

SCOMM

#50:12

COMMITTEE REPORT
HOUSE

3/20

(5)

~~XXXXXX~~
1/15/85
1/16/88

FURTHER: Finance

Date: 3/11/85

The Committee on Special House Committee on State Loans has had HB 4

"An Act relating to debt of the state, its agencies, and municipalities; and providing for an effective date."

under consideration and recommends:

- do pass do not pass
- do pass with attached amendments(s)
- replace with CS for _____ same title
 new title
- and recommends it do pass
- AND attaches a "Letter of Intent" New Fiscal Note Sup 32
 Zero Fiscal Note Attached
- reports it back without recommendation
- referred to the _____ Committee

MEMBERS SIGNING
DO PASS

MEMBERS HAVING
OTHER RECOMMENDATIONS:

NO _____

DEHNING _____

FULLER _____

[Signature]
CHAIRMAN

Original sponsors: Uehling and Gruenberg

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IN THE HOUSE

BY THE HOUSE SPECIAL
COMMITTEE ON STATE LOANS

CS FOR HOUSE BILL NO. 4 (Loans)

IN THE LEGISLATURE OF THE STATE OF ALASKA

FOURTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to debt of the state, its agencies, and municipalities; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. AS 37.15.110 is amended to read:

Sec. 37.15.110. CREATION AND MEMBERSHIP OF STATE BOND COMMITTEE. There is created within the Department of Revenue a committee known as the "state bond committee," the members of which are the commissioner of commerce and economic development, the commissioner of administration, and the commissioner of revenue. If a member of the committee is absent or otherwise unable to act, the member's designee [IN THE DEPARTMENT] shall act as a member of the committee in the member's place.

* Sec. 2. AS 37.15.130 is amended to read:

Sec. 37.15.130. OFFICERS, RECORDS AND PROCEEDINGS. (a) The commissioner of revenue [COMMERCE AND ECONOMIC DEVELOPMENT] is the chairman of the state bond committee [AND THE COMMISSIONER OF REVENUE IS THE SECRETARY]. A majority of the members of the committee constitute a quorum. The committee shall keep a full, complete, and permanent record of its proceedings. All records and correspondence of the committee shall be kept in the office of the commissioner of revenue.

(b) The committee may meet and transact business by electronic media if

(1) public notice of the time and locations where the

1 meeting will be held by electronic media has been given in the same
2 manner as if the meeting were held in a single location;

3 (2) participants and members of the public in attendance
4 can hear and have the same right to participate in the meeting as if
5 the meeting were conducted in person; and

6 (3) copies of pertinent reference materials, statutes,
7 regulations, and audio-visual materials are reasonably available to
8 participants and to the public.

9 (c) A meeting by electronic media as provided in this section
10 has the same legal effect as a meeting in person.

11 (d) For the purposes of this chapter public notice of 24 hours
12 or more is adequate notice of a meeting of the committee at which the
13 issuance of bonds is authorized.

14 * Sec. 3. AS 37.15.140 is amended to read:

15 Sec. 37.15.140. DUTIES OF STATE BOND COMMITTEE. (a) The state
16 bond committee shall adopt the resolution and prepare the documents
17 necessary for the issuance, sale, and delivery of bonds issued on
18 behalf of the state.

19 (b) The state bond committee shall prepare an annual report to
20 be submitted to the governor and legislature before January 31 of each
21 year. The report must show (1) all outstanding debt of debt issuing
22 entities of the state; (2) the anticipated impact on the finances and
23 credit of the state, including the effect on long-term debt capacity
24 and creditworthiness resulting from that debt; (3) which long-term
25 debt is tax supported and which is supported only by revenues attrib-
26 utable to the project being financed by the debt; (4) all long-term
27 capital lease obligations of the state; (5) the volume of short-term
28 debt issued and retired during the year by debt issuing entities of
29 the state; (6) specific identification of each issue for which the

1 state has pledged some form of indirect support for the debt including
2 any moral obligation of the state to support the debt; (7) future
3 bonding and debt capacity implications of legislation enacted in the
4 previous legislative session; and (8) the recommended debt issuance
5 capacity of the state for the next two years following the year of the
6 report. The committee may require that any information needed to
7 prepare the report be furnished by debt issuing entities of the state
8 at a time determined by the committee. The state bond committee shall
9 publicize the existence of the report submitted under this section and
10 shall make the report available to the public upon request.

11 (c) The state bond committee may develop written policies
12 concerning debt of the state.

13 (d) The committee may develop written informational guidelines
14 for management of debt of municipalities of the state and debt of
15 instrumentalities of the state authorized to issue tax exempt obliga-
16 tions.

17 (e) The policies and guidelines developed under (c) and (d) of
18 this section shall include bidding procedures, and bid awards and
19 compensation for financial service.

20 (f) The state bond committee shall request the debt issuing
21 entities of the state to (1) prepare and submit to the committee by
22 January 31 of each year a calendar of all debt proposed to be issued
23 during the calendar year showing the amount and type of the debt and
24 the month in which issuance is proposed, and (2) prepare and submit
25 monthly a report showing all proposed changes to the calendar sub-
26 mitted.

27 (g) In this section the term "debt issuing entities of the
28 state" includes the state, each agency or instrumentality of the state
29 authorized to issue tax exempt obligations, and each municipality of

1 the state.

2 (h) In this section the term "debt" means (1) long-term bonded
3 indebtedness secured by the full faith and credit of the government
4 unit, (2) long-term bonded indebtedness secured by a mortgage or lien
5 on specific properties or receivables, (3) short-term notes, (4)
6 warrants, and (5) capital lease obligations; but "debt" does not in-
7 clude debt owed within the debt issuing entity or to another debt
8 issuing entity.

9 * Sec. 4. AS 37.15.150 is amended to read:

10 Sec. 37.15.150. STAFF AND [COMMITTEE MAY EMPLOY] SPECIAL SER-
11 VICES. The state bond committee may appoint an executive director who
12 may with approval of the committee select and employ additional staff
13 as necessary. Employees of the committee are in the partially exempt
14 service under AS 39.25.120. If the [STATE BOND] committee considers
15 it necessary and advisable, it may procure architectural or engineer-
16 ing, fiscal agent or municipal investment, legal and other expert or
17 specialized services at reasonable and customary fees to assist it in
18 accomplishing the most advantageous sale of the state bonds. The fees
19 may be paid from the proceeds of the sale or advanced from the contin-
20 gency fund in the office of the governor or otherwise.

21 * Sec. 5. AS 39.25.120(c) is amended by adding a new paragraph to read:

22 (19) employees of the state bond committee.

23 * Sec. 6. This Act takes effect immediately in accordance with AS 01.-
24 10.070(c).

STATE OF ALASKA 1985 LEGISLATIVE SESSION
FISCAL NOTE

Revision Date _____

REQUEST

Bill/Resolution No: HB 4
 Title: Debt of State, Agencies, and Municipalities
 Sponsor: Uehling
 Requestor: Special Loans Committee
 Date of Request: January 22, 1985

FISCAL DETAIL

Agency Affected: Department of Revenue
 Program Category Affected: _____
 BRU, Program of Subprogram(s) Affected: Treasury

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90
OPERATING						
100 PERSONAL SERVICES	-	-	-	-	-	-
200 TRAVEL	-	-	-	-	-	-
300 CONTRACTUAL	-	50.0	-	-	-	-
400 SUPPLIES	-	-	-	-	-	-
500 EQUIPMENT	-	-	-	-	-	-
600 LANDS & STRUCTURES	-	-	-	-	-	-
700 GRANTS, CLAIMS	-	-	-	-	-	-
800 MISCELLANEOUS	-	-	-	-	-	-
TOTAL OPERATING	-	50.0	-	-	-	-
CAPITAL	-	-	-	-	-	-
REVENUE	-	-	-	-	-	-

FUNDING: (Thousands of Dollars)

GENERAL FUND	-	50.0	-	-	-	-
FEDERAL FUNDS	-	-	-	-	-	-
OTHER	-	-	-	-	-	-
TOTAL	-	50.0	-	-	-	-

POSITIONS:

FULL-TIME	-	-	-	-	-	-
PART-TIME	-	-	-	-	-	-
TEMPORARY	-	-	-	-	-	-

ANALYSIS: Attach a separate page for analysis.

Prepared By: Milt Barker *MB*
 Division: Treasury

Phone: 465-2350
 Date: January 22, 1985

Approved by Commissioner: *Stanley A. Studer*
 Agency: Department of Revenue

Date: 1/23/85

Distribution (by Agency preparing fiscal note):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

HB 4
Fiscal Note Analysis

Funds for development of policies and informational guidelines
by State Bond Committee financial advisor.

STATE OF ALASKA
THE LEGISLATURE

POUCH Y STATE CAPITOL
JUNEAU, ALASKA 99811
907 465 3800


LEGISLATIVE AFFAIRS AGENCY

MEMORANDUM

March 11, 1985

SUBJECT: Sectional Analysis of HB 4
State debt

TO: Representative John Sund

FROM: Billy G. Berrier 
Director
Division of Legal Services

You have requested a sectional analysis of House Bill 4 relating to state, agency and municipal debt.

Section 1 amends AS 37.15.110 to locate the state bond committee within the Department of Revenue. Current law does not have a specific provision on this.

Section 2 amends AS 37.15.130 to make the commissioner of revenue instead of the commissioner of commerce and economic development chair of the state bond committee. It also allows meetings by electronic media if there is at least 24 hours public notice, if the public may participate as if the meeting were conducted in person and if copies of relevant materials are available to the public. This meeting has the same legal effect as a meeting in person.

Section 3 amends AS 37.15.140 relating to the duties of the state bond committee.

(a) the amendment clearly specifies the duty to adopt the authorizing resolution and prepare the documents needed for a bond sale applies only to state bonds.

(b) requires the committee to prepare an annual report to the governor and legislature and sets out a nonexclusive list of matters the report must contain. The committee may require information needed for the report from all debt issuing agencies of the state. (Debt issuing agencies are defined in subsection (g)). It also requires publishing

existence of the report and that the report itself must be available to the public on request.

(c) requires the state bond committee to develop written policies concerning debt of the state itself. This requirement does not include agency or municipal debt.

(d) requires that for agency and municipal debt the committee must develop written informational guidelines.

(e) requires that both the policies under (c) and the guidelines under (d) include recommended level of debt, debt management, bidding procedure and awards and compensation for financial services.

(f) requires the committee to request municipalities and agencies which issue debt to submit a calendar of debt proposed to be issued during the calendar year showing amount and type and to submit a monthly report of changes to the calendar.

(g) defines debt issuing entities of the state to include the state, the agencies and municipalities.

(h) defines debt as long term general obligation bonds, long term lien bonds, short term notes, warrants and capital lease obligations. The term does not include inter-agency or municipal-state debt.

Section 4 amends AS 37.15.150 to allow the committee to have employees who are in the partially exempt service under AS 39.25.120.

Section 5 amends AS 39.25.120 to add employees of the state bond to the list of partially exempt employees.

Section 6 provides an immediate effective date.

BGB:ojb
J12/081

ANCHORAGE
DOWNTOWN
DISTRICT TWELVE

AIRPORT HEIGHTS
CITY VIEW
DOWNTOWN
FAIRVIEW
GOVERNMENT HILL
INLET VIEW
SOUTH ADDITION

Alaska State Legislature



House of Representatives

Representative
RICK UEHLING

MEMBER

HOUSE FINANCE COMMITTEE

HOUSE SPECIAL COMMITTEE
ON STATE LOANS

HOUSE FINANCE SUBCOMMITTEE ON
ADMINISTRATION, REVENUE
AND THE GOVERNOR'S OFFICE

MEMORANDUM

Date: March 9, 1985

To: Representative Sund, Chair,
House Special Committee on State Loans

From: Representative Rick Uehling

Subject: House Bill 4, "An Act relating to the debt of the State, its agencies, and municipalities; and providing for an effective date."

The following is an outline of the background and provisions of HB 4:

The Background

As a part of the work of the House Special Committee on State Loans of the 13th Legislature, the Committee examined a recent report to the Legislative Budget and Audit Committee by the Government Finance Research Center entitled "A review of the Debt Management and Debt Capacity of the State of Alaska." The House Special Committee on State Loans held a major hearing in Anchorage, at which Wesley Hough, Manager of the Government Finance Research Center and the author of the report, presented it to the Committee.

The report makes a series of recommendations concerning the State's Debt Management practices. In addition, the report speaks specifically to the General Obligation Debt capacity of the State. HB 4 is an attempt to institute many of the report's recommendations for managing State Debt.

During the last Session a similar bill passed the House 40-0 but died in Senate Rules in the last days of the Session.

There has been a growing concern on the part of both the Legislature and the public with the amount of debt that is being incurred by the State of Alaska. As the State looks to financing many large projects that are important to the State, the capacity of the State to issue General Obligation bonds becomes an increasingly important factor. Additionally, a great deal of attention has focused on the

Page Two

"debt issuing entities" of the State, the municipalities and agencies which are authorized to incur debt.

This attention has focused on the Alaska Housing Finance Corporation and the North Slope Borough which together have issued almost four times the amount of State General Obligation debt.

While the debt that is incurred by the Alaska Housing Finance Corporation (AHFC) is supported by mortgage revenues, and the debt of the North Slope Borough is supported by the property tax revenues of the borough, there remain concerns about the State's ultimate moral obligation. Furthermore there is the overriding question of at what point the growing debt issuance of the AHFC and the North Slope Borough will negatively impact the overall capacity of the State to issue debt.

HB 4 contains four major provisions:

1. The Chair of the State Bond Committee would be changed from the Commissioner of Commerce and Economic Development to the Commissioner of Revenue.
2. The State Bond Committee would be responsible for a yearly report to the Legislature and the Public on the State's bonded indebtedness. HB 4 states very specifically what the report will contain.
3. The State Bond Committee would be required to issue written policies and guidelines for the management of State debt and local debt.
4. The State Bond Committee would be responsible for coordinating a calendar of State-wide debt issuance.

While HB 4 contains many of the provisions called for by the GFRC report, it does not provide for some of more controversial recommendations such as a ceiling on municipal debt or new provisions controlling the School Debt Retirement Program. It is a first step towards the Legislature recognizing the need to maintain an active role in the management of the debt issuance of the State, its municipalities and agencies.

Page Three

The Provisions.

Section 1 AS 37.15.110

The State Bond Committee is placed for Administrative purposes within the Department of Revenue. It currently does not exist within a Department. The State Bond Committee would retain its current three members: The Commissioner of Revenue, the Commissioner of Commerce & Economic Development and the Commissioner of Administration.

Section 2 AS 37.15.130

The Commissioner of Revenue replaces the Commissioner of Commerce & Economic Development as the Chair of the State Bond Committee.

This section also provides at the request of the Department of Revenue, provisions allowing for meetings to be held by electronic means and a special provision allowing 24 hour notice of a meeting for the purpose of authorizing the issuance of bonds. These provisions are substantially the same as those concerning meetings of the Board of Directors of AHFC.

Section 3 AS 37.15.140

- a) The words "issued on behalf of the State" have been added to existing statute in order to clarify that the statute relates only to bonds issued on behalf of the State and does not pertain to municipalities.
- b) The State Bond Committee is required to prepare an annual report to the Legislature and the Governor outlining the current status of outstanding State Debt before January 31st of each year. Material to be included in the report is very specific in accordance with the recommendations of Wesley Hough of the Government Finance Research Center.

The report must show:

- 1) All outstanding debt of the debt issuing entities of the State including the municipalities and those entities authorized to issue tax exempt bonds such as AHFC.

Page Four

- 2) The anticipated impact of that debt on the finances and credit of the State including the effect on the State's long term debt capacity and credit worthiness.
- 3) Which long term debt is tax supported and which long term debt is supported by revenues attributable to the project being financed.
- 4) All long term capital lease obligations of the State.
- 5) The volume of short term debt issued and retired by the debt issuing entities of the State.
- 6) Specific identification of each debt issuance for which the State has pledged some form of indirect support for the debt including any moral obligation of the State.
- 7) Future bonding and debt capacity implications of legislation enacted in the previous legislative session.
- 8) The recommended debt capacity of the State for the two years following the year of the report.

Additionally, the State Bond Committee is required to publicize the existence of the report and that copies be made available to the public.

- c) The State Bond Committee shall develop written policies concerning the debt of the State.
- d) The State Bond Committee shall develop written informational guidelines for the management of debt for the municipalities and the debt issuing entities of the State authorized to issue tax exempt obligations.
- e) These policies and guidelines shall include recommended level of debt, debt management practices, bidding procedures and awards, and compensation for financial service.

Page Five

f) The State Bond Committee will develop a statewide debt issuance calendar by January 31st of each year. The Bond Committee will require the debt issuing entities of the State to submit a calendar of all debt proposed to be issued including the amount and type of debt, and the month in which it is to be issued. The calendar will be updated on a monthly basis.

g) For drafting purposes "Debt issuing entities of the State" is defined as the State, each agency or instrumentality of the State authorized to issue tax exempt obligations and each municipality of the State.

h) For the purposes of this section, "Debt" is defined as:

- 1) Long-term bonded indebtedness secured by the full faith and credit of the government unit (general obligation bonds).
- 2) Long-term bonded indebtedness secured by a mortgage or lien on specific properties or revenues (revenue supported bonds).
- 3) Short term notes.
- 4) Warrants.
- 5) Capital lease obligations.

Debt does not include inter-agency debt or debt owed from one debt issuing entity to another. This definition has been provided to us by Wesley Hough of the Government Finance Research Center.

Section 4 AS 37.15.150

The State Bond Committee is given the authority to appoint an executive director and hire staff as necessary.

Section 5 AS 39.25.120

Employees of the State Bond Committee are in the partially exempt service.

Section 6

HB 4 has an immediate effective date.

- (b) The commissioner of revenue may
- (1) invest and reinvest the principal of the funds;
 - (2) sell, exchange, convey, transfer, or otherwise dispose of investments of the funds by private contract or at public auction;
 - (3) vote upon a stock, bond, or other security; give a general or special proxy or power of attorney with or without power of substitution; exercise a conversion privilege, subscription right, or other option and make payments incidental to it; consent to or participate in a corporate reorganization or other change affecting corporate securities, delegate discretionary power, pay an assessment or charge in connection with the delegation; and generally exercise any of the powers of an owner with respect to stocks, bonds, securities, or other investments held in the funds;
 - (4) make, execute, acknowledge, and deliver documents of transfer and conveyance and instruments necessary or appropriate to carry out the powers granted;
 - (5) register investments held in a fund in the name of the board having the power to approve investments for a fund;
 - (6) do all acts whether or not expressly authorized which are considered proper for the protection of the investments held in the funds.
- (§ 4 ch 182 SLA 1978)

Chapter 15. State Bonding Act.

Article

1. General Obligation Bonds (§§ 37.15.010 — 37.15.220)
2. Bond Anticipation Notes (§§ 37.15.300 — 37.15.390)
3. International Airports Revenue Bonds (§§ 37.15.410 — 37.15.550)

Article 1. General Obligation Bonds.

Section	Section
10. Full faith and credit for general obligation bonds	120. Regulations
12. Continuing debt service appropriation	130. Officers, records and proceedings
15. Committee shall publish notice of existing state indebtedness before election	140. Duties of state bond committee
20. Manner and amounts of sale	150. Committee may employ special services
30. Interest rate and maturity	155. Prohibited bidding on bonds and anticipation notes
40. Sale of bonds	160. Contents of resolution
50. Redemption	170. State bond committee to certify annual principal, interest, and reserve requirements
60. Form and registration of bonds	180. Remedies of bondholders
70. Place of payment	190. Negotiability
80. Signatures and seal	200. Bonds as legal investments
90. Terms and conditions	210. Refunding bonds
100. Trustee	215. Official statements
110. Creation and membership of state bond committee	220. Short title

Sec. 37.15.010. Full faith and credit for general obligation bonds. The full faith, credit and resources of the state are hereby pledged to the payment of the principal of and interest and redemption premium, if any, on all general obligation bonds of the state authorized pursuant to art. IX, § 8 of the constitution. (§ 1 ch 175 SLA 1960; am § 1 ch 104 SLA 1967)

Collateral references. — 63 Am.Jur.2d, Public Funds, §§ 23-32. 64 Am.Jur.2d, Public Securities and Obligations, § 1 et seq.

81A C.J.S., States, §§ 250-262.

Funding or refunding obligations as

subject to conditions respecting approval by voters, 97 ALR 442.

Validity of bond issue in excess of amount permitted by law within authorized debt, tax or voted limit, 175 ALR 823.

Sec. 37.15.012. Continuing debt service appropriation. The amounts required annually to pay the principal, interest, and redemption premium on all issued and outstanding general obligation bonds of the state are appropriated on July 1 of each year from the general fund to the state bond committee to make all required payments of principal, interest, and redemption premium. (§ 1 ch 100 SLA 1981)

Opinions of attorney general. — This section does not represent an unconstitutional dedication of public funds under § 7, art. IX, of the state constitu-

tion, as that section of the constitution contains an implied exception for bond obligations. November 30, 1982, Op. Att'y Gen.

Sec. 37.15.015. Committee shall publish notice of existing state indebtedness before election. (a) Before a general or special election in which a bond issue is offered for ratification, the state bond committee shall publish a notice of existing state bonded indebtedness at least once a week for three consecutive weeks in a newspaper of general circulation in each of the four judicial districts of the state. The first notice shall be published at least 20 days before the date of the election. A notice shall contain

- (1) the current total bonded indebtedness of the state,
- (2) the cost of the debt service on the current indebtedness.

(b) Neither the failure to publish the notice of existing state bonded indebtedness nor a defect in the publication affects the validity of the bond issue offered for ratification or of a general or special election in which a bond issue is offered for ratification. (§ 2 ch 50 SLA 1964; am § 1 ch 8 SLA 1969)

Collateral references. — Effect of inclusion in call for election, or in proposal for bond issue submitted to people, of unauthorized method of payment or retirement, 93 ALR 362.

Bonds issued by state officer of board payable solely out of proceeds of obli-

gations of political subdivisions pledged as within constitutional or statutory provisions which impose a limit on state indebtedness or require consent of electors, 100 ALR 1114.

Mistake, ambiguity, or omission in statement as to indebtedness, in call for

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PUBLIC FINANCE

§ 37.15.050

election or proposal for bond issue, as affecting validity of election or bonds issued pursuant thereto, 116 ALR 1258.

Effect of delay after authorization by voters on power of governmental unit to issue bonds, 135 ALR 768.

Validity, within authorized debt, tax, or voted limit, of bond issue in excess of amount permitted by law, 175 ALR 823.

Sec. 37.15.020. Manner and amounts of sale. The state bond committee shall sell the bonds of each authorization in the amounts or series and at the times which it finds are for the best interests of the state and its inhabitants. (§ 1 ch 175 SLA 1960)

Sec. 37.15.030. Interest rate and maturity. Each issue or series of bonds shall bear interest at an effective rate over the life of the bonds not to exceed 11 percent a year or that rate of interest which is 110 percent of the rate of the Bond Buyer Index of 20 Municipal Bond Average Yields for the week previous to the date of sale of the bonds, whichever is higher. The bonds shall mature in not more than 30 years from date of issue, unless a longer period is specifically authorized by statute. (§ 1 ch 175 SLA 1960; am § 2 ch 104 SLA 1967; am § 1 ch 92 SLA 1970; am § 1 ch 29 SLA 1976; am § 1 ch 85 SLA 1980; am § 1 ch 110 SLA 1982)

Effect of amendments. — The 1980 amendment substituted "10" for "eight" preceding "percent a year" at the end of the first sentence.

The 1982 amendment substituted the language beginning "11 percent a year" for

"10 percent a year" at the end of the first sentence.

Collateral references. — Right to call governmental bonds in advance of their maturity, 109 ALR 988.

Sec. 37.15.040. Sale of bonds. Before selling an issue or series of bonds, the state bond committee shall give notice inviting sealed bids in such manner as it may prescribe. If satisfactory bids are received, the bonds offered for sale shall be awarded to the highest responsible bidder. If the state bond committee determines that the bids received are not satisfactory as to price or responsibility of the bidders, it may reject all bids received. (§ 1 ch 175 SLA 1960; am § 3 ch 104 SLA 1967; am § 1 ch 43 SLA 1969)

Sec. 37.15.050. Redemption. The state bond committee may determine whether the bonds are subject to redemption before their fixed maturities and may fix the premium for and all other terms of the redemption. No bond may be subject to redemption before its fixed maturity date unless the right to so redeem the bond is expressly mentioned on the face of the bond. (§ 1 ch 175 SLA 1960; am § 4 ch 104 SLA 1967; am § 1 ch 26 SLA 1968; am § 7 ch 143 SLA 1968)

Collateral references. — 81A C.J.S., Rates, § 261.

Funding or refunding obligations as subject to conditions respecting limitation

of indebtedness, 97 ALR 442. amount permitted by law within authorized debt, tax or voted limit, 175 ALR 823.
 Validity of bond issue in excess of

Sec. 37.15.060. Form and registration of bonds. An issue or series of bonds may be issued in coupon form payable to bearer or in fully registered form, and bonds in coupon form may be made registrable as to principal or principal and interest, as determined by the state bond committee. (§ 1 ch 175 SLA 1960; am § 2 ch 26 SLA 1968)

Sec. 37.15.070. Place of payment. The state bond committee may fix the place or places of payment of the principal, interest and redemption premium, if any. (§ 1 ch 175 SLA 1960; am § 5 ch 104 SLA 1967)

Sec. 37.15.080. Signatures and seal. (a) Each bond shall be signed on behalf of the state by the governor and attested by the lieutenant governor, which signatures may be facsimile signatures. The seal of the state shall be impressed, imprinted or otherwise reproduced on each bond. Each interest coupon attached to the bond shall be signed by the facsimile signatures of the governor and lieutenant governor. If an officer whose signature appears on the bonds or coupons ceases to be an officer before delivery of the bonds, the signature is, nevertheless, valid and sufficient for all purposes, as if the officer had remained in office until delivery.

(b) A signature required on a bond issued by a political subdivision of the state may be a facsimile signature. (§ 1 ch 175 SLA 1960; am § 6 ch 104 SLA 1967)

Collateral references. — Printing, lithographing, or other mechanical signature on public bonds, coupons, or other pecuniary obligation, 94 ALR 768.

Sec. 37.15.090. Terms and conditions. Each issue or series of bonds shall be issued under and subject to the terms, conditions, and covenants providing for the payment of the principal and the interest and other terms, conditions, covenants, and protective provisions safeguarding the payment as found reasonably necessary by the state bond committee for the most advantageous sale. The terms, conditions, and covenants may include the setting aside and maintaining of certain reserves to secure the payment of principal and interest. (§ 1 ch 175 SLA 1960)

Collateral references. — Effect of inclusion in call for election, or in proposal for bond issue submitted to people, of unauthorized method of payment or retirement, 93 ALR 362. prescribed by Constitution upon incurring public debts, 106 ALR 231.

Power of legislature to add to or make more onerous the conditions or limitations authorized to issue bonds of governmental unit as regards terms or conditions to be included therein, 119 ALR 190.

37.15.090

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§ 37.15.100

PUBLIC FINANCE

§ 37.15.150

Sec. 37.15.100. Trustee. If the state bond committee finds it necessary to accomplish the most advantageous sale of the bonds, the committee shall select a trustee for the owners and holders of the bonds or for the safeguarding and disbursement of the proceeds of the sale of the bonds for the use and purpose for which issued, and shall fix the rights, duties, powers, and obligations of the trustee. (§ 1 ch 175 SLA 1960)

Sec. 37.15.110. Creation and membership of state bond committee. There is created a committee known as the "state bond committee," the members of which are the commissioner of commerce and economic development, the commissioner of administration, and the commissioner of revenue. If a member of the committee is absent or otherwise unable to act, the member's designee in the department shall act as a member of the committee in the member's place. (§ 2 ch 175 SLA 1960; am § 7 ch 104 SLA 1967; am § 81 ch 218 SLA 1976)

Sec. 37.15.120. Regulations. The state bond committee may adopt regulations for the performance of its duties and may designate by resolution one of its members to perform any act necessary to effectuate its duties not required by statute to be performed by the state bond committee in meeting or by resolution, or by another officer of the state. (§ 2 ch 175 SLA 1960; am § 8 ch 104 SLA 1967)

Sec. 37.15.130. Officers, records and proceedings. The commissioner of commerce and economic development is the chairman of the state bond committee and the commissioner of revenue is the secretary. A majority of the members of the committee constitute a quorum. The committee shall keep a full, complete, and permanent record of its proceedings. All records and correspondence of the committee shall be kept in the office of the commissioner of revenue. (§ 2 ch 175 SLA 1960; am § 82 ch 218 SLA 1976)

Collateral references. — Personal liability of officers to holders of invalid public money obligations, 87 ALR 273.

Sec. 37.15.140. Duties of state bond committee. The state bond committee shall adopt the resolution and prepare the documents necessary for the issuance, sale, and delivery of bonds. (§ 3 ch 175 SLA 1960)

Sec. 37.15.150. Committee may employ special services. If the state bond committee considers it necessary and advisable, it may procure architectural or engineering, fiscal agent or municipal investment, legal and other expert or specialized services at reasonable and customary fees to assist it in accomplishing the most advantageous sale of the bonds. The fees may be paid from the proceeds of the sale or advanced from the contingency fund in the office of the governor or otherwise. (§ 3 ch 175 SLA 1960)

Alaska State Legislature



House of Representatives

Committee on Loans

POUCH V
JUNEAU, ALASKA 99811

PHONE
[907] 465-4919
[907] 465-4920

AGENDA

TUESDAY, 3/12/85, 3:30 p.m.
Room 124 (House Judiciary)

- * HB 4 "An Act relating to debt of the state, its agencies and municipalities; and providing for an effective date."
- * HB 16 "An Act relating to loans or grants for mobile home relocation; and providing for an effective date."
- * HB 146 "An Act relating to housing loans for the permanently disabled."
- * HB 204 "An Act making a special appropriation to the Alaska housing finance revolving loan fund for housing loans for the permanently disabled; and providing for an effective date."
- * HB 217 "An Act relating to interest rates; and providing for an effective date."

THURSDAY, 3/14/85, 3:30 p.m.
Room 124 (House Judiciary)

Continuation of HB 4, HB 16, HB 146, HB 204, HB 217.

For more information, contact JOHN HARTLE

465-4919
Capitol Room 411

* Indicates first public hearing.

STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF REVENUE

TREASURY DIVISION

ELEVENTH FLOOR
STATE OFFICE BUILDING
POUCH SB
JUNEAU, ALASKA 99811
PHONE:

March 12, 1985

The Honorable John Sund
Chairman
House Special Committee on Loans
Pouch V
Juneau, AK 99811

Dear Representative Sund:

At the request of your staff, I would like to offer the Department of Revenue's comments on HB 4, "An Act relating to debt of the state, its agencies, and municipalities."

The bill addresses an important subject -- the issuance, management, and oversight of state and municipal debt. A strong point of the legislation is its assurance of a focal point for the accumulation of information regarding State and local debt.

I would like to point out that the Department of Revenue is now providing the two main informational items required by the bill. The Treasury Division now disseminates a monthly debt calendar to all issuers of public debt in the state. Within weeks, executive, legislative, and municipal officials will receive an annual report on State, State agency, and municipal debt.

It also may be of interest that the provisions for electronic meetings of the State Bond Committee effectively are contained in HB 140, which provides blanket authorization for State agencies to engage in such meetings.

The Department does have reservations about certain provisions of HB 4. One is a degree of ambiguity about what constitutes "debt of the state."

More importantly, the Department is concerned about the issuance of debt guidelines by the State Bond Committee. While the desire for guidelines is understandable, the Department believes they may raise certain problems, to wit:

1. with respect to municipalities, the State may not have constitutional authority to sanction debt issuance,

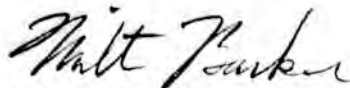
Hon. John Sund
March 12, 1985
Page 2

albeit in a manner lacking any legal compulsion;

2. such sanctions might imply some degree of State responsibility for the debt; with municipal and agency debt levels so high, the State should be very careful that the State does not project to bondholders any responsibility for debt beyond whatever legal liability it has;
3. issuers might place great confidence or reliance on the State and guidelines might be adhered to ritualistically by some less sophisticated borrowers or for political reasons; public determination of municipal agendas for capital improvements could be unduly impaired; with some communities experiencing rapid growth, guidelines could be a relatively inflexible and, for the State Bond Committee, politically untenable manner of addressing rapidly growing infrastructure needs;
4. if an issuer should issue bonds in defiance of guidelines, the bonds could suffer at the hands of the rating agencies or markets; and
5. State Bond Committee sanction of bond issuance might give the impression that the State is obliged to fully fund certain municipal aid programs, particularly school debt payments.

The Department wonders if it might be more useful to disseminate debt information to issuers rather than issue guidelines. An example would be Credit Overview, a publication of Standard & Poor's that describes in detail the methods and criteria that agency uses in rating debt. To a large extent, these are the "guidelines" that matter. Such dissemination would avoid greater entanglement of the State in the responsibility for municipal debt.

Sincerely,



Milt Barker
Deputy Commissioner

MB/gb
85-33

ANCHORAGE
DOWNTOWN
DISTRICT TWELVE

AIRPORT HEIGHTS
CITY VIEW
DOWNTOWN
FAIRVIEW
GOVERNMENT HILL
INLET VIEW
SOUTH ADDITION

Alaska State Legislature



House of Representatives

Representative

RICK UEHLING

MEMBER

HOUSE FINANCE COMMITTEE

HOUSE SPECIAL COMMITTEE
ON STATE LOANS

HOUSE FINANCE SUBCOMMITTEE ON
ADMINISTRATION, REVENUE
AND THE GOVERNOR'S OFFICE

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

Dear Representative Sund,

At the request of your staff I would like to comment on the March 12th letter by Deputy Commissioner of Revenue, Milt Barker, regarding HB 4 "An Act regarding the debt of the State, its agencies and its municipalities".

I would like to begin by stating that the Department of Revenue has changed its position regarding this Legislation. As the previous chair of the House Special Committee on State Loans I worked each step of the way with former Commissioner Heath to develop legislation that would be responsible public policy. It has come as a shock that the new Commissioner of Revenue has taken the position that the Dept. of Revenue does not support HB 4.

In reviewing the Commissioner's letter I am forced to question whether the Commissioner fully understands the the provisions of HB 4.

The Commissioner begins by stating that, the Department does have reservations about HB 4. "One is a degree of ambiguity about what constitutes 'debt of the State'". This is my point exactly. There is currently a great deal of concern about the debt issuances of agencies and municipalities within the State of Alaska. Ambiguity about what constitutes "debt of the State" exists currently. HB 4 attempts to place additional information in the hands of the Legislature and the public regarding "the State's debt issuance."

The Commissioner goes on to state that "The Department is concerned about the issuance of debt guidelines by the State Bond Committee," and raises five specific points.

I would like to begin in responding to the Commissioner's five points by stating that HB 4 does not require the issuance of vague "debt guidelines," but instead, requires "informational guidelines for the management of debt of municipalities of the State." These informational guidelines would include "recommended level of debt, debt management, bidding procedures, and bid awards, and compensation for financial service."

With regard to point number one, no where in HB 4 is the State Bond Committee given the authority to sanction or not sanction the debt issuance of the municipalities. I am well aware of the constitutional questions which would surround such a requirement.

With regard to point number two, the Commissioner believes that "such sanctions might imply some degree of State responsibility for the debt." If HB 4 provided for State Bond Committee sanctioning of municipal debt, this argument might have some merit. However, HB 4 does not provide such sanctions. Furthermore, although it may be the Commissioner's belief that the State now has no moral obligation for the debt issuances of the municipalities, this is a matter of some discussion and debate.

With regard to point number three, first, the existence of "less sophisticated borrowers" is evidence of the need for informational guidelines. Secondly, no where in HB 4 are "municipal agendas for Capital Improvements" addressed. Third, the State Bond Committee would have full authority to write the informational guidelines as flexibly as it pleased.

With regard to point number four, the question of bonds issued in defiance of State Bond Committee guidelines and their fate in the market, is one of what constitutes good public policy.

With regard to point number five, once again I would like to reiterate that no where in HB 4 is the State Bond Committee given the authority to sanction or not sanction the issuance of municipal debt.

In closing I would like to state that HB 4 is, I believe, a necessary step the Legislature must take in order to protect the State's interest in the bonded indebtedness of its agencies and municipalities.

Cordially



Rep. Rick Uehling

GOVERNMENT
FINANCE
RESEARCH
CENTER

MUNICIPAL FINANCE
OFFICERS ASSOCIATION

**"A Review of Debt Management and Debt Capacity
for the State of Alaska"**

Presentation of report written for the Legislative
Budget and Audit Committee to the House Special Committee on
State Loans.

October 19, 1983

Wesley C. Hough, Manager
Government Finance Research Center (GFRC)
Municipal Finance Officers Association (MFOA)

- I. Overview of GFRC Report's Scope
- II. Alaska State-level Debt
 - o classification of long-term debt by type:
 - tax-supported general obligation
 - revenue-supported
 - moral obligation
 - o market performance of State general obligation bonds
 - o investor perceptions of the State's creditworthiness
- III. Recommended Changes in State Debt Management
 - o expanded role for State Bond Committee
 - o supervision of moral obligation bonds
 - o capital financing plan
 - o use of generally accepted accounting principals
- IV. Local Government Debt
 - o profile of local borrowers, market performance
 - o State reimbursement of school construction costs
 - o state oil production property tax policy
 - o municipal bond bank
- V. Local Government Debt Management
 - o alternative programs for state involvement
 - o ceiling on locally issued debt
 - o expanded role for municipal bond bank
- VI. State Debt Capacity
 - o determinants of debt capacity
 - o methodology for assessing debt capacity

GFRC Debt Study Recommendations

1. State Bond Committee

a) Oversight responsibilities of the State Bond Committee should include all State-level debt.

b) Committee Chairman should be Commissioner of Revenue or Director of O.M.B., as they are actually involved in the State's Debt Management.

c) Membership of State Bond Committee should be expanded to include the Commissioner of Community and Regional Affairs and the head of a debt issuing agency (AHFC, ALDA, etc.).

d) State Bond Committee should have a full time professional staff person who is an expert in public finance.

e) State Bond Committee should require annual financing plans from each authorized issuer of bonds.

f) The State Bond Committee should prepare an annual profile of outstanding debt and monitor its impact on the State's fiscal condition.

g) State Bond Committee should develop written debt management guidelines.

