

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 86/2

215 SCOMM 9: HOUSE SPEC. COMM. ON PERMANENT FUND 1977-78

STATE OF ALASKA
LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

120

11-APR-77

COMMENTS

HB 322 FRANCHISE TAX
HB 323 PROPERTY TAX
HB 321 GOVERNOR SEVERANCE TAX
HB 328 RESERVES @ 8 MILLS
CONSTANT REAL PER CAPITA BUDGET APPROPRIATIONS

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%

YEAR END	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM- ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL OF \$0 MIL
1977											539.3	
1978	1091.9	61.4	1153.3	802.7	0.0	0.0	137.8	940.5	212.8	86.7	752.1	0.0
1979	1341.6	90.7	1432.3	867.8	0.0	0.0	204.3	1072.1	360.2	211.0	1112.3	0.0
1980	1592.5	134.4	1726.9	873.9	0.0	0.0	260.7	1134.6	592.3	357.0	1704.6	0.0
1981	1778.6	193.6	1972.2	910.8	0.0	0.0	281.7	1192.5	779.8	509.6	2484.3	0.0

Moore Business Forms, Inc. 14127

11-APR-77

HB 245 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%

ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%

MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00

% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%

8 OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%

ANNUAL % INCREASE IN BUDGET APPROPRIATION = 10.00%

[illegible]

STATE OF ALASKA
LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

122

11-APR-77

COMMENTS

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%
ANNUAL % INCREASE IN BUDGET APPROPRIATION = 15.00%

YEAR	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM- ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL OF \$0 MIL
1977											652.7	
1978	1103.0	70.0	1173.0	802.7	0.0	0.0	137.8	940.5	232.5	86.7	885.2	0.0
1979	1348.7	99.4	1448.1	923.1	0.0	0.0	204.3	1127.4	320.7	211.0	1205.9	0.0
1980	1492.5	133.4	1625.9	1061.6	0.0	0.0	260.7	1322.3	303.7	357.0	1509.6	0.0
1981	1586.5	165.8	1752.3	1220.8	0.0	0.0	281.7	1502.5	249.8	509.6	1759.4	0.0
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Moore Business Forms, Inc. 14127

11-APR-77

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%

ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%

MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00

% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%

% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%

ANNUAL % INCREASE IN BUDGET APPROPRIATION = 20.00%

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Moore Business Forms, Inc. 14121

11-APR-77

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
CONSTANT REAL PER CAPITA BUDGET APPROPRIATIONS

ANNUAL RATE OF INTEREST ON GENERAL & PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%

YEAR	NON INVESTMENT REVENUE	INVESTMENT INTREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM-ANENT FUND	GENERAL FUND	REVENUE REQ FOR GF BAL
END											END OF YEAR	OF \$0 MIL
1977											652.7	
1978	1103.0	70.0	1173.0	802.7	0.0	0.0	137.8	940.5	232.5	86.7	885.2	0.0
1979	1348.7	100.6	1449.3	867.8	0.0	0.0	204.3	1072.1	377.2	211.0	1262.5	0.0
1980	1492.5	141.6	1634.1	873.9	0.0	0.0	260.7	1134.6	499.5	357.0	1762.0	0.0
1981	1586.5	190.8	1777.3	910.8	0.0	0.0	281.7	1192.5	584.9	509.6	2346.9	0.0

Moore Business Forms, Inc. vs 14127

11-APR-77

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 328 RESERVES @ 8 MILLS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL. = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%
ANNUAL % INCREASE IN BUDGET APPROPRIATION = 10.00%

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STATE OF ALASKA
LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

126

11-APR-77

COMMENTS

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 328 RESERVES @ 8 MILLS

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%
ANNUAL % INCREASE IN BUDGET APPROPRIATION = 15.00%

YEAR END	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM- ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL OF \$0 MIL
1977											539.3	
1978	1103.0	61.8	1164.8	802.7	0.0	0.0	137.8	940.5	224.3	86.7	763.6	0.0
1979	1348.7	90.6	1439.3	923.1	0.0	0.0	204.3	1127.4	311.9	211.0	1075.5	0.0
1980	1492.5	124.0	1616.5	1061.6	0.0	0.0	260.7	1322.3	294.2	357.0	1369.7	0.0
1981	1689.3	159.4	1848.7	1220.8	0.0	0.0	281.7	1502.5	346.2	509.6	1715.9	0.0
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11-APR-77

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 328 RESERVES @ 8 MILLS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%
ANNUAL % INCREASE IN BUDGET APPROPRIATION = 20.00%

YEAR	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM-ANENT FUND	GENERAL FUND	REVENUE REQ FOR GF BAL OF SO MIL
1977											539.3	
1978	1103.0	61.8	1164.8	802.7	0.0	0.0	137.8	940.5	224.3	86.7	763.6	0.0
1979	1348.7	89.7	1438.4	963.2	0.0	0.0	204.3	1167.5	270.9	211.0	1034.5	0.0
1980	1492.5	118.9	1611.4	1155.9	0.0	0.0	260.7	1416.6	194.9	357.0	1229.3	0.0
1981	1689.3	145.6	1834.9	1387.1	0.0	0.0	281.7	1668.7	166.1	509.6	1395.5	0.0

STATE OF ALASKA
LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

128

11-APR-77

COMMENTS

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 328 RESERVES @ 8 MILLS
CONSTANT REAL PER CAPITA BUDGET APPROPRIATIONS

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%

YEAR	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM- ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL OF \$0 MIL
1977											539.3	
1978	1103.0	61.8	1164.8	802.7	0.0	0.0	137.8	940.5	224.3	86.7	763.6	0.0
1979	1348.7	91.8	1440.5	867.8	0.0	0.0	204.3	1072.1	368.4	211.0	1132.0	0.0
1980	1492.5	132.2	1624.7	873.9	0.0	0.0	260.7	1134.6	490.1	357.0	1622.1	0.0
1981	1689.3	184.4	1873.7	910.8	0.0	0.0	281.7	1192.5	681.3	509.6	2303.3	0.0
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Moore Business Forms, Inc. 14127

11-APR-77

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 144 COUNCIL SEVERANCE TAX

ANNUAL RATE OF INTEREST ON GENERAL & PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%
ANNUAL % INCREASE IN BUDGET APPROPRIATION = 10.00%

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STATE OF ALASKA
LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

130

11-APR-77

COMMENTS

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 144 COUNCIL SEVERANCE TAX

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%
ANNUAL % INCREASE IN BUDGET APPROPRIATION = 15.00%

YEAR END	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM- ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL OF \$0 MIL
1977											652.7	
1978	1147.3	71.6	1218.9	802.7	0.0	0.0	137.8	940.5	278.4	86.7	931.1	0.0
1979	1416.9	105.2	1522.1	923.1	0.0	0.0	204.3	1127.4	394.7	211.0	1325.9	0.0
1980	1638.4	147.4	1785.8	1061.6	0.0	0.0	260.7	1322.3	463.6	357.0	1789.4	0.0
1981	1879.5	196.7	2076.2	1220.8	0.0	0.0	281.7	1502.5	573.7	509.6	2363.2	0.0
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Moore Business Forms, Inc. 14127

11-APR-77

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 144 COUNCIL SEVERANCE TAX

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%

ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%

MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00

% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL. = 20.00%

% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%

ANNUAL % INCREASE IN BUDGET APPROPRIATION = 20.00%

[illegible]

STATE OF WISCONSIN
LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

132

11-APR-77

COMMENTS

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 144 COUNCIL SEVERANCE TAX
CONSTANT REAL PER CAPITA BUDGET APPROPRIATIONS

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%

YEAR END	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM- ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL \$0 MIL
1977											652.7	
1978	1147.3	71.6	1218.9	802.7	0.0	0.0	137.8	940.5	278.4	86.7	931.1	0.0
1979	1416.9	106.4	1523.3	867.8	0.0	0.0	204.3	1072.1	451.2	211.0	1382.4	0.0
1980	1638.4	155.6	1794.0	873.9	0.0	0.0	260.7	1134.6	659.4	357.0	2041.8	0.0
1981	1879.5	221.8	2101.3	910.8	0.0	0.0	281.7	1192.5	908.8	509.6	2950.6	0.0
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11-APR-77

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 144 COUNCIL SEVERANCE TAX
HB 328 RESERVES @ 8 MILLS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%

ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%

MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00

% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00

% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%

ANNUAL % INCREASE IN BUDGET APPROPRIATION = 10.00%

[illegible]

STATE OF ALASKA
LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

134

11-APR-77

COMMENTS

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 144 COUNCIL SEVERANCE TAX
HB 328 RESERVES @ 8 MILLS

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%
ANNUAL % INCREASE IN BUDGET APPROPRIATION = 15.00%

YEAR END	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM- ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL OF \$0 MIL
1977											539.3	
1978	1147.3	63.4	1210.7	802.7	0.0	0.0	137.8	940.5	270.2	86.7	809.5	0.0
1979	1416.9	96.4	1513.3	923.1	0.0	0.0	204.3	1127.4	385.9	211.0	1195.4	0.0
1980	1741.1	141.7	1882.8	1061.6	0.0	0.0	260.7	1322.3	560.5	357.0	1755.9	0.0
1981	1879.5	194.3	2073.8	1220.8	0.0	0.0	281.7	1502.5	571.3	509.6	2327.2	0.0
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STATE OF NEW YORK
LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

135

11-APR-77

COMMENTS

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 144 COUNCIL SEVERANCE TAX
HB 328 RESERVES @ 8 MILLS

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%
ANNUAL % INCREASE IN BUDGET APPROPRIATION = 20.00%

YEAR END	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM- ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL IF \$0 MIL
1977											539.3	
1978	1147.3	63.4	1210.7	802.7	0.0	0.0	137.8	940.5	270.2	86.7	809.5	0.0
1979	1416.9	95.5	1512.4	963.2	0.0	0.0	204.3	1167.5	344.9	211.0	1154.4	0.0
1980	1741.1	136.7	1877.8	1155.9	0.0	0.0	260.7	1416.6	461.2	357.0	1615.6	0.0
1981	1879.5	180.5	2060.0	1387.1	0.0	0.0	281.7	1668.7	391.3	509.6	2006.8	0.0

LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

136

11-APR-77

COMMENTS

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 144 COUNCIL SEVERANCE TAX
HB 328 RESERVES @ 8 MILLS
CONSTANT REAL PER CAPITA BUDGET APPROPRIATIONS

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
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% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%

YEAR	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM- ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL OF SO MIL
1977											539.3	
1978	1147.3	63.4	1210.7	802.7	0.0	0.0	137.8	940.5	270.2	86.7	809.5	0.0
1979	1416.9	97.6	1514.5	867.8	0.0	0.0	204.3	1072.1	442.4	211.0	1251.9	0.0
1980	1741.1	149.9	1891.0	873.9	0.0	0.0	260.7	1134.6	756.4	357.0	2008.3	0.0
1981	1879.5	219.3	2098.8	910.8	0.0	0.0	281.7	1192.5	906.4	509.6	2914.7	0.0
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STATE OF ALASKA
LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

137

11-APR-77

COMMENTS

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 321 GOVERNOR SEVERANCE TAX

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%
ANNUAL % INCREASE IN BUDGET APPROPRIATION = 10.00%

YEAR	NON						PAYMENTS		SURPLUS	PERM-	GENERAL	REVENUE REQ
END	INVESTMENT	INVESTMENT	TOTAL	BUDGET	SUPPLE-	DEBT	TO	TOTAL	OR	ANENT	FUND	FOR GF BAL
	REVENUE	INTEREST	REVENUE	APPROPRIATION	MENTALS	SERVICE	FUNDS	EXPENDITURE	DEFICIT	FUND	END OF YEAR	OF
												SO MIL
1977											652.7	
1978	1153.3	71.9	1225.2	802.7	0.0	0.0	137.8	940.5	284.7	86.7	937.4	0.0
1979	1408.4	106.2	1514.6	883.0	0.0	0.0	204.3	1087.2	427.4	211.0	1364.7	0.0
1980	1559.0	149.3	1708.3	971.3	0.0	0.0	260.7	1232.0	476.4	357.0	1841.1	0.0
1981	1823.6	201.7	2025.3	1068.4	0.0	0.0	281.7	1350.0	675.3	509.6	2516.4	0.0
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HB 145	SEPARATE ACCOUNTING
HB 323	PROPERTY TAX
HB 321	GOVERNOR SEVERANCE TAX

ANNUAL % INCREASE IN BUDGET APPROPRIATION = 15.00%

[illegible]

MAGNET BUSINESS FORMS, INC. 14121

11-APR-77

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 321 GOVERNOR SEVERANCE TAX

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%

ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%

MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00

% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%

% OF ROYALTIES, LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%

ANNUAL % INCREASE IN BUDGET APPROPRIATION = 20.00%

[illegible]

LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

140

11-APR-77

COMMENTS

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 321 GOVERNOR SEVERANCE TAX
CONSTANT REAL PER CAPITA BUDGET APPROPRIATIONS

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%

ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%

MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00

% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%

% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%

YEAR	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM- ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL OF \$0 MIL
1977											652.7	
1978	1153.3	71.9	1225.2	802.7	0.0	0.0	137.8	940.5	284.7	86.7	937.4	0.0
1979	1408.4	106.5	1514.9	867.8	0.0	0.0	204.3	1072.1	442.9	211.0	1380.2	0.0
1980	1559.0	152.6	1711.6	873.9	0.0	0.0	260.7	1134.6	577.0	357.0	1957.2	0.0
1981	1823.6	213.6	2037.2	910.8	0.0	0.0	281.7	1192.5	844.7	509.6	2801.9	0.0
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Moore Business Forms, Inc. 14727

11-APR-77

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 321 GOVERNOR SEVERANCE TAX
HB 328 RESERVES @ 8 MILLS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES, LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%
ANNUAL % INCREASE IN BUDGET APPROPRIATION = 10.00%

[illegible]

11-APR-77

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 321 GOVERNOR SEVERANCE TAX
HB 328 RESERVES @ 8 MILLS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS =	7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS =	6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS =	22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL =	20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND =	25.00%
ANNUAL % INCREASE IN BUDGET APPROPRIATION =	15.00%

[illegible]

STATE OF ALASKA
LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

143

11-APR-77

COMMENTS

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 321 GOVERNOR SEVERANCE TAX
HB 328 RESERVES @ 8 MILLS

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%
ANNUAL % INCREASE IN BUDGET APPROPRIATION = 20.00%

YEAR END	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM- ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL OF \$0 MIL
1977											539.3	
1978	1153.3	63.6	1216.9	802.7	0.0	0.0	137.8	940.5	276.4	86.7	815.7	0.0
1979	1408.4	95.6	1504.0	963.2	0.0	0.0	204.3	1167.5	336.5	211.0	1152.3	0.0
1980	1651.8	133.3	1785.1	1155.9	0.0	0.0	260.7	1416.6	368.5	357.0	1520.7	0.0
1981	1833.5	171.9	2005.4	1387.1	0.0	0.0	281.7	1668.7	336.7	509.6	1857.4	0.0
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STATE OF ALASKA
LEGISLATIVE FINANCE WORKING DOCUMENT
BUDGET FORECASTING MODEL

144

11-APR-77

COMMENTS

HB 145 SEPARATE ACCOUNTING
HB 323 PROPERTY TAX
HB 321 GOVERNOR SEVERANCE TAX
HB 328 RESERVES @ 8 MILLS
CONSTANT REAL PER CAPITA BUDGET APPROPRIATIONS

ASSUMPTIONS

ANNUAL RATE OF INTEREST ON GENERAL + PERMANENT FUNDS = 7.00%
ANNUAL RATE OF INTEREST ON NEW BONDS = 6.50%
MATURITY PERIOD ON NEW BONDS IN YEARS = 22.00
% OF CURRENT YEAR EXPEND. IN G.F. CASH BAL = 20.00%
% OF ROYALTIES LEASES AND BONUSES DEPOSITED IN PERMANENT FUND = 25.00%

YEAR	NON INVESTMENT REVENUE	INVESTMENT INTEREST	TOTAL REVENUE	BUDGET APPROPRIATION	SUPPLE- MENTALS	DEBT SERVICE	PAYMENTS TO FUNDS	TOTAL EXPENDITURE	SURPLUS OR DEFICIT	PERM- ANENT FUND	GENERAL FUND END OF YEAR	REVENUE REQ FOR GF BAL OF	SO MIL
1977											539.3		
1978	1153.3	63.6	1216.9	802.7	0.0	0.0	137.8	940.5	276.4	86.7	815.7	0.0	
1979	1408.4	97.7	1506.1	867.8	0.0	0.0	204.3	1072.1	434.0	211.0	1249.8	0.0	
1980	1651.8	146.5	1798.3	873.9	0.0	0.0	260.7	1134.6	663.7	357.0	1913.4	0.0	
1981	1833.5	210.8	2044.3	910.8	0.0	0.0	281.7	1192.5	851.8	509.6	2765.3	0.0	

SCOMM

#9:110

STATE OF ALASKA
THE LEGISLATURE

LEGISLATIVE AFFAIRS AGENCY

PF: Fiscal Tools
POUCH Y - STATE CAPITOL
JUNEAU, ALASKA 99811
907-455-3800

MEMORANDUM

June 16, 1977

SUBJECT: Permanent Fund - Analysis of "Fiscal Tools"

TO: The Honorable Clark Gruening
Chairman
House Special Committee on the Alaska Permanent Fund

FROM: Richard Haggart
Research Analyst

This memorandum is in response to your request that we prepare:

1. A listing of the existing "fiscal tools"--state fiscal programs and debt instruments issued by the state--which are (or with minor modification could be made) eligible for investment of the Permanent Fund principal under the "income producing" criterion; and
2. An analysis of the "strengths and weaknesses" of each in terms of their appropriateness as components of a Permanent Fund strategy.

Basic to the problem presented us in making this analysis is the use of the term "fiscal tool" in the general outline prepared by the Division of Policy Development and Planning (DPDP), in their memorandum of May 6, 1977. Implicit in the concept of a "fiscal tool" is some idea of a job to be accomplished--clearly, a hammer is a "tool" but its utility--its "strengths and weaknesses"--can vary considerably, depending on whether the task at hand is brain surgery or house building.

Through this memorandum we have assumed that the "task at hand" for the Permanent Fund will be structured around some more or less explicit effort to shape the state's growth path. Consequently, we have used the terms "growth strategy" and "Permanent Fund strategy" interchangeably. In addition, many of our comments and observations regarding the "Permanent Fund" policy objectives are also applicable to the more general question of General Fund surpluses in years to come. And, in one sense, the "growth" impact effects of such General Fund surpluses may prove to be ever more critical in terms of state policy, because fewer constraints exist on how such money may be used.

Inescapable in this approach are some judgments about the sorts of growth strategies that are feasible (and thus worth analyzing) and the state's potential for general and sectorial economic development. The result is basically a "scenario" approach, based on a number of hopefully explicit assumptions. Obviously the analysis contained in Appendix II is only of limited usefulness if these judgments diverge significantly from those of the committee. The assumptions are as follows:

Assumption No. 1: We assume that Alaska's long-run ability to sustain growth is limited, and that exclusive of Prudhoe Bay revenues, that limit is below growth rates which have occurred over the last decade.

Assumption No. 2: We assume that uncontrolled investment of oil revenues in Alaska will result in economic growth that will not be wholly self-sustaining if and when petroleum-related revenue begins to decline in the mid-1980's.

Assumption No. 3: Even if Alaska's non-oil economic potential were capable of being developed rapidly enough to replace oil revenues by the mid-to-late 1980's, such accelerated economic development would be undesirable from the standpoint of implicit social and quality-of-life objectives which are shared by most Alaskans.

