of Revenue, (January 1980 and July 1981).
- (14) Guide to the New Tax Reform Law, Price Waterhouse, October 1986.
- (15) Revenue Sourcebook, Alaska Department of Revenue, (January 1987).
- (16) Fuel, Conservation, & Individual Credits Relative to the Individual Income Tax, Alaska Department of Revenue, (January 1980 and July 1981).
- (17) Public Finance, Rosen, 1985.
- (18) Revenue Sourcebook, Alaska Department of Revenue, (January 1987).
- (19) Fuel, Conservation, & Individual Credits Relative to the Individual Income Tax, Alaska Department of Revenue, (January 1980 and July 1981).
- (20) Petroleum Revenue, Alaska Department of Revenue, December 1986

Sales Tax

Revenue Potential
of a
General Sales Tax
December 1986

Prepared by

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INTRODUCTION AND PURPOSE OF STUDY

Current revenue projections for fiscal years 1988 through 1992 indicate that revenues generated by petroleum related activities (Oil and Gas Corporate Net Income Tax, Oil and Gas Property Tax, Oil and Gas Severance Tax and Oil and Gas Royalties) will comprise over 81.5 percent of total unrestricted General Fund Revenues for the period. Therefore, state government is presently very dependent on these sources of revenue. Finding sources of additional revenue is becoming increasingly important.

Prudhoe Bay oil production has already peaked. Total Alaskan production is currently projected to decline from over 1.848 million b/d in fiscal year 1986 to under 400,000 b/d by fiscal year 2005. This represents a compound annual average rate of decline of 7.9 percent.⁽¹⁾ Other North Slope fields which are currently projected to begin producing will only partially offset this decline. These projections are based only on the development of presently known and economically developable reserves. Additional discoveries may be made in the future, but their development as well as the development of some currently known but high cost reserves is highly dependent on the future growth of real oil prices. In addition, these future discoveries may be made on federal OCS lands from which the state would receive little or no revenues. Future petroleum revenues are therefore both exhaustible and highly uncertain.

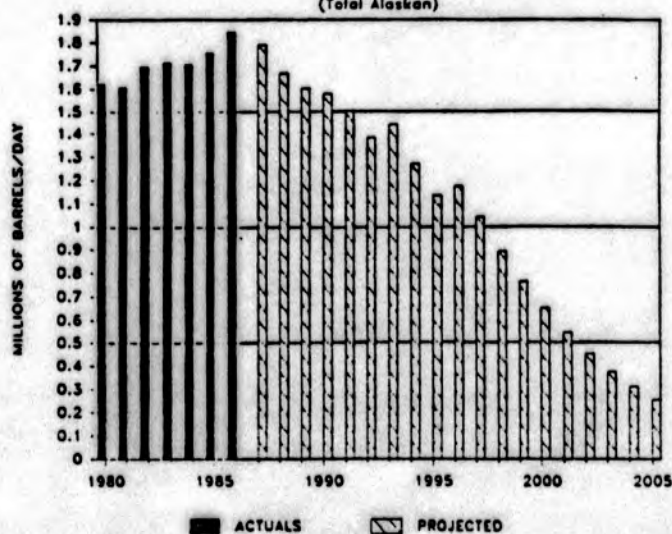
TABLE 1

PETROLEUM PRODUCTIONS PROJECTIONS
(Millions of Barrels/Day)

FISCAL YEAR	TOTAL ALASKAN
1980	1.621
1981	1.609
1982	1.696
1983	1.714
1984	1.704
1985	1.714
1986	1.848
1987	1.842
1988	1.755
1989	1.687
1990	1.550
1991	1.499
1992	1.384
1993	1.287
1994	1.257
1995	1.237
1996	1.095
1997	1.182
1998	1.020
1999	0.845
2000	0.775
2001	0.674
2002	0.593
2003	0.513
2004	0.450
2005	0.384

FIGURE 1

PETROLEUM PRODUCTION PROJECTIONS
(Total Alaskan)



Alaska North Slope oil prices, meanwhile, have dropped from a high in 1981 of \$33.67 per barrel to a 1987 low of \$8.50 (the average is projected to be \$12.59 for the year). These prices have become extremely volatile and difficult to predict. Even if production wasn't declining, this volatility in oil prices and riskiness of oil related revenues could undermine the major source of revenue for this state. To a large extent, this has already happened.

TABLE 2

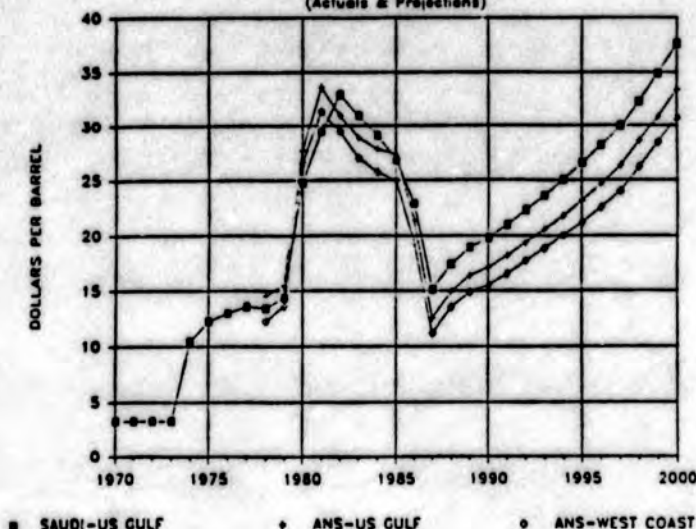
ACTUAL & PROJECTED CRUDE OIL PRICES
(Dollars per Barrel)

FISCAL YEAR	SAUDI US GULF	ANS US GULF	ANS WEST COAST
1970	3.25		
1971	3.25		
1972	3.25		
1973	3.25		
1974	10.45		
1975	12.20		
1976	13.04		
1977	13.61		
1978	13.46	14.60	12.30
1979	14.41	15.50	13.70
1980	24.75	27.60	26.50
1981	29.45	33.67	31.43
1982	22.99	21.07	29.50
1983	21.05	20.87	27.00
1984	29.10	27.83	25.68
1985	26.80	27.25	24.92
1986	22.90	21.20	19.76
1987	15.15	12.59	11.19
1988	17.29	14.97	12.57
1989	18.93	16.29	14.90
1990	19.77	17.10	15.52
1991	20.96	18.16	16.52
1992	22.21	19.27	17.70
1993	23.62	20.53	18.82
1994	25.03	21.00	20.02
1995	26.55	22.18	21.20
1996	28.10	24.67	22.57
1997	29.93	26.20	24.01
1998	32.26	28.60	26.18
1999	34.91	30.95	28.46
2000	37.62	33.45	30.07

FIGURE 2

CRUDE OIL PRICES

(Actuals & Projections)



The purpose of this study is to develop a model that will allow us to evaluate the revenue potential and burden of general sales tax proposals presented by Legislative and Executive policy makers. We have presented alternative structures here primarily for illustrative purposes, and in no way wish to suggest these are proposals of this Department or section. The value of these alternatives is comparative, illustrating the way different structural elements in a tax can be altered to obtain various results, and to show what scope of information it is possible to generate in response to a proposal. We have evaluated the advantages and disadvantages, as well as preliminary estimates of fiscal impact, for each of our illustrative general sales tax alternatives in order to suggest what kinds of questions could be asked about various proposals.

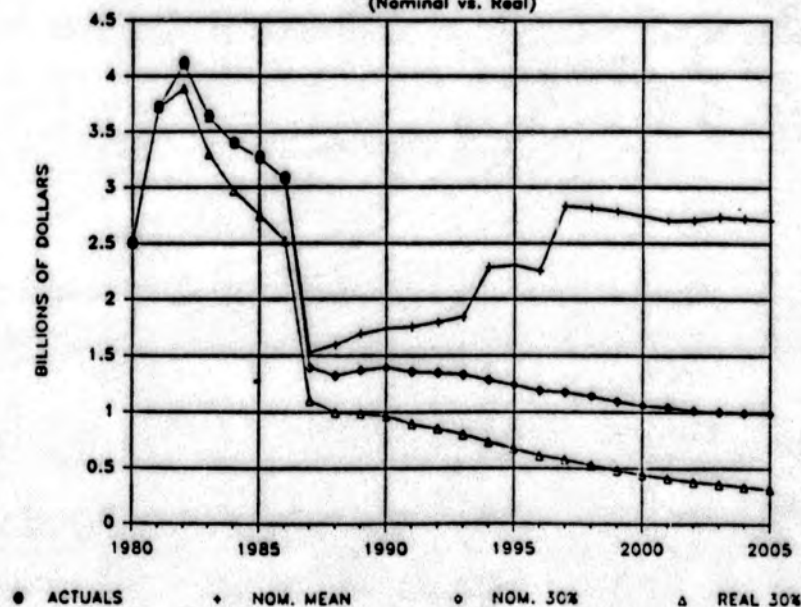
It should be noted at the outset, that it will be practically impossible to replace petroleum revenues with taxes on individuals or other industrial sectors given the present structure of the Alaskan economy. In fiscal year 1984 the gross wellhead value of North Slope oil production was approximately \$10.6 billion⁽²⁾ while the estimated gross production of all other nongovernmental industrial sectors was only \$8.7 billion and total disposable personal income was \$6.8 billion. In addition, oil production has been high profit sector and thus supported much higher levels of taxation than other more marginal industrial sectors. Also, many other industries are currently supported, directly and indirectly through state government spending of oil revenues.

