

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILE 8672

1305 SCOMM 50: HOUSE SPECIAL COMMITTEE ON STATE LOANS 1985-86

THE BONDS

The Bonds are fully registered bonds without coupons, are in denominations of \$5,000 each, or integral multiples thereof, are dated as of the date shown on the cover hereof, and mature April 1 of the years and in the amounts set forth on the cover hereof. The Bonds are subject to certain mandatory and optional redemption provisions prior to maturity including the mandatory sinking fund redemption of Bonds of the 1999, 2004, and 2009 Term Bond maturities (see "Redemption Provisions").

The Bonds bear interest from May 1, 1985, payable October 1, 1985, and semiannually thereafter on each April 1 and October 1 by check or draft mailed to the registered owners of the Bonds of record as of the 15th day of the month next preceding the interest payment date. The principal of and premium, if any, on the Bonds is payable at the principal corporate trust office of the Trustee, Seattle-First National Bank, in Seattle, Washington, or its successor.

Redemption Provisions

1. Mandatory Redemption. (a) The Bonds of each Series are subject to mandatory redemption on April 1, 1986, in inverse order of maturity and by lot within a maturity, at par plus accrued interest to the date of redemption, from unexpended Bond proceeds remaining on February 1, 1986, in the Loan Participation Fund created by the Bond Resolution for such Series of Bonds. All the Loan Participations financed with proceeds from the December 20, 1984 sale of the Bonds, have been fully funded except that the Loan Participation financed by the sale of the \$675,000 Series 338 Floating Rate Bonds was reduced and funded at \$645,000. To compensate for this reduction, \$30,000 Series 338 Floating Rate Bonds are to be redeemed from the proceeds thereof prior to the conversion of the Floating Rate Bonds to fixed interest rates. Therefore, there will be no unexpended Bond proceeds requiring the implementation of this mandatory redemption provision.

(b) Until conversion to Bonds bearing fixed interest rates and in the year immediately following conversion, the Bonds of each Series are subject to mandatory redemption each October 1 beginning October 1, 1985, at par, plus accrued interest to the date of redemption, in an amount sufficient to ensure that the yield on each Participation acquired with Bond proceeds will not exceed the yield on the respective Bonds by more than the allowable spread under Income Tax Regulation 1.103-13(b)(5), as it is then in effect. However, the Authority expects it will not be necessary to employ this redemption provision at any time after the Conversion Date and that no Bonds will be redeemed on October 1, 1985, or thereafter in order to ensure compliance with the arbitrage restrictions during the floating rate period.

2. Sinking Fund Redemption. Of the combined total of \$3,105,000 Bonds due April 1, 1999, \$2,345,000 Bonds are subject to mandatory redemption in part, by lot, at par plus accrued interest to the date of redemption, from Sinking Fund payments required to be made on April 1 of the years and in the amounts shown in the following schedule:

<u>Year</u>	<u>Amount</u>
1995	\$495,000
1996	550,000
1997	615,000
1998	685,000

The remaining \$760,000 Bonds of the 1999 maturity will mature April 1, 1999.

Of the combined total of \$4,490,000 Bonds due April 1, 2004, \$3,390,000 Bonds are subject to mandatory redemption in part, by lot, at par plus accrued interest to the date of redemption, from Sinking Fund payments required to be made on April 1 of the years and in the amounts shown in the following schedule:

<u>Year</u>	<u>Amount</u>
2000	\$715,000
2001	800,000
2002	885,000
2003	990,000

The remaining \$1,100,000 Bonds of the 2004 maturity will mature April 1, 2004.

Of the combined total of \$700,000 Bonds due April 1, 2009, \$530,000 Bonds are subject to mandatory redemption in part, by lot, at par plus accrued interest to the date of redemption, from Sinking Fund payments required to be made on April 1 of the years and in the amounts shown in the following schedule:

<u>Year</u>	<u>Amount</u>
2005	\$110,000
2006	125,000
2007	140,000
2008	155,000

The remaining \$170,000 Bonds of the 2009 maturity will mature April 1, 2009.

3. Optional Redemption. On and after April 1, 1994, the Bonds of each Series are subject to redemption, at the option of the Authority, as a whole on any date or in part on any interest payment date, in inverse order of maturity and by lot within a maturity, at the prices (expressed as a percentage of par value) set forth in the following schedule, plus accrued interest to the date of redemption:

<u>Redemption Period</u>	<u>Redemption Price</u>
April 1, 1994 through March 31, 1995	102 %
April 1, 1995 through March 31, 1996	101
April 1, 1996 and thereafter	100

In the event of an optional redemption, the Authority may direct each Series and amount thereof to be redeemed.

4. Special Optional Redemption. The Bonds of each Series are subject to redemption, at the option of the Authority, as a whole on any date or in part on any interest payment date, in inverse order of maturity and by lot within a maturity, at par plus accrued interest to the date of redemption, from amounts recovered or received by the Authority as a prepayment of any Loan Participation financed with the proceeds of such Series of Bonds. The Authority may accept Loan prepayments on such terms and conditions as it determines. In each Bond Resolution, the Authority covenants that it will require any prepayments to be in amounts sufficient to redeem a like principal amount of Bonds of such Series at the applicable redemption price. The Authority has also covenanted in each Bond Resolution that prior to the exercise of its election to redeem Bonds, it will use its best efforts to apply monies derived from prepayments to the purchase of investment securities or new loan participations which pay principal and interest sufficient to pay scheduled principal and interest on the applicable Series of Bonds as the same become due.

Notice of Redemption. Thirty days' notice of redemption of any Bond, all or a portion of which is to be redeemed, will be mailed to the registered owner thereof at the owner's last address appearing on the registry books of the Authority kept by the Trustee.

Disposition of Funds Received from Sale of Bonds

The funds received by the Authority from the sale of the Bonds to the Underwriters will be used by the Authority to pay the principal of the tendered Floating Rate Bonds.

Disposition of Proceeds from Issuance of Floating Rate Bonds

Upon the issuance of the Floating Rate Bonds, the proceeds of the Bonds of each Series were deposited by the Authority with the Trustee and deposited by the Trustee in the Loan Participation Accounts within the Loan Participation Fund, except that accrued interest on the Bonds was deposited in the Principal and Interest Account within the Debt Service Fund maintained under each Bond Resolution. Amounts deposited in the Loan Participation Accounts may be expended only (a) to purchase the Participations for which the Bonds were issued or to reimburse the Authority for its prior purchase of such Participations, (b) to pay costs of issuance of the Bonds not otherwise provided for, (c) to pay the principal or redemption price of and interest on the Bonds when due to the extent that amounts in any other Fund or Account are insufficient or unavailable therefor. The amount, if any, remaining in any Loan Participation Account on February 1, 1986, will be transferred to the Redemption Account of the Debt Service Fund.

SECURITY FOR THE BONDS

General

The Bonds constitute general obligations of the Authority, and the full faith and credit of the Authority are pledged to the payment of the principal of, redemption premium, if any, and interest on the Bonds. Each Series of Bonds is further secured by a pledge of certain monies, properties, assets and revenues as described below. The Authority does not have the power to levy taxes for any purpose. The Bonds do not constitute an indebtedness or liability of the State of Alaska (the "State"), and the Bonds do not directly, indirectly or contingently obligate the State to apply money from, or levy or pledge, any form of taxation whatever to the payment of the Bonds. All Economic Development Bonds have an equal claim to monies on deposit in the Capital Reserve Fund (see "Capital Reserve Fund").

Pledge Under Each Bond Resolution

Pursuant to each Bond Resolution, the revenues, including amounts representing payments of principal, to be derived from the Participations financed with the proceeds of each Series of Bonds and all monies and investments in the funds and accounts established thereunder are pledged to pay the principal of, redemption premium, if any, and interest on such Bonds, subject only to the provisions of the Bond Resolution permitting the application or release thereof for or to the purposes and on the terms and conditions therein set forth.

Each Bond Resolution also pledges and assigns the Participations financed thereunder to the Trustee, reserving to the Authority, except in the event of default, the right to administer and enforce the provisions of the documents evidencing the Participations in its own discretion and to enter into amendments with respect thereto, including releases of security and removal of covenants and conditions contained therein.

The Act provides that any pledge made in respect of the Bonds shall be valid and binding from the time when the pledge is made, that the money or property so pledged and received by the Authority shall immediately be subject to the lien of such pledge without any physical delivery or further act and that the lien of any such pledge shall be valid and binding against all parties having claims of any kind in tort, contract or otherwise against the Authority irrespective of whether the parties have notice.

Capital Reserve Fund

On April 13, 1981, the Authority adopted the Economic Development Bond Capital Reserve Fund Resolution under which it covenants and agrees with the holders of Economic Development Bonds to establish and maintain the Capital Reserve Fund in an amount at least equal to the Capital Reserve Fund Requirement (an amount equal to average annual debt service on Economic Development Bonds). The monies on deposit in the Capital Reserve Fund are pledged to the payment of all outstanding Economic Development Bonds of the Authority and may only be used by the Authority for the payment of principal, redemption premium, if any, and interest on Economic Development Bonds, but only when and to the extent that other monies are not available therefor pursuant to the bond resolution under which the Economic Development Bonds were issued. It has never been

necessary for the Authority to use funds in the Capital Reserve Fund for this purpose. Any amounts on deposit in the Capital Reserve Fund in excess of the Capital Reserve Fund Requirement will be transferred to the Authority and commingled with other Authority revenues. The calculation of the present Capital Reserve Fund Requirement of \$13,360,390 included the effect of an estimated floating interest rate of 15% on the Floating Rate Bonds. Upon the establishment of fixed interest rates on the Bonds, the Capital Reserve Fund Requirement will be \$

The Act requires the Chairman of the Authority, at least annually and no later than January 2 of each year, to certify in writing to the Governor and to the State Legislature the amount, if any, required to restore the Capital Reserve Fund to the Capital Reserve Fund Requirement. The Legislature may, but is not obligated to, appropriate to the Authority the amount certified by the Chairman of the Authority. The Authority is required to deposit any monies so appropriated in the Capital Reserve Fund.

In 1982, the State Constitution was amended to impose a limit on the amount of appropriations from the State Treasury in any fiscal year. This amendment may limit the amounts available in future fiscal years for appropriation by the State Legislature to cure any deficiency in the Capital Reserve Fund and other capital reserve funds of the Authority.

General Assets of the Authority

As of June 30, 1984, the Authority's general assets included \$101.5 million of investments in United States government obligations and commercial paper and \$327.6 million of loans including (1) \$105.6 million of loans appropriated to the Authority by the State, (2) \$60.2 million of federally guaranteed loans, and (3) \$161.8 million of participations in loans financed or to be financed from the proceeds of the Authority's general obligation bonds. As of June 30, 1984, the unrestricted surplus of the Authority was \$258.9 million.

In 1980, the State appropriated the sum of \$183 million to the Authority to initiate its programs, and in 1981 the State appropriated an additional \$8 million for future capital reserve fund purposes. The 1980 appropriation included cash in the amount of \$15 million, \$166 million principal amount of outstanding loans acquired by the State in connection with State loan programs, and certain other assets. The Authority was authorized to select the specific loans to be included in the appropriation (the "Appropriated Loans") from a total pool of approximately \$350 million principal amount of loans.

The Appropriated Loans selected by the Authority included Small Business Loans, Tourism Loans and Commercial Fishing Vessel Loans. *Small Business Loans* have a term of up to 25 years. Approximately 90% are secured by real property, the balance by equipment. The maximum loan in each case did not exceed the lower of 75% of cost or appraised value. *Tourism Loans* have a maximum term of 20 years. The majority were made for hotels and motels within the State. Two loans were made for large tour vessels. Tourism loans required at least a 20% participation by the originating lender. *Commercial Fishing Vessel Loans* have a maximum term of 15 years. All such loans are secured by fishing vessels. The maximum loan in each case did not exceed the lower of 75% of cost or appraised value, and each owner was required to carry insurance on the vessel equal to 110% of the amount of the loan.

Amounts to be received by the Authority from the Appropriated Loans have not been pledged to the payment of any general obligation indebtedness (including the Bonds). As general assets of the Authority, such amounts (if not spent for other purposes) will be available for the payment of the Bonds in the event amounts on deposit under the applicable Bond Resolution and in the Capital Reserve Fund are insufficient for such purpose.

The Authority has created a loan loss reserve (which is not pledged to the Bonds) for the Appropriated Loans which had a balance as of June 30, 1984, of \$2,567,000. In the year ended June 30, 1984, \$728,332 was charged against the reserve for loan write-downs and charge-offs, but the reserve was restored by a like charge to current earnings.

Financial Covenants of the Authority

Each Bond Resolution (Part II, Section 713) contains the following financial covenants:

(A) The Authority shall not create or permit to be created any pledge, assignment, lien, encumbrance or charge on the Appropriated Loans whether in favor of the Bonds, any Series of Bonds or for any other purpose. The Authority may pay Costs of Issuance of any Series of Bonds and Operating Costs and any charges, and may make deposits into any funds or accounts of the Authority, from Appropriated Loan Receipts or from any source of funds.

(B) The Authority shall not incur any General Obligation Indebtedness unless the Net Income, as estimated in a Certificate of an Authorized Officer delivered at the time of the incurring of the General Obligation Indebtedness, over the term of all General Obligation Indebtedness equals not less than 150% of the General Obligation Annual Debt Service Requirements in each year in which General Obligation Indebtedness is outstanding. Such estimate shall be made after deducting an amount equal to an aggregate of all annual payments thereafter due on all Non-Current Assets. (As defined in the Bond Resolutions, Net Income includes (a) all revenues, including principal and interest receipts, derived from loan participations acquired with the proceeds of (i) Economic Development Bonds and other bonds which are tax exempt under Section 103(b)(6)(A) of the Code and are issued pursuant to a bond resolution with substantially the same general terms and conditions as are contained in the Economic Development Bond Resolutions, (ii) Consolidated Bonds and (iii) Variable Demand/Fixed Rate Bonds, (b) all Appropriated Loan Receipts, and (c) all other revenues or receipts of the Authority, but excluding any proceeds of money borrowed by the Authority, any revenues or receipts specifically pledged or assigned to the payment of any bonds or other indebtedness other than the Bonds or any Series of Bonds, and any amounts appropriated and paid to the Authority by the State, less Service Fees and all Operating Costs of the Authority.)

(C) The Authority shall not make any loans, incur any indebtedness, or expend any money, except for reasonable and necessary Operating Costs or the payment of principal and interest on any General Obligation Indebtedness, the effect of which would (i) reduce its estimated Net Income, estimated in the manner provided in clause (B), at any time to less than 150% of the General Obligation Annual Debt Service Requirements in any year in which General Obligation Indebtedness is Outstanding, or (ii) cause its unrestricted surplus to amount to less than \$100,000,000.

Covenant of the State

Pursuant to the Act, the State has pledged and agreed with the holders of any bonds and notes issued under the Act that the State will not limit or alter the rights vested in the Authority until such obligations, together with the interest thereon, are fully met and discharged, provided nothing shall preclude such limitation or alteration if and when adequate provision shall be made by law for the protection of the holders of such bonds and notes.

THE AUTHORITY

The Authority was created by the State Legislature in 1967 to promote, develop and advance the general prosperity and economic welfare of the people of the State, and to relieve problems of unemployment. In 1982, the Authority's enabling legislation was amended to add to its purpose the promotion, development and maintenance of an adequate supply of multi-family housing projects.

Powers

Under the Act the Authority has the power to adopt regulations; to acquire an interest in a project; to lease projects; to issue bonds; to sell and otherwise convey interests in its properties; to accept gifts, grants and loans; to deposit and invest funds; to enter into contracts; to purchase and insure loans; to make loans; to acquire, manage and operate projects; to assist private lenders to make

loans; to facilitate the expansion of a secondary market for the resale of insured loans in Alaska held by financial institutions or by the Alaska Commercial Fishing and Agricultural Bank; and to participate with the Alaska State Housing Authority or municipalities in the financing of multi-family housing projects.

Pursuant to legislation enacted in 1984, the Authority is authorized to acquire, manage and operate projects which the Authority considers necessary or appropriate to serve a public purpose. The 1984 legislation prohibits the use of capital reserve funds to secure bonds of the Authority issued to finance such a project if a majority of the project is to be used, leased, or occupied by the State. In the case of a project acquired, managed or operated by the Authority and which is financed or developed through the use of the assets of the Economic Development Fund established pursuant to AS 44.88.172, the Authority may not pledge or use other assets of the Authority to assist in the financing, development or operation of the project.

Authority Members

The powers of the Authority are vested in its five directors: two members of the general public appointed by the Governor and three ex officio members. The ex officio members are the Commissioner of Commerce and Economic Development, the Commissioner of Revenue, and one other member of the Governor's Cabinet appointed at his discretion. The Commissioner of the State Department of Labor is the Cabinet member selected by the Governor as his discretionary appointee. The current directors of the Authority are:

LOREN H. LOUNSBURY, Chairman, Commissioner of the State Department of Commerce and Economic Development. Mr. Lounsbury was appointed Commissioner in January 1985. Prior to entering government service he was President of Lounsbury and Associates, Inc., a family-owned survey and engineering firm. A 40-year resident of Alaska, he has held leadership positions in both community and professional organizations in Alaska, including that of Honorary Consul, Republic of Korea in Anchorage. Mr. Lounsbury holds a Bachelor of Science degree in civil engineering from Oregon State University.

MICHAEL G. HARPER, Vice Chairman. Mr. Harper currently is Vice President of United Bank Alaska. Previously, he held the positions of Administrative Assistant to the Governor, Deputy Commissioner for the State Department of Community and Regional Affairs and Executive Director of the Rural Alaska Community Action Program. Mr. Harper was appointed as an Authority director in August 1981 and was subsequently reappointed for a term expiring on July 1, 1985.

JEFFREY HASSLER. Mr. Hassler is Executive Vice President of Carr-Gottstein Properties, Inc. and has been affiliated with the company for 15 years. His responsibilities have encompassed all phases of real estate development, from feasibility studies and construction to permanent financing, leasing and property management. Mr. Hassler holds a Bachelors degree in Business Administration and has been an Alaska resident since 1952. He was appointed a director of the Authority in July 1984 for a term expiring July 1, 1986.

MARY A. NORDALE, Commissioner of the State Department of Revenue. Ms. Nordale was appointed Commissioner in September 1984. She is a lifelong resident of Alaska. She holds degrees from Gonzaga and George Washington Universities and was admitted to the Alaska Bar in 1969. Her prior experience includes: Assistant U.S. Attorney (1968-1969), Assistant District Attorney (1969-1970), Branch Counsel for Small Business Administration (1970-1972) and private practice (1972-1984). She is a member of the Alaska, Tanana Valley, Federal and American Bar Associations as well as the District of Columbia Bar.

JIM ROBISON, Commissioner of the State Department of Labor. Mr. Robison was appointed Commissioner in December 1982, was appointed a director of the Authority in April 1984 and was subsequently reappointed to a term expiring July 1, 1986. A 38-year resident of Alaska, he has been engaged in all phases of the construction industry and has served in numerous positions with various labor organizations. Immediately prior to his appointment as Commissioner, Mr. Robison served as

Business Manager and Secretary/Treasurer of the Alaska State District Council of Laborers and then as President of the Alaska State AFL-CIO.

Authority Staff

The Authority's programs are managed by an administrative staff consisting of an Executive Director, three Deputy Directors, two loan officers and eleven other employees.

BERTRAM L. WAGNON is the Authority's Executive Director. Mr. Wagon was appointed Executive Director in May 1982. Prior to his appointment as Executive Director, Mr. Wagon served as Assistant Deputy Commissioner of the State Department of Transportation and Public Facilities and as Deputy Commissioner of the State Department of Commerce and Economic Development. Before entering State service, Mr. Wagon was with an investment banking firm. He holds a degree in Business Administration from the University of Alaska.

Umbrella Bond Program

Under the Act and the regulations of the Authority, the Authority administers the Umbrella Bond Program to purchase participations of up to \$10,000,000 in project loans. There are three types of bonds issued under the Umbrella Bond Program: Economic Development Bonds, Consolidated Bonds and Variable Demand/Fixed Rate Bonds. Economic Development Bonds (for issues of \$1,000,000 or less for commercial and industrial facilities) are issued pursuant to Section 103(b)(6)(A) of the Code. Consolidated Bonds are issued pursuant to Section 103(b)(4) (residential rental housing and other exempt activities or facilities), Section 103(b)(5) (industrial parks) or Section 103(b)(6)(D) (commercial and industrial facilities) of the Code. Variable Demand/Fixed Rate Bonds may be issued pursuant to any of the above Sections of the Code.

Under the Umbrella Bond Program, the Authority issues commitments to Originators to provide monies to purchase not in excess of 90% interests in permanent loans (80% with respect to loan participations in excess of \$1,000,000) for which such institutions have provided interim financing on a taxable basis. Upon completion of a project and satisfaction of all terms of the commitment, the Authority will acquire its participation in the loan for the project. Each Originator has entered into a Loan Participation and Servicing Agreement with the Authority (collectively, the "Agreements") pursuant to which the Originators have agreed to originate and service eligible loans made to borrowers. An Originator may subsequently sell or assign up to 90% of its interest in a loan, but only to regulated financial institutions and qualified pension trusts. A list of the Participations acquired by the Authority with the proceeds of each Series of the Bonds is set forth in Appendix A.

Approximately \$53 million principal amount of the Authority's participations in loans made under the Umbrella Bond Program may be prepaid at any time without penalty after 30 days' notice. It is anticipated that some of these loans (and therefore the Authority's participations therein) will be prepaid and that the Authority will reinvest the proceeds of such prepayments by the acquisition of new participations or other permitted investments. The yield on such new participations or permitted investments will be limited by the provisions of Section 103 of the Code.

The Authority maintains a multi-family housing loan security fund which contained approximately \$18.3 million of assets as of June 30, 1984. These funds are available to replenish any losses of the Authority on loans or to establish capital reserve funds to secure bonds issued in connection with the financing of multi-family housing projects.

As of December 31, 1984, there were \$131,360,000 Economic Development Bonds (including the \$13,120,000 Floating Rate Bonds), \$60,170,000 Consolidated Bonds and \$12,200,000 Variable Demand/Fixed Rate Bonds outstanding. Economic Development Bonds and Consolidated Bonds are general obligations of the Authority additionally secured by separate capital reserve funds. The amounts required to be on deposit in the Economic Development Bond Capital Reserve Fund (\$ upon the conversion of the Floating Rate Bonds to Bonds bearing fixed interest rates) and the Consolidated

Bond Capital Reserve Fund (\$6,382,364 as of December 31, 1984) are available as a source of payment of only Economic Development Bonds and Consolidated Bonds, respectively.

The outstanding \$12,200,000 Variable Demand/Fixed Rate Bonds are secured by a letter of credit issued by Lloyds Bank International Limited. The Authority's obligation to repay Lloyds Bank for any drawings under its letter of credit will constitute general obligation indebtedness of the Authority. Owners of the Variable Demand/Fixed Rate Bonds may tender their bonds for payment upon seven days' notice. The Authority has reserved the right to convert the Variable Demand/Fixed Rate Bonds to fixed interest rates. After such conversion such fixed rate bonds will be general obligations of the Authority and will be entitled to the benefit of a separate capital reserve fund.

Self-Sustaining Revenue Bond Program

Under the Act and the regulations of the Authority, the Authority administers a "self-sustaining" Revenue Bond Program intended to provide financing to those borrowers not using credit assistance by the Authority. As of December 31, 1984, the Authority had funded 220 projects aggregating \$464 million under the Revenue Bond Program for businesses located in various parts of the State. These financings were made possible by the original enabling legislation as well as legislative amendments adopted in 1977 expanding the Authority's purposes to include commercial projects, air and water transportation facilities, pollution control facilities and facilities to furnish gas and electricity.