Assumption No. 4: Within the limitations set forth above, we assume that the objective of the Permanent Fund will be to (a) promote that economic development which is self-sustainable after oil revenues begin to decline, and (b) which is not inimical to quality-of-life objectives shared by Alaskans (i.e. wilderness, environmental and recreational values).

Assumption No. 5: Finally, we assume that to the degree that either Permanent Fund and/or General Fund revenues are in excess of the development objectives set forth in No. 4 above, that the excess revenues will be invested in a diversified and relatively riskless investment portfolio with the income accruing unencumbered to the General Fund.

The remainder of the memorandum consists of Appendices I and II attached. Appendix I provides a brief "laundry-list" of state programs which are eligible for Permanent Fund investment. Where possible, the descriptions and outline follow the format of the Executive Budget of the Governor. Appendix II contains a discussion of these programs by broad category, assuming that more specific programmatic analysis will be dependent on the assignment of more precise goals and objectives to Permanent Fund policy generally.

RGH:mo
Attachments

APPENDIX I

Specific State Programs Eligible for Permanent Fund Investment

In this part of the memorandum we briefly describe and comment on the state programs and activities which are potentially eligible for Permanent Fund investment support (i.e., they are "income producing"). A more generalized discussion of these program areas by type of activity appears in Part III of this memorandum.

For fairly obvious reasons, the outline of this discussion follows the Executive budget--hence, debt service activities appear in several areas, depending on the program area being discussed. Finally, for purposes of this analysis no programs were included that would require major legislative modification in order to make Permanent Fund participation possible.

Category 1: Education

1. The Scholarship Loan Program provides loans to Alaskan residents for post-secondary vocational and academic training. The purpose of the program is to assist qualified Alaskans to secure a post-secondary education and to encourage them to remain in Alaska after completing their schooling. Up to \$2,500 per year is available to undergraduates and up to \$5,000 per year to graduate students. Loans must be repaid within six years of the termination of studies, and a maximum of 40 percent of a loan can be forgiven for five years' residence in Alaska after graduation. In fiscal 1976, 2,087 loans were made totaling \$308,500.
3.8 MILLION
2. Debt service for education-related state bonding in fiscal 1976 totaled \$13.0 million, and is estimated to be \$17.2 million in fiscal 1977. Debt service costs under this category include payments on University of Alaska projects, general education which includes rural schools built with state funds, and payments on library facilities. Of the associated costs of debt service for education programs, all funding comes from the general fund with the exception of dedicated revenues from the cigarette tax which totaled \$475,000 annually through fiscal 1976 and is estimated to increase to \$500,000 in fiscal 1977.

Category 2: Social Services

1. Debt service on Pioneer Homes totaled \$765.9 thousand in fiscal 1976 and is estimated to increase to \$900.7 thousand in fiscal 1977.

Category 3: Health

1. Debt service for health care facilities for fiscal 1976 totaled \$705.8 thousand. For fiscal 1977, debt service costs are estimated to be \$1,170.9 thousand and to increase in fiscal 1978 to \$1.7 million.

Category 4: Natural Resources Management and Environmental Conservation

1. The Fisheries Enhancement Revolving Loan Fund is designed to support loans to non-profit organizations or individuals for the development of hatcheries. The Department of Revenue is required to purchase all loans made under this program. To date, the program has made only one loan, to a regional organization, totaling \$1.4 million. In addition, officials in the Department of Commerce and Economic Development indicate that "prospective" loans (meaning loans which have been extensively discussed, but have not necessarily been applied for) total about \$3.5 million--two individual loans totaling about \$500,000 and one large regional loan of \$3 million--and that the FY 1978 total could go as high as \$10 million.
2. Debt service for this category totaled \$3.5 million in fiscal 1976 and is estimated to increase to \$4.7 million in fiscal 1977 and \$5.8 million in fiscal 1978. Sub-categories under this category of debt service include fish and game facilities, water and sewer, parks and recreation, and forest fire protection.

Category 5: Public Protection

1. Flood control and national guard facilities debt service under this category totaled \$629,000 in 1976, and is estimated to increase to \$737.5 thousand in fiscal 1977 and \$743.8 thousand in fiscal 1978.

Category 6: Administration of Justice

1. Correctional facilities debt service under this category totaled \$888.6 thousand in fiscal 1976, and is projected to increase to \$959.5 thousand in fiscal 1977 and \$953.1 thousand in fiscal 1978.

Category 7: Development

1. The Municipal Bond Bank Authority is an independent public corporation established by the 1975 legislature to assist communities in Alaska to develop needed public facilities by marketing general obligation bonds. The bond bank will purchase these bonds and offer its own revenue bonds to the public bond market. The revenue bonds will be secured by the credit of the municipality as well as by a bond reserve fund appropriated by the legislature. In fiscal 1977 it was estimated that the authority will sell bonds in the amount of \$25 million.

2. The Division of Business Loans has the responsibility of administering five revolving loan funds and two public corporations: the Small Business Revolving Loan Fund; the Tourism Revolving Loan Fund; the Commercial Fishing Revolving Loan Fund; the Child Care Facilities Revolving Loan Fund; the Water Resources Revolving Loan Fund; the Alaska State Development Corporation; and the Small Business Development Corporation. The five loan funds enable qualified businesses and public utilities in their respective areas to obtain long-term financing for the primary purposes of developing, expanding or modernizing their operations. The Department of Revenue must purchase all loans made by the division. In addition to this, the division maintains for the Alaska State Development Corporation a loan portfolio in excess of \$3 million as well as an investment portfolio exceeding \$3.5 million. This corporation, however, is inactive and will dissolve in 1983. Finally, the Small Business Development Corporation grants loans in participation with the federal Small Business Administration under the "502" programs. These loans are high risk development loans and the SBDC portion is five percent of the total loan. According to state officials, the SBDC has not made a loan for two years, although one for "about \$50,000" is now under consideration.
3. The Department of Commerce and Economic Development through their Division of Veterans Affairs maintains a Veterans Affairs Revolving Loan Fund for the purpose of making loans to qualified Alaska national guardsmen and veterans in the State of Alaska. These loans may be used to purchase, refinance, build and remodel homes, farms, businesses and multiple dwellings. In addition, a qualified veteran may be granted a loan for education, fishing, mining or personal use. At the present time, the program has about 3,200 outstanding loans. In fiscal 1976, 1,500 loan applications were approved, totaling \$55 million. It is projected that 1,160 loans with a value of \$54 million will be approved in fiscal 1977, and a total of 1,480 loans valued at \$30 million is projected for fiscal 1978.
4. The Department of Commerce and Economic Development through its Agriculture Division maintains the Agricultural Revolving Loan Fund which provides a source of long-term, low interest loans to promote a rapid development of agriculture as an industry throughout the state. Sources of credit usually available to farm enterprises are not available in Alaska due to the generally unproven potential for profitable operation. In fiscal 1976, 67 loans were made from this fund for a total of \$700,000. It is projected that 92 loans totaling \$1,500,000 will be made in fiscal 1978. As of fiscal 1976, the program had outstanding (126) loans to (222) separate clients.

5. The senior citizen housing development program provides loans and grants to municipalities, housing authorities and other non-profit local sponsors to stimulate new housing construction and for rehabilitation of existing units for senior citizens. Fund revenues are provided from a \$7.5 million general obligation bond issue approved in November, 1976. To date, no loans have been approved, and program activity is limited to grants.
6. Debt service items in the development category cover remote housing bonds, water and harbor facilities bonds, natural disaster recovery bonds, and port facilities bonds. Total debt service costs for these categories in fiscal 1976 total \$826,000. and are expected to increase to \$2.7 million in fiscal 1977.

Category 8: Transportation

1. Debt service costs of the transportation category include general obligation bonds for highways, marine transportation, and aviation. In addition, revenue bond debt costs for fiscal 1977 will be accruing on international airports. Total debt service costs for the general obligation bond categories in fiscal 1976 totaled approximately \$16.6 million. These are projected to increase to \$19.3 million in fiscal 1977.

Category 9: Housing

The state of Alaska maintains housing programs in two major areas: state owned and operated public and low cost housing programs, operated by the Alaska State Housing Authority (ASHA), and a program of state supported financing for low- and moderate-cost private sector housing development via the Alaska Housing Finance Corporation (AHFC).

The ASHA was established in the late 1940's to provide increased availability of low- and moderate-cost housing for Alaskans, with specific reference to veterans and persons engaged in "national defense activities". In addition, ASHA is authorized to construct public buildings for the state or federal government. The low-cost housing program and the public buildings construction program are financed via bonds or other debt securities which the Authority is authorized to issue. The debt is totally secured by the properties involved, and involves no pledge of the state's credit.

While ASHA's activities in the state were at one time substantial, the Authority now is concentrating virtually exclusively on the development of public housing programs. Consequently, ASHA officials estimate that urban renewal activities will be entirely phased out by the end of 1977, and the Authority has

also requested a termination of its public buildings program. While ASHA has the authority to issue bonds and notes on its own credit (no state guarantee of the loans is made), in fact, little of this type of financing has occurred (with the exception of the public buildings program which involved approximately \$108 million in bond issues between 1966 and 1974). Currently, ASHA receives over 99 percent of its funding from the federal government, chiefly from the Department of Housing and Urban Development. The Authority has borrowed from the state in the past, but according to Authority officials, the Department of Revenue will not make short-term loans to ASHA except where federal guarantees exist. The lack of bonding activity of the Authority for housing construction reflects the lack of creditworthiness of public housing projects. In the judgment of the Authority, such bonds would be essentially unmarketable. At the present time the ASHA is responsible for management of 1,970 housing units in the state, including 747 units of remote housing constructed via a special 1971 legislative appropriation and general obligation bond issue--the only significant increment of state funding other than short-term Department of Revenue loans, in recent years.