TABLE 3
GENERAL FUND UNRESTRICTED REVENUE PROJECTIONS
(Nominal vs. Real)

FISCAL YEAR	ACTUALS	ESTIMATES MEAN CASE (NOMINAL \$)	ESTIMATES 30 % CASE (NOMINAL \$)	ESTIMATES 30 % CASE (REAL \$/1981)
1980	2.501			
1981	3.710			3.710
1982	4.108			3.691
1983	3.631			3.270
1984	3.390			2.968
1985	3.260			2.746
1986	3.076			2.523
1987		1.535	1.399	1.105
1988		1.601	1.325	1.000
1989		1.697	1.374	0.992
1990		1.748	1.398	0.985
1991		1.763	1.359	0.897
1992		1.802	1.349	0.851
1993		1.851	1.324	0.800
1994		2.290	1.287	0.733
1995		2.307	1.241	0.672
1996		2.254	1.191	0.613
1997		2.830	1.178	0.576
1998		2.810	1.143	0.520
1999		2.779	1.098	0.483
2000		2.738	1.063	0.444
2001		2.698	1.045	0.414
2002		2.699	1.020	0.383
2003		2.730	1.004	0.358
2004		2.718	0.997	0.327
2005		2.699	0.989	0.317

FIGURE 3

GENERAL FUND UNRESTRICTED REVENUES
(Nominal vs. Real)



TAX CAPACITY AND TAX BURDEN ON ALASKANS

The assessment of the burden of taxation is a complicated problem. Statutes determine who is legally responsible for a tax. In contrast the economic incidence of a tax is the change in the distribution of private real income brought about by a tax. Different taxes can be shifted to differing extents from the person or business legally responsible to other individuals or businesses.

In less rigorous terms, concepts such as burden are examined by resorting to state-by-state comparisons of taxes paid usually on a per capita basis or in relation to some measure of revenue capacity. Because measures such as per capita income are poor measures of revenue capacity alternative concepts have been developed. One such measure involves the concept of a representative tax system (RTS).(3)

"The RTS is designed to answer this question: what would be the total revenue of each of the 50 states if every state applied identical tax rates - national averages - to each of 26 commonly used tax bases?"

Tax effort is a companion concept that indicates the overall tax burden placed on the base as defined by the tax capacity concept. A tax effort index is created by dividing the state's actual tax collections by its estimated tax capacity and multiplying by 100.

"The result may be interpreted as a measure of how much a state chooses to exploit all its potential tax bases relative to other states. If a state has a tax effort beneath the national norm, it will have an effort index under 100. Conversely, if a state has a tax effort in excess of the national average, it will have an effort index over 100."

The most current estimates of these ratios is in an Advisory Commission on Intergovernmental Relations publication Tax Capacity of the 50 States. Dated May 1985, the book is based on tax data for 1982. While aged, the numbers are indicative of Alaska's state and local tax burden relative to other states.(4)

Indexes of this sort can often hide subtleties in the underlying relationships. For instance the effort variables are developed using per capita measures which hide the fact that a substantial portion of the tax may be paid by out-of-state visitors or seasonal workers. Alaska, for instance, shows a high effort for hunting and fishing licenses. Although care has to be exercised in their interpretation, the figures indicate that Alaska residents are taxed at relatively low levels on income and sales when compared to residents of other states.

Overall Alaska shows a high tax effort because of our resource based taxes. However, effort measures are considerably below national norms for several major taxes commonly found in other states. Column two below shows the relative importance of major taxes and column three shows Alaska's effort index for these taxes.

<u>Tax</u>	<u>State-Local Tax Collections as % of U.S. Total</u>	<u>Alaska Effort Index 1982</u>
General Sales	23.5%	29.1
Selected Sales	11.7%	102.0
License Taxes	3.5%	118.0
Individual Income	19.7%	.7
Corporate Income	5.6%	95.0
Property	31.8%	105.0
Estate and Gift	.9%	22.9
Severance	3.4%	278.8

GENERAL DESCRIPTION AND STRUCTURE OF RETAIL SALES TAXES

General Sales Tax

A general sales tax could be enacted at the State level. Alaska currently has no sales tax at the State level, however seven boroughs and at least fifty-two smaller municipalities do levy some form of sales tax. The rates levied range from one percent to five percent. The base upon which these rates are levied also varies with different exemptions being allowed in various communities. If a sales tax were enacted at the State level it would be in addition to the tax at the local level, however, it should be noted that Anchorage and Fairbanks, the two most populous municipalities in the State currently have no sales tax.

Currently forty-five of the fifty states levy some form of sales tax at the state level. Sales taxes are a significant source of state government revenues in most of the states which levy them. Sales taxes account for 48.8 percent of all State tax collections. The sales tax base varies considerably as to exemptions allowed and the degree to which services are taxed from one state to another. Food purchases, except restaurant meals and alcohol, are exempt in twenty-eight of the forty-five states. Prescription drug purchases are exempt in forty-three states. Gas and electric utility bills are exempt to some degree in thirty-two states. Five states exempt clothing purchases to some degree. Also, four states allow some credit for sales taxes paid against state income tax liability. These various exemptions and credits are meant to ameliorate the regressive incidence of the sales tax.

Services are taxed very comprehensively including all personal and professional services in only three states. Twenty-five states either tax no services or tax services very narrowly and selectively such as laundry and cleaning or advertising and selected business services. The remaining seventeen states tax services to a considerable degree although not comprehensively with most exempting professional services.

The rates levied on taxable purchases of goods and services also varies considerably from state to state with a low of three percent to a high of seven and one half percent. The median rate levied by states which exempt food is five percent and by those which do not exempt food is four percent.

Retail sales taxes tax consumer expenditure, thereby taxing income at its use, in contrast to income taxes, which taxes income at its source. The basic elements of any tax structure apply to the retail sales tax. These are tax base, rate(s) and credits against tax owed.

Tax Base

Tax base is characterized by what is included, excluded, and deductible from the base. It is also affected by the presence of exemptions from the tax.

Retail sales are the primary base of state and local sales taxes. Sales for resale generally are excluded to avoid problems of multiple taxation. While a general retail sales tax can logically cover services, in most cases services are excluded. Thus, a substantial portion of consumer expenditure is not taxed. A few services are, however, included in the tax bases of some states. These include admissions, lodging and public utility services.

Equity considerations lead some state to exclude particular retail sales from the tax base. The most common exclusions are prescription drugs and food for consumption at home. Some taxing states allow non resident visitors to obtain exemption certificates for sales tax. All sales tax states have use taxes as part of their sales tax structure. These use provisions apply to goods bought outside the state and brought into the state for consumption.

Tax Rates

Tax rates are applied to the tax base. They can be separated into rate groups for various consumer goods. This can be done to help make the tax more equitable, (i. e. taxing goods more highly that are consumed by higher income taxpayers (luxuries and non health services) or taxing subsistence items (basic food purchases, children's clothing or utilities) at low rates or not at all . The tax rate can also be applied differentially for other social policy goals, i. e. to tax goods with high social cost associated with them, such as alcohol, at higher rates, or to tax goods associated with low tax capacity at low rates or not at all, eg. medications and health services.

Tax Credits

Tax credits against tax owed are deducted after the rate is applied to the tax base. Tax credits are available for special expenditures and can be effective in avoiding penalties for or encouraging those qualifying expenditures. Credits can also be used to offset amounts paid to other government; thereby preventing double taxation of the same transactions.