Bonds issued under the Revenue Bond Program have been and are expected to continue to be secured solely by the revenues to be derived from the project so financed or the private business for which the project is financed. No revenue bonds issued by the Authority do or will enjoy any claim on the capital reserve funds for the Economic Development Bond, Consolidated Bond and Variable Demand/Fixed Rate Bond programs. However, separate capital reserve funds and insurance funds may be established to secure such bond issues and, in the event of deficiencies therein, the Authority may be required to certify the amount of such deficiencies to the Governor and the State Legislature.

Federally Guaranteed Loan Participation Program

The Authority conducts a program of purchasing the guaranteed portion of loans guaranteed by the Small Business Administration and other independent agencies of the Federal government. As of June 30, 1984, the Authority had issued commitments for the purchase of participations in federally guaranteed loans aggregating \$100.7 million and had funded \$76.9 million of its participation commitments.

Additional Programs

Under the Act, the Authority is also empowered to:

- (a) make loans to business enterprises for projects not qualifying for tax-exemption;
- (b) establish a loan insurance program;
- (c) purchase loans from the Alaska State Housing Authority or municipalities in the State in furtherance of the multi-family housing programs developed by the Alaska State Housing Authority or the municipalities; and
- (d) acquire, manage and operate projects which the Authority considers necessary or appropriate to serve a public purpose.

Of these programs only the taxable bond program described in (a) above and certain projects described in (d) above may be financed by the issuance of general obligation bonds of the Authority, subject to the limitations on total outstanding general obligation indebtedness set forth in each Bond Resolution.

Operating Results and Financial Position

The following comparative table sets forth selected information relating to the operating results and financial position of the Authority for the following years ended June 30 (in millions):

	1984	1983	1982	1981
Net Earnings	\$ 25.3	\$ 22.6	\$ 21.0	\$ 16.5
Total Assets, as of June 30	\$435.3	\$350.3	\$307.4	\$217.6
Liabilities, as of June 30:				
General Obligation Debt	\$155.4	\$ 98.1	\$ 78.4	\$ 18.8
Other	5.1	3.4	2.7	1.5
Total Liabilities.....	\$160.5	\$101.5	\$ 81.1	\$ 20.3
Total Equity	\$274.8	\$248.9	\$226.2	\$197.2

See the audited Financial Statements with Accountants' Report Thereon attached hereto as Appendix C for further information about the financial condition of the Authority as of June 30, 1984.

The following table sets forth the loan delinquency experience for loans funded from the proceeds of Umbrella Bond Program bond issues.

LOAN DELINQUENCY EXPERIENCE OF UMBRELLA BOND PROGRAM LOANS (as of December 31, 1984)

	Number of Days Delinquent			
	30	60	90	Total
Percent of Total Number of Loans Delinquent.....	1.32%	1.32%	1.06%	3.70%
Percent of Total Par Value of Loans Delinquent	0.62%	1.90%	0.46%	2.97%
Total Par Value of Loans Delinquent (millions)	\$1.17	\$3.56	\$0.86	\$5.59

The following table sets forth the loan delinquency experience of the Authority's Appropriated Loans portfolio.

LOAN DELINQUENCY EXPERIENCE OF STATE-APPROPRIATED LOANS (as of December 31, 1984)

	Number of Days Delinquent			
	30	60	90	Total
Percent of Total Number of Loans Delinquent.....	2.52%	1.78%	5.49%	9.79%
Percent of Total Par Value of Loans Delinquent	1.80%	1.31%	4.72%	7.84%
Total Par Value of Loans Delinquent (millions)	\$1.76	\$1.28	\$4.62	\$7.66

The following table sets forth the loan delinquency experience for federally guaranteed loans funded by the Authority.

LOAN DELINQUENCY EXPERIENCE OF FEDERALLY GUARANTEED LOANS (as of December 31, 1984)

	Number of Days Delinquent			
	30	60	90	Total
Percent of Total Number of Loans Delinquent.....	8.26%	1.18%	0.29%	9.73%
Percent of Total Par Value of Loans Delinquent	8.25%	1.13%	0.17%	9.55%
Total Par Value of Loans Delinquent (millions)	\$5.61	\$0.77	\$0.11	\$6.49

Loan Program Regulations

The Authority's Umbrella Bond Program is administered pursuant to regulations promulgated by the Authority. The Authority's regulations and procedures described herein are derived from the provisions of the Act and regulations of the Authority adopted under the Administrative Procedure Act of Alaska. These regulations and procedures are in all respects subject to amendment or change by the Alaska State Legislature or the Authority and are not covenants with bondholders.

Procedures

A business enterprise which wishes to receive a loan under the Umbrella Bond Program may apply for financing to any Originator. The Originator will then perform an initial review of the proposed use of funds, borrower eligibility and borrower creditworthiness. Thereafter the Originator will submit to the Authority on behalf of the borrower a preliminary application which contains sufficient information to allow the Authority to determine on a preliminary basis whether the proposed project and the applicant are eligible for consideration and whether interest on the Authority's Umbrella Bond Program bonds issued to fund the purchase of a participation in the loan will be tax-exempt under Section 103 of the Code. The preliminary application must be accompanied by a non-refundable \$100 fee.

Upon review of a preliminary application by the Executive Director, Bond Counsel and the administrative staff of the Authority, a summary of the application is transmitted to the Authority's Board of Directors for consideration along with the Executive Director's recommendation. If the Authority determines to purchase a participation upon successful completion of the application process and acquisition or construction of the project by the applicant, the Authority adopts a resolution indicating its intent to issue bonds.

After adoption of such a resolution by the Authority, the Originator and borrower may submit an application for Authority participation in the loan. The Authority may require the following in an application:

1. Letter of transmittal.
2. Loan summary.
3. Signed loan application.
4. Current credit report.
5. Current financial statement.
6. Copies of the applicant's Federal income tax returns or audited financial statements for each of the past three years.
7. Copies of earnest money receipt and agreement, option to purchase, contract to purchase or invoice for purchase of (a) land, (b) land and improvements or (c) tangible personal property.
8. Leases for land or improvements related to the project.
9. Plans and specifications for construction of the project and a detailed project description for real or tangible personal property which is to be acquired rather than constructed.
10. Construction cost estimate.
11. For a real estate loan, a narrative appraisal report in a format consistent with standards established by the American Institute of Real Estate Appraisers or the Society of Real Estate Appraisers or, for a tangible personal property loan, an appraisal prepared by an appraiser who is acceptable to the Authority.
12. Copies of leases or binding commitments to lease or renew leases between the applicant and project tenants, including, where appropriate, a list of tenants with lease rates, terms and options.
13. Soil tests.
14. Proof of a business license.
15. Job certification forms.
16. Any other information required by the Authority.

The Authority may also require a financial feasibility study satisfactory to the Authority and, as applicable, require a statement from the borrower that the borrower is in compliance with the capital expenditure restrictions of Section 103(b)(6)(D) of the Code.

The Authority purchases participations in loans originated by Alaska commercial lending institutions (see "Umbrella Bond Program"). The Authority does not engage in direct lending activities. The Originator services both the Originator and the Authority portion of each loan. If more than 2% of the outstanding principal balance of Authority participations originated by any Originator are 90 days or more delinquent, such Originator is ineligible for future participation in Authority programs until the delinquencies on the Loan Participations it originated are reduced to less than the 2% limit. Authority loan participations are funded net of each borrower's share of pro rata costs of issuance and bond discount.

Industrial and Commercial Loan Criteria

Real Property Loans. Loan participation commitments for projects involving the purchase or improvement of interests in real property will be issued in accordance with the following criteria established by the Act and the Authority's regulations:

1. The Authority may loan, through its purchase of a participation in a loan from an Originator, up to \$10,000,000 (\$1,000,000 for Economic Development Bond issues) to applicants who are principal users or related persons in connection with a facility, provided that the Authority's Umbrella Bond Program bonds issued for that purpose qualify in all respects as tax-exempt obligations under Section 103 of the Code.

2. The loan shall be secured by a mortgage which shall constitute a first lien, subject to permitted encumbrances, on real estate in fee simple or on a leasehold estate.

3. The maximum loan-to-value ratio for the purchase of an existing project is 75% of the lesser of the appraised value or sale price of the project. The maximum loan-to-value ratio for the construction of a new project is the lesser of 75% of the appraised value or 100% of the certified costs approved by the Authority.

4. The rate of interest on the Authority's participation in a loan will be determined after sale of the Authority's Umbrella Bond Program bonds but may not exceed the interest rate paid by the Authority on the Umbrella Bond Program bonds by more than the percentage permitted under Section 103 of the Code and regulations promulgated thereunder. The rate of interest on the Originator's participation in a loan is established by the Originator but may not exceed a market rate.

5. The maximum term of any loan is the lesser of 25 years or 75% of the Authority's estimate of the economic life of the project.

6. The Originator of a loan under the Authority's Umbrella Bond Program must retain at least a 10% (20% for loans involving Authority loan participations in excess of \$1,000,000) interest in the loan amount but may subsequently sell or assign up to 90% of its interest, but only to regulated financial institutions and qualified pension trusts. The Authority's participation will be adjusted to the next lower \$5,000 increment.

7. Prior to closing, the Authority will require documentation:

- (a) by a qualified appraiser that all construction was completed in conformance with the plans and specifications upon which the appraiser relied in formulating the appraisal;

- (b) by the appropriate person or persons that the buildings and structures may be legally occupied and that the occupancy of buildings and structures conforms to all requirements of Federal, State and municipal law; and

- (c) by a registered architect or professional engineer, if there is no appropriate person available for the purposes described in (b) above or, in any event, if required by the

Authority, that the property offered as security is structurally sound and that any buildings or structures conform to applicable building standards.

8. The terms and conditions of any leasehold estate securing a project are subject to approval by the Authority. The term of any lease must extend at least 10 years beyond the term of the loan, but leases for a shorter term, with options to renew, will be considered by the Authority on a case-by-case basis.

9. Secondary financing by an applicant will be permitted by the Authority on a project to be financed by the Authority on a case-by-case basis when the applicant is able to demonstrate that additional debt can be serviced from the cash flow generated by the real property offered as security for the loan.

10. The Authority may require personal guarantees from partners, joint venturers and substantial corporate stockholders (including those of a parent corporation if the applicant is a subsidiary corporation).

11. The Authority may require prepayment fees on its share in a loan in such amounts as it may determine.

12. Fire, extended coverage, vandalism and optional perils insurance is required for not less than 90% of the value of improvements to the real property, unless waived by the Authority. Natural hazard, including flood and earthquake, insurance may be required, and American Land Title Association type of title insurance coverage is also required.

Borrowers whose loans include funding from the proceeds of Consolidated Bonds issued subject to Section 103(b)(6)(D) of the Code have agreed to specifically limit their own future capital expenditures and those of other principal users and persons related to a principal user. In the event such capital expenditure limitations imposed by the Authority in the loan agreements or other documents are exceeded, the borrower is contingently liable to the Authority for any and all costs of the Authority incurred in the event of a violation of the capital expenditure limitations of Section 103(b)(6)(D) of the Code.

Tangible Personal Property Loans. Loan participation commitments for projects involving the acquisition or fabrication of tangible personal property, whether or not attached to real property, will be issued in accordance with the following criteria established by the Act and the Authority's regulations.

1. The Authority may loan through its purchase of a participation in a loan from an Originator up to \$10,000,000 (\$1,000,000 for Economic Development Bond issues) to applicants who are principal users or related persons in connection with a facility, provided that the Authority's Umbrella Bond Program bonds issued for that purpose qualify in all respects as tax-exempt obligations under Section 103 of the Code.

2. The loan shall be secured by a security interest which shall constitute a first lien on the tangible personal property.

3. The maximum loan-to-value ratio is 75% of the lesser of the appraised value or purchase price of the project.

4. The rate of interest on the Authority's participation in a loan will be determined after sale of the Authority's Umbrella Bond Program bonds but may not exceed the interest rate paid by the Authority on the Umbrella Bond Program bonds by more than the percentage permitted under Section 103 of the Code and regulations promulgated thereunder. The rate of interest on the Originator's participation in a loan is established by the Originator but may not exceed a market rate.

5. The maximum term of any loan is the earlier of 15 years or 75% of the Authority's estimate of the economic life of the project.

6. The Originator of a loan under the Authority's Umbrella Bond Program must retain at least a 10% (20% for loans involving Authority loan participations in excess of \$1,000,000) interest in the loan amount but may subsequently sell or assign up to 90% of its interest, but only to regulated financial institutions and qualified pension trusts. The Authority's participation will be adjusted to the next lower \$5,000 increment.

7. The terms and conditions of any leasehold estate securing a project are subject to approval by the Authority.

8. The Authority may require personal guarantees from partners, joint venturers and substantial corporate stockholders (including those of a parent corporation if the applicant is a subsidiary corporation).

9. The Authority may require prepayment fees on its share in a loan in such amounts as it may determine.

10. Full-coverage insurance is required including, but not limited to, fire, theft, comprehensive, collision and liability in form and amount acceptable to the Authority.

Borrowers whose loans are funded from the proceeds of Consolidated Bonds issued subject to Section 103(b)(6)(D) of the Code have agreed to specifically limit their own future capital expenditures and those of other principal users and persons related to a principal user. In the event such capital expenditure limitations imposed by the Authority in the loan agreements are exceeded, the borrower is contingently liable to the Authority for any and all costs of the Authority incurred in the event of a violation of the capital expenditure limitations of Section 103(b)(6)(D) of the Code.

Housing Loan Criteria

Loan participation commitments for multi-family housing projects involving the purchase or improvement of interests in real property will be issued in accordance with the following criteria established by the Act and the Authority's regulations:

1. A project must contain no fewer than five housing units.

2. The principal amount of a non-federally insured or guaranteed loan may not exceed 75% of the appraised value of the project or 100% of the cost of construction of the project which has been certified by the borrower and Originator and approved by the Authority, whichever is less.

3. A loan, other than a loan referred to in paragraph 6 below, must be secured by a real property mortgage or deed of trust which is a first lien on real property in fee simple or on a leasehold estate. The Authority may, in its discretion, permit further encumbrances against the real property which do not in the Authority's opinion affect the security of the loan.

4. The term of a non-federally insured or guaranteed loan shall not exceed 25 years or 75% of the estimated economic life of the project, as determined by the Authority, whichever is less.

5. A loan shall be in the form and contain, among other things, the terms and provisions with respect to insurance, repairs, alterations, payment of taxes and assessments, default reserves, delinquency charges, default remedies, acceleration of maturity, secondary liens, assumability of the loan, and other matters, as the Authority determines.

6. The Authority may provide for secondary financing of a project in conjunction with a loan purchased by the Authority and secured by a first lien referred to in paragraph 3 above. The secondary loan may contain such terms as the Authority determines necessary to permit the bond financing of the first-lien loan participation including, without limitation, provisions for periodic advances of funds to meet the difference, as determined by the Authority, between principal and interest payments on bonds, the proceeds of which were expended to purchase the first-lien loan participation, and loan repayments net of fees. The secondary loan shall be subordinate to a loan participation purchased with the proceeds of bonds.

7. The loan documents shall contain such deed restrictions, tax-exempt compliance agreements, or other requirements as may be determined by the Authority to be necessary to cause the loan and the bonds issued to finance the purchase of a participation in the loan to comply with the applicable provisions of Section 103(b)(4)(A) of the Code and the regulations and rulings issued or proposed to be issued thereunder, as determined by the Authority.

8. Before funding a loan, the Originator shall obtain a statement in writing from:

(a) the appraiser that construction was substantially completed according to the plans and specifications relied on by the appraiser in making the fair-market-value appraisal required by the Authority;

(b) a registered architect or professional engineer that the property securing the loan is structurally sound or that the buildings or structures thereon conform to applicable building standards, or from an authorized official that the buildings may be occupied and that the occupancy, buildings and structures conform to all applicable requirements of Federal, State and municipal law; and

(c) other persons as directed by the Authority concerning matters which are reasonable and customary in commercial loan transactions.

9. Unless waived by the Authority, the borrower shall obtain fire, extended coverage, vandalism and optional perils insurance for not less than 100% of the value of the improvements on the real property. Natural hazard insurance coverage for flood and earthquake may be required by the Authority. American Land Title Association type of title insurance coverage is also required.

10. The Authority may require a guarantee for repayment of the loan from such persons as the Authority determines.

11. Pursuant to an agreement with the Municipality of Anchorage, multi-family housing projects constructed within Anchorage must comply with the conservation-of-energy and access-for-handicapped requirements of the Municipality.

Loan Commitment

A loan participation commitment is effective upon payment of a non-refundable commitment fee by the borrower. By its commitment the Authority agrees to purchase a participation in a loan to the borrower in an amount and on the terms and conditions described in the loan commitment.

A decision by the Authority's staff not to approve a loan participation application may be appealed by the Originator by filing a written notice of appeal with the Board of Directors of the Authority within 10 days of notification that the loan participation application has not been approved. The Board of Directors is required to issue its decision within 45 days after receipt of the notice of appeal based solely upon the loan application documents originally filed.

Loan Closing and Disbursement of Funds

The Authority issues its bonds in amounts sufficient to provide the necessary funds for the Authority's purchase of its interest in the permanent financing for each project being financed. Upon certification by the Originator and the borrower that all provisions of the loan commitment have been complied with, the loan participation will be scheduled for closing and disbursement of funds to the Originator.

Servicing of Loans

The Authority has entered into a loan servicing agreement with each Originator which:

(a) provides that all servicing be by a regulated financial institution within the State and that the Originator hold at least that portion of the loan minimally required to be held by the

Originator, as previously described herein under "Real Property Loans" and "Tangible Personal Property Loans";

(b) provides the methods whereby delinquent collections will be made and foreclosure or exercise of security rights will be undertaken by the Originator;

(c) provides for periodic reports to the Authority by the Originator; and

(d) requires the Originator to service the loan in accordance with acceptable practices of prudent lending including, but not limited to, the exercising of diligence in collecting amounts due under the Loan.

The Originator must provide a bond deemed sufficient by the Authority to protect the Authority against errors, omissions and fraud.

In the event of any material breach by an Originator of any agreement or covenant contained in the loan servicing agreement which remains uncorrected for 30 days, the Authority may at its option, require the Originator to repurchase the Authority's interest in any loan. Furthermore, the Act requires the Authority to discontinue purchasing participations from any Originator whenever more than 2% of the participations purchased from such Originator are 90 or more days delinquent.

General Provisions

A borrower requesting a loan will, upon receipt of a written request from the Authority, make its books and records available for inspection by the Authority at a reasonable time. As long as any bonds issued by the Authority to finance the purchase of a participation in a loan are outstanding, the Authority may, in its discretion, require an applicant whose financing of a project is approved, or who is the recipient of a loan, to permit and pay the costs of an audit or examination of its books and records by an independent firm of certified public accountants at a reasonable time to determine whether the borrower has complied with the provisions of the bonds.

SUMMARY OF CERTAIN PROVISIONS OF EACH BOND RESOLUTION AND OF THE ECONOMIC DEVELOPMENT BOND CAPITAL RESERVE FUND RESOLUTION

Each Series of the Bonds is issued pursuant to a separate Bond Resolution. The Bonds, together with all other Economic Development Bonds, are entitled to the benefits and security of the Economic Development Bond Capital Reserve Fund Resolution. Reference is made to each Bond Resolution and the Economic Development Bond Capital Reserve Fund Resolution for a full and complete statement of their provisions. The following is a brief summary of certain provisions contained in each Bond Resolution and the Economic Development Bond Capital Reserve Fund Resolution and should not be considered a full statement thereof.

BOND RESOLUTION

Definitions (Section 101)

"Appropriated Loans" means the loans appropriated to the Authority pursuant to Section 9 of Chapter 120, Session Laws of Alaska, 1980, as described in a certificate of an authorized officer on file with the Trustee.

"Appropriated Loan Receipts" shall mean the scheduled payments (representative of principal or interest or proceeds of insurance) called for by any Appropriated Loan and paid to the Authority from any source, including both timely and delinquent payments with late charges, and all amounts received by the Authority as a recovery of the principal amount, including any premium or penalty with respect thereto, on account of (i) the advance payment of amounts to become due pursuant to such Appropriated Loan, (ii) the sale, assignment, endorsement or other disposition thereof, or (iii) the acceleration of payment due thereunder or other remedial proceedings taken in the event of a default thereon, but shall not mean or include any payments with respect to such Appropriated Loans

received prior to April 1, 1981, any amount retained by the servicer, if there be one, as service fees, or payments of ground rents, taxes, assessments or mortgage, fire or other hazard insurance premiums or like payments.

"Bond" shall mean one of the bonds to be authenticated and delivered pursuant to the Bond Resolution.

"Capital Reserve Fund" shall mean the fund so entitled established in the Capital Reserve Fund Resolution.

"Capital Reserve Fund Requirement" shall have the meaning ascribed thereto in the Capital Reserve Fund Resolution.

"Capital Reserve Fund Resolution" shall mean the Economic Development Bond Capital Reserve Fund Resolution of the Authority adopted on April 13, 1981, as amended.

"Fiduciary" shall mean the Trustee and any Paying Agent, or any or all of them, as may be appropriate.

"Fiscal Year" shall mean a twelve-month period commencing on the first day of July of any year.

"General Obligation Annual Debt Service Requirements" shall mean the amounts required to be paid in each Fiscal Year as sinking fund installments, or as principal not required to be redeemed through the payment of said sinking fund installments, and interest payable, adjusted for capitalized interest or scheduled redemption through payment of said sinking fund installments on General Obligation Indebtedness, all in accordance with the terms of the General Obligation Indebtedness.

"General Obligation Indebtedness" shall mean all indebtedness, including, without limitation, the Bonds and all Series of Bonds, notes or other forms of indebtedness of the Authority payable from its income and receipts or assets generally, whether or not additionally secured in any manner, but shall not include liabilities or obligations in the nature of accounts payable incurred as Operating Costs of the Authority or amounts loaned by the State subordinate in all respects to General Obligation Indebtedness then outstanding or thereafter issued.

"Investment Securities" shall mean and include any of the following obligations, to the extent the same are at the time legal for investment of funds of the Authority:

- (1) direct obligations of or obligations guaranteed by the United States of America;
- (2) any bond, debenture, note, participation certificate or other similar obligation issued by any of the following agencies: Government National Mortgage Association, Federal Land Banks, Federal Home Loan Banks, Federal Intermediate Credit Banks, Banks for Cooperatives, Tennessee Valley Authority, United States Postal Service, Farmers' Home Administration and Export-Import Bank;
- (3) any bond, debenture, note, participation certificate or other similar obligation issued by the Federal National Mortgage Association to the extent such obligations are guaranteed by the Government National Mortgage Association or issued by any other Federal agency and backed by the full faith and credit of the United States of America other than as provided in (1) hereof;
- (4) any other obligation of the United States of America or any Federal agency which may then be purchased with funds belonging to the State or which are legal investments for savings banks in the State;
- (5) Public Housing Bonds issued by public agencies or municipalities and fully secured as to the payment of both principal and interest by a pledge of annual contributions under an annual contributions contract or contracts with the United States of America or temporary notes, preliminary loan notes or project notes issued by public agencies or municipalities, in each case fully secured as to the payment of both principal and interest by a requisition or payment agreement with the United States of America;

(6) direct and general obligations of or obligations guaranteed by the State of Alaska, to the payment of the principal of and interest on which the full faith and credit of the State is pledged;

(7) units of participation in any money market fund constituting an investment trust, the corpus of which is restricted to cash, direct obligations of or obligations guaranteed by the United States of America, or repurchase agreements with respect to such obligations; and

(8) deposits in interest-bearing time or demand deposits, or certificates of deposit, secured by obligations described in clauses (1), (2), (3), (4), (5), or (6) above.