Housing other than public housing is primarily the responsibility of the Alaska Housing Finance Corporation created in 1971. The Corporation makes or buys mortgages on low- or moderate-income housing, insures mortgages, makes home improvement loans, and makes loans for other associated costs of home ownership for qualified persons, or developers, including downpayments. To finance its activities, the Corporation is authorized to issue bonds and notes. In addition, income from the Corporation's activities (interest payments and insurance fees) is retained for operations. As of November 30, 1976, the Corporation had approximately \$166.9 million in outstanding bonds and notes, and an additional \$9.2 million in notes payable to the state of Alaska (as with ASHA, these short-term loans are made by the Department of Revenue to the Corporation). Of the bonded indebtedness outstanding, the Corporation issued \$50 million in FY 1976, and anticipates issuing a further \$75 million in bonds during FY 1977 and FY 1978. As of November 30, 1976, the Corporation's activities had assisted approximately 4,000 people obtain home financing, and they estimate that the FY 1977-78 bonding program will assist an additional 1,500.

Finally, the state has established 13 regional native housing authorities with powers essentially similar to those of the ASHA. They do not, however, have the authority to engage in the public buildings program or to participate in urban renewal activities. Like ASHA, virtually all money for these activities is provided by the federal government, and state participation is minimal and limited to insured short-term loans. According to state officials, none of the corporations have sold bonds.

Category 10: Energy and Power Development Authorities

A recently enacted, and still nascent, program is the Alaska Power Authority. The Authority is an independent body, designed to promote development of hydroelectric and fossil fuel power sources for domestic Alaskan usage. The Authority is generally empowered to issue bonds and notes to finance power development activities in the state, with the debt being secured by the projects themselves or by the earnings of these projects.

The Alaska Power Authority's funding sources are the Power Project Revolving Fund, appropriated initially by the legislature, as well as receipts from the sale of bonds or notes, which are not subject to legislative appropriation. As currently constituted, it appears that the legislature could appropriate money directly from the Permanent Fund (or allocate Fund resources by legislative direction) to the Revolving Fund, or could legislatively direct the Fund to purchase some or all of the debt securities issued by the Authority. Obviously, the greater the contribution made by the legislature to the Revolving Fund, the less the requirement for the Authority to issue debt. Conversely, minimal appropriations to the Fund would necessitate issuance of debt securities by the Authority.

Presently, the Authority is still in the formative stages and has, as yet, issued no bonds. Power Authority officials estimate that initial organizational work will be complete by October 1, 1977, and that the Authority will then be able to evaluate specific projects and financing proposals.

The state also has authorized the creation of regional electrical authorities to develop adequate, safe, and reliable electric power sources in rural or economically depressed areas. The authorities have the authority to sell bonds, but according to state officials none have done so due to poor credit ratings of the prospective facilities. One association (Tlingit-Haida) has secured long-term financing from the Rural Electrification Administration, U. S. Department of Agriculture.

Category 11: Toll Bridge Authority

The Alaska Toll Bridge Authority, created to provide for the analysis of feasibility and establishment of toll bridges upon public highways, is inactive. There are, to the knowledge of the Department of Highways, no toll bridges in the state of Alaska.

APPENDIX II

This portion of the memorandum contains a general analysis of the use of fiscal mechanisms in conjunction with overall Permanent Fund policy, and where possible, analyzes the strengths and weaknesses of various approaches.

The General Fund:

In our judgment, the General Fund is a relatively inefficient mechanism, generally, for dealing with projected short-term revenue surpluses. This criticism is apart from any specific problems which may exist for individual program areas. We believe this to be true because:

1. The political process tends to allocate total available revenues regardless of marginal utility and without systematic consideration of longer term economic and social consequences.
2. Existing fiscal mechanisms now funded through the General Fund were virtually all enacted during periods of revenue scarcity. Hence, these programs have an innate bias towards maximizing their share of fiscal resources, vis-a-vis competing programs (or, viewed in another context, the programs compete for available resources on behalf of their various constituencies within the state). In short, these programs and their managers in the state bureaucracy can be expected to seek the greatest slice of the available revenue "pie" that they can get, notwithstanding any constraints imposed by generalized "growth" or Permanent Fund policy objectives.
3. We do not believe it particularly sanguine to expect that future legislatures will constrain their own fiscal actions if surplus General Fund revenues exist. Again, we believe the pressures will be virtually insurmountable to distribute available revenues. The experience with the Prudhoe Bay lease sale revenues may be illustrative. In this instance, the state was able to "bail" itself out of an untenable revenue position with the in-place reserves tax. No such alternative is visible on the fiscal horizon, once oil production related revenues begin to decline.

Consequently, we believe that holding large revenue surpluses in the General Fund is likely to prove to be the least effective method of managing the state's short-term revenue surplus, if there exists in the minds of the committee an alternative long-range goal towards which these funds should be committed.

Should this line of reasoning be accepted, then it follows that the General Fund should be the recipient of only those funds which will not be detrimental to the long-run growth objective as set forward in Permanent Fund policy. Clearly, the more ambitious the eventual objec-

tive of the Permanent Fund, the less will be the year-to-year contributions to the General Fund from oil revenues, and the greater will be the contributions to the Permanent Fund, or other specific objectives.

Specific Programs Within the General Fund:

Loan Programs: The state maintains loan programs to promote a variety of interests, ranging from promotion of business enterprise to Senior Citizen Housing and Child Care Facilities. Before considering the potential effectiveness of these programs, several points emerge concerning loan programs generally:

1. Unlike most other programs contained in the General Fund, loans are interest bearing investments, and hence, potentially eligible for backing by the Permanent Fund directly. Therefore, the question of what division should be between the Permanent and General Funds in terms of the overall revenue "surplus" is not directly applicable.
2. However, under current law there is no requirement that the Permanent Fund purchase such securities, nor is there any provision allowing Permanent Fund monies to be used for funding such programs directly (assuming this mechanism were legal).
3. Finally, there is no current provision of law requiring any coordination between ongoing state objectives (as exemplified in the loan programs and their statutory objectives) and the investment objectives of the Permanent Fund. The matter of coordination will be discussed further below.

While investments of Permanent Fund money in state loan programs is superficially attractive (and in fact is attractive in some aspects), several problems exist which should be considered:

1. Since state loan programs are intentionally subsidized to promote the specific areas covered by the programs, the Permanent Fund would earn a lower return on invested capital than would otherwise be the case.
2. One answer to the problem of differential rates of return between state issued loans and market rates has been suggested within the Department of Revenue. This approach would involve using the State Treasury as a secondary market for state sponsored notes or mortgages which were financed at the subsidized rate by the Permanent Fund. The Treasury would then repurchase the notes at a discount rate that recognizes the difference between the subsidized rate and the market, thus effectively reimbursing the Permanent Fund for the differential. In essence, then, the capital resources of the Permanent Fund would be available for support of state sponsored loan funds, while the interest subsidy burden would continue to be borne by the state. In any event, some provision making up the interest rate differential would seem to be appropriate.

3. Such a program as outlined in No. 2 above, however, could easily result in growth impacts that are not easily predictable, or controllable. Currently, the amount of state loan monies are rather closely controlled by the appropriations process--in FY 1976 the state issued loans totalling only \$56.8 million. Unless controlled by Permanent Fund legislation, access to the Permanent Fund as a capital vehicle could result in a ballooning of state loans, at only marginal increases in carrying costs (because the only appropriated cost to the state would be the interest differential subsidy payable to the Permanent Fund).

Consequently, if the committee chooses to utilize any or all of the state's existing loan programs as investment vehicles for Permanent Fund money, we believe adoption of a policy which would make such investment levels contingent on annual appropriations would be appropriate. It is also possible that some absolute limit or percentage limit be placed on the amount of Permanent Fund money invested in state loan programs. Without such limitations, the loan programs are likely to emerge as sources of "easy money", siphoning large and very possibly inappropriate amounts of Permanent Fund money into the programs.

A final and extremely significant point should be addressed if the committee chooses to allow use of some Permanent Fund money to support state loan programs: the matter of coordination between existing state programs, and prospective investment and development activities of the Fund. An obvious example would be the Fisheries Enhancement Loan Fund (a current state loan program) and any prospective fisheries development investments which might be made by the Permanent Fund itself (either independently, or as a reaction to some legislative direction in the Permanent Fund legislation). Since the two programs (one actual, the other prospective) are seeking the same ends, it would seem to be in the best interest of the state to insure that investment and development decisions regarding the state's fisheries be made in a coordinated manner--which potentially would not be the case, since at least some of the Permanent Fund investments may well take place outside of direct legislative review. This problem may become even more severe if the impact of such impending programs as the Renewable Resources Fund are included in the considerations--it is entirely conceivable that prospective investors in Alaska could have at least three, and possibly more, major state funding sources available to them, only one of which would be accountable to the legislature in terms of appropriations.

Capital Improvements Projects and State Bonds

One alternative fiscal vehicle that must be considered is utilizing the Permanent Fund as a major purchasing agent of state bonds, and thus financing at least portions of the state's capital improvements via the

Fund. This course of action has the advantage of internalizing the state's bonding activity, and turning long-term repayment obligations (if the bonds are sold in the open market) into long-term revenue sources (as repayments are made to the Permanent Fund). In our judgment, however, this is a relatively inefficient form of fiscal self-discipline--which is not to say that inefficient self-discipline may not be better than no self-discipline at all under some sets of assumptions.

However, there are clear inefficiencies and dis-economies associated with setting up the Permanent Fund as a state or municipal bond purchasing authority. Chief among these is the differential in the rate of return that the Permanent Fund would earn under such a system. Thus, the choice would essentially be between purchasing tax exempt state or municipal debts at lower rates (due to their tax exempt status), and forgoing the higher rates that are attainable in high grade corporate or even federal securities. Since the Permanent Fund is a state entity that pays no taxes, the advantage of investing in tax exempt debt is lost. At the present time, high grade tax exempts are paying about 5.5%, while similar grade corporates yield about 8.15%--the difference, if the Fund were to invest in state debt instruments, would be a clear loss to the state.