2. Debt Capacity:

To preserve State's credit worthiness the State should keep its debt service-to-revenue ratio to 5%, and the State should keep maturities within the known and predictable range of State revenues (we could go to as high as 10%, but we would face tradeoffs against other spending priorities and it could result in a lowering of the State's AA rating).

3. Moral Obligation Bonds:

a) Where possible, use of the moral obligation should be avoided. The moral obligation should be a privilege not a right. State Bond Committee should make the determination.

b) Existence of the Permanent Fund provides comfort to bondholders that the State would be able to meet its moral obligation (even though not presently permitted by the Constitution), so any attempt to erode the principal of the Fund should be avoided.

4. Capital Financing Plan:

- a) A plan linking a capital financing plan to our long range capital improvement plan is necessary.
- b) The State should consider bringing its accounting system into conformance with Generally Accepted Accounting Principles (GAAP).

5. Local Government Debt Management

- a) The State should take the lead in implementing programs that encourage the prudent use, and guard against the misuse, of local debt issuance.
- b) The State should take steps to improve the market performance of the Municipal Bond Bank and use of the Bond Bank by all localities should be encouraged.
- c) The State should develop a two-tiered ceiling on local debt issuance, based on per capita amounts of debt and as a percentage of property values.
- d) The current State program to subsidize school construction should be replaced.

6. General Debt Management:

- a) Financial advisors and bond counsel should be paid on a flat fee basis rather than as a percentage of the bond issue to avoid any conflicts between the advice and payment for advice.
- b) Greater use of competitive bidding versus negotiated sales should be used when possible. For example: AHFC issues.
- c) Bonds should be bid on the basis of true interest cost, not net interest cost, as is presently done.

CHAPTER I

EXECUTIVE SUMMARY

The changing nature of tax-exempt borrowing, including the shift from traditional tax-supported government bonds to revenue-backed bonds, the rise and volatility in interest rates, the reliance upon individual investors in contrast to institutional lenders, and changes in federal law concerning various aspects of tax-exempt financing, has resulted in states generally being more attentive to debt management and debt policy. This study of State debt management comes at a propitious time. While the past growth of tax-exempt borrowing by issuers bearing the Alaska name has been rapid and sizeable, new programs and proposals before the legislature indicate that the demand for new spending and borrowing is far from sated. At the same time, recent reductions in the market price for petroleum and the unpredictability of its future supply and price raise uncertainties about the level and viability of the principal source of governmental revenues that directly or indirectly supports many of Alaska's borrowing and spending programs.

The interdependence of the Alaskan economy and its oil wealth creates a paradox for assessing the State's debt management and debt capacity. Oil revenues have enabled the State and local governments to borrow at unusually high levels -- in terms of per capita amounts of debt -- and have provided the financial security required by investors in the State's bonds. It is the reliance on these same oil revenues, however, that is the principal weakness of the Alaska credit as a long-term issuer of tax-exempt bonds and that makes assessment of the State's future debt capacity very difficult.

To be effective, debt management must join the capital needs of the State and its constituent governmental units with the ability to achieve bond market access on affordable terms. Market access is a function of debt capacity, debt burden, and perceived ability to pay; it is also conditioned importantly by the overall forces that shape borrowing needs nationally and the willingness of investors to supply funds. The private credit market, where public debts are sold, decides what borrowers will be accommodated and at what cost -- from a fluctuating but always limited pool of lendable funds. While Alaska is concerned first and foremost with the cost and availability of credit for its own needs, Alaska bonds compete with other governmental obligations from all parts of the country. The terms offered Alaska borrowers by the marketplace are strongly influenced by the volume and quality of competing claims from other borrowers. Hence, it is in Alaska's interest to offer a well-structured, high-quality security in order to obtain funds, and to obtain them at acceptable interest rates.

Effective debt management must also provide State and local issuers and the State's debt managers with the flexibility to react quickly and responsibly to changes in the financial markets. That the tax-exempt bond market is highly

sensitive to changes in the federal tax code was obvious in late 1982 as the pendency of the bond registration requirement brought a flood of issues to market. Now, as a result of this legislation, the primary and secondary market acceptance of an issuer's securities will in part depend on a timely, accurate and efficient transfer process (discussed on pages 35-36). Changes in other federal tax provisions can also sharply affect the demand for tax-exempt bonds. Chapter Two includes a survey of the tax acts of 1981 and 1982, and their impacts on the municipal bond market. These changes, like volatility in interest rates, are factors over which the State has little control. However, a responsible and flexible debt management program places the State in the best position to respond effectively to events that may affect the State's borrowing.

State-Level Debt

The evidence presented in this study shows that Alaska debt has grown from 0.7 to 1.8 percent of annual national tax-exempt bond market volume since 1970. The rising market share accorded Alaska bonds has been the result of an increase in the State's annual volume of new debt issues from \$134 million to \$1.4 billion between 1970 and 1982. Chapter Three documents the increase in borrowing and includes a profile of the major State debt issuers. Of all State-level issuers in Alaska, the Alaska Housing Finance Corporation has issued the largest amount of public debt — over 62 percent of State-level debt and over 44 percent of all State-wide debt (including local government obligations) outstanding — and is the State's most frequent and best-known borrower.

At a time when we have seen the national credit rating agencies downgrade the credit rating of many states, Alaska can be proud of its rating upgrade over the past 10 years from a Baa to an AA credit. Credit analysts and the market itself have recognized the quality of Alaska's bonds as an investment. The evidence shows that Alaska now trades on par with such strong AA credits as Connecticut and Ohio. Chapter Four presents the results of our study of the State's past market experience. The data show that Alaska has consistently experienced lower borrowing costs than other states with similar ratings. Evidence to support this comes from the lower underwriting spreads, larger number of bids, and the lower interest rates on Alaska bonds as compared to those of other states of similar high quality.

State Bond Committee

In spite of the strong past performance of the State's bonds, the mid-1980s is a good time for the State of Alaska to broaden and strengthen the role of the State in debt management and oversight, particularly through the State Bond Committee (see pages 157 to 160). Recent fluctuations in the worldwide price of oil and the decline of Prudhoe Bay oil production within the ten-year range have alerted investors to the "boom and bust" nature of the Alaskan economy. These two events will be important factors behind the ability of the State to issue further debt in the coming years. One major role for a newly

reconstituted State Bond Committee would be oversight of the State's total indebtedness. It is not intended that the State Bond Committee supplant the activities or authority of independent agencies and corporations; however, it is vital that the State annually review and assess its debt position -- including within that review all State-level debt -- relative to the State's debt capacity and priorities for future public investment.

In order to carry out its expanded scope of activity, the State Bond Committee should be restructured. The chairmanship should reside in a senior-level fiscal official -- such as the Commissioner of Revenue or the Director of the Office of Management and Budget -- who is actively involved in the State's debt management. The Commissioner of Commerce and Economic Development is the Committee's present chair. Expanding the membership to include a representative from the governing board of a State corporation, and the Commissioner of Community and Regional Affairs would emphasize the interrelationship of the State, its agencies, and local government in the debt management area. To assist in fulfilling its expanded duties, the Committee should be staffed full-time by a professional in the field of public finance.

The Committee should be given the responsibility to take a global view of the State's debt-related activities in a formal manner, not in the loose, informal way that is presently said to exist. The State may wish to require that each entity of the State which is authorized to issue bonds annually file a debt financing plan with the State Bond Committee. From these plans a master debt issuance schedule may be compiled to inform and assist all debt issuers in the State. The schedule could be updated monthly or on an "as-needed" basis as financing plans change. The State Bond Committee should also annually prepare a comprehensive profile of outstanding debt and monitor its impact on the State's fiscal condition. Special attention in this review should be paid to the level of the State's contingent liabilities, such as moral obligation debt, and changes in the growth and composition of local debt.

It is advised that the State develop written debt management guidelines that include several criteria for evaluating the desired and affordable level of debt issuance in lieu of a legislative ceiling on debt issuance. The State Bond Committee should be responsible for implementing these guidelines by reviewing each State-level bond issue before it is brought to market. The Committee's only power in this regard would be to defer or veto an issuance because the security structure or sources of repayment are inadequate or the issue jeopardizes the financing plans or creditworthiness of the State. Likewise, if the State wishes to maintain its present interest rate ceiling on the issuance of bonds, it is preferable to set such a ceiling administratively rather than legislatively.

Debt Capacity and Affordability

The analysis of debt capacity is addressed in Chapter Seven. Comparisons of State debt with that of other states indicates that Alaska is an "outlier" with extremely high ratios of debt per capita and debt per \$1,000 of personal

income. Therefore, it is necessary to look in-depth at the State's revenue sources to assess its capacity for further debt issuance. Determination of the affordable level of general obligation debt essentially depends upon the State's ability and willingness to pay debt service now and in the future on any amounts borrowed. For the immediate future, Alaska's debt capacity will be determined by the amount of general fund revenues that the State wishes to allocate to the payment of debt service and the preservation of the permanent fund. Thus, short-term affordability depends exclusively on the fluctuating level and uncertain future of oil revenues as long as the State's source of funds to repay debt is tied to this single source. In the longer term, when the State's oil wealth has subsided, the ability of Alaska to issue debt will depend upon the stability and breadth of the State's economy. Without its extensive petroleum resource base Alaska will become much more like other states and analysis of its debt capacity will follow the traditional steps outlined in pages 196 to 206.

The methodology for evaluating Alaska's short-term debt affordability is presented on pages 218 to 222. If the State maintains its current ratio of debt service to revenues at the five percent level and continues to issue debt with maturities within the known and predictable range of State revenues, the State's creditworthiness will be preserved. If the State wishes to have debt service comprise a larger share of the State budget (to a maximum of 10 percent), debt capacity would be increased -- although this would force trade-offs against other State spending priorities and possibly result in a decline in the State's AA credit rating. Through 1990, the State's general obligation debt capacity is estimated to range from \$252 million to \$1.2 billion, depending upon the level of current revenues the State decides to commit to the payment of debt service.

Because of the frequent changes in petroleum prices and their impact on State revenues, the affordability analysis along the lines presented in this report must be continually updated. Revisions should take place at least quarterly when the Department of Revenue releases long-range revenue forecasts and whenever the State issues general obligation debt. Such analysis will provide the State Bond Committee with important information to be used in formulating future debt issuance plans.

Even though the affordability of revenue bonds is principally determined by the adequacy of the revenue stream pledged to repayment of the bonds, along with the market's acceptance of the security structure behind the bonds, revenue bonds indirectly affect the State's debt capacity. To the extent that revenue bonds are supported by a pledge of the State's moral obligation, or their issuance creates an oversupply of bonds bearing the Alaska name in the marketplace, the State's ability and willingness to carry debt will be affected.

Use of Moral Obligation Bonds

We do not see the possibility of entirely eliminating the use of the State's moral obligation pledge in the case of all Alaska financings. Where it is possible to avoid its use, such as in the case of Alaska Housing Finance Corporation

bonds, it should be avoided. The moral obligation pledge should not be treated as a right, available to most State issuers, as it is at present. Rather, it should be considered a privilege, an indication to the bond market that, after close scrutiny, the State believes the project meets public policy objectives and is financially sound. The State Bond Committee should have the responsibility for determining the necessity of the moral obligation to an agency's borrowing program, and its potential impact on the State's creditworthiness.

If moral obligation debt increases at a time when overall State revenues are stable, are growing at a rate less than the growth in contingent liabilities, or are declining, the moral obligation burden may encumber the State's credit capacity. Such an occurrence would make general obligation debt more costly and, therefore, less affordable due to weaker credit quality. Hence, the importance for including contingent debt in the State Bond Committee's annual review of the State's outstanding debt.

If it were not for the Permanent Fund, the limited sources of State revenue would cause investors to discount the moral obligation pledge heavily. The mere existence of the Permanent Fund provides comfort to bondholders that the State would be able to meet its moral obligations, if necessary, even though such action is not constitutionally permitted and would require a change in law. Any attempt to erode the principal of the Fund, or to otherwise weaken its position should, therefore, be avoided.

Capital Financing Plan

Demonstrating keen fiscal management and attention to capital financing and debt management is especially important to Alaska because of the uncertainties surrounding State revenues. The State must wisely allocate scarce resources to its developing economy in a manner that balances capital investment with the return on that investment yielding a diverse and broadened economy that will be able to maintain the public infrastructure put in place. Accordingly, the need for a capital financing plan linked to a comprehensive capital improvement plan is evident. (see pages 165 to 174)

The quality of financial reporting is an important element in a capital financing plan and to the complete debt management picture. While Alaska's financial reporting is complete, it does not conform to generally accepted accounting principles (GAAP). States that use an accounting system that conforms to, and is consistent with, GAAP benefit in several ways (see pages 174-175). It is recommended that the State consider converting its annual financial reports to GAAP. Such action will provide the State with vital information on its financial condition, encourage the State to take a global view of outstanding debt, improve financial management, and will be looked upon favorably by investors in the State's bonds.

General Debt Management

Specific debt management practices being used in the State could be improved. The State and its agencies recognize the importance of securing professional advice on debt issuance. However, financial advisors and bond counsel are typically compensated based on a percentage of the amount of bonds sold. Tying the advisor's compensation to the amount of bonds sold or the successful delivery of the bonds builds in an unnecessary risk of conflict of interest. The State should review its method of compensation for financial advisory services and seek arrangements that do not encourage conflicts between the advice and the payment for the advice. In this regard, a flat fee -- such as a base retainer and hourly rates -- is to be preferred over a fee based upon the amount of bonds issued. (see pages 185 to 190).

There is a place for both negotiated and competitive techniques for selling bonds in a debt management and debt marketing strategy. The approach which is judged to provide the greatest market reception and lowest interest cost should be followed. While each bond issue is unique, it appears that some bond issues presently being sold by negotiation by the State, for example, those of the Alaska Housing Finance Corporation, would be candidates for a competitive sale. (see pages 182 to 184).

Neither the State Bonding Act nor the State statutes regarding municipal debt specify the method by which effective interest rate on a competitive bond sale must be determined. However, the State and most municipalities have chosen to use the net interest cost (NIC) method to compare alternative bids at competitive sale. This method may not be in the best interests of the State because the winning bid on a NIC basis does not necessarily result in the lowest true interest cost (TIC) -- a measure of the "true" cost of borrowing money that takes into account the time value of money. We recommend that the State Bond Committee review the current rules that govern the award of the State's competitive general obligation bond issues, and that municipalities be encouraged to do so as well, with a view toward awarding bond issues on the basis of TIC. (see pages 179 to 181).

Local Government Debt

Local governments in Alaska have issued approximately 29 percent of all State-wide debt. The analysis of local government borrowing in Chapter Five indicates that the bonds of Alaska's localities sell at yields significantly above the average for the overall market. Furthermore, the evidence indicates that yields on the North Slope Borough's debt are vastly higher than the average for other Alaska municipalities. The most significant comparison of local and State bond issuance is the markedly higher underwriting cost on local issues. Compared to other states, local governments in the Alaska rely on general obligation bond financing at twice the national rate. Given the high levels of debt that have been issued by the State's localities, the much higher than average interest costs of Alaska's local debt, and the loss to the State of revenues from taxes levied by certain localities to pay the annual debt service on their debt, the State may wish to analyze further local bond market experience and State policies regarding local debt management. The State

should take the lead in implementing programs that encourage the prudent use and guard against the misuse of local debt issuance.

Currently the State is being short-changed by those localities that levy a high amount of taxes on oil production property in order to finance debt service. Because taxes paid to the locality are credited towards State property tax liability, this represents a direct revenue loss to the State. It is, therefore, in the State's interest to address the absolute level of debt issuance by its localities. It is recommended that the State develop a two-tiered ceiling on local debt issuance, based on per capita amounts of debt and a percentage of property value.

Specific State-level programs which can assist local borrowers and improve local debt management are covered in pages 136 to 141. In evaluating alternative State policies, the State must consider both the direct budgetary costs of the programs and the indirect effects on the State's own credit worthiness, and the amount of autonomy the State wishes its localities to enjoy. A reasonable compromise between encumbering the State's debt capacity and providing greater financial assistance to local governments would be to expand the role of the Municipal Bond Bank. Our review of the Bank's market performance indicated that, compared with other state bond banks, the Alaska Bond Bank has the potential for saving as many as 50 basis points in borrowing cost by undertaking an active national marketing effort. The State should review the present security structure behind the Bank's bonds with the view toward improving their market reception by taking advantage of the State's high creditworthiness.

The State's present program to subsidize the cost of school construction is an expensive undertaking; however, its cost could be minimized through attention to the cost of the project and to the means of financing during the Department of Education's approval process. Further alternatives include the issuance of State general obligation bonds in lieu of local school construction bonds, and requiring the Municipal Bond Bank to issue all school construction debt.

Exhibit 2.4

Credit Ratings of Alaska Issuers

<u>Issuer</u>	<u>Moody's Rating</u>	<u>S&P's Rating</u>
State General Obligation	Aa	AA-
International Airports Revenue Bonds	A	A
AHFC-Home Improvement Loans	A	A-
Home Mortgage Revenue	Aa	AA-
Housing Mortgage Revenue	Aa	AA
Insured Mortgage Program	A	A
Veterans Housing	Aa	AA
AIDA	A	A-
Municipal Bond Bank	A	A
ASHA	A	A
University of Alaska	Baal	NR
Medical Facilities Authority	Baal	BBB-
Anchorage	A1	A
Fairbanks	A	BBB+
Fairbanks North Star Borough	A	A
Greater Anchorage Area Borough	A1	A
Sitka City and Borough	Baal	NR
Homer	Baa	NR
Juneau City and Borough	Baal	NR
Kenai Peninsula Borough	A	A
Ketchikan	Baal	BBB
Ketchikan Gateway Borough	Baal	BBB
Kodiak	Baa	NR
Kodiak Island Borough	Baal	BBB
Matanuska-Susitna Borough	A	BBB+
North Slope Borough	A	BBB+
Petersburg	Baal	NR
Valdez	A	A

Table 3.2

Volume of New Tax-Exempt Bond IssuesAlaska, 1970 - 1982

(dollar amounts in millions)

Year	Number	Total New Issues Amount	General Obligations		Revenue Bonds	
			Amount	Percent of Total	Amount	Percent of Total
1970	24	\$134.3	\$ 88.1	66%	\$ 46.2	34%
1971	24	135.5	107.5	79	28.0	21
1972	23	150.3	104.9	70	45.3	30
1973	28	222.0	130.5	59	91.5	41
1974	20	161.4	79.5	49	81.9	51
1975	32	279.9	182.7	65	97.2	35
1976	24	284.9	170.9	60	114.0	40
1977	25	1659.6	155.4	9	1504.2	91
1978	27	552.2	264.3	48	287.9	52
1979	19	591.1	198.8	34	392.3	66
1980	11	809.7	340.8	42	468.9	58
1981	16	501.8	150.6	30	351.2	70
1982	42	1397.5	885.9	63	511.6	37

Source: Public Securities Association

COMPOSITION OF STATE DEBT OUTSTANDING

SELECTED FISCAL YEARS

DEBT-GENERAL OBLIGATION

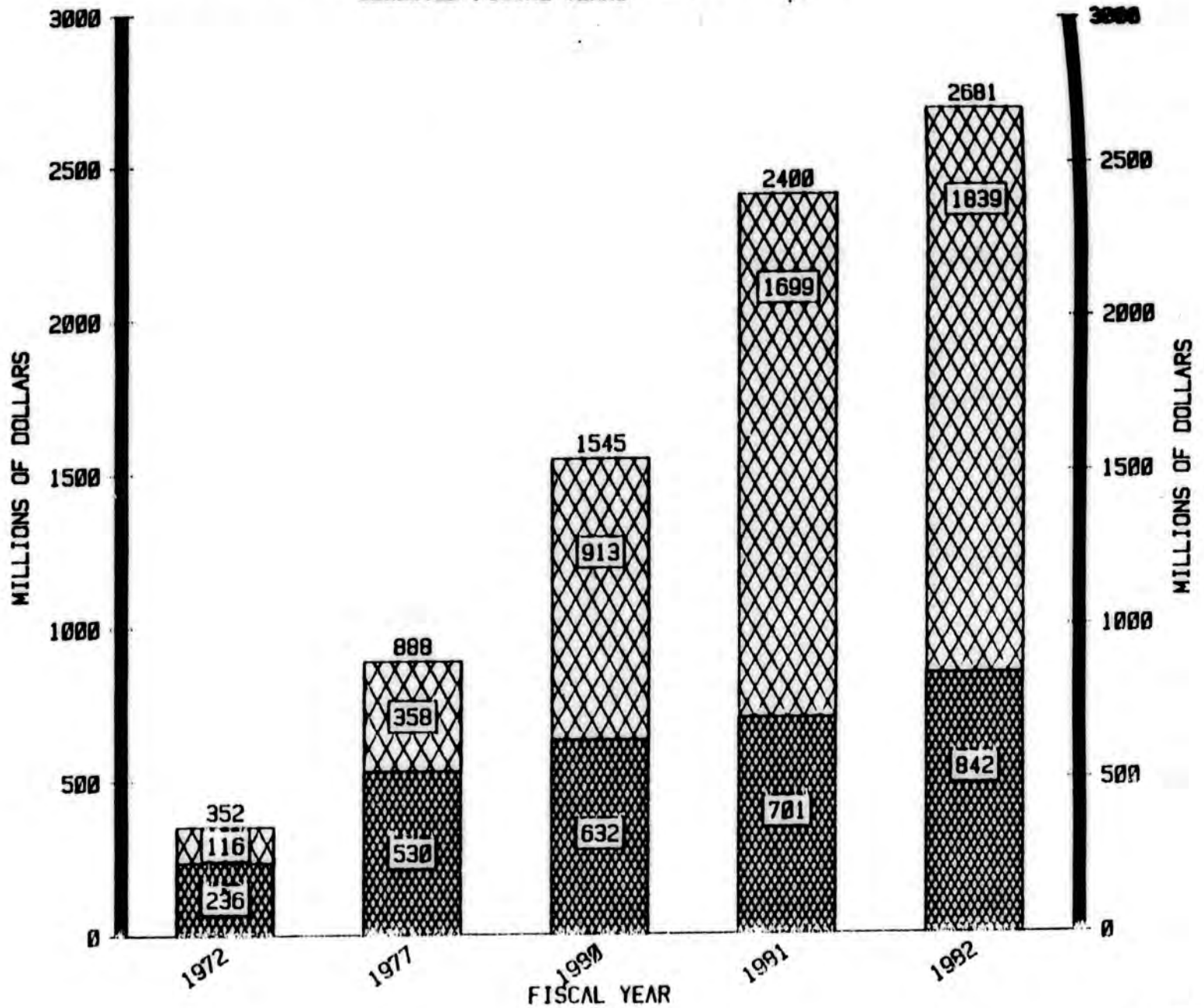


DEBT-OTHER



Exhibit 3.2

53



ALASKA

TOTAL STATE DEBT OUTSTANDING BY ISSUER
(DOLLARS IN 000'S AS OF APRIL 1, 1983)

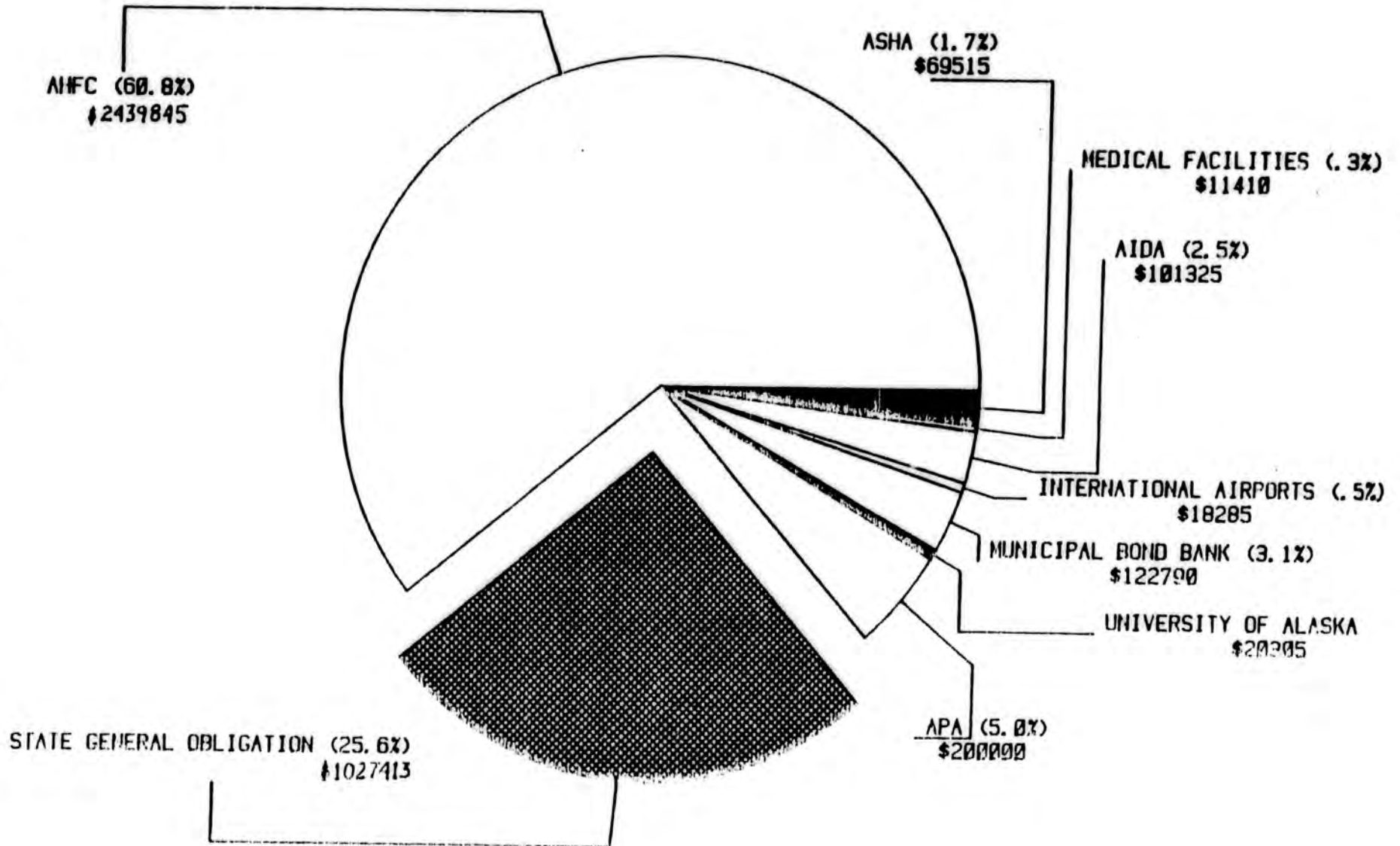


Exhibit 3.3

56

Table 3.5

State of Alaska
Total Public Debt Outstanding
(000s)

Issuer	Amount Outstanding as of 6/30/82	Amount Issued 6/30/82 to 6/1/83	Total/ Outstanding	Percent of State- Level Debt	Percent of State- Wide Debt
<u>STATE LEVEL</u>					
State General Obligation	\$ 842,413	\$185,000	\$1,027,413	24.8%	17.7%
Alaska Housing Finance Corp.	2,004,845	560,000	2,564,845	62.0	44.2
Alaska Power Authority	200,000	-0-	200,000	4.8	3.5
Municipal Bond Bank	94,805	26,985	122,790	3.1	2.1
Alaska Industrial Development Auth.	77,875	23,450	101,325	2.5	1.7
Alaska State Housing Agency	67,125	2,390	69,515	1.7	1.2
57 University of Alaska	20,305	-0-	20,305	0.5	0.5
International Airports	18,285	-0-	18,285	0.4	0.4
Medical Facilities	11,410	-0-	11,410	0.2	0.2
State Development Corporation	50	-0-	50	0.0	0.0
TOTAL STATE LEVEL OUTSTANDING			\$4,135,938	100.0%	
<u>LOCAL LEVEL</u>					
Municipal G.O.	\$1,316,300	N/A	\$1,316,300		22.7%
Municipal Revenue	347,536 ^{2/}	N/A	347,536		5.8
TOTAL LOCAL LEVEL OUTSTANDING			\$1,663,836		
TOTAL STATE-WIDE OUTSTANDING			\$5,799,774		100.0%

1/ This column does not account for debt retired between 6/30/82 and 4/1/83.
2/ FY 1981 Figure from Moody's Investors Service.

Table 3.16

State of Alaska Classification of Outstanding Debt
(amounts in millions)

	Amount Outstanding June 30, 1982	Amount Retired	Amount Issued	Amount Outstanding May 30, 1983	Percent of State-Level Debt
<u>Direct Debt</u>					
General Obligation Debt	\$842.2	\$81.2	\$185.0	\$946.2	23.5%
Alaska State Housing Auth. Lease-Revenue Bonds	67.1	3.7	-0-	63.4	1.6
University of Alaska	20.3	1.1	-0-	19.2	0.5
NET TAX-SUPPORTED DEBT	\$929.8	\$86.0	\$185.0	\$1,028.8	25.6%
<u>Indirect Debt (moral obligation)</u>					
Alaska Housing Finance Corp. State Guaranteed Veterans Housing Insured Mortgage Bonds	-0-	-0-	\$175.0	\$175.0	4.3%
Home Improvement Loan Bonds	\$963.3	\$ 10.6	-0-	952.7	23.6
Alaska Industrial Devel. Authority	15.0	-0-	-0-	15.0	0.4
Alaska Power Authority	77.9	3.3	23.4	98.0	2.4
Alaska Municipal Bond Bank	200.0	-0-	-0-	200.0	5.0
Alaska State Devel. Corporation	95.8	2.9	27.0	119.9	3.0
Low Income Housing Bonds	11.4	0.3	-0-	11.1	0.3
	-0-	-0-	2.4	2.4	0.0
<u>Indirect Debt (special obligation)</u>					
International Airport Authority	18.3	0.8	-0-	17.5	0.5%
TOTAL INDIRECT DEBT	\$1,381.8	\$ 17.9	\$227.8	\$1,591.6	39.5%
TOTAL DIRECT AND INDIRECT STATE DEBT	\$2,311.6	\$103.9	\$412.8	\$2,620.4	65.1%
<u>Other State-Level Debt</u>					
Alaska Housing Finance Corp. State Assisted Mortgage Bonds	\$675.0	-0-	\$200.0	\$875.0	21.7%
Housing Mortgage Program Bonds	96.2	\$ 2.2	-0-	94.0	2.3
Home Mortgage Bonds	200.0	-0-	185.0	385.0	9.6
Second Mortgage Bonds	27.0	-0-	-0-	27.0	0.6
Fairbanks Residential Mortgage	28.3	-0-	-0-	28.3	0.7
TOTAL OTHER STATE-LEVEL DEBT	\$1,026.5	\$ 2.2	\$385.0	\$1,409.3	34.9%
TOTAL STATE-LEVEL DEBT	\$3,338.1	\$106.1	\$797.8	\$4,029.7	100.0%

Table 5.1
 Estimated Alaska Municipal Debt
 (Millions)

<u>Fiscal Year</u>	<u>Amount of Revenue and G.O. Debt Issued</u>	<u>Amount Outstanding</u>		<u>Revenue Debt Outstanding as % of Total</u>
		<u>G.O.</u>	<u>Rev.</u>	
1971	78.7	\$ 30.9	\$ 56.3	19.6%
1972	88.9	279.2	81.0	22.5
1973	46.8	319.9	70.3	18.0
1974	85.3	345.1	77.6	16.4
1975	120.2	415.8	94.8	18.6
1976	70.1	452.5	99.4	18.0
1977	220.8	514.1	215.7	29.6
1978	178.2	449.5	277.7	38.2
1979	320.9	731.6	286.3	28.1
1980	250.0	809.4	316.0	28.1
1981	277.7	1,030.2	347.4	25.2
1982	515.0	1,316.2	N/A	N/A

Source: U.S. Department of Commerce, Bureau of the Census, Governmental Finances, various years, and Moody's Investors Service, Inc. Municipal Bond Record, 1983.

Table 5.2
State of Alaska
Local Government Debt

<u>City/Borough</u>	<u>General Obligation Debt Outstanding 7-1-82¹</u>	<u>Revenue- Supported Debt Outstanding² 12-31-81</u>	<u>Moody's Rating³</u>
North Slope	\$587,400,000	-0-	A
Anchorage	261,010,000	\$236,660,000	A1/Baa
Kenai Peninsula	98,999,603	-0-	A
Valdez	84,460,000	9,200,000	A
Fairbanks North Star	83,158,350	35,000,000	A/Aa
Matanuska-Susitna	65,218,090	-0-	A
Juneau	27,904,000	146,000	Baa1
Kodiak Island	20,042,372	-0-	Baa1
Sitka	17,486,200	5,168,000	Baa1
Ketchikan Gateway	14,495,000	-0-	Baa1
Fairbanks	11,915,000	36,400,000	A
Ketchikan City	8,110,000	12,567,000	Baa1/Baa
Bristol Bay	3,895,000	-0-	NR
Kenai	3,695,000	280,000	NR
Palmer City	3,629,401	-0-	NR
Unalaska	3,500,000	456,000	NR
Kodiak City	3,250,000	4,295,000	Baa
Petersburg	2,995,000	2,526,000	Baa1
Homer City	2,877,000	1,096,000	Baa
Nenana	2,725,000	-0-	NR
Wrangell	2,578,000	612,000	NR
Skagway	1,826,325	-0-	NR
Cordova	1,673,200	1,611,000	NR
Haines	923,310	-0-	NR
Haines City	805,000	-0-	NR
Bethel	585,000	-0-	NR
Nome	507,872	960,000	NR
Seldovia	430,000	55,000	NR
Dillingham	73,000	231,000	NR
Craig	37,498	93,000	NR
Totals	\$1,316,294,221	\$347,356,000	

- NOTES: 1. From Department of Community and Regional Affairs, Alaska Taxable 1982.
2. From Moody's Investors Service, Moody's Municipal and Government Manual 1983, and Department of Community and Regional Affairs.
3. When two ratings are given, the first applies to general obligation debt, and the second to the majority of revenue bonds.

NR = Not Rated.

Table 5.3
Municipal Debt Ratios

<u>City/Borough(population)</u>	<u>G.O. Debt Per Capita</u>	<u>Debt as % of Assessed Value</u>
North Slope *	\$77,781	7.10%
Anchorage *****	1,278	2.46
Kenai Peninsula ***	3,064	4.45
Valdez *	22,864	4.97
Fairbanks North Star ****	1,146	2.78
Matanuska-Susitna ***	2,508	5.42
Juneau **	1,267	2.69
Kodiak Island **	1,576	4.58
Sitka *	2,127	4.15
Ketchikan Gateway **	1,166	2.17
Fairbanks ***	463	1.12
Ketchikan City *	1,043	2.58
Bristol Bay *	3,064	4.45
Kenai *	706	1.80
Palmer City	1,438	3.93
Unalaska *	1,821	4.76
Kodiak City *	553	1.00
Petersburg *	985	2.32
Homer City *	993	1.85
Nenana *	5,046	30.39
Wrangell *	1,085	2.94
Skagway *	2,312	3.21
Cordova *	747	1.44
Haines *	499	1.30
Haines City *	746	0.23
Bethel *	159	0.41
Nome *	148	0.32
Seldovia *	590	2.26
Dillingham *	40	0.11
Craig *	62	0.17
Statewide Average	\$ 4,648	3.75%

Moody's Local Debt Medians
Population

*****	200-300,000	361	2.1%
****	50-100,000	391	1.8
***	25-50,000	289	1.9
**	10-25,000	422	2.7
*	Under 10,000	600	3.2

Source: Department of Community and Regional Affairs,
Alaska Taxable, Fiscal year 1982.

Table 5.4
State of Alaska
School Debt Outstanding
(as of April 1, 1983)

<u>School District</u>	<u>Amount</u>	<u>Moody's Rating</u>
A) Public Offerings ¹		
North Slope Borough	\$197,235,000	A
Greater Anchorage Area Borough	138,665,000	A1
Fairbanks North Star Borough	101,475,000	A
Kenai Peninsula Borough	56,938,000	A
Matanuska-Susitna Borough	37,995,000	A
Valdez	27,685,000	A
City and Borough of Juneau	3,325,000	Baal
Petersburg	2,995,000	Baal
Greater Sitka Borough	1,560,000	Baal
Kodiak Island Borough	375,000	Baal
Ketchikan Gateway Borough	<u>345,000</u>	Baal
	\$568,593,000	
B) School Bonds Issued Through Bond Bank ²		
City and Borough of Juneau	\$ 35,205,000	Baal
Matanuska-Susitna Borough	22,610,000	A
Kodiak Island Borough	11,810,000	Baal
Bristol Bay Borough	3,785,000	Unrated
City of Wrangell	1,405,000	Unrated
City of Unalaska	<u>975,000</u>	Unrated
	\$ 75,790,000	
Total School Debt Outstanding \$644,383,000		

NOTES: 1) Data through fiscal year 1981 from Moody's Municipal and Government Manual 1983, Moody's Investors Service. Fiscal Year 1981 to date from Public Securities Association data base.

2) Data from Mary J. Hughes, Foster & Marshall/American Express, Inc., Seattle, WA.