"Net Income" means (a) all revenues, including principal and interest receipts, derived from loan participations acquired with the proceeds of (i) Economic Development Bonds and other bonds which are tax exempt under Section 103(b)(6)(A) of the Code and are issued pursuant to a bond resolution with substantially the same general terms and conditions as are contained in the Economic Development Bond Resolutions, (ii) Consolidated Bonds and (iii) Variable Demand/Fixed Rate Bonds; (b) all Appropriated Loan Receipts; and (c) all other revenues or receipts of the Authority, but excluding any proceeds of money borrowed by the Authority, any revenues or receipts specifically pledged or assigned to the payment of any bonds or other indebtedness other than the Bonds or any Series of Bonds, and any amounts appropriated and paid to the Authority by the State, less Service Fees and all Operating Costs.

"Non-Current Assets" shall mean loans and securities of the Authority, including, without limitation, Appropriated Loans, on which payments of principal or interest are 90 days or more delinquent.

"Operating Costs" shall mean, as of any date, all the Authority's expenses in carrying out and administering its powers, duties and functions under the Act, including service fees on any loan for which there is no servicer, and shall include, without limiting the generality of the foregoing, (a) salaries, supplies, utilities, mailing, labor, materials, office rent, maintenance, furnishings, equipment, machinery and apparatus, and insurance premiums, (b) legal, accounting, management, consulting and banking services and expenses, (c) the fees and expenses of any trustee, depository or paying agents, (d) costs of issuance not paid from proceeds of a Series of Bonds, (e) payments to pension, retirement, health and hospitalization funds, and (f) any other expenses required or permitted to be paid by the Authority under the Act.

"Pledged Receipts" shall mean (i) the scheduled payments (representative of principal or interest or proceeds of insurance or amounts withdrawn from the Recoveries of Principal Account with respect thereto) called for by any Loan Participation and paid to the Authority from any source, including both timely and delinquent payments with late charges, but shall not include or mean any amount retained by a Loan servicer as Service Fees, or payments of ground rents, taxes, assessments or mortgage, fire or other hazard insurance premiums or like payments, and (ii) all income earned or gain realized in excess of losses suffered on any investment or deposit of monies in Funds or Accounts established and maintained pursuant to the Bond Resolution, other than the Pledged Receipts Account.

"Project Security Contract" shall mean the participation certificate issued to the Authority and evidencing the interest of the Authority in an economic development loan.

"Recoveries of Principal" shall mean all amounts received by the Authority as a recovery of the principal amount disbursed by the Authority in connection with any Loan Participation, including any premium or penalty with respect thereto, on account of (i) the advance payment of amounts to become due pursuant to such Loan Participation, (ii) the sale, assignment, endorsement or other disposition thereof, or (iii) the acceleration of payments due thereunder or other remedial proceedings taken in the event of a default thereon.

"Revenues" shall mean the Pledged Receipts and Recoveries of Principal.

"Series of Bonds" shall mean Bonds and any other series of bonds which are tax exempt under the provisions of Section 103(b)(6)(A) of the Code and which are issued by the Authority pursuant to a

bond resolution with substantially the same general terms and conditions as to the bonds as are contained in the Economic Development Bond Resolutions.

"Service Fees" shall mean the reasonable or necessary expenses of servicing any economic development loan participations.

Bond Resolution to Constitute Contract (Section 202)

In consideration of the purchase and acceptance of the Bonds by those who shall hold the same from time to time, the provisions of the Bond Resolution shall constitute a contract with the holders of the Bonds. The pledges contained in the Bond Resolution and the covenants and agreements set forth therein shall be for the equal benefit, protection and security of the holders of any Bonds, without preference, priority or distinction of any Bonds over any other, except as expressly provided in the Bond Resolution.

Obligation of Bonds and Pledge Effected by the Resolution (Sections 204 and 501)

The Bonds are general obligations of the Authority, and the revenues, including amounts representing payments of principal, to be derived from the Participations financed with the proceeds of each Series of Bonds and all amounts in any Fund or Account, including investments thereof, established under the Bond Resolution are pledged to secure the payment of the principal or redemption price of and interest on the Bonds (including the sinking fund payments for the retirement thereof) in accordance with their terms and the provisions of the Bond Resolution, subject only to the provisions of the Bond Resolution permitting the application or release thereof for or to the purposes and on the terms and conditions therein set forth.

The Authority also pledges and assigns the Participations financed under the Bond Resolution to the Trustee, reserving to the Authority, except in the event of default, the right to administer and enforce the provisions of the documents evidencing the Participations in its own discretion and to enter into amendments with respect thereto, including releases of security and removal of covenants and conditions contained therein.

Application of Bond Proceeds and Other Amounts (Article IV)

The Bond Resolution establishes separate Loan Participation Accounts and Recoveries of Principal Accounts for each project within the Loan Participation Fund and the Revenue Fund, respectively. The monies deposited in a Loan Participation Account or a Recoveries of Principal Account may be used for the financing of Loan Participations but only if:

- (1) the Authority is of the opinion and determines in accordance with the Act that the Revenues derived from the project to be financed thereby shall be sufficient (i) to pay the principal, as the same becomes due at maturity or upon redemption by application of sinking fund payments, of and interest on the Bonds issued to finance such project, (ii) to establish, increase and maintain any reserves deemed by the Authority to be advisable to secure the payment of the principal of and interest on such Bonds, (iii) unless the person entering into the Project Security Contract is obligated to pay for the maintenance and insurance of the project, to pay the cost of maintaining the project in good repair and keeping it properly insured and (iv) to pay such other costs or taxes on the project as may be required and that such person is found by the Authority to be financially responsible and presumptively able to comply with the terms and conditions of any Project Security Contract with respect to such project;

- (2) one or more Project Security Contracts have been executed which, upon the use and application of any monies for such project as permitted in the Bond Resolution, shall evidence the rights of the Authority in a Loan; and

- (3) there shall be filed in the records of the Authority an opinion of counsel satisfactory to the Trustee (who may be counsel to the Authority) to the effect that, in the opinion of such counsel, such Project Security Contracts have been duly and validly executed and delivered and

as of the date of delivery thereof constituted valid and binding agreements between the parties thereto enforceable in accordance with their terms, except as the same may be limited by bankruptcy, insolvency or similar laws affecting creditors' rights, but such opinion may be subject to such exceptions and qualifications as an authorized officer shall determine to be reasonable and not to indicate a substantial impairment of the Authority's rights in the project and the Project Security Contracts;

(4) there shall be filed in the records of the Authority a certificate of an authorized officer stating that to the best of his information, knowledge and belief:

(a) the costs of the project to be financed were not incurred prior to the approval of the project by the Authority, which may include preliminary approval in accordance with the practice of the Authority;

(b) there are no outstanding obligations described in Section 103 of the Code, the proceeds of which were used with respect to facilities of which the principal user is or will be the same person or two or more related persons and which are located in the same incorporated municipality as the project or the same Borough (but not in any incorporated municipality other than the Borough), or in the Unorganized Borough, or in any other of the project locations specified in Part I of the Bond Resolution and which would cause the aggregate face amount of the Bonds to be treated as exceeding \$1,000,000 pursuant to Section 103(b)(6)(A) of the Code;

(c) the proceeds of the Bonds used by the Authority to finance a Loan Participation in respect of the project will be used in their entirety for the acquisition, construction, reconstruction or improvement of land or property of a character subject to depreciation for Federal income tax purposes;

(d) the proceeds of the Bonds used by the Authority to finance a Loan Participation in respect of the project will not be used in any manner which would cause the Bonds to be "arbitrage bonds" within the meaning of Section 103(c) of the Code; and

(e) the average maturity of the Bonds does not exceed 120% of the average reasonably expected economic life of the project in accordance with Section 103(b)(14) of the Code, which shall be accompanied by (i) a certificate of the project occupant stating the average reasonably expected economic life of the project if a substantial portion of the project consists of personal property and (ii) a certificate of the financial advisor to the Authority stating the average maturity of the Bonds, the proceeds of which are expected to be used to finance said project.

Establishment of Funds and Accounts (Section 502)

Each Bond Resolution establishes the following Funds and Accounts, which are to be held in trust by the Trustee and the depositaries selected by the Trustee:

- (1) Loan Participation Fund:
 - (a) Loan Participation Account
- (2) Revenue Fund:
 - (a) Pledged Receipts Account
 - (b) Recoveries of Principal Account
- (3) Debt Service Fund:
 - (a) Interest and Principal Account
 - (b) Redemption Account
- (4) Surplus Reserve Fund

Loan Participation Fund (Section 503)

Amounts in the Loan Participation Fund may be expended only (i) to pay the cost of financing Loan Participations, (ii) to pay the reasonable and necessary costs of issuance of the Bonds, (iii) to the extent that amounts in any other Fund or Account are insufficient or unavailable therefor, to pay the

principal or redemption price of and interest on the Bonds when due, but only if there shall have been filed with the Trustee a certificate of an authorized officer of the Authority stating (a) that the Revenues expected to be received thereafter by the Authority together with amounts expected to be made available therefor by the Authority will be sufficient to pay in full the principal or redemption price, if any, of and interest (and any arrears thereof) on all outstanding Bonds when and as the same shall become due, and (b) in reasonable detail, the basis for such certification, or (iv) applied to the redemption of Bonds. Any amount remaining in the Loan Participation Fund on February 1, 1986, shall be applied to redeem Bonds on April 1, 1986.

Revenue Fund (Section 504)

All Pledged Receipts and Recoveries of Principal are to be transmitted to the Trustee regularly or at least semiannually prior to the fifth day preceding any interest payment date and deposited into the Pledged Receipts Account and Recoveries of Principal Account, respectively. On or before the day preceding each interest payment date, the Trustee is required to make payments from the Pledged Receipts Account into the following Funds and Accounts in the following amounts and in the following sequence:

FIRST: Into the Interest and Principal Account, the amount necessary to increase the amount in such Account so that it equals the sum of (i) unpaid interest on the outstanding Bonds accrued and to accrue to such interest payment date and (ii) the principal installments accrued and to accrue to such interest payment date, assuming the accrual of principal installments on the same basis as interest accrues commencing one year prior to the next principal installment date, and with respect only to principal installments on outstanding Bonds due and payable on either of the two next succeeding interest payment dates.

SECOND: Into the Surplus Reserve Fund, the amount remaining.

Amounts on deposit in each Recoveries of Principal Account shall be applied to the redemption of Bonds or (i) invested in Investment Securities sufficient, in the opinion of the Authority, to provide for the payment of the principal of and interest on the Bonds as the same become due or (ii) expended to finance further loan participations, provided that the Authority has been furnished with a counsel's opinion or a ruling of the Internal Revenue Service to the effect that the financing of such further loan participations will not result in the inclusion of interest on any Bond in the gross income of the holder thereof for Federal income tax purposes. The Authority covenants that prior to applying amounts in any Recoveries of Principal Account to the redemption of Bonds, it will use its best efforts to apply such monies to the purchase of Investment Securities or to finance further loan participations.

Debt Service Fund (Section 505)

The Trustee is required to pay out of the Interest and Principal Account to the respective Paying Agents for any of the Bonds, on or before each interest payment date, the amounts required for the payment of interest on the outstanding Bonds due on such date and, on or before the redemption date, or date of purchase, the amounts required for the payment of accrued interest on Bonds redeemed or purchased for retirement (unless the payment of such accrued interest shall be otherwise provided for), and such amounts shall be applied by the Paying Agents to such payments.

The Trustee is required to pay out of the Interest and Principal Account to the respective Paying Agents, on the day preceding each principal installment date for any of the outstanding Bonds, the amounts required for the payment of principal due on such date, and such amounts shall be applied by the Paying Agents to such payments.

The amount accumulated in the Interest and Principal Account for each sinking fund payment may, and if so directed by the Authority shall, be applied (together with amounts accumulated in the Interest and Principal Account with respect to interest on the Bonds for which such sinking fund payment was established) by the Trustee prior to the forty-fifth day preceding the due date of such sinking fund payment as follows:

(1) to the purchase of Bonds for which such sinking fund payment was established, at prices (including any brokerage and other charges) not exceeding the applicable redemption price, plus unpaid interest accrued to the date of purchase, such purchases to be made in such manner as the Trustee shall determine, or

(2) to the redemption, pursuant to the Bond Resolution, of such Bonds, if then redeemable by their terms, at their applicable redemption prices.

Surplus Reserve Fund (Section 506)

Amounts in the Surplus Reserve Fund shall be deposited or transferred by the Trustee to the Interest and Principal Account on the day preceding each interest payment date to provide the amount necessary to increase the amount therein so that it equals (a) the interest due on such date or (b) if such interest payment date is also a principal payment date, the interest and principal, in that order, due on such date. On the day following the day each principal payment is due, the Trustee, upon the direction of the Authority, shall pay to the Authority all amounts in the Surplus Reserve Fund free and clear of any lien or pledge created by or pursuant to the Bond Resolution for expenditure for any lawful purpose of the Authority consistent with Section 706 relating to Tax Covenants.

Deposits (Section 507)

Any amounts held under the Bond Resolution may be deposited in the commercial banking department of the Fiduciary or depository holding such amounts which may honor checks and drafts thereon as if it were not such Fiduciary or depository. All amounts so deposited are required to be continuously and fully secured either by lodging Investment Securities with the Trustee as collateral or in such other manner as may then be required by applicable Federal or State laws regarding the deposit of trust funds.

Investment of Certain Funds (Section 508)

Amounts held under the Bond Resolution may be invested in Investment Securities or deposited in interest-bearing time deposits, certificates of deposit or other similar banking arrangements with the Trustee, banks of the Federal Reserve System or banks the deposits of which are insured by the Federal Deposit Insurance Corporation.

Valuation of Investments (Section 509)

In computing the amount in any Fund or Account, obligations purchased as an investment of amounts therein are to be valued at par, if purchased at par, or at amortized value if purchased at other than par. Valuation is to be made at least 30 days before each interest payment date and on any particular date shall include the amount of interest then earned or accrued to such date.

Payment of Bonds (Section 701)

The Authority covenants that it will duly and punctually pay or cause to be paid the principal or redemption price, if any, of every Bond and the interest thereon, at the dates and places and in the manner mentioned in the Bonds according to the true intent and meaning thereof, and shall duly and punctually pay or cause to be paid all sinking fund payments, if any, becoming payable with respect to any Bonds.

Tax Covenants (Section 706)

The Authority covenants not to permit at any time or times any of the proceeds of the Bonds or other funds of the Authority to be used directly or indirectly to acquire any securities or obligations, the acquisition of which would cause any Bond to be an "arbitrage bond" as defined in Section 103(c) (2) of the Code and that it will not permit such proceeds or other funds to be used in a manner which would result in the exclusion of any Bond from the treatment afforded by Section 103(a) of the

Code, except in the case of Bonds held by a "substantial user" or "related person" within the meaning of Section 103(b) of the Code.

Loan Participations (Section 709)

The Authority from time to time shall, with all practical dispatch and in a sound and economical manner consistent in all respects with the Act, with the provisions of the Bond Resolution and with sound banking practices and principles, (i) use and apply the proceeds of the Bonds (to the extent not reasonably or otherwise required for other purposes of the Act) to finance Loan Participations, (ii) do all things necessary to receive and collect Pledged Receipts and, when applicable, Recoveries of Principal, sufficient to pay the principal or redemption price of and interest on the Bonds and (iii) diligently enforce and take all steps reasonably necessary to maintain any insurance on the Loan Participations and the projects related thereto and to enforce all terms, covenants and conditions of the Loan Participations. The Authority covenants not to sell or assign a Loan Participation other than for the purpose of foreclosure or realizing the benefits of insurance with respect thereto or the project relating thereto.

General Obligation Indebtedness (Section 712)

If the Authority authorizes any General Obligation Indebtedness other than the Bonds or a Series of Bonds, it will establish and maintain a capital reserve fund with terms and provisions the same as the terms and provisions contained in the Capital Reserve Fund Resolution.

Negative Covenants (Section 713)

(A) The Authority covenants not to create or permit to be created any pledge, assignment, lien, encumbrance or charge on the Appropriated Loans for any purpose. The Authority may pay costs of issuance of any Series of Bonds and Operating Costs and any charges, and may make deposits into any funds or accounts of the Authority, from Appropriated Loan Receipts or from any source of funds.

(B) The Authority covenants not to incur any General Obligation Indebtedness unless the Net Income as estimated in a certificate of an authorized officer delivered at the time of the incurring of the General Obligation Indebtedness over the term of all General Obligation Indebtedness equals not less than 150% of the General Obligation Annual Debt Service Requirements in each year in which General Obligation Indebtedness is outstanding. Such estimate shall be made after deducting an amount equal to an aggregate of all annual payments thereafter due on all Non-Current Assets.

(C) The Authority covenants not to make any loans, incur any indebtedness, or expend any money except for reasonable and necessary Operating Costs or the payment of principal and interest on any General Obligation Indebtedness the effect of which would (i) reduce its estimated Net Income, estimated in the manner provided in clause (B), at any time to less than 150% of the General Obligation Annual Debt Service Requirements in any year in which General Obligation Indebtedness is outstanding, or (ii) cause its unrestricted surplus to amount to less than \$100,000,000.

Events of Default (Section 1001)

Each of the following events is an "Event of Default": (1) the Authority shall default in the payment of the principal or redemption price of any Bond when and as the same shall become due, whether at maturity or upon call for redemption or otherwise; (2) payment of any installment of interest on any of the Bonds shall not be made when the same shall become due; (3) the Authority shall file a petition in bankruptcy or seeking a composition of indebtedness under the Federal bankruptcy laws or under any other applicable law of the United States of America or of the State; (4) the Trustee has been notified by the trustee under the Capital Reserve Fund Resolution that an event of default specified in the Capital Reserve Fund Resolution has occurred; (5) the Authority shall fail or refuse to comply with the provisions of the Bond Resolution, or shall default in the performance or observance of any of the covenants, agreements or conditions contained therein, in any supplemental resolution, or in the Bonds, and such failure, refusal or default shall continue for a period of 45 days

after written notice thereof by the Trustee or the holders of not less than 5% in principal amount of the outstanding Bonds.

Remedies (Section 1002)

Upon the happening and continuance of any Event of Default specified in clauses (1) through (3) of Section 1001, the Trustee shall proceed, or upon the happening and continuance of any Event of Default specified in clauses (4) and (5) of Section 1001, the Trustee may proceed, and upon the written request of the holders of not less than 25% in principal amount of the outstanding Bonds is required to proceed, in its own name, subject to the Bond Resolution, to protect and enforce its rights and the rights of the Bondholders by such of the following remedies as the Trustee, being advised by counsel, shall deem most effectual to protect and enforce such rights: (a) by mandamus or other suit, action or proceeding at law or in equity, to enforce all rights of the Bondholders (including the right to require the Authority to receive and collect revenues, including Pledged Receipts and Recoveries of Principal, adequate to carry out the covenants and agreements as to, and assignment of, the Loan Participations) and to require the Authority to carry out any other covenant or agreement with Bondholders and to perform its duties under the Act; (b) by bringing suit upon the Bonds; (c) by action or suit in equity, to require the Authority to account as if it were the trustee of an express trust for the holders of the Bonds; (d) by action or suit in equity, to enjoin any acts or things which may be unlawful or in violation of the rights of the holders of the Bonds; (e) by declaring all Bonds due and payable, and if all defaults shall be cured, then, with the written consent of the holders of not less than 25% in principal amount of the outstanding Bonds, by annulling such declaration and its consequences; or (f) in the event all Bonds are declared due and payable, by selling Loan Participations. Upon commencement of judicial proceedings by the Trustee to enforce the rights of the Bondholders under the Bond Resolution, the Trustee is entitled to cause the appointment of a receiver for the Authority.

Priority of Payments After Default (Section 1003)

If, upon the happening and continuance of any Event of Default, the funds held by the Trustee and Paying Agents are insufficient for the payment of principal or redemption price, if any, and interest then due on the Bonds, such funds (other than funds held for the payment or redemption of particular Bonds which have theretofore become due) and any other amounts received or collected by the Trustee are to be applied as follows, after making provision for the payment of expenses to protect the interests of the holders of the Bonds and of charges, expenses and liabilities incurred and advances made by the Trustee or any Paying Agents in the performance of their respective duties under the Bond Resolution:

1. Unless the principal of all of the Bonds shall have become or have been declared due and payable:

FIRST: To the payment to the persons entitled thereto of all installments of interest then due in the order of maturity, and, if the amount available shall not be sufficient to pay in full any installment, then to the payment thereof ratably to the persons entitled thereto, without any discrimination or preference; and

SECOND: To the payment to the persons entitled thereto of the unpaid principal or redemption price of any Bonds which shall have become due, whether at maturity or by call for redemption, in the order of their due dates and, if the amounts available shall not be sufficient to pay in full all the Bonds due on any date, then to the payment thereof ratably to the persons entitled thereto, without any discrimination or preference.

2. If the principal of all of the Bonds shall have become or have been declared due and payable, to the payment of the principal and interest then due and unpaid upon the Bonds without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Bond over any other Bond, ratably to the persons entitled thereto, without any discrimination or preference except as to any difference in the respective rates of interest specified in the Bonds.

ECONOMIC DEVELOPMENT BOND CAPITAL RESERVE FUND RESOLUTION

Definitions (Section 101)

"Bonds" shall mean bonds of a Series which are tax exempt under the provisions of Section 103(b)(6)(A) of the Code issued by the Authority pursuant to a bond resolution or bond resolutions with substantially the same terms and conditions as are contained in the Bond Resolution.

"Bond Trustee" shall mean the trustee appointed under each resolution securing Bonds and its successor or successors and any other person substituted in its place under said resolution.

"Capital Reserve Fund" shall mean the Capital Reserve Fund established pursuant to Section 301.

"Capital Reserve Fund Requirement" shall mean, as of any particular date of calculation, the amount of money equal to the average of the amounts of money required to be paid in each future Fiscal Year until the last maturity date of outstanding Bonds for interest payable on Bonds and for the amortization of principal installments, including sinking fund payments.

"Capital Reserve Fund Trustee" shall mean the trustee appointed under the Capital Reserve Fund Resolution.

"Fiduciary" shall mean the Capital Reserve Fund Trustee, any Bond Trustee and any Paying Agent acting under any resolution securing a Series of Bonds.

"Fiscal Year" shall mean a twelve-month period commencing on the first day of July of any year.

"Interest and Principal Account" shall mean the Interest and Principal Account established pursuant to a resolution securing a Series of Bonds.

"Investment Securities" shall mean and include any of the following obligations, to the extent the same are at the time legal for investment of funds of the Authority under the Act:

(1) direct obligations of or obligations guaranteed by the United States of America;

(2) any bond, debenture, note, participation certificate or other similar obligation issued by any of the following agencies: Government National Mortgage Association, Federal Land Banks, Federal Home Loan Banks, Federal Intermediate Credit Banks, Banks for Cooperatives, Tennessee Valley Authority, United States Postal Service, Farmers' Home Administration and Export-Import Bank;

(3) any bond, debenture, note, participation certificate or other similar obligation issued by the Federal National Mortgage Association to the extent such obligations are guaranteed by the Government National Mortgage Association or issued by any other Federal agency and backed by the full faith and credit of the United States of America other than as provided in (1) hereof; and

(4) deposits in interest-bearing time or demand deposits, or certificates of deposit, secured by obligations described in clauses (1), (2), and (3).

"Series" shall mean all the Bonds of a series authenticated and delivered as a series of bonds under an authorizing bond resolution.

Resolution to Constitute Contract (Section 202)

In consideration of the purchase and acceptance of the Bonds by those who shall hold the same from time to time, the provisions of the Capital Reserve Fund Resolution shall constitute a contract between the Authority, the Capital Reserve Fund Trustee, the Bond Trustee and the holders from time to time of the Bonds. The pledges contained in the Capital Reserve Fund Resolution and the provisions, covenants and agreements therein set forth shall be for the equal benefit, protection and security of the holders of any and all of such Bonds, all of which shall be of equal rank without preference, priority or distinction of any of such Bonds over any other thereof, except as expressly provided in the Capital Reserve Fund Resolution.