Perhaps the best argument in favor of avoiding Permanent Fund purchase of state tax exempt debt lies in the area of avoiding distorting effects on the state's growth rate. Put most simply, reliance on the national capital markets provides ongoing discipline of the state's fiscal affairs that is relatively immune to short-term political considerations. Major purchasers of the state debt instruments are fully capable of analyzing the state's ability to repay debts, especially in the light of declining oil revenues beyond 1986 or 1987. Hence, any temptation the state government might have to issue excessive amounts of debts will be tempered by the market's reluctance to accept such debts, in the form of rising interest charges as such relatively risky indebtedness increased. Conversely, of course, utilization of the Permanent Fund as a debt purchaser would run the very real risk of having the state issuing debt in excess of the non-Permanent Fund economy's ability to adequately service and retire. Under such circumstances, the Fund or portions thereof, could be dissipated by inefficiently overdeveloping the state's capital improvements sector, beyond that level which the national debt markets would normally permit. This situation differs from potential misuse of excess money in the General Fund only because the principal and some interest will be repaid to the Permanent Fund--however, the potentially distorting effects on the state's economy and growth rate would be very similar. And, as was noted earlier, some real impact on the value of the fund would occur because of the interest rate penalty the Fund would suffer if forced to finance state and municipal debts.

SCOMM

#9:111

Clark:

Sorry this is so late.

Had troubles with my
typewriter and person who
works on it.

Plex

Terry Gardiner

Box 6092, Ketchikan, Alaska 99901 Pouch V, Juneau, Alaska 99811

October 21, 1977

Mr. Clark Gruening
Alaska Permanent Fund Committee
528 West 5th, Suite 270
Anchorage, Alaska 99501

Dear Clark:

I wanted to drop you a note and inform you of the status of the Renewable Resources Subcommittee before I left on my trip. Russ Meekins is taking over the responsibility of running the staff for the Renewable Resources Subcommittee while I am gone. Russ has been down to Juneau twice, the last time being on this Thursday before I left for Denmark. Russ has been brought up to speed on all the work of the staff and been given a detailed time schedule for completion of all the work by the staff.

The Renewable Resources Subcommittee will be meeting on November 20th while the Permanent Fund Committee is in Juneau. This will save some cost of travel and per diem. As per our work schedule that you received in August, all the staff research will be completed by November 1st. Shortly after November 1st a meeting will be held of the Subcommittee to review all of the work and to start drafting legislation.

I have instructed Tom to prepare a final report to be given to the Permanent Fund Committee on November 18th when the Permanent Fund Committee will be meeting in Anchorage. We are then scheduled to have completed the final draft of recommended legislation by December 1st. Actually we are working on drafting as we go along through Bill Berrrier.

The Administration has appointed a committee composed of Bob Palmer, Dona Lehr, Jim Edenso and Jim Stey to make recommendations to the Budget Review Committee on the Renewable Resources Fund. We are keeping in close communication with the Administration so there is no duplication of effort and so that they are tuned into what we are doing. They are considering four alternative approaches, two of which are either identical or very similar to what the Renewable Resources Subcommittee is doing.

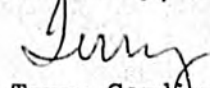
Mr. Clark Gruening

Page Two

October 21, 1977

I am returning to Anchorage on the night of the 17th (November) to be available for the Permanent Fund meetings happening shortly after that. I will then also stop in Juneau on my way back to Ketchikan to make sure everything is functioning with the Renewable Resources Subcommittee. Between then and January 10th when the Session starts I do not have anything really planned so I will be able to devote a lot of time to the implementation stage. After December 1st when the final drafts are completed we intend to be in contact with all the actors in the House, Senate and Administration to make sure things are lined up for when the bill is introduced to the Legislature.

Sincerely,



Terry Gardiner
State Representative

STATE OF ALASKA
THE LEGISLATURE
LEGISLATIVE AFFAIRS AGENCY

POUCH Y - STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

MEMORANDUM

September 16, 1977

SUBJECT: Second Meeting

TO: Ad Hoc Committee on Alaska Resources Research and Development
and
Committee Advisory Group

FROM: Terry Gardiner, Chairman 

The second meeting of the ad hoc Committee on Alaska Resources Research and Development will occur in conjunction with the Alaska Science Conference. The conference is being held September 22-24 in Anchorage at the Captain Cook Hotel.

The committee will meet at noon, September 24, at the Captain Cook. David Hickok will make arrangements for a no-host lunch.

We are enclosing in this mailing:

- (1) an update of my discussion paper on the potential structure and need for a R & D Council,
- (2) a paper prepared by David Hickok entitled "An Examination of the Alaska Academy of Science and Technology/Alaska Research Council Concept", and
- (3) a preliminary report on the same subject prepared by Dick Holden, Deputy Commissioner of the Department of Transportation and Public Facilities.

STATE OF ALASKA
THE LEGISLATURE
LEGISLATIVE AFFAIRS AGENCY

POUCH Y - STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

MEMORANDUM

September 16, 1977

TO: Alaska Resource Research and Development Ad Hoc Committee
and
Committee Advisory Group
FROM: Terry Gardiner, Chairman 
SUBJECT: Alaska Research and Development Council

During the first meeting of the ad hoc committee, I stated that I would expand on my thoughts about the potential role of the Alaska Research and Development Council in the future of Alaska. I will begin by describing my perspective of the research decision-making utilized to date in selecting resource related research projects and the changes which are occurring at this time which I feel add further to the need for greater consideration of research activity. Following that, I will propose a purpose and structure of the R & D Council and suggest some of the critical aspects of its formation and function. My perspective is intended to be one of a decision-maker in government; thus, I will stress the point of view of the need for state government to have its needs identified to the research community by a body which can most competently accomplish that end.

Probably the greatest problem that exists today with respect to meeting the state government resource research needs is that no single omnibus body exists which considers all the competing uses of Alaska resources or the competing demands placed upon research dollars. Those administrative agencies which do conduct resource related research are most likely addressing a statutory or policy mission. Typically, that kind of research is too myopic to accomplish the initiation of research activity which will typically return data in support of decision-making which must address future resource disposition.

Two recent activities of the Legislature would seem to serve as examples to articulate this problem. The most economically advanced of any of Alaska's renewable resource industries is undoubtedly fisheries. Within that sector, two recent decisions of the Alaska Legislature are the cause of great amounts of activity within the industry (their importance must be considered somewhat overshadowed by the enactment of the 200-mile limit legislation). I am referring to the creation of the Division

of Fisheries Rehabilitation, Enhancement, and Development and the private, non-profit hatchery legislation which was significantly amended this last year. Both of these bills were opposed by the department which would be responsible for administering the new programs; yet these two new laws, whether implemented for better or for worse, have caused more change in their short life than had occurred for some time in the salmon industry. The legislature's only available resident expertise opposed these two laws--which apparently had little effect in dissuading them from their actions. Apparently, the legislature felt that the information which the department used to support its viewpoint was inadequate and, thus, decided to oppose their recommendations. The question can be posed, how much better would these two resource related laws have been if the drafters had had access to better information about the subjects addressed? Surely, in light of limited entry and the advent of salmon enhancement techniques, a systematic look at resource research priorities would have prompted some research activity into enhancement practices and social structures to take advantage of the limited entry concept.

University-conducted resource research often addresses issues of great importance to state resource policy. However, the considerations most often utilized in deciding research activity do not include the state interest per se. This is to be expected; however, the failure here is that university investigators have not typically had access to information which describes what areas and activities would be considered highly important to the State. If such a listing did exist, we could expect that academic researchers would likely consider state research priorities in their research activity decision-making.

As things now stand, university research is usually geared to one of the following considerations: (1) pursuit of intellectual curiosity, (2) continuance of activity in a subject area familiar to the researcher (application of talent to experience area), (3) pursuit of available funding (research proposal designed to assure funding success based upon the perceived priorities of the funding agency), and (4) continuance of departmental or institutional missions. Other reasons for academic research activity surely exist--this is to demonstrate what the more accepted reasons for research activity are considered to be.

It is a fact that the State does not pay the major portion of university research. This does not, however, modify the fact that one of the unwritten goals of any state university is to assist in issue analysis and fact finding to support governance of that state. I feel that successful accomplishment of that goal would be more easily accomplished if the State communicated their desires to the university in a systematic manner.

The federal government is a major source of research dollars in Alaska. That research conducted by federal agencies suffers the same sorts of problems with respect to state resource research priorities as do state agencies--with the added problem of their missions being oriented to the

national perspective. For the sake of argument, though, let us assume that federal agencies would be more inclined to (at least on occasion) modify their research plans to address some state research priorities if they knew what those priorities were and had an opportunity to discuss their activity with individuals who could represent the state position.

The Legislature during its next session will be considering the implementation of two funds which will be vitally important to Alaska's renewable resource industries. They are the Alaska Permanent Fund and the Renewable Resources Fund(s).

The Permanent Fund dedicates a minimum of 25% of the rentals, royalties, and bonuses collected by the State from petroleum operations conducted on state land. The principal is to be invested in an "income producing" manner. Undoubtedly, a major portion of this savings account will be invested outside Alaska in secure investments. Just as likely, though, is the fact that some of this fund will be invested in Alaska. Much of this investment will likely occur in renewable resource industries. Since the fund is mandated to make money, it cannot be expected to conduct loan activities in high risk areas. Since risk is often lack of knowledge, research will, on occasion, diminish risk by supplying the information which will assist in proving the economics of particular activities.

The need for resource research is probably even greater for the Renewable Resources Fund. This fund is also created by a dedication of petroleum revenues (five percent of the rentals, royalties, and bonuses). The fund is charged with "investing" the money in the "rehabilitation, enhancement, and development" of Alaska's renewable resources. It is not restricted to income producing investments as is the Permanent Fund. It could be appropriated to grants, loans, equity investments, line-agency funding, acquisitions, and research.