Table 7.1

Per Capita Total Outstanding State General Obligation Debt
(1974-75 to 1980-81)^a

State	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Alabama	\$24.74	\$26.63	\$30.32	\$35.74	\$32.90	\$33.27	\$30.66
Alaska	1,035.64	1,143.02	1,299.04	1,448.78	1,651.49	1,579.31	1,700.97
Arizona	--	--	--	--	--	--	--
Arkansas	--	--	--	--	--	--	--
California	264.63	260.86	260.46	260.90	265.92	266.93	255.65
Colorado	--	--	--	--	--	--	--
Connecticut	702.04	778.95	774.89	759.33	735.62	703.76	738.39
Delaware	739.48	974.36	702.28	707.79	715.02	676.27	681.10
Florida	20.99	25.64	51.13	71.64	71.59	63.51	116.68
Georgia	26.52	65.93	73.36	100.89	97.33	100.15	94.94
Hawaii	933.20	1,178.85	1,305.11	1,482.16	1,468.61	1,470.22	1,357.08
Idaho	1.53	1.41	1.27	1.13	.99	.84	.73
Illinois	86.71	122.18	145.30	191.11	216.62	228.72	250.28
Indiana	--	--	--	--	--	--	--
Iowa	.90	.45	--	--	--	--	--
Kansas	--	--	--	--	--	11.76	11.67
Kentucky	106.47	100.79	95.52	90.36	84.73	76.95	72.09
Louisiana	189.85	248.87	329.90	373.48	415.66	453.95	560.38
Maine	262.35	260.47	253.55	250.62	240.79	226.52	229.83
Maryland	340.96	415.02	499.45	524.05	519.50	502.94	519.68
Massachusetts	344.78	518.87	555.38	558.47	574.64	567.00	573.58
Michigan	53.23	63.02	80.93	77.31	69.43	73.06	72.89
Minnesota	156.14	152.73	186.76	205.03	210.10	219.97	224.73
Mississippi	219.07	283.60	303.58	505.52	317.92	298.43	291.74
Missouri	12.13	11.00	15.39	15.00	13.58	12.96	16.45
Montana	--	9.79	9.64	8.94	8.58	8.26	7.82
Nebraska	--	--	--	--	--	--	--
Nevada	54.38	56.06	57.25	103.49	157.38	133.72	123.55
New Hampshire	171.17	211.30	263.41	278.56	298.64	274.15	352.88
New Jersey	209.62	208.33	230.07	235.23	249.31	251.69	257.60
New Mexico	18.81	14.93	20.91	15.56	14.88	17.75	17.39
New York	207.58	198.59	207.94	221.65	232.78	215.37	228.96
North Carolina	74.49	103.23	114.65	105.47	116.14	124.36	128.24
North Dakota	26.96	25.03	23.17	21.25	19.20	17.38	15.20
Ohio	161.27	181.87	185.82	196.00	210.73	212.24	219.27
Oklahoma	68.53	65.33	62.11	85.16	79.83	65.37	54.45
Oregon	732.12	859.05	1,009.28	1,220.00	1,428.88	1,717.32	2,074.76
Pennsylvania	256.80	292.66	326.37	327.27	332.44	326.31	328.33
Rhode Island	295.23	297.90	293.55	298.25	297.85	264.32	237.46
South Carolina	170.58	172.53	175.29	202.26	189.09	160.73	159.71
South Dakota	--	--	--	--	--	--	--
Tennessee	114.92	135.36	161.31	171.15	159.90	141.88	145.32
Texas	58.86	65.74	69.21	57.29	65.64	63.86	59.49
Utah	20.73	72.64	56.61	60.74	73.24	60.57	58.30
Vermont	544.99	532.93	523.68	478.84	502.32	466.30	527.52
Virginia	10.54	9.26	8.01	6.79	5.65	4.41	42.45
Washington	115.10	112.23	303.07	307.21	317.22	320.25	334.36
West Virginia	375.25	406.16	463.25	465.63	612.40	474.45	474.18
Wisconsin	133.57	194.38	259.92	304.68	343.26	362.25	362.93
Wyoming	--	--	--	--	--	--	--
Total U.S.	\$158.88	\$179.55	\$198.93	\$212.89	\$220.04	\$218.55	\$229.31

a. Debt data from the U.S. Department of Commerce, Bureau of the Census, State Government Finances (series GF), various years. State general obligation debt is defined as all state-guaranteed debt for which states pledge their full faith and credit. Debt data measured as of June 30 of each fiscal year shown. Figures exclude debt issued by local governments, and debt issued by the District of Columbia.

Reprinted from : The Use of Tax-Exempt Bonds in California : Policy Issues and Recommendations, Legislative Analyst, Jon David Vasche, State of California, December 1982.

Table 7.2

Per Capita Total Outstanding State General Obligation and Revenue Bond Debt
(1974-75 to 1980-81)^a

State	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Alabama	\$247.88	\$267.71	\$270.23	\$268.22	\$279.49	\$265.38	\$236.97
Alaska	1,872.88	2,044.06	2,246.53	2,744.65	3,355.98	3,861.39	5,824.03
Arizona	39.71	40.92	44.79	41.29	39.25	34.59	50.04
Arkansas	58.20	61.36	65.56	81.06	112.04	158.61	205.49
California	304.98	300.03	307.88	316.90	338.24	353.28	371.24
Colorado	48.20	48.77	74.61	114.73	153.75	159.40	240.44
Connecticut	943.57	989.66	1,021.38	1,064.98	1,152.79	1,248.13	1,407.59
Delaware	1,024.04	1,267.19	1,276.13	1,313.93	1,469.00	1,755.46	1,778.93
Florida	193.57	208.41	236.22	270.64	301.47	269.70	276.51
Georgia	233.21	259.62	252.33	265.17	267.87	257.70	247.26
Hawaii	1,342.02	1,479.02	1,664.36	1,878.24	1,854.48	1,931.83	1,889.50
Idaho	48.57	47.18	25.91	147.16	244.04	346.75	395.10
Illinois	250.33	299.48	360.92	457.72	509.21	549.76	603.71
Indiana	115.82	112.59	109.75	110.39	107.49	110.67	187.25
Iowa	44.28	43.49	42.70	78.19	128.45	130.79	151.36
Kansas	133.93	176.74	172.81	179.75	193.81	185.42	176.29
Kentucky	579.41	580.56	588.41	749.99	796.85	829.08	826.93
Louisiana	319.85	375.48	449.62	513.29	656.28	708.14	809.84
Maine	434.82	499.39	520.36	639.18	634.05	649.13	735.66
Maryland	509.12	610.56	737.33	914.57	889.64	830.70	933.99
Massachusetts	682.06	859.87	895.92	876.72	938.55	1,008.35	1,088.31
Michigan	183.20	206.87	213.50	234.25	272.13	314.98	377.12
Minnesota	222.40	256.90	309.48	439.94	461.51	507.70	585.34
Mississippi	261.00	326.66	339.79	538.35	347.11	323.30	313.71
Missouri	58.06	70.09	91.32	114.39	146.21	207.01	270.25
Montana	108.97	112.51	132.02	174.63	187.02	393.31	382.35
Nebraska	44.42	41.19	37.99	35.70	33.46	126.97	156.18
Nevada	87.20	87.15	86.12	369.91	494.39	660.79	656.33
New Hampshire	305.26	366.46	247.27	483.41	832.67	976.17	1,109.82
New Jersey	531.42	548.88	554.58	646.99	734.11	886.31	1,029.17
New Mexico	133.27	159.36	177.46	283.77	414.10	544.45	573.95
New York	811.21	1,137.00	1,119.93	1,261.99	1,302.29	1,346.48	1,400.80
North Carolina	113.56	129.73	146.26	139.66	197.53	215.48	226.99
North Dakota	98.92	108.32	103.42	124.70	199.07	335.80	322.19
Ohio	248.12	283.07	299.14	320.53	349.01	371.86	437.32
Oklahoma	346.70	342.11	334.14	388.47	522.46	504.38	559.06
Oregon	732.12	859.05	1,017.26	1,267.82	1,507.23	1,855.79	2,225.54
Pennsylvania	453.09	498.70	541.43	554.40	549.66	534.92	533.20
Rhode Island	494.13	546.39	686.31	924.35	1,267.92	1,544.98	1,810.18
South Carolina	331.26	368.28	457.25	607.48	542.33	621.11	779.00
South Dakota	99.15	133.58	335.56	560.15	841.50	1,035.18	1,010.64
Tennessee	185.44	224.66	280.52	319.21	317.04	306.24	319.41
Texas	158.07	165.61	166.00	162.70	177.16	173.50	179.61
Utah	73.73	122.92	114.06	220.63	287.53	367.61	380.96
Vermont	975.91	882.96	941.09	947.54	1,035.74	1,280.15	1,305.04
Virginia	138.58	140.73	170.68	242.56	319.95	360.32	394.40
Washington	357.01	338.76	382.28	380.98	385.84	387.51	425.25
West Virginia	589.38	640.81	720.36	746.06	871.61	931.53	944.06
Wisconsin	219.43	294.64	361.68	425.10	473.30	519.87	546.35
Wyoming	205.00	192.18	180.05	236.53	480.16	770.48	915.65
Total U.S.	\$339.68	\$394.32	\$418.14	\$471.46	\$509.20	\$539.96	\$588.06

a. Debt data from the U.S. Department of Commerce, Bureau of the Census, State Government Finances (series GF), various years. Debt data measured as of June 30 of each fiscal year shown. Figures exclude debt issued by local governments, and debt issued by the District of Columbia.

Reprinted from : The Use of Tax-Exempt Bonds in California : Policy Issues and Recommendations, Legislative Analyst, Jon David Vasche, State of California, December 1982.

Table 7.4

Total Outstanding State General Obligation Debt
Per \$1,000 of Personal Income
(1974-75 to 1980-81)^a

State	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Alabama	\$5.30	\$5.13	\$5.32	\$5.61	\$4.70	\$4.43	\$3.73
Alaska	110.75	109.78	122.12	136.54	146.81	123.00	123.66
Arizona	--	--	--	--	--	--	--
Arkansas	--	--	--	--	--	--	--
California	39.72	35.71	32.48	29.29	26.41	24.34	21.44
Colorado	--	--	--	--	--	--	--
Connecticut	102.72	105.12	95.26	83.94	71.29	59.91	57.62
Delaware	112.76	136.78	91.68	84.00	75.87	65.19	61.34
Florida	3.65	4.13	7.46	9.39	8.32	6.98	11.48
Georgia	5.19	11.71	11.93	14.62	12.64	12.38	10.63
Hawaii	139.61	165.99	165.95	173.02	154.94	145.14	123.01
Idaho	.29	.24	.20	.16	.13	.10	.08
Illinois	12.67	16.51	17.93	21.44	21.99	21.68	21.62
Indiana	--	--	--	--	--	--	--
Iowa	.15	.07	--	--	--	--	--
Kansas	--	--	--	--	--	1.18	1.08
Kentucky	21.88	18.65	16.06	13.77	11.63	10.08	8.56
Louisiana	38.92	45.54	54.52	54.81	53.86	53.54	58.88
Maine	54.46	47.89	43.20	38.79	33.30	28.51	26.93
Maryland	52.57	58.68	65.35	61.23	54.26	47.96	45.28
Massachusetts	55.65	77.74	76.57	70.16	64.12	55.86	51.54
Michigan	8.87	9.35	10.68	9.15	7.40	7.33	6.76
Minnesota	26.62	24.24	26.16	25.97	23.66	22.56	20.82
Mississippi	53.68	62.11	59.48	89.59	50.73	45.25	39.38
Missouri	2.22	1.84	2.48	2.05	1.64	1.44	1.71
Montana	--	1.69	1.57	1.24	1.08	.97	.83
Nebraska	--	--	--	--	--	--	--
Nevada	8.08	7.52	6.87	10.88	14.84	12.43	10.67
New Hampshire	31.31	34.80	39.40	37.29	35.59	29.95	35.33
New Jersey	30.78	28.19	28.62	26.62	25.41	22.96	21.24
New Mexico	3.87	2.77	3.55	2.34	2.02	2.26	2.04
New York	31.72	28.40	27.61	26.86	25.42	20.93	19.97
North Carolina	15.02	18.85	19.31	15.90	15.79	15.87	14.83
North Dakota	4.39	4.23	3.80	2.77	2.32	1.98	1.49
Ohio	27.66	28.26	26.08	24.92	24.06	22.38	21.26
Oklahoma	12.98	11.23	9.59	11.63	9.54	7.15	5.31
Oregon	125.79	132.13	141.49	152.29	161.87	183.91	207.35
Pennsylvania	43.71	45.53	46.49	42.47	38.39	34.51	31.66
Rhode Island	51.47	47.40	42.74	39.06	34.49	27.89	23.39
South Carolina	36.50	33.30	30.74	32.18	27.31	22.06	19.87
South Dakota	--	--	--	--	--	--	--
Tennessee	23.66	25.27	27.56	26.02	21.81	18.33	17.20
Texas	10.52	10.54	10.01	8.68	7.45	6.67	5.54
Utah	4.20	13.33	11.11	9.16	10.04	7.90	7.01
Vermont	109.60	97.66	89.63	73.31	68.92	59.38	60.53
Virginia	1.81	1.46	1.14	.88	.65	.47	4.10
Washington	18.19	16.10	39.88	35.50	32.75	30.99	29.65
West Virginia	75.88	74.08	77.03	70.70	82.48	60.69	56.60
Wisconsin	23.80	31.70	37.99	40.36	40.16	38.65	36.17
Wyoming	--	--	--	--	--	--	--
Total U.S.	\$26.79	\$27.71	\$27.98	\$26.96	\$24.90	\$22.82	\$21.86

a. Debt data from the U.S. Department of Commerce, Bureau of the Census, State Government Finances (series GF), various years. State general obligation debt is defined as all state-guaranteed debt for which states pledge their full faith and credit. Debt data measured as of June 30 of each fiscal year shown. Figures exclude debt issued by local governments, and debt issued by the District of Columbia.

Reprinted from : The Use of Tax-Exempt Bonds in California : Policy Issues and Recommendations, Legislative Analyst, Jon David Vasche, State of California, December 1982.

Table 7.5

Total Outstanding State General Obligation and Revenue Bond Debt
Per \$1,000 of Personal Income
(1974-75 to 1980-81)^a

State	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Alabama	\$53.08	\$51.57	\$47.45	\$42.12	\$39.92	\$35.36	\$40.99
Alaska	200.29	196.31	211.19	258.67	298.34	300.73	423.47
Arizona	7.31	6.83	6.81	5.59	4.59	3.92	5.13
Arkansas	12.74	12.23	11.83	13.02	15.93	21.78	25.55
California	45.78	41.07	38.39	35.57	33.60	32.22	31.14
Colorado	7.94	7.38	10.33	14.11	16.73	15.86	21.44
Connecticut	138.06	133.55	125.56	117.73	111.73	106.25	109.83
Delaware	156.15	177.88	166.60	155.93	155.87	169.23	160.21
Florida	33.66	33.55	34.47	35.46	35.02	29.62	27.20
Georgia	45.65	46.10	41.03	38.41	34.78	31.77	27.68
Hawaii	200.77	208.25	211.63	219.25	195.65	190.71	171.26
Idaho	9.07	8.11	4.09	20.83	31.74	42.92	44.19
Illinois	36.59	40.48	44.53	51.34	51.70	52.12	52.16
Indiana	20.44	17.86	15.85	14.45	12.67	12.35	19.27
Iowa	7.34	6.87	6.11	9.68	14.75	13.94	14.45
Kansas	22.14	27.03	24.36	22.49	21.21	18.53	16.31
Kentucky	119.10	107.44	98.92	114.31	109.37	108.64	98.20
Louisiana	65.56	68.70	74.31	75.33	85.04	83.52	85.09
Maine	90.26	91.83	88.66	98.93	87.69	81.69	86.20
Maryland	78.50	86.33	86.48	106.86	92.91	79.22	81.38
Massachusetts	110.09	128.84	123.52	110.14	104.72	99.34	97.79
Michigan	30.50	30.69	28.18	27.73	28.99	31.58	34.95
Minnesota	37.92	40.77	43.35	55.73	51.98	52.08	54.36
Mississippi	63.96	71.53	66.58	95.41	55.39	49.02	42.35
Missouri	10.63	11.75	13.83	15.65	17.68	22.99	28.00
Montana	20.03	19.44	21.52	24.15	23.60	45.98	40.65
Nebraska	7.39	6.65	5.61	4.69	3.89	13.53	15.07
Nevada	13.04	11.69	10.33	38.91	46.62	61.41	56.70
New Hampshire	55.83	60.36	63.92	64.69	99.23	106.56	111.10
New Jersey	78.02	74.26	68.98	73.21	74.82	80.85	84.87
New Mexico	27.42	29.59	30.11	42.65	56.13	69.26	67.31
New York	123.95	162.61	148.73	152.90	142.19	130.86	122.17
North Carolina	22.90	23.68	24.64	21.06	26.85	27.49	26.24
North Dakota	16.11	18.32	16.94	16.24	24.00	38.31	31.52
Ohio	42.56	43.98	41.99	40.75	39.85	39.20	42.41
Oklahoma	65.69	59.06	51.62	53.04	62.42	55.19	54.55
Oregon	125.79	132.13	142.61	158.26	170.74	198.73	222.42
Pennsylvania	77.12	77.59	77.12	71.95	63.48	56.57	51.42
Rhode Island	86.15	86.94	99.93	121.05	146.82	163.02	178.29
South Carolina	70.88	71.09	80.20	96.66	78.33	85.24	96.91
South Dakota	19.39	26.28	57.27	83.73	112.04	132.08	114.48
Tennessee	38.17	41.94	47.93	48.53	43.24	39.58	37.81
Texas	28.26	26.56	24.01	20.98	19.64	18.13	16.74
Utah	14.93	22.56	19.03	33.25	39.42	47.94	45.83
Vermont	196.26	161.80	161.07	145.06	142.12	163.01	149.74
Virginia	23.85	22.15	24.36	31.25	36.97	38.27	38.11
Washington	56.43	48.61	50.31	44.03	39.83	37.50	37.71
West Virginia	119.17	116.88	119.79	113.28	117.39	119.17	112.70
Wisconsin	39.10	48.06	52.87	56.32	55.38	55.47	54.45
Wyoming	33.21	28.08	23.68	27.25	48.60	70.44	78.51
Total U.S.	\$57.27	\$60.85	\$58.81	\$59.71	\$57.61	\$56.39	\$56.06

a. Debt data from the U.S. Department of Commerce, Bureau of the Census, *State Government Finances* (series GF), various years. Debt data measured as of June 30 of each fiscal year shown. Figures exclude debt issued by local governments, and debt issued by the District of Columbia.

Reprinted from : *The Use of Tax-Exempt Bonds in California : Policy Issues and Recommendations*, Legislative Analyst, Jon David Vasche, State of California, December 1982.

Table 7.14
Alaska State General Obligation Debt
Projected Ratio of Debt
Service to General Fund Revenues

<u>Fiscal Year</u>	<u>Unrestricted General Fund Revenue (1) (millions)</u>	<u>Debt Service Committed as of Dec. 1982 (millions)</u>	<u>Debt Service Commitment as % of Unrestricted General Fund Revenue</u>
1983	\$3542	\$143.6	4.05%
1984	2737	163.4	5.97
1985	2772	156.2	5.63
1986	2838	150.6	5.31
1987	2960	142.8	4.82
1988	2871	136.3	4.75
1989	3065	124.5	4.06
1990	2946	109.8	3.73
1991	2704	85.6	3.17
1992	2631	58.9	2.24
1993	2519	50.9	2.02
1994	2423	25.8	1.06
1995	2359	23.1	0.98
1996	2206	21.5	0.97
1997	2230	16.7	0.75
1998	2261	14.4	0.64
1999	2259	9.1	0.40
2000	2268	2.6	0.11

(1) March, 1983, 30th percentile projections of The Department of Revenue.

Table 7.15

Alaska State General Obligation Debt

Future Debt Capacity
Debt Service at 5 Percent of
General Fund Revenues
(millions)

Fiscal Year	(1) Unrestricted General Fund Revenue ¹	(2) Available for Debt Service ²	(3) Debt Service Committed as of Dec. 1982	(4) Debt Service on future Borrowing ³	(5) Additional Debt Service Capacity	(6) Future G.C. Debt Capacity ⁴
1983	3542	-	143.6	-	0	0
1984	2737	137	163.4	-	0	0
1985	2772	139	156.2	-	0	0
1986	2838	142	150.6	-	0	0
1987	2960	148	142.8	-	5.2	35
1988	2871	144	136.3	5.2	2.5	17
1989	3065	153	124.5	7.7	20.8	141
1990	2946	147	109.8	28.5	8.7	59
1991	2704	135	85.6	37.2	12.2	83
1992	2631	132	58.9	49.4	23.7	161
1993	2519	126	50.9	75.1	2.0	14
1994	2423	121	25.8	75.1	13.4	91
1995	2359	118	23.1	88.5	0	0
1996	2206	110	21.5	68.5	0	0
1997	2230	111	16.7	83.3	11.0	75
1998	2261	113	14.4	91.8	6.8	46
1999	2259	113	9.1	77.8	26.1	177
2000	2268	113	2.6	95.2	15.2	103
					1476	1002

- 1 March 1983, 30th percentile projections of the Department of Revenue.
- 2 5 percent of column 1.
- 3 Assumes that debt equal to full capacity (column 6) is issued.
- 4 10-year bonds at 8.0 percent (AA-rated) level amortization debt service constant is .1472 (e.g., column 5 ÷ .1472 = column 6).

Table 7.16

Alaska State General Obligation Bonds

Future Debt Capacity
Debt Service at 10 Percent of
General Fund Revenues
(millions)

Fiscal Year	(1) Unrestricted General Fund Revenue ¹	(2) Available for Debt Service ²	(3) Debt Service Committed as Dec. 1982	(4) Debt Service on future Borrowing ³	(5) Additional Debt Service Capacity	(6) Future G.O. Debt Capacity ⁴
1983	3542	354	143.6	0	0	0
1984	2737	274	163.4	0	110.6	729
1985	2772	277	156.2	110.6	10.2	67
1986	2838	284	150.6	120.8	12.6	83
1987	2960	296	142.8	133.4	17.3	114
1988	2871	287	136.3	150.7	0	0
1989	3065	306	124.5	150.7	30.8	203
1990	2946	295	109.8	181.5	2.9	19
1991	2704	270	85.6	184.4	0	0
1992	2631	263	58.9	184.4	16.7	110
1993	2519	252	50.9	201.1	0	0
1994	2423	242	25.8	201.1	15.1	99
1995	2359	236	23.1	212.9	104.1	686
1996	2206	221	21.5	199.5	0	0
1997	2230	223	16.7	186.9	19.4	128
1998	2261	226	14.4	189.0	22.6	149
1999	2259	226	9.1	211.6	5.3	35
2000	2268	227	2.6	186.1	38.3	252
					4,059	2,674

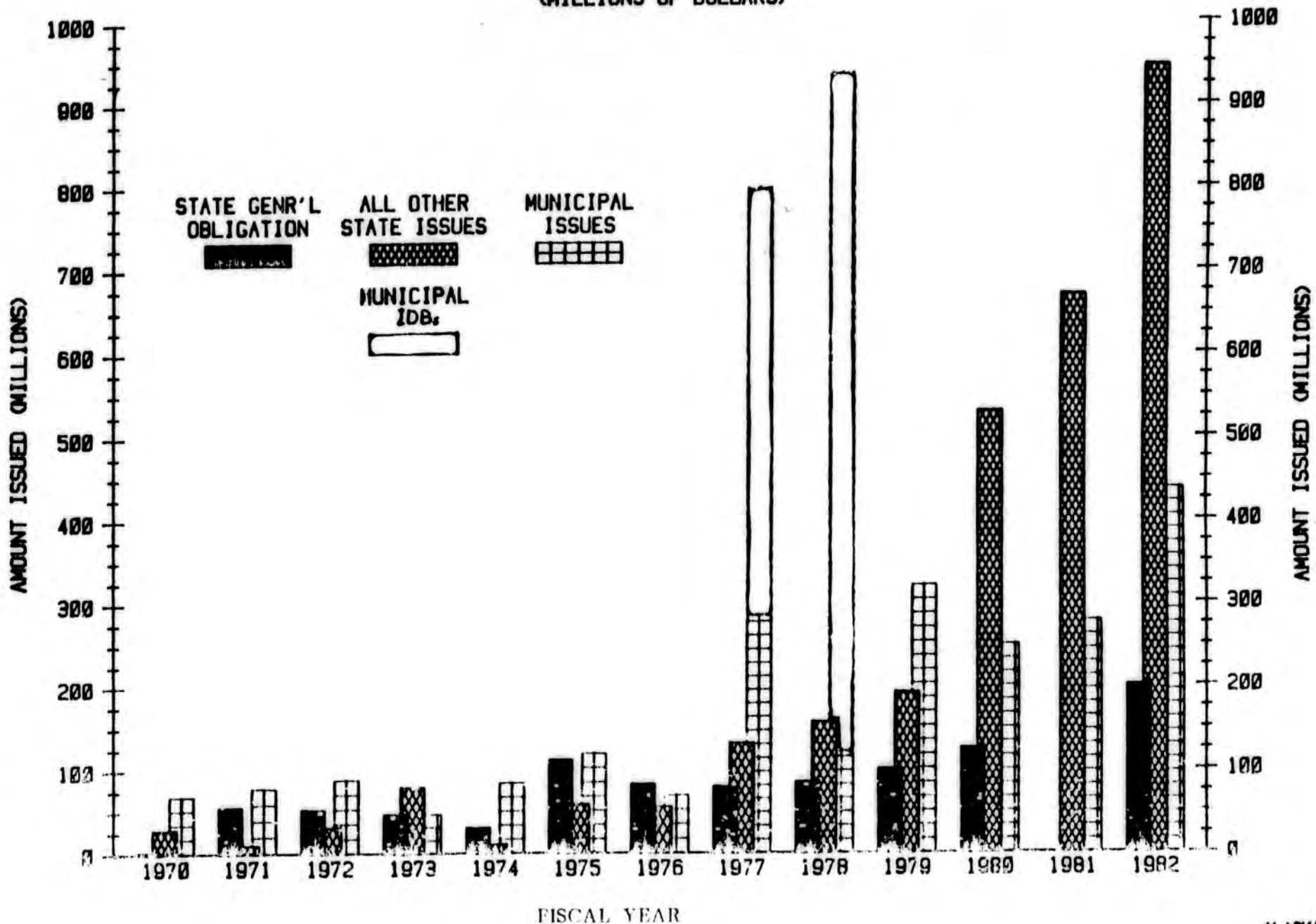
1 March 1983, 30th percentile projections of the Department of Revenue.

2 10 percent of column 1.

3 Assumes that debt equal to full capacity (column 6) is issued.

4 10-year bonds at 8.7 percent (A-rated), level amortization debt service constant .1518 (e.g., column 5 ÷ .1518 = column 6).

ANNUAL STATE DEBT ISSUANCE 1970 TO 1982 (MILLIONS OF DOLLARS)



(4) make, execute, acknowledge, and deliver documents of transfer and conveyance and instruments necessary or appropriate to carry out the powers granted;

(5) register investments held in a fund in the name of the board having the power to approve investments for a fund;

(6) do all acts whether or not expressly authorized which are considered proper for the protection of the investments held in the funds. (§ 4 ch 182 SLA 1978)

Chapter 15. State Bonding Act.

Article

1. General Obligation Bonds (§§ 37.15.010 — 37.15.220)
2. Bond Anticipation Notes (§§ 37.15.300 — 37.15.390)
3. International Airports Revenue Bonds (§§ 37.15.410 — 37.15.550)

Article 1. General Obligation Bonds.

Section

10. Full faith and credit for general obligation bonds
15. Committee shall publish notice of existing state indebtedness before election
20. Manner and amounts of sale
30. Interest rate and maturity
40. Sale of bonds
50. Redemption
60. Form and registration of bonds
70. Place of payment
80. Signatures and seal
90. Terms and conditions
100. Trustee
110. Creation and membership of state bond committee
120. Regulations

Section

130. Officers, records and proceedings
140. Duties of state bond committee
150. Committee may employ special services
155. Prohibited bidding on bonds and anticipation notes
160. Contents of resolution
170. State bond committee to certify annual principal, interest, and reserve requirements
180. Remedies of bondholders
190. Negotiability
200. Bonds as legal investments
210. Refunding bonds
215. Official statements
220. Short title

Sec. 37.15.010. Full faith and credit for general obligation bonds. The full faith, credit and resources of the state are hereby pledged to the payment of the principal of and interest and redemption premium, if any, on all general obligation bonds of the state authorized pursuant to art. IX, § 8 of the constitution. (§ 1 ch 175 SLA 1960; am § ch 104 SLA 1967)

Revisor's note. — The following laws relate to issuance of general obligation bonds under the provisions of this chapter.

Ch. 170, SLA 1960, and ch. 50, SLA 1961, provide for the issuance of bonds in the amount of \$23,000,000 for ferries and ferry facilities and roads and highways.

Ch. 171, SLA 1960, and ch. 54, SLA 1961, provide for the issuance of bonds in the

amount of \$1,500,000 for vocational education schools.

Ch. 172, SLA 1960, and ch. 54, SLA 1961, provide for the issuance of bonds in the amount of \$2,000,000 for gymnasium and general utility facilities for the University of Alaska.

Ch. 173, SLA 1960, ch. 66, SLA 1961, and ch. 100, SLA 1962, provide for the issuance

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of bonds in the amount of \$2,500,000 for hospital construction and equipment matching funds.

Ch. 174, SLA 1960, and ch. 65, SLA 1961, provide for the issuance of bonds in the amount of \$1,500,000 for state bush airfields.

Ch. 121, SLA 1962, provides for the issuance of bonds in the amount of \$5,950,000 for construction of academic and related facilities at the University of Alaska.

Ch. 122, SLA 1962, provides for the issuance of bonds in the amount of \$5,000,000 for certain elementary and secondary public schools.

Ch. 123, SLA 1962, provides for the issuance of bonds in the amount of \$4,175,000 for trunk airports.

Ch. 157, SLA 1962, provides for the issuance of bonds in the amount of \$2,200,000 for a vocational education school.

Ch. 57, SLA 1963, providing for the issuance of bonds in the amount of \$2,200,000 for a vocational education school, affects ch. 157, SLA 1962, relating to the issuance of bonds for a vocational education school.

Ch. 48, SLA 1964, as amended by ch. 68, SLA 1966, and ch. 28, SLA 1967, provide for the issuance of bonds in the amount of \$8,185,000 to meet the effects of the March 27, 1964, earthquake.

Ch. 94, SLA 1964, provides for the issuance of bonds in the amount of \$2,000,000 for a branch of the Alaska Pioneers' Home at Fairbanks.

Ch. 118, SLA 1964, and ch. 96, SLA 1965, provide for the issuance of bonds in the amount of \$5,000,000 for state buildings for use by the Department of Health and Welfare.

Ch. 86, SLA 1966, provides for the issuance of bonds in the amount of \$900,000 to provide outdoor recreation facilities.

Ch. 121, SLA 1966, provides for the issuance of bonds in the amount of \$2,285,000 for elementary and secondary public schools throughout the state.

Ch. 134, SLA 1966, provides for the issuance of bonds in the amount of \$15,500,000 for state ferries and ferry facilities.

Ch. 165, SLA 1966, provides for the issuance of bonds in the amount of \$16,900,000 for buildings for the University of Alaska throughout the state.

Ch. 166, SLA 1966, provides for the issuance of bonds in the amount of \$10,500,000 for highways and roads in the state.

Ch. 167, SLA 1966, provides for the issuance of bonds in the amount of \$11,500,000 for trunk, secondary and bush airports owned or operated by the state or its political subdivisions.

Ch. 168, SLA 1966, provides for the issuance of bonds in the amount of \$5,000,000 for regional high schools throughout the state.

Ch. 73, SLA 1967, and ch. 142, SLA 1968, provide for the issuance of bonds in the amount of \$5,000,000 and \$11,200,000, respectively, for highways and roads in the state.

Ch. 91, SLA 1968, provides for the issuance of bonds in the amount of \$2,000,000 for a branch of the Alaska Pioneers' Home in the Southcentral area.

Ch. 146, SLA 1968, provides for the issuance of bonds in the amount of \$1,200,000 for public or other nonprofit community hospitals and other medical facilities at various locations in the state.

Ch. 167, SLA 1968, provides for the issuance of bonds in the amount of \$8,800,000 for trunk, secondary and bush airports owned or operated by the state or its political subdivisions.

Ch. 207, SLA 1968, provides for the issuance of bonds in the amount of \$10,000,000 for elementary and secondary public schools at various locations in the state.

Ch. 224, SLA 1968, provides for the issuance of bonds in the amount of \$8,500,000 for buildings, facilities and utilities at the University of Alaska.

Ch. 226, SLA 1968, provides for the issuance of bonds in the amount of \$18,000,000 for state ferries. This bond issue was not approved by the voters.

Ch. 227, SLA 1968, provides for the issuance of bonds in the amount of \$3,000,000 for fish hatcheries in the state.

Ch. 147, SLA 1970, as amended by ch. 220, SLA 1970, provides for the issuance of bonds in the amount of \$11,000,000 for capital improvements for water supply and sewerage systems.

Ch. 170, SLA 1970, provides for the issuance of bonds in the amount of \$20,300,000 for certain elementary and secondary public schools within the state.

Ch. 173, SLA 1970, provides for the issuance of bonds for facilities at Anchorage and Fairbanks International Airports.

Ch. 180, SLA 1970, provides for the issuance of bonds in the amount of \$3,000,000 for making capital improvements to Alaska Remote Housing Program.

Ch. 181, SLA 1970, provides for the issuance of bonds in the amount of \$2,300,000 for making capital improvements to state recreational facilities.

Ch. 182, SLA 1970, provides for the issuance of bonds in the amount of \$29,200,000 for making capital improvements to highways and roads in the state.

Ch. 183, SLA 1970, provides for the issuance of bonds in the amount of \$8,600,000 for making capital improvements to state correctional buildings for use by the Department of Health and Welfare.

Ch. 190, SLA 1970, provides for the issuance of bonds in the amount of \$5,600,000 for making capital improvements to mental health facilities, health and child care centers.

Ch. 221, SLA 1970, provides for the issuance of bonds in the amount of \$5,500,000 for making capital improvements to highway maintenance facilities.

Ch. 222, SLA 1970, provides for the issuance of bonds in the amount of \$10,000,000 for making capital improvements to certain airports in the state.

Ch. 223, SLA 1970, provides for the issuance of bonds in the amount of \$21,000,000 for making capital improvements to the state ferry system.

Ch. 224, SLA 1970, provides for the issuance of bonds in the amount of \$29,700,000 for making capital improvements to buildings, facilities, and utilities at the University of Alaska and community colleges.

Ch. 97, SLA 1972, provides for the issuance of bonds in the amount of \$3,500,000 for the purpose of matching federal funds under the Hill-Burton hospital construction program.

Ch. 99, SLA 1972, provides for the issuance of bonds in the amount of \$10,000,000 for paying the cost of capital improvements for highway construction.

Ch. 150, SLA 1972, provides for the issuance of bonds in the amount of \$11,500,000 for paying the cost of capital improvements for civic, convention and community recreation centers and all-weather sports facilities. This bond issue was not approved by the voters.

Ch. 177, SLA 1972, provides for the issuance of bonds in the amount of \$18,000,000 for paying the cost of capital improvements for the University of Alaska.

Ch. 194, SLA 1972, provides for the issuance of bonds in the amount of \$24,000,000 for paying the cost of capital improvements for airports.

Ch. 195, SLA 1972, provides for the issuance of bonds in the amount of \$16,000,000 for paying the cost of acquiring, constructing and equipping state-operated schools.

Ch. 201, SLA 1972, provides for the issuance of bonds in the amount of \$20,000,000 for paying the cost of capital improvements for flood control and small boat harbor projects.

Ch. 202, SLA 1972, provides for the issuance of bonds in the amount of \$33,000,000 for paying the cost of capital improvements for water supply and sewerage systems.

Ch. 2, SLA 1973, provides for the issuance of bonds in the amount of \$11,500,000 for paying the cost of capital improvements for civic, convention and community recreation centers. This bond issue was rejected by the voters at the special election held March 6, 1973.

Ch. 62, SLA 1974, provides for the issuance of bonds in the amount of \$2,700,000 for paying the cost of fire protection facilities.

Ch. 36, SLA 1974, provides for the issuance of bonds in the amount of \$22,500,000 to fund port facilities development grants under ch. 85, SLA 1974.

Ch. 116, SLA 1974, provides for the issuance of bonds in the amount of \$7,900,000 to pay the cost of library resource centers and community libraries.

Ch. 118, SLA 1974, provides for the issuance of bonds in the amount of \$10,400,000 to pay the cost of trunk and secondary airport construction.

Ch. 122, SLA 1974, provides for the issuance of bonds in the amount of \$37,300,000 to pay for highway, ferry and local service road and trail construction.

Ch. 132, SLA 1974, provides for the issuance of bonds in the amount of \$10,900,000 to pay the state share under the Hill-Burton Act hospital construction program and for nursing homes.

Ch. 133, SLA 1974, provides for the issuance of bonds in the amount of \$10,500,000 to pay the cost of fish and game management, development and enforcement facilities.

Ch. 135, SLA 1974, provides for the issuance of bonds in the amount of \$7,515,000 to pay the cost of constructing and equipping Pioneers' Homes.

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Ch. 142, SLA 1974, provides for the issuance of bonds in the amount of \$40,337,000 to pay the cost of rural school construction.

Ch. 144, SLA 1974, provides for the issuance of bonds in the amount of \$39,523,000 to pay the cost of capital improvements for the University of Alaska.

Ch. 124, SLA 1976, provides for the issuance of bonds in the amount of \$7,100,000 for paying the cost of regional fire fighter training centers.

Ch. 131, SLA 1976, provides for the issuance of bonds in the amount of \$59,290,000 for paying the cost of constructing, repairing, equipping and upgrading school facilities.

Ch. 168, SLA 1976, provides for the issuance of bonds in the amount of \$6,660,000 for paying the cost of capital improvements to parks and recreation areas, and outdoor recreational, open space and historic properties projects.

Ch. 214, SLA 1976, provides for the issuance of bonds in the amount of \$29,205,000 for paying the cost of capital improvements to fish and game management and development facilities.

Ch. 239, SLA 1976, provides for the issuance of bonds in the amount of \$7,500,000 for paying the cost of construction and development of senior citizen housing.

Ch. 243, SLA 1976, provided for the issuance of bonds in the amount of \$26,960,000 for paying the cost of capital improvements for the University of Alaska. This bond issue was rejected at the general election held November 2, 1976.

Ch. 247, SLA 1976, provides for the issuance of bonds in the amount of \$53,360,000 for paying the cost of highway, ferry and local service road and trails construction.

Ch. 248, SLA 1976, provides for the issuance of bonds in the amount of \$6,866,000 for paying the cost of airport construction and facilities.

Ch. 270, SLA 1976, provided for the issuance of bonds in the amount of \$10,630,000 for paying the cost of constructing and major remodeling of justice facilities. This bond issue was rejected by the voters at the general election held November 2, 1976.

Ch. 271, SLA 1976, provides for the issuance of bonds in the amount of \$31,000,000 for paying the cost of water

supply and sewerage systems construction.

Two other major bonding laws which have been passed since statehood but which do not come under the provisions of this chapter are mentioned here for completeness:

Ch. 56, SLA 1961, provides for the issuance of negotiable revenue bonds of the University of Alaska in the amount of \$6,750,000 for certain University of Alaska buildings.

Ch. 88, SLA 1961, as referred to in ch. 108, SLA 1962, and amended in ch. 80, SLA 1968, and ch. 173, SLA 1970, provide for the issuance of negotiable revenue bonds of the state in the amount of \$19,925,000 for international airports.