Pledge Effected by Capital Reserve Fund Resolution (Section 301)

The amounts in the Capital Reserve Fund, including the investments thereof, are pledged to secure the payment of the principal or redemption price, if any, of and interest on all Bonds (including the sinking fund payments established by the resolutions securing the Bonds for the retirement thereof) in accordance with their terms and the provisions of said resolutions subject only to the provisions of the Capital Reserve Fund Resolution permitting the application or release thereof for or to the purposes and on the terms and conditions herein and therein set forth.

Operation of Capital Reserve Fund (Section 302)

(A) If on any interest payment date or redemption date for any Bonds the amount in the Interest and Principal Account or a redemption account established under a resolution securing the Bonds shall be less than the amount required for the payment of all principal installments or redemption price and interest on the outstanding Bonds due on such interest payment date, or redemption date, upon notification by the Bond Trustee acting under the resolution securing the Bonds, the Capital Reserve Fund Trustee shall transfer amounts from the Capital Reserve Fund to the Bond Trustee to the extent necessary to make good the deficiency.

(B) If on the first days of January, April, July or October of each year the amount in the Capital Reserve Fund is in excess of the Capital Reserve Fund Requirement, the Capital Reserve Fund Trustee shall transfer at the request of the Authority the amount of such excess to the Authority free and clear of any lien or pledge created by or pursuant to the Capital Reserve Fund Resolution for expenditure by the Authority for any lawful purpose.

(C) The Capital Reserve Fund Trustee shall sell, redeem or transfer Investment Securities to the extent necessary to make any required or permitted payment or transfer and, at the direction of the Authority, shall sell, redeem or transfer Investment Securities as necessary to comply with this section.

Investment of the Capital Reserve Fund (Section 303)

(A) Monies in the Capital Reserve Fund shall be invested in Investment Securities so that the maturity date or date of redemption at the option of the holder thereof shall coincide as nearly as practicable with the times at which monies are needed by the Authority to be so expended. The Investment Securities purchased shall be held by the Capital Reserve Fund Trustee and shall be deemed at all times to be part of the Capital Reserve Fund, and the Capital Reserve Fund Trustee shall keep the Authority advised as to the details of all such investments. The Capital Reserve Fund Trustee shall sell at the best price obtainable, or present for redemption, any Investment Securities purchased by it as an investment whenever it shall be necessary in order to provide monies to meet any payment from the Capital Reserve Fund. The Authority may direct the Capital Reserve Fund Trustee to enter into financial transactions under which Investment Securities are sold under an agreement providing for their repurchase at a future date for a fixed price.

(B) In lieu of such investments the Capital Reserve Fund Trustee shall, at the written direction of an authorized officer of the Authority, deposit amounts or cause amounts to be deposited from the Capital Reserve Fund in interest-bearing time deposits, or certificates of deposit, or shall make other similar banking arrangements, with itself or a member bank or banks of the Federal Reserve System or banks the deposits of which are insured by the Federal Deposit Insurance Corporation. Each such interest-bearing time deposit or certificate of deposit or other similar banking arrangement shall permit the monies so placed to be available for use at the times at which monies are needed by the Authority to be expended. All monies in each such interest-bearing time deposit or certificate of deposit or other similar banking arrangement shall be continuously and fully secured by direct obligations of the United States of America or of the State or obligations the principal and interest of which are guaranteed by the State or the United States of America, of a market value equal at all times to the amount of the deposit, certificate or other similar banking arrangement.

(C) Investment Securities purchased as an investment of monies in the Capital Reserve Fund under the provisions of the Capital Reserve Fund Resolution shall be deemed at all times to be a part of the Capital Reserve Fund until transferred therefrom as permitted by this section.

Maintenance of Capital Reserve Fund (Section 305)

(A) The Authority shall at all times maintain the Capital Reserve Fund in an amount at least equal to the Capital Reserve Fund Requirement and do and perform or cause to be done and performed each and every act and thing with respect to the Capital Reserve Fund required to be done or performed by or on behalf of the Authority or the Capital Reserve Fund Trustee under the terms and provisions of the Capital Reserve Fund Resolution or by or on behalf of the Authority or each Bond Trustee under the terms and provisions of all resolutions securing Bonds or of the Act.

(B) In order to better secure the Bonds and to make such Bonds more marketable and to maintain in the Capital Reserve Fund an amount equal to the Capital Reserve Fund Requirement, and in furtherance of the provisions of the Act, the Authority shall cause its Chairman at least annually, no later than January 2 of each year, to make and deliver to the Governor and to the Legislature his certificate stating the amount, if any, required to restore the Capital Reserve Fund to the Capital Reserve Fund Requirement. All monies received by the Authority from the State in accordance with the provisions of the Act pursuant to any such certification shall be paid to the Capital Reserve Fund Trustee for deposit and credit to the Capital Reserve Fund.

Events of Default (Section 601)

Each of the following is an "Event of Default":

(1) the Authority shall fail or refuse to comply with the provisions of subsection (B) of Section 305; or

(2) the amounts certified pursuant to Section 305 shall not have been paid by the State for deposit in the Capital Reserve Fund within 90 days of the date of such certification; or

(3) the Authority shall fail or refuse to comply with the provisions of the Capital Reserve Fund Resolution, or shall default in the performance or observance of any of the covenants, agreements or conditions on its part contained therein or in any supplemental resolution.

Remedies (Section 602)

Upon the happening and continuance of any Event of Default specified in Section 601, the Capital Reserve Fund Trustee may proceed and, upon the written request of the holders of not less than 25% in principal amount of the outstanding Bonds, shall proceed, in its own name, subject to the provisions of the Capital Reserve Fund Resolution, to protect and enforce the rights of the Bondholders by such of the following remedies as the Capital Reserve Fund Trustee, being advised by counsel, shall deem most effectual to protect and enforce such rights:

(1) by mandamus or other suit, action or proceeding at law or in equity, to enforce all rights of the Bondholders, and to require the Authority to carry out any other covenants or agreements with Bondholders and to perform its duties under the Act; or

(2) by action or suit in equity, to enjoin any acts or things which may be unlawful or in violation of the rights of the holders of the Bonds.

ABSENCE OF MATERIAL LITIGATION

The Authority will furnish a certificate, dated the Conversion Date, of an authorized officer of the Authority to the effect that there are no proceedings or litigation of any nature pending or threatened restraining or enjoining the issuance, sale, execution or delivery of the Bonds, or in any way contesting or affecting the validity of the Bonds or any proceedings of the Authority taken with respect to the

issuance or sale thereof or the right, power or authority of the Authority with respect to the pledge or application of any monies or securities provided for the payment of the Bonds or the existence or powers of the Authority.

Members of the First Session, Thirteenth Alaska State Legislature have commenced litigation in the Superior Court for the State of Alaska, Third Judicial District, in an action styled *Abood et al. vs. Gorsuch et al.* (Case No. 3 AN 83-5980-CIV) challenging the legality of the proceedings taken during that Session with respect to the confirmation by the Legislature of certain State Commissioners and other State officers appointed by the Governor who are named as defendants in the litigation. Among other things, the plaintiffs seek a declaratory judgment that each defendant is unlawfully holding or exercising a public office. Two of the Commissioners by virtue of their offices served as members of the five-member Board of Directors of the Authority on the date of the issuance of the Floating Rate Bonds. On October 22, 1984, the Superior Court issued an opinion granting the defendants' motion for summary judgment and dismissing the case. The plaintiffs filed notice of appeal of the Superior Court decision to the Supreme Court of Alaska on October 30, 1984. It is the opinion of the Attorney General of the State of Alaska and of Bond Counsel that the confirmation of all Commissioners will ultimately be validated in such judicial proceeding. It is further the opinion of the Attorney General and Bond Counsel that even if the plaintiffs ultimately prevail, actions taken by the Authority in connection with the authorization, issuance, sale or delivery of the Bonds would not be invalidated and that any claim to the contrary is without merit.

FINANCIAL STATEMENTS

The financial statements of the Authority have been examined by Peat, Marwick, Mitchell & Co., Anchorage, Alaska, independent certified public accountants, to the extent and for the periods indicated in their report. Such financial statements have been appended to this Official Statement as Appendix C and are included in reliance upon the report of such firm as experts in accounting and auditing.

BOND RATINGS

Moody's Investors Service, Inc. has assigned the Bonds a rating of . Standard & Poor's Corporation has assigned the Bonds a rating of . The ratings assigned by the rating agencies reflect only the respective views of the rating agencies, and an explanation of the significance of such ratings may be obtained only from the respective rating agencies. The rating agencies have the right to change, suspend or withdraw their ratings at any time, and any such action may have an adverse effect upon the market price of the Bonds.

LEGAL OPINION

The Bonds were issued subject to the opinion of Wohlforth & Flint, Bond Counsel, of Anchorage, Alaska, approving the legality of the issuance thereof. Legal matters incident to the conversion of the Bonds from Bonds bearing a floating interest rate to Bonds bearing fixed interest rates and the sale thereof to the Underwriters are subject to the approval of Bond Counsel. Certain legal matters will be passed upon for the Underwriters by their counsel, Preston, Thorgrimson, Ellis & Holman of Seattle, Washington.

TAX EXEMPTION

In the opinion of Bond Counsel, interest on the Bonds is exempt from Federal income taxes under existing statutes, rulings and court decisions, except that no opinion is expressed as to the exemption from such taxes of interest on any Bond for any period during which such Bond is held by a person who, within the meaning of Section 103(b) of the Code, is a substantial user of facilities with respect to which the proceeds of the Bonds were issued, or a related person.

UNDERWRITING

The Bonds are being purchased by Prudential-Bache Securities Inc. and Goldman, Sachs & Co. as representatives of the Underwriters. The Underwriters have agreed to purchase the Bonds at an aggregate purchase price of \$, plus accrued interest. The Underwriters intend to offer the Bonds to the public at the offering prices set forth on the cover page of this Official Statement. The Underwriters may allow concessions from the public offering prices to certain dealers, who may realow concessions to other dealers. After the initial public offering, the public offering price may be varied from time to time by the Underwriters.

EXECUTION OF OFFICIAL STATEMENT

The execution and delivery of this Official Statement have been authorized by the Authority. This Official Statement is submitted only in connection with the conversion of the interest rates on the Bonds from a floating rate to fixed rates and the sale of the Bonds and may not be reproduced or used in whole or in part for any other purpose.

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

/s/ BERTRAM L. WAGNON
Executive Director

BOND AMORTIZATION SCHEDULES BY SERIES
(\$000)

Year	Series																		Maturity Total
	332	333	334	336	337	338	339	340	341	342	343	344	345	347	348	349	350	351	
1986	20	10	5	5	10	25	15	10	15	15	10	20	10	35	5	15	5	15	245
1987	20	10	5	10	10	55	15	10	15	15	15	20	10	35	5	15	5	15	285
1988	20	10	10	10	10	60	15	15	20	15	15	25	10	40	5	15	10	15	320
1989	20	10	10	10	15	65	20	15	20	20	15	25	10	45	5	20	10	15	350
1990	25	15	10	10	15	70	20	15	20	20	20	25	10	45	5	20	10	20	375
1991	30	15	10	10	15	80	20	20	25	20	20	30	10	50	10	20	10	20	415
1992	30	15	15	10	20	90	25	20	25	25	20	30	10	55	10	25	10	25	460
1993	35	15	15	10	20	95	25	20	30	25	25	35	15	60	10	25	15	25	500
1994	40	20	15	15	20	105	30	20	35	30	20	40	15	65	10	30	15	30	555
1995	40	25	15	15	25	—	30	25	35	30	30	45	20	75	10	30	15	30	495
1996	45	25	20	15	25	—	35	25	40	35	30	50	20	85	10	35	20	35	550
1997	50	30	20	20	30	—	40	30	45	35	35	55	20	90	15	40	20	40	615
1998	60	30	25	20	35	—	45	30	50	40	40	60	25	105	15	45	20	40	685
1999	65	35	25	25	40	—	50	35	55	45	45	65	25	115	15	50	25	45	760
2000	70	35	30	25	40	—	55	40	60	55	50	75	30	—	20	55	25	50	715
2001	80	45	30	30	45	—	60	45	70	60	55	85	35	—	20	55	30	55	800
2002	90	45	35	30	50	—	65	50	75	65	60	90	40	—	25	65	35	65	885
2003	100	50	40	35	55	—	75	55	85	70	65	100	50	—	25	75	40	70	990
2004	110	60	40	40	60	—	80	60	95	80	75	115	50	—	30	85	40	80	1,100
2005	—	60	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	110
2006	—	70	55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	125
2007	—	80	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	140
2008	—	90	65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	155
2009	—	100	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	170
	950	900	675	345	540	645	720	540	815	700	645	990	415	900	250	720	360	690	11,800

A-1

APPENDIX A

**ESTIMATED AGGREGATE DEBT SERVICE AND COVERAGE SCHEDULE
CONSOLIDATED BONDS AND ECONOMIC DEVELOPMENT BONDS
ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY**

Year Ending June 30	Estimated Net Income								
	Combined Debt Service Requirements (1)	Outstanding Loan Rev's (2)	Est. New Loan Rev's (2)	Other Rev (3)	Interest Income (4)	Total Net Income	Est. Cov. (5)	Excess Revenues	Base Plus Cumulative Excess Rev's
1985	\$ 26,102,605	\$ 24,322,039	\$ 669,158	\$ 28,207,502	\$ 8,959,422	\$ 62,158,121	2.38	\$36,055,516	\$ 102,783,623
1986	25,470,758	24,983,625	1,484,060	27,547,689	11,413,251	65,428,625	2.57	39,957,867	138,839,139
1987	25,093,210	24,430,035	1,484,060	26,190,062	10,172,476	62,276,633	2.48	37,183,423	178,797,006
1988	24,265,366	23,696,125	1,484,060	25,087,961	11,943,786	62,211,932	2.56	37,946,566	215,980,429
1989	23,836,613	23,279,465	1,484,060	22,921,175	13,965,985	61,650,685	2.59	37,814,072	253,926,995
1990	23,704,805	23,173,605	1,484,060	21,523,784	16,045,759	62,227,208	2.63	38,522,403	291,741,067
1991	23,708,624	23,176,825	1,484,060	20,178,405	18,164,491	63,003,781	2.66	39,295,157	330,263,470
1992	23,420,659	22,809,265	1,484,060	18,265,527	20,325,724	62,884,576	2.69	39,463,917	369,558,627
1993	22,947,428	22,445,165	1,484,060	17,114,706	22,496,240	63,540,171	2.77	40,592,743	409,022,544
1994	22,762,694	22,261,575	1,484,060	14,834,361	24,728,841	63,308,837	2.78	40,546,143	449,615,287
1995	22,549,700	22,191,585	1,466,373	16,379,561	26,958,879	66,996,398	2.97	44,446,698	490,161,430
1996	22,542,983	22,231,435	1,466,373	8,220,046	29,403,447	61,321,301	2.72	38,778,318	534,608,128
1997	22,140,689	21,723,975	1,466,373	6,861,950	31,536,255	61,588,553	2.78	39,447,864	573,386,446
1998	21,239,449	20,911,455	1,466,373	6,099,324	33,705,887	62,183,039	2.93	40,943,590	612,834,310
1999	20,897,281	20,562,500	1,466,373	3,993,259	35,957,785	61,979,917	2.97	41,082,636	653,777,900
2000	20,115,793	19,901,894	1,296,320	2,485,431	38,217,329	61,900,974	3.08	41,785,181	694,860,536
2001	20,130,873	19,914,875	1,296,320	2,123,376	40,515,514	63,850,085	3.17	43,719,212	736,645,717
2002	19,626,418	19,374,465	1,296,320	2,000,324	42,920,071	65,591,180	3.34	45,964,762	780,364,929
2003	18,532,440	18,274,865	1,296,320	1,749,874	45,448,133	66,769,192	3.60	48,236,752	826,329,691
2004	18,052,786	17,699,441	1,296,320	1,091,845	48,101,154	68,188,760	3.78	50,135,974	874,566,443
2005	15,385,276	16,644,491	799,336	774,743	50,858,633	69,077,203	4.49	53,691,927	924,702,417
2006	15,343,951	16,020,535	184,392	613,242	53,811,689	70,629,858	4.60	55,285,907	978,394,344
2007	13,997,939	14,470,395	184,392	649,858	56,852,414	72,157,059	5.15	58,159,120	1,033,680,251
2008	9,298,515	9,735,277	184,392	472,246	60,051,165	70,443,080	7.58	61,144,565	1,091,839,371
2009	5,751,476	5,374,013	184,392	153,080	63,414,116	69,125,601	12.02	63,374,125	1,152,983,936
2010	1,637,788	192,974	99,161	0	66,899,693	67,191,828	41.03	65,554,040	1,216,358,061
	\$508,556,119	\$499,801,899	\$29,475,228	\$275,539,331	\$882,868,139	\$1,687,684,597			

- (1) Includes (a) the \$13,120,000 Floating Demand/Fixed Rate Economic Development Bonds, Series 332 through 351 at actual interest cost to March 1, 1985, and an estimated interest rate of 10% thereafter to the Conversion Date, and (b) the \$11,800,000 Bonds at an estimated interest rate of 10% from the Conversion Date.
- (2) Revenues are net of all fees and expenses. Schedule assumes that loans are funded on anticipated funding dates. Estimated New Loan Revenues are from Loan Participations funded by proceeds of the Floating Rate Bonds.
- (3) Represents revenues from the loans appropriated by the State to the Authority, net of all fees. Principal and interest on loans delinquent more than 90 days are not included. Also includes revenue from certain loans and participations purchased by the Authority, primarily participations in loans guaranteed by the Small Business Administration.
- (4) Includes income from investment of certain assets and excess net revenues of the Authority at actual present rates and at an assumed rate of 5.5% compounded annually for periods after present investments mature.
- (5) Coverage reflects debt service requirements, including mandatory sinking fund requirements. There are currently outstanding \$6,035,000 Economic Development Bonds which may be tendered for payment by the holders thereof commencing April 1, 1987 (\$80,000 of which are subject to Mandatory Sinking Fund redemption on April 1, 1987). If all of such bonds were tendered for payment on April 1, 1987, the estimated coverage for the year ending June 30, 1987, would decline from 2.48 to 2.01. The reduction in annual debt service requirements thereafter would result in slightly higher coverage multiples for the years 1988 through 2007 than those shown above.

NOTE: Table does not include the outstanding \$12,200,000 Variable Demand/Fixed Rate Bonds, 1984 Series A and B, nor the loan revenues and investment earnings associated therewith because those bonds will not become general obligations of the Authority until such time as they are converted to Fixed Rate Consolidated Bonds.

APPENDIX C



Peat, Marwick, Mitchell & Co.
Certified Public Accountants
Alaska Mutual Bank Building
601 West 5th Avenue, Suite 700
Anchorage, Alaska 99501

The Board of Directors
Alaska Industrial Development Authority:

We have examined the balance sheets of Alaska Industrial Development Authority as of June 30, 1984 and 1983, and the related statements of earnings and retained earnings and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned financial statements present fairly the financial position of Alaska Industrial Development Authority at June 30, 1984 and 1983, and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Peat, Marwick, Mitchell & Co.

August 3, 1984

APPENDIX C



Peat, Marwick, Mitchell & Co.
Certified Public Accountants
Alaska Mutual Bank Building
601 West 5th Avenue, Suite 700
Anchorage, Alaska 99501

The Board of Directors
Alaska Industrial Development Authority:

We have examined the balance sheets of Alaska Industrial Development Authority as of June 30, 1984 and 1983, and the related statements of earnings and retained earnings and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned financial statements present fairly the financial position of Alaska Industrial Development Authority at June 30, 1984 and 1983, and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Peat, Marwick, Mitchell & Co.

August 3, 1984

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

Balance Sheets

June 30, 1984 and 1983

<u>Assets</u>	<u>1984</u>	<u>1983</u>
Cash	\$ 33,271	\$ 8,284
Investments, partially restricted (note 3)	101,489,304	88,162,708
Loans (note 4)	327,595,487	257,043,035
Less allowance for possible loan loss	2,567,000	2,567,000
Net loans	<u>325,028,487</u>	<u>254,476,035</u>
Accrued interest receivable	5,445,694	4,289,332
Unamortized bond issue costs	3,247,920	3,351,481
Other	<u>56,120</u>	<u>9,661</u>
	<u>\$ 435,300,796</u>	<u>\$ 350,297,501</u>
<u>Liabilities and Equity</u>		
Notes and bonds payable (note 6)	\$ 155,431,775	\$ 98,085,736
Accrued interest payable	4,422,171	3,072,556
Deposits from others	574,225	266,650
Other	<u>95,051</u>	<u>32,573</u>
	<u>160,523,222</u>	<u>101,457,515</u>
Equity:		
Contributed capital (note 1)	189,256,532	188,588,332
Retained earnings	<u>85,521,042</u>	<u>60,251,654</u>
Total equity	<u>274,777,574</u>	<u>248,839,986</u>
Commitments (note 9)		
	<u>\$ 435,300,796</u>	<u>\$ 350,297,501</u>

See accompanying notes to financial statements.

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

Statements of Earnings and Retained Earnings

Years ended June 30, 1984 and 1983

	<u>1984</u>	<u>1983</u>
Revenues:		
Interest, net of servicing fees	\$ 41,278,732	\$ 33,529,884
Fees (note 7)	1,510,262	1,218,261
Miscellaneous	86,623	26,582
Total revenues	<u>42,875,617</u>	<u>34,774,727</u>
Expenses:		
Interest	15,457,760	10,799,620
Salaries and employee benefits	760,911	677,957
Professional fees	134,023	122,605
Travel	39,089	38,657
Rent	121,850	100,527
Furniture and equipment	125,675	40,801
Amortized bond issue costs	136,191	139,676
Loan loss	728,332	149,157
Other	102,298	129,156
Total expenses	<u>17,609,229</u>	<u>12,198,156</u>
Net earnings	25,266,388	22,576,571
Retained earnings at beginning of year	<u>60,251,654</u>	<u>37,675,083</u>
Retained earnings at end of period	\$ <u>85,521,042</u>	\$ <u>60,251,654</u>

See accompanying notes to financial statements.

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

Statements of Changes in Financial Position

Years ended June 30, 1984 and 1983

	<u>1984</u>	<u>1983</u>
Sources of financial resources:		
Net income	\$ 25,269,388	\$ 22,576,571
Appropriations from State of Alaska	668,200	-
Repayments on loans	32,458,109	28,744,764
Issuance of notes and bonds payable	62,195,000	23,205,000
Increases in:		
Accrued interest payable	1,349,615	556,682
Deposits from others	307,575	251,850
Other liabilities	62,478	-
Decreases in:		
Cash	-	9,442
Accrued interest receivable	-	811,259
Unamortized bond issue costs	<u>103,561</u>	<u>158,118</u>
	<u>\$122,413,926</u>	<u>\$ 76,313,686</u>
Uses of financial resources:		
New loans disbursed	\$103,010,561	\$ 66,003,719
Payments on notes and bonds payable	4,848,961	3,510,000
Increases in:		
Cash	24,987	-
Investments	13,326,596	6,647,461
Accrued interest receivable	1,156,362	-
Other assets	46,459	6,924
Decreases in:		
Deferred revenue	-	25,867
Other liabilities	<u>-</u>	<u>119,715</u>
	<u>\$122,413,926</u>	<u>\$ 76,313,686</u>

See accompanying notes to financial statements.

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

Notes to Financial Statements

June 30, 1984 and 1983

(1) Historical

The Alaska Industrial Development Authority (Authority) is a public corporation of the State of Alaska, constituting a political subdivision within the Department of Commerce and Economic Development, but with separate and independent legal existence. The Authority's purpose is to promote, develop and advance the general welfare of the people of Alaska by providing permanent, long-term financing for industrial, manufacturing and other business enterprises.