An implied objective of the Renewable Resources Fund is to assist in the building of renewable resource industries. Knowledge about the resources and industries it is "investing" in will be paramount to the success of this fund.

CREATION AND PURPOSE

The findings and new developments discussed in the preceding section lead me to believe that there is a definite need for the creation of a body which is charged with addressing state priorities in the resource research area. David Hickok, an ad hoc committee member, has prepared a working paper on this same subject. My proposal will differ from his with respect to the implementation of this activity. It would seem appropriate that the committee have varying proposals before it for its consideration.

I propose the creation of an Alaska Research and Development Council which would serve as the major communication forum between the Alaska research community and state policy personnel. Its duties would be: (1) the prioritization of state needs for resource related research, (2) establishing standards of excellence for research conducted in this area (including the utilization of research results generated from all sources), (3) to respond to Administrative and Legislative needs for statements of scientific finding with respect to specific requests from either of these branches of government, and (4) to coordinate with an information maintenance and dissemination agency.

Research prioritization (1 above) would seem to be the major issue. As I have attempted to demonstrate in the first part of this memorandum, a major failing of the State thus far is the lack of declaration of priority research areas--not only with regard to in-house resource research, but also to identify to the research community what the State is most anxious to see answered by academic scrutiny. The R & D Council would allow for a forum to be developed to discuss the varying issues at hand, and to clarify the scope and description of these priority areas. During the process of prioritization, both state interests and research community comments can be considered to guarantee a proper ordering and adequate description of the priorities.

Standards of excellence (2 above) would seem to be an integral part of the description of the research priorities. The reports of the R & D Council should not only list the priorities, but should describe the scope of the investigations which need to be initiated to develop the information base. To a great degree, the standards of excellence can describe the application of the scientific approach to each specific priority area.

The first two functions of the proposed council describe a communication from the council to the State and research community. If the council is to serve as a major communication intersection between these two divergent interests, it is important to allow the State to develop systematic access to the research community through the council. Therefore, directing the council to respond to Legislative and Administrative needs for scientific comment on specific issues (3 above) would seem imperative. The role of the council in this area would be to design an investigation of the problem posed by the requesting governmental branch and to create an ad hoc working group to consist of those people which the council feels could best address the problem. There would be no restriction on the personnel which the council could consider for the ad hoc group.

Since the agency is necessarily going to handle a great amount of information with respect to Alaska resources, it would seem appropriate that the council work closely with a data gathering and dissemination agency. Not only would that facilitate better data handling by the council, but by coordinating with the resource information dissemination source, the

council will have direct information from the users of resource information about what the major calls for information are and in what areas. Hence, the council will have direct access to a source of information which can, to a great degree, identify the major information needs of the public, but can also directly identify where the interests lie with respect to the future utilization of Alaska's resources.

For the purpose of discussion, I would propose that the R & D Council be statutorily placed in the Office of the Governor, and the council consist of seven members. The legislature could be charged with selecting one member, and the governor selecting the rest with the legislature confirming those six selections. Two of the members could represent the Administration, two the research community, and two the public.

It is obvious to me that there is much more work that needs to be accomplished on this subject. We have not as yet made the contacts with the people and agencies that could supply us with further guidance as we proceed. State and federal agencies need to be contacted, as well as private foundations and industry. I hope the committee will assist in expanding our information base.

DISCUSSION PAPER

on

AN EXAMINATION OF THE
ALASKA ACADEMY OF SCIENCE AND TECHNOLOGY
ALASKA RESEARCH COUNCIL CONCEPT

Prepared by

David M. Hickok
Eugene H. Buck
Erwin Van Nieuwenhuyse

August 1977

INTRODUCTION

The need to establish a forum of the finest scientific and technological expertise in Alaska has long been recognized as an important step toward furthering science and its use for the general welfare of all Alaskans. For example, one of the many resolutions to come out of the 1969 "Conference on the Future of Alaska" sponsored by the Legislative Council in association with the Brookings Institution recommended that:

A body of qualified Alaskans shall be recognized by statute and supported by annual state appropriation under the title, "Alaska Academy of Science and Technology." Its constitution and operation will be analogous to that of the National Academy of Science-National Research Council, so providing representation from all disciplines.*

The purpose of this paper is to provide an intellectual framework for establishing such an institution--the Alaska Academy of Science and Technology-Alaska Research Council. We will examine the structure as well as the various functions and responsibilities of both the academy and the council. In addition, we will evaluate the various options available for creating the academy-council, noting the benefits resulting from such an action and any problems which might be encountered along the way.

A. The Alaska Academy of Science and Technology (AAST) Alaska Research Council (ARC)

1. Description. Initially, the academy would be comprised of 50 Alaska resident members, each distinguished in his or her field of inquiry and together representing all facets of

*A Comprehensive Review of Policy Decisions/Seminars I, II and III, "The Evolution of an Alaska Policy," Dec. 10, 1969. p. 14.

scientific research, application, and education. Subsequent membership could include both residents and nonresidents with appropriate backgrounds and a demonstrated in-depth knowledge of Alaska affairs.

The academy would be given the power to create its own organization, including a constitution, bylaws, and rules and regulations, and to add new members. Officers would include a president, vice president, secretary, treasurer, and five councilors elected by the membership at its first meeting. Plenary meetings would be held at least once a year at which time new members could be added. Officers and members of the academy would be treated as members of advisory boards with regard to compensation.

The academy would operate primarily through the Alaska Research Council (ARC) established under a separate title within the AAST enabling legislation. Seven of its 12 members would be chosen from the AAST membership, and all would require Alaska Senate confirmation. Under our suggested approach, the elected president of the academy would serve as chairman of the council. All members of the research council would be Alaska residents and would be responsible for formulating council rules and regulations.

The Alaska Research Council would carry out its major functions primarily through assemblies or special committees

which it would organize and dissolve as needs arose and were successfully met. Persons serving on these assemblies or committees would be selected by the council and would report directly to the council. Neither Alaska residency nor AAST membership would be required to serve as a member of an assembly or committee. A full-time salaried executive secretary and an assistant would be engaged by the chairman of the council to coordinate the activities of the various committees. Council and committee members would be compensated for expenses incurred in the course of their activities on the same basis as members of advisory boards.

All aspects of the academy-council's dealings, including all findings, reports, and recommendations, would be matters of public record. Sufficient funds for the academy to carry out the purposes set forth in its enabling legislation would be appropriated annually by the legislature. A separate appropriation would be made for the research council.

2. Purposes. The simultaneous creation of an Alaska academy and research council would assemble in one body the finest expertise in Alaska on science and technology and in turn provide it with an efficient means of carrying out its responsibilities. Such an assembly of distinguished persons would play an important role in shaping Alaska's future.

The academy, through the operation of the research council, would exercise this role in many ways. It would act

as an advisor to state government on scientific and technological issues; it would stimulate the translation of science into various technologies, especially those developed in response to Alaska's unique environment; it would act as a standard-setting body, supplying the criteria necessary to evaluate the quality of research endeavors and assist in the design of research programs; and it would stimulate communication and cooperation between scientists, engineers, and the public both in Alaska and the "lower 48."

Let us now examine in more detail these and other possible functions of the academy and the various ways in which they might be implemented.

- a. The academy would advise in those matters involving science and technology referred to it by either the executive or legislative branch of state government.

Referring to the academy for nonpartisan advisory services would provide for continuity in scientific and technological planning and programming both at the state and local levels. The academy would effectively serve as a source of policy alternatives on matters of science and technology. When presented with a major problem by the legislature or the executive branch, the academy would recommend particular approaches and, if requested by either or both branches, would arrange for appropriate

studies. For example, a request for a review or a problem study might be submitted by a legislative committee or the commissioner of an executive department directly to the president of the academy who would then, as chairman, put it before the research council for consideration. If a majority of the council members voted to conduct the requested review or recommend particular approaches to the requested problem study, the council would then organize a special committee for those purposes. However, it should be carefully noted that the council would only arrange for requested problem studies; it would not conduct them.

The above example is only a suggested procedure. Other possibilities exist and could be adopted. For example, such requests might require the endorsement of appropriate representatives of both the executive and the legislative branches. This arrangement, however, has the inherent weakness that it is not consistent with the concept of balance of powers. For example, if the legislature questioned the policy of an executive department on a particular scientific or technological matter and wished the advice of the academy, the likelihood that the commissioner of that department would sign a request for such advice would be at best minimal.

Therefore, we feel that of the two approaches, the former, in which either branch could request the advice of the academy independently, is the more practical.

In the above example, the president of the academy also serves as chairman of the research council as is the case at the national level. It might be decided, however, that the Alaska Research Council should be given the right to elect a chairman from among its 12 members. In this case, the state government could:

1. Submit its request directly to the council chairman for consideration.
2. Submit it to the president who would decide whether or not to forward it to the council.
3. Be given the option to direct its inquiries to either the president or the chairman according to circumstances or preference.

The first option is logically sound and most consistent with the academy-council organization. As the operating arm of the academy the research council should receive all official requests for advice. This arrangement would also allow the council to act as an interface between the academy and state government. In addition, it would be the most efficient approach of the three. However, under this scheme the council might become too independent of

the academy and exceed the limits of its strictly "catalytic" role as the "steering committee" of the AAST. Under the suggested approach, the president of the academy would also serve as chairman of the council, thus minimizing the probability of such an occurrence.

The second approach is not a viable option for it is not consistent with academy-council organization. In addition, it would provide for no separation between the government and the academy and would be much less efficient.

The third possibility would be as unwise as the second is impractical, for it combines all the weaknesses of the first two approaches.

In view of the above discussion, it appears that the suggested arrangement is probably the most desirable. However, still other possibilities may exist and should be given proper consideration.

- b. The academy would encourage further development of new techniques of applied science to fulfill the special requirements imposed by Alaska's unique environment.

In many areas of technology, traditional methods used to perform certain tasks or resolve particular problems in other parts of the world are simply ineffective or uneconomical when attempted in Alaska. Examples range from ice and permafrost problems encountered in planning for the offshore development of oil and gas in

the Arctic, to the extraction and transportation of coal by sludge pipelines in northwest Alaska, to the development of effective agricultural techniques in the Matanuska Valley.