In addition, the following session laws provide for negotiable revenue bonds: Ch. 43 SLA 1963 — \$2,020,000 for acquiring, constructing and equipping a student dormitory and dining complex for the University of Alaska; ch. 109 SLA 1965 — \$4,590,000 for acquiring, constructing and equipping two student dormitories, a dining facility and a food warehouse and preparation center; ch. 111 SLA 1969 — \$4,000,000 for acquiring, constructing, etc., a campus activities center at the University of Alaska.

For legislative committee reports on (1) ch. 50, SLA 1961, relating to ferry bonds, see 1961 House Journal, pp. 223-224; (2) ch. 66, SLA 1961, relating to hospital bond standards, see 1961 House Journal, pp. 263-264; (3) ch. 65, SLA 1961, relating to bush airfield bonds, see 1961 House Journal, pp. 280-281; (4) ch. 183, SLA 1970 (SB 442 am FCC), relating to capital improvements to state correctional buildings, see 1970 Senate Journal, p. 574; (5) ch. 222, SLA 1970 (FCCS SB 431), relating to capital improvements to certain airports in the state, see 1970 House Journal, p. 1529; 1970 Senate Journal, p. 1276. For legislative committee report on capital improvement program, see 1960 House Journal, pp. 231-234, 253.

Am. Jur., ALR and C.J.S. references. — 43 Am. Jur., Public Securities and Obligations, §§ 151, 156 to 160.

Funding or refunding obligations as subject to conditions respecting approval by voters, 97 ALR 442.

Validity of bond issue in excess of amount permitted by law within authorized debt, tax or voted limit, 175 ALR 823.

41 C.J.S. States §§ 179 to 190.

Sec. 37.15.015. Committee shall publish notice of existing state indebtedness before election. (a) Before a general or special election in which a bond issue is offered for ratification, the state bond committee shall publish a notice of existing state bonded indebtedness at least once a week for three consecutive weeks in a newspaper of general circulation in each of the four judicial districts of the state. The first notice shall be published at least 20 days before the date of the election. A notice shall contain

- (1) the current total bonded indebtedness of the state,
- (2) the cost of the debt service on the current indebtedness.

(b) Neither the failure to publish the notice of existing state bonded indebtedness nor a defect in the publication affects the validity of the bond issue offered for ratification or of a general or special election in which a bond issue is offered for ratification. (§ 2 ch 50 SLA 1964; am § 1 ch 8 SLA 1969)

Editor's note. — Section 2, ch. 8, SLA 1969, provides: "This Act may not be construed as having changed the effect of AS 37.15.015 since this Act merely makes explicit that which was already intended before its enactment."

Legislative committee report. — For report on ch. 8, SLA 1969 (HB 79 am S), see 1969 House Journal, p. 186.

Sec. 37.15.020. Manner and amounts of sale. The state bond committee shall sell the bonds of each authorization in the amounts or series and at the times which it finds are for the best interests of the state and its inhabitants. (§ 1 ch 175 SLA 1960)

Am. Jur. reference. — 43 Am. Jur., Public Securities and Obligations, §§ 126 to 150.

Sec. 37.15.030. Interest rate and maturity. Each issue or series of bonds shall bear interest at an effective rate over the life of the bonds not to exceed eight per cent a year. The bonds shall mature in not more than 30 years from date of issue, unless a longer period is specifically authorized by statute. (§ 1 ch 175 SLA 1960; am § 2 ch 104 SLA 1967; am § 1 ch 92 SLA 1970; am § 1 ch 29 SLA 1976)

Effect of amendment. — The 1976 amendment substituted "eight per cent" for "seven per cent" in the first sentence.

Sec. 37.15.040. Sale of bonds. Before selling an issue or series of bonds, the state bond committee shall give notice inviting sealed bids in such manner as it may prescribe. If satisfactory bids are received, the bonds offered for sale shall be awarded to the highest responsible bidder. If the state bond committee determines that the bids received are not satisfactory as to price or responsibility of the bidders, it may

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reject all bids received. (§ 1 ch 175 SLA 1960; am § 3 ch 104 SLA 1967; am § 1 ch 43 SLA 1969)

Sec. 37.15.050. Redemption. The state bond committee may determine whether the bonds are subject to redemption before their fixed maturities and may fix the premium for and all other terms of the redemption. No bond may be subject to redemption before its fixed maturity date unless the right to so redeem the bond is expressly mentioned on the face of the bond. (§ 1 ch 175 SLA 1960; am § 4 ch 104 SLA 1967; am § 1 ch 26 SLA 1968; am § 7 ch 143 SLA 1968)

Legislative committee report. — For legislative committee report on ch. 143, SLA 1968 (HB 707), see House Journal (1968), p. 836.

Am. Jur., ALR and C.J.S. references. — 38 Am. Jur., Municipal Corporations, §§ 408 to 422; 42 Am. Jur., Public Funds, § 1 et seq.; 43 Am. Jur., Public Securities and Obligations, §§ 24, 25, 250 to 270; 49

Am. Jur., States, Territories and Dependencies, §§ 66 to 71.

Funding or refunding obligations as subject to conditions respecting limitation of indebtedness. 97 ALR 442.

Validity of bond issue in excess of amount permitted by law within authorized debt, tax or voted limit. 175 ALR 823.

81 C.J.S. States § 189.

Sec. 37.15.060. Form and registration of bonds. An issue or series of bonds may be issued in coupon form payable to bearer or in fully registered form, and bonds in coupon form may be made registrable as to principal or principal and interest, as determined by the state bond committee. (§ 1 ch 175 SLA 1960; am § 2 ch 26 SLA 1968)

Am. Jur. reference. — 43 Am. Jur., Public Securities and Obligations, §§ 106 to 116.

Sec. 37.15.070. Place of payment. The state bond committee may fix the place or places of payment of the principal, interest and redemption premium, if any. (§ 1 ch 175 SLA 1960; am § 5 ch 104 SLA 1967)

Sec. 37.15.080. Signatures and seal. (a) Each bond shall be signed on behalf of the state by the governor and attested by the lieutenant governor, which signatures may be facsimile signatures. The seal of the state shall be impressed, imprinted or otherwise reproduced on each bond. Each interest coupon attached to the bond shall be signed by the facsimile signatures of the governor and lieutenant governor. If an officer whose signature appears on the bonds or coupons ceases to be an officer before delivery of the bonds, the signature is, nevertheless, valid and sufficient for all purposes, as if the officer had remained in office until delivery.

(b) A signature required on a bond issued by a political subdivision of the state may be a facsimile signature. (§ 1 ch 175 SLA 1960; am § 6 ch 104 SLA 1967)

Revisor's note (1971). — In this section "lieutenant governor" in conformity with "secretary of state" has been changed to the 1970 Alaska constitutional amendment

(SJR 2) changing the designation of that office.

Am. Jur. reference. — 43 Am. Jur., Public Securities and Obligations, § 108.

Sec. 37.15.090. Terms and conditions. Each issue or series of bonds shall be issued under and subject to the terms, conditions, and covenants providing for the payment of the principal and the interest and other terms, conditions, covenants, and protective provisions safeguarding the payment as found reasonably necessary by the state bond committee for the most advantageous sale. The terms, conditions, and covenants may include the setting aside and maintaining of certain reserves to secure the payment of principal and interest. (§ 1 ch 175 SLA 1960)

Am. Jur. reference. — 43 Am. Jur., Public Securities and Obligations, §§ 106 to 116.

Sec. 37.15.100. Trustee. If the state bond committee finds it necessary to accomplish the most advantageous sale of the bonds, the committee shall select a trustee for the owners and holders of the bonds or for the safeguarding and disbursement of the proceeds of the sale of the bonds for the use and purpose for which issued, and shall fix the rights, duties, powers, and obligations of the trustee. (§ 1 ch 175 SLA 1960)

Sec. 37.15.110. Creation and membership of state bond committee. There is created a committee known as the "state bond committee," the members of which are the commissioner of commerce and economic development, the commissioner of administration, and the commissioner of revenue. If a member of the committee is absent or otherwise unable to act, his designee in the department shall act as a member of the committee in his place. (§ 2 ch 175 SLA 1960; am § 7 ch 104 SLA 1967; am § 81 ch 218 SLA 1976)

Effect of amendment. — The 1976 amendment substituted "commissioner of commerce and economic development" for "commissioner of commerce" in the first sentence.

Sec. 37.15.120. Regulations. The state bond committee may adopt rules and regulations for the performance of its duties and may designate by resolution one of its members to perform any act necessary to effect its duties not required by statute to be performed by the state bond committee in meeting or by resolution, or by another officer of the state. (§ 2 ch 175 SLA 1960; am § 8 ch 104 SLA 1967)

Sec. 37.15.130. Officers, records and proceedings. The commissioner of commerce and economic development is the chairman of the state bond committee and the commissioner of revenue is the secretary. A majority of the members of the committee constitute a quorum. The committee shall keep a full, complete, and permanent

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record of its proceedings. All records and correspondence of the committee shall be kept in the office of the commissioner of revenue. (§ 2 ch 175 SLA 1960; am § 82 ch 218 SLA 1976)

Effect of amendment. — The 1976 "commissioner of commerce" in the first amendment substituted "commissioner of commerce and economic development" for sentence.

Sec. 37.15.140. Duties of state bond committee. The state bond committee shall adopt the resolution and prepare the documents necessary for the issuance, sale, and delivery of bonds. (§ 3 ch 175 SLA 1960)

Sec. 37.15.150. Committee may employ special services. If the state bond committee considers it necessary and advisable, it may procure architectural or engineering, fiscal agent or municipal investment, legal and other expert or specialized services at reasonable and customary fees to assist it in accomplishing the most advantageous sale of the bonds. The fees may be paid from the proceeds of the sale or advanced from the contingency fund in the office of the governor or otherwise. (§ 3 ch 175 SLA 1960)

Sec. 37.15.155. Prohibited bidding on bonds and anticipation notes. (a) No person who provides financial programming or marketing assistance to the state bond committee in connection with the issuance or sale of general obligation bonds, revenue bonds or bond anticipation notes of the state may bid on the bonds.

(b) The sale of general obligation bonds, revenue bonds or bond anticipation notes of the state to a person who is prohibited from bidding on the bonds or notes under (a) of this section is against public policy and the sale is void.

(c) In this section "person" means an individual, firm, agent, factor, intermediary, partnership, corporation, association, bond house, stockbroker or bond broker. (§ 1 ch 102 SLA 1974)

Sec. 37.15.160. Contents of resolution. The resolution adopted by the state bond committee shall

(1) fix the principal amount, denominations, date, maturities, place of payment, terms, right of redemption if any, form, conditions and covenants of the bonds;

(2) fix the date of sale and the form of the notice of sale; and

(3) provide if the notice is to be published elsewhere in addition to the publication required by § 40 of this chapter. (§ 3 ch 175 SLA 1960; am § 3 ch 26 SLA 1968)

Sec. 37.15.170. State bond committee to certify annual principal, interest, and reserve requirements. (a) Before January 1 of each year after bonds are issued, the state bond committee shall certify to the commissioner of administration the amount needed for the following

calendar year to meet principal, interest, and reserve requirements on all bonds or issues or series of bonds then outstanding.

(b) The commissioner of administration shall set aside these amounts or make the necessary provisions for the setting aside of these amounts so that there will be sufficient money to pay the principal and interest on the due date and to meet reserve requirements. (§ 4 ch 175 SLA 1960)

Sec. 37.15.180. Remedies of bondholders. The owner and holder of each bond or the trustee may by appropriate proceeding require and compel the transfer and payment of money as directed by this chapter. (§ 4 ch 175 SLA 1960)

Sec. 37.15.190. Negotiability. General obligation bonds of the state and the coupons attached to the bonds are negotiable instruments. (§ 5 ch 175 SLA 1960)

Am. Jur. and ALR references. — 43 Am. Jur., Public Securities and Obligations, § 161 to 165. Negotiability of state warrants, 36 ALR 949.

Sec. 37.15.200. Bonds as legal investments. General obligation bonds of the state are legal investments for all state funds, or for funds under state control, and for all funds of a political subdivision of the state. (§ 5 ch 175 SLA 1960)

Sec. 37.15.210. Refunding bonds. (a) All or a part of the general obligation bonds of the state, or all or a part of each outstanding issue or series of bonds, may be refunded at or before maturity by the issuance of general obligation refunding bonds of the state if, in the opinion of the state bond committee, refunding is advantageous to and in the best interest of the state and its inhabitants. Money set aside as reserve to secure the payment of the principal and interest of bonds being refunded may be used to pay the principal and interest on these bonds or may be retained by the state to secure the payment of the principal and interest on the refunding bonds to be issued.

(b) Refunding bonds and the coupons attached to them are negotiable instruments. The effective rate of interest over the life of refunding bonds may not exceed seven per cent a year and the amount of premium which is paid to effect the redemption of outstanding bonds may not be considered in determining the effective rate of interest.

(c) Refunding bonds may be exchanged for the bonds being refunded or refunding bonds may be sold in the manner and at the prices which the state bond committee determines to be for the best interest of the state and its inhabitants either at public or private sale.

(d) The issuance of refunding bonds need not be authorized by the qualified voters of the state. The state bond committee shall adopt the resolution and prepare the documents necessary for the issuance, exchange or sale, and delivery of refunding bonds. The provisions of this

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chapter relating to the terms, conditions, covenants, issuance, and sale of general obligation bonds of the state apply to refunding bonds except as otherwise specifically provided in this section. (§ 6 ch 175 SLA 1960; am § 2 ch 92 SLA 1970)

Am. Jur. reference. — 43 Am. Jur., Public Securities and Obligations, §§ 156 to 160.

Sec. 37.15.215. Official statements. To the extent practicable the official statements and other documentation issued in connection with an offering of state or local government securities shall comply with the guidelines of the Municipal Finance Officers Association or other nationally recognized guidelines. (§ 12 ch 168 SLA 1978)

Sec. 37.15.220. Short title. Sections 10 — 220 of this chapter may be cited as the State Bonding Act. (§ 7 ch 175 SLA 1960; am § 54 ch 127 SLA 1974)

Effect of amendment. — The 1974 amendment added "Sections 10 — 220 of" to the beginning of this section.

Legislative committee report. — For report on ch. 127, SLA 1974 (SCSHB 817 am S), see 1974 House Journal, p. 657.

Article 2. Bond Anticipation Notes.

Section	Section
300. Borrowing in anticipation of sale of bonds permitted	350. Security for repayment of revenue bonds
310. Issuance of notes	360. Limitation on issuance of notes
320. [Repealed]	370. Use of proceeds from sale of notes
330. Repayment of notes	380. Sale of notes
340. Security for repayment of general obligation bonds	390. Execution of notes

Sec. 37.15.300. Borrowing in anticipation of sale of bonds permitted. When the state bond committee considers it in the best interests of the state, it may borrow money in anticipation of the sale of general obligation and revenue bonds, if

(1) the general obligation bonds to be sold have been authorized by law and ratified by a majority vote of the qualified voters of the state who vote on the question; or

(2) the general obligation bonds to be sold have been authorized by law for the purpose of meeting natural disasters, repelling invasion, suppressing insurrection, or defending the state in war; or

(3) the revenue bonds to be sold have been authorized by law; and

(4) money to be derived from the sale of general obligation and revenue bonds have been appropriated by the legislature. (§ 1 ch 42 SLA 1964; am § 1 ch 74 SLA 1964)

Sec. 37.15.310. Issuance of notes. The state bond committee shall issue notes for the amounts borrowed with a maturity date not to exceed

one year from the date of issue. All the notes are payable at a fixed place, on or before a fixed time, or at a fixed time, from the proceeds of the sale of bonds, in anticipation of which the original note or notes were issued, unless the bonds have not been sold by the maturity date of the notes. Interest on the notes is payable at a fixed place, on or before a fixed time, out of appropriations made for the payment of interest on general obligation notes or bonds of the state. (§ 1 ch 42 SLA 1964; am § 1 ch 127 SLA 1976)

Effect of amendment. — The 1976 amendment deleted "and the interest thereon" following "All the notes" near the beginning of the second sentence and added the third sentence.

Sec. 37.15.320. Issuance of new notes.
Repealed by § 3 ch 41 SLA 1967.

Editor's note. — The repealed section derived from § 1, ch. 42, SLA 1964; § 1, ch. 41, SLA 1967.

Sec. 37.15.330. Repayment of notes. Every note shall be payable from the proceeds of the next succeeding sale of bonds or from the proceeds of the sale of new bond anticipation notes. (§ 1 ch 42 SLA 1964)

Sec. 37.15.340. Security for repayment of general obligation bonds. Notes issued in anticipation of the sale of general obligation bonds and the interest thereon are secured by the full faith, credit, and resources of the state. (§ 1 ch 42 SLA 1964)

Sec. 37.15.350. Security for repayment of revenue bonds. Notes issued in anticipation of the sale of revenue bonds and the interest thereon are secured in the same manner as are the revenue bonds in anticipation of which the notes are issued. (§ 1 ch 42 SLA 1964)

Sec. 37.15.360. Limitation on issuance of notes. The total amount of such notes issued and outstanding shall at no time exceed the total amount of bonds authorized to be issued. (§ 1 ch 42 SLA 1964)

Sec. 37.15.370. Use of proceeds from sale of notes. The proceeds from the sale of the notes shall be used only for the purposes for which the proceeds from the sale of bonds may be used or to meet payment of outstanding bond anticipation notes. (§ 1 ch 42 SLA 1964)

Sec. 37.15.380. Sale of notes. Notes issued under this chapter shall be sold by the state bond committee in such manner and at such price or prices as it shall determine, at either public or private sale; however, no such note shall be sold for less than par and accrued interest or at an interest rate exceeding seven per cent a year. (§ 1 ch 42 SLA 1964; am § 3 ch 92 SLA 1970)

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Sec. 37.15.390. Execution of notes. Notes for money borrowed in anticipation of receipts from the sale of bonds shall be signed by the governor and countersigned by the lieutenant governor. The governor's signature may be a facsimile signature. (§ 1 ch 42 SLA 1964)

Revisor's note (1971). — In this section the 1970 Alaska constitutional amendment "secretary of state" has been changed to "lieutenant governor" in conformity with the 1970 Alaska constitutional amendment (SJR 2) changing the designation of that office.

Article 3. International Airports Revenue Bonds.

Section

- 410. Bond authorization
- 420. Construction fund
- 430. Revenue fund
- 440. Redemption fund
- 450. Bond terms
- 460. Bond resolution
- 470. Enforcement by holder
- 480. Amounts required for payments

Section

- 490. Bond negotiability
- 500. Airport charges
- 510. State improvements to airports
- 520. Refunding
- 530. Bonds as legal investments
- 540. Statutory construction
- 550. Definitions

Editor's note. — Section 2, ch. 149, SLA 1972, provides: "For the purpose of carrying out the provisions of AS 37.15.410 — 37.15.550, there is appropriated from the International Airports Construction Fund the sum of

"(1) \$9,225,000, together with the amounts of any grant or other money paid into the fund for the same purpose, for acquisition, construction and equipping of facilities previously funded through revenue bond issues dated June 1, 1968 and June 1, 1969 (authorized by ch. 80, SLA 1968);

"(2) \$8,700,000 for the acquisition, construction and equipping of airport facilities as authorized in AS 37.15.510 at Anchorage International Airport (authorized by ch. 173, SLA 1970);

"(3) \$2,000,000 for the acquisition, construction and equipping of airport

facilities as authorized in AS 37.15.510 at Fairbanks International Airport (authorized by ch. 173, SLA 1970); and

"(4) \$11,300,000 for the acquisition, construction and equipping of airport facilities as authorized in AS 37.15.510 at Anchorage and Fairbanks International Airports (authorized by ch. 149, SLA 1972)."

Section 4, ch. 149, SLA 1972, provides: "This Act codifies the 'temporary' law pertaining to the international airport revenue bonds. The repeal of statutes by sec. 3 of this Act does not affect existing bonds or actions that have been taken under the repealed provisions."

Legislative committee report. — For report on ch. 149, SLA 1972 (CSHB 531), see 1972 House Journal, p. 1233.

Sec. 37.15.400. Bond authorization. For the purpose of providing part or all of the money to be used, with or without any grants or other money which may become available, the issuance and sale of revenue bonds of the state in the total principal sum of not to exceed \$34,825,000 is authorized to acquire, equip, construct and install the additions, improvements, extensions and facilities authorized in § 510 of this chapter. The principal of and interest on these bonds shall be paid out of and secured by the gross revenues derived by the state from the

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Chapter 58. Municipal Debt.

Article

1. Revenue Anticipation Notes (§§ 29.58.010—29.58.060)
2. Bond Anticipation Notes (§§ 29.58.070—29.58.140)
3. General Obligation Bonds (§§ 29.58.150—29.58.180)
4. Revenue Bonds (§§ 29.58.200—29.58.220)
5. Refunding Bonds (§§ 29.58.240—29.58.230)
6. Miscellaneous Provisions (§§ 29.58.300—29.58.340)

Article 1. Revenue Anticipation Notes.

Section

10. Borrowing in anticipation of revenue
20. Issuance of notes
30. Limitation on issuance of notes

Section

40. Issuance of notes in anticipation of state, federal grants
50. Priority of repayment
60. Sale of notes

Sec. 29.58.010. Borrowing in anticipation of revenue. A municipality of the state which is authorized to incur indebtedness may borrow money in a fiscal year to meet appropriations for that fiscal year in anticipation of the collection of taxes and estimated revenues for the fiscal year and may issue its revenue anticipation notes as evidence of the borrowing. (§ 2 ch 118 SLA 1972)

Sec. 29.58.020. Issuance of notes. The governing body of a municipality may, by ordinance or resolution, authorize the issuance of revenue anticipation notes and prescribe the form and details of the notes and the manner of their execution. The governing body of the municipality may delegate to its chief fiscal officer the power to issue the notes from time to time under the terms and conditions of the ordinance or resolution which provides for the manner of their sale. Revenue anticipation notes and notes issued to renew notes previously issued mature not later than the end of the fiscal year in which they are issued. (§ 2 ch 118 SLA 1972)

Sec. 29.58.030. Limitation on issuance of notes. The aggregate amount of revenue anticipation notes at any time outstanding may not exceed 50 per cent of the amount of revenues estimated to be collected in the fiscal year in which the notes are issued, less the amount of estimated revenues actually collected in the fiscal year before the issuance of the notes. (§ 2 ch 118 SLA 1972)

Sec. 29.58.040. Issuance of notes in anticipation of state, federal grants. (a) The governing body of a municipality, upon adoption of a long-range capital improvement budget by ordinance or resolution, may by resolution provide for revenue anticipation notes in an amount not to exceed the total amount of any state or federal grants finally committed for these projects. The notes mature no later than the end of the next fiscal year. The notes may be for

single or multiple projects outlined in the adopted capital improvement budget.

(b) If the state or federal grants for capital improvement projects have not been paid to the municipality before maturity of the notes issued in anticipation of the receipt of the revenue, the governing body of the municipality may issue new notes in order to meet payment of the notes then maturing or may renew the outstanding revenue anticipation notes. New notes issued or renewals of outstanding revenue anticipation notes shall mature not later than the end of the next fiscal year. (§ 2 ch 118 SLA 1972)

Sec. 29.58.050. Priority of repayment. The payment of the principal and interest on revenue anticipation notes shall be payable from revenues, and their payment additionally shall be secured by a pledge of the full faith, credit and unlimited taxing power of the municipality issuing them. (§ 2 ch 118 SLA 1972)

Sec. 29.58.060. Sale of notes. The municipality may sell revenue anticipation notes in the manner and at the price it determines, at either public or private sale. (§ 2 ch 118 SLA 1972)

Article 2. Bond Anticipation Notes.

Section	Section
70. Bond anticipation borrowing	110. Security
80. Issuance of notes	120. Limitation
90. Issuance of new notes	130. Use of proceeds
100. Repayment of notes	140. Sale of notes

Sec. 29.58.070. Bond anticipation borrowing. A municipality may borrow money in anticipation of the sale of general obligation and revenue bonds if

(1) the general obligation bonds to be sold have been authorized by the assembly or council and ratified by a majority vote at a regular or special election;

(2) the revenue bonds to be sold have been authorized by ordinance. (§ 2 ch 118 SLA 1972)

Sec. 29.58.080. Issuance of notes. The assembly or council shall issue negotiable or nonnegotiable notes for the amounts borrowed with a maturity date not to exceed one year from the date of issue. All notes and the interest on them are payable at fixed places on or before a fixed time, from the proceeds of the sale of bonds in anticipation of which the original note or notes were issued, unless the bonds have not been sold by the maturity date of the notes. (§ 2 ch 118 SLA 1972)

Sec. 29.58.090. Issuance of new notes. If the sale of the bonds has not occurred before the maturity of the notes issued in anticipation of the sale, the assembly or council shall issue new notes in

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order to meet payment of the notes then maturing or shall renew the outstanding bond anticipation notes. New notes issued or renewals of outstanding bond anticipation notes shall bear a maturity date not to exceed one year from the date of issue. Notes, new notes, and renewals of notes shall not be outstanding for a total elapsed time of more than three years. (§ 2 ch 118 SLA 1972)

Sec. 29.58.100. Repayment of notes. Every note is payable from the proceeds of the sale of bonds which the notes anticipated or from the proceeds of the sale of new bond anticipation notes. (§ 2 ch 118 SLA 1972)

Sec. 29.58.110. Security. (a) Notwithstanding any other provisions of this chapter as to payment of notes, notes issued in anticipation of the sale of general obligation bonds and the interest on them are secured by the full faith, credit, taxing power and resources of the municipality. The municipality may levy ad valorem taxes for payment without limitation of rate or amount.

(b) Notes issued in anticipation of the sale of revenue bonds and the interest on them are secured in the same manner as are the revenue bonds in anticipation of which the notes are issued. (§ 2 ch 118 SLA 1972)

Sec. 29.58.120. Limitation. The total amount of notes issued and outstanding shall at no time exceed the total amount of bonds authorized to be issued. (§ 2 ch 118 SLA 1972)

Sec. 29.58.130. Use of proceeds. The proceeds from the sale of notes shall be used only for the purposes for which the proceeds from the sale of bonds may be used or to meet payment of outstanding bond anticipation notes. (§ 2 ch 118 SLA 1972)

Sec. 29.58.140. Sale of notes. Notes issued under this chapter shall be sold by the municipality in the manner and at the price it determines, at either public or private sale, but no note may be sold for less than par and accrued interest. (§ 2 ch 118 SLA 1972)

Article 3. General Obligation Bonds.

Section	Section
150. General obligation bonds	170. Form and terms of sale
160. Vote and notice of existing indebtedness required	180. Payment

Sec. 29.58.150. General obligation bonds. A municipality may acquire, construct, improve and equip capital improvements and issue negotiable or nonnegotiable general obligation bonds for these purposes. (§ 2 ch 118 SLA 1972)

Section supplements Alaska Constitution. — The legislature enacted this section to supplement Alaska Constitution, art. IX, § 9, and did not intend to attempt to substitute a different purpose than that established by "capital improvements" in the constitution. *City of Juneau v. Hix*

son, Sup. Ct. Op. No. 93 (File No. 201), 373 P.2d 743 (1962).

"Improvement" in its broad sense means betterment. *City of Juneau v. Hixson*, Sup. Ct. Op. No. 93 (File No. 201), 373 P.2d 743 (1962).

Off-street parking facilities constitute public improvements or public works and this section is sufficiently broad to cover such facilities. *Kis-sane v. City of Anchorage*, 17 Alaska 514, 159 F. Supp. 733 (D. Alas. 1955).

Section assumes city will acquire right of occupancy before building improvement.—This section assumes that a city will acquire the rights of occupancy necessary to construct wharves, as a preliminary to their construction. *Berger v. Ohlson*, 10 Alaska 84, 120 F.2d 56 (9th Cir. 1941).

It does not authorize building on federal land.—This section would not authorize a city to build and maintain a wharf in a reserve already set apart by the federal government for the use of its railroad. *Berger v.*

Ohlson, 10 Alaska 84, 120 F.2d 56 (9th Cir. 1941).

And improvement built on federal land belongs to the United States.—A city dock built upon land belonging to the United States must in legal contemplation have become a part of it in the absence of special circumstances leading to a contrary conclusion where no specific authority for the erection of the wharf as property of the city of Anchorage can be found. *Berger v. Ohlson*, 10 Alaska 84, 120 F.2d 56 (9th Cir. 1941).

At best the public of the city of Anchorage had a mere license to use a city dock built and maintained within the Alaska railroad terminal reserve, and the United States had a right to terminate the use of the dock. *Berger v. Ohlson*, 10 Alaska 84, 120 F.2d 56 (9th Cir. 1941).

Am. Jur. references.—38 Am. Jur., Municipal Corporations, § 559 et seq., 43 Am. Jur., Public Works and Contracts, § 1 et seq.

Sec. 29.58.160. Vote and notice of existing indebtedness required. (a) A municipality may incur general obligation bond debt only after a bond authorization ordinance is approved by a majority of those voting on the question at a regular or special election. Any municipal voter may vote in the bond election, except as otherwise provided by charter or law.

(b) Before a general obligation bond issue election, the assembly or council shall have published a notice of the municipality's total existing bond indebtedness at least once a week for three consecutive weeks. The first notice shall be published at least 20 days before the date of the election. A notice shall include

(1) the current total general obligation bonded indebtedness, including authorized but unsold bonds of the municipality;

(2) the cost of the debt service on the current indebtedness;

(3) the total assessed valuation within the municipality. (§ 2 ch 118 SLA 1972)

Sec. 29.58.170. Form and terms of sale. The assembly or council shall fix the date of the bonds, denominations, maturities, rate of interest, place and manner of payment, redemption terms, registration privileges, manner of execution, and signatures required. If an officer whose signature appears on the bonds or coupons ceases to be an officer before delivery of the bonds, his signature is valid as if he had remained in office until delivery. (§ 2 ch 118 SLA 1972)

§ 29.58.170

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§ 29.58.180

MUNICIPAL GOVERNMENT

§ 29.58.220

Sec. 29.58.180. Payment. (a) The full faith and credit of a municipality are pledged for the payment of principal and interest on general obligation bonds. The municipality may levy ad valorem taxes for payment without limitation of rate or amount.

(b) General obligation bonds issued for acquiring, constructing, improving and equipping a municipally-owned utility or other revenue-generating enterprise may be additionally secured by a pledge of the revenue derived from operation. Bonds so secured are not subject to a debt limitation imposed by a borough or city home rule charter. (§ 2 ch 118 SLA 1972)

Article 4. Revenue bonds.

Section
200. Revenue bonds
205. No election required

Section
210. Forms and terms
220. Payment

Sec. 29.58.200. Revenue bonds. A municipality may acquire, construct, improve and equip capital improvements to be operated upon a revenue-producing basis, and bonds for these purposes are payable solely from unpledged revenue of the public facilities for which the bonds are issued. (§ 2 ch 118 SLA 1972)

Sec. 29.58.205. No election required. No election is required to authorize the issuance and sale of revenue bonds, unless otherwise provided by ordinance. (§ 2 ch 118 SLA 1972)

Sec. 29.58.210. Forms and terms. The assembly or council shall fix the date of the bonds, denominations, maturities, rate of interest, place and manner of payment, redemption terms, registration privileges, manner of execution and signatures required. If an officer whose signature appears on the bonds or coupons ceases to be an officer before delivery of the bonds, his signature is valid as if he had remained in office until delivery. (§ 2 ch 118 SLA 1972)

Sec. 29.58.220. Payment. Bonds issued under §§ 200—220 of this chapter or the proceedings of the assembly or council authorizing their issuance may contain the covenants which the assembly or council considers advisable concerning

- (1) the rates or fees to be charged for services rendered by the public facilities, the revenue of which is pledged to the payment of the bonds;
- (2) the deposit and use of the revenue of the public facilities;
- (3) the issuance of additional bonds payable from revenue of the public facilities;
- (4) the rights of the bondholders in case of default in the payment of the principal or interest on the bonds, including the appointment of a receiver to operate the public facilities;
- (5) other covenants as the assembly determines. (§ 2 ch 118 SLA 1972)

Article 5. Refunding Bonds.

<p>Section 240. Authorization 250. Effect of bonds 260. No election required</p>	<p>Section 270. Payment of refunding bonds 280. Sale</p>
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Sec. 29.58.240. Authorization. If a municipality has outstanding general obligation or revenue bonds and the assembly or council determines that it would be financially advantageous to refund the bonds, the assembly or council may provide by ordinance for the issuance of general obligation or revenue refunding bonds. (§ 2 ch 118 SLA 1972)

Sec. 29.58.250. Effect of bonds. The refunding bonds may take up and refund all or any part of outstanding bonds at or before their maturity or redemption date. The assembly or council may include various series and issues of bonds in a single issue of refunding bonds. (§ 2 ch 118 SLA 1972)

Sec. 29.58.260. No election required. No election is required to authorize the issuance and sale of refunding bonds. Their issuance may be authorized and all proceedings with reference to them prescribed by ordinance of the assembly or council. However, when it is desirable to use general obligation bonds to refund a revenue bond issue, the governing body shall call an election on the question. (§ 2 ch 118 SLA 1972)

Sec. 29.58.270. Payment of refunding bonds. General obligation refunding bonds are payable according to § 180 of this chapter. Revenue refunding bonds are payable according to § 220 of this chapter. (§ 2 ch 118 SLA 1972)

Sec. 29.58.280. Sale. General obligation or revenue refunding bonds may, in the discretion of the assembly or council, be exchanged at par for the bonds being refunded, or may be sold at public or private sale for an amount not less than par and accrued interest. They may be issued and delivered at any time before the date of maturity or redemption of the refunded bonds. (§ 2 ch 118 SLA 1972)

Article 6. Miscellaneous Provisions.

<p>Section 300. Public sale 310. Interest rate 315. Bond attorneys, bond and financial consultants</p>	<p>Section 320. Redemption before maturity 340. Borough indebtedness</p>
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Sec. 29.58.300. Public sale. The municipality shall sell all bonds at a public or private sale as provided by ordinance. No bonds may be sold at less than par value. (§ 2 ch 118 SLA 1972)

§ 29.58.300

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§ 29.58.310

MUNICIPAL GOVERNMENT

§ 29.58.340

Sec. 29.58.310. Interest rate. No municipal bond or note may bear an interest rate exceeding the contract usury rate of interest provided by law. (§ 2 ch 118 SLA 1972)

Sec. 29.58.315. Bond attorneys, bond and financial consultants. The governing body or its designee of a home rule or general law municipality shall be the sole contracting authority for bond attorneys, bond consultants and financial consultants engaged in long-range financial planning of the municipality which leads to sale of bonds. (§ 2 ch 118 SLA 1972)

Sec. 29.58.320. Redemption before maturity. A bond or note may be made subject to redemption before maturity as stated in the authorization or in the bond or note. (§ 2 ch 118 SLA 1972)

Sec. 29.58.340. Borough indebtedness. (a) Boroughs may incur indebtedness

- (1) on an areawide basis for areawide functions; or
- (2) on a noncity basis for functions performed in the area outside cities only; or
- (3) on a service area basis for functions performed in a service area only.

(b) Payment of debt principal and interest as well as other costs shall be limited to the area incurring the debt under (a) (2) or (a) (3) of this section, except that the full faith and credit of the entire borough may be pledged to guarantee payment of principal and interest.

(c) If the bonded debt to be incurred by a borough is an areawide debt, the vote is areawide; if the full faith and credit of the entire borough is pledged for the payment of the debt of the area outside cities or of a service area, an areawide election is held and the proposition must pass both areawide and in the area which will benefit from the improvement; if the bonded indebtedness to be incurred is limited to areas outside cities only or to service areas, the vote is limited to voters in those areas. (§ 2 ch 118 SLA 1972)

**A REVIEW OF DEBT
CAPACITY AND DEBT
MANAGEMENT FOR THE
STATE OF ALASKA**

GOVERNMENT
FINANCE
RESEARCH
CENTER

MUNICIPAL FINANCE
OFFICERS ASSOCIATION

A Review of Debt Capacity
and Debt Management
for the State of Alaska

Report to the
Legislative Budget and Audit Committee,
State of Alaska Legislature

August, 1983

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August 26, 1983

The Honorable Robert H. Bettisworth
Chairman
Legislative Budget and Audit
Committee
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Juneau, AK 99811

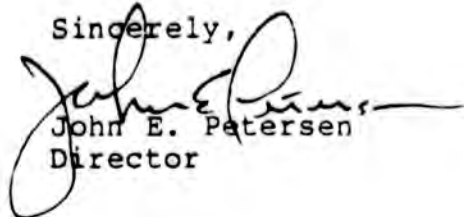
Dear Chairman Bettisworth:

The Government Finance Research Center is pleased to transmit our "Review of Debt Capacity and Debt Management for the State of Alaska" to the Legislative Budget and Audit Committee. The report was written by Wesley C. Hough and Lawrence D. Shubnell, with contributions from Ronald C. Forbes, State University of New York at Albany, and Kenneth J. Kirkland of the National Conference of State Legislatures.

I would also like to acknowledge the guidance and direction of Senator Arliss Sturgulewski, Chair of the Legislative Budget and Audit Committee when this report was commissioned in October, 1982. In addition, the perceptions and comments of those persons interviewed in the course of writing this report, a list of whom appears in the appendix, were extremely helpful.

Finally, we have appreciated the cooperation and assistance provided by Stephen Frank, Staff Assistant, Legislative Budget and Audit Committee.

Sincerely,



John E. Petersen
Director

JEP:jcw

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CHAPTER I

EXECUTIVE SUMMARY

The changing nature of tax-exempt borrowing, including the shift from traditional tax-supported government bonds to revenue-backed bonds, the rise and volatility in interest rates, the reliance upon individual investors in contrast to institutional lenders, and changes in federal law concerning various aspects of tax-exempt financing, has resulted in states generally being more attentive to debt management and debt policy. This study of State debt management comes at a propitious time. While the past growth of tax-exempt borrowing by issuers bearing the Alaska name has been rapid and sizeable, new programs and proposals before the legislature indicate that the demand for new spending and borrowing is far from sated. At the same time, recent reductions in the market price for petroleum and the unpredictability of its future supply and price raise uncertainties about the level and viability of the principal source of governmental revenues that directly or indirectly supports many of Alaska's borrowing and spending programs.

The interdependence of the Alaskan economy and its oil wealth creates a paradox for assessing the State's debt management and debt capacity. Oil revenues have enabled the State and local governments to borrow at unusually high levels -- in terms of per capita amounts of debt -- and have provided the financial security required by investors in the State's bonds. It is the reliance on these same oil revenues, however, that is the principal weakness of the Alaska credit as a long-term issuer of tax-exempt bonds and that makes assessment of the State's future debt capacity very difficult.