Prior to July 1, 1980, the Authority's sole means of providing financing for business enterprises was through a tax-exempt stand-alone revenue bond program. Funds were provided to qualified applicants by issuance of the Authority's industrial development revenue bonds, which are secured solely by the revenue earned by the applicant's project and the financial credit of the individual applicant.

Since July 1, 1980, the legislature of the State of Alaska has appropriated the following to the Enterprise Development fund of the Authority:

- (a) \$23,668,200 cash.
- (b) All rights, title and interest in loans, with remaining principal balances totaling approximately \$166,000,000, held by the State Department of Revenue and State Department of Commerce and Economic Development.
- (c) Assets and liabilities of the Alaska State Development Corporation, the Small Business Development Corporation and the Alaska Toll Bridge Authority, with fund balances of \$2,554,055.

(Continued)

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

Notes to Financial Statements

State of Alaska legislation has also enabled the Authority to significantly expand its financing programs as follows:

- (a) A tax-exempt umbrella bond program, under which the Authority's bonds are sold on national markets, was established to provide loans of up to \$10,000,000. The proceeds of the sales are used to purchase portions of loans made by financial institutions to their customers. The bonds may be secured by any or all of the following:
 - The full faith and credit of the Authority.
 - Principal and interest payments received on the loans.
 - Collateral held by the Authority on projects financed by the loans.
 - A Capital Reserve Fund to be established from the State appropriation.
 - A negative covenant on other commitment of assets.
- (b) The tax-exempt stand-alone revenue bond program was also expanded to enable the Authority to issue bonds to provide funds for business enterprises other than those of a manufacturing or industrial nature. Such bonds are not secured by the full faith and credit of the Authority and are not recorded as obligations of the Authority.
- (c) The Authority has annual authorization to finance projects totaling \$400,000,000 under its bond programs.
- (d) Uncommitted funds held in the Enterprise Development Fund may be used to purchase the guaranteed portion of business loans (usually 90% of the loan amount) guaranteed by the Small Business Administration, the National Marine Fisheries Service or the Farmers Home Administration.
- (e) On June 24, 1982, legislation was signed into law by the Governor of Alaska providing authorization and funding of a multifamily housing loan program. Under this legislation, \$21,000,000 in certificates of deposit were appropriated by the State to the Authority in July 1982 for a multifamily housing loan security fund to provide a loan loss reserve for certain multifamily housing loans. As the legislation excluded the assets of the fund from the general assets of the Authority, the fund and the earnings thereon are not recorded on the financial statements of the Authority.

In July of 1983, the Alaska legislature approved a bill which transferred \$5,000,000 of certificates of deposit, held in the multifamily loan security fund, to other State uses and expanded the uses of the remaining funds enabling the Authority to utilize the assets of the fund for capital reserve fund purposes and to provide a loan loss reserve for all multifamily housing loans. The fund balance at June 30, 1984, was \$18,345,200 after transferring \$668,200 to the Authority for capital reserve purposes.

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

Notes to Financial Statements

(2) Summary of Significant Accounting Policies

Basis of Accounting

The Authority uses the accrual basis of accounting, under which revenues are recorded when earned, and expenditures are recorded when liabilities are incurred.

Investments

Investments are recorded at the acquisition cost which approximates market.

Income Taxes

The Internal Revenue Code provides that gross income for tax purposes does not include income accruing to a state or territory, or any political subdivision thereof, which is derived from the exercise of any essential governmental function or from any public utility. According to the Alaska Statutes, the Authority constitutes a political subdivision of Alaska and is therefore exempt from State and Federal taxes.

Tax-Exempt Stand-Alone Revenue Bonds

Tax-exempt stand-alone revenue bonds issued by the Authority are not general obligations of the Authority. They are payable solely out of the revenues derived from the financing of projects. They do not constitute indebtedness of the Authority within the meaning of any provision or limitation of the Constitution or Statutes of the State of Alaska, and they do not constitute or give rise to a pecuniary liability of the Authority or a charge against its general credit.

The repayments of these bonds by the various entities on whose behalf they have been issued are made directly to the trustee for each bond issued and, therefore, are not recorded as revenues and expenses of the Authority.

Allowance for Loan Loss

Management regularly reviews the loan portfolio and determines provision for loss based upon experience and management's estimate of potential loss.

Retirement Plan

All employees of the Authority participated in the State of Alaska Public Employees' Retirement System. The State's policy is to fund pension costs accrued.

(Continued)

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

Notes to Financial Statements

Bond Issue Costs

When advanced by the Authority, costs of bond issues, including underwriters' fees and commissions, legal fees, bond insurance and printing, are amortized over the life of the bond issue on the straight-line method and are recovered from the borrowers primarily as a part of the interest rate charged. Current practice is to require borrowers to pay for bond costs at the time of funding.

Furniture and Equipment

Purchases of furniture and equipment are expensed, as such items are the property of the State of Alaska.

(3) Investments

At June 30, 1984, all investments were in United States Government securities or commercial paper, yielding interest at 9.5% to 13.0% and maturing within one year, except \$4,899 in United States Treasury Notes maturing in 1990.

At June 30, 1983, all investments were in certificates of deposit, United States Government securities or commercial paper, yielding interest at 8.5% to 15.0%, and maturing within six months, except United States Treasury notes maturing \$115,307 in 1984 and \$4,899 in 1990.

Certain invested funds are restricted by the terms of the Authority's bond resolution and are held and invested by the trustee. A summary of these investments follows:

<u>Name</u>	<u>Restriction</u>	<u>1984</u>	<u>Amount</u> <u>1983</u>
Loan participation funds	Committed loans not closed at June 30	\$ 3,210,000	\$ 1,600,000
Capital reserve funds	Secure debt service payment - bonds	15,870,477	10,117,508
Debt service funds	Loan repayments and funds held for debt service - bonds	<u>11,707,225</u>	<u>7,761,125</u>
		<u>\$ 30,787,702</u>	<u>\$ 19,478,633</u>

(Continued)

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

Notes to Financial Statements

The Capital Reserve Fund is maintained for the purpose of making principal and interest payments on the bonds payable if monies received by the Authority are available for the payment of bond principal and interest are insufficient to make the required debt service payments. The amounts held in the capital reserve funds are equal to the average of the amounts required to be paid for principal and interest in each future fiscal year until maturity of the outstanding bonds. On the first day of January, April, July and October of each year, the Authority must replenish the capital reserve funds to the required amounts or may withdraw any excess amounts.

(4) Loans

Loans outstanding at June 30, 1984 and 1983 are classified as follows:

<u>Loan Type</u>	<u>Number</u>	<u>1984</u>	<u>Number</u>	<u>1983</u>
		<u>Amount</u>		<u>Amount</u>
Appropriated	699	\$ 105,594,820	763	\$ 120,348,684
Federally guaranteed	308	60,202,983	217	39,185,785
Bond sale	365	161,797,684	267	97,508,566
	<u>1,372</u>	<u>\$ 327,595,487</u>	<u>1,247</u>	<u>\$ 257,043,035</u>

An aging of loans as of June 30, 1984 and 1983 follows:

<u>Loan Age</u>	<u>1984</u>		<u>1983</u>	
	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>
Current	\$ 312,325,338	95.34	\$ 242,381,031	94.38%
Past due:				
30-60 days	7,194,844	2.20	7,004,586	2.72
61-90 days	2,555,586	.78	1,680,004	.65
Over 90 days	5,519,719	1.68	5,977,414	2.25
	<u>\$ 327,595,487</u>	<u>100.00%</u>	<u>\$ 257,043,035</u>	<u>100.00%</u>

(5) Tax-Exempt Stand-Alone Revenue Bonds Issued

At June 30, 1984, the Authority had issued tax-exempt stand-alone revenue bonds totaling \$392,138,180 for 176 projects in various parts of Alaska, including \$105,432,875 issued for 65 projects during the year ended June 30, 1984.

(Continued)

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

Notes to Financial Statements

(6) Notes and Bonds Payable

Notes and bonds payable at June 30, 1984 and 1983 consisted of the following:

	<u>1984</u>	<u>1983</u>
Economic development bonds:		
7-1/2% to 11-3/8%, issued April 1, 1981, maturing between 1982 and 2007	\$ 15,725,000	\$ 16,590,000
9-3/4% to 13-5/8%, issued October 15, 1981, maturing between 1983 and 2008	52,590,000	55,000,000
12.875%, issued August 15, 1982, maturing between 1984 and 2008	920,000	930,000
10% to 11.25%, issued October 1, 1982, maturing between 1983 and 2008	6,890,000	7,195,000
10% and 11.375%, issued December 1, 1982, maturing between 1984 and 2009	2,905,000	3,335,000
8.5% to 10.5%, issued November 1, 1983, maturing between 1984 and 2009	11,870,000	
7.75% to 10.75%, issued December 1, 1983, maturing between 1984 and 2009	16,395,000	
Consolidated bonds:		
13% and 13.5%, issued April 1, 1982, maturing between 1984 and 2008	2,945,000	2,975,000
9.5% and 10.125%, issued October 1, 1982, maturing between 1984 and 2008	4,420,000	4,465,000
10% and 11.375%, issued December 1, 1982, maturing between 1984 and 2008	6,920,000	7,080,000
6.5% to 10.25%, issued July 1, 1983, maturing between 1985 and 2010	14,445,000	
9.75% to 10.5%, issued November 1, 1983, maturing between 1984 and 2009	11,600,000	
9.25% to 10.75%, issued December 1, 1983, maturing between 1984 and 2009	7,700,000	
2% certificates of deposit originally issued by the Alaska State Development Corporation, due August 1, 1983	<u>106,775</u>	<u>515,736</u>
	<u>\$ 155,431,775</u>	<u>\$ 98,085,736</u>

The bonds payable are secured by the general assets of the Authority, including loans, loan proceeds and capital reserve funds of \$15,870,477 established pursuant to terms of the bond resolutions (note 3).

(Continued)

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

Notes to Financial Statements

The principal portions of the bonds payable mature as follows:

Year ending <u>June 30</u>	Total principal <u>maturing</u>
1985	\$ 4,385,000
1986	4,285,000
1987	4,210,000
1988	3,805,000
1989	3,790,000
1990-1994	22,910,000
1995-2010	<u>111,940,000</u>
	<u>\$ 155,325,000</u>

(7) Fees

At the time tax-exempt stand-alone revenue bonds are issued by the Authority to provide financing for a project of an applicant, the applicant shall pay a financing fee equal to 1% of the first \$1,000,000 of the principal amount of the bonds issued, 1/2% of the next \$4,000,000 of the principal amount of the bonds issued, 1/4% of the next \$10,000,000 of the principal amount of the bonds issued, and 1/10% of the principal amount of the bonds issued in excess of \$15,000,000.

The Authority charges borrowers under the tax-exempt umbrella bond program a non-refundable commitment fee equal to 1% of the Authority's participation in the loan.

The commitment fee for a multifamily housing loan is 2% of the principal amount of the participation of the Authority in the loan and is nonrefundable.

The Authority also charges a preapplication fee of \$100 to each applicant under the stand-alone revenue bond program, the umbrella bond program or the multifamily bond program.

Applicants pay the cost of issuing bonds, underwriters' discount, financial advisor fees, bond counsel fees and other costs of the Authority.

(Continued)

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

Notes to Financial Statements

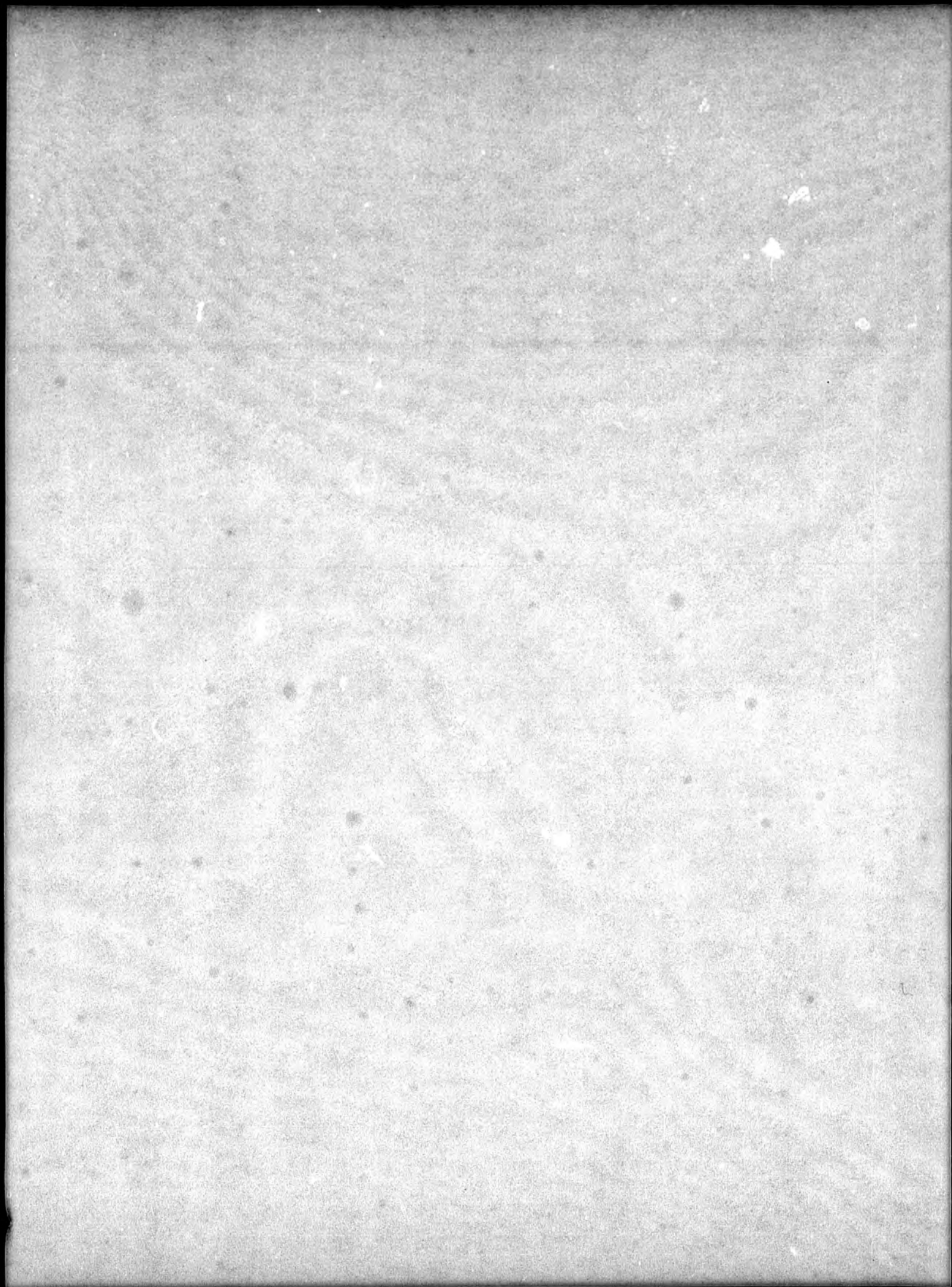
(8) Retirement Plan

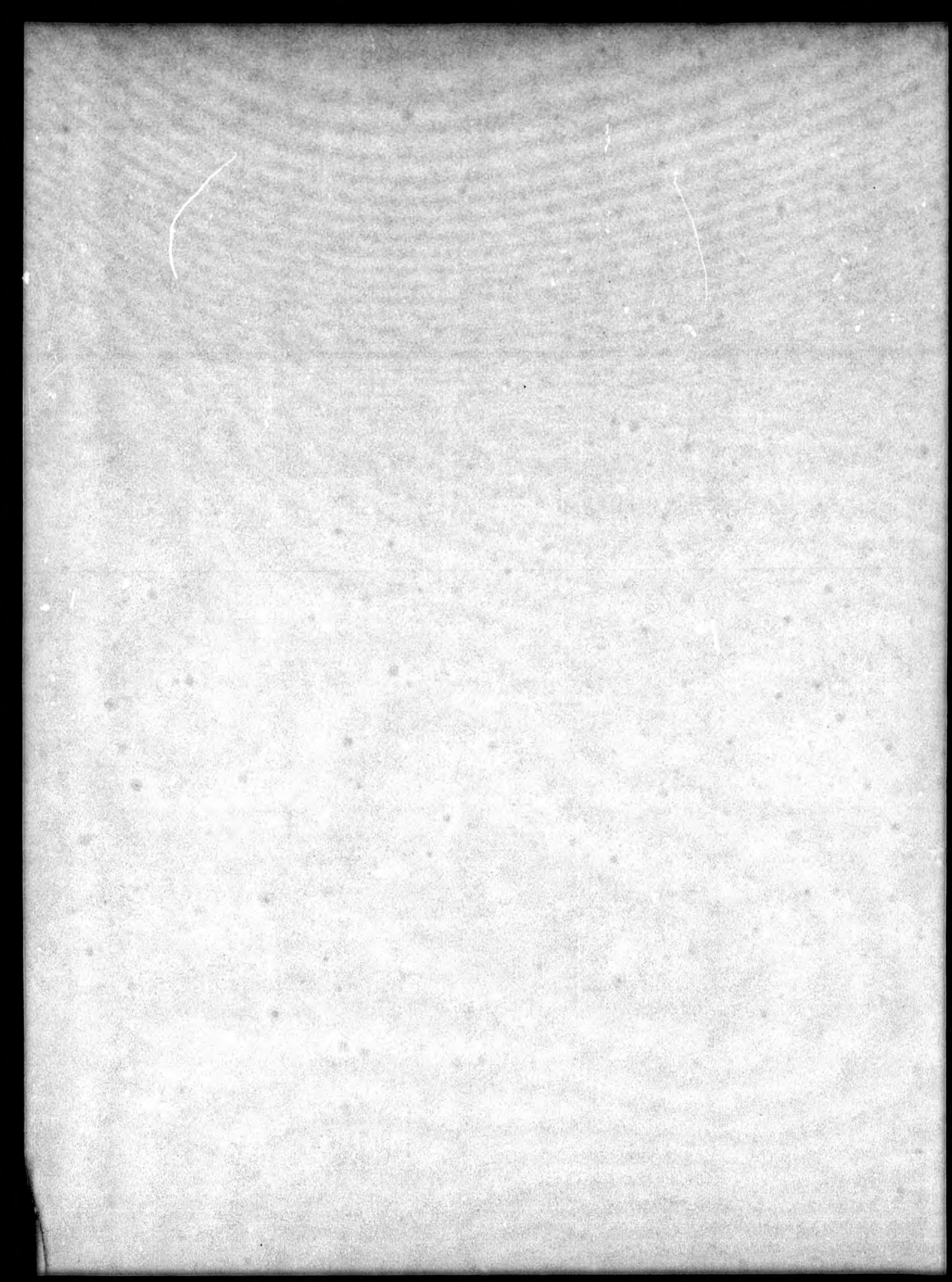
The Authority participates in the State of Alaska Public Employees' Retirement System. Plan expense for the years ended June 30, 1984 and 1983 were \$79,429 and \$68,250, respectively.

Information as to accumulated plan benefits and net assets available for plan benefits is not available on an individual agency basis for each State agency which participates in the State of Alaska Public Employees' Retirement System.

(9) Commitments

At June 30, 1984 and 1983, the Authority had entered into loan commitment agreements for loans of \$34,637,093 and \$59,431,000, respectively.





NORTH SLOPE BOROUGH

OFFICE OF THE MAYOR

P.O. Box 69
Barrow, Alaska 99723

Phone: 907-852-2611

George N. Ahmaogak, Sr., Mayor



December 27, 1985

Representative John Sund
2504 Second Street
Ketchikan, Alaska 99901

Dear Representative Sund:

As you know, the State Department of Community and Regional Affairs filed a petition on November 22, 1985 to detach over 2.1 million acres from the North Slope Borough. This proposed action is contrary to the expressed wishes of the North Slope Borough voters. Further, no provision for compensation to the Borough for loss of tax base is included in the State's petition. Such compensation is required by law.

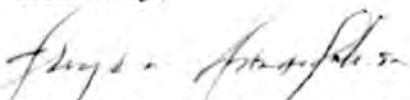
I am writing to remind you of the limited and rushed schedule of Local Boundary Commission public hearings on this matter. The LBC will hold the following hearings:

1. January 8, 1986
Anchorage, 10:00 AM
University Plaza Building
349 E. 36th Avenue
Suite 404
2. January 9, 1986
10:00 AM Noatak School
7:00 PM Kotzebue Senior Citizens' Center
3. January 10, 1986
10:00 AM Point Hope High School Library
7:00 PM Barrow High School Auditorium
4. January 11, 1986
11:00 AM
Fairbanks, Alaska

Since it is possible that the entire matter will wind up for action during the first 45 days of the Legislature, I would urge you to come to Barrow for the last meeting of the LBC on January 10. The LBC has already scheduled a decisional meeting the morning after the Barrow hearing in Fairbanks at 11:00 AM January 11, 1986. There are no scheduled flights from Barrow to Fairbanks between the evening Barrow hearing on January 10 and the decision meeting on January 11. Any of our residents who are interested would have to take an expensive charter flight to attend the Fairbanks meeting.

I would encourage you to attend the Barrow or another Local Boundary Commission hearings and experience the local input for yourself. Thank you for your time and consideration.

Sincerely,

A handwritten signature in dark ink, appearing to read "George N. Ahmaogak, Sr.", written in a cursive style.

George N. Ahmaogak, Sr.
Mayor



UNIVERSITY OF ALASKA, FAIRBANKS
Fairbanks, Alaska 99701

April 3, 1985

Honorable Michael Davis
State of Alaska House of Representatives
Pouch V
Juneau, Alaska 99811

Re: Red Dog Mine: Cominco/Nana Corp. - Financing
the 91 km Mine Road

Dear Rep. Davis:

The Red Dog mine has the potential for becoming a world class lead-zinc ore body. Cominco is a well respected multinational corporation with similar deposits in the high Arctic regions and in Spain. As a multinational corporation Cominco views the world as their oyster. Cominco, like any for-profit corporation, must make strategic decisions based upon what is best for the corporation.

Mining locations will be put into production and taken out of production based upon world economic conditions, i.e. the demand for various mineral commodities, technological shifts in their usage in manufacturing, the coming on stream of other lead-zinc producers by the governments of less developed countries and a host of other variables.

The citizens of Alaska and our legislators have been asked to assist in the development of the Red Dog mine and more specifically to build the 91 km access road from Kivalina to the mine site at an estimated cost of \$150 million. Various financing schemes have been put forth. One such proposal would have the Alaska Development Authority make a loan of \$150 million to Cominco at 4 per cent interest to be repaid by a royalty tonnage tariff.

Suggestion: The State of Alaska is seeking greater revenues for current and future State expenditures. It is clearly appropriate for the State to expect market returns on their investments. Various figures have appeared in the popular press for the total cost of the Red Dog mine development which seems to be approximately \$400 million with Cominco putting up \$250 million (62.5%) and ADA contributing \$150 million (37.5%) of the capital outlay.

(1) Loan: As a viable business deal the State must consider the option of a 20-25 year loan at 1 to 2 percent above the prime interest rate with guaranteed annual payments without regard to tonnage shipped. This is necessary, since Cominco may decide for whatever reason not to operate the mine for a period of time.

(2) Loan with Equity Position: As a venture capitalist we know that Cominco has the \$150 million required for the road, but they also have other investment opportunities. Why should Cominco not try for some low cost money through the ADA? No reason if they can get the 4 percent money so much the better.

But let us proceed with the scenario. We, the venture capitalist (State of Alaska) make a counter offer. The State of Alaska puts up the \$150 million for 51 per cent voting control until \$100 million of the loan is paid back and then take an equity position of 20 percent of the Red Dog Mine for their remaining \$50 million loan.

Other considerations would be appropriate representation on the Corporate Board of Directors, oversight control in managerial decision making, but not operating decisions, etc.

Conclusion:

Alaska is unique, not like any other state. Alaska must be an equity participant in its economic development. It can no longer be a donor of monies to every good cause. Alaska must participate as a responsible corporate person for the benefit of all Alaskans.