Cooperation between Alaska scientists and engineers and their counterparts in industry and agriculture is essential to the development of new techniques which are both feasible and environmentally sound. The academy would play a key role in promoting this kind of interaction to the benefit of all.

- c. The academy would clearly formulate and promote standards of scientific research in Alaska.

Science may be defined as an objective, logical, and systematic method for analyzing phenomena. It represents the best way humankind has thus far devised to permit the accumulation of reliable knowledge. The operational aspect of science constitutes what is known as the "scientific method." And, like all other methods, it can be carelessly or inappropriately applied.

The academy would serve the useful purpose of establishing standards for scientific research both operationally, in terms of the processes or operations performed when practicing it, and functionally, in terms of the services it can perform. It would also formulate guidelines which could be used to determine whether or not the scientific

approach should be used at all to solve a particular problem. These standards would provide a means of enhancing the quality of state-funded research activities and greatly increase their yield in useful knowledge.

- d. The academy would allow experts to more freely express their educated opinions on events related to science and technology occurring in Alaska.

The AAST would constitute an invaluable source of knowledge and information, innovative ideas, viable options, thoughtful evaluations, and accurate predictions. If, however, an individual scientist's evaluation of a particular problem or situation lying in his or her field of expertise does not concur with those of government agencies, industry, or the public, he or she must make what is, under present circumstances, the rather difficult decision of whether or not to express his or her opinion publicly. Scientists, after all, are people, and as is consistent with human nature, would most often choose not to expose themselves to unnecessary inconvenience or possible ridicule. The academy would provide such experts with a forum in which to express their ideas under such circumstances and could then decide whether to take appropriate measures as a body. This would encourage scientists to give voice to their thoughts, to engage in

meaningful dialogue with other experts, and perhaps reach a consensus, thus minimizing situations in which an individual scientist finds himself "riding point" so to speak.

- e. The academy would promote communication and cooperation with scientists outside of Alaska.

This would be accomplished in many ways--the committee system of the research council, AAST publications and articles in national magazines and scientific journals, and AAST-sponsored conferences or workshops. As the national reputation of the academy increased, so would the amount of direct contact with the outside scientific community. The academy would thus attract additional scientific and technological talent to Alaska.

- f. The establishment of an Academy of Science and Technology would create an atmosphere in which scientists would be encouraged to point out gaps in essential knowledge and initiate appropriate studies to fill them, to identify and expound on current trends and potential future problems, and most importantly, to devote some of their time and energies to the consideration of long-range goals and research programs.

The history of research in many government agencies has been the history of competition between short-term

immediate research in response to urgent problems on the one hand and long-term anticipatory research on the other. Needless to say, under such circumstances, usually compounded by chronically insufficient funds in both departments, it is invariably the long-term research which is sacrificed.

An excellent example of this phenomenon is the current situation of the Environmental Protection Agency's research and development programs. As day-to-day regulatory problems occur, there is a strong tendency within any agency to transfer funds and personnel normally assigned to long-term research (characterized by more generalized, open-minded objectives) to short-term immediate research on current problems, which, of course, has entirely different, more clearly defined goals. In addition, the suddenness with which environmental problems arise also has a disruptive effect on fundamental environmental research because immediate problems have to be handled first. For instance, to deal with the recent Kepone disaster in the James River, EPA expended at least \$1.65 million, of which \$1.25 million was taken from the Office of Research and Development.

The Academy would actively voice the need for long-term research and promote it whenever possible. It would

provide the proper milieu for discussions of the long-range aspects of Alaska's development in the field of science and technology and permit the dissemination of the ideas resulting from such discussions to both the government and the people of Alaska.

3. Possible Establishment Procedures. The authorization of an academy-council would require an act of the legislature. It could be subdivided into two titles, Title I for establishment of an Alaska Academy of Science and Technology and Title II for the creation of an Alaska Research Council.

If it were prescribed in the legislation that the elected president of the academy would also serve as chairman of the research council, the selection of the academy membership would necessarily have to precede the organization of the council. Several methods for choosing the initial membership of the AAST are conceivable. We suggest the following.

In the enabling legislation the governor would be directed to create a special committee for this purpose. This committee would be comprised of 10 resident Alaskans with statewide experience in affairs of science and technology. Its function would be to establish appropriate criteria for the selection of initial academy members and subsequently submit its recommendations to the senate for confirmation. Members of the

committee would not be prohibited from nominating themselves for membership in the academy.

Upon receiving senate confirmation the members would meet as a body to elect the officers of the academy. A requirement might be that the president receive senate confirmation before assuming office. This is probably not an important point, however, as the legislature would find it difficult to refuse confirmation to a man or woman regarded by the scientific elite of this state as the person best qualified for the office.

The president would then aid in writing the AAST constitution, bylaws, and rules and regulations as well as choose the members of the Alaska Research Council, subject to academy membership approval and legislative confirmation. The council would draft its bylaws and begin assuming its responsibilities as operating arm of the academy.

Under this kind of overall organization, the AAST and the ARC would be funded separately by annual legislative appropriation. Both would be required to submit annual reports to the legislature.

This general scheme, however, represents only one possible establishment approach. For every important point outlined above, there exist other options. For example, the selection of the initial membership of the AAST might be conducted by a

special committee of the legislature. This method, however, would exclude the involvement of the executive branch and thus represents a less balanced approach.

Another alternative might be to engage a private organization such as the Alaska Division of the American Association for the Advancement of Science, to submit a "list" of nominees for senate approval. However, this arrangement would combine the falacies inherent in the above approach with the fact that the majority of scientists in Alaska are not members of the AAAS, which is nevertheless the largest organization of its kind in Alaska.

By specifying that the offices of president of the academy and chairman of the council could not be held by the same person would avoid the more sequential procedure imposed by our suggested approach, but we feel the possible disadvantages which might result and which have already been discussed would far outweigh any inconvenience which might accompany the delay in organizing the research council.

SUMMARY AND CONCLUSION Throughout this analysis of the structure, role, and possible modes of establishing a proposed AAST-ARC institution, a suggested scenario was used as a touchstone for discussing alternative approaches. Under the suggested arrangement the order of events subsequent to passage of the enabling legislation would take place as follows.

The Governor would appoint a special committee of 10 resident Alaskans to submit a list of 50 candidates for initial AAST membership

to the Alaska State Senate for confirmation. Upon its first meeting, the academy membership would elect its officers, including the president, who would then, as chairman of the authorized Alaska Research Council, select 11 persons to serve on the council subject to AAST membership approval and state senate confirmation (see figure 1).

The AAST would operate primarily through the ARC, which, in turn, would carry out its functions by organizing special committees. As the official advisor to state government on matters related to science and technology, all inquiries or requests for studies would be submitted by either the executive or legislative branch to the president who would then decide, with academy membership input, whether or not to initiate appropriate council action. The ARC would only arrange for requested studies which would actually be conducted by the special committees (see figure 2).

Once again it must be stressed that the role of the AAST-ARC would be strictly advisory. It would act as a catalyst for research or problem solving efforts but would not perform them. Its role would not be one of managing or coordinating state-funded research but rather in assisting those who determine its policy directives and priorities.

In view of the many benefits which would result from the establishment of an Alaska Academy of Science and Technology-Alaska Research Council system, we feel that it is in the interests of all Alaskans that enabling legislation be written and submitted as soon as possible for consideration by the Alaska State Legislature.

FIGURE 1.

ESTABLISHMENT

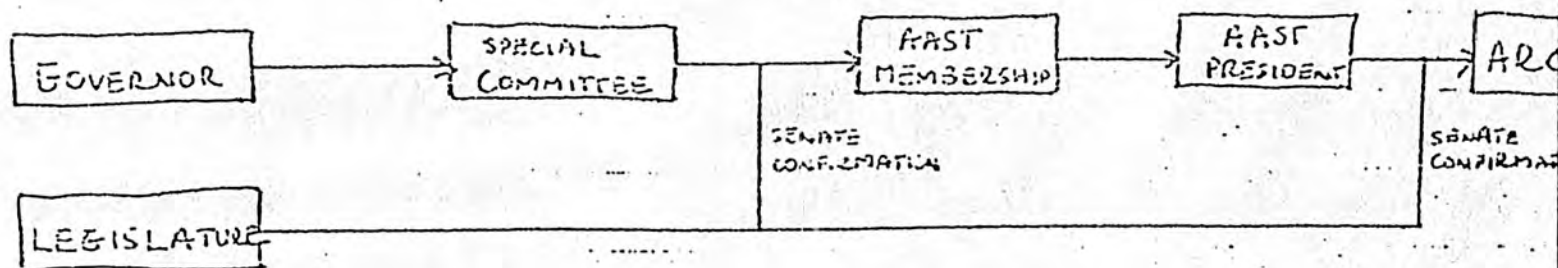
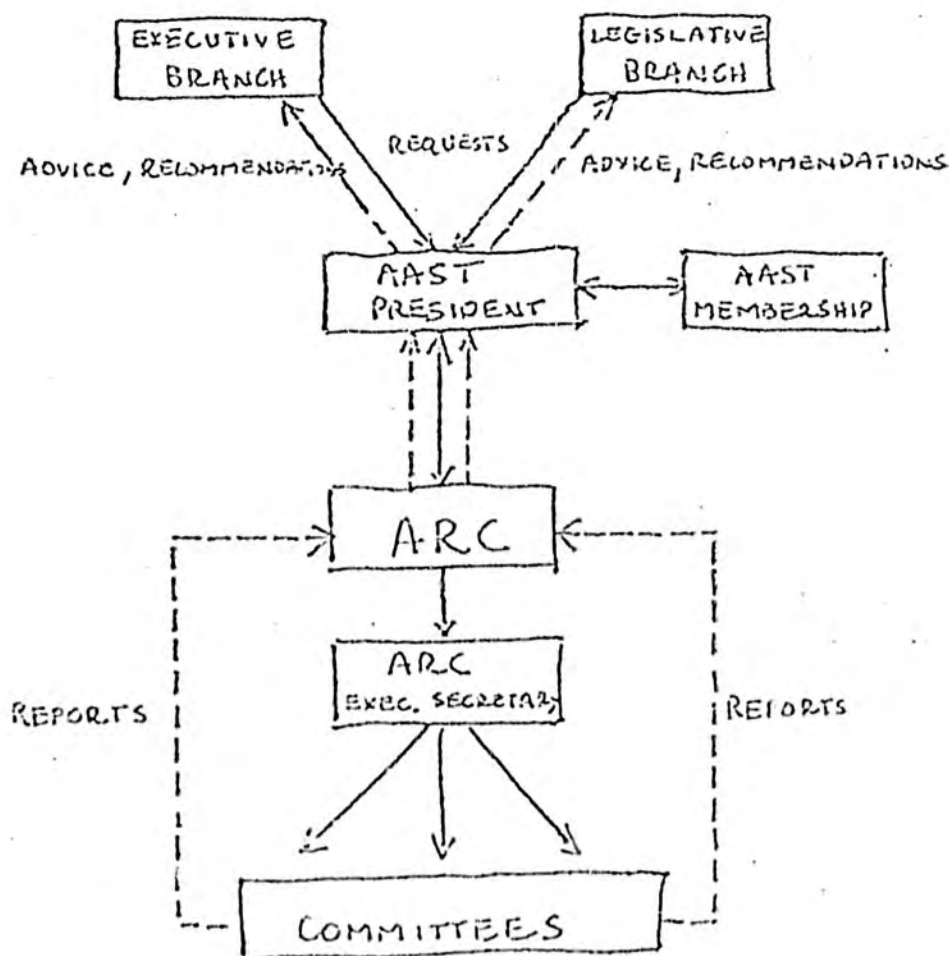