EVALUATION OF ALTERNATIVES

The tables presented in this report summarize only the projected quantitative impacts of two sales tax proposals. Other issues do arise, however. Each of the elements of the tax structure can be tailored to affect different taxpayers differently (or to try and affect them identically). The alternative tax structures we present will each be analyzed briefly on a number of issues including how they affect taxpayer groups, how easily administered they are and how politically palatable they might be.

In general, the issues which should be considered with respect to measures to increase revenues are as follows.

Economic Efficiency: What effect does the proposed tax have on incentives and economic decision making? How does the tax alter consumption, production or resource allocation decisions?

Equity: Who bears the burden of the tax and how does that burden compare with ability to pay or benefits received? Is the tax progressive or regressive with respect to income and/or wealth?

Elasticity: What is the sensitivity of the tax revenue yield to changes in economic or demographic conditions? As income or population increase or decrease, does tax revenue increase or decrease in greater, lesser or equal proportion?

Administrative Efficiency: How costly is the tax to administer in terms of resources devoted to administration and compliance relative to the revenue yield of the tax? Who bears the burden of administrative cost, the taxpayer, the State or the tax collector (if different from the State)?

Political Feasibility: How acceptable is the proposed tax to the legislature and/or the electorate given existing social, political, and economic conditions? Who benefits, who loses, and who has the most political power?

Additionally, we are concerned with three other issues.

Interstate Capture: How much of the tax owed by nonresident taxpayers who work or travel in Alaska is it possible to capture?

Intergovernmental Effects: Does the tax erode the tax base of higher level (federal) or lower level (local) governments? If such erosion should be mitigated, how can it be done? Do higher level or lower level government taxes erode the State tax base? If such erosion should be mitigated, how can it be done?

Inflation Effects: What is the effect of inflation on the elements of the tax structure and the burden on the taxpayer? If this should be mitigated, how can it be done?

Efficiency

As is the case with many other taxes it is difficult to make definitive statements on how different types of sales taxes influence consumer welfare. The public finance literature suggests that it is unlikely that efficiency will require a general sales tax with the same tax rate for each commodity but recognizes the problems involved in differentiating rates among different commodities.

Elasticity

It is difficult to determine precisely how the sales tax will vary over time as income and disposable income changes. An increase in income will have different implications for revenues depending on the distribution of that increase. An increase which goes primarily to high income households may have a significantly different impact than a similar increase distributed mostly to low income groups. The reason is that high income households may at the margin spend only a small fraction of their income on taxable commodities.

With this caveat in mind it can be stated that a broad based retail sales tax is generally a fairly stable source of revenue. Consumption expenditures do not fluctuate as widely as personal income as individuals may alter savings while maintaining consumption over the short term. The yield from the tax should move roughly in proportion to movements in income, population and prices and will likely be less elastic than an individual income tax.

Equity

The conventional view of the distributional effects of a general sales tax is that it is regressive. As annual income rises, the proportion of household income devoted to consumption falls. Hence the amount of tax paid is a higher proportion for low income households.

Two arguments are commonly invoked against this conventional reasoning. First, some argue that the proportion of lifetime (as opposed to annual) income that is devoted to consumption is roughly the same at all income levels. Second, the regressivity argument implicitly assumes that the taxes on a good are borne entirely by the consumers of the good while in reality some shifting does occur.

In an attempt to deal with the regressivity concern some sales tax systems tax certain items consumed intensively by the poor at low rates or exempt these items completely. This is not without problems. For instance, while food expenditures are a large item in the budget of poor people they can also comprise a high proportion of income at higher levels. In addition such selective treatment causes administrative problems such as whether certain items (e.g. soft drinks) are in the favored category (e.g. food). Some states with both income and sales taxes utilize a sales tax credit against income tax liability as a device for dealing with equity concerns.

Administrative Compliance

The main attraction of sales taxes is probably its ease of administration. It is collected from sellers at the retail level which means fewer individuals to deal with than is the case with income taxes.

The main administrative complexities arise when it is unclear if some type of transaction creates a tax liability. Arbitrary distinctions are often made such as taxing food consumed at a restaurant but exempting the same meal if taken home for consumption. Also, tax evasion remains a problem.

In many states which have both state and local general sales taxes some efficiencies are achieved by piggybacking the local tax onto the state system. Compliance costs fall mostly on retailers with some states compensating stores for costs by allowing them to keep some percentage of their tax obligation.

Nonresident Taxpayers

Sales taxes will be paid by nonresident workers and tourists to the extent that they consume goods in the state. Some states such as Washington reduce this payment through issuance of tax exempt cards which apply to purchases which are ultimately consumed out-of-state.

Intergovernmental Effects

Under the new federal tax law state and local sales taxes are no longer deductible. This weakens the sales tax as an alternative to a state income tax as the latter retains its deductible status.

Some concern needs to be given to the effect of a state sales tax on those municipalities which have sales taxes or might adopt such taxes in the future. For instance, the imposition of a four percent state tax on top of a four percent local tax adds substantially to the cost of in-state purchases. Such rates would create incentives for consumers to avoid Alaska taxes by catalogue ordering or combining shopping with vacation or business trips.

Political Acceptability

In terms of political acceptability, sales taxes have been traditionally supported by higher income groups fearing increased property or income taxation. They have been opposed by labor organizations primarily on equity grounds and retailers who feared loss of business and compliance costs. Sales taxes are not as visible as income taxes in that the tax is levied in small bits each time a purchase is made rather than in larger amounts through payroll withholding or payments at year end. Since Alaska has never had a state sales tax, it is questionable whether the legislature would enact such a major new tax on individuals until oil revenues decline significantly.

Discussion of Estimates

The data presented in the table provides an approximation of the revenues which might be realized by a sales tax on differently configured tax bases. Examination of 1985 provides a good bench mark as the next several years will likely show lower levels of receipts and sales because of the economic slow down caused by lower oil revenues.

A one percent tax on retail sales in 1985 would have raised about \$40 million. If all services were taxed, the same one percent rate would generate an additional \$14 million. Finally, a one percent tax on electric utility sales for both residential and commercial customers would realize in the neighborhood of \$3 million. In total then a very broad based sales tax in a good year would have raised about \$57 million. This figure would not include revenues from a use tax and is most certainly an upper bound in the sense that virtually all retail and service transactions are covered. Exclusions of various items would correspondingly lower revenues. For instance, if all sales of food stores were excluded nearly \$9 million less in revenue would be realized. Note that some sales of food stores would likely remain taxable. However, we do not have the data to separate food and non-food sales for such establishments.

Higher tax rates would of course increase revenues. It is probably not valid to assert that a four percent rate would raise four times as much revenue because individuals will make some adaptations to the additional cost of purchased goods and services. Bartering, catalogue purchases and substitution of second hand purchases for new cars or appliances would likely occur.

The second table projects sales tax revenues for a tax based on retail sales. The analysis assumes that retail sales are a constant percentage of personal income for the years covered in the table.

ESTIMATED YIELD OF 1 % SALES TAX
VARIOUS TAX BASES 1985

SIC CODE FOR INDUSTRY	INDUSTRY	ESTIMATED RECEIPTS OR SALES \$	YIELD FROM 1 % TAX \$

RETAIL TRADE:			
52	BUILDING MATERIALS	\$387,270,000	\$3,872,700
53	GENERAL MERCHANDISE	\$462,926,000	\$4,629,260
54	FOOD STORES	\$890,572,000	\$8,905,720
55	AUTO DEALERS (EXCL 554)	\$600,134,000	\$6,001,340
554	GASOLINE SERVICE STATIONS	\$215,048,000	\$2,150,480
56	APPAREL & ACCESSORIES	\$137,886,000	\$1,378,860
57	FURNITURE	\$172,315,000	\$1,723,150
58	EATING & DRINKING	\$547,137,000	\$5,471,370
59	MISC RETAIL (EXCL 591)	\$439,277,000	\$4,392,770
591	DRUG & PROPRIETARY STORES	\$157,031,000	\$1,570,310
	TOTAL RETAIL TRADE	\$4,009,596,000	\$40,095,960
SERVICES:			
70	HOTELS AND LODGING	\$184,503,000	\$1,845,030
72	PERSONAL SERVICES	\$64,985,000	\$649,850
73	BUSINESS SERVICES	\$270,034,000	\$2,700,340
75	AUTO REPAIR GARAGES	\$105,228,000	\$1,052,280
76	MISC REPAIR SERVICES	\$61,727,000	\$617,270
78	MOTION PICTURES	\$12,871,000	\$128,710
79	AMUSEMENT & RECREATION	\$28,092,000	\$280,920
80	HEALTH SVCS EXCEPT HOSPITALS	\$232,111,000	\$2,321,110
81	LEGAL SERVICES	\$136,933,000	\$1,369,330
82	EDUCATIONAL SERVICES	\$8,786,000	\$87,860
83	SOCIAL SERVICES	\$13,089,000	\$130,890
891	ENGR ARCHIT SURVEY	\$247,033,000	\$2,470,330
892	ACCTG AUDIT BOOKKEEPING	\$56,979,000	\$569,790
	TOTAL SERVICES	\$1,422,371,000	\$14,223,710
ELECTRIC UTILITIES			
	RESIDENTIAL	\$150,605,000	\$1,506,050
	COMMERCIAL	\$147,987,000	\$1,479,870