To be effective, debt management must join the capital needs of the State and its constituent governmental units with the ability to achieve bond market access on affordable terms. Market access is a function of debt capacity, debt burden, and perceived ability to pay; it is also conditioned importantly by the overall forces that shape borrowing needs nationally and the willingness of investors to supply funds. The private credit market, where public debts are sold, decides what borrowers will be accommodated and at what cost -- from a fluctuating but always limited pool of lendable funds. While Alaska is concerned first and foremost with the cost and availability of credit for its own needs, Alaska bonds compete with other governmental obligations from all parts of the country. The terms offered Alaska borrowers by the marketplace are strongly influenced by the volume and quality of competing claims from other borrowers. Hence, it is in Alaska's interest to offer a well-structured, high-quality security in order to obtain funds, and to obtain them at acceptable interest rates.

Effective debt management must also provide State and local issuers and the State's debt managers with the flexibility to react quickly and responsibly to changes in the financial markets. That the tax-exempt bond market is highly

sensitive to changes in the federal tax code was obvious in late 1982 as the pendency of the bond registration requirement brought a flood of issues to market. Now, as a result of this legislation, the primary and secondary market acceptance of an issuer's securities will in part depend on a timely, accurate and efficient transfer process (discussed on pages 35-36). Changes in other federal tax provisions can also sharply affect the demand for tax-exempt bonds. Chapter Two includes a survey of the tax acts of 1981 and 1982, and their impacts on the municipal bond market. These changes, like volatility in interest rates, are factors over which the State has little control. However, a responsible and flexible debt management program places the State in the best position to respond effectively to events that may effect the State's borrowing.

State-Level Debt

The evidence presented in this study shows that Alaska debt has grown from 0.7 to 1.8 percent of annual national tax-exempt bond market volume since 1970. The rising market share accorded Alaska bonds has been the result of an increase in the State's annual volume of new debt issues from \$134 million to \$1.4 billion between 1970 and 1982. Chapter Three documents the increase in borrowing and includes a profile of the major State debt issuers. Of all State-level issuers in Alaska, the Alaska Housing Finance Corporation has issued the largest amount of public debt -- over 62 percent of State-level debt and and over 44 percent of all State-wide debt (including local government obligations) outstanding -- and is the State's most frequent and best-known borrower.

At a time when we have seen the national credit rating agencies downgrade the credit rating of many states, Alaska can be proud of its rating upgrade over the past 10 years from a Baa to an AA credit. Credit analysts and the market itself have recognized the quality of Alaska's bonds as an investment. The evidence shows that Alaska now trades on par with such strong AA credits as Connecticut and Ohio. Chapter Four presents the results of our study of the State's past market experience. The data show that Alaska has consistently experienced lower borrowing costs than other states with similar ratings. Evidence to support this comes from the lower underwriting spreads, larger number of bids, and the lower interest rates on Alaska bonds as compared to those of other states of similar high quality.

State Bond Committee

In spite of the strong past performance of the State's bonds, the mid-1980s is a good time for the State of Alaska to broaden and strengthen the role of the State in debt management and oversight, particularly through the State Bond Committee (see pages 157 to 160). Recent fluctuations in the worldwide price of oil and the decline of Prudhoe Bay oil production within the ten-year range have alerted investors to the "boom and bust" nature of the Alaskan economy. These two events will be important factors behind the ability of the State to issue further debt in the coming years. One major role for a newly

reconstituted State Bond Committee would be oversight of the State's total indebtedness. It is not intended that the State Bond Committee supplant the activities or authority of independent agencies and corporations; however, it is vital that the State annually review and assess its debt position -- including within that review all State-level debt -- relative to the State's debt capacity and priorities for future public investment.

In order to carry out its expanded scope of activity, the State Bond Committee should be restructured. The chairmanship should reside in a senior-level fiscal official -- such as the Commissioner of Revenue or the Director of the Office of Management and Budget -- who is actively involved in the State's debt management. The Commissioner of Commerce and Economic Development is the Committee's present chair. Expanding the membership to include a representative from the governing board of a State corporation, and the Commissioner of Community and Regional Affairs would emphasize the interrelationship of the State, its agencies, and local government in the debt management area. To assist in fulfilling its expanded duties, the Committee should be staffed full-time by a professional in the field of public finance.

The Committee should be given the responsibility to take a global view of the State's debt-related activities in a formal manner, not in the loose, informal way that is presently said to exist. The State may wish to require that each entity of the State which is authorized to issue bonds annually file a debt financing plan with the State Bond Committee. From these plans a master debt issuance schedule may be compiled to inform and assist all debt issuers in the State. The schedule could be updated monthly or on an "as-needed" basis as financing plans change. The State Bond Committee should also annually prepare a comprehensive profile of outstanding debt and monitor its impact on the State's fiscal condition. Special attention in this review should be paid to the level of the State's contingent liabilities, such as moral obligation debt, and changes in the growth and composition of local debt.

It is advised that the State develop written debt management guidelines that include several criteria for evaluating the desired and affordable level of debt issuance in lieu of a legislative ceiling on debt issuance. The State Bond Committee should be responsible for implementing these guidelines by reviewing each State-level bond issue before it is brought to market. The Committee's only power in this regard would be to defer or veto an issuance because the security structure or sources of repayment are inadequate or the issue jeopardizes the financing plans or creditworthiness of the State. Likewise, if the State wishes to maintain its present interest rate ceiling on the issuance of bonds, it is preferable to set such a ceiling administratively rather than legislatively.

Debt Capacity and Affordability

The analysis of debt capacity is addressed in Chapter Seven. Comparisons of State debt with that of other states indicates that Alaska is an "outlier" with extremely high ratios of debt per capita and debt per \$1,000 of personal

income. Therefore, it is necessary to look in-depth at the State's revenue sources to assess its capacity for further debt issuance. Determination of the affordable level of general obligation debt essentially depends upon the State's ability and willingness to pay debt service now and in the future on any amounts borrowed. For the immediate future, Alaska's debt capacity will be determined by the amount of general fund revenues that the State wishes to allocate to the payment of debt service and the preservation of the permanent fund. Thus, short-term affordability depends exclusively on the fluctuating level and uncertain future of oil revenues as long as the State's source of funds to repay debt is tied to this single source. In the longer term, when the State's oil wealth has subsided, the ability of Alaska to issue debt will depend upon the stability and breadth of the State's economy. Without its extensive petroleum resource base Alaska will become much more like other states and analysis of its debt capacity will follow the traditional steps outlined in pages 196 to 206.

The methodology for evaluating Alaska's short-term debt affordability is presented on pages 218 to 222. If the State maintains its current ratio of debt service to revenues at the five percent level and continues to issue debt with maturities within the known and predictable range of State revenues, the State's creditworthiness will be preserved. If the State wishes to have debt service comprise a larger share of the State budget (to a maximum of 10 percent), debt capacity would be increased -- although this would force trade-offs against other State spending priorities and possibly result in a decline in the State's AA credit rating. Through 1990, the State's general obligation debt capacity is estimated to range from \$252 million to \$1.2 billion, depending upon the level of current revenues the State decides to commit to the payment of debt service.

Because of the frequent changes in petroleum prices and their impact on State revenues, the affordability analysis along the lines presented in this report must be continually updated. Revisions should take place at least quarterly when the Department of Revenue releases long-range revenue forecasts and when ever the State issues general obligation debt. Such analysis will provide the State Bond Committee with important information to be used in formulating future debt issuance plans.

Even though the affordability of revenue bonds is principally determined by the adequacy of the revenue stream pledged to repayment of the bonds, along with the market's acceptance of the security structure behind the bonds, revenue bonds indirectly affect the State's debt capacity. To the extent that revenue bonds are supported by a pledge of the State's moral obligation, or their issuance creates an oversupply of bonds bearing the Alaska name in the marketplace, the State's ability and willingness to carry debt will be affected.

Use of Moral Obligation Bonds

We do not see the possibility of entirely eliminating the use of the State's moral obligation pledge in the case of all Alaska financings. Where it is possible to avoid its use, such as in the case of Alaska Housing Finance Corporation

bonds, it should be avoided. The moral obligation pledge should not be treated as a right, available to most State issuers, as it is at present. Rather, it should be considered a privilege, an indication to the bond market that, after close scrutiny, the State believes the project meets public policy objectives and is financially sound. The State Bond Committee should have the responsibility for determining the necessity of the moral obligation to an agency's borrowing program, and its potential impact on the State's creditworthiness.

If moral obligation debt increases at a time when overall State revenues are stable, are growing at a rate less than the growth in contingent liabilities, or are declining, the moral obligation burden may encumber the State's credit capacity. Such an occurrence would make general obligation debt more costly and, therefore, less affordable due to weaker credit quality. Hence, the importance for including contingent debt in the State Bond Committee's annual review of the State's outstanding debt.

If it were not for the Permanent Fund, the limited sources of State revenue would cause investors to discount the moral obligation pledge heavily. The mere existence of the Permanent Fund provides comfort to bondholders that the State would be able to meet its moral obligations, if necessary, even though such action is not constitutionally permitted and would require a change in law. Any attempt to erode the principal of the Fund, or to otherwise weaken its position should, therefore, be avoided.

Capital Financing Plan

Demonstrating keen fiscal management and attention to capital financing and debt management is especially important to Alaska because of the uncertainties surrounding State revenues. The State must wisely allocate scarce resources to its developing economy in a manner that balances capital investment with the return on that investment yielding a diverse and broadened economy that will be able to maintain the public infrastructure put in place. Accordingly, the need for a capital financing plan linked to a comprehensive capital improvement plan is evident. (see pages 165 to 174)

The quality of financial reporting is an important element in a capital financing plan and to the complete debt management picture. While Alaska's financial reporting is complete, it does not conform to generally accepted accounting principles (GAAP). States that use an accounting system that conforms to, and is consistent with, GAAP benefit in several ways (see pages 174-175). It is recommended that the State consider converting its annual financial reports to GAAP. Such action will provide the State with vital information on its financial condition, encourage the State to take a global view of outstanding debt, improve financial management, and will be looked upon favorably by investors in the State's bonds.

General Debt Management

Specific debt management practices being used in the State could be improved. The State and its agencies recognize the importance of securing professional advice on debt issuance. However, financial advisors and bond counsel are typically compensated based on a percentage of the amount of bonds sold. Tying the advisor's compensation to the amount of bonds sold or the successful delivery of the bonds builds in an unnecessary risk of conflict of interest. The State should review its method of compensation for financial advisory services and seek arrangements that do not encourage conflicts between the advice and the payment for the advice. In this regard, a flat fee -- such as a base retainer and hourly rates -- is to be preferred over a fee based upon the amount of bonds issued. (see pages 185 to 190).

There is a place for both negotiated and competitive techniques for selling bonds in a debt management and debt marketing strategy. The approach which is judged to provide the greatest market reception and lowest interest cost should be followed. While each bond issue is unique, it appears that some bond issues presently being sold by negotiation by the State, for example, those of the Alaska Housing Finance Corporation, would be candidates for a competitive sale. (see pages 182 to 184).

Neither the State Bonding Act nor the State statutes regarding municipal debt specify the method by which effective interest rate on a competitive bond sale must be determined. However, the State and most municipalities have chosen to use the net interest cost (NIC) method to compare alternative bids at competitive sale. This method may not be in the best interests of the State because the winning bid on a NIC basis does not necessarily result in the lowest true interest cost (TIC) -- a measure of the "true" cost of borrowing money that takes into account the time value of money. We recommend that the State Bond Committee review the current rules that govern the award of the State's competitive general obligation bond issues, and that municipalities be encouraged to do so as well, with a view toward awarding bond issues on the basis of TIC. (see pages 179 to 181).

Local Government Debt

Local governments in Alaska have issued approximately 29 percent of all State-wide debt. The analysis of local government borrowing in Chapter Five indicates that the bonds of Alaska's localities sell at yields significantly above the average for the overall market. Furthermore, the evidence indicates that yields on the North Slope Borough's debt are vastly higher than the average for other Alaska municipalities. The most significant comparison of local and State bond issuance is the markedly higher underwriting cost on local issues. Compared to other states, local governments in the Alaska rely on general obligation bond financing at twice the national rate. Given the high levels of debt that have been issued by the State's localities, the much higher than average interest costs of Alaska's local debt, and the loss to the State of revenues from taxes levied by certain localities to pay the annual debt service on their debt, the State may wish to analyze further local bond market experience and State policies regarding local debt management. The State

should take the lead in implementing programs that encourage the prudent use and guard against the misuse of local debt issuance.

Currently the State is being short-changed by those localities that levy a high amount of taxes on oil production property in order to finance debt service. Because taxes paid to the locality are credited towards State property tax liability, this represents a direct revenue loss to the State. It is, therefore, in the State's interest to address the absolute level of debt issuance by its localities. It is recommended that the State develop a two-tiered ceiling on local debt issuance, based on per capita amounts of debt and a percentage of property value.

Specific State-level programs which can assist local borrowers and improve local debt management are covered in pages 136 to 141. In evaluating alternative State policies, the State must consider both the direct budgetary costs of the programs and the indirect effects on the State's own credit worthiness, and the amount of autonomy the State wishes its localities to enjoy. A reasonable compromise between encumbering the State's debt capacity and providing greater financial assistance to local governments would be to expand the role of the Municipal Bond Bank. Our review of the Bank's market performance indicated that, compared with other state bond banks, the Alaska Bond Bank has the potential for saving as many as 50 basis points in borrowing cost by undertaking an active national marketing effort. The State should review the present security structure behind the Bank's bonds with the view toward improving their market reception by taking advantage of the State's high creditworthiness.

The State's present program to subsidize the cost of school construction is an expensive undertaking; however, its cost could be minimized through attention to the cost of the project and to the means of financing during the Department of Education's approval process. Further alternatives include the issuance of State general obligation bonds in lieu of local school construction bonds, and requiring the Municipal Bond Bank to issue all school construction debt.

CHAPTER II

OVERVIEW OF THE NATIONAL TAX-EXEMPT "MUNICIPAL" BOND MARKET AND THE BOND ISSUANCE PROCESS

Characteristics of the Marketplace

Most, but not all, borrowing of bonds by state and local governments is in the form of securities representing written promises to repay a sum of money with interest at a specified future date. Such obligations form one of the most important subsets of the financial markets, that of "tax-exempt" securities, frequently referred to as "munis" or "municipal" bonds. The term municipal is a generic one and applies to issues sold by all forms of state and local government, including agencies, cities, boroughs and special districts.

The distinguishing feature of the municipal security is its tax-exempt status. Interest income earned by investors who purchase these securities is not subject to federal or, frequently, to various state and local income taxes. This tax exemption permits state and local governments to borrow at lower rates of interest, because investors will accept a lower return since none of the interest is lost to the federal income tax levy. These securities have appealed to a special market composed of high tax-bracket individual and institutional investors seeking non-taxable income.

The tax-exempt nature of state and local debt obligations is interpreted by some as a constitutionally guaranteed right, and by others as a federal subsidy to state and local governments. The constitutional argument is based upon the doctrine of the separation of powers and its implication that the sovereignty of state and local units of government requires that they be protected from the federal government's tax power.¹ Regardless of one's view on the legal basis of tax-exemption, it is generally not believed to be an efficient federal subsidy of state and local government borrowing costs. Many studies have shown that the cost to the federal government from lost tax revenues is greater than the benefit received by state and local governments from reduced borrowing costs.²

Traditionally, municipal securities are debt obligations having fixed maturities and fixed rates of interest. They may be backed by many different pledges of security which, in this sense of the word, means the nature of the resources that the governments pledge to meet the payments of principal and interest (debt service). Municipal bonds conventionally are divided into two broad categories when classified by type of security: (1) general obligations, secured by the full faith and credit--the taxing power--of a government, and (2) revenue or special-fund obligations, secured by the revenues or receipts of a project or special fund rather than by the full taxing power of a borrower.

TABLE 2.1
 NATIONAL BOND MARKET
 NEW ISSUES OF TAX-EXEMPT SECURITIES
 1966 982
 (DOLLAR AMOUNTS IN MILLIONS)

	<u>TOTAL NEW ISSUES</u>		<u>LONG TERM ISSUES</u>		<u>SHORT TERM ISSUES</u>	
	<u>NUMBER</u>	<u>DOLLAR VOLUME</u>	<u>NUMBER</u>	<u>DOLLAR VOLUME</u>	<u>NUMBER</u>	<u>DOLLAR VOLUME</u>
1982	9340	\$122,008	6164	\$77,295	3236	\$44,713
1981	7821	85,156	4734	47,724	3087	37,432
1980	7933	76,087	5589	48,368	2344	27,720
1979	7468	65,050	5391	43,335	2077	21,715
1978	8031	69,574	5695	48,190	2336	21,384
1977	8333	71,457	5358	46,706	2975	24,751
1976	7533	57,321	4920	35,416	2613	21,905
1975	8072	59,632	4689	30,659	3383	28,973
1974	7628	52,626	4214	23,585	3414	29,041
1973	8061	48,488	4655	23,821	3406	24,667
1972	8131	48,914	4814	23,692	3317	25,222
1971	8493	51,210	5143	24,929	3350	26,281
1970	7238	35,963	4335	18,083	2903	17,880
1969	6167	23,485	3824	11,702	2343	11,783
1968	7660	24,979	5487	16,320	2173	8,659
1967	7552	22,430	5417	14,405	2135	8,025
1966	6800	17,333	4964	11,079	1836	6,254

Source: Public Securities Association

Most governmental securities are debentures. That is, they are secured on the general creditworthiness of the borrower's promises rather than on the real or financial assets to which the lender has rights of possession in the case of default. Bondholders cannot be paid off with fire hydrants or classrooms if their governmental debtor defaults. As a result, primary emphasis in municipal credit analysis is placed on the flow of revenues generated through taxation or the operation of a specific public enterprise and the ability of the investor (lender) to get first claim on them.

State and local governmental debt issuers, the uses of bond proceeds, and the controlling legislation under which governments undertake capital projects and sell securities are extremely diverse. One of the outstanding features of the tax-exempt market has been the growth in new financings even under volatile and sometimes hostile market conditions. Table 2.1 points out that in 1982, the total volume of long-term and short-term tax-exempt new issues exceeded \$120 billion, a 44 percent increase over 1981. This increase contrasts with the average annual rate of growth in new issues since 1966 which has been 12.9 percent.

Market convention generally distinguishes between short-term tax-exempt securities, which carry a final maturity of 13 months or less, and long-term debt issues with final maturities beyond 13 months. As noted in Table 2.1 the volume of newly issued short-term tax-exempts (often called notes) increased rapidly between 1968 and 1971, from \$6.3 billion to \$26.3 billion. Since 1971, new note issues have generally increased during periods of high or rapidly rising interest rates and have declined during periods of low or falling interest rates. In 1982, note issues reached an all time high of \$44.7 billion, when long-term bond interest rates were at some of the highest levels ever recorded. This is due to the fact that the shorter maturities bring lower interest rates. Therefore, short-term notes are a useful interim financing device to use in anticipation of falling long-term interest rates in the near future.

Long-term issues, referred to as bonds, have recorded an upward trend in dollar volume since 1966. In 1982, 6,104 new bond issues were marketed, raising \$77.3 billion in funds. The \$77.3 billion in bond sales is more than double the volume just 6 years earlier--in 1976--and more than six times the volume in 1969. The record of the past decade points out that new issues of tax-exempt bonds have doubled approximately every 5 years.

Accompanying the growth in dollar volume has been an increase in the average size of each sale. In 1966, 4,964 separate bond issues were marketed with a total dollar volume of \$17.3 billion. In 1982, 6,164 issues were sold, raising \$77.3 billion in funds. Thus, the average size of new bond issues increased from \$2.2 million in 1966 to \$12.5 million in 1982. Even more significant, the number of individual new issues over \$25 million in par value has increased from 60 in 1966 to 753 issues in 1982. While these large issues accounted for only 12.3% of the number of new issues in 1982, they accounted for 70% of the total dollar volume of funds raised in the tax-exempt bond market. Short-term note issues have also increased in size. In 1966, the average note issue amounted to \$3.4 million; by 1982, the average note sale amounted to \$13.8 million.

TABLE 2.2
 NATIONAL BOND MARKET
 NEW LONG-TERM BOND ISSUES BY
 TYPE OF SECURITY
 (\$000')

	<u>ALL</u>	<u>GENERAL OBLIGATION</u>	<u>REVENUE</u>
1966	\$11,078,506	\$6,802,004	\$4,276,502
1967	14,405,352	8,944,606	5,460,746
1968	16,319,507	9,275,329	7,044,178
1969	11,702,028	7,735,674	3,966,354
1970	18,082,509	11,851,771	6,230,738
1971	24,929,063	15,218,492	9,710,571
1972	23,692,402	13,329,018	10,363,384
1973	23,821,477	12,169,799	11,651,678
1974	23,584,809	13,126,341	10,458,468
1975	30,659,442	15,974,335	14,685,087
1976	35,415,683	18,200,098	17,215,585
1977	46,705,886	18,118,339	28,587,547
1978	48,189,731	17,789,591	30,400,140
1979	43,335,851	12,082,583	31,252,268
1980	48,367,802	14,102,312	34,265,490
1981	47,724,616	12,392,648	35,331,968
1982	77,294,539	20,879,301	56,415,238

Another fundamental change in tax-exempt bond issues during the past decade has been in the type of securities sold. Table 2.2 records the trend towards a decline in the relative importance of general obligation or tax-supported bonds issued by a general unit of government. In 1970, general obligation bonds amounted to \$12.0 billion and accounted for 66 percent of the dollar volume of all new issues. But since 1970, the proportion of new issues sold as general obligations has fallen markedly, accounting for only 27 percent of dollar volume in 1982.

In contrast to the decline of the tax-supported bond, revenue bonds have grown markedly in both dollar volume and share of the market. In 1970, revenue bonds amounted to \$6.2 billion, or 34 percent of the market; by 1982, revenue bonds amounted to \$56.4 billion and accounted for 73 percent of all bond sales. A central message emerging from this trend is that the traditional purposes of government borrowing are changing and the traditional general obligation security is being supplanted by new bond types and borrowing devices. In the process, the landscape of the tax-exempt market has and continues to undergo radical change.

The shared characteristic among most revenue-supported issues across the marketplace is that while they are tax-exempt governmental obligations, they are designed to attenuate or completely sever the link between a government's ability to incur debt and its general power to levy taxes to repay such debt. In other words, the debt of the government issuer no longer is to be considered that of a taxpayer, rather, it is considered to be that of the public enterprise or borrowing program on whose behalf the tax-exempt debt is issued.

The rapid waxing of the revenue bond and the relative waning of the general obligation bond are not independent phenomena. They are the results of several forces, including:

1. An expanding definition of what constitutes public purposes to encompass activities and types of projects that were historically financed in the private sector using taxable securities.
2. Bond referenda results showing that although the number of areas where governments may have responsibility has expanded, voters have been increasingly unwilling to approve new bond issues or otherwise directly pledge the public's taxes or credit to new endeavors. The new generation of state and local fiscal constraints reinforces these trends.
3. Various legal barriers at the state and local level, such as debt and tax limits, interest rate ceilings, bond design requirements, and legally allowable purposes for expenditure, which have from time to time and place to place constrained the use of conventional financing techniques and promoted the creation of new, non tax-supported borrowing vehicles.
4. Certain fiscal limitations and uncertainties aside from legal hurdles, which have eroded general tax-supported creditworthiness and fostered the supplanting of its use with alternative borrowings that employ "special" authorities and funds that stand free of (and conserve) the general obligation taxing power of the governmental borrower.

5. A trend toward conducting certain activities in a businesslike (enterprise) manner, with greater stability and professionalism than might be possible in the political arena of general government, has led to the establishment of special entities (and debt instruments) detached from general government and its taxing power. This can be particularly important for projects that involve large areas and overlap many units of government, such as regional transit or water and sewer authorities, or for projects where certain activities are placed on a self-supporting basis. In these instances users (rather than the public at large) pay for benefits through user charges and fees, encouraging the use of debt secured on such payments.
6. The realities of competition among areas and regions for economic development and efforts applied by special interests to provide a conduit into the tax-exempt market, has resulted in permitting private firms and individuals to enjoy the benefits of lower interest costs through the use of tax-exempt industrial development or revenue bonds.

The Changing Role of Public Borrowing

Long-term financing by governments through the bond market is a response to demand for capital needs perceived as necessary by governmental units and their constituents. Capital expenditures and sales of debt reflect the interactions of several fundamental forces. Population growth carries with it the need for additional governmental services of a basic nature: education, public safety, transportation, and general administration. Rising standards of living also tend to raise expectations of the role of government in fulfilling certain social welfare goals such as adequate housing, improved facilities and opportunities for health treatment and higher education, and other amenities such as parks and forest preserves. At some point, older capital facilities become obsolete and worn-out and need to be replaced, so that an ever-increasing public capital base generates a continuing need for replacement capital.

Trends in public capital spending mirror the changing forces at work in the overall economy. In recent years, the traditional link between capital spending on public works by state and local governments and their borrowing has been greatly attenuated. The bricks-and-mortar rationale for public capital investment has given way to new motivations as governments have found their blueprint of activities altered, have found new sources of capital funds, and, especially, have found new missions as suppliers of capital funds to those outside of the public sector.

The above developments are symptomatic rather than explanatory of the rise of the revenue bond as a security form; but they carry the seeds of explanation in that state and local governments, through a combination of political, legal, and technical circumstances, have increasingly found it desirable and necessary to reach beyond their traditional functions and financial arrangements to meet an enlarged version of public purpose. The enlarged scope, which often involves

private sector participants and emulates private sector financing arrangements has been both accommodated and stimulated by access to the tax-exempt market through the use of the revenue bond.

The results of the above forces are reflected in the shifting purposes for which state and local debt is issued. The dollar volume of new bonds issued for the "traditional" purposes of education, highways, and water and sewage facilities has declined from 51 percent of total sales between 1966 and 1970 to between 11 and 12 percent of 1982 sales. New areas for growth have more than taken up any slack in traditional capital demands. Among these new areas, bonds sold to meet social welfare purposes have dominated. Housing, hospital and health facilities, and recreation facilities accounted for over 32 percent of all new issues in 1982, up from 7.2 percent of the 1966-70 market.

Table 2.3 presents the use of bond proceeds for recent years, and shows that other than traditional uses of public credit have increased in volume and proportion compared to general obligation financing. Utility financing has more than doubled in the decade and accounted for over 11 percent of the market in 1982. These utility bond issues are among the most complex and specialized financings ever devised in the tax-exempt market, and include those of the State of Washington Public Power Supply System. Many, for example, involve joint undertakings between one public entity or a collection of municipalities and one or more private firms. Several projects involve the construction of entirely new utility systems, including ancillary capital facilities such as railroad cars and other features of a vertically-integrated system.

Table 2.3 also points out that industrial aid bonds, including pollution control facilities, accounted for more than \$7 billion in 1976-79. These issues, which primarily benefit private corporations, accounted for 10 percent of the market in 1982, which is double the 4.9 percent market share recorded in the 1966-70 period.

Many of these new financings were formerly conducted in the taxable market from conventional lending sources; but these trends demonstrate that the concept of a public purpose has been expanded, even to the point that such well-known corporations as the United States Steel and McDonald's Restaurants and such diverse projects as shopping centers, branch banks, and catfish farms, have been included in the tax-exempt market. Indeed, a portion of the funds to finance construction of the TransAlaskan Pipeline's Terminus in Valdez came from such tax-exempt industrial development bonds.

Emerging Concerns for Traditional Capital Spending and Financing

The problems of the unmet capital needs and deteriorating condition of public capital stock have received widespread attention. The causes are complicated, but may be distilled to the following: because of changed political priorities that have put emphasis on current spending, persistent fiscal restraint at all levels of government, and disruptive bond market conditions, states and localities have not been spending enough on the repair and replacement of public facilities. State

Table 2.3

TAX-EXEMPT NEW ISSUES
CLASSIFIED BY USE OF PROCEEDS

Use of Proceeds	1966-1970		1971-1976		1977-1978		1979-1980		1981		1982	
	Volume	%	Volume	%	Volume	%	Volume	%	Volume	%	Volume	%
EDUCATION												
ELEMENTARY & SECONDARY	19,533	21.7	25,799	12.2	6,584	6.9	6,014	6.6	2,178	4.6	2,206	2.9
HIGHER EDUCATION & OTHER	7,066	7.8	12,077	5.7	3,443	3.6	3,718	4.1	2,366	5.0	2,378	3.1
HIGHWAY TRANSPORTATION	10,033	11.1	12,447	5.9	2,896	3.1	2,214	2.4	995	2.1	1,643	2.1
WATER AND SEWER	9,680	10.7	18,057	8.5	6,571	6.9	6,090	6.6	2,852	6.0	5,027	6.5
ELECTRIC, GAS, OTHER UTILITY	3,909	4.3	25,714	12.2	9,695	10.2	9,211	10.0	7,070	14.8	8,873	11.5
HOUSING	1,639	1.8	13,794	6.5	9,391	9.9	27,605	30.1	5,926	12.4	14,344	18.6
HOSPITALS & HEALTH FACILITIES	3,108	3.4	15,038	7.1	8,212	8.7	7,458	8.1	5,375	11.3	9,503	12.3
PARKS, CIVIC CENTERS, ETC.	1,763	2.0	5,372	2.5	2,401	2.5	2,341	2.6	759	1.6	1,187	1.5
PORTS, AIRPORTS, OTHER TRANSPORTATION	6,958	7.7	9,500	4.5	3,532	3.7	2,830	3.1	2,455	5.1	4,596	5.9
INDUSTRIAL AID (including Pollution Control)	4,387	4.9	13,600	6.4	9,036	9.5	7,784	8.5	7,650	16.0	7,750	10.0
REFUNDING, ADVANCE REFUNDING	N/A		N/A		21,234	22.4	3,693	4.0	1,201	2.5	4,255	5.5
MULTIPURPOSE & ALL OTHER	22,037	24.6	60,537	28.6	11,902	12.5	12,745	13.9	8,898	18.6	15,533	20.1
TOTAL	90,113	100	211,395	100	94,896	100	91,703	100	47,725	100.0	77,295	100.0

SOURCE: Data files maintained by the Municipal Finance Study Group, State University of New York at Albany.

Table 2.3

TAX-EXEMPT NEW ISSUES
CLASSIFIED BY USE OF PROCEEDS

Use of Proceeds	1966-1970		1971-1976		1977-1978		1979-1980		1981		1982	
	Volume	%	Volume	%	Volume	%	Volume	%	Volume	%	Volume	%
EDUCATION												
ELEMENTARY & SECONDARY	19,533	21.7	25,799	12.2	6,584	6.9	6,014	6.6	2,178	4.6	2,206	2.9
HIGHER EDUCATION & OTHER	7,066	7.8	12,077	5.7	3,443	3.6	3,718	4.1	2,366	5.0	2,378	3.1
HIGHWAY TRANSPORTATION	10,033	11.1	12,447	5.9	2,896	3.1	2,214	2.4	995	2.1	1,643	2.1
WATER AND SEWER	9,680	10.7	18,057	8.5	6,571	6.9	6,090	6.6	2,852	6.0	5,027	6.5
ELECTRIC, GAS, OTHER UTILITY	3,909	4.3	25,714	12.2	9,695	10.2	9,211	10.0	7,070	14.8	8,873	11.5
HOUSING	1,639	1.8	13,794	6.5	9,391	9.9	27,605	30.1	5,926	12.4	14,344	18.6
HOSPITALS & HEALTH FACILITIES	3,108	3.4	15,038	7.1	8,212	8.7	7,458	8.1	5,375	11.3	9,503	12.3
PARKS, CIVIC CENTERS, ETC.	1,763	2.0	5,372	2.5	2,401	2.5	2,341	2.6	759	1.6	1,187	1.5
PORTS, AIRPORTS, OTHER TRANSPORTATION	6,958	7.7	9,500	4.5	3,532	3.7	2,830	3.1	2,455	5.1	4,596	5.9
INDUSTRIAL AID (including Pollution Control)	4,387	4.9	13,600	6.4	9,036	9.5	7,784	8.5	7,650	16.0	7,750	10.0
REFUNDING, ADVANCE REFUNDING	N/A		N/A		21,234	22.4	3,693	4.0	1,201	2.5	4,255	5.5
MULTIPURPOSE & ALL OTHER	22,037	24.6	60,537	28.6	11,902	12.5	12,745	13.9	8,898	18.6	15,533	20.1
TOTAL	90,113	100	211,395	100	94,896	100	91,703	100	47,725	100.0	77,295	100.0

SOURCE: Data files maintained by the Municipal Finance Study Group, State University of New York at Albany.

and local capital spending, which grew during the decades of the fifties and sixties, declined in real terms throughout the seventies and has been particularly depressed in the early 1980s.

Since 1968, state and local government capital investment in constant 1972 dollars has fallen by one-third, from a high of \$35.9 billion to \$23.6 billion in 1981. Measured in per capita constant dollars, state and local public works investment declined from \$179 per person in 1968 to \$103 per person 13 years later. Capital expenditures make up a diminishing share of total outlays of state and local governments: in 1960, state and local governments spent 27.1 percent of their budgets on infrastructure; by 1980, they were spending only 15.4 percent on capital items. Judging by the most recent construction data, state and local spending has sunk even further over the first two years of the 1980s, with spending levels in current-dollar terms running more than 10 percent lower in 1982 than in 1980.

Examining the means of financing of capital facilities provides insights into the current difficulties. The last 20 years have marked a trend away from the use of own-sources by states and localities and, in particular, that of debt financing, and towards greater reliance on the federal government. As budget priorities shifted to meet current service and transfer payment program needs, grants to states and localities for capital purposes—while nominally growing—failed to keep pace with the explosive growth in grants for non-capital purposes. Moreover, capital grants were typically episodic and "single-shot" efforts, providing for initial investments in major new projects and not oriented toward providing a financial or institutional base for the subsequent problems of operating and preserving the capital infrastructure once in place.

Table 2.4 provides a broad perspective on the sources of funds used to finance state and local capital outlays and reflects a general ebbing in the importance of long-term debt and its replacement by federal grants. By the last half of the 1970s, states and localities depended on federal grants to finance an estimated 35 to 40 percent of their capital spending, rendering this component of their spending highly vulnerable to changes in federal grants policy.

The recurring budgetary cutbacks at the federal level are now withdrawing a major source of capital funds. While this process takes time to materialize in terms of reduced aid flows and spending, it seems clear that state and local governments will be increasingly forced to rely more heavily on their own sources of financing. Such a reliance on their own sources boils down to greater use of current revenues or more debt financing. On the current revenues side of the equation, prolonged fiscal pressures have brought on a wave of home-grown tax and expenditure limitations that have tainted and made difficult increasing any resource allocations to government. Moreover, several years of sluggish economic growth further depressed current revenues and rendered them of very limited help in meeting capital needs. In fact, the demands on current budgets to keep governmental operations going in the face of insufficient and erratic revenues have further restricted capital spending by reallocating to current uses funds that otherwise might have gone to capital purposes.

Table 2.4

State and Local Capital Outlay Financing
Percentage Composition of Sources of Funds

	<u>1952-57</u>	<u>1960</u>	<u>1970</u>	<u>1977</u>	<u>1980</u>
Long-Term Debt:	56.0%	37.1%	51.0%	43.3%	37.0%
Federal Aid:	8.5	20.0	22.0	32.1	36.0
Other Sources:	<u>35.5</u>	<u>42.9</u>	<u>27.0</u>	<u>24.6</u>	<u>27.0</u>
TOTAL	100.0	100.0	100.0	100.0	100.0

Sources: 1952-57-Alan Manvel, "State and Local Government Financing of Capital Outlays," in State and Local Public Facility News and Aiming, Joint Economic Committee (December 1966). Data for the subsequent years: George Peterson, "Capital Spending and Capital Obsolescence" in Roy Bahl's The Fiscal Outlook for Cities, Syracuse University Press, 1978, and authors' estimates for 1980.

This leaves the remaining alternative: state and local governments must rely increasingly upon borrowing to finance their capital needs. Unfortunately, many of the same economic circumstances that have led to the deteriorating support for capital spending from federal grants and out of current revenues are reflected in very unstable bond market conditions, making borrowing a volatile and expensive means of raising funds for capital projects. It is the adverse conditions in the financial market--against the background of unmet capital needs, both public and private, and scarce resources on the current accounts--that form the primary basis for the surge of creative and non-traditional activity in the realm of state and local capital finance.

Changes in The Cost Of Borrowing

A combination of cyclical and secular factors have brought rapid and radical changes to the tax-exempt market over the past few years. State and local governments have shared the difficulties of high interest rates and recessionary conditions that now burden all sectors of our economy. But governments have come in for some special problems over the past two years. These difficulties arose in large part from simultaneous changes in the federal tax code, reductions in the federal budget, and the impacts of recession on revenues. To these changes, which reduced investor demand for tax-exempt bonds while making access to that market even more important, must be added the pressures brought by restrictive monetary policy and continuing growth in private-purpose tax-exempt borrowing. The latter occurrence has swelled the supply of tax-exempt securities in the midst of weak demand for such securities, particularly in the long maturities and created additional upward pressure on interest rates.

The pressures in the tax-exempt market can probably best be measured by comparing its cost of capital to that in the taxable market. Over the past two years, the value of tax exemption as a means of reducing interest rates has been severely eroded. As a consequence, borrowing costs for state and local governments have risen faster than the general rise in interest rates. As Table 2.5 shows, tax-exempt rates shifted from a historic range of 65 to 70 percent of comparable taxable bond yields up to 80 to 85 percent in the long end of the market in late 1981 and early 1982. (The second half of 1982 brought a substantial decrease in rates but the ratio of comparable taxable to tax-exempt rates remained close to 75 percent).

Changes enacted in the Economic Recovery Tax Act of 1981 (ERTA) contributed to systematically higher interest rates for municipal bonds. Several provisions of ERTA relating to individual taxpayers had adverse consequences for tax-exempt interest rates relative to those on taxable securities. Among these were the following:

- Reduction of personal income tax marginal rates, especially the lowering of the top-bracket rate from 70 percent (on unearned income) to 50 percent for all income. The rate reductions are scheduled to continue at a rate of 10 percent a year, with indexation commencing in 1985. Thus, starting in late 1981, the long-term prospects were for progressively lower income tax rates into the future.