FIGURE 2.

ADVISORY ROLE



September 15, 1977

GOALS

PRELIMINARY

1. Establish state research needs.
2. Establish funding mechanisms.
3. Ensure that expenditures produce acceptable products.
4. Ensure that the State University can assist in the solving of State research oriented problems.

OBJECTIVES

1. Creation of an organization to assess research needs and plan, coordinate and propose priorities for the expenditure of State funds for research purposes.
2. The organization will determine the most cost effective expenditure of its research funds, including the maximizing of benefits to the State through the expenditure of federal research funds.
3. The organization will develop methodologies for assessing the value to the State of University of Alaska research proposals with a view to State monetary participation.
4. Develop techniques to minimize redundancy of State funded research activities.
5. Act as a standard-setting body, supplying the criteria necessary to evaluate the quality of research endeavors and assist in the design of research programs, and stimulate communication and cooperation between scientists, engineers, and the public both in Alaska and the "Lower '48."
6. Advise in those matters involving science and technology referred to by either the executive or legislative branches of state government.

7. Serve as a source of policy alternatives on matters of science and technology. When presented with a major research problem by the legislature or the executive branch, recommend particular approaches and, if requested by either or both branches, would arrange for appropriate studies.
8. The development of an adequate information dissemination system.

Proposal

The Creation of a State Research Foundation and an Alaska Academy of Science and Technology

The Research Council would have authority to address goals and objectives as heretofore outlined. The Alaska Academy of Sciences and Technology would bring together multi-disciplinary expertise as an advisory body to the Research Foundation for the furtherance of State research goals and objectives.

The Research Foundation would have authority to plan and budget for the funds necessary to adequately address State research needs. It would be empowered to cooperate with the University of Alaska and other institutions in the furtherance of its objectives.

It would determine the most cost effective means of producing research projects, both in short and long range. It would be empowered to create its own organization, including a constitution, bylaws, rules and regulations, and the ability to add members. Its function would be to manage research expenditures by disseminating and monitoring funds to other agencies. It would be prohibited from spending research funds internally.

Problems

The proposal to create an organization as outlined above will generate fear within the academic community that control of other agency accounts, e.g.

the State University, will lead to dissipation of effort and loss of funding for other agency-initiated proposals. The Foundation must not act in any manner which would inhibit other agency research proposals from being submitted to other funding sources.

Other problems include the development of methodologies to establish State related needs and stimulate cooperative effort among the Research Foundation, the State executive and legislative branches, the State University, other institutions and interest groups. For example, expenditures of State funds made by the Research Foundation must be auditable; therefore, research funds dispersed by the Research Council to the State University must be preceded by adequate specialized business office management within the University. The University could accomplish such a goal by the establishment of a specialized business office for research.



Alaska State Legislature House

JUNEAU, ALASKA

MEMORANDUM

July 29, 1977

SUBJECT: The Ad Hoc Committee on Alaska Resource Research and Development

TO: Members of the Alaska Resource Community

FROM: The Honorable Terry Gardiner *TG*
Representative

Attached is a description of a committee which has been established to assist the legislature in studying the problem of resource research priorities in Alaska. The material is intended to give some background of the legislatively perceived problem, and to describe the scope and activity of the newly formed committee.

In addition to the people who have been asked to serve directly on the committee, I have prepared a list of people who collectively have a broad background relating to Alaska resources and their utilization. It is our intent to keep these people informed on the happenings and suggestions of the committee, and to solicit their comments on the progress that is made. I am hopeful that you will serve in such a role.

If you have any questions or comments, please send them to our committee staff person--John Williams, Legislative Research Division, Pouch Y, Juneau, Alaska 99811. Your advice on this matter would be greatly appreciated.

TG:mo
Attachment

Report of the First Meeting of the Ad Hoc Committee
on Alaska Resources Research and Development

July 22, 1977

The committee meeting was called to order by the committee Chairman, Representative Terry Gardiner, at 9:00 a.m. in the House Judiciary Committee chambers. Those in attendance were Janet McCabe and John Hall (Land Use Planning Commission), Kay Allred (Dept. of Environmental Conservation), David Hickok (AEIDC), Dean Olson (Ahtna, Inc.) and Russ Cahill and Peter Keating (DPDP).

Representative Gardiner opened the meeting with some introductory remarks explaining the purpose for formation of the committee and then asked for comments from the members. The members expressed a great amount of support for the concept of a council which would have the responsibility of determining research priorities and objectives for state resources. It was recommended that the committee could act in three major roles: (1) in a passive role as overseer of previously stated research priority areas; (2) in an active role as the council which predicts future priority areas that need to be addressed by research in the immediate future; and (3) as a standard-setting body which would supply the necessary criteria to evaluate the quality of research endeavors as well as assist in research design prior to the commencement of research activity.

As a part of the staff presentation, John Williams informed the committee that an advisory group was to be created. The purpose of the advisory group was to offer insight regarding the subjects of committee activity and to comment on the work products of the committee. The advisory group is to receive all communications of the committee, be informed of future committee meeting dates and times, and to voluntarily attend any meetings of the committee. The committee was asked to supply the names of those people they would like to serve on the advisory group.

*what is
the synthesis
function*

The staff presented the results of the research agency survey which was conducted at the request of Representative Gardiner (summary attached). Of most importance to the committee were the responses to questions ten and eleven - relating to the creation of a centralized data repository and the inclusion of a synthesis function within such a repository. It was noted that the research personnel that responded seemed to feel that a centralized data repository would be quite beneficial, whereas the synthesis function was viewed much less favorably.

The final portion of the staff report dealt with the correspondence which had been initiated with the National Academy of Sciences, the National Science Foundation, Weyerhaeuser, and Bell Laboratories to inquire about the processes utilized by those agencies (or other entities they were familiar with) to determine long range research priorities. No specific responses relating to that inquiry have been received. The staff was instructed to continue investigating other examples of research prioritization in both the public and private sector. Additional contacts were recommended by the committee, as

well as assistance in locating suitable contacts in the various organizations to be contacted.

Mr. David Hickok and Mr. John Hall made presentations to the group about data handling in Alaska. Mr. Hickok's presentation was an overview of data handling in Alaska, concluding with a summary of the present day status and recommendations for future organization. A major emphasis of his report was the necessity to design a means of accessing the several major Alaska data holdings with one accessing system. It is his observation that such a "networking" approach is much more feasible than to attempt to create a single-location data repository.

Mr. Hall discussed the current status of the Alaska Resources Information System (ARIS) which has been proposed by the Joint Federal/State Land Use Planning Commission. Persons unfamiliar with the ARIS proposal should contact the Commission to receive a copy (733 W. 4th Ave, Suite 400, Anchorage, Ak, 99501).

At the recommendation of David Hickok, the committee felt it most appropriate that the next meeting be scheduled in conjunction with the Alaska Science Conference; which is being held in Anchorage on September 22, 23, and 24. Committee members and members of the Advisory Group will be informed of the exact time and location. Between now and then, the staff will continue to assemble information about the Research and Development Council concept. Additional contacts will be made with private industry. The National Academy of Sciences will be contacted regarding the support that they may have for the creation of such a council at the State level, and information about similar councils legislatively created in other states will be presented at the next meeting.

The meeting was adjourned at 12:10 p.m.

Results of Questionnaire Sent to Research Agencies
On Resource-Related Research in Alaska

Respondents

DNR Division of Agriculture

DNR Division of Parks, Office of History & Archaeology

DNR Division of Minerals & Energy Management

DNR Planning & Research

DNR Division of Geological & Geophysical Surveys

DEC

ADFG FRED Division

ADFG Game Division

ADFG Commercial Fisheries

ADFG Sport Fish Division

University of Alaska - Organized Research

Sealaska Corporation

Alaska Power Administration

U.S. Bureau of Mines

Chugach Natives, Inc.

NMFS

Alaska Consultants, Inc.

Dept. of Highways

Cook Inlet Region, Inc.

Arctic Institute of North America

EPA - Arctic Environmental Research Station

CRA - Division of Community Planning

NARL

FSLUPC