PROJECTED SALES TAX REVENUES
WITH AND WITHOUT SALES OF FOOD STORES
APPROXIMATE YIELD FOR EACH 1 % OF TAX

YEAR	ESTIMATED SALES OF ALL RETAIL ESTABLISHMENTS	YIELD OF 1 % TAX	ESTIMATED SALES IF FOOD STORES EXEMPTED	YIELD OF 1 % TAX
1985	\$4,009,600,000	\$40,096,000	\$3,119,000,000	\$31,190,000
1986	\$3,945,500,000	\$39,455,000	\$3,066,700,000	\$30,667,000
1987	\$3,762,000,000	\$37,620,000	\$2,924,100,000	\$29,241,000
1988	\$3,835,500,000	\$38,355,000	\$2,981,200,000	\$29,812,000
1989	\$3,929,600,000	\$39,296,000	\$3,054,400,000	\$30,544,000
1990	\$4,072,600,000	\$40,726,000	\$3,165,600,000	\$31,656,000
1991	\$4,174,300,000	\$41,743,000	\$3,244,600,000	\$32,446,000
1992	\$4,325,600,000	\$43,256,000	\$3,362,200,000	\$33,622,000

DATA DESCRIPTION, LIMITATIONS AND USE

CENSUS OF RETAIL TRADE

Description of data used in estimates

Each five years the U.S. Department of Commerce undertakes a series of economic censuses. The last census available is that done for 1982. The next census will occur in 1988 for the year 1987. The censuses for Retail Trade and Service Industries for 1982 provided the data for this analysis. While these publications are dated they provide the best available information on level of receipts and sales by industry groupings. The industry groupings are important as they provide a framework for projecting sales and receipts to current levels and also for approximating the impact of excluding particular sales (e.g. food, drugs) from the tax base.

Data for these reports is compiled from administrative records of various federal agencies and from mail surveys. Data is presented for each kind of business or operation classified (unless disclosure rules apply) and includes:

1. Number of establishments
2. Annual sales or receipts
3. Annual payroll
4. First quarter payroll
5. Paid employees for pay period including March 12th

METHOD

GENERAL DESCRIPTION OF MODELLING OR ESTIMATING PROCESS

Methodology for Estimates

Because the census data applies to 1982 it was necessary to develop a procedure which would both update the information and also provide a basis for forecasting future levels of sales and receipts. The procedure involved two steps:

1. Extrapolation to 1985. Because 1985 is the last year with complete data on many major economic variables it serves as the starting point for this analysis. The Alaska Department of Labor prepares the Statistical Quarterly, a publication which presents industry specific data (SIC codes) on a number of reporting units, payroll and average wages. After some refinements for differences in census and labor coverage, labor data for the period 1982-85 was used to estimate 1985 levels of census variables.
2. Projection to future years. The level of retail sales estimated for 1985 was expressed as a percentage of personal income in that year. A separate forecast of personal income for future years was used along with this percentage to approximate the level of retail sales for the forecast period. This approach assumes that the relationship of retail sales to personal income will not vary dramatically. Because there is considerable variation among sales tax states in the treatment of services these values were not projected forward. An examination of the 1985 levels provides an indication of potential revenues obtainable from taxes on various categories of services.

FOOTNOTES

- (1) Petroleum Revenue, Alaska Department of Revenue, December 1986
- (2) Ibid.
- (3) 1982 Tax Capacity of the Fifty States, Advisory Commission on Intergovernmental Relations, May 1985.
- (4) Ibid.

Production

&

Revenue

Projection

MEMORANDUM

State of Alaska

TO: Senator Frank Ferguson
Co-chair, Joint Special Committee

DATE: September 10, 1986

FILE NO: 87-592

THROUGH: Gordon S. Harrison, Associate Director
Office of Management and Budget

TELEPHONE NO: 465-3568

FROM: Gregg Erickson, Senior Economist
Division of Strategic Planning
Office of Management and Budget

SUBJECT: The Jones Act and the
Price of Alaska Oil

Introduction

At the July 21 meeting of the Joint Special Committee on Tax Policy you requested that OMB provide you with background information and material regarding the Jones Act and the price of Alaska oil.

Background

Shipyard inefficiencies, lack of competition, and high labor costs, make American ships two to three times as expensive to build and operate as their foreign counterparts. Despite these higher costs, virtually all waterborne commerce between Alaska and the rest of the United States moves in U.S. rather than foreign ships. The reason is the Jones Act (Sec. 27 of the federal Merchant Marine Act of 1920), which requires that maritime trade between U.S. ports be carried in ships built in the U.S., documented under U.S. law, owned by U.S. citizens, and crewed by Americans.

Trade goods shipped between the Alaska and American ports must bear this burden, either as lower return to the seller or a higher price to the buyer. As a practical matter, Alaska usually bears the burden regardless of which way the commerce moves. In the case of Alaska crude oil, the burden is reflected in reduced wellhead values; over \$100 million per year may be lost to the State treasury due to lower severance taxes and royalties.

A related burden on the value of Alaska oil comes from the Export Administration Act of 1979 and other U.S. laws that prohibit the foreign export of Alaska oil. The prohibitions deny Alaska oil its most profitable markets in the Far East, and thus make the oil less valuable at the wellhead. A recent study by the federal Department of Commerce estimated the loss to the State treasury at \$333 million per year.

Some oil companies have opposed any relaxation of the export limitations, noting that much of their investment in U.S. flag tankers could be lost if exports were allowed. Oil companies'

September 10, 1986

production revenues would be enhanced if exports were allowed, however, and this would marginally encourage additional development of existing fields and further exploration.

Recent Studies

Several recent studies have addressed these issues. An annotated listing of those that appear most interesting in terms of the State revenue implications is attached. Copies of the studies themselves are attached with the original of this memorandum.

GKE/dmc

Attachments

cc: Committee Members

**Annotated Listing of Selected Studies
On The Jones Act, Oil Export Limitations,
and Alaska Oil Revenue**

U.S. Department of Commerce, *Report To Congress on Alaskan Oil*, June 1986. In 1985 Alaska made an unsuccessful effort in Congress to amend the Export Administration Act to allow some exports of Alaska oil. As a consolation prize for Alaska, Congress authorized and directed the administration to conduct the study that led to this Report. According to the study, the export limitations will cost Alaska \$1,330 million in the 1987-90 period (\$333 million per year), \$1,510 million in 1991-95, and \$1,116 million in 1996-2000. The study's findings generally support Alaska's position, though the authors make some factual errors and incorporate a number of unusual assumptions. For example, the federal study's "low" oil production scenario shows about twice as much annual production as the state's current "mean" production forecast.

Samuel A. Van Vactor and Arlon Tussing, "The Export of Alaska Crude Oil: Its Significance for Pacific Basin petroleum Trade," prepared for the International Association of Energy Economists annual meeting, June 1986. The authors believe that "[o]ver the coming year...the distortions and waste entailed by [the export limitations] will become more apparent, and as they come to light, the policy is likely to change. Once the inhibition on exports of Alaska oil is removed, there will likely be a cascade of reactions that will substantially increase crude-oil and petroleum product trade throughout the Pacific Basin."

State of Alaska, *Report to the Legislature on Implementation of Initiative 83-02*, January 1986. The initiative was adopted by the voters in 1982. It directs the governor to work for repeal of the Jones Act, and to annually report on those efforts. This was the first of these annual reports, and was largely prepared by John Katz and his staff in the governor's Washington, D.C. office. the report uses data from the Alaska Statehood Commission studies (cited below) to estimate that the Jones Act costs Alaska consumers \$40 million per year, and the state treasury \$225 million. The report is not optimistic about the prospects for near-term fundamental change in the trade restrictions.

National Advisory Committee on Oceans and Atmosphere, *Shipping, Shipyards and Sealift*, July 1985. The report focus on the national security implications of the Jones Act. It concludes that the nation's defense capabilities would be improved if foreign built ships were allowed to be used in the domestic maritime trade. The authors say they had access to "secret" and "official use only" Department of Defense materials on sealift capacity, etc.