Two viable options are available to the State: (1) Long-term loan at market rates of interest, repayable on a fixed schedule; (2) Loan with equity position at variable interest rates, generally for mining ventures the loan would command a premium of 1 to 2 percent above the prime rate.

I urge the State to support those economic development projects that are viable on their own merit. It is inappropriate for industrial development projects to be subsidized by state or federal monies.

I wish to thank you for this opportunity to express my personal opinion in this matter.

Sincerely,



Peter G. Biesiot, PhD.
Professor of Int'l. Business
School of Management
6th Floor Gruening
University of Alaska
Fairbanks, Alaska 99701
(907) 474-6533

Rep. Davis
For info
Fergie

APR 28 1985



UNIVERSITY OF ALASKA

FAIRBANKS, ALASKA 99701

April 27, 1985

Senator Frank R. Ferguson
Alaska State Senate
Pouch V
State Capitol
Juneau, Alaska 99811

Dear Senator Ferguson:

With 85,000,000 tons of proven lead-zinc reserves and a vast additional resource potential, Alaska's Red Dog Mine could become the largest lead-zinc mine in the world. At a rated annual capacity of 580,000 metric tons, this one mine would produce 8.9% of the total world production.

If the Red Dog Mine were in production, Alaska would rank as the fourth most important source of lead-zinc in the world. The State would only be outranked by the countries of Canada, U.S.S.R. and Australia. It would boost the total U.S. lead-zinc production ahead of Australia's and would reverse the long and continuous decline in U.S. metal production.

More importantly, it would establish Alaska as an important new world source of minerals and would provide a broad spectrum of economic benefits to our State and the nation.

Sincerely,

Leo Mark Anthony
Professor of Mining Extension
School of Mineral Engineering

LMA/bg



March 20, 1985

The Honorable John Sund
Representative
Alaska State Legislature
Pouch V
Juneau, Alaska 99811

Dear Representative Sund:

There has been a substantial amount of attention given lately to the proposed Red Dog project in Northwest Alaska. Although far from the villages and cities of Southeastern Alaska many people fail to realize the positive effects this project will have on our region.

Some of the more positive impacts of the Red Dog project will be in diversifying the economy and providing other Alaskan resource developers trade opportunities with Pacific Rim nations, as well as other nations around the world.

This project, once on-line, will also bring revenues to Southeast, in the form of royalty distributions under Section 7(i) of the Alaska Native Claims Settlement Act. The owners of the mineral deposit, NANA Corporation, according to an agreement signed with Cominco Alaska, developers and financiers of the project, will receive a percentage of the net proceeds derived from the sale of lead and zinc concentrates.

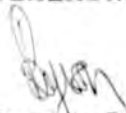
Over the first 30 years of the project NANA will receive, on the average, \$30 million per year. According to Section 7(i), NANA will retain 30 percent, or \$10 million, and the remaining 70 percent, \$20 million, will be distributed to all of the regional corporations. Sealaska Corporation will receive over 20 percent of the \$20 million, about \$4 million per year and over \$120 million over the first 30 years of the mine's life. This is indeed a substantial contribution to the economy of Southeastern Alaska.

Support for funding of a road and port which will be utilized by this mine is important this legislative session. I understand Cominco Alaska as agreed to a series of guarantees which eliminate the element of risk to the State of Alaska, if the State agrees to long-term financing for the road and port

costs. I believe this project is in the State and people's best interests and hope you will be able to support the necessary funding request.

Sincerely,

SEALASKA CORPORATION


Byron I. Mallott
President and Chief
Executive Officer

cc: Board of Directors, Sealaska Corporation

A

07049

POM TDA JUNEAU AK 15 05-02 850A ADT
FMS

REP JOHN SUND

JUNEAU

HECK NO TO RED DOG WITHOUT A CITIZEN VOTE.

JOHN MCMULLEN

800 F ST N-4

JUNEAU AK 99801

Ownership:	Cominco American	Start-up Date:	1989
Capacity:	710,000 sdt/y of concentrates	Capital Investments:	\$270 million
Metal Prices:	Base case	Production Rate:	Full capacity

Source: SRI International

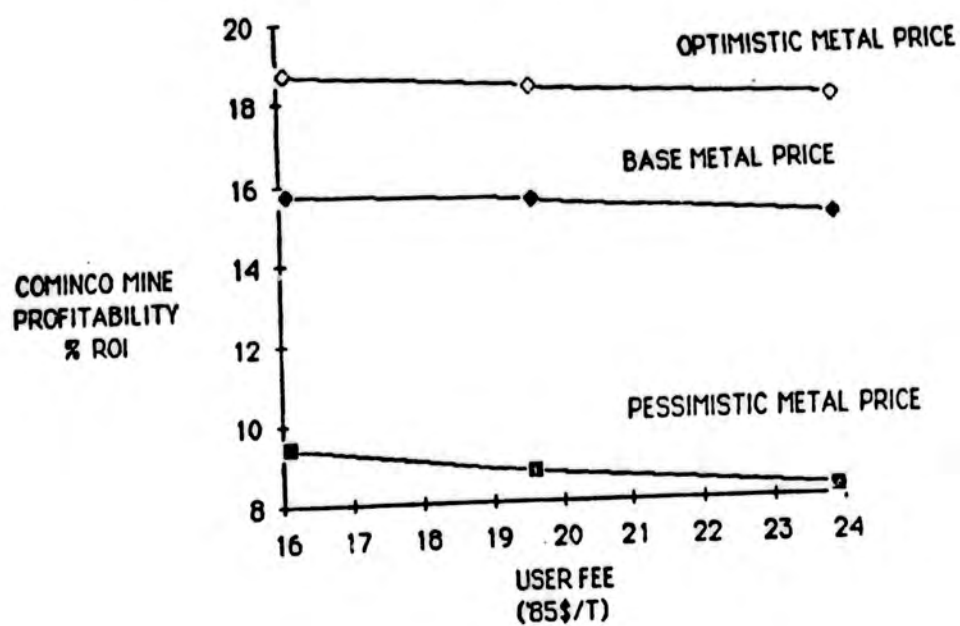
Table U-4
MED DOG COST MODEL
(Inflated U.S. Dollars)

	Ownership: Capacity: Metal Prices:			Cominco American 710,000 sdt/y of concentrates Base case			Start-up Date: Capital Investment: Production Rate:			1989 \$270 million Full capacity			Millions of Dollars (Except Prices)																
	1979 to 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
U.S. PRICES																													
Zinc - \$/lb						.49	.50	.54	.59	.63	.68	.74	.78	.82	.87	.92	.97	1.02	1.08	1.13	1.20	1.26	1.33	1.41	1.48	1.56	1.66	1.74	1.84
Lead - \$/lb						.23	.24	.26	.29	.33	.36	.40	.42	.44	.46	.49	.52	.55	.58	.61	.64	.68	.71	.75	.79	.84	.88	.93	.98
Silver - \$/lb						7.53	7.87	8.22	8.64	9.07	9.52	10.00	10.50	11.02	11.57	12.15	12.76	13.40	14.07	14.77	15.51	16.28	17.10	17.95	18.85	19.79	20.78	21.82	22.91
SALES																													
Zinc concentrates						83.85	161.33	173.96	190.17	205.48	222.03	239.90	253.18	267.10	281.66	296.87	313.38	330.53	348.64	367.73	388.11	409.12	431.76	455.37	480.26	427.17	451.98	475.36	501.21
Lead concentrates						9.60	18.85	21.75	24.60	28.00	31.89	36.15	38.10	40.12	42.21	44.36	46.73	49.27	51.88	54.54	57.51	60.52	63.71	67.05	70.55	73.36	77.29	81.39	85.66
TOTAL SALES						93.45	180.18	195.71	214.78	233.48	253.93	276.05	291.28	307.22	323.87	341.23	360.10	379.80	400.52	422.26	445.62	469.64	495.47	522.42	550.81	500.53	529.27	556.75	586.87
OPERATING COSTS																													
Mine						3.20	6.19	7.34	7.78	8.26	8.76	9.30	9.83	10.40	11.01	11.65	12.32	13.04	13.79	14.59	15.44	16.33	17.28	18.29	19.35	20.47	21.66	22.92	24.25
Mill						5.60	10.77	12.73	13.46	14.23	15.04	15.91	16.80	17.75	18.74	19.80	20.91	22.08	23.33	24.64	26.02	27.49	29.03	30.67	32.39	34.21	36.14	38.17	40.32
Maintenance						4.95	9.61	11.39	12.09	12.83	13.62	14.46	15.30	16.19	17.13	18.13	19.19	20.31	21.49	22.74	24.07	25.47	26.95	28.52	30.19	31.95	33.81	35.78	37.87
Power generation						4.62	8.84	10.43	11.01	11.62	12.27	12.96	13.68	14.44	15.24	16.08	16.97	17.91	18.91	19.96	21.06	22.23	23.46	24.77	26.14	27.59	29.12	30.73	32.44
Mine and mill overhead						9.50	18.33	21.68	22.94	24.28	25.70	27.20	28.74	30.37	32.09	33.91	35.84	37.87	40.02	42.29	44.69	47.23	49.91	52.74	55.74	58.90	62.25	65.79	69.52
Additional costs for start-up						10.83	5.29	6.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Contingency						2.36	4.53	5.34	5.63	5.94	6.27	6.61	6.98	7.36	7.77	8.19	8.64	9.12	9.62	10.15	10.71	11.30	11.92	12.57	13.27	14.00	14.77	15.58	16.43
TOTAL OPERATING COSTS						41.07	63.56	75.19	72.91	77.16	81.67	86.43	91.33	96.51	101.98	107.76	113.87	120.33	127.16	134.37	141.99	150.05	158.56	167.56	177.07	187.12	197.74	208.96	220.83
TRANSPORTATION COSTS																													
Concentrates to port						1.65	3.19	3.78	4.01	4.26	4.51	4.79	5.06	5.36	5.67	5.99	6.34	6.71	7.09	7.50	7.94	8.40	8.88	9.40	9.94	10.52	11.12	11.77	12.45
Road and port user fee						2.66	13.19	13.40	13.65	13.93	14.29	14.69	15.04	15.43	15.86	16.33	16.83	17.36	17.91	18.48	19.07	19.68	20.32	20.99	21.69	22.42	23.18	23.97	24.79
Barge to ship						6.03	4.58	4.39	4.46	4.57	4.69	4.80	4.93	5.05	5.18	5.30	5.44	5.57	5.71	5.86	6.00	6.15	6.31	6.46	6.62	6.79	6.97	7.15	7.34
Ocean shipping						8.70	15.63	15.41	15.91	16.55	17.23	17.94	18.60	19.32	20.12	20.96	21.82	22.74	23.68	24.67	25.71	26.79	27.92	29.09	30.31	31.58	32.90	34.27	35.69
Inland freight						5.64	13.59	13.68	13.90	14.24	14.60	14.96	15.34	15.72	16.11	16.51	16.93	17.35	17.78	18.23	18.69	19.15	19.63	20.12	20.63	21.15	21.68	22.23	22.79
TOTAL TRANSPORTATION COSTS						24.69	50.17	50.66	51.92	53.55	57.72	59.53	61.32	63.19	65.18	67.22	69.41	71.67	74.07	76.49	79.06	81.78	84.40	87.10	89.96	95.04	88.04	90.98	94.13
OTHER COSTS																													
Corporate overhead						3.74	7.21	7.83	8.59	9.34	10.16	11.04	11.65	12.29	12.95	13.65	14.40	15.19	16.02	16.89	17.82	18.79	19.82	20.90	22.03	20.02	21.17	22.27	23.47
MMVA royalties						3.03	5.73	6.39	7.18	7.94	8.66	9.42	10.20	11.01	11.85	12.70	13.59	14.51	15.45	16.42	17.42	18.46	19.54	20.67	21.84	22.55	23.55	24.55	25.55
Mining license tax						-	-	-	.60	1.79	4.57	4.02	4.31	4.57	4.84	5.28	5.12	5.48	5.85	6.29	6.28	6.03	6.26	6.99	7.49	5.55	5.27	5.55	5.94
TOTAL OTHER COSTS						6.77	12.94	14.22	16.38	19.07	23.38	26.08	29.03	32.06	35.20	38.63	42.22	46.03	49.94	53.85	57.82	61.83	65.89	69.96	74.03	78.10	82.17	86.24	90.31
DEPRECIATION						74.49	36.29	36.50	36.79	37.63	6.94	7.82	8.04	8.97	9.94	8.55	9.09	9.21	9.38	8.86	15.22	15.47	18.60	14.81	14.79	10.70	11.29	11.90	11.86
DEPLETION						.00	9.87	10.89	19.97	24.80	41.26	40.61	43.32	45.94	48.68	51.55	52.03	55.48	59.08	62.73	64.41	63.17	66.07	72.39	77.16	62.37	61.13	64.49	68.64
TOTAL COSTS						147.01	172.82	187.48	197.98	212.22	210.97	240.46	253.04	266.67	280.97	293.71	314.62	331.22	348.73	366.29	389.21	414.90	438.25	459.44	483.58	446.72	477.19	501.77	528.21
NET INCOME BEFORE TAXES						-53.56	7.36	8.23	16.80	21.26	42.96	35.59	38.24	40.55	42.90	47.52	45.49	48.58	51.80	55.97	56.41	54.74	57.22	62.97	67.23	53.81	52.08	54.98	58.61
TAXES																													
State						.00	.27	.29	.54	.67	1.11	1.10	1.17	1.24	1.04	1.04	1.10	1.16	1.24	1.30	1.42	1.37	1.45	4.51	6.65	4.42	3.17	2.47	5.36
Federal						.00	1.48	1.63	3.00	3.72	6.19	6.09	6.50	6.89	15.85	18.78	17.28	18.94	20.02	21.89	19.76	20.12	20.35	22.86	23.75	17.10	14.54	16.33	18.36
TOTAL INCOME TAXES						.00	1.75	1.93	3.54	4.39	7.30	7.19	7.67	8.13	16.89	19.82	18.38	20.10	21.26	23.19	21.18	21.48	21.80	27.37	30.40	21.52	17.71	18.80	23.71
NET INCOME AFTER TAXES						-53.56	5.61	6.31	13.26	16.87	35.66	28.40	30.57	32.42	26.01	27.70	27.11	28.48	30.54	32.78	35.23	33.26	35.43	35.61	36.83	32.30	34.37	36.18	34.9
CASH FLOW						20.93	51.77																						

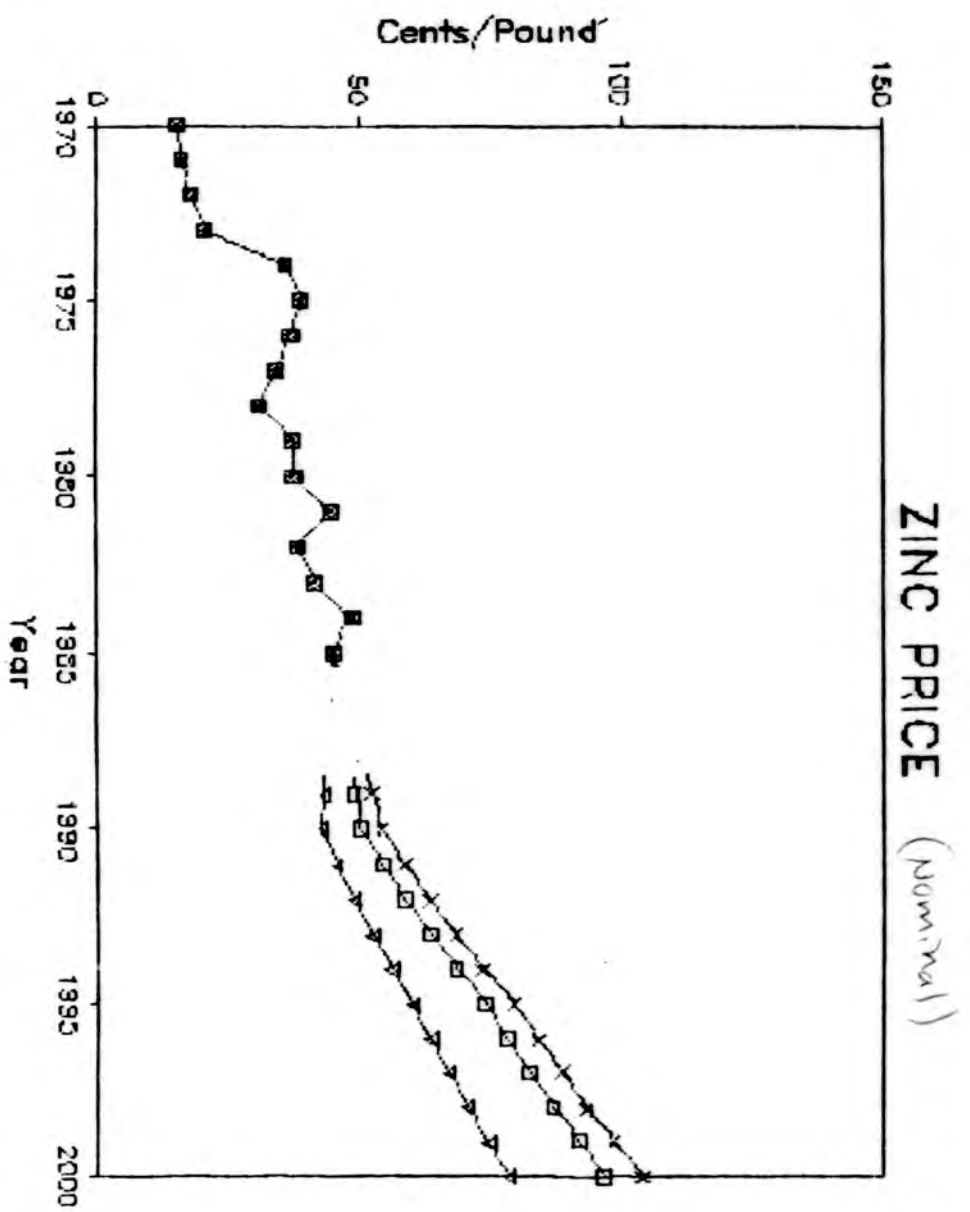
Source: SRI International

SRI
4/30/85

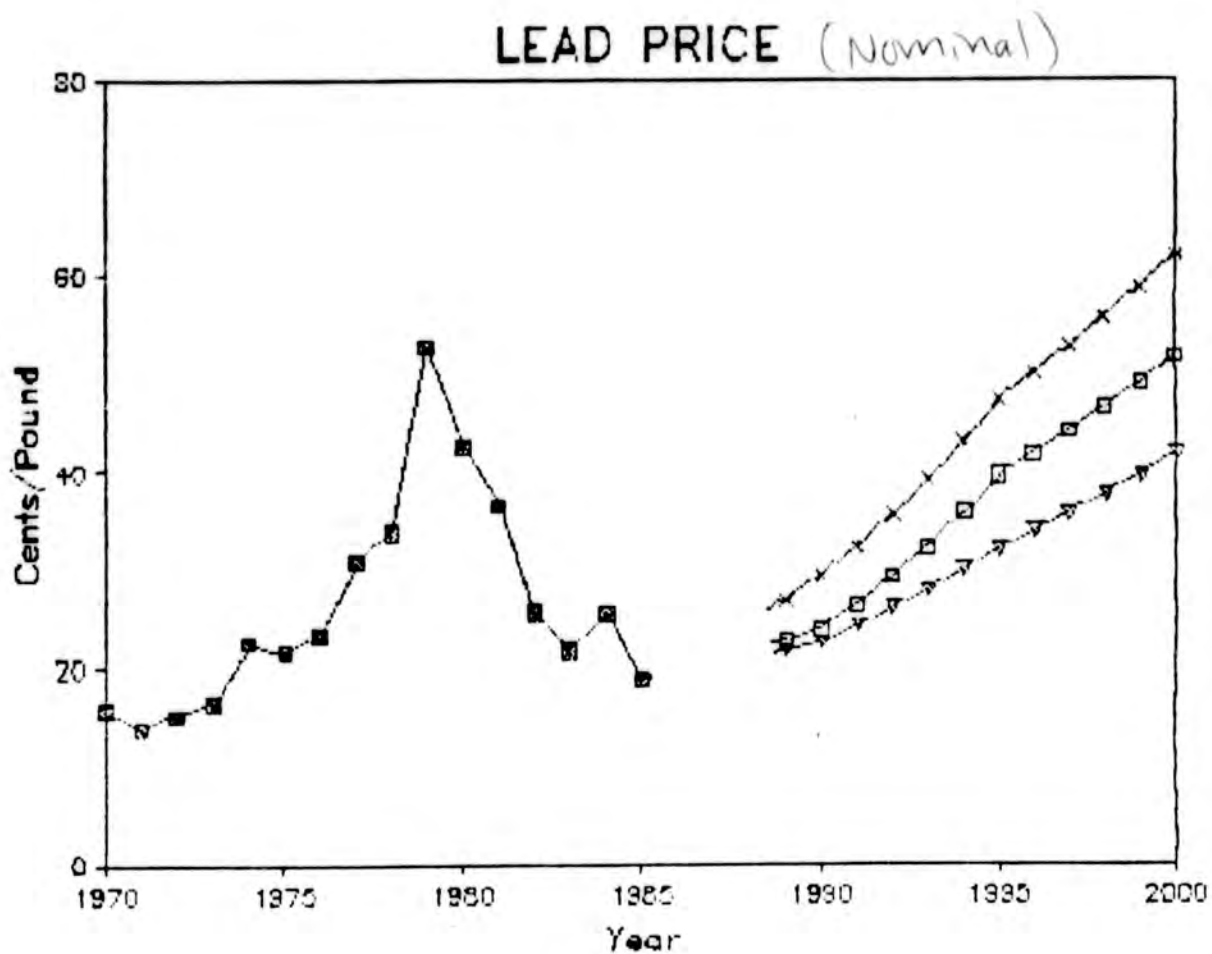
EXHIBIT 8.5: MINING PROFITABILITY VS. USER FEE