Table 2.5

LEVELS AND RATIOS OF INTEREST RATES:
 BOND BUYER 20 BOND INDEX (TAX-EXEMPT),
 MOODY'S ALL-INDUSTRY CORPORATE BONDS (TAXABLE)
 1978 to 1982/IV

<u>Year/Quarter</u>	<u>Bond Buyer 20 Bond Index (Tax-Exempt)</u>	<u>Moody's All-Industry Corporate Bonds (Taxable)</u>	<u>Ratio Of Tax-Exempt To Taxable (%)</u>
1978 (yr.)	6.07%	9.07%	66.0%
1979 (yr.)	6.53	10.12	64.5
1980/I	8.56	12.80	66.9
1980/II	7.86	12.32	63.8
1980/III	8.79	12.30	71.5
1980/IV	9.61	13.67	70.3
1981/I	9.97	14.09	70.8
1981/II	10.68	14.89	71.7
1981/III	12.03	15.65	76.9
1981/IV ^{1/}	12.59	15.64	80.5
1982/I	12.96	15.95	81.3
1982/II	12.19	15.55	78.4
1982/III	11.06	15.03	73.6
1982/IV	10.14	13.49	75.2
1983/I	9.41	12.88	73.1

Source: Resources in Review, Government Finance Research Center,
 Municipal Finance Officers Association.

^{1/} All-Savers Certificates became available in October, 1981.

- Reduction in the capital gains rate, which dropped from a maximum of 28 percent to 20 percent. Over the long haul, this change should accent the attractiveness of holding equities in comparison to fixed-income securities, such as municipal bonds — a particularly important trade-off in the case of wealthy investors.
- Expansion of various competing income-sheltering opportunities in individual retirement savings plans (IRA and Keogh), the partial exemption of interest income, the Utility Dividend Reinvestment Program, and the creation of the All Savers Certificate. The latter wrinkle represented a widely available tax-exempt, short-term instrument that was federally guaranteed.

On the corporate tax side of the ledger, the following provisions in ERTA appeared to have adverse impacts on tax-exempt issuers:

- Rapid expansion under ERTA of leasing tax shelters (the Safe Harbor provisions). This change permitted firms to sell tax benefits to the highest bidder, thus creating billions of dollars of tax-shelter investment opportunities to compete with tax-exempt securities.
- Increase in the Investment Tax Credit (ITC) and Accelerated Cost Recovery Schedules (ACRS). These steps generally enhanced the after tax economic rate of return on private investments, thus lessening the need for tax shelter provided by municipal securities because less income would be subject to taxation. However, these provisions may also help governments that take advantage of public-private joint ventures.

Reducing the need for shelters and expansion of income sheltering opportunities available to individuals and corporations proved to be especially ill-timed for the municipal market. In further reducing investor demand for municipal securities, the 1981 tax laws compounded several longer-term problems caused by generally poor economic conditions--recession and high interest rates--and changing investment objectives. Demand for tax-exempt bonds by the two major institutional investors, namely commercial banks and property and casualty insurance companies, practically evaporated after 1979 due to poor profitability and the availability of competing tax shelters. Since the early 1970s, commercial banks have been shifting portfolios away from tax-exempt bonds. Through much of the decade this shift was offset as property and casualty insurance companies increased demands and kept the long-term tax-exempt market buoyant. Banks and insurance companies together in the late 1970s acquired 80 to 90 percent of net increases in municipal bonds. However, these institutions have shown only minimal interest in tax-exempt income since 1980 largely because of their reduced profitability from business operations.

The withdrawal of the institutional investors from the tax-exempt market has resulted in a heavy reliance on individual investors to absorb the supply of new tax-exempt securities. As Table 2.6 demonstrates, the percentage of outstanding tax-exempt debt held by individuals and mutual funds shot up in 1981 and 1982. According to flow-of-funds figures for 1982, the household (individual) sector and mutual funds absorbed 96 percent of the new supply of tax-exempt debt last year.

Table 2.6

NET CHANGE IN HOLDINGS
OF TAX-EXEMPT SECURITIES

1965 - 1982

(DOLLAR AMOUNTS IN BILLIONS)

YEAR	COMMERCIAL BANKS		HOUSEHOLDS*		PROPERTY-CASUALTY INSURANCE COMPANIES		TOTAL CHANGE IN OUTSTANDING TAX-EXEMPTS (\$)
	(\$)	% of Total	(\$)	% of Total	(\$)	% of Total	
1964	3.6	60%	2.6	43%	.4	7%	6.0
1965	5.2	71	1.7	23	.4	5	7.3
1966	2.3	41	3.6	64	1.3	23	5.6
1967	9.1	117	-2.2	-28	1.4	18	7.8
1968	8.6	91	-.5	-5	.9	9	9.5
1969	.6	6	9.3	94	1.1	11	9.9
1970	10.7	96	-.9	-8	1.5	13	11.2
1971	12.6	72	.1	1	3.5	20	17.4
1972	7.2	49	2.3	16	4.3	29	14.7
1973	5.7	39	5.3	36	3.6	24	14.7
1974	5.5	33	8.2	50	2.2	13	16.5
1975	1.8	11	6.2	39	2.6	16	16.1
1976	3.0	19	2.5	16	5.4	34	15.7
1977	9.2	42	.1	.5	10.7	49	21.9
1978	9.6	34	4.6	16	13.5	48	28.4
1979	9.5	32	11.2	38	9.9	33	29.8
1980	13.6	38	14.2	40	7.7	21	35.9
1981	5.0	15	23.3	71	4.0	12	32.9
1982	0	0	58.5	96	2.2	4	60.7

* Includes Mutual Funds

Source: Board of Governors of the Federal Reserve System, Flow of Funds, February 1983.

The shifting mix of investors coupled with the rising levels of all capital market borrowing costs has dramatically increased the volatility of the tax-exempt market in particular. Table 2.7 provides a measure of the volatility by tallying the variation between high and low yields on top quality municipal bonds each year since 1968. In 1982, the spread between the high yield in January and low yield in October on 30-year prime grade municipals reached 440 basis points (4.40 percent) exceeding the range in yields on U.S. Treasury securities for the first time.

At the same time, the structure of tax-exempt yields by maturity continued to be upward-sloping, indicating both the high, even prohibitive, cost of long-term financing and the lure of lower cost, but more variable cost, short-term financing. Table 2.8 traces the tax-exempt yield-to-maturity relationship at the high point in yields, in January, and at year-end 1982.

Impacts of the Tax Act of 1982

Starting in late summer of 1982, the bond markets enjoyed a rally as interest rates began to decline under twin influences of an increasingly depressed economy and a relaxation of monetary policy on the part of the Federal Reserve Board. Despite a flood of new issues, the tax-exempt bonds followed the general trend, with especially good recovery in the short-term area. However, the longer term prospects for the market continued to be, at best, complicated. Complicating factors are the implications of once-again altered tax treatments and, the continuing weakness on the part of institutional demand and, hence, continued heavy reliance on the household-oriented "retail" market.

The 1982 Federal Tax Equity and Fiscal Responsibility Act (TEFRA) further changed the status of municipal securities (and that of alternative investments) in a variety of ways. Two of the changes in the tax code most likely will spell higher costs for municipals over the intermediate to longer haul: the partial removal of the deductibility of bank interest costs used to finance tax-exempt securities and the requirement that all municipal bonds issued after July 1, 1983, be in registered form.

The change in the corporate minimum tax provisions which required that interest on indebtedness used to purchase or carry tax-exempt securities be included in calculation of liability for the minimum tax was estimated to increase municipal borrowing rates by as much as 160 basis points (1.60 percent).³ Before the 1982 law was enacted, commercial banks were able to deduct from operating income interest paid on deposits or other borrowed funds that were applied to the purchase of tax-exempt bonds. The new tax provision is expected to decrease the demand for tax-exempt bonds by commercial banks, leading to increased borrowing costs.

The registered bond requirement changes the form of the municipal bond from a readily negotiable instrument where ownership resides with its bearer, to a registered-form security requiring transfer of ownership to be recorded. This change may increase the costs of borrowing for two major reasons. In the short-term, interest rates on registered securities may be slightly higher than those on traditional bearer bonds before investors become familiar with the new security.

Table 2.7

INTRA-YEAR YIELD
VOLATILITY ON PRIME MUNICIPALS BY MATURITY

	30 YEAR MATURITY			10 YEAR MATURITY			1 YEAR MATURITY		
	<u>HIGH</u>	<u>LOW</u>	<u>RANGE</u>	<u>HIGH</u>	<u>LOW</u>	<u>RANGE</u>	<u>HIGH</u>	<u>LOW</u>	<u>RANGE</u>
1968	4.65	4.10	55	4.20	3.70	50	3.75	2.90	85
1969	6.50	4.90	160	6.05	4.30	175	5.52	3.70	155
1970	6.95	5.25	170	6.20	3.75	245	5.40	2.50	290
1971	6.25	5.15	110	5.10	3.80	130	3.45	2.25	120
1972	5.30	5.00	30	4.40	3.85	55	3.00	2.45	55
1973	5.50	5.00	50	5.05	4.20	85	4.75	3.00	175
1974	6.50	5.20	130	5.90	4.30	165	5.60	3.80	160
1975	7.00	6.30	70	5.75	4.90	85	4.50	3.50	100
1976	6.40	5.50	90	5.25	4.30	95	3.70	2.30	140
1977	5.40	5.15	25	4.50	4.10	40	3.25	2.40	85
1978	6.00	5.30	70	5.25	4.60	65	5.20	3.50	170
1979	7.00	5.75	125	6.10	5.10	100	6.00	4.80	120
1980	10.00	6.75	325	8.50	5.70	280	8.25	4.70	355
1981	12.90	9.25	365	11.50	7.75	375	10.00	6.75	325
AVERAGE			126			138			167
1982	13.00	8.60	440	11.25	7.50	375	8.25	5.25	300

U.S. TREASURIES

1982	14.47	10.62	385	14.70	10.54	416	15.06	8.87	619
1981	15.08	11.22	386	15.68	11.35	433	17.36	11.98	538
1980	13.12	9.47	365	13.57	9.33	424	16.07	7.46	861
1972	5.93	5.58	35	6.57	5.96	61	5.62	4.20	142

SOURCE: U.S. Department of Commerce, Survey of Current Business, various years.

Table 2.8

YIELD-MATURITY RELATIONSHIPS
 PRIME MUNICIPALS AND TREASURIES
 1982

<u>Maturity</u>	<u>January 1982</u>		<u>December 1982</u>	
	<u>Prime Municipals</u>	<u>U.S. Treasury</u>	<u>Prime Municipals</u>	<u>U.S. Treasury</u>
6 Months	7.70%	13.70%	4.90%	8.61%
1 Year	8.25	14.40	5.25	8.82
5 Years	9.75	14.37	6.50	10.21
10 Years	11.25	14.56	7.75	10.46
30 Years	13.00	14.21	9.00	10.51

In the long run, the potential for improving the efficiency of the municipal market provided by the registered-form bond may actually increase the attractiveness to investors of these securities and result in lower interest rates. The cost of implementing the registered bond requirement, regardless of which alternatives are selected, will increase the fixed costs of borrowing to some degree. The actual costs of registering municipal bonds will depend upon whether the issuer, a state agency or a private firm provides registrar and transfer agent services.

In several other areas affected by TEFRA -- the changes in the restrictions on the use of industrial revenue and municipal mortgage bonds, the new taxation rules for life insurance companies, curbing of the leasing provisions, and the tightening-up of the use of certain competing tax shelters and their subjugation to a revised minimum income tax (that excludes tax-exempt interest income) -- the ultimate impacts constitute a mixed, but most likely negative, picture. Overall, there appears to be little reason to believe that the tax-exempt market's position relative to the other markets has improved or that its more volatile, credit sensitive behavior will be materially altered.

Perhaps one of the more critical developments over the past few years is the extent to which the entire municipal securities market has become ultrasensitive to changes -- real or potential -- in the federal tax code. For example, the pendency of the bond registration requirement and the year-end effective date for the new interest deduction requirements for banks greatly accelerated tax-exempt issues at the end of 1982.

Credit Concerns

No discussion of the municipal bond market and its ability to raise capital for state and local government needs would be complete without a discussion of the credit concerns that continue to pervade the market. The financial condition of the state and local sector has deteriorated over the past few years; and, yet, there remains a huge backlog of unfunded capital spending needs. The national credit rating agencies are aware of the financial problems and have been lowering ratings to reflect the more perilous prospects for governmental issuers. Moody's Investors Service, Inc. reduced the credit ratings of nearly twice as many tax-exempt bond issuers as had their rating raised during the first eight months of 1982. The 384 downgradings during this period were more than four times as many as were reported for all of 1981. The outlook for ratings appears to be no better, and a default or two by a major issuer(s) could intensify a "flight to quality" (purchase of only high-grade municipals) by investors. With the ongoing concerns as to creditworthiness and the reliance on individual investors to purchase municipal bonds, marketing considerations have been instrumental in requiring municipal bond insurance and other forms of guarantees to back up weaker or unusual credits.

These "back-stopping" security features have included letters of credit issued by domestic and foreign banks, insurance companies, and other private firms, and bond insurance policies issued by three private insurance organizations. States have also expressed growing interest in developing state-assisted programs for

improving the terms of borrowing available to their local governments. Various programs of state credit assistance, including state bond banks, full faith and credit state guarantees of local issuers, moral obligation pledges, and state debt subsidy programs have been implemented.

The new forms of financing discussed below and the growing use of credit backstops share a common and fundamental trait with significant policy implications for all participants -- issuers, intermediaries and investors -- in the tax-exempt market. That trait is best summarized as a transfer of risks. Most new financing vehicles such as variable rate securities and insurance-backed bonds have as a unifying feature the shift of interest rate risk or credit risk from investors to issuers. Most state credit assistance programs spread the losses associated with defaults to third parties, including other governmental units. Collectively, transfers of risk have been substantial. It is vital, therefore, to emphasize that the risks have not disappeared -- the locus of risk-bearing has shifted. For states especially, this means that even more careful attention must be focused on the monitoring of state and local debt capacity.

Innovative Bond Financing Alternatives

In response to varying market demands and economic factors -- many of which were discussed in Section Two -- issuers of municipal debt have become "creative." What is "creative" in capital financing is a highly judgmental consideration. Most of the new techniques have historical antecedents in the taxable capital markets, but typically had not been put to use in financing public capital expenditures. Thus, what is novel can be either the introduction of new loan instruments into the tax-exempt bond market or the creation of some new source of funds that had not previously existed as an alternative to loans in the raising of capital by state and local government.

The definition is a "catch-all," one of exception from standard practices: creative financing techniques are those that differ from the traditional means of raising capital through the sale of standard instruments in the tax-exempt securities market.

Creative financing techniques have dealt with rearranging the borrowing transaction by shifting the risk of interest rate changes and, in some cases, of creditworthiness from the lender to the borrower. In addition, they have increased the types of returns available to the investor beyond simply the receipt of regular tax-exempt interest payments. An important aspect of the latter development has been the design of transactions in which governments are able to transfer certain tax benefits of ownership from themselves to tax-paying entities that can use them for tax-shelter purposes. Correspondingly, another related aspect of creative financing has been to devise ways by which governments themselves can take maximum advantage of financial investment opportunities through the temporary use of borrowed funds as a means of lowering costs. For both private investors and public borrowers, these aspects of creative financing are intimately connected to the peculiarities of the treatment of tax-exempt securities and depreciable assets in the federal tax code.

Innovative and creative financing techniques open up new potential arrangements for raising capital for public borrowers, but may present pitfalls as well. Many of the new devices are creating a backlog of short-term debt that will need refinancing in the near future. The more stockpiling of such debt, the more difficult it will be to refinance as every issuer comes to market at once. Also, creative financing is often associated with off-balance sheet debt. Not only can this impair an unit's fiscal flexibility by tying up monies otherwise available for general purposes, it also makes understanding an unit's financial condition more difficult. Creative financing, if used simply as an expedient, can be a prescription for trouble, especially in times of financial and economic contraction; however, if used wisely, these techniques may save hundreds of thousand dollars in borrowing costs.

Creative Financing Innovations

The high level of long bond rates has spawned a variety of innovative financing vehicles designed to move borrowing costs down the yield curve.

Short-term financing vehicles include tax-exempt commercial paper ("TECP"), Bond Anticipation Notes ("BANS"), secured BANS, direct bank loans and variable rate demand ("VRD") notes. Although these alternatives generally provide lower borrowing costs (presently up to 650 basis points, or 6.5%, lower than long-term bonds), there are important risks to consider, particularly for construction projects. First, the financial markets may "move against" the issuer, and subsequent long-term borrowing costs could ultimately be higher than if long-term financing were selected initially. Secondly, in the case TECP and VRD notes, the lower cost depends on the volatility of investor demand in the short-term market. These risks, as well as those described below, must be carefully weighted by the issuers. The primary short-term alternatives are as follows:

TECP is a very short-term method of financing. The volume of outstanding commercial paper has increased from \$300 million only two years ago to over \$3 billion at present. It is used for a variety of short-term assets, such as fuel financing or during construction to allow an issuer to select a better market before issuing long-term bonds. Most commercial paper matures between 15 and 45 days because the most favorable rate is obtained by extremely short maturities.

Although the interest rate on commercial paper is low, several additional factors must be added to determine the total cost. First there is the fee for standby letter of credit; second is the fee of 1/8 to 1/4 of 1 percent or more for the dealer-agent who places the commercial paper. In addition there is the procedural cost of rolling over commercial paper notes at each maturity. Given the very short maturities, there can be as many as 20 or 30 closings a year.

At each rollover, the dealer-agent determines the amount of commercial paper to be placed and solicits enough interest among investors to sell all of the commercial paper. Thus, the cost of commercial paper varies with the market. In the event the paper cannot be placed, the issuer must draw upon a letter of credit to refinance the matured notes and the debt converts to a bank loan.

BANS provide a flexible financing instrument, maturing in one to three years and typically payable solely from the proceeds of a long-term bond issue. The interest on BANS, prior to their refunding, may be capitalized from the proceeds of the notes or paid from operating revenues. The principal is payable in one lump sum.

Since repayment of BANS depends on issuing refunding BANS or long-term bonds, regardless of market conditions, this method of financing involves some risk if interest rates are higher or if the structure and terms of the new debt issued to refund the BANS will not be satisfactory. Investors will be concerned with the issuer's market access -- its ability to refinance. To reduce these risks, investors must know if refunding bonds are authorized, if there is an interest rate limitation that could prohibit issuing additional bond tests.

SECURED BANS alleviate some of the market and credit risk associated with unsecured BANS by providing investors an additional level of security. This additional level of security can be in the form of federal grants (in which case the security is a grant anticipation note, or "GAN"), or in the form of a commercial bank letter of credit to guarantee the take-out of the note at maturity. The nature of the security mechanism can vary from assured take-out (as in the case of GANS) to a conditional irrevocable letter of credit to be used only if take-out bonds could not be sold. This in effect shifts liquidity risk to the commercial bank.

For assuming this risk, the bank charges a commitment and/or standby fee. These fees have escalated recently. Today, an annual commitment fee of approximately 1 to 1.5 percent based on the undrawn balance (i.e., the amount of the notes then outstanding) is typical. If the letter of credit is used to repay BANS, the issuer's obligation converts into a direct bank loan. The bank then charges interest on the borrowed amount at a floating rate, usually a fixed percentage of the bank's prime lending rate. These fees also have escalated. Previously, a typical interest rate formula might have been 60-70 percent of the prime rate; recently some banks are charging a rate equal to their prime lending rate for this type of obligation. The bank may also require that a compensating balance be maintained, increasing the effective borrowing cost to the issuer.

Under a DIRECT BANK LOAN, an issuer negotiates a loan at tax-exempt rates, and places the security for the loan directly with a bank or group of banks. The interest typically is computed on a floating or variable rate defined at a percentage of the bank's prime lending rate. The terms range from 60 to 85 percent of prime. The lending bank may or may not require a compensating balance or commitment fee.

It is increasingly difficult to negotiate an interest rate ceiling, unless a statutory rate limit applies under state law. However, during periods in which the formula would result in a rate higher than an agreed upon target ceiling, the additional interest accrues and is recouped by the bank when the rate formula drops below the limit. The additional interest is deferred but not avoided. This type of security is usually applied to weaker credits.

VARIABLE RATE DEMAND NOTES - VRD Notes are in many ways similar to TECP in that they are both a variation on secured BANS. VRD Notes usually have a maturity of two or three years. The interest rate on the notes fluctuates weekly with a prescribed municipal bond market index or an alternative index based on a major bank's prime lending rate. The unique feature of a demand note is that the investor can either hold the note to maturity or put (tender) the note to the issuer for redemption at the original par value upon several days notice. Because of the tender provision, the investor regards a demand note as a very short-term investment with immediate liquidity and thus will accept a lower interest rate.

The issuer, on the other hand, must add the cost of the letter of credit and placement fees.

Long-term financing alternatives have proliferated recently in response to market volatility and changing investor needs. These innovative alternatives are designed to enhance security and marketability, provide investors with market price protection, provide for shorter maturities and/or average lives, and in some cases enable renegotiation of interest rate. While each of these new techniques has valid application, they often require the issuer to assume more market risk than with traditional fixed rate, fixed term revenues bond financing. The primary long-term alternatives include:

TENDER OPTION BONDS ("PUT" BONDS) - The Put bond combines some aspects of long-term and short-term financing. These bonds have a stated maturity of 25 to 30 years but give the holder the option to tender (literally "put") bonds back to the issuer for repayment at par at the end of a specified period, usually at least three to five years. Thereafter, the option can be exercised periodically at either one-year or three-year intervals.

Because of the option, a bondholder considers the next available option date the equivalent of a maturity date. Thus purchasers will accept yields as much as 250 basis points (2.5 percentage points) lower than for 30-year bonds without the option. After the first option date, the bonds trade or are priced in the secondary market at yields comparable to securities with a final maturity of one year. Accordingly, as long as one-year rates do not exceed the stated coupon rate of bonds, an investor should be inclined to hold the bonds or to trade them in the market at a premium rather than tender them for redemption at par.

From the issuer's perspective, the interest rate savings is attractive because of the wide differential between short-term and long-term rates. However, for a 30-year financing, the savings is assured only for five years. Subsequent savings are promised on the expectation that all or a major portion of the bonds will not be tendered. In exchange for this possible benefit, the issuer assumes the market risk, i.e., that the portion of the bonds tendered may have to be financed at the then-prevailing (and possibly higher) market rates.

Although the use of tender option bonds has been widespread, issuers have used this innovation judiciously and have limited the amount of put bonds sold to a minor portion of the total issue, usually between 10 and 25 percent. From the viewpoint of investors and rating agencies, this makes the refinancing risk more manageable.

FLOATING RATE BONDS ("FLOATER") - Floaters do not bear a fixed interest rate; they vary or float with the tides of the marketplace. The floater appeals to the issuer who expect rates to decline in the near future. Conversely, it appeals to the investor who believes that interest rates may rise and is looking for a means of protecting investment principal.

In structuring a floating rate issue, there are several criteria. First, the floating interest rate must be pegged or tied to an accepted market index. Second, the derived or computed market rate usually stated as a fraction or multiple of the market index, should produce a yield or a return to the investor that is at any given time sufficient to compensate for the credit risk associated with the investment. There is the question of whether the investor and issuer can agree on high-low caps, i.e., on maximum and minimum limits on potential future variations in the interest rate.

To illustrate: a floating rate issue may be calculated to equal 95 percent of the 20-year Bond Buyer Index, with high-low limits of 15 percent and 8 percent. For example, the rate would be 95 percent x's 9.00 or 8.55 percent if the BBI was at 9.0%. For an A-rated utility whose 30-year bonds would sell at 10.375 percent, the floater would save more than 1 percent in the current market. If the market declines, the issuer's savings will increase, conversely the floating rate may move to 15 percent and remain there.

The first generation of floating rate bonds was sold with a comparatively narrow spread between maximum and minimum limits. Currently, however, investors demand wider spread, or maximum limitation.

ADJUSTABLE FLOATING RATE BONDS "AFRB's" are a recent innovation which combines the option bond with the floating rate bond. The objective is to provide a means of managing refinancing risk and reducing or eliminating the cost of issuing new debt in the event the market conditions deteriorate. This hybrid functions exactly like the tender option bond. For example, if prior to any option date, the interest rates for short-term bonds are higher than the coupon rate on put bonds, an issuer can anticipate that a sizeable portion of the outstanding put bonds will be tendered. The authorizing bond ordinance provides that, at that time, a repricing committee will propose adjusting the rate on the put bonds to a level deemed sufficient so that the tendered bonds can be remarketed to a new group of investors. The firm underwriting the original issue serves as remarketing agent. The bonds remain outstanding. They are not refinanced although the coupon rate is adjusted to accomodate the change in markets. At the next option date, the issuer can consult again with the repricing committee; if market conditions improve, the committee will recommend a new lower interest rate but not so low that it will result in the bonds being tendered back to the issuer. Thus, the risk of rates going up and coming down again is shared between the issuer and the bondholder.

FLOATING/FIXED RATE BONDS "F/FRB's" are a means of arranging long-term floating rate financing with the option of fixing the rate under more favorable market conditions without incurring the expense of refunding. The F/FRB can be issued for a stated maturity of up to 30-40 years. During the floating rate period (which can be the entire term of the bond issue) the interest

rate floats relative to a predetermined index. The F/FRB during the floating rate period gives the holder a seven-day put and, if the "put" is exercised, the bonds are purchased by drawing on a bank line of credit. The bonds are then either converted into a bank loan or else remarketed on a best efforts basis to other investors.

While F/FRB's transfer the market risk from the investor to the issuer, they do provide tremendous financing flexibility to the issuer.

ZERO COUPON BONDS (Deep Discount) - Zeroes are a unique form of bond in that they pay no current coupon or interest rate. The investor foregoes current income in exchange for appreciation in the value of the bonds at maturity or when the bonds are called. The rate of return realized by an investor can be compared to a savings account in which there are no withdrawals of compounded interest or principal over a long period.

Investors have accepted a lower yield on zeroes, relative to traditional current coupon bonds. There are several theories which attempt to explain this situation, but generally it is felt that: the pricing of such bonds has ranged from 20 percent of par value to as low as 3 percent because an investor can purchase a bond with a maturity value of \$5,000 for as little as \$150, or at a deep discount. This greatly expands the potential market, thus increasing demand for the bonds but is attractive to investors because the reinvestment yield is guaranteed.

Another important factor is that the supply of zero coupon bonds has been quite limited. As the volume increases, most market observers expect that the interest cost benefit will diminish. For issuers, zero coupon bond offerings can be structured so that the reduced capital yield results immediately in lower average annual debt service costs. More sophisticated investors accept the idea that bonds purchased at deep discounts can not be called at par if the issuer chooses to refund the debt.

BONDS WITH WARRANTS ATTACHED ("WARRANTS") - When an issuer uses this financing vehicle, he simultaneously sells a warrant entitling the purchaser of the bond to buy an additional bond bearing the same coupon rate at any given time within a one-year period. If interest rates decline substantially, the investor can exercise this option. If interest rates increase substantially, the privileges of the warrant expire since investors have an opportunity to purchase other bonds at higher rates. Since the warrant gives the option to the investor, the presumption is that the investor will accept a lower yield on the original bond sale.

INCREMENTAL COUPON BONDS ("IC" or STEPPED COUPON BONDS) - The IC, stepped or graduated coupon bonds are serial coupon bonds in which all outstanding principal, regardless of maturity, bears the same rate of interest in any one year. As each year passes from the date of issue to final maturity (e.g., from 1983 through 2000), the coupon rate for all the remaining bonds increases gradually. The coupon rate never decreases. For example, a bond issue can be structured so that the interest rate is 8 percent on all bonds the first year, 8.5 percent the second year, 9 percent the following year, and increases thereafter to 20 percent or more on the remaining bonds in the final year of maturity. Since

the interest rate is lower in the early years of the financing, there can be substantial savings on projects for which interest is capitalized during the construction period because the capitalized interest is based on the lowest coupon rate (8 percent in the hypothetical example) instead of the average coupon rate for conventional offerings that would be substantially higher. However, the call premiums are unusually high to offset the investor's loss of coupon income in the early years. This makes it difficult to refund the debt.

The recent popularity of many of these innovations may fade with a return of interest rates to lower levels, but the experience of the past several years has provided ample evidence that financing is a dynamic process. The creative methods of attracting funds have provided market access on reasonable terms under very hostile market conditions for traditional borrowing instruments.

Bond Issuance Process

The bond issuance process should be part of a comprehensive debt management policy that includes an evaluation of capital facility needs, a thorough analysis of financing alternatives, and assessment of the ability and willingness to repay debt issued. Once a government has decided to finance a given capital project through the issuance of tax-exempt bonds, the bond issuance process begins. The issuance process is comprised of four major steps:

- obtaining the bond resolution (which may require voter approval);
- securing specialized services;
- marketing of the bonds; and
- selling the bonds.

Bond Resolution

Among the first steps in issuing municipal bonds is obtaining the proper bond resolution which authorizes state or local officials to proceed with the issuance of debt. For general obligation debt, this frequently requires, as it does in Alaska, voter approval of a bond referendum. For revenue-supported debt, generally only legislative or another governing board's approval is required.

The bond resolution specifies the purposes for which the bond proceeds are to be used, and it can constitute the appropriation for the projects in the amounts specified or it may leave appropriation to a subsequent action. The content of the bond resolution is important and should provide public finance officials with flexibility in administering the use of bond proceeds.⁴ Restrictions in the resolution that require bond proceeds to be segregated in a separate bank account, or that do not allow the temporary investment of proceeds, impede effective investment management and raise borrowing costs.

Specialized Services

Successful bond issues require the involvement of competent professionals in a variety of specializations. It is unusual for any but the largest and most frequent borrowers to have such professionals on their staffs. Rather, legal and marketing

considerations dictate that outside advice and assistance be secured from the following professionals:

Bond Counsel - Bond counsel essentially serves as the legal advisor to the ultimate bond investor, although such counsel is retained by the issuer. The use of bond counsel was one of several reforms taken in reaction to widespread defaults in the 1870s and early 1880s on bonds to finance railways when many bonds were discovered to have been illegally issued. As a result, investors required assurances as to the validity of the bonds from the inception to final delivery. Prior to World War I, bond counsel was employed by the purchaser of the bonds. This practice was abandoned when local governments found it advantageous to use the bond counsel's services prior to the issuance of the bonds.

Bond counsel will be required to offer an opinion that the particular bond issues conforms to all pertinent legal requirements. Such requirements may include certification:

- that the issuer is legally constituted and authorized to issue tax-exempt obligations;
- that the bond resolutions is validly authorized;
- that proper issuance procedures were adhered to; and
- that the interest paid on the bonds will be exempt from federal income tax.

In addition, the bond counsel will generally assist in preparation of the official statement, but does not offer an opinion regarding the completeness nor the correctness of information disclosed within the document.

Financial Advisor - The planning and sale of a bond issue may appear on the surface to be a fairly straight-forward and routine undertaking. However, the complexity and sophistication of the tax-exempt market, and the severe budgetary impact of current interest rates in the 8 to 12 percent range, place a premium on competent professional assistance in the planning, structuring and marketing of debt issuance. To proceed without the benefit of professional financial assistance may result in unnecessarily high-interest and other costs to the issuer.

The services performed by a financial advisor can vary depending on the issuer's needs. Certain governments may only require assistance in the timing and marketing of the bonds, others may need the full services of structuring the issue and preparing the official statement. A description of the basic services a financial advisor can perform and a discussion of the manner of selection and compensation of those providing financial advice is provided in Chapter Six.

Trustee - The trustee acts as custodian of the bond proceeds and supervises their investment, use for the purposes specified in the bond resolution, and payment of debt service to investors. The trustee may also oversee any debt service reserve funds, construction accounts, and maintenance of certain coverage ratios required in

the bond contract with investors. In the use of revenue bonds, the trustee may also be required to see that the enterprise is operated optimally and that all revenues are administered in accordance with the terms of the bond indenture and official statement.

Paying Agent - This service facilitates transactions with investors, such as the timely payment of interest and redeeming of matured bonds. Normally, the paying agent function is performed by banks located in established financial centers.

Registrar/Transfer Agent - To satisfy the federal requirement that most municipal bonds be issued in registered or book-entry form after June 30, 1983, many issuers may choose to use the services of a professional registrar and transfer agent, rather than develop the necessary expertise in-house. Generally, a transfer agent is responsible for:

- issuing the initial set of registered certificates;
- formulating and maintaining an accurate list of registered owners, and
- making transfers and updating the ownership records

The chief duties of the registrar are to prevent the issuance of more bonds than are authorized, and to verify the cancellation and issuance of certificates by the transfer agent. In most cases, the transfer agent also serves as the registrar, unless these functions are separated for purposes of fiscal control. In addition, the transfer agent may also serve as the issuer's paying agent.

The types of organizations which offer transfer agent services can be divided into two groups: major financial institutions; and local banks and trust companies. The first are located in financial center cities and serve as transfer agents for corporate securities. The second group are local banks and trust companies which serve as paying agents for municipal securities issued in bearer form.

Acceptance of an issuer's registered municipal bonds in the primary and secondary markets is largely dependent on a timely, accurate and efficient transfer process. The liquidity and attractiveness of a particular municipal security are adversely affected by delays in the transfer of ownership and the crediting of interest payments to the correct owners. Poor transfer agent performance will result in the issuer incurring higher borrowing costs the next time it returns to market.

In selecting transfer agents, issuers should consider the following:

- the ability of the transfer agent to meet the market requirement of a 72 hour turnaround on transfers;

- experience of the organization with other issuers
- qualifications of the transfer agent's management;
- adequacy of financial controls and protection against loss;
- the transfer agent's location; and
- the costs of services provision.

Additional factors to consider include the selection of the transfer agent through competitive or negotiated bidding procedures, the use of standard record dates to facilitate interest payments, the length of the service contract and renewal provisions, transfer agent performance measures, and confidentiality of records. In selecting a transfer agent, the issuer should work closely with its financial advisor and underwriter(s).

Depositories. As an alternative to issuing registered certificates in physical form, issuers may wish to consider the various certificate immobilization and pure book-entry programs being offered by the nation's four securities depositories. A depository operates as a not-for-profit clearing agency registered with the Securities and Exchange Commission. It specializes in the immobilization of securities issues and book-entry delivery on behalf of its members (called "participants") who generally are securities brokers-dealers and large financial institutions. The costs of operation are assumed by the members of the depository rather than by the issuers of the bonds. The four securities depositories are independent organizations but are electronically linked to a national depository system.

The chief function of a depository is to reduce its participants' processing costs associated with the transfer and safekeeping of securities. A depository holds large blocks of securities (securities which are owned or safekept and deposited at the depository by its participants) and, upon their instructions, transfers ownership of securities among its participants through bookkeeping entry without having to move or re-register certificates. Except for full book-entry issues, the depository can arrange for delivery of physical certificates to non-participants and to customers of participants who want to keep certificates registered in their own names.

Under a pure book-entry system, the entire issue is held by the depository for members shown on its books. The only bond certificates issued are limited to one or more "jumbo" certificates which are used solely to satisfy legal requirements to provide evidence of ownership of an issue. No certificates are available to investors. The records of ownership are maintained by the depository, and all transfers are made through computer entry, based upon instructions from its participants.

Marketing of Municipal Bonds

Once the above services have been secured, and the specific features of the bond issue determined -- such as maturity structure and type of security (general obligation or revenue bonds) -- the bonds are ready for marketing. Bonds may be

OFFICIAL NOTICE OF SALE

\$185,000,000

State of Alaska

1982 Bonds, Series B

NOTICE IS HEREBY GIVEN that sealed proposals will be received by the State Bond Committee of the State of Alaska at Chemical Bank, Room 618, South Building, 55 Water Street, New York, New York, on WEDNESDAY,

OCTOBER 20, 1982

at 1:00 p.m., for the purchase of \$185,000,000 principal amount of general obligation bonds of the State of Alaska designated "State of Alaska 1982 Bonds, Series B," more particularly described below.

ISSUE: \$185,000,000 consisting of 37,000 coupon bonds in the denomination of \$5,000, numbered B1 to B37,000 inclusive (or fully registered bonds in the denomination of \$5,000 or multiples thereof), all dated November 1, 1982.

MATURITIES: The bonds will mature serially, as set forth in the following schedule:

<u>Maturity Date</u> <u>November 1</u>	<u>Principal</u> <u>Amount</u>	<u>Maturity Date</u> <u>November 1</u>	<u>Principal</u> <u>Amount</u>
1983	\$18,500,000	1988	\$18,500,000
1984	18,500,000	1989	18,500,000
1985	18,500,000	1990	18,500,000
1986	18,500,000	1991	18,500,000
1987	18,500,000	1992	18,500,000

INTEREST RATE: Maximum not to exceed eleven percent (11%) per annum or that rate or interest which is 110 percent of the rate of the Bond Buyer Index of 20 Municipal Bond Average Yields for the week previous to the date of sale of the bonds, whichever is higher. Interest is payable semiannually on May 1 and November 1 of each year commencing May 1, 1983. Bidders must specify the rate or rates of interest which the bonds hereby offered of sale shall bear. Bidders will be permitted to bid different rates of interest; but (i) the highest rate specified may not exceed the lowest rate by more than two percent (2%) per annum; (ii) each interest rate specified in any bid must be a multiple of one-eighth or one-twentieth of one percent ($\frac{1}{8}$ or $\frac{1}{20}$ of 1%) per annum; (iii) no bond shall bear more than one rate of interest, no interest payments shall be evidenced by more than one coupon and supplemental coupons will not be permitted; (iv) each bond shall bear interest from its date to its stated maturity date at the interest rate specified in the bid; and (v) all bonds maturing at any one time shall bear the same rate of interest. Any premium must be paid in federal funds as part of the purchase price.

PURPOSE: The bonds were authorized to finance various capital improvements for the State of Alaska, including transportation facilities, recreational facilities, fisheries management and development facilities, water supply and sewerage systems, flood control facilities and small boat harbors, port facilities, health facilities, educational facilities and correctional and public safety facilities. In elections held on November 7, 1972, November 5, 1975, November 2, 1976, November 7, 1978 and November 4, 1980, the issuance of the bonds for each of said purposes was ratified by a majority of the voters of the State voting on the question.

SECURITY: The bonds are general obligations of the State of Alaska, and full faith, credit and resources of the State are pledged to the payment of the principal of and interest on the bonds.

DATED: September 23, 1982

**STATE BOND COMMITTEE OF THE
STATE OF ALASKA**

**By: THOMAS K. WILLIAMS, Commissioner
of Revenue, Secretary**

sold through either a public, competitive sale or a private, negotiated sale. Most states require state and local general obligation bonds to be sold competitively; however, revenue bonds are often negotiated. In Alaska, state law (AS 37.15.040) requires that only State general obligation bonds be sold competitively, the sale of all types of local debt may be negotiated (see Appendix). In a competitive sale, the bonds are generally sold at auction to the underwriting firm whose bid produces the lowest interest cost to the issuer. The issuer advertises the sale, usually well in advance, and specifies the amount and maturity range of the bonds and other structural features of the issue. A notice of sale inviting competitive bids on the most recent State obligation bond issue is presented in Exhibit 2.1. In a negotiated sale, one or several underwriters are preselected, and the terms of sale (interest rates, maturity structure, and security pledges) are a matter for negotiation.