Alaska Department of Revenue, "The Export of Oil to Japan - State Revenue Impacts," by Dr. Charles Logsdon in *Petroleum Production Revenue Forecast Quarterly Report, March 1983*. "Under a wide range of assumptions the State of Alaska would enjoy revenue increases should the current ban on exports [of Alaska North Slope crude oil] be removed. Though the impact illustrated ranges between \$10 and \$500 million per year..., the best guess revenue impact would probably be about \$50-\$100 million per year."

Simat, Hellieson, & Eichner, Inc., for The Alaska Statehood Commission, *The Jones Act and Its Impact on the State of Alaska*, July 1982; and Arlon R. Tussing and Associates, Inc., for The Alaska Statehood Commission, *Alaska's Economy and the Merchant Marine Act of 1920 (the Jones Act)*, September 1982. Though now somewhat out of date, these two studies still remain the best starting point for anyone wishing a good understanding of the effects of the Jones Act (and the export limitations) on Alaska.

12/10/84

DRAFT

REVENUE OPTIONS
(in millions \$)

	<u>FY87</u>	<u>FY88</u>	<u>FY89 & Beyond</u>
G.F. Revenues-unrestricted	\$1,399.2	\$1,325.0	\$1,373.9 (FY89)
Adjustments to G.F.	<u>7.4</u>	<u>0</u>	<u>0</u>
Current Unrestricted G.F	<u>1,411.6</u> =====	<u>1,325.0</u> =====	<u>1,373.9</u> =====
ONE-TIME REVENUE MEASURES:			
Budget Reserve Fund*	428.5		
Railbelt Energy Fund*	281.0		
AHFC Purchase of HAD Loans	100.0		
Bradley Lake (Change of funding source)	95.0		
Cash-out Loan Fund Balances*	37.3		
FY87 Restriction (10%) School Debt.	13.9		
Sale of Student loan Portfolio	136.0		
Sale of Other Loan Portfolios	122.9		
Dinkum Sands			238.0 (FY89)
Amerada HESS			? (FY90)
Disputed Taxes	?	?	? (\$1,495.0 owed in disputed taxes)
Repeal of Prior Year Cap. Approp.		? (up to \$1,100.0)	
Uncumbered AIDA Assets	162.0		?
Sale of AHFC - Privatization			?
Sale of AK Railroad			?
Sale of AK Railroad lands			?
Sale of 4 Dam Pool			?
RECURRING REVENUE MEASURES:			
Lottery*		11.8	11.8
Gov't. Loans & Debt:			
Debt Restructuring	50.0	45.0	35.0
AIDA Income Return to G.F.	41.8	41.8	41.8
AHFC Income Return to G.F.	28.9	28.9	28.9
AHFC Phase-out	?	?	?
Permanent Fund:			
Earnings Reserve*	281.0	18.0	0
Inflation Proofing*	138.0	357.0	484.0
Dividends*	362.0	393.0	423.0
Oil Taxes:			
ELF*	31.5	123.4	151.8
Severance Tax*		?	?
Petroleum Corporate Income Tax*			
(See Corporate Income Tax)			
Separate Accounting		?	?
Reserves Tax*		280.0	280.0
Oil			
Gas			
Property Tax (per 1 mill)*		16.0	16.0

	<u>FY87</u>	<u>FY88</u>	<u>FY89 & Beyond</u>
Other Business Taxes & Licenses:			
Motor Fuel Tax Increase (\$.08/gal inc.)*		20.0	20.0
Aviation Fuel Tax Increase*		7.7	7.7
Waterfuel Tax Increase*		4.1	4.1
Misc. Fees Increase* ~~12.1~~		35.8	35.8
Licenses & Permits	5.4		
Corp.			
Occ. Lic.			
Motor Vehicles			
Bev. Lic.			
Amuse.			
Fishing & Hunting			
Vehicle License			
(1% of value)	13.4		
APUC	4.0		
Oil & Gas Cons.	2.5		
Bus. Lic. Fees	9.5		
Misc.	1.0		
 Tobacco Tax*		1.5	1.5
Alcohol Tax*		4.8	4.8
Business Gross Receipts*			
Regressive		31.7	38.4
or		or	or
Flat		53.9	62.3
Corporate Income Tax *		93.0	93.0
Household and Individual:			
Income Tax*		125.0	250.0
Sales Tax @ 1% *			
with food		55.4	55.4
or		or	or
excluding food		33.0	33.0
School Head Tax (@ \$25 per person)*		5.0	5.0
 Real Property Tax*		?	?
Personal Property Tax*		?	?
Land Speculation Tax*		?	?

* Legislation Required

BILL SHEFFIELD
GOVERNOR



STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

SEP 05 1986

STATE OF ALASKA

January 13, 1986

File Jones Act

The Honorable Ben Grussendorf
Speaker of the House
Alaska State Legislature
P.O. Box V
Juneau, AK 99811

Dear Representative Grussendorf:

At the General Election of November 6, 1984, the voters of Alaska adopted Initiative Number 83-02, "An Act terminating the Alaska Transportation Commission and repealing transportation laws administered by the commission; requiring persons who carry passengers or freight for hire to hold insurance or other security; and requiring the governor to lobby Congress for the repeal of the federal Jones Act."

The initiative provides in part: BE IT ENACTED BY THE PEOPLE OF THE STATE OF ALASKA:

Section 1: STATEMENT OF PURPOSE. The people of Alaska recognize that ... 5. a federal law, known as the Jones Act, requires that ships bound for Alaska from other American ports must be built and registered in the United States and staffed with American crews, thereby granting such ships an unfair monopoly and protecting them from free market competition, which costs Alaskan consumers millions of dollars each year; 6. the Jones Act should be repealed and the Governor should use all appropriate means to persuade Congress to do so. ... Section 4.AS 44.19 is amended by adding a new section to article I to read: Section 44.19.035 JONES ACT REPEAL. The governor shall use best efforts and all appropriate means to persuade the United States Congress to repeal 46 USC, sections 861, et seq., known as the Jones Act. Until that Act is repealed, the governor shall publish an annual report documenting the harmful effects of the Act on Alaska commerce, and progress made toward its repeal. The report shall be submitted to the legislature no later than its convening each year.

Two courses of action have been taken to comply with the initiative. The first was the direct effort by the Office of the Governor to lobby the Congress for repeal of the Jones Act and the preparation of the enclosed report on the repeal effort. The second was to prepare a report on the harmful impact of the Jones Act on Alaska commerce. Each of these items is developed more fully in the report which is enclosed with this transmittal.

In addition to the specific events related to Jones Act repeal, amendments, or waiver requests, we have also included in the report discussions of the various efforts directed toward improving the economic, legal, and political climate for the export of Alaska crude oil. International trade and the shipment of North Slope crude oil to Japan are economic goals shared by many Alaskans. Because Alaska's maximum potential for economic development, financial stability, and permanent job opportunities are linked to our status as a Pacific Rim international trading partner, we believe that advocacy efforts directed at developing trade should be included in the annual report. Accordingly, we have included those efforts in this report as they relate to Congressional consideration of the reauthorization of the Export Administration Act and the administrative decision to permit the export of Cook Inlet royalty oil.

The economic and political factors involved in the two issues of the Jones Act and international oil export are similar. They involve concerns about the energy independence of the United States, continued support of the domestic ship building industry, and the protection of merchant marine jobs. Even though we feel that the evolution of global trading and economics has changed many of the causal conditions that resulted in certain protectionist concepts and laws, these are nevertheless firmly held beliefs and will be difficult to overcome if we are to prevail in our goals. It is an educational challenge to provide information to our detractors in this effort and to demonstrate to them that the changes we are seeking are not detrimental to their own interests.

The first part of the accompanying report discusses many specific actions that my office and the Alaska delegation have initiated to seek relief from the Jones Act and to stimulate the export of Alaska oil. The negative impact of the Jones Act on Alaska commerce is the subject of the second part of the report. This section of the report is based on economic reports originally prepared in 1982 for the Alaska Statehood Commission. The briefing paper

prepared in August of 1985 shows that while there is an estimated cumulative cost to Alaskan consumers of approximately \$40 million annually due to Jones Act restrictions, the estimated reduction in wellhead value to Alaska because oil transport must be on Jones Act tankers is \$225 million.

These figures demonstrate the importance of the issue both to the State and to the federal government and also show the linkage between the Jones Act and the oil industry. Such points are discussed more fully in part two of the enclosed report.