STI
4/30/85



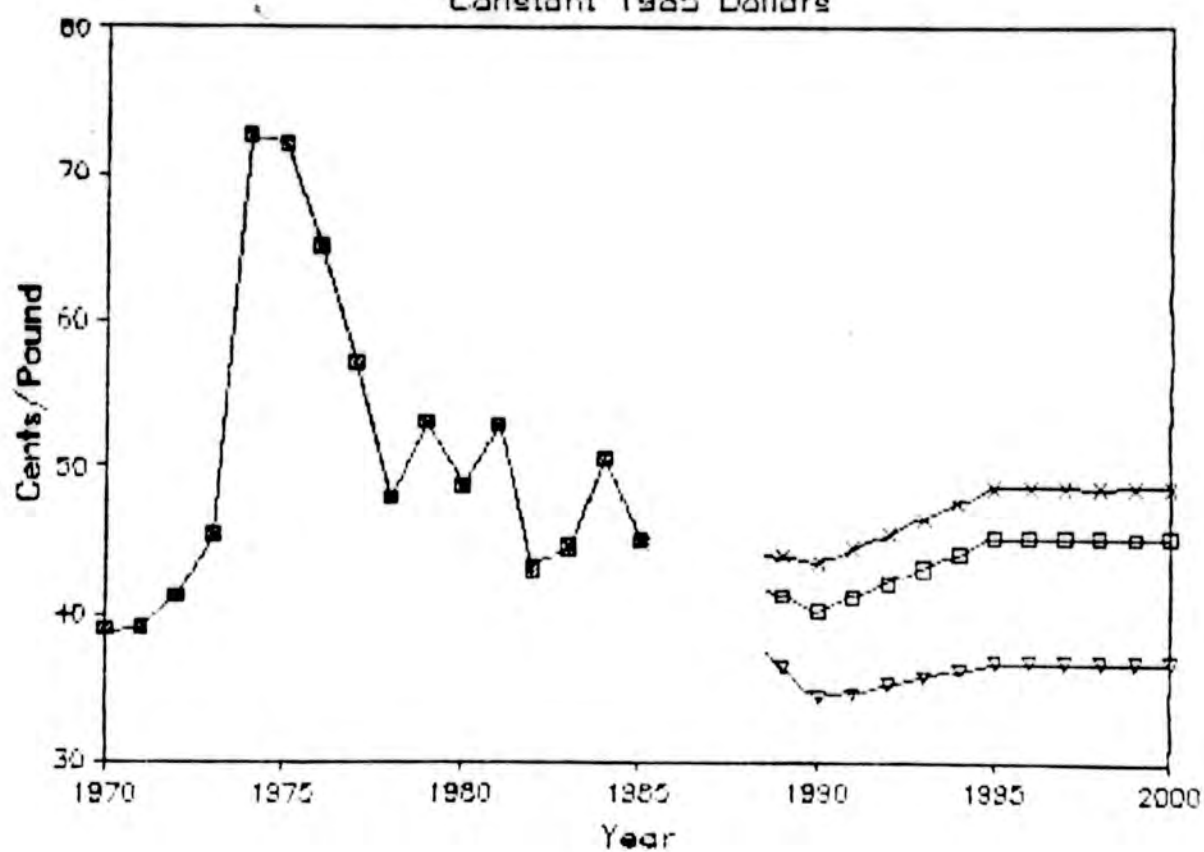
SR I
4/30/85



SZE
4/30/85

ZINC PRICE

Constant 1985 Dollars



S/ZI
4/30/85

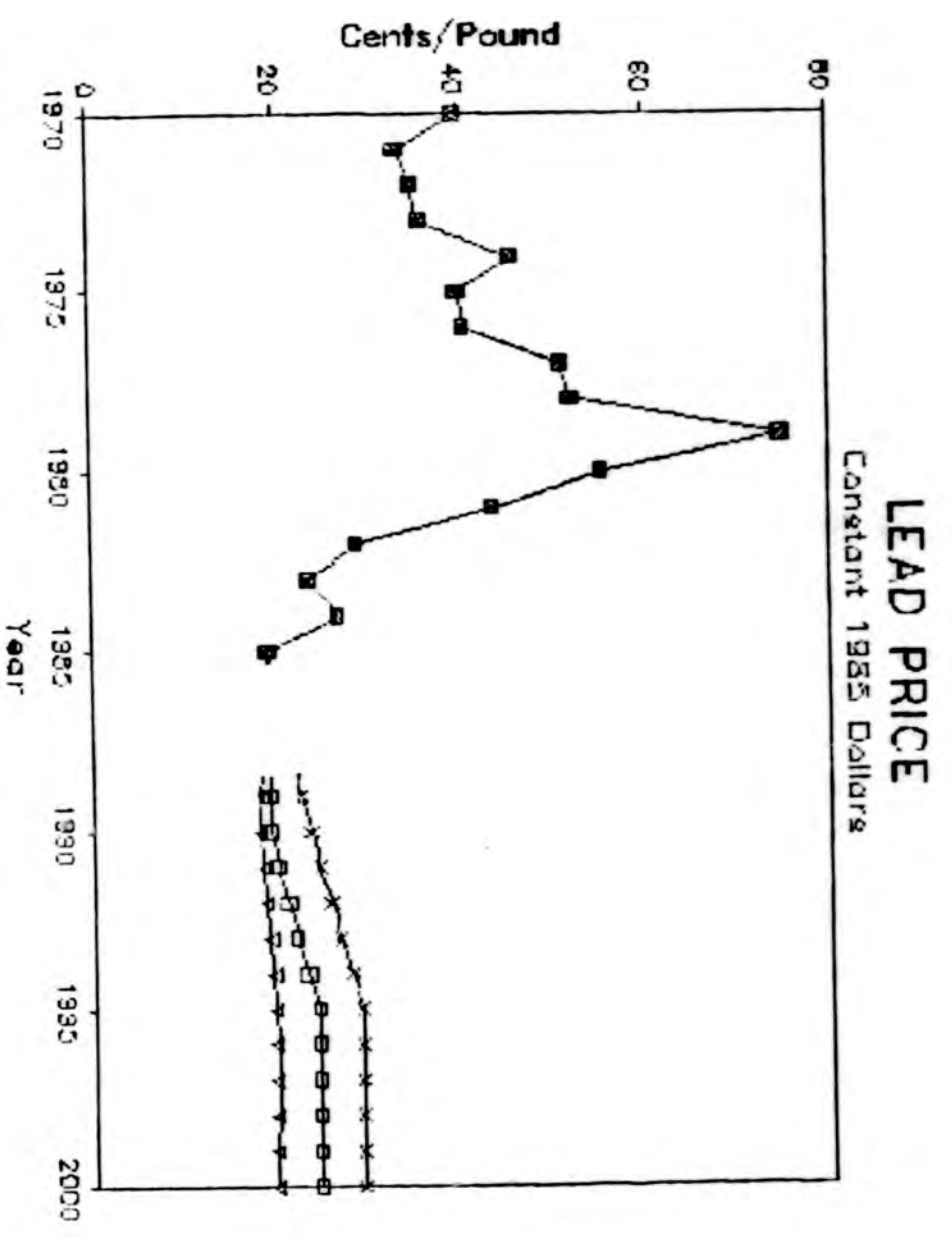
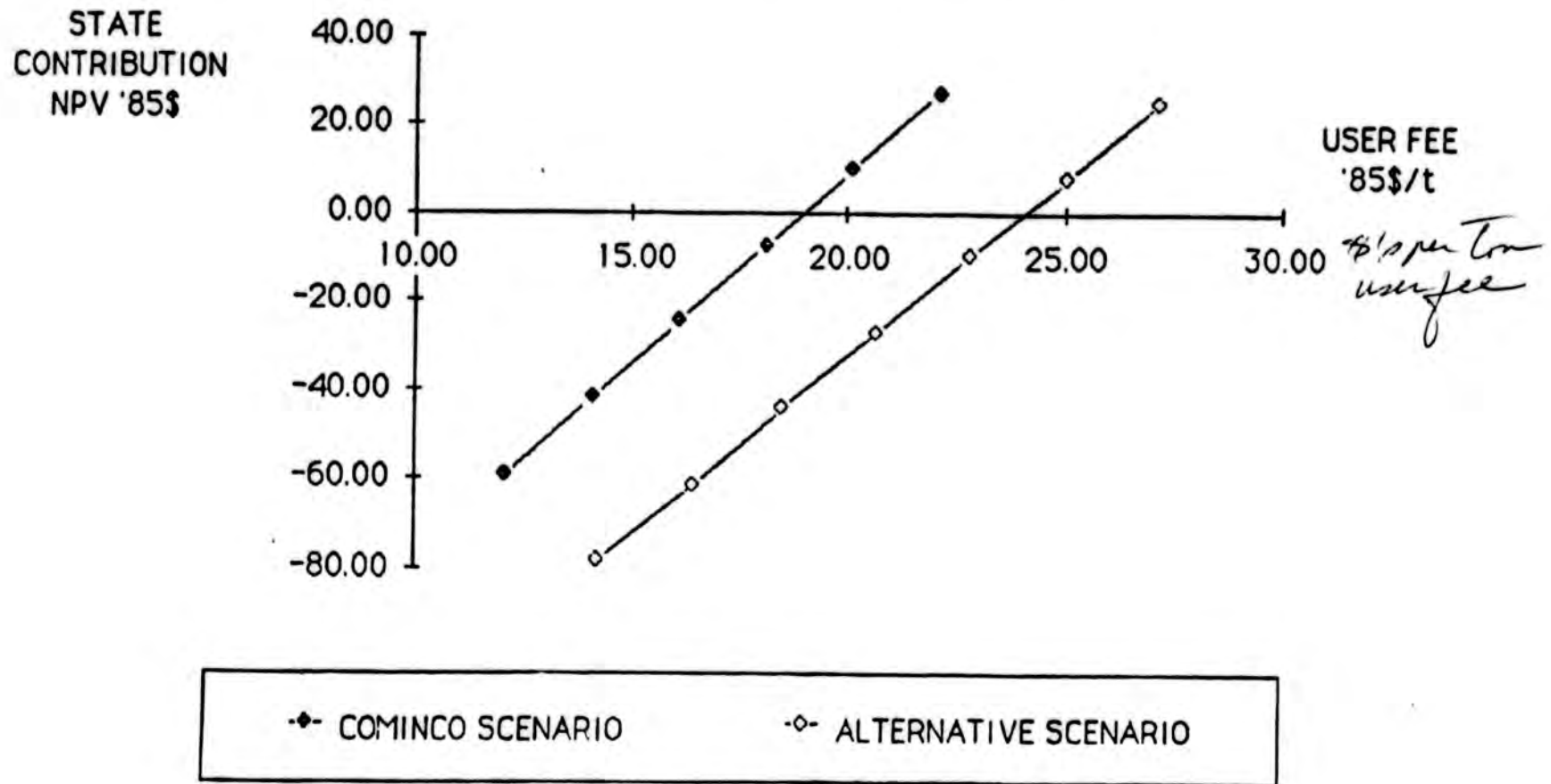


**EXHIBIT 8.4: STATE CONTRIBUTION VS. USER FEES
(GENERAL CARGO RATE OF \$50/T)**



◆ COMINCO SCENARIO

◇ ALTERNATIVE SCENARIO

PROPOSED ANNUAL ASSESSMENT

5/25
4/30/85

Rep Sund

April 2, 1985

Chairman, Senate Resources Committee
Senator Arliss Sturgulewski
Pouch V
Juneau, AK 99811

Dear Senator Sturgulewski:

Greetings from Dillingham on this cold but sunny day. It is 14 below zero with steam rising from the waters of Bristol Bay.

I am not writing to tell you about our weather but to encourage you and the Senate, the House and the Administration to approve the Red Dog Mine request for funds through the Alaska Industrial Development Authority. This is a project that I believe will send a strong signal that our State has leaders that want to set Alaska on a course of resource diversification and development.

We are relying too heavily on one resource, oil, to meet our short and long term needs. Alaska, much like a developing nation, needs to support and assist diversification in order to move ahead in a manner consistent with the requirements, goals and objectives of our entire state community.

I believe that the people of the NANA Corporation have studied the impact of the mining activity in their area and they have seen that it is time to bring the stated goals of Alaskan resources development and their regional goals together. For the first time, I see an opportunity for our State government and a region of our State to work together to achieve common goals.

These goals are to diversify our economy, bridge the economic gaps between urban and rural Alaska, employ and train Alaskans for a major mining activity and allow a region of our State a chance to engage in a long term project that will not be a financial burden for Alaska in the future.

It would be a major economic development setback if an agreement cannot be struck before this session ends. A delay will send a signal out that will be difficult to override in terms of perception. We Alaskans will be perceived as anti-development on a major scale if the terms needed to proceed cannot be negotiated before the legislature adjourns.

Your request for additional information on a financing statement is legitimate and should be honored as quickly as possible by the Administration. However, I have never seen a legislature give a blank check to any sitting Governor, nor should you on any project of this magnitude.

I urge you to proceed with dispatch to help our State move toward a future that sees us developing our natural resources in a prudent and equitable manner. This is the time to act and you are capable of dynamic action when you know what your are doing is right!

Thank you for listening.

cc: Governor Sheffield
Resources Committee Members
Senator Ferguson Rep. Adams
Senator Sackett Rep. Fuller
Rep. Herrmann Rep. Dandridge
Rep. Gruenewald

Very sincerely,

Nels A. Anderson, Jr.
Nels A. Anderson, Jr.

Dillingham, Alaska 99576 • Phone (907) 842-2366

PRESENT VALUE DETERMINATION
RED DOG TAXES AND TRANSFERS

Year Project Begins	(millions \$)		Present value of the transfers	Estimated annual taxes (real \$)	Present value of the taxes	Total present value of taxes and transfers
	Assumed annual transfer amount (real \$)					
1	2.1		2.04	2.06	2.00	4.04
2	2.1		1.98	2.06	1.94	3.92
3	2.1		1.92	2.06	1.89	3.81
4	2.1		1.87	2.89	2.57	4.43
5	2.1		1.81	8.84	7.63	9.44
6	2.1		1.76	10.23	8.57	10.33
7	2.1		1.71	10.23	8.32	10.03
8	2.1		1.66	10.23	8.08	9.73
9	2.1		1.61	10.23	7.84	9.45
10	2.1		1.56	10.23	7.61	9.17
11	2.1		1.52	10.23	7.39	8.91
12	2.1		1.47	10.23	7.18	8.65
13	2.1		1.43	10.23	6.97	8.40
14	2.1		1.39	10.23	6.76	8.15
15	2.1		1.35	10.23	6.57	7.91
16	2.1		1.31	10.23	6.37	7.68
17	2.1		1.27	10.23	6.19	7.46
18	2.1		1.23	10.23	6.01	7.24
19	2.1		1.20	10.23	5.83	7.03
20	2.1		1.16	10.23	5.66	6.83
21	2.1		1.13	10.23	5.50	6.63
22	2.1		1.10	10.23	5.34	6.43
23	2.1		1.06	10.23	5.18	6.25
24	2.1		1.03	10.23	5.03	6.07
25	2.1		1.00	10.23	4.89	5.89
26	2.1		0.97	10.23	4.74	5.72
27	2.1		0.95	10.23	4.61	5.55
28	2.1		0.92	10.23	4.47	5.39
29	2.1		0.89	10.23	4.34	5.23
30	2.1		0.87	10.23	4.21	5.08
Total			41.16		169.68	210.84

Present value based on long term real rate of return of 3%
since all dollar values are in real terms

Paul Engelman 03/27/85

1 up. Kirk Wehling

STATISTICS ON DCED LOAN PROGRAMS
(Thousands of Dollars)

January 31, 1985

	Veterans	Small Business	Commercial Fish	Tourism	Bulk Fuel	Child Care	Hist Dist	Mining	Alternate Energy	Resid. Energy	Fish Enhance	Power Dev.	Water Resource	Total
Commitments														
Total No. Loans														
Committed FY '72-85	7,718	1,338	2,657	59	148	42	9	65	2,691	2,173	97	3	5	17,005
Total Dollar Amount														
Committed FY '72-85	371,795.2	202,529.3	154,396.7	29,874.7	5,482.6	1,320.4	667.7	28,160.0	17,140.9	8,151.2	37,084.1	191,165.0	2,500.0	1,050,267.8
Total No. Loans														
Committed FY '85	-0-	-0-	110	-0-	28	6	-0-	2	183	159	9	3	-0-	500
Total Dollar Amount														
Committed FY '85	-0-	-0-	6,148.1	-0-	962.9	276.2	-0-	1,128.1	1,394.2	404.4	3,780.1	191,165.0	-0-	205,259.0
Appropriations														
FY '83	-0-	-0-	9,400.0	-0-	1,000.0	400.0	500.0	15,000.0	4,000.0	4,500.0	22,000.0 ¹	N/A	-0-	56,800.0
FY '84	-0-	-0-	9,091.0	-0-	-0-	869.5	500.0	-0-	2,400.0	3,123.4	6,500.0	N/A	-0-	22,483.9
FY '85	-0-	-0-	3,500.0	-0-	-0-	-0-	-0-	-0-	1,000.0	-0-	5,000.0	210,000.0	-0-	219,500.0
Loans Outstanding														
Owned by Fund														
Number of Loans														
Outstanding	135	268	999	5	49	25	3	48	1,944	1,571	81	3	1	5,132
Principal Amount														
Outstanding	6,129.4	33,835.6	48,402.5	3,258.2	1,257.0	867.0	339.9	18,833.6	12,051.7	4,966.0	31,116.2	191,165.0	909.8	353,131.9
Average Loan Amount														
Outstanding	45.5	201.4	48.5	651.6	25.7	34.7	113.9	392.4	6.2	3.2	38.5	63,721.7	909.8	68.8
Serviced for the Dept. of Revenue														
Number of Loans														
Outstanding	1,841	225	764	14	N/A	3	3	N/A	N/A	N/A	14	N/A	N/A	2,864
Principal Amount														
Outstanding	~~83,241.0~~	~~18,587.5~~	~~30,215.1~~	~~2,578.9~~		~~16.9~~	~~1124.3~~				~~6,604.2~~			~~141,367.9~~
Average Loan Amount														
Outstanding	45.2	82.6	39.5	184.2		5.6	41.4				471.7			49.4
Summary														
Total No. of Loans														
Outstanding	1,976	493	1,763	19	49	28	6	48	1,944	1,571	95	3	1	7,996
Total Principal Amount Outstanding	~~89,370.4~~	~~52,423.1~~	~~78,617.6~~	~~5,837.1~~	~~1,257.0~~	~~883.9~~	~~464.2~~	~~18,833.6~~	~~12,051.7~~	~~4,966.0~~	~~37,720.4~~	~~191,165.0~~	~~909.8~~	~~494,499.8~~
Delinquency Rates (includes defaults)														
Number of Loans %	18.3%	32.8% ²	14.9% ³	10.5% ²	20.4%	14.8%	-0-	47.9%	16.6%	15.8%	N/A	N/A	-0-	17.8%
Outstanding Balance %	19.2%	34.1%	18.5%	3.5%	11.1%	13.9%	-0-	56.3%	15.8%	16.0%	N/A	N/A	-0-	24.0%

See Ch 114, Sec 5 and Ch 141, Sec 242 SLA 1982, and Ch 106 Sec 11 SLA 1983.
Adjusted for Bank Participation system inaccuracies
Adjusted for approved extension requests

Prepared by: Division of Accounting and Collections, 465-2555

2/25/85



ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY

1577 "C" STREET • SUITE 304 □ ANCHORAGE, ALASKA 99501-5177 □ (907) 274-1651

May 10, 1985

The Honorable John Sund
Chairman, House Special Loans Committee
Alaska State Legislature
Pouch V
Juneau, Alaska 99811

Dear Representative Sund:

As you are aware, the Alaska Industrial Development Authority is actively involved in a proposal to build and operate a transportation system in the DeLong Mountains area. This transportation system, consisting of a 55 mile road and a port, would be used by Cominco Alaska, for its Red Dog Mine, and eventually by other users in this mineral rich area. Prior to incurring any debt on this project, AIDA has to prepare a Finance Plan that accounts for all costs, both operating and capital, and details revenue sources that are adequate to cover all of these costs.

Enclosed is a preliminary draft report, prepared by SRI International, that is being sent to you for your information and comments. When the final version of this report is prepared, it will form the basis of this Financial Plan.

I welcome any comments and suggestions you might have.

Sincerely,

Bertram L. Wagnon
Executive Director

BLW/RDL/rm
Enclosure

SRI International



ECONOMIC EVALUATION OF THE PROPOSED TRANSPORTATION SYSTEM FOR THE RED DOG DEPOSIT

A Preliminary Draft Report

May 3, 1985

Prepared for:

ALASKA INDUSTRIAL DEVELOPMENT AUTHORITY (AIDA)

Prepared by:

**Mark Hollyer
Gerard M. Marsh
John W. Moberly
Ann J. Pacey
Claire Starry
Eugene Thiers
Jack E. Van Zandt**

SRI International Project No. 8404

I INTRODUCTION

This draft report summarizes the results of SRI International assistance to Alaska Industrial Development Authority (AIDA) in preparing alternative finance plans for the proposed transportation system for Cominco Alaska's Red Dog deposit. The deposit is about 90 miles north of Kotzebue and about 70 miles east-northeast of Kivalina, some 55 miles from the Chukchi Sea.

To assure that the legislative requirements of the State of Alaska (Alaska Statutes Section 44.88.173) are met, the various finance plans, and alternatives include estimates of project capital costs, possible sources of capital funds, anticipated project operating costs and the money sources to meet them, and our comments regarding implied levels of State financial assistance.

In undertaking the work SRI has adopted a multidisciplinary approach, with specialists assigned to the study team for the duration of the program. SRI has consulted multiple sources of information, which are listed in Attachment 1.

Unless otherwise noted, all prices and costs in this report are expressed in inflated dollars (i.e., the inflated dollar values that are likely to prevail in the future), as opposed to dollars expressed in terms of 1985 purchasing power. Such projections are based on assumptions about future levels of inflation, and escalation or deflation factors that apply to cost components like labor, supplies, or energy. Table I-1 summarizes SRI's principal assumptions regarding escalation factors and overall inflation.

Following this introduction is Chapter II, the Executive Summary. Chapter III reviews the information collected, and briefly describes the transportation project and the capital and operating costs associated with the required infrastructure. Chapter IV describes the transport model SRI has used for allocating cargo and user costs. Chapter V deals with the profitability of the Red Dog project (relative to other major zinc/lead suppliers in the Western World). The chapter reviews the capital, operating, and maintenance costs associated with the mine and mill facilities that are currently contemplated. Chapter V also briefly discusses relevant metal prices and describes the model SRI has created to examine Cominco Alaska's profitability under various operating assumptions.

A financial evaluation of Cominco's proposal and the State's investment in the proposed transportation system, including possible alternatives, are discussed in Chapter VI. The importance of such

Table I-1

MISCELLANEOUS ESCALATION FACTORS
(Compound Percent per Year)

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992- 1995</u>	<u>Post- 1995</u>
Inflation	4.0	4.0	4.5	4.5	5.0	5.5	6.0	6.5	6.5
Construction/ equipment	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	0.0
Labor	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	0.5
Energy	-0.5	-0.5	-0.5	-0.5	-0.5	0.0	0.0	0.0	0.0
Materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: SRI International

critical parameters as start-up date and construction and capital cost schedules are discussed. Chapter VI also describes the financial model SRI has used to evaluate different proposals and alternatives, and sets forth the principal results modeled. Chapter VII provides a brief discussion of results.

Special effort has been made to make this draft report a succinct document--one that is immediately useful to AIDA and the Alaskan Legislature and other state organizations. Accordingly, certain details pertaining to intermediate steps or methodology are omitted here. Also omitted are Appendix materials, such as tables and figures. These will be included, however, in SRI's final report.

II EXECUTIVE SUMMARY

In general, SRI has identified no serious discrepancies in the review of capital and operating and maintenance (O&M) cost data regarding the proposed road and port facilities that will serve Cominco Alaska's Red Dog operation. The data, which were largely submitted by Cominco Alaska but include those from multiple other sources as well, indicate that the capital investment required will be on the order of \$158 million for the road and the port. This estimate, which we have called the "Cominco-Based Scenario," has been adjusted to reflect SRI's views on possible cost contingencies. If all these contingencies are considered, they would raise the total investment contemplated under the Cominco-Based Scenario by about 20%. We refer to this higher capital cost set of assumptions as the Alternative Scenario.

Both the Cominco-Based Scenario and the Alternative Scenario have been used to evaluate the State subsidy implied in Cominco Alaska's proposal outlined in its December 11, 1984, Memorandum of Understanding--representing an offer that has not been officially acknowledged. Our findings indicate that, under the Cominco-Based Scenario, the State would earn a return of about 2% to 3% on its investment in the transportation system and a return of about 1% to 2% under the Alternative Scenario. Assuming that the State's cost of money is about 10%, the implied level of State subsidy would range from about \$80 million (in 1985 dollars) to about \$95 million (in 1985 dollars). Furthermore, the State's financial exposure can increase significantly if the first shipment of concentrates is delayed after 1989. For example, a 1-year delay in shipments and user charges increases the implied subsidy from about \$16 million (in 1985 dollars) under the Cominco-Based Scenario to \$20 million (under the Alternative Scenario).

Surprisingly, Cominco's mine profitability (i.e., as a percent of return on investment--%ROI) appears to be relatively insensitive to the total amount of user charges for the transportation system. SRI examined the effect of significantly higher user charges on both the State's return on its transportation system investment and on Cominco Alaska's return on its mine investment. The results indicate a user charge that will allow the State to achieve breakeven on its investment and that will reduce Cominco's rate of return on its mine investment by less than two percentage points compared with its original proposal.