Over the years, finance professionals on both sides of the transaction have debated the relative merits of competitive versus negotiated sales. Competitive sales generally will result in a lower average interest cost to the issuer. However, under certain market conditions and with certain types of bonds, a negotiated sale may be preferred. The considerations that must be taken into account in deciding between competitive and negotiated sales are discussed in Chapter Six.

Official Statement- The official statement, or prospectus, presents the terms on which the bonds are to be offered and the information necessary to evaluate the investment quality of the bonds. It includes general descriptive information on the bond issue itself, the financial condition of the issuer, and the economic and demographic characteristics of the government. The quality and quantity of information disclosed to investors in the official statement varies widely among issuers. However, it is in the issuer's best interest that the official statement be as comprehensive as possible in order to inform investors fully of the nature of the security they are purchasing. Incomplete disclosure is a source of insecurity to investors, who, being risk-averse, will reward full disclosure and a comprehensive official statement with improved market reception.

Since the principal use of the official statement is as an information (disclosure) document, it should be organized in an order that appeals to the interests of its primary audiences. Underwriters who buy, sell, and market bonds as middlemen are a primary audience. Hence, the first substantive section that should appear is the "Description of the Issue (Bonds)". This will give bond traders a complete run-down of the type of bond being offered, its security structure, and its terms and conditions.

Credit analysts at the national rating services and analysts within the institutional investor firms are also a primary audience. Persons in this field need technical data that is complete and presented in easily understandable format. Their principal interest is in examining where the new debt offering fits into the existing debt structure of the issuer and, the issuer's capacity to manage and repay its debt. Accordingly, a detailed "Debt Summary" should follow the Description of the Issue in order that the issuer's complete debt profile is readily available in a consolidated format. This, then, will be followed by a "Description of the Issuer" and the

"Financial Statements" both of which contain information that, will enable a review of and judgment upon the governmental units debt capacity

Given the importance the official statement plays in providing a debt issue with the broader market reception, its preparation generally involves several parties. The description of the bond issue and other financial information may be provided by the financial advisor or the issuer's finance staff. The economic and demographic information may also come from the financial advisor, or from the planning and economic development staffs of the issuer. The financial statements will be prepared by the issuer's auditor, (regardless of whether the audit is conducted by public agency or a private firm) or the finance department. Finally bond counsel will ensure that the description of the issue, the bond indenture, and other legal matters are handled properly in the official statement.

Credit Rating- Once the official statement for the bond offering has been prepared, the creditworthiness of the bond issue can be rated by potential investors and the national credit rating agencies. In order for financial markets to operate efficiently, investors must have reliable information on the credit quality of the various investment opportunities available. Because of the large number of governmental debt issuers and the variety of security structures behind each debt issuance, the analysis and comparison of credit quality is fairly complex. To assist individual investors and the investment community, several private corporations provide a credit rating service to investors. For a fee, the rating agencies express an opinion as to the credit quality of individual bond issues, or, in the case of general obligation issues, of the borrower itself. The two largest, nationally recognized, firms are Moody's Investors Services, Inc., and Standard & Poor's Corporation. In order for a bond issuance to be sold on a national basis, it is virtually necessary to obtain a rating from at least one of these firms. The cost of the rating must be borne by the borrower.

The rating symbols used by the two agencies to denote relative credit quality are presented in Exhibit 2.2. The most important feature of the credit rating is its impact on interest costs. Although differences in interest costs among the various security grades will fluctuate depending upon market conditions, the very highest grade bonds (Aaa or AAA) often sell at interest rates a full percentage point (100 basis points) or more below those of the lowest investment grade securities (Baa or BBB). Bonds rated lower than Baa are considered predominantly speculative investments and carry much higher interest rates.

Table 2.9 shows that the average spread between Aaa-and Baa-rated 10-year bonds in 1982 was 102 basis points (1.02 percent). This spread can vary at any given time; in December 1982, the average spread was nearly 200 basis points (2.00 percent). Translated into increased borrowing costs, a Baa-rated 10-year bond issue of \$10 million would cost nearly \$700,000 more, on average, over its 10-year life than a bond rated Aaa. Table 2.9 provides similar cost comparisons between bonds rated Aa or A and Aaa bonds.

Exhibit 2.2

Moody's and Standard and Poor's Bond Rating Classifications^(a)

<u>General Quality Characteristic</u>	<u>Rating Symbol</u>	
	<u>Moody's^(b)</u>	<u>Standard and Poor's</u>
Prime Quality	Aaa	AAA
Excellent Quality	Aa	AA
Upper Medium Quality	A, A-1	A
Lower Medium Quality	Baa, Baa-1	BBB
Marginally Speculative Quality	Ba	BB
Very Speculative Quality	B, Caa	B, CCC, CC
Default Quality	Ca, C	C ^(c) , D
Other	Con. (---) ^(d)	NR ^(e)

- (a) Source: John E. Petersen, The Rating Game, Twentieth Century Fund, 1974, as appearing in State Level Bonding in Wisconsin: Procedures, Policies, and Issues, Legislative Fiscal Bureau, State of Wisconsin, February 1978, p. 13; and State of Oregon's Bonded Debt: A Review of Borrowing Practices for General Obligation and Direct Revenue Bonds, Governor's Bonded Debt Advisory Panel, March 1981, pp. 18-19.
- (b) Bonds rated A-1 and Baa-1 by Moody's have stronger investment attributes than bonds rated A and Baa, respectively.
- (c) Standard and Poor's uses the "C" rating for income bonds on which no interest is being paid.
- (d) The rating "Con. (---)" by Moody's is for bonds whose security depends upon the completion of some act or the fulfillment of some condition. The parenthetical rating [for example, Con. (Aa)] denotes the probable credit rating stature upon completion of the specified conditions.
- (e) No rating, either due to lack of request for a rating, lack of enough information to develop a rating, or a policy by Standard and Poor's of not rating a particular type of obligation.

Reproduced from John David Vasche, The Use of Tax-Exempt Bonds in California: Policy Issues and Recommendations, Legislative Analyst, State of California, 1982.

Table 2.9

1982 Average Tax-exempt New Issue Yields
and Borrowing Cost
General Obligation Bonds

<u>Moody's Credit Rating</u>	<u>Average Yield on 10-year Maturity</u>	<u>Interest Cost over 10 years¹</u>	<u>Difference Between AAA</u>
AAA	9.54	\$5,737,037	0
Aa	9.69	5,838,278	\$101,241
A	10.01	6,055,322	318,285
Baa	10.56	6,431,723	694,686

¹ \$10 million borrowing.

The general guidelines used by the rating agencies in evaluating governmental credit quality are presented in Exhibit 2.3. The factors taken into account by the rating agency analysts include the operations of the issuer; the economy upon which the issuer relies for support of the debt being considered; and the pertinent social and management factors. High in the list of factors considered are trends in population, employment, wealth, and income; the organization and management of the government; and the performance of governmental enterprises in relation to projections previously made. Any other matters likely to influence the ability of the issuer to continue to meet the financial obligations undertaken with respect to the debt being rated are also taken into account to the extent feasible.

While the rating is a simple, easily understood classification of the credit risks of a municipal bond it is the product of the objective and subjective factors discussed above. The credit ratings of Alaska issuers are presented in Exhibit 2.4. The majority of the State's credits fall into the lower end of the range of credit quality. This is largely due to the relatively untested nature of Alaska's credits, the small size of many of the State's local government issuers, and the limited, readily accessible, resource base against which taxes may be levied.

Investor Relations- Aside from a comprehensive official statement and an investment-quality credit rating, the other crucial determinant of bond marketability is investor relations. It is important that the issuer be known to the investment community and that its past record of meeting debt service requirements on time is flawless. The most important players in this regard are the bond underwriters.

Underwriters are the financial "middlemen" who purchase — either by competitive bid or negotiation — the bond issue directly from the governmental entity and resell the individual bonds to the final investors. Underwriters generally are either commercial banks or investment banking firms. Normally, a group of underwriters, from two to twenty (or more), form an underwriting syndicate to purchase the bonds. This technique divides the risk among all participants in the syndicate and generally enables larger amounts of capital to be raised. Underwriters are compensated by the underwriting spread, which is the difference between the price they pay a government for an entire bond issue and the total price at which they are able to resell the individual bonds to investors. The components of the underwriters spread are described in Chapter Six.

One method used to attract investors is for the underwriters to advertise the availability of a government's bonds in the financial press. An example of such an advertisement is presented in Exhibit 2.5, wherein the coupon interest rates and reoffering yield (price to investors for that particular interest rate) of each maturity on a recent state bond issue are listed. Bonds are generally sold in increments of \$5,000, with a "coupon" attached for each date (generally twice annually) that interest on the bonds is payable to bondholders. The coupon specifies the interest rate and dollar amount of interest payable for that installment. For example, each of the 20 coupons on a \$5,000 1992 Alaska 1982 Series B bond would carry an interest rate of 4 percent and entitle the bond holder to a semi-annual payment of \$200 (see Exhibit 2.5). Now that all municipal bonds must be issued in registered form, "coupons" will no longer be attached to bonds since the owner will be recorded with the issuer's transfer/registrars or agent. Interest payments will be made directly to the owner of record without the need for the investor to submit interest coupons for payment.

Exhibit 2.3

Major Variables Considered in Determining Municipal Bond Ratings by
Moody's and/or Standard and Poor's

- A. Debt Analysis
 - Nature of security pledged for a bond issue
 - Debt burden--the amount of debt relative to income and resources
 - Overlapping debt
 - Debt structure, including plans for debt retirement
 - Debt history
 - Capital improvement programs
 - Debt limitations and unused margins

- B. Financial Analysis
 - Pension fund requirements
 - Use of short-term debt
 - Assessed value of property (primarily for local entities)

 - Tax rates
 - Tax structure--balance among types of taxes
 - Mandated expenditures
 - Debt service as percent of total expenditures
 - Taxes collected as a percent of revenues
 - Balance between revenue trends and expenditure trends
 - Budget growth relative to trends in population and the tax base

- C. Governmental Analysis (administrative factors)
 - Potential and/or pending litigation
 - Form of government
 - Degree of professionalism
 - Intergovernmental factors, including shared responsibilities
 - Availability of documents necessary to evaluate fiscal conditions
 - Constitutional limitations on tax rates, tax bases, etc.

- D. Economic Analysis
 - Growth trends in income
 - Geographic and locational advantages
 - Size and land-use characteristics
 - Population size, composition, and shifts over time
 - Family, household, and per capita income
 - Age and composition of the housing stock
 - Value of owner-occupied housing
 - New construction values
 - Employment mix between industries
 - Relationship of community to its S.M.S.A. (for local entities only)
 - Type of transportation facilities
 - Industrial shifts
 - Forecasts of future economic performance
 - Labor force growth and unemployment
 - Leading employers
 - Leading taxpayers
 - Mix of building activity
 - Retail sales activity
 - Bank deposits

Sources: Moody's Investors Service, Inc., Pitfalls in Issuing Municipal Bonds, 1977, pp. 14-19; Standard and Poor's Corporation, Municipal and International Bond Ratings: An Overview, pp. 12-15.

Reproduced from John David Vasche, The Use of Tax-Exempt Bonds in California: Policy Issues and Recommendations, Legislative Analyst, State of California, 1982.

The price which the investor has to pay the underwriting syndicate for a particular bond is determined by the figure in the reoffering yield column, in the case of the 1992 4 percent bond, 8.20 percent. Bonds in the 1992 maturity were priced so that the return to investors was higher than the 8 percent coupon on the bonds. This is achieved through selling the bonds at a price less than the \$5,000 face (or par) value which will be payable at maturity. In this case the price would be approximately \$4,933 for a \$5,000 par value bond. The value of the \$67 "discount" from par plus the 20 semi-annual payments of \$200 over the bond's 10-year life equal an effective annual yield to the investors of 8.20 percent.

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Sale to Investors

The final step in the bond issuance process is the purchase of an entity's securities by investors. Bonds may be purchased as new issues directly from the underwriter, or on the secondary municipal bond market from other investors. There are three major groups of investors in tax-exempt securities. They are:

- Individuals or "Households",
- Commercial Banks, and
- Fire and Casualty Insurance Companies.

Together, these three classes of investors held over 90 percent of the outstanding state and local debt in 1981. The relative importance of individuals, banks, or insurance companies to the municipal bond market fluctuates with changes in the economy and other financial markets. At the end of December, 1981, state and local debt was held by the following sectors:

<u>Sector</u>	<u>Billions held</u>	<u>Percent of total</u>
Commercial Banks	\$155.1	42.9%
Household	96.8	26.8
Fire and Casualty Insurance Co.	83.0	23.0
Other Investors	26.4	7.3
TOTAL	\$361.3	100.0%

Exhibit 2.4

Credit Ratings of Alaska Issuers

<u>Issuer</u>	<u>Moody's Rating</u>	<u>S&P's Rating</u>
State General Obligation	Aa	AA-
International Airports Revenue Bonds	A	A
AHFC-Home Improvement Loans	A	A-
Home Mortgage Revenue	Aa	AA-
Housing Mortgage Revenue	Aa	AA
Insured Mortgage Program	A	A
Veterans Housing	Aa	AA
AIDA	A	A-
Municipal Bond Bank	A	A
ASHA	A	A
University of Alaska	Baal	NR
Medical Facilities Authority	Baal	BBB-
Anchorage	A1	A
Fairbanks	A	BBB+
Fairbanks North Star Borough	A	A
Greater Anchorage Area Borough	A1	A
Sitka City and Borough	Baal	NR
Homer	Baa	NR
Juneau City and Borough	Baal	NR
Kenai Peninsula Borough	A	A
Ketchikan	Baal	BBB
Ketchikan Gateway Borough	Baal	BBB
Kodiak	Baa	NR
Kodiak Island Borough	Baal	BBB
Matanuska-Susitna Borough	A	BBB+
North Slope Borough	A	BBB+
Petersburg	Baal	NR
Valdez	A	A

NEW ISSUE

\$185,000,000

State of Alaska

1982 Bonds, Series B

Principal and semi-annual interest (May 1 and November 1) payable in Seattle, Washington and New York, New York.
Coupon Bonds of \$5,000 denominations, fully registrable.

Interest exempt, in the opinion of counsel, from all present Federal Income Taxes

These Bonds, to be dated November 1, 1982, will constitute, in the opinion of counsel, valid general obligations of the State of Alaska, for the payment of which the full faith and credit of the State are pledged.

Amount	Due Nov. 1	Rate	Yield	Amount	Due Nov. 1	Rate	Price	Amount	Due Nov. 1	Rate	Price or Yield
\$18,500,000	1983	8 $\frac{3}{4}$ %	5.50%*	\$18,500,000	1986	6.75%	100%	\$18,500,000	1990	7.90%	100%*
18,500,000	1984	8 $\frac{3}{4}$	6.00	18,500,000	1987	7	100*	18,500,000	1991	8	8.10*
18,500,000	1985	8.20	6.50	18,500,000	1988	7.30	100	18,500,000	1992	8	8.20*

(Accrued interest to be added)

*This maturity is not available from the account. Bonds of this maturity may or may not be available from account members or others at the indicated yield or price.

These Bonds are offered subject to prior sale, change in price, when, as and if issued and received by us and subject to approval of legality by Messrs. Pohlforth & Flint of Anchorage, Alaska and Messrs. Preston, Thorgrimson, Ellis & Holman of Seattle, Washington. The above Bonds are offered in any State in which this announcement is made in which the undersigned are authorized to do so under the laws of such State.

Morgan Guaranty Trust Company of New York

Salomon Brothers Inc

Bankers Trust Company

Merrill Lynch White Weld Capital Markets Group

Merrill Lynch, Pierce, Fenner & Smith Incorporated

Bank of America NT & SA

Bank of Boston

The First National Bank of Boston

Bear, Stearns & Co.

Lazard Frères & Co.

North Carolina National Bank

J. J. Lowrey & Co.

E. A. Moos & Co.

Incorporated

Langdon P. Cook & Co.

Incorporated

Stone & Youngberg

October 22, 1982

CHAPTER III

PROFILE OF OUTSTANDING ALASKAN DEBT¹

Overview

With its first bond issue occurring in 1958, the State of Alaska is a relative newcomer to the national tax-exempt bond market. Its recent appearance is primarily the result of two factors: 1) the relatively recent incorporation of Alaska as a state; and 2) the increase in State resources available to repay debt. Although territories of the United States are able to issue tax-exempt bonds if given specific authorization by the U.S. Congress, debt issuance is facilitated if the entity is a state of the Union. As a territory, however, Alaska was able to issue \$2.9 million of bonds to finance construction at the University of Alaska. These bonds constituted the entire debt of the Territory when Alaska became a state, and are now general obligations of the State, payable out of general revenues.

The dramatic increase in State revenues following completion of the Trans-Alaska Pipeline in 1975 has fueled development in the State, generating revenue to the State Treasury that can support the State's own issuance of debt. In addition, growth of the Alaskan economy has created demand for State industrial and housing loan programs and has provided the revenue streams which can be pledged to repayment of debt obligations. Expansion of the economy also creates demand for municipal services, and municipal-type State services in unincorporated areas of the State. Such demands have fueled the increase in State and local government debt to finance roads, schools, water and sewer systems, and public utilities.

Since becoming a state in 1959, Alaska has been a steady issuer of debt, either in the form of direct general obligations of the State (tax-supported), obligations of State public corporations (revenue-supported), or its municipalities (both tax and revenue supported). Table 3.1 compares the volume of new debt issues from Alaska to national market volume over the 1970-82 period. Setting aside the unusually heavy volume of "pipeline" bonds in 1977 (which is discussed below), the data indicate that the volume of new Alaska bonds has been growing in relation to the national market. In 1970, new Alaska issues accounted for 0.7 percent of national volume; by 1982, Alaska's market share had more than doubled, to 1.8 percent of aggregate new issue volume.

The dramatic increase in borrowing, both in absolute amount and relative volume, provokes the need for an assessment of who the issuers are, the types of debt being issued, and its market acceptance. While Alaska's borrowing commands far less market share than many other states -- New York State issues, for example, accounted for more than 10 percent of national market volume over the last decade -- its rate of growth has been noted.

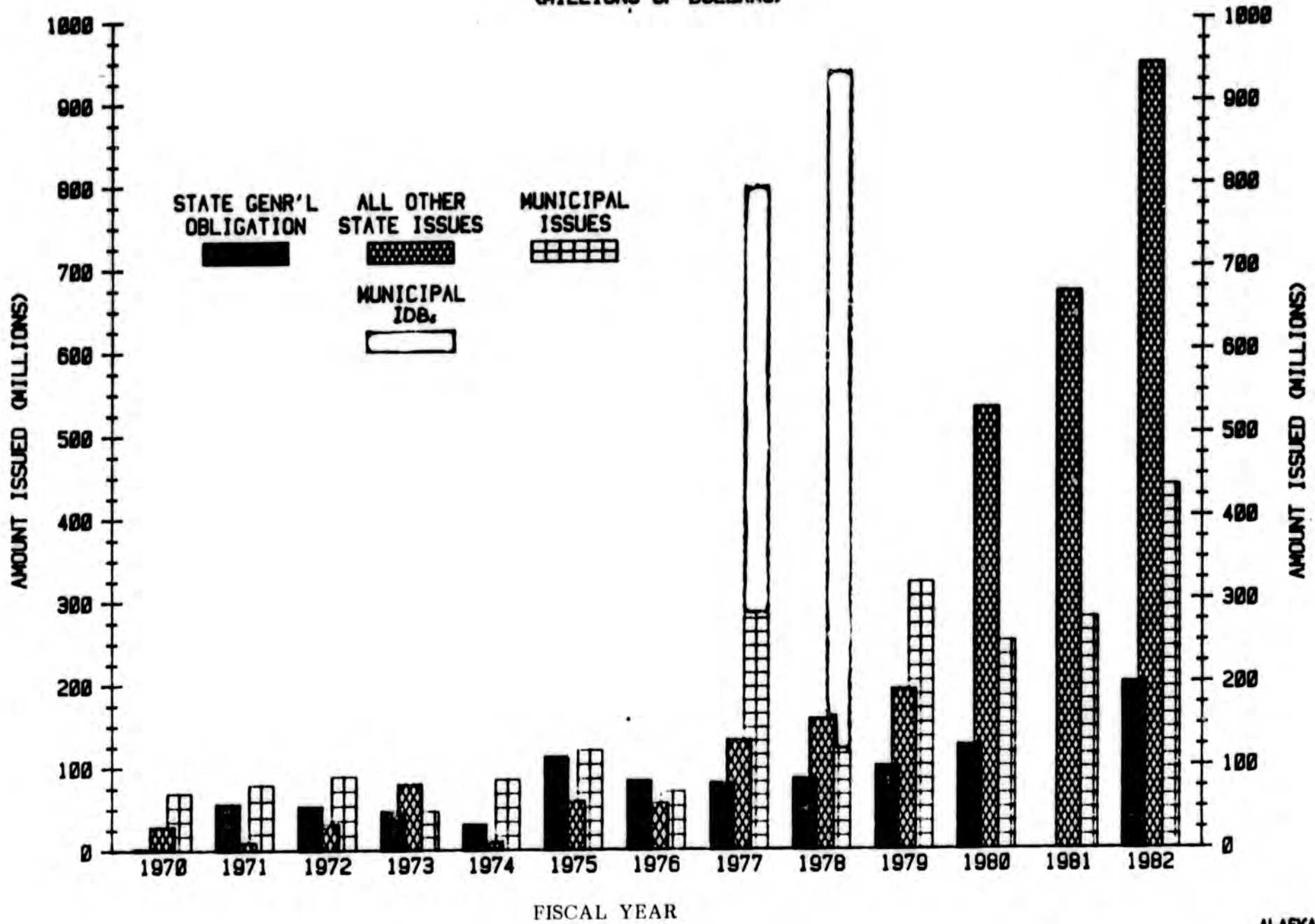
Before turning to the individual issuers of public debt in Alaska, it is useful to trace the general trend in volume of new tax-exempt bond issues sold

Table 3.1
 Volume Of Alaska Issues As A Percent Of Total
 Long-Term Tax-Exempt Bond Issues

<u>Year</u>	<u>Alaska Issues (\$ million)</u>	<u>Total Volume (\$ billion)</u>	<u>Alaska as a Percent of Total</u>
1970	\$134.3	\$18.1	.7%
1971	135.5	24.9	.5
1972	150.3	23.7	.6
1973	222.0	23.8	1.0
1974	161.4	23.6	.7
1975	279.9	30.7	.9
1976	284.9	35.4	.9
1977	1659.6	46.7	3.6
1978	552.2	48.2	1.2
1979	591.1	43.3	1.4
1980	809.7	48.3	1.7
1981	501.8	47.7	1.0
1982	1397.5	78.3	1.8

Source: Public Securities Association

ANNUAL STATE DEBT ISSUANCE 1970 TO 1982 (MILLIONS OF DOLLARS)



by governmental units in the State over the 1970-82 period. Table 3.2 documents the steadily rising volume of new borrowings. Bonds sold by all governmental units or agencies in 1982 amounted to nearly \$1.4 billion, or more than ten times the volume of new issues in 1970 of \$134 million.

Exhibit 3.1 disaggregates total issuance over the 1970-82 period by class of issuer. The three classes of debt issuers being the State itself (general obligation), its agencies and public corporations (other State issuers), and municipalities. It is obvious that the year 1977 marked a dramatic increase in the amounts of debt issued from Alaska. In this year the municipality of Valdez issued tax-exempt industrial revenue bonds to finance the construction of port facilities in conjunction with the Trans Alaskan Pipeline. These bonds were issued on behalf of the oil companies involved, are payable and guaranteed solely by these companies, and are not direct obligations of the municipality. Therefore, this type of debt is generally not considered as municipal debt, but rather as corporate debt. The magnitude of these debt issues, however, introduced the "Alaska name" to investors in tax-exempt securities and marked a turning point in the State's access to the national bond market.

Although unique for size and purpose, the so-called "pipeline bonds" are characteristic of other trends in borrowing practices — namely the growing use of revenue bonds. As noted in Table 3.2, the volume of revenue bond financing in Alaska has exceeded the volume of tax-supported issues in 5 of the last 6 years (1982 being the exception). From 1978 through 1982, the average annual volume of revenue bonds, \$402 million, accounted for 52 percent of total Alaska debt sales, while tax-supported volume amounted, on average, to \$368 million or 48 percent of annual average sales. By contrast, over the 1970-74 period, tax-supported general obligation bonds of the State and its municipalities accounted for 64 percent of total Alaska debt volume.

Exhibit 3.1 and Tables 3.3 and 3.4 trace other related developments in the changing character of new debt issues from Alaska. The dollar volume of State general obligation debt has increased substantially from an average annual volume of \$64 million in the 1970-76 period to \$123 million in the 1977-82 period as indicated in Table 3.3. As a proportion of total Alaska new borrowings, however, State general obligation debt has declined from 32 percent of aggregate Statewide volume over 1970-76 to 12 percent over the last six years as indicated in Table 3.4.

The tremendous increase in State agency borrowing since 1977 has dwarfed the State's general obligation borrowing and that of its municipalities. Annual State issuance other than general obligation debt has risen from approximately \$130 million in fiscal year 1977 to over \$900 million in 1982. The vast majority of agency borrowing is revenue-supported, contributing to the trend towards increased reliance on revenue bonds indicated in Table 3.2. Over the 1978-82 period, aggregate State agency issues amounted to \$1.7 billion and 44 percent of new issues. By contrast, over the entire 1970-77 period, State agency borrowings amounted to only \$409 million and accounted for only 13.5 percent of total borrowings.

Table 3.2
Volume of New Tax-Exempt Bond Issues
Alaska, 1970 - 1982
(dollar amounts in millions)

Year	Total New Issues		General Obligations		Revenue Bonds	
	Number	Amount	Amount	Percent of Total	Amount	Percent of Total
1970	24	\$134.3	\$ 88.1	66%	\$ 46.2	34%
1971	24	135.5	107.5	79	28.0	21
1972	23	150.3	104.9	70	45.3	30
1973	28	222.0	130.5	59	91.5	41
1974	20	161.4	79.5	49	81.9	51
1975	32	279.9	182.7	65	97.2	35
1976	24	284.9	170.9	60	114.0	40
1977	25	1659.6	155.4	9	1504.2	91
1978	27	552.2	264.3	48	287.9	52
1979	19	591.1	198.8	34	392.3	66
1980	11	809.7	340.8	42	468.9	58
1981	16	501.8	150.6	30	351.2	70
1982	42	1397.5	885.9	63	511.6	37

Source: Public Securities Association

Table 3.3

STATE OF ALASKA

NEW ISSUES OF TAX-EXEMPT BONDS

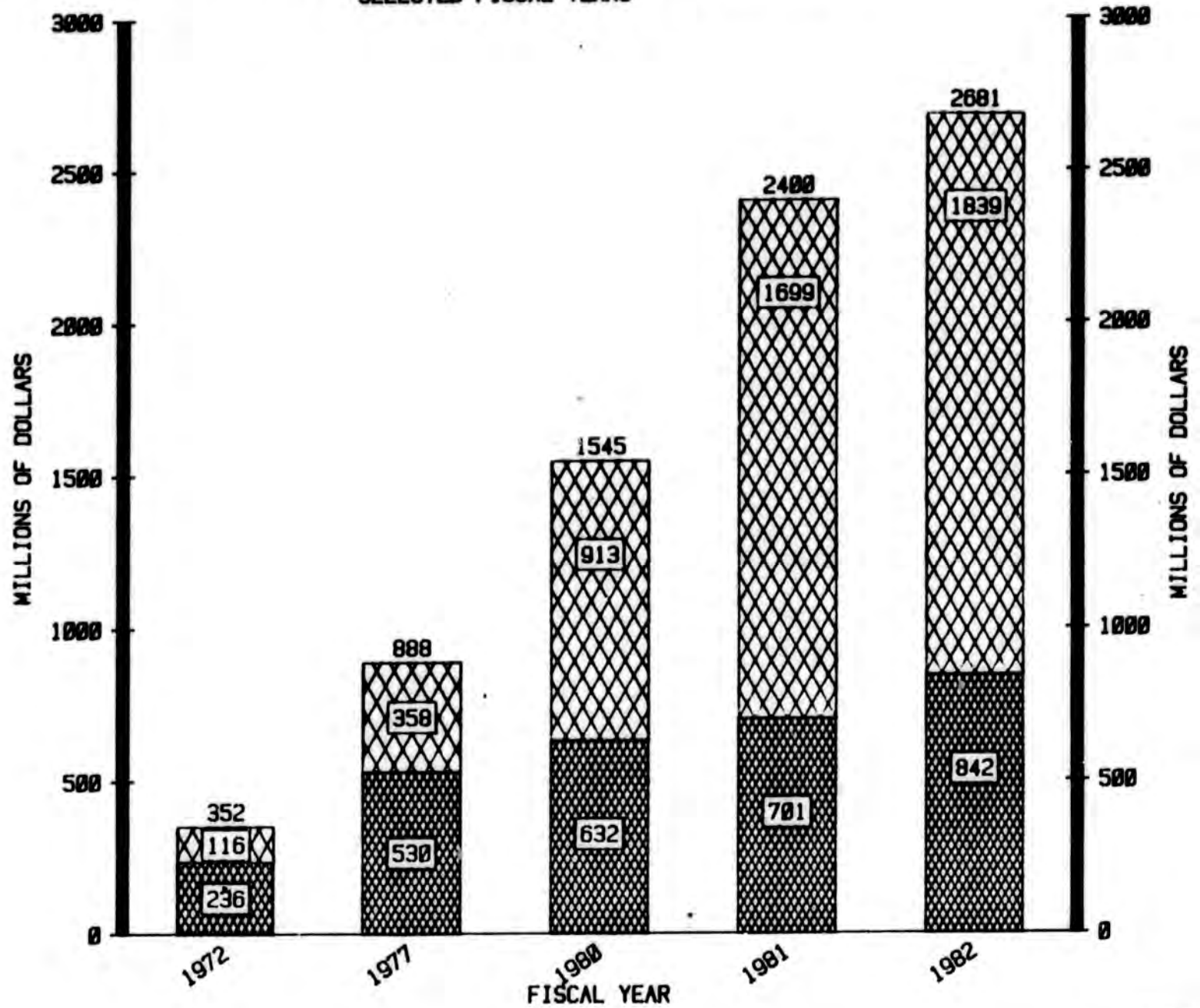
1970-82

(dollar amounts in millions)

Year	State GO		State Financial Intermediaries								Other State Agencies		Local GO		Local Revenue		Total	
			AHFC/ASHA		AIDA		Bond Bank		Medical Care									
	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$
1970	3	35.7	1	29.1	--	---	--	---	--	---	--	---	14	52.4	6	17.1	24	134.3
1971	2	45.1	1	3.8	--	---	--	---	--	---	--	---	15	62.4	6	24.2	24	135.5
1972	2	53.4	3	32.3	--	---	--	---	--	---	--	---	15	51.5	3	13.0	23	150.3
1973	3	78.0	5	70.1	--	---	--	---	--	---	3	31.1	13	52.5	7	21.4	28	222.0
1974	1	30.0	1	11.4	--	---	--	---	--	---	--	---	12	49.5	6	70.5	20	161.4
1975	3	125.2	5	57.0	--	---	--	---	--	---	3	17.1	17	57.5	4	23.1	32	279.9
1976	2	80.0	2	45.0	--	---	3	10.8	--	---	--	---	11	80.1	6	69.0	24	284.9
1977	2	80.6	3	123.0	--	---	3	9.3	--	---	--	---	3	66.1	14	1381.2	25	1659.6
1978	2	85.0	3	146.2	--	---	4	12.7	--	---	1	5.6	8	166.6	9	136.1	27	552.2
1979	1	60.0	3	204.4	1	7.5	3	12.3	1	12.0	--	---	4	130.3	6	164.6	19	591.1
1980	1	125.0	2	460.0	--	---	2	26.3	--	---	--	---	5	189.9	1	8.5	11	809.7
1981	--	---	2	200.0	6	114.5	1	2.1	--	---	--	---	3	148.5	4	36.7	16	501.8
1982	2	385.0	3	195.6	10	55.0	3	30.8	--	---	2	165.0	13	474.5	8	91.6	42	1397.5

Source: Public Securities Association

COMPOSITION OF STATE DEBT OUTSTANDING SELECTED FISCAL YEARS



ALASKA

Exhibit 3.2 demonstrates the changing composition of outstanding Alaskan debt over the period encompassed by fiscal years 1972 and 1982. Over this time period, State general obligation debt fell from 67% of all debt outstanding in the State in 1972 to 31% in 1982. The increase in non-general obligation debt of the State's public corporations was led by the Alaskan Housing Finance Corporation (AHFC) which has become the largest supplier of mortgage funds and the heaviest issuer of debt in the State. AHFC alone accounted for 31.2 percent of all Alaska "paper" to enter the bond market in the past five years. As indicated in Table 3.4, however, the market share of AHFC dropped substantially between 1981 and 1982. The drop to 14 percent of all Statewide issues from 40 percent in the prior year occurred simultaneously with the onset of major new borrowing programs of the Alaska Power Authority and the Alaska Industrial Development Authority.

Exhibit 3.3 and Table 3.5 present the composition of outstanding State-level debt by individual issuer as of April 1, 1983. Of the approximately \$4 billion in State level debt outstanding, AHFC comprises nearly 61% (\$2.4 billion), State general obligation debt 26% (\$1 billion), and other issuers 13%.

When bonds are issued, the issuer commits itself to the payment of interest on the money borrowed from bondholders in addition to the repayment of principal. At the end of fiscal year 1982, the amount of interest payable over the term of all outstanding State-level debt amounted to \$4.1 billion, 117% of the principal amount outstanding. Table 3.6 presents the amount of principal outstanding and interest due over the term of the outstanding principal on each State-level issuers' bonds at the end of fiscal year 1982. A more detailed breakdown of these amounts is provided in the debt service schedules of each State-level issuer in Table 3.7.

The remainder of this section briefly describes each of the public issuers of debt within the State, the purposes for which they issue bonds, and the historical trend of debt issuance. In so doing, it provides a current profile of long-term debt in Alaska. Because of their sizeable share of the public debt market, the State's corporations and agencies will be the primary focus of the profile. At present there are eight State agencies or corporations that have at one time received legislative authorization to issue bonds. These are:

- Alaska Housing Finance Corporation (AHFC)
- Alaska Industrial Development Authority (AIDA)
- Alaska State Housing Authority (ASHA)
- Alaska Power Authority (APA)
- Alaska Municipal Bond Bank
- University of Alaska
- Alaska Medical Facilities Authority
- Alaska State Development Corporation

For the purpose of profiling debt issuance in Alaska, debt in the State is categorized in the following manner:

Table 3.4

PERCENTAGE COMPOSITION OF
NEW TAX-EXEMPT BOND ISSUES
BY TYPE OF ISSUE

STATE OF ALASKA
1970-82

<u>Year</u>	<u>State GO</u>	<u>Alaska Housing Finance</u>	<u>Other State Agencies</u>	<u>Municipal Bond Bank</u>	<u>Local GO</u>	<u>Local Revenue</u>
1970	27%	--	22%	--	39%	13%
1971	33%	--	3%	--	46%	18%
1972	36%	9%	13%	--	34%	9%
1973	35%	18%	14%	--	24%	10%
1974	19%	--	7%	--	31%	44%
1975	45%	20%	6%	--	21%	8%
1976	28%	16%	--	4%	28%	24%
1977	5%	7%	--	1%	4%	83%
1978	15%	26%	1%	2%	30%	25%
1979	10%	35%	3%	2%	22%	28%
1980	15%	57%	--	3%	23%	1%
1981	--	40%	23%	4%	30%	7%
1982	28%	14%	16%	2%	33%	7%

Source: Public Securities Association

TOTAL STATE DEBT OUTSTANDING BY ISSUER
(DOLLARS IN 000'S AS OF APRIL 1, 1983)

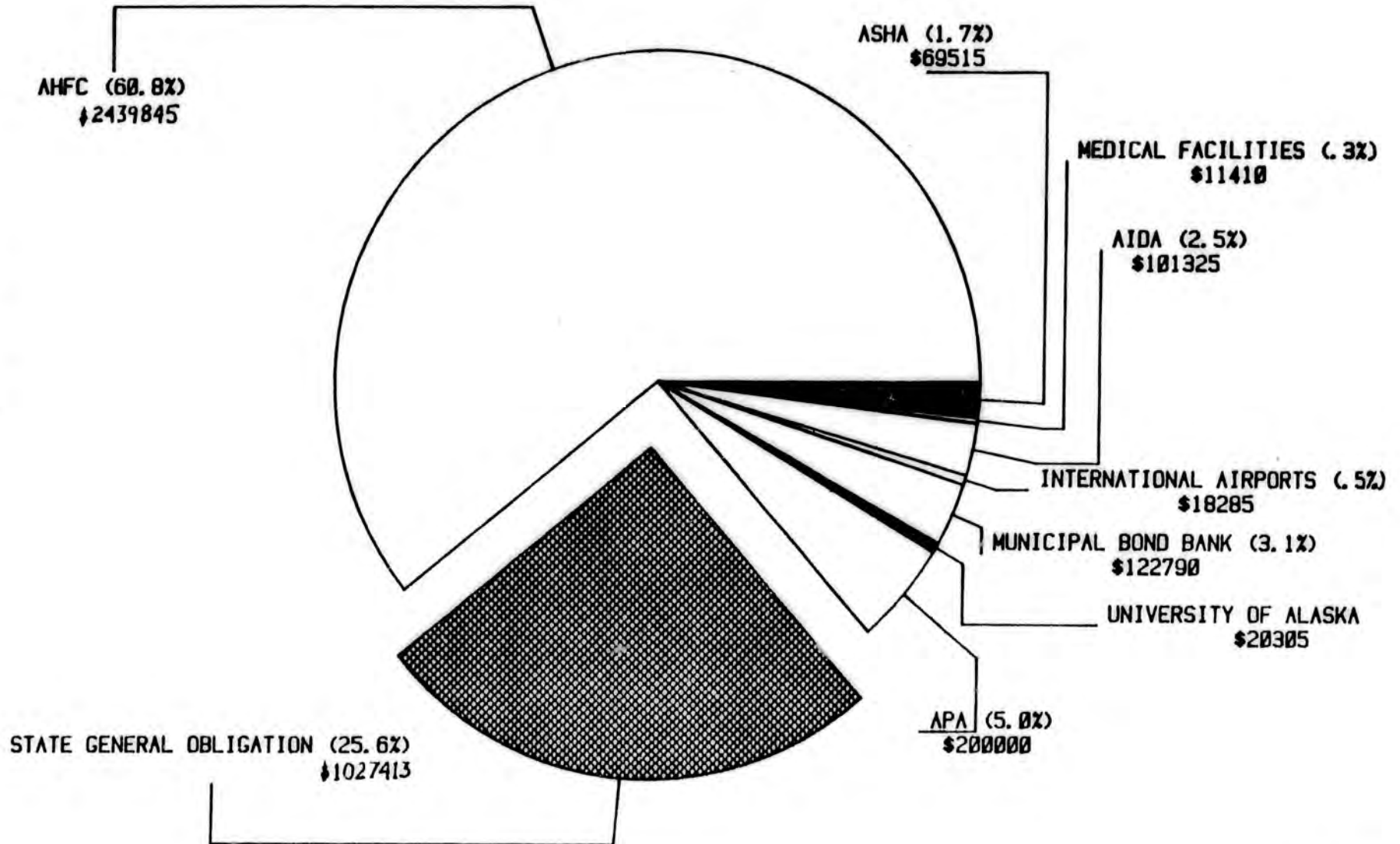


Exhibit 3.3

Table 3.5

State of Alaska
Total Public Debt Outstanding
(000s)

<u>Issuer</u>	<u>Amount Outstanding as of 6/30/82</u>	<u>Amount Issued 6/30/82 to 6/1/83</u>	<u>Total^{1/}/ Outstanding</u>	<u>Percent of State- Level Debt</u>	<u>Percent of State- Wide Debt</u>
<u>STATE LEVEL</u>					
State General Obligation	\$ 842,413	\$185,000	\$1,027,413	24.8%	17.7%
Alaska Housing Finance Corp.	2,004,845	560,000	2,564,845	62.0	44.2
Alaska Power Authority	200,000	-0-	200,000	4.8	3.5
Municipal Bond Bank	94,805	26,985	122,790	3.1	2.1
Alaska Industrial Development Auth.	77,875	23,450	101,325	2.5	1.7
Alaska State Housing Agency	67,125	2,390	69,515	1.7	1.2
University of Alaska	20,305	-0-	20,305	0.5	0.5
International Airports	18,285	-0-	18,285	0.4	0.4
Medical Facilities	11,410	-0-	11,410	0.2	0.2
State Development Corporation	50	-0-	50	0.0	0.0
TOTAL STATE LEVEL OUTSTANDING			\$4,135,938	100.0%	
<u>LOCAL LEVEL</u>					
Municipal G.O.	\$1,316,300	N/A	\$1,316,300		22.7%
Municipal Revenue	347,536 ^{2/}	N/A	347,536		5.8
TOTAL LOCAL LEVEL OUTSTANDING			\$1,663,836		
TOTAL STATE-WIDE OUTSTANDING			\$5,799,774		100.0%

^{1/} This column does not account for debt retired between 6/30/82 and 4/1/83.