I am pleased to submit this report as required by Initiative 83-02.

Sincerely,

Bill Sheffield
Governor

Enclosures

PART I

Efforts to seek repeal and modification of the Jones Act and other actions to promote Alaska international trade and shipping.

Following the adoption of the Initiative 83-02 on November 6, 1984, several actions have been taken by the Office of the Governor to seek repeal of the Jones Act by the United States Congress. Even before initiative 83-02 was adopted, however, Governor Sheffield had developed a State of Alaska position paper on the Jones Act. In a paper dated June 30, 1983, the thrust of the position was that:

(t)he State of Alaska favors an amendment to the Jones Act which would allow foreign-built ships into the U.S. coast cargo and passenger trade, provided that they meet American safety standards, and are U.S. owned, registered, manned and repaired. (See attachment 1.)

On July 6, 1983, this position paper on the Jones Act was distributed to the Chairmen and Ranking Minority Members of the House Committee on Merchant Marine and Fisheries, its Merchant Marine Subcommittee, and the Senate Committee on Commerce, Science and Transportation. (See attachment 2.)

3RD PROVISIO

Earlier, Governor Sheffield submitted testimony to Congressman Biaggi's Merchant Marine Subcommittee concerning a bill that would repeal a section of the Jones Act known as the 3rd proviso. (See attachment 3.) The 3rd proviso allows an exception to the Jones Act for merchandise that is transported between points within the continental United States over routes recognized by the Interstate Commerce Commission which include a Canadian rail connection. The exception was later extended to Alaska. In that testimony, the Governor stated:

Continued competition from 3rd proviso carriers is good for Alaska in that it maintains a greater diversity of cargo service and, perhaps, moderates the high cost of freight shipments to Alaska.

As a result, the State successfully opposed the passage of the bill to repeal the 3rd proviso exception.

HOVERCRAFT

Public Law 95-599 passed by the Congress as an amendment to the Surface Transportation Assistance Act of 1978 provided that foreign built hovercraft could be used for the

transportation of merchandise or passengers within the State of Alaska for a five-year period. That period would have expired in November, 1983. The specific hovercraft authorized for use were utilized in the oil industry. This Jones Act exemption was considered to be in the national interest due to concern about energy resource development.

H.R.1372 was introduced in February, 1983, for the purpose of authorizing the continued use of the hovercraft in Alaska. Foreign built hovercraft were permitted for an additional two-year period with a possible five-year extension, if the companies involved ordered an American built hovercraft before November, 1985.

Governor Sheffield submitted written testimony in support of H.R.1372 which was passed by the House on August 1, 1983. The Senate passed H.R.1372 on August 4, 1983, and the President approved the measure on August 26, 1983. The bill became Private Law 98-01 of the 98th Congress.

JETFOIL

In order to facilitate Southeast Alaska water transportation, the State arranged for a demonstration through the Boeing Company of a jetfoil to show that passenger and freight service was feasible using a high technology craft of this type. The Jones Act became a barrier to a longer term test of the concept after a successful summer demonstration, and a winter test showed the feasibility of regularly scheduled service in Southeast Alaska.

When it became known that the only vessel available for a longer term demonstration was not eligible to participate in the coastwise trade, the State of Alaska petitioned the U.S. Customs Service for a Jones Act waiver. (See Attachment 4.) While the vessel had been manufactured in the United States, it was sold to a foreign corporation and had been in service under a foreign registry. The Alaska Congressional delegation, other members of Congress, and representatives of private industry joined in requesting the waiver. In early November of 1983, the waiver was granted by the Department of the Treasury. (See Attachment 5.)

ALASKA ADVOCACY

These 1983 lobbying efforts by the Office of the Governor and the Alaska Congressional delegation made it clear that Alaska opposed the restrictive Jones Act provisions and favored an amendment that would remove the prohibition on using foreign-built ships in the coastwise trade. It was our judgment at that time that the prospects for Congressional repeal of the entire Jones Act were extremely unfavorable. If shipboard merchant marine jobs could be

protected, however, perhaps there would be some receptivity to lifting the ship construction restrictions to allow foreign built ships in the coastwise trade, as advocated in the Governor's July 6, 1983, letter.

Initiative 83-02, adopted in November, 1984, recognized as a matter of public policy the negative impact that the Jones Act had on Alaskan commerce.

On January 14, 1985, Governor Sheffield wrote to all Alaskan legislators in order to acquaint them with the legislative issues in the 99th Congress that the Alaska office in Washington, D.C. would be pursuing. (See attachment 6.) One enclosure to the Governor's January 14 letter was a memorandum from John W. Katz, Director of State/Federal Relations and Special Counsel to the Governor, identifying the priority issues of the legislative program. On page 6 of that memorandum, Jones Act Modifications are discussed. Specific reference is made to the passage of initiative 83-02 calling for the repeal of the Jones Act. Discussion of the Jones Act directive pointed out that:

(a)lthough we laid the basis for such activity in the past Congress, the chances for accomplishing anything in this area are not bright, as evidenced by the outcome of the proposal for a vastly more limited exemption for Alaska oil exports.

That memorandum was sent to the Alaska Congressional delegation, among others.

CUSTOMS SERVICE REGULATIONS

The Department of the Treasury Customs Service published a proposed rule on January 9, 1985, that modified regulations relating to the transportation of passengers by foreign vessels between ports or places in the U.S. either directly or by way of a foreign port.

Title 46 USC Section 289 provides that no foreign vessel shall transport passengers between ports or places in the U.S., either directly or by way of a foreign port, under a penalty of \$200 for each passenger so transported and landed.

Customs had previously adopted a 24-hour rule that coastwise laws were violated if a vessel remained in a coastwise port for more than 24 hours. The Customs Service had been advised that certain American ports, including those in Alaska, were placed in a disadvantaged position with respect to the tourist business.

The proposed regulations provided that the 24 hour limit be extended to permit foreign flag vessels from U.S. ports to land passengers at other U.S. ports for longer periods. It was generally believed that the proposed change would allow ports encompassed by the coastwise laws to compete favorably with nearby foreign ports for the ever-increasing revenues generated by the cruise ship industry.

The effect of the proposed ruling was to allow cruise ship operators to stop at a greater number of Alaskan ports for unlimited periods. Adoption of the proposal was a significant help to Alaskan tourism.

On February 20, 1985, the Governor wrote to William von Raab, Commissioner of the United States Customs Service. (See attachment 7.) In this letter, the Governor supported the change in regulations, pointing out the benefits to Alaska. The Governor's D.C. office also actively worked with the Congressional delegation and interested operators to secure the rules change. The ruling which was adopted made coastwise trade more competitive.

EXPORT OF ALASKA OIL

During the winter meeting of the National Governors' Association held in Washington, D.C., February 26-28, 1985, Governor Sheffield scheduled a series of meetings with various federal officials to discuss a variety of issues, including the Jones Act and international trade. (See attachment 8.) Individuals with whom the Governor met on the trip to Washington, D.C. included: Dr. Alton Keel, Associate Director, Office of Management and Budget for National Security and International Affairs; Allen Wallis, Undersecretary of State for Economic Affairs; John S. Herrington, Secretary, Department of Energy; and Malcom Baldrige, Secretary, Department of Commerce.

In addition, the Governor sent a letter to each member of the Alaska Congressional delegation. The February 21, 1985, letter drew their attention to Initiative 83-02 and sought their assistance for the repeal of the Jones Act. (See attachment 9.) Governor Sheffield held a meeting with the Alaska delegation on February 28 to discuss Alaskan issues. The Jones Act and its proposed repeal were on the agenda. The consensus at the meeting appeared to be that while repeal of the Jones Act was not a very likely action to expect from the Congress, we could still pursue individual relief and Alaska exemptions as opportunities arose. Continued opposition from several maritime interest groups can be expected, and they have the demonstrated ability to

mount an effective lobbying effort in the Congress. This opposition is a factor to be considered in our efforts to win repeal of the Jones Act.

In August of 1985, staff in the Office of the Governor prepared a briefing paper on the Jones Act for use in discussions by the Governor and members of the State administration. (See attachment 10.) The briefing paper succinctly presents many of the economic impacts of the Jones Act on various Alaska industries and on Alaska consumers. These cost impacts on Alaska commerce are more fully developed in Part II of this report. The briefing paper is presented here to demonstrate the continued concern by State officials over the Jones Act.