Comparisons with international producers of lead and zinc indicate that Red Dog's operating cash costs should be below the median of those for the western world at any point in the foreseeable future. Furthermore, Cominco, Ltd. will benefit from this mine development through continued high utilization of existing facilities.

We note that debt-financing by Cominco of its mine and mill facilities--as is usual within the industry--would increase the anticipated return on its investment in the Red Dog operation above what is shown by our analysis.

The proposed mine development will also generate handsome royalties for NANA, which owns the resource, as well as distribution to other regional corporations--more than \$600 million (in 1985 dollars) under our base price metal forecasts.

We believe that the State, in view of the sizable total economic return expected from developing this mine, should facilitate this commercial development. However, we question the need for a substantial State subsidy in financing the proposed transportation system. We recommend that a reasonable rate of return on this investment be secured in future years through an appropriate schedule of user charges.

III REVIEW OF INFORMATION

Project Description

The proposed transportation system consists of two relatively distinct components:

1. A year-round, 30-foot wide roadway, some 55 miles in length, extending from the proposed Red Dog Mine site (800 to 1500 feet in elevation and 90 air miles north of Kotzebue), southwesterly to the port site on the Chukchi Sea, a few miles south of Ipiavik Lagoon.
2. A sea port facility, which is currently described as a "800 lineal foot, 20 foot (water) depth, 2-dolphin" plan, with support features, including: material-handling equipment; power generation and fuel storage; water and sanitary works; helipad; personnel accommodations; and a barge for "regional" use. Major associated features include a concentrate storage building, fuel tank farm, storage areas for regional supplies (solids) and containers, and a regional supplies (liquid) facility.

The proposed road portion of the transportation system is described in "Geotechnical Report, Alaska Red Dog Mine" (October 1984). For the port, the following preliminary plans were provided to SRI:

- o Cominco Alaska Red Dog Project, Seaport Facilities, Scheme 3B, Drawing SKD-GA-09, Rev. B (2-23-85).
- o Concentrate Storage Facilities at Seaport, Drawing SKD-GA-10, (2-26-85).
- o Cominco Alaska Red Dog Project, Dock Facilities, Drawing SKD-GA-11, Rev. A (3-8-85).

In addition, physical conditions data were also obtained from reports by D&M and from telephone discussions with Arctec, Inc., and Brian J. Watt Associates.

The road is planned for construction over a 2-year period from mid-1986 to mid-1988. This schedule, which includes two winter seasons, allows for road embankments to be constructed on undisturbed tundra in its frozen state, and for necessary embankment repair or grade correction after periods of thaw. Construction of the port facility is also planned to commence in mid-1986; it will extend somewhat beyond mid-1988,

however--primarily because of the extensive mechanical-electrical installations required.

Capital Costs

Two key documents on construction costs and their expenditure rates over the planned construction periods were provided to SRI:

- o Road and Port Cost Summaries; Memorandum (March 7, 1985) from T. J. Manning (Red Dog Project Office, Pasadena) to H. M. Giegerich (Cominco Alaska, Anchorage),
- o Port and Road Cash Flow; prepared by RMP (3-15-85), referring to Job No. 6560.

The road's cost summary reflects RMP's audit of the PN&D cost estimates. The cost summary for the port reflects a revised port scope (i.e., the one used here) developed by RMP.

To supplement the limited backup detail provided, SRI held several in-depth telephone discussions with RMP's estimating department during our review of the cost estimates and schedules. These estimates were then partially reordered to take account of transport cost modeling and financial analyses of a public-based transportation system in Alaska, and the scheduled need for in-process construction capital. We refer to these estimates as the "Cominco-based" case.

Given that Cominco Alaska, RMP, PN&D, and others familiar with Alaskan construction cost factors have allotted considerable effort to developing detailed cost estimates, SRI believes its comment on aggregated costs are in order but notes that similar time for conducting detailed checks on economic assessments was unavailable.

Nevertheless, SRI and HLA suggest that if certain construction item costs were in fact higher than originally estimated, their overall cost effect should be considered in the financial analysis. For this purpose, SRI has developed an Alternative Case.

Our review has thus centered on identifying possible geotechnical and Arctic engineering concerns and constraints that might affect project costs. Those identified are discussed below.

Roadway Gradient and Curvature

The PN&D report specifies a maximum grade of 4% and addresses a one-lane road with passing turnouts every 2 miles and a sight distance design speed of 55 miles per hour. We understand, however, that curvature (vertical and horizontal) design criteria have subsequently been relaxed and maximum grades could reach 8% to 10%, although for

relatively short distances. For a public highway with similar traffic conditions, such grades and lesser alignment standards, particularly for winter driving in Alaska, may pose a severe safety hazard. For example, these road configurations may compound sight and stopping distance problems. Given the passing turnouts proposed and speeds to 55 miles per hour, this change in alignment criteria may prove to undesirably decrease the margin of operational safety. For the purpose of cost impact analyses in the Alternative Case, the embankment fill quantity has been increased by 50% (i.e., an additional \$8.5 million).

Roadway Maintenance and Repair during Construction

Two freeze/thaw cycles will occur during the construction period. The severity and frequency of roadway depressions and/or surface cracking resulting from these conditions are unknown. Along the road's centerline, 15 test borings were drilled, with 9 more drilled at major stream crossings, and 51 at proposed roadway borrow sites. PN&D concludes that subsurface conditions of importance have probably been identified. However, to account for soil problems that may not have been identified and to account for higher than expected roadway reconstruction costs, the Alternative Case doubles the fill quantity provided in the "Cominco-based" case for these purposes for an additional \$2.1 million.

Ice Forces on the Port's Causeway

As currently proposed, the causeway consists of a series of cellular sheet pile structures filled with quarry run material. Preliminary plans envision the sheet piles bottoming some 25 feet below mudline. (Bedrock is apparently about 40 feet below the mudline.) To our knowledge, uplift and horizontal ice forces on the proposed structure have not been definitively quantified. Concerns therefore include potential jacking of individual sheet piles because of ice bonding and uplift, or the possible failure of individual sheets or groups of sheets because of large local lateral ice forces, leading to progressive failure of the cell. Accordingly, the Alternative Case assumes that the \$6.9 million estimate for the cellular causeway portion be increased by 25% (i.e., an additional \$1.7 million) to allow for unexpected additional sheet pile lengths or other required design modifications.

Concentrate Storage Facility and Fuel Tank Farm

The D&M reports provide no conclusions or recommendations in regard to the proposed location of the concentrate ore pile and the fuel tank farm, which is supported on fill pads adjacent to an existing lagoon. No doubt, additional test borings and soils analysis will be conducted before final design decisions are made. In the meantime, however, related concerns about soils stability and settlement, and about lateral loads on the foundations of the concentrate storage building appear worthy of consideration in the Alternative Case. Accordingly, the Site Preparation and Pad Fill item for both the concentrate storage and fuel

storage facilities were used as the basis for the Alternative Case. Cost for these items were increased by 100% (i.e., an additional \$2.1 million for the concentrate storage facility and \$1.6 million for the fuel tank farm).

In summary, although it is problematical whether any or all of the above cost adjustments will in reality occur, their net effect would be to raise the Cominco-based estimates (for direct construction costs) by about 15% for the road and 10% for the port facility. These adjustments serve as the basis for the Alternative Case analysis discussed in subsequent sections.

Operating and Maintenance Costs

Road

The road from the Red Dog mine to the port site is assumed to carry substantially heavier trucks than most other roads in northern Alaska. Therefore, its operating and maintenance (O&M) costs are likely to be higher than comparable roads. From our discussions with the contacts cited in Attachment 1, the O&M items discussed below will be required. Annual costs (in 1985 dollars) associated with these activities are listed in Table VII.1 for the Cominco-based Case and the Alternative Case.

- o General and Administrative--Three persons, plus support facilities, are estimated to be required to administer road O&M. They will be in offices at the mine site or the port. Information used to develop this estimate was obtained from discussions with the Alaskan Department of Transportation (ADOT) and the highway consultant cited in Attachment 1
- o Maintenance--Maintenance estimates are based on two camps of crew and equipment--one at the mine and one at the port. Each camp will be responsible for servicing approximately 30 miles of road and will be staffed by 4 persons. Maintenance will be year-round, with the possible exception of a shut-down period during thaws. Typical activities include snowplowing and repair of the roadway and structures. The cost estimates for maintenance are based on per-mile costs to maintain the Dalton and Elliott Highways and similar roads in northern Alaska. All labor costs are based on prevailing local wage standards. (Our discussions with state and federal officials indicate that this facility should conform to the provisions of the Davis-Bacon Act.)
- o Sustaining Equipment--Sustaining equipment includes snowplows, snowblowers, loaders, bulldozers, graders, trucks, and related equipment. These items will be replaced as needed throughout the life of the road. The costs for acquiring this equipment,

which were provided by Cominco, are consistent with estimates provided by ADOT.

- (1) Sustaining Capital--Major repairs to the roadway and structures (e.g., replacement of bridge decking and culverts, and roadway reconstruction) are expected periodically, starting about 5 years after the road is opened. These activities are included in the sustaining capital category. Estimates for these activities were developed from discussions with highway engineers at ADOT and with LCMF, Ltd., a highway consulting organization. Some uncertainties remain about sustaining capital requirements (e.g., major damage to the road from recurring freeze/thaw conditions or from poor quality ground surface or greater sustaining capital costs).
- o Right-of-Way--The road will cross land owned by the NANA Corporation and Krusenstern National Monument. Right-of-way costs have not been included in this analysis, because no data are available, but such costs are likely to be assessed.

Port

The methods used to maintain and operate the port serving the Red Dog mine will be like those at other ports with similar climatic conditions and/or cargo operations. From discussions with the contacts noted in Attachment 1, the O&M items listed below will be required. Annual costs (in 1985 dollars) associated with these activities for each of the two cases being analyzed are given in Table III.1.

- o General and Administrative--We estimate that four persons, plus support facilities, will be required to administer operations at the port.
- o Maintenance--Maintenance estimates are based on data provided by Cominco in its March 27, 1985, letter and have been corroborated by SRI in discussions with officials at similar ports. Cominco estimates are about 15% higher on a per ton basis, than maintenance for other ports but SRI believes these estimates are reasonable given that the port will be open only about 3 to 4 months per year.
- o Replacement Parts--Cominco estimates, provided in Appendix 7 of the Red Dog Report, indicate replacement parts to keep the port operating will amount to \$250,000 per year (1984 dollars). This figure appears to be reasonable.

Table III.1
ANNUALIZED OPERATING AND MAINTENANCE COSTS FOR ROAD AND PORT
(1985 dollars)

	<u>Cominco-Based Case</u>	<u>Alternative Case</u>
<u>Road</u>		
General and administration	15% of maintenance costs(a)	15% of maintenance costs(a)
O&M	\$15,000 per mile(a)	\$20,000 per mile(a)
Sustaining equipment	Varies each year(b)	Varies each year(b)
Sustaining capital	\$8,500 per mile(c)	\$11,300 per mile(c)
Right-of-way	Unknown	Unknown
<u>Port</u>		
General and administrative	15% of O&M costs(a)	15% of O&M costs(a)
O&M	\$1.06 million per year(b)	\$1.06 million per year(b)
Replacement parts	\$250,000 per year(b)	\$250,000 per year(b)
Fuel	150,000 gallons per year, at \$1.10 per gallon (1985\$)(d)	150,000 gallons per year, at \$1.10 per gallon (1985\$)(d)
Sustaining equipment	Varies each year	Varies each year(b)
Sustaining capital	0.5% of the value of port construction(e)	0.5% of the value of port construction(e)
<u>Royalty on port land</u>	Unknown	Unknown

(a) Based on estimates provided by ADOT and LCMF, Ltd.

(b) Cominco, Red Dog Report, Appendix 7.

(c) Costs incurred after about the fifth year of operation, based on information provided to SRI by ADOT.

(d) Letter from T. J. Manning of Cominco to John Moberly of SRI, March 27, 1985.

(e) SRI International, to start about the fifth year of operation.

NOTE: Dollar figures in this table are increased each year by the appropriate inflators throughout the period of analysis.

- o Fuel--The cost of fuel to operate the port is based on use figures provided by Cominco in its March 27, 1985, letter. The fuel, Arctic No. 1 Diesel, currently costs \$1.10 per gallon. This amount has been inflated by the price escalators in the Introduction.
- o Sustaining Equipment--Sustaining equipment includes container chassis, tractors, forklifts, container loading equipment, cranes, trucks, and other items. These items are replaced as needed throughout the life of the port. The costs Cominco stipulated for acquisition of sustaining equipment are reasonable.
- o Sustaining Capital--Major periodic rehabilitation and repairs to port facilities are expected (e.g., for ice and wind damage to loading equipment and for rehabilitation of the port structures). Such costs are likely to start about 5 years after the port is opened. These activities are included in the category of sustaining capital. The total cost of these activities is estimated to be about 0.5% of the cost of construction, adjusted for inflation.
- o Royalty on Port Land--The port will be situated on land owned by the NANA Corporation. Although annual royalty costs for using the land are not included in this analysis because no data on them have been provided, they are likely to be assessed.

We have not included, in either the port or road costs, the cost of reclaiming the land. The Red Dog Environmental Impact Report indicates that if these facilities are no longer used at the end of the project, the developer will be required to return the area to its natural conditions.

IV THE SRI TRANSPORT MODEL

The SRI Transport Model consists of two parts: The first part evaluates land movement between the port and the Red Dog mine. The second part evaluates the cost of moving concentrate from the port to smelters at various locations around the world. The latter part of the model is not of direct interest to AIDA because the Authority will not be involved in its funding. However, the cost of transporting the concentrate will affect the profitability of the mine and, therefore, Cominco's ability to pay user fees levied by the State for the port and road facilities.

Road and Port Model

The land-side road and port model is a cost-allocation model that determines the annual charges necessary to meet all capital and O&M costs. Costs are allocated to users on the basis of tonnages moved. The sources of capital and O&M data and the inflation rates used to escalate costs throughout the period of construction and operation are given in Attachment 1.

The model has been used to evaluate two cases: The first is the Cominco case, where the capital and O&M costs are, to the extent feasible, those Cominco provided by in its Red Dog Report (the exceptions to those costs are noted). The second case is an alternative that reflects the adjustments SRI has made, as discussed in Chapter III.

Construction Costs

Road

All road construction costs have been allocated to Cominco because it appears unlikely that others in the region (whether other mines or local residents) will be using the road in the near term. The net present value of these costs has been determined, and an equal, annualized, payment has been calculated that allows payback of the construction costs and interest over the 30-year operation period, 1989 to 2018. The discount rate of 10.5% reflects the estimated cost of money to be raised through long-term, tax-exempt bond issues.

Port

Because the port may be used by local residents and others living in the small communities nearby, costs of port construction and operations

have been allocated between Cominco and regional users. The communities include Kivalina, Noatak, Kiana, and Kotzebue. Currently, cargoes destined for these communities are barged from Seattle and conveyed via lighter (a type of barge) to shore. The presence of the port for the Red Dog Mine may allow for more efficient transport and unloading of this cargo. Indeed, the Red Dog Mine Port Evaluation report (prepared by Cominco Engineering Services, Ltd., November 1983) contends that the port will reduce freight charges for regional cargo and may help to eliminate one of the greatest handicaps to growth in the region--high freight charges. SRI has found no data to support or refute this assumption. However, because the port may well be used for regional cargoes, such estimates have been incorporated in the analysis based on the Cominco report, which estimates that regional cargoes will total 32,700 to 34,900 tons per year (general cargoes and fuel).

Construction costs have been allocated to Cominco and regional users by identifying project elements that are dedicated to Cominco or region users and those elements that are common to both. Items that are specific to Cominco include the material-handling equipment, fuel storage, and concentrate storage. Items specific to regional users are the dry and wet storage areas, and a barge for local residents' use. All of the other construction costs have been allocated to Cominco or regional users on the basis of the percentage of tonnage moving through the port.

Annual construction costs have been calculated in the same manner as for the road.

Operating Costs

Most of the operating costs for the road and port have been estimated on an annual basis. Sustaining capital costs, however, have been taken from estimates provided by Cominco in its Red Dog Report, Appendix 7, and are not evenly spread throughout the period of operation. To spread these costs evenly over the life of the project, the net present value of purchases required has been calculated, and an equal, annualized payment that pays back the cost of the equipment and interest has been determined.

Operating costs, other than those for sustaining equipment, have first been estimated in 1985 dollars, and then have been escalated to reflect inflation. The costs for sustaining equipment, like those for construction or capital costs, have not been inflated. Rather, the method used to calculate the equal annual payments accounts for the effects of inflation on future purchases of equipment and the related interest costs.

Although the port and road will be in operation from 1988, and will be used for construction supplies for the mine before the export of

concentrate, the transport model does not allocate costs until 1989 (i.e., the first year of concentrate shipment). Any operating costs that are incurred in 1988 have been included in the mine cost model and have been assumed to be paid directly by Cominco. Depreciation of capital has been assumed not to begin until 1989.

All O&M costs have been allocated to regional and Cominco cargo on the basis of tonnage. Although the costs of handling and storing different types of cargo are likely to be different, we did not have sufficient information to determine these differences. In addition, from discussions with personnel at various ports and, given the operating conditions expected at the Red Dog port, the differences in overall operating and storage costs for the types of cargo are unlikely to be major.

Traffic

Cominco traffic will dominate port and road uses. Table IV.1 shows the amount of cargo, by type, during the peak use of the road and port--from 1993 to 2007. Concentrate will account for more than 95% of the cargo for the road and about 90% for the port.

About 700,000 short tons of concentrate will be moved each year. In addition, about 10,000 short tons of general cargo and about 25,000 short tons of fuel will be imported for use at the mine and port. Regional users have been estimated to move an additional 11,600 short tons of general cargo and 23,300 short tons of fuel through the port each year.

Cost Allocations

Table IV.2 gives the estimated cost allocations for Cominco and regional users for each of the two cases. The port costs could not be broken down by type of cargo because the information available was insufficient for doing so.

The port charges per ton of regional cargo are about 50% higher than for Cominco cargo because of the higher cost per ton of construction for the regional storage facilities (as a result of the small tonnage throughput and the resulting lack of economies of scale) and the barge that serves local residents' needs. Those facilities dedicated to Cominco will be used, on average, more intensively. Of course, no road charges are incurred for regional cargo.

Table IV.1

PEAK LEVEL TRAFFIC FOR THE RED DOG PORT AND ROAD
(Dry Short Tons)

Road

Cominco

Zinc concentrate	585,000
Lead concentrate	119,000
General cargo	10,000
Fuel	20,000

Port

Cominco

Zinc concentrate	585,000
Lead concentrate	119,000
General cargo	10,000
Fuel	24,380

Regional users

General cargo	11,600
Fuel	23,300

Source: Cominco Engineering Services, Ltd., Red Dog Port Evaluation Study (November, 1983) and Red Dog Report (July, 1984).

Table IV.2

COST ALLOCATION FOR ROAD AND PORT
COMINCO AND REGIONAL USERS

<u>Cominco Case</u>	<u>1990</u>	<u>2000</u>	<u>2010</u>	<u>2018</u>
Cominco				
Road (\$ in millions)	\$11.19	\$13.44	\$16.19	\$19.84
Road (\$ per ton)	\$15.07	\$18.32	\$25.26	\$26.91
Port (\$ in millions)	\$10.01	\$12.25	\$15.64	\$24.14
Port (\$ per ton)	\$13.40	\$16.59	\$24.24	\$31.21
Regional				
Port (\$ in millions)	\$ 0.74	\$ 0.91	\$ 1.16	\$ 1.50
Port (\$ per ton)	\$22.75	\$26.08	\$33.30	\$42.88
<u>Alternative Case</u>				
Cominco				
Road (\$ in millions)	\$13.27	\$16.26	\$19.90	\$24.75
Road (\$ per ton)	\$17.87	\$22.15	\$31.05	\$33.58
Port (\$ in millions)	\$10.30	\$12.61	\$16.07	\$20.65
Port (\$ per ton)	\$13.78	\$17.07	\$24.89	\$32.00
Regional				
Port (\$ in millions)	\$ 0.68	\$ 0.83	\$ 1.06	\$ 1.37
Port (\$ per ton)	\$20.85	\$23.92	\$30.49	\$39.19

Source: SRI International

Ocean Transport Model

The second part of the transport of concentrate is from the port to various smelters. Because of the shallow depth of the water at the Red Dog port, lightering barges will be required to carry the concentrate to ocean-going vessels about 4 miles off shore. The ocean transport model, therefore, includes the costs of the barges and concentrate carriers, as well as port discharge costs and in-land haulage. There are four probable destination areas: Trail, British Columbia; Japan; Europe; and Eastern Canada.

The information sources used to develop the capital and operating costs for the barges ocean transport, discharge, and in-land transport costs are given in Attachment 1.

Barge Costs

Two self-propelled concentrate barges are expected to be used to carry the concentrate from the port to the concentrate ships. These barges will be dedicated to Cominco use because it is unlikely any other use will be found for them. The barges will be stored in British Columbia during the winter season. They will be used to bring containerized general cargo to the mine at the beginning of the shipping season in June and to return the containers at the end of the season. The useful life of the barges is expected to be 30 years.

Self-sustaining barges, which have greater maneuverability in the choppy waters in the Chukchi Sea, will be used instead of the more common tug and barge operations. Operations with tug and barge would have to be curtailed more often than those employing a self-sustaining barge.

We have assumed that foreign-flag barges will be used, given Cominco's stated intentions for doing so. There is, however, some concern that U.S.-flag barges may be required by the Jones Act. If so, U.S.-flag barges would cost about 33% to 50% more to purchase and operate. Barge cost estimates are given in Table IV.3.

Vessel Costs

We have developed vessel costs that are based on the use of foreign-flag ships of varying sizes and whose characteristics depend on the water depth at the port of destination and the amount of cargo being shipped and the estimated number of voyages. We have assumed that the ships will be chartered on a one-way basis for Europe and Eastern Canada, and on a two-way basis for Japan and Trail. Voyage costs include the time charter rate, bunker fuel, oil costs, and canal charges if any. No delivery charges for initially bringing the ships to Alaska have been included, but we have included the cost of the additional insurance required for operations north of the Arctic Circle. Vessel, port, and in-land haulage cost estimates are given in Table IV.4.

Port and Inland Haulage Costs

Port charges include discharge, storage, and docking fees. Sufficient port facilities currently exist in Eastern Canada and Europe. Japan's port limitations are related to draft because ports for smelters are located upriver where concentrate is unloaded. Therefore, cost estimates reflect actual charges that would be incurred today. Vancouver is an export port and has few facilities to handle large amounts of in-bound cargo. Vancouver Wharves has indicated that it would be willing to install unloading and storage equipment to handle Cominco concentrates

Table IV-3

ESTIMATED CAPITAL AND OPERATING COSTS FOR TWO SELF-PROPELLED BARGES

	<u>1989</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>	<u>2010</u>	<u>2018</u>
Capital cost(a)	\$1,055,221	\$1,055,221	\$1,055,221	\$1,055,221	\$1,055,221	\$1,055,221	\$1,055,221
Operating Costs	<u>450,204</u>	<u>472,714</u>	<u>603,316</u>	<u>770,002</u>	<u>982,739</u>	<u>1,254,252</u>	<u>1,853,101</u>
Total Cost	\$1,505,425	\$1,527,935	\$1,658,537	\$1,825,223	\$2,037,960	\$2,309,473	\$2,908,322
Cost for 2 barges	\$3,010,850	\$3,055,870	\$3,317,075	\$3,650,445	\$4,075,920	\$4,618,945	\$5,816,643
Dollars per short wet ton	\$14.48	\$5.98	\$6.16	\$6.78	\$7.57	\$10.20	\$12.85

(a) Based on a foreign-built barge whose cost is estimated at \$7 million (1985 dollars).