The most recent specific Jones Act activity resulted from an inquiry that Governor Sheffield made during the latter part of September, 1985. The Governor had been informed that operators of cruise ships might be experiencing some Jones Act problems that were interfering with operations in Alaska waters. Following conversations with representatives of the cruise ship operators, it was determined that the problems raised during these inquiries did not concern the Jones Act.

By the close of calendar year 1985, the State had developed a consistent record of Jones Act opposition that dated back to the early tenure of the Sheffield administration. In spite of successes in winning Jones Act exemptions for specific Alaskan situations, it is clear that the total repeal of the Act is unlikely in the near future. The Congress and certain Federal agencies have, however, demonstrated by granting limited exemptions, that there is sometimes a recognition of the special problems arising from Alaska's location as an off-shore state on the northern Pacific Rim.

Governor Sheffield has stated his economic goals many times; each time highlighting the need to create permanent, year-round private sector jobs, many of which are likely to be the product of natural resource development. This development must be accompanied by a corresponding growth of infrastructure within Alaska, and also a competitive transportation system to ship goods to commercial markets. The natural linkage between the barriers imposed by Jones Act restrictions on goods flowing to Alaska and the need to ease restrictions on the flow of goods leaving Alaska, involves not only the Jones Act but also other federal barriers. The Export Administration Act has presented a barrier to the sale of North Slope crude oil, our most significant natural resource from a revenue producing point of view. The prohibition on the export of North Slope crude oil has reduced State tax revenues and may be a factor in depressing oil exploration because of the transportation costs associated with Jones Act tankers. The global

structure of the crude oil market which indicates export of Alaska oil to nations on the Pacific Rim would be very cost effective, cannot be turned to our advantage until both of these legal restrictions are lifted.

Because free market competition and the stimulation of international trade seem to be a philosophical foundation of the current National Administration, Governor Sheffield has taken actions to seek the support of the Administration for our efforts to ease the trade restrictions that are most onerous -- specifically, the prohibition in the Export Administration Act against the export of North Slope crude oil. Governor Sheffield wrote to the President of the United States on December 26, 1984, to provide him with a status report on Alaskan-Japanese trade and to discuss specific actions that could be taken to promote such trade, particularly in natural resource products. This letter was written at a time when the President had a pending meeting with the Prime Minister of Japan, and the Governor wanted the President to be aware that increased commerce with Pacific Rim Nations is a major Alaskan international marketing goal that seems consistent with goals of the National Administration.

Governor Sheffield requested that the Administration help to ease restrictions on the export of Alaskan oil by supporting Alaskan efforts in the reauthorization of the Export Administration Act to remove the barrier to the export of North Slope crude. Active support from the Administration would assist in establishing a national policy of free market competition in the international trading arena and could prove instrumental in the eventual success of our efforts by creating support for similar arguments to be used in the Jones Act repeal effort. The industries and proposals discussed in that letter included oil, with emphasis on the possible sale of State royalty oil to Japan, natural gas, coal, fisheries, and timber exports. (See attachment 11.)

In a January 19 letter to the Director of the President's Office of Management and Budget, Governor Sheffield again sought the active support of the Administration to remove restrictions on the export of Alaska North Slope crude oil. (See attachment 12.) Because the views of the Administration would be considered by the Congress during reauthorization of the Export Administration Act, active support and advocacy by the Administration was critical to the State's position. In response to our efforts, the Administration continued to voice some support for our proposal, but would not become actively involved in Congressional lobbying on the issue.

The Export Administration Act Amendment of 1985 was signed into law on July 12, 1985, and became Public Law 99-64.

Section 126 requires an ALASKAN OIL STUDY to be accomplished within 9 months of enactment. The scope of the study is a:

(c)omprehensive review of the issues and related data concerning possible changes in the existing incentives to produce crude oil from the North Slope of Alaska (including changes in Federal and State taxation, pipeline tariffs and Federal leasing policies) ... as well as the appropriateness of continuing existing controls.

The report is due to the Congress on April 12, 1986, and provides a formal avenue for the full examination of the export of North Slope oil. The State has already provided information in connection with this study, and will continue these efforts as the Study progresses. (See attachment 13.)

Governor Sheffield, while in Washington, D.C. during early November, 1985, for another round of talks with key federal officials, again discussed the export of Alaska oil.

Throughout 1985, State officials had many contacts with various federal officials and members of Congress in relation to our goal of removing the barriers to the export of Alaska oil. We are not including a comprehensive catalog of those contacts in this report, only those that are most directly related to Jones Act issues. However, it is accurate to report that the export of Alaska oil has been and will continue to be a top priority as a matter of State policy, and in pursuing that policy goal, constant contacts are made with private sector, Congressional, and federal officials.

As a culmination of the 1985 efforts, most Alaskans were pleased when the Reagan Administration announced that Cook Inlet Oil exports would be permitted and that the necessary administrative and regulatory steps would be taken to make this possible. The State has already issued preliminary guidelines for the sale process, and a sale of royalty oil should occur before the end of the State's fiscal year. To assure this result, the State will oppose legislation which has been introduced in Congress to restrict the export of Cook Inlet oil.

From the perspective of 1986, as we look ahead to the export of Cook Inlet royalty oil, we can conclude that the strategy and efforts employed to date have produced favorable results. We are hopeful that continued efforts will also produce a favorable outcome in the export of North Slope oil and in the coastwise shipping trade, as well. The report required by the Export Administration Act, due in April, 1986, will hopefully provide a foundation for State efforts to seek beneficial modifications for the balance of the 99th Congress.

RECENTLY INTRODUCED JONES ACT LEGISLATION

During the closing days of the first session of the 99th Congress, three specific bills were introduced in the U.S. Senate that are indicators of the developing concern about the Jones Act and international trade issues. The content and nature of these bills is detailed below:

S.1935 was introduced by Senator Stevens on December 12. This is a bill to permit five foreign-built passenger ships to be documented under laws of the United States. There are certain restrictions in the bill, but its purpose is to promote the development of a domestic cruise ship industry and to allow these vessels to engage in the coastwise trade.

S.1929 was introduced on December 12 by Senator Mathias of Maryland. The Passenger Ship Authorization Act would also allow the documentation of partially foreign-built ships so that they would be allowed to participate in the coastwise trade. The legislation calls for the construction of the marine portions of new passenger ships in U.S. shipyards, while the "hotel" portions of the vessels could be built overseas. Under current law, such ships would not be permitted to trade between U.S. ports. In a statement accompanying the bill, Senator Mathias makes reference to the need to keep jobs in American shipyards and states that passage of the Passenger Ship Authorization Act would allow several hundred jobs to be created and help maintain our nation's shipbuilding capacity. In his view, the alternative is to lose all the jobs to foreign ship building. Since Senator Mathias represents a ship building industrial state, his actions may suggest a more favorable reception in the Congress to Jones Act modifications. This development may partly be the result of the international trade deficit and the balance-of-payments problem, but it may still help turn the Congress in a direction that is favorable to Alaskan goals.

S.1975 was introduced by Senator Goldwater on December 18. This bill provides a temporary eight-year exemption from the Jones Act for inflatable passenger boats or rafts. In his statement accompanying the bill, Senator Goldwater makes reference to the historical caution that the Congress exercises with regard to any proposed amendments to the Jones Act. However, he points out that businesses in the whitewater rafting industry have been told by the Customs Service that the use of foreign-built rafts between river ports is a violation of the Jones Act, and they must, therefore, stop using such rafts. Since the U.S. ship building industry is not able to meet this demand on short notice, Senator Goldwater believes the proposed exemption is warranted. The issue seems similar to the Alaskan hovercraft situation that was discussed earlier in this report.

It currently appears that the second session of the 99th Congress may actively consider legislation that bears directly on Jones Act issues. In conjunction with the Alaska Oil Study authorized by the Export Administration Act, many opportunities may arise for Alaska to actively advocate its position. It should be a significant benefit to express our interests through legislative vehicles introduced not only by our delegation, but also by other members of Congress who are not identified as having a special Alaska interest in the outcome.

PART II

Data presented in 1982 to the Alaska Statehood Commission estimated the impact of the Jones Act on Alaska commerce. Part II of this report excerpts from THE JONES ACT AND ITS IMPACT ON THE STATE OF ALASKA, Volume I: Executive Summary prepared for the Alaska Statehood Commission by Simat, Helliesen, and Eichner (SH&E), Inc. July, 1982. We believe the report presents an analysis of baseline data that continues to provide a valid assessment of the present impact of the Jones Act on Alaska commerce.

We have also included parts of the report prepared by Arlon R. Tussing and Associates, Inc. (ARTA), entitled ALASKA'S ECONOMY AND THE MERCHANT MARINE ACT OF 1920, (The Jones Act), A follow-up and Review of the Jones Act and its Impact on the State of Alaska, by Simat, Helliesen and Eichner, Inc., for the Alaska Statehood Commission, September 20, 1982.

The discussion by ARTA offers a critique of the earlier data and provides a balance to the discussion of the economic impact of the Jones Act on Alaska commerce. A summary of some of the significant changes and events that have taken place relative to the coastwise trade and the Jones Act is also included to indicate how these recent events affect Alaska commerce.

THE JONES ACT AND ITS IMPACT ON THE STATE OF ALASKA
Volume I: Executive Summary
Prepared for the
Alaska Statehood Commission
by
Simat, Helliesen & Eichner, Inc.
July 1982

MAJOR CONCLUSIONS

The Jones Act and Alaska's Liner Service

- o Commerce of the State of Alaska moving in liner services, mostly consumer goods and business supplies, is absorbing an aggregate annual cost of approximately \$41 million because of the restrictions imposed by the Merchant Marine Act of 1920.
- o Due to the inherent directional imbalance of Alaska cargoes, the incidence of higher costs and rates is having the greatest impact on northbound cargoes.
- o In the high-volume Anchorage-Pacific Northwest trade, the state may have a potential for reducing rates by stimulating backhaul cargoes. The extra cost of transportation for such cargoes would be low.
- o In modern containerized-type operations, the bulk of the costs are not flag related. Consequently, the scope for cost and rate reductions as a result of introduction of foreign-flag services is not as great proportionately as in other sectors of the merchant marine.

The Jones Act and Alaska's Crude Oil Transportation Service

- o Alaska's net return from its oil sales is being reduced due to the additional costs imposed by the Jones Act, which, based on current conditions, are approximately \$225 million per year.

Current Use of Exemptions from the Act

- o The State of Alaska has some relief available from the Merchant Marine Act of 1920. This relief is currently not being exploited. Non-use of this loophole does indicate that the cost savings ultimately available from use of foreign-flag vessels may not be as great as has sometimes been supposed.

Changes in U.S. Maritime Policy

- o In view of the Administration's apparent position to uphold the Jones Act, efforts to have it rescinded in toto will be difficult in the immediate future.
- o Given the recent lifting of prohibitions on overseas-built vessels for U.S. subsidized trades, the State of Alaska may wish to consider an effort to obtain a waiver of the requirement to use vessels built in the U.S. and place less emphasis on changing the remainder of the Jones Act.
- o The State of Alaska should develop a coordinated, thoroughly considered Jones Act strategy that seeks reasonable and politically attainable concessions in areas where the cost impacts are most meaningful. This approach has the potential for success, and can be instrumental in reducing the impact of the Jones Act on the State's economy.

The following material has been selected from the report prepared by SH&E and is intended to further explain the major issues of importance to Alaska and to amplify the major conclusions.

All of the material is intended to convey the original work and thoughts of SH&E although it has been selectively edited and arranged for the purpose of this report.

The Jones Act Fleet

The Jones Act fleet consists of those vessels eligible to engage in the coastwise trade. Generally, that includes any vessels built in the U.S. under U.S. ownership, registered under the laws of the U.S., and not restricted because of subsidy status. Vessels that have received Construction Differential Subsidy (CDS) or are receiving Operating Differential Subsidy (ODS) from the Maritime Administration cannot serve the cabotage or coastwise trade without special waivers.

Alaska trade fleet of six dry cargo freighters and 88 tankers constituted 28.9 percent of the Jones Act fleet and 16 percent of the active U.S.-flag privately owned fleet. Alaska trade freighters constitute only 8.6 percent of the total Jones Act eligible freighters. The containerships are smaller than those generally found in the Jones Act fleet and the Roll-on/Roll-off (Ro/Ro) ships are larger. Among tankers, the Alaska trade fleet is made up of 34.4 percent of the total Jones Act fleet, but has 54 percent of the

carrying capacity. This is because tankers in Alaska service are larger than the fleet average.

ALASKA WATERBORNE TRADE

Alaska's waterborne commerce is dominated by crude oil shipments from Valdez which accounted for 89.5 percent of Alaska's total port activity in 1979. When crude oil shipments are subtracted from the total, remaining waterborne commerce is 34.5 percent foreign imports and exports, 47.5 percent coastwise receipts and shipments, and 18 percent internal receipts and shipments. Excluding crude oil shipments, the activity of the top ten Alaska ports includes approximately 60 percent of the state's total waterborne commerce.

ALASKA SHIPPING COSTS

The Impact of Costs on Rates

The cost of shipping in the Alaska trade, and the cost premium caused by the Jones Act, were estimated by comparing the cost of present vessel services with the probable cost of those services were they operated with foreign-flag ships. Although it is true that the observed impact on customers is conveyed through shipping rates, not underlying shipping costs, and that competition and value of service, or "what the traffic will bear," establish freight rates for each commodity in the short run, costs set the limits for freight rates in the long term. In other words, although cost and rate may not be the same or even similar for any given commodity at any given time, in the long run (and/or over a mixture of commodities carried in the same service), rates are, in fact, cost determined. Hence, the cost-based method is a valid approach for determining the relative impact of differing governmental policies which affect the long term character of a shipping market.

IMPACT OF THE JONES ACT ON ALASKA COMMERCE

	U.S.-Flag		Foreign-Flag	
	Cost Per Voyage	Cost Per TEU*	Cost Per Voyage	Cost Per TEU
SUMMARY OF U.S.- AND FOREIGN-FLAG COSTS FOR CONTAINERSHIP OPERATIONS ANCHORAGE/SEATTLE				
Total	\$981,774.66	\$1,055.67	\$850,658.24	\$914.69
SUMMARY OF U.S.- AND FOREIGN-FLAG COSTS FOR RO/RO SHIP OPERATIONS ANCHORAGE/SEATTLE				
Total	\$1,024,030.32	\$922.55	\$889,373.98	\$801.24
	Cost Per Voyage	Cost Per TON	Cost Per Voyage	Cost Per TON
SUMMARY OF U.S.- AND FOREIGN-FLAG COSTS FOR VLCC OPERATIONS VALDEZ/LOS ANGELES				
Total	\$717,599.08	\$5.98	\$551,253.68	\$4.59
SUMMARY OF U.S.- AND FOREIGN-FLAG COSTS FOR PRODUCT TANKER OPERATIONS LOS ANGELES/ANCHORAGE				
Total	\$448,626.98	\$12.82	\$257,541.43	\$7.36

* TEU is "Twenty-foot Equivalent Unit," the standard measure of output in the container trades. In Alaska, most or all containers are 35' or 40' long, and based on total cubic volume are considered equivalent to two TEU's.

These summary runs indicate that the relative impact of the Jones Act on Alaskan commerce varies with specific circumstances. For example, in liner trades (represented by container and Ro/Ro vessels) a significant part of the total cost relates to containers, cargo handling, and other cargo-related functions. These are not affected by the Jones Act. Hence, the relative cost difference between U.S.- and foreign-flag vessel service is less than, say, the tanker trades, where Jones Act-affected cost categories make up a much larger share of the total cost.

The Impact of The Act on Liner Services

The total U.S.-flag premium cost for liner services in the Alaskan trade (i.e., services which transport package cargo such as consumer goods, automobiles, machinery, etc.) is about \$41 million per year, as follows:

	<u>Container</u>	<u>Ro/Ro</u>	<u>Tug Barges</u>
Cost per trip - U.S.-flag	\$981,774	\$1,024,030	\$195,217
Cost per trip - foreign-flag	<u>850,658</u>	<u>889,373</u>	<u>158,023</u>
Net	\$131,116	\$134,657	\$37,188
Voyages per year	X 155	X 100	X 200
	<u>\$20,322,980</u>	<u>\$13,465,700</u>	<u>\$7,437,600</u>
	<u>GRAND TOTAL</u>		<u>\$41,226,280</u>

The cost penalty applies to commodities as a group. How it may be distributed to any specific commodity or group of commodities is uncertain; if any one item is judged to pay less premium, then something else must automatically be said to pay more, and the net result to the people of Alaska is essentially the same.

With regard to the relative impact of the Act on inbound versus outbound commodities, the analysis indicates it is northbound liner commodities which are most likely absorbing the cost premium, meaning the direct (or initial) impact of the Jones Act is falling more heavily on Alaskan receivers and consumers rather than on Alaskan businesses shipping their products southbound.

CORRECTION

**THIS DOCUMENT
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TO ASSURE LEGIBILITY**

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