^{2/} FY 1981 Figure from Moody's Investors Service.

Table 3.6
 State-Level Debt
 Debt Service Obligations
 as of FY 1982

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
State General Obligation	\$1,027,413	\$408,301	\$1,435,714
University of Alaska	20,304	13,122	33,427
ASHA	67,125	21,930	89,055
International Airport Authority	18,285	10,486	28,771
Municipal Bond Bank	95,805	92,296	188,101
APA	200,000	45,200	245,200
AIDA	77,875	139,398	217,273
Medical Facilities Authority	11,410	10,790	22,200
State Development Corp.	50	1	51
AHFC	<u>2,004,845</u>	<u>3,373,706</u>	<u>5,378,551</u>
	\$3,523,112	\$4,115,230	\$7,640,342

Table 3.7
 SUMMARY OF DEBT SERVICE REQUIREMENTS TO MATURITY
 AS OF JUNE 30, 1982 (000's)

Fiscal Year	State G.O. Bonds (1)			University of Alaska			State Housing Agency			Municipal Bond Bank			Housing Finance Corp.		
	P	I	Total	P	I	Total	P	I	Total	P	I	Total	P	I	Total
1983	81230	62394	143624	1114	1192	2306	6140	3774	9914	2910	8812	11722	17573	231674	249247
1984	100175	63240	163415	875	1133	2008	6545	3370	9915	3380	8678	12058	33462	231060	264522
1985	100060	56149	156209	920	1078	1998	6970	2953	9923	3665	8329	11994	42775	227023	269798
1986	101465	49120	150585	736	1020	1756	7415	2494	9909	4015	7946	11961	47419	221954	269373
1987	100580	42230	142810	771	1038	1809	4335	2142	6477	4375	7554	11929	51027	216245	267272
1988	100885	35449	136334	812	929	1741	4575	1891	6466	4595	7130	11725	54142	209937	264079
1989	95927	28548	124475	873	880	1753	4850	1623	6473	5110	6667	11777	58392	203182	261574
1990	87760	22063	109823	919	827	1746	5150	1337	6487	6625	6150	12775	63979	195772	259751
1991	69699	15870	85569	969	771	1740	5450	1032	6482	8145	5532	13677	69375	187599	256974
1992	48349	10523	58872	1020	711	1731	5785	713	6498	9510	4809	14319	301582	172045	473627
1993	43563	7397	50960	1086	647	1733	5460	400	5860	6495	3973	10468	58161	133256	191417
1994	20598	5220	25818	947	586	1533	2975	166	3141	4680	3457	8137	61860	126054	187914
1995	19096	3988	23084	1022	527	1549	1475	35	1510	4710	3067	7777	65746	118301	184047
1996	18610	2864	21474	1068	463	1531				5535	2655	8190	69563	110039	179602
1997	14865	1800	16665	1139	396	1535				4400	2213	6613	73432	101277	174709
1998	13380	1008	14388	1205	323	1528				3325	1829	5154	71743	92168	163911
1999	8640	369	9009	1281	246	1527				3770	1476	5246	76731	83250	159981
2000	2531	69	2600	1353	163	1516				4200	1054	5254	68343	73714	142057
2001				889	75	964				3845	639	4484	66180	65816	131996
2002				400	42	442				2515	326	2841	54015	59294	113309
2003				266	29	295							52835	54753	107588
2004				215	19	234							54270	50285	104555
2005				120	12	132							55840	45619	101459
2006				120	9	129							59210	40784	99994
2007				125	5	130							66880	35634	102514
2008				60	1	61							64965	29846	94811
2009													75465	24139	99604
2010													64380	17326	81706
2011													63900	11017	74917
2012													41600	4643	46243
2013															
TOTAL	1027413	408301	1435714	20305	13122	33427	67125	21930	89055	95805	92296	188101	2004845	3373706	5378551

(1) Includes November 1982 bond sale

Table 3.7 (Continued)

Fiscal Year	Alaska Power Authority			Alaska Industrial Auth.			Medical Facilities Auth.			State Development Corp.			International Airport Aut		
	P	I	Total	P	I	Total	P	I	Total	P	I	Total	P	I	Total
1983		16000	16000	3310	9300	12610	325	956	1281	50	1	51	795	1149	1944
1984	35000	16000	51000	3305	9036	12341	350	928	1278				845	1101	1946
1985	165000	13200	181000	2955	8719	11674	375	897	1272				895	1049	1944
1986				2750	8427	11177	405	864	1269				945	995	1940
1987				2550	8148	10698	435	829	1264				1005	940	1945
1988				2240	7885	10125	465	792	1257				1065	882	1947
1989				2185	7648	9833	500	752	1252				1140	820	1960
1990				2265	7413	9678	535	711	1246				1210	744	1954
1991				2555	6796	9351	575	667	1242				1275	666	1941
1992				2515	7153	9668	615	620	1235				1340	583	1923
1993				2375	6854	9229	660	569	1229				1410	496	1906
1994				2590	6534	9124	705	514	1219				1485	404	1889
1995				2820	6235	9055	760	456	1216				1560	306	1866
1996				3180	5905	9085	815	394	1209				1640	204	1844
1997				3145	5138	8283	875	325	1200				800	97	897
1998				2705	4736	7441	935	252	1187				875	50	925
1999				3040	4393	7433	1005	174	1179						
2000				3410	4011	7421	1075	90	1165						
2001				3890	3581	7471									
2002				3875	3090	6965									
2003				3270	2598	5868									
2004				3600	2182	5782									
2005				4105	1725	5830									
2006				4620	1204	5824									
2007				4065	612	4677									
2008				555	75	630									
2009															
2010															
2011															
2012															
2013															
TOTAL	200000	45200	248000	77875	139398	217273	11410	10790	22200	50	1	50	18285	10486	28771

3.7 (Continued)

ALASKA STATE LEVEL DEBT OUTSTANDING
(as of Fiscal Year 1982)

Fiscal Year	Direct Tax-Supported Debt(1)			Indirect State Debt (2)			Total State Indebtedness		
	P	I	Total	P	I	Total	P	I	Total
1983	88484	67360	155844	24963	267891	292854	113447	335251	448698
1984	107595	67743	175338	76342	266803	343145	183937	334546	518483
1985	107950	60180	168130	215665	259217	474882	323615	319397	643012
1986	109616	52634	162250	55534	240186	295720	165150	292820	457970
1987	105686	45410	151096	59392	233716	293108	165078	279126	444204
1988	106272	38269	144541	62507	226626	289133	168779	264895	433674
1989	101650	31051	132701	67327	219069	286396	168977	250120	419097
1990	93829	24227	118056	74614	210790	285404	168443	235017	403460
1991	76118	17673	93791	81925	201260	283185	158043	218933	376976
1992	55154	11947	67101	315562	185210	500772	370716	197157	567873
1993	50109	8444	58553	69101	145148	214249	119210	153592	272802
1994	24520	5972	30492	71320	136963	208283	95840	142935	238775
1995	21593	4550	26143	75596	128365	203961	97189	132915	230104
1996	19678	3327	23005	80733	119197	199930	100411	122524	222935
1997	16004	2196	18200	82652	109050	191702	98656	111246	209902
1998	14585	1331	15916	79583	99035	178618	94168	100366	194534
1999	9921	615	10536	84546	89293	173839	94467	89908	184375
2000	3884	232	4116	77028	78869	155897	80912	79101	160013
2001	889	75	964	73915	70036	143951	74804	70111	144915
2002	400	42	442	60405	62710	123115	60805	62752	123557
2003	266	29	295	56105	57351	113456	56371	57380	113751
2004	215	19	234	57870	52467	110337	58085	52486	110571
2005	120	12	132	59945	47344	107289	60065	47356	107421
2006	120	9	129	63830	41988	105818	63950	41997	105947
2007	125	5	130	70945	36246	107191	71070	36251	107321
2008	60	1	61	65520	29921	95441	65580	29922	95502
2009	0	0	0	75465	24139	99604	75465	24139	99604
2010	0	0	0	64380	17326	81706	64380	17326	81706
2011	0	0	0	63900	11017	74917	63900	11017	74917
2012	0	0	0	41600	4643	46243	41600	4643	46243
TOTAL	1114843	443353	1558196	2408270	3671876	6080146	3523113	4115229	7638342

Notes: (1) Includes State General Obligation Debt, University of Alaska Revenue Bonds, Alaska State Housing Authority Lease Revenue Bonds.

(2) Includes all other State Level Debt.

- I. Direct Tax-Supported Debt
 - A. State General Obligation Bonds
 - B. Revenue Debt Dependent on State Appropriations (ASHA/University debt)
- II. Indirect Debt
 - A. General Obligation Veterans Housing
 - B. Moral Obligation Bonds of State public corporations (AIDA, APA, Bond Bank, certain AHFC bonds)
 - C. Other obligations of public corporations (Airport Revenue Bonds)
- III. Municipal Debt
- IV. Other Long-Term Obligations
 - A. Public Pension Liabilities
 - B. Local School Construction Expenditures

Direct Tax-Supported Debt

Tax-supported debt is debt that is supported by the State's general fund. It includes only that debt which is payable from State appropriations, and not debt for which a specific revenue stream that is independent of the State budget has been pledged (such as the State's International Airport Bonds). This is also the aggregate outstanding debt amount used by Moodys Investor's Service, a major credit rating institution, in evaluating and comparing the State's debt posture with respect to other States and in assigning a credit rating to the State's own obligations. Tax-supported debt includes State General Obligation debt, lease-revenue debt of the Alaska State Housing Authority, and University of Alaska debt.

State General Obligation Debt

General obligation (G.O.) bonds are backed by the full faith and credit and general taxing authority of the State of Alaska. Bonds which carry Alaska's G.O. pledge represent the State's most direct form of indebtedness. If future State revenues are ever insufficient to make the required interest payments to bondholders or repay principal, the State is legally required by its contract with bondholders to raise taxes in order to meet these obligations.

G.O. debt is issued to provide funds for a variety of State activities. Among these are the construction of State marine and surface highway systems, water supply and sewerage systems, educational facilities, airports, and other public buildings. Table 3.8 and Exhibit 3.4 provide a breakdown of the amounts of State G.O. debt issued since 1972 by the purposes for which it was issued. In addition, the purposes for which future debt may be issued, within the remaining voter-authorized amount of \$81.5 million, are presented.

Table 3.8

Functional Distribution of State G.O. Debt Issued and
Authorized but Unissued
Since 1972

(\$ in thousands)

<u>Function</u>	<u>Amount Issued</u>	<u>Amount Authorized but Unissued</u>
Transportation		
Airport	\$ 40,366	\$ 900
Highways and Ferries	330,095	16,008
Flood Control and Harbor Development	72,292	3,498
Education	263,167	15,190
Health and Housing	54,234	181
Water and Sewer	94,964	29,676
Fish, Game and Recreation	86,899	0
Public Safety (Fire and Corrections)	52,613	16,041
TOTAL	\$994,630	\$81,494

Source: State Annual Financial Report, 1982, and November 1982
Offering Statement prepared in conjunction with sale of
State general obligation bonds.

ALASKA GENERAL OBLIGATION DEBT SINCE 1972 (THOUSANDS OF DOLLARS)

AMOUNT ISSUED BY PURPOSE

AUTHORIZED BUT UNISSUED DEBT

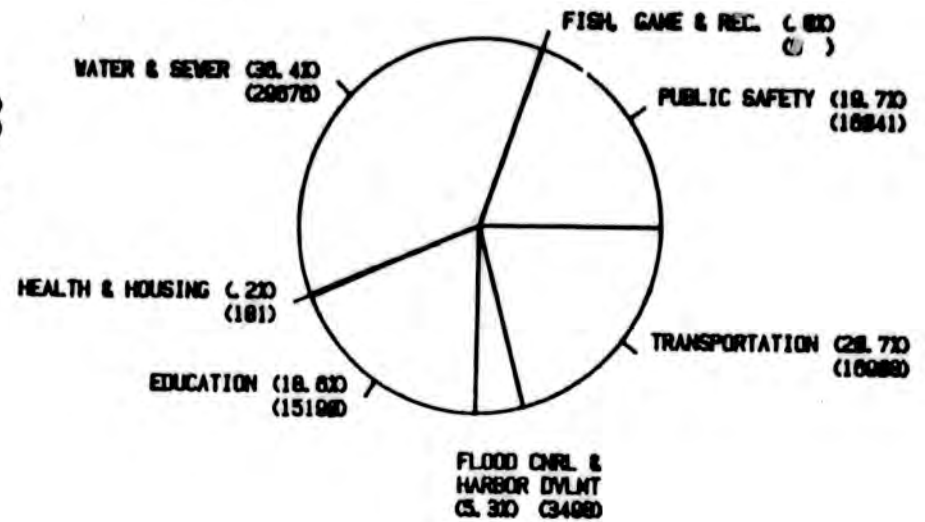
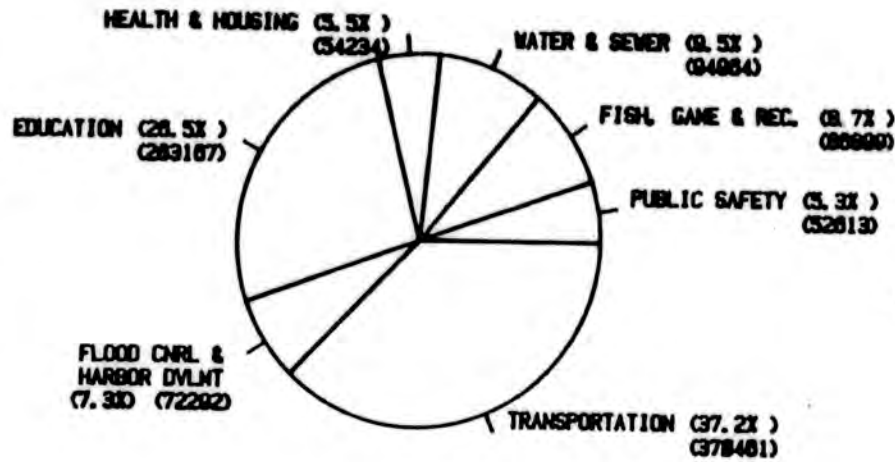


Exhibit 3.4
64

G.O. bonds are issued under provisions of the Alaska Constitution that require advance approval of the State electorate. In addition, the authorization of the State legislature and approval of the State Bond Committee are required. The legal provisions concerning State G.O. bonds are primarily contained in Article IX, Section 8 of the Alaska Constitution and the State Bonding Act in Chapter 37, Section 15 of the Alaska Statutes.

The State has gone to the bond market 37 times since statehood, to raise over \$1 billion in general obligation debt. In addition, the State assumed as general obligation bonds of the State the outstanding debt of the Territory of Alaska. In 1959 the Territorial debt amounted to \$2,932,000. In contrast, as of December 1982, the State had \$1,027,413,000 in G.O. debt outstanding. Table 3.9 provides details of each of the State's past bond issues and the amounts outstanding at the end of fiscal year 1982. A graphic presentation of State debt issuance is provided in Exhibit 3.5. The amount of State general obligation debt issuance dramatically increased after 1974 when the prospects of large increases in State revenues became more certain with the completion of the Trans Alaskan Pipeline. Indeed, over 75% of State general obligation debt issuance occurred since 1975.

The debt service schedule presented in Table 3.7 gives the future payments of principal and interest that will be required to repay the \$1 billion in general obligation debt presently outstanding. Debt service requirements begin to drop rapidly after 1990. This is the result of a conscious effort of the State and its financial advisors to shorten the maturities of State debt to conform with projected oil revenues generated from the Prudhoe Bay field. Table 3.10 shows that the average life of State bond issues has dropped since 1975 from 12.5 years to 5 years on the State's most recent G.O. bond issue.

Table 3.10 also shows that the interest cost per dollar borrowed on State general obligation debt has fallen sharply over the past 10 years. The interest cost on State bond issues is determined by several factors, the major factor being the general level of interest rates in the economy. However, the credit rating assigned to an issuer and investor perception of creditworthiness are also considerable factors. Table 3.10 indicates that the decrease in borrowing costs since 1973 generally corresponds to improvement in the State's credit rating from Baa 1/A in 1973 to Aa/AA- at present. A significant factor behind the improved credit rating is the tailoring of new debt issuance to the expected life of Prudhoe Bay and the State's oil-based revenues. In addition, average interest rates on a bond issue generally are lower the shorter the average maturity.

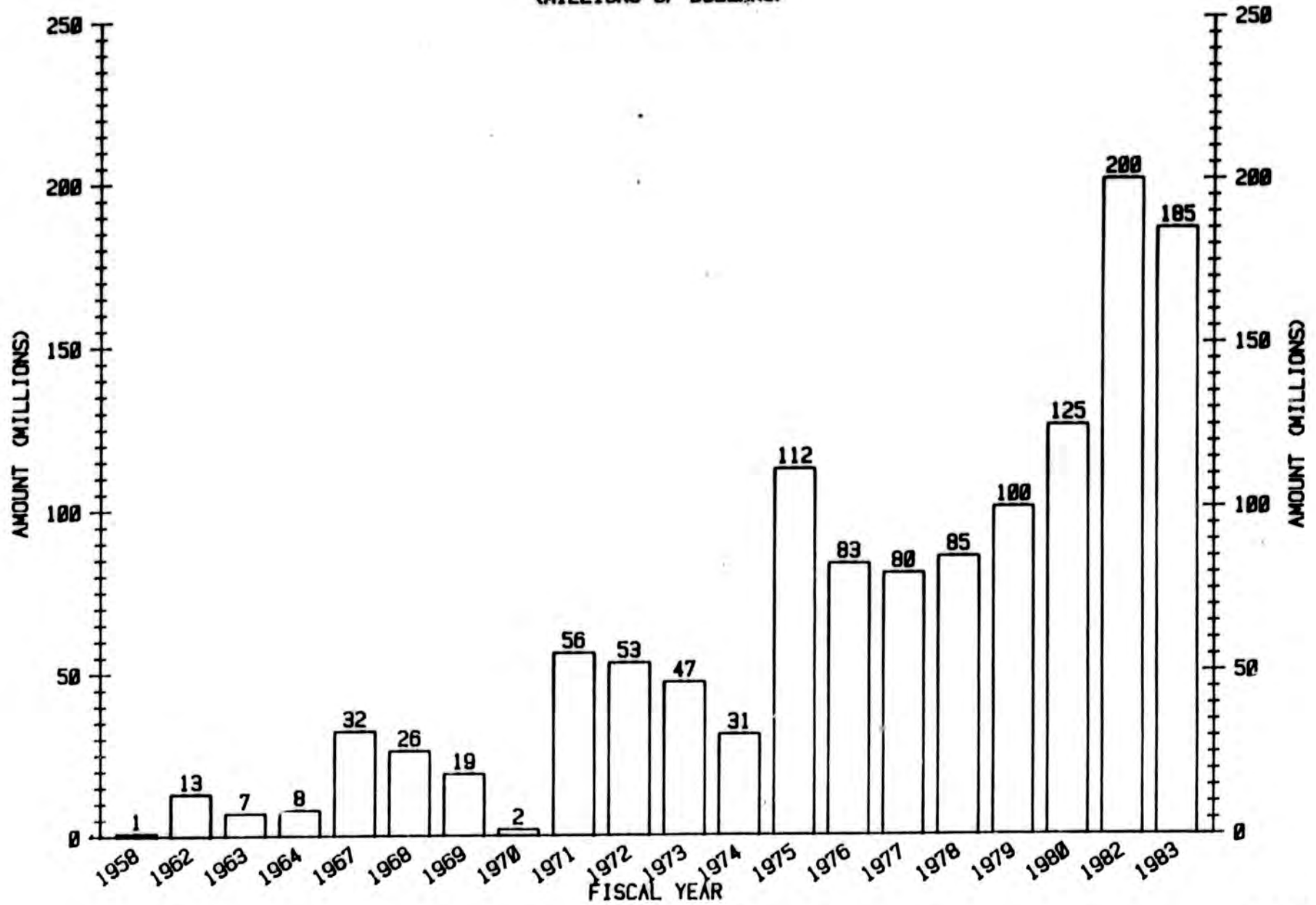
Revenue Debt Dependent on State Appropriations

The majority of State revenue-supported bonds is secured primarily by the revenues generated by the project for which the bonds are issued (e.g., Alaska Industrial Development bonds). In most instances they are not general obligations of the State and bondholders have no legal recourse to State tax revenues (the exception is the AHFC veterans housing mortgage revenue bonds, described below). However, certain revenue-supported debt is considered to be

ANNUAL STATE GENERAL OBLIGATION
BOND ISSUANCE
(MILLIONS OF DOLLARS)

Exhibit 3.5

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ALASKA

Table 3.9
State of Alaska
State General Obligation Bond Issues

<u>DATE</u>	<u>PURPOSE</u>	<u>AMOUNT</u>	<u>PRINCIPAL OUTSTANDING AS OF 6/30/82</u>	<u>ANIC^{1/}</u>	
June 1, 1958 ^{2/}	University of Alaska	\$ 1,290,000	\$ 365,000	2.97%	
July 1, 1961	Transportation	12,500,000	6,750,000	3.56	
April 1, 1963	University of Alaska	2,650,000	205,000	3.33	
April 1, 1963	Education	2,700,000	205,000	3.33	
April 1, 1963	Airport	1,550,000	105,000	3.33	
Jan. 1, 1964	Various	7,865,000	1,110,000	3.56	
Oct. 1, 1966	Various	12,485,000	7,757,000	3.75	*coupon
Oct. 1, 1966	Various	2,600,000	1,156,000	3.75	*coupon
May 1, 1967	Various	16,500,000	9,945,000	4.50	
Sept. 1, 1967	Transportation	10,500,000	9,000,000	4.90	
April 1, 1968	Various	15,500,000	6,300,000	5.18	
Oct. 1, 1968	Various	10,500,000	4,850,000	5.24	
May 1, 1969	Transportation	8,500,000	4,050,000	5.73	
Oct. 1, 1969	University	2,030,000	1,440,000	3.0	*coupon
Sept. 1, 1970	Various	11,325,000	4,025,000	5.87	
Feb. 1, 1971	Various	21,325,000	11,285,000	5.07	
June 1, 1971	Various	18,880,000	15,120,000	6.03	
June 1, 1971	University	3,750,000	3,025,000	6.04	
June 1, 1971	University	1,200,000	900,000	6.00	
Feb. 1, 1972	Various	23,445,000	16,800,000	5.23	
May 1, 1972	Various	30,000,000	20,900,000	5.15	
Jan. 1, 1973	Transportation	20,000,000	16,000,000	5.12	
June 1, 1973	Various	27,000,000	19,600,000	5.10	
Aug. 1, 1973	Various	31,000,000	27,500,000	5.80	
Sept. 1, 1974	Various	30,000,000	34,800,000	6.85	
Feb. 1, 1975	Various	40,000,000	38,500,000	5.98	
May 1, 1975	Various	42,000,000	34,400,000	6.52	
Oct. 1, 1975	Various	42,915,000	38,500,000	6.85	
March 1, 1976	Various	40,000,000	27,500,000	5.86	
July 1, 1976	Various	40,000,000	27,500,000	5.80	
Feb. 1, 1977	Various	40,000,000	30,000,000	5.08	
Oct. 1, 1977	Various	40,000,000	28,000,000	4.50	
April 1, 1978	Various	45,000,000	30,000,000	4.86	
Jan. 1, 1979	Various	40,000,000	28,000,000	5.52	
May 1, 1979	Various	60,000,000	48,000,000	5.59	
July 1, 1980	Various	125,000,000	100,000,000	5.76	
April 1, 1982	Various	200,000,000	200,000,000	9.98	
Nov. 1, 1982	Various	185,000,000	185,000,000	7.72	
		\$1,265,310,000	\$1,027,413,000		

Source: Department of Administration, Bonded Debt and Debt Service, Fiscal Year ended June 10, 1982, plus November 1982 offering.

^{1/} ANIC=Average Net Interest Cost

^{2/} State Assumed obligation of Territory.

Table 3.10

State of Alaska
State General Obligation Bond Sales
Since 1973

<u>Date of Bonds</u>	<u>Amount of Issue (Millions)</u>	<u>Maturities</u>	<u>Average Life in Years</u>	<u>Effective Interest Rate</u>	<u>Salomon Brothers Monthly Average¹</u>	<u>Ratings (at the time of issuance) Moody's/S&P</u>
Jan. 13, 1973	\$ 20.0	1976-1998	15.3	5.12%	5.10%	Baal/A
Jan. 13, 1973	27.0	1976-1998	14.8	5.10	5.20	Baal/A
Aug. 1, 1973	31.0	1977-1998	16.7	5.80	5.65	Baal/A
Sept. 1, 1974	30.0	1978-1998	15.6	6.85	6.40	Al/A
Feb. 1, 1975	40.3	1978-1998	14.6	5.98	6.10	Al/A+
May 1, 1975	42.0	1979-1999	15.1	6.52	6.40	Al/A+
Oct. 1, 1975	42.9	1978-1997	12.5	6.85	6.00	Al/A+
Mar. 1, 1976	40.0	1978-1993	9.5	5.86	5.30	Al/A+
Jul. 1, 1976	40.0	1978-1993	9.5	5.80	5.15	Al/A+
Feb. 1, 1977	40.0	1979-1988	9.5	5.08	4.50	Al/A+
Oct. 1, 1977	40.0	1979-1988	7.0	4.50	4.45	Al/A+
Apr. 1, 1978	45.0	1980-1988	7.0	4.86	4.85	Al/A+
Jan. 1, 1979	40.0	1979-1989	5.5	5.52	5.50	Al/A+
May 1, 1979	60.0	1979-1989	5.5	5.59	5.30	Al/A+
Jul. 1, 1980	125.0	1981-1990	5.5	5.76	5.50	Aa/AA-
Apr. 1, 1982	200.0	1983-1992	5.0	9.98	10.25	Aa/AA-

SOURCE: John Nuveen & Co., Alaska: A New Look, 1981; and Department of Administration, Bonded Debt and Debt Service, fiscal year 1982.

¹ Salomon Brothers Monthly Average is for "Good Grade" bonds of similar average maturity.

tax-supported debt when the project's revenue stream is dependent upon State appropriations. This occurs with two non-State debt issuers in Alaska; the University of Alaska and the lease-revenue bonds of the Alaska State Housing Authority. The issuance of revenue bonds does not require voter approval; however, both houses of the legislature determine the annual bonding authorization for each issuer through the budget approval process.

The tax-supported revenue bond borrowing programs are described below.

University of Alaska Revenue Bonds - In addition to issuing general obligation bonds to finance university-related projects, the State issues revenue bonds for specific university purposes that can be secured by project revenues. The facilities which have been financed using revenue bonds include the Anchorage student center, the Anchorage campus utility system, and university dormitories. The student center, utility system, and campus housing bonds, are all secured by student fees and user charges. The University of Alaska Heating Corporation bonds are secured by lease payments made by the university from general fund appropriations.

Following is the amount of debt outstanding (as of June 30, 1982) on university projects financed using revenue bonds:

Anchorage Energy Utility System	\$665,000
Anchorage Campus Student Center	4,680,000
University of Alaska Heating Corp.	6,950,000
Fairbanks Campus Housing	8,010,000
TOTAL	\$20,305,000

These bonds are not general obligations of the State; however, because the debt may be payable from State appropriations to the University for general operating purposes, the bonds are considered to be direct, tax-supported, obligations of the State.

Moody's Investors Service has assigned a credit rating of Baal to the university revenue bonds. This rating is lower than the State's due to the lower security of student fees and the tentative and discretionary nature of State appropriations that are pledged to retire the debt.

Alaska State Housing Authority - The Alaska State Housing Authority (ASHA) is a public corporation of the State authorized to:

- construct, operate, and manage low income housing projects;
- finance rental housing projects;
- engage in urban renewal programs; and
- construct and acquire public buildings for lease to the State.

Most of the debt that has been issued by ASHA to date has been for the latter purpose. These bonds are referred to as lease-revenue bonds because they

are secured by long-term leases with the State for the public buildings. All structures leased to the State are operated and maintained by the State. The bonds are not general obligations of the State; however, the State makes annual lease payments to ASHA which are of an amount sufficient to cover the necessary debt service. Therefore, the lease-revenue bonds are considered to be direct, tax-supported, obligations of the State.

In spite of the security of the State's lease payments behind ASHA lease-revenue bonds, the bonds are rated A by Moodys Investor's Service, a full notch below the State's AA credit rating. This is because the State's (appropriation) pledge to make lease payments is not as strong as its general obligation (full faith and credit) pledge. The State's leases with ASHA are subject to the legislature annually appropriating the lease payments. If the legislature should fail to do so, ASHA would have difficulty making the required debt service payments.

ASHA is starting to become active in the Section 8 housing program and to act as a financing source for local housing authorities. To date, the only bond issue for this purpose occurred in August 1982 in the amount of \$2.39 million. This debt is not considered to be a direct obligation of the State because the revenue pledged to retire the bonds does not rely on State appropriations. As of December 31, 1982, ASHA had the following debt outstanding:

State Lease-Revenue Bonds	\$67,125,000
Low-Income Housing Bonds	2,390,000
Total	<u>\$69,515,000</u>

Indirect State Debt

AHFC Veterans Housing (General Obligation) Bonds - In the 1982 general election, voters approved an amendment to Article IX, Section 8 of the Alaska Constitution that permits the State to guarantee unconditionally as a general obligation of the State the payment of principal and interest on certain revenue bonds issued by the AHFC for the purpose of purchasing mortgages made for residences of qualifying veterans. The amendment provided that the maximum amount of State G.O. bonds that may be issued for this purpose is \$400 million.

These bonds are known to investors as "doublebarrelled" because there are two distinct forms of security behind the bonds. Their first lien is on the revenue stream generated by the mortgages made from bond sale proceeds. Additional security to bondholders is provided by the general obligation pledge of the State to make the required debt service payments in the event that revenues are insufficient. These are the only AHFC bonds (and the only State revenue bonds) which carry the State's direct G.O. pledge. The constitutional amendment permitting AHFC to issue such debt was necessary in order for the AHFC to continue issuing tax-exempt mortgage revenue bonds. The U.S. Mortgage Subsidy Bond Tax Act passed by Congress in 1980 restricted the ability of states or public corporations to sell tax-exempt housing bonds above specified ceilings unless they were also general obligations of the issuing state.

As a consequence of the 1980 legislation, the AHFC had been raising capital by issuing the more expensive taxable bonds because the Alaska Constitution prohibited the issuance of State G.O. bonds for other than State capital improvements.

It is important to note that the State's general obligation pledge was not needed in order to make the bonds attractive to investors, or to improve their security structure. The "double-barrell" bonds are being issued solely to circumvent the federal restrictions on the issuance of tax-exempt mortgage revenue bonds mentioned above. In recognition of the independent creditworthiness of the Veterans bonds, the bonds are rated higher than the State itself. Whereas the State's rating on its general obligation bonds is Aa/AA-, the AHFC veteran's housing bonds are rated Aa/AA. Although the difference between a Standard & Poor's rating of AA and AA- is a fine distinction, it is a sign that the veterans bonds are not being rated on the strength of the State's general obligation pledge, but on their own merit.

Because of the strong support behind the bonds, independent of the State's general obligation pledge, this debt is not considered to be direct tax-supported debt as is other general obligation debt. However, if problems in the administration of the veterans program were to arise, the bonds would be treated as general obligation debt. These bonds are still indirect obligations of the State, just as are AHFC moral obligation-backed bonds. Since the November 1982 election which authorized their issuance, there have been two issues of AHFC State Guaranteed Bonds, totaling \$175 million. Because the bonds are general obligations of the State, their issuance must be approved by the State Bond Committee.

Moral Obligation Bonds of State Public Corporations

Moral obligation (M.O.) bonds, as issued by Alaska's public corporations, are secured primarily by revenues generated by the purpose for which the bonds are issued and are not direct tax-supported obligations of the State. Neither State tax revenues nor State appropriations are pledged to retire the revenue bonds. However, such debt is an indirect, contingent obligation of the State because in the event that revenues of the corporation which issues the debt are insufficient to meet debt service commitments, the State has a "moral obligation" to appropriate the required funds.

The State has declared its moral obligation backing of State corporate debt in the original enabling legislation of the public entity. For example, the State's M.O. pledge behind bonds issued by the Alaska Industrial Development Authority reads as follows: (Alaska Statutes Sec. 44.88.105)

- (d) The chairman of the authority shall annually, no later than January 2, certify in writing to the governor and the legislature the amount, if any, required to restore a capital reserve fund to the capital reserve fund requirement. The legislature may appropriate to the authority the amount

certified by the chairman of the authority. ...Nothing in this section creates a debt or liability of the state.

The capital reserve fund mentioned in the statute is generally equal in size to the minimum amount of debt service required in any year. It is common for issuers of revenue bonds to include a capital reserve or debt service reserve fund in the structure of the bond offering for it lends additional security to the bondholders and helps ensure the highest possible credit rating for the bonds. Alaska's moral obligation provision means that if the debt service reserve fund should fall below its required level, the State legislature may, but is not legally required to, appropriate the funds sufficient to restore the capital reserve fund to its required level. The most likely reason that such a reserve fund would fall short of the required level is if agency revenues were insufficient to meet a given debt service payment and the reserve fund had to be used to make the payment.

Similar clauses were included in the enabling legislation of each of the other State corporations. Consequently, the State's M.O. stands behind the debt issued by the Alaska Municipal Bond Bank, the Alaska Power Authority, the Alaska Medical Facility Authority, and certain bonds issued by the Alaska Housing Finance Corporation.

Alaska Municipal Bond Bank - The Alaska Municipal Bond Bank is a public corporation administratively located within the Department of Revenue but with a separate and independent legal existence. It was established in 1975 in order to loan funds for capital construction to cities and boroughs in the State. The Bank raises the money it loans to the municipalities through the issuance of tax-exempt bonds. The Municipal Bond Bank bonds are general obligations of the Bank alone, and are not obligations of the State of Alaska. The State has pledged its moral obligation to the maintenance of the debt service reserve fund, however.

The Bank loans funds to local governmental units through the purchase of general obligation and revenue bonds of the localities. Instead of directly selling a bond issue in the national bond market, a city may sell its bonds to the Municipal Bond Bank. The Bank collects several such bond issues and consolidates them into a single bond issue which it sells on the national market. The interest rate bid on the Bank's bonds becomes the rate the localities must pay to the bank. The Bank is, therefore, a middleman — facilitating the debt issuance of smaller units of government.

The advantages to Alaska's localities are several. First, interest rates tend to be more competitive (i.e., lower) because of the additional security local bonds enjoy through the structure of the Bond Bank. Also, by pooling the bond issuances of localities the Bank's bond issue is larger than the individual offerings would be and the lower administrative costs can be shared by the localities which comprise the Bank's issue. The Bank's bonds are rated A by Moodys Investors Service. This is a higher rating than many of Alaska's smaller, lesser known, municipalities could achieve on their own. Purchasers of the

Table 3.11

Alaska Municipal Bond Bank
General Obligation Debt Outstanding by Locality

<u>Governmental Unit</u>	<u>Moody's Credit Rating</u>	<u>Obligation to the Bank As of 4/1/83</u>	<u>Percent of Total</u>
City and Borough of Juneau	Baal	\$40,625,000	37.6%
Matanuska-Susitna Borough	A	22,025,000	20.4
Kodiak Island Borough	Baal	11,810,000	10.9
City and Borough of Sitka	NR	8,920,000	8.3
City of Ketchikan	Baal	4,870,000	4.5
Bristol Bay Borough	NR	3,785,000	3.5
City of Unalaska	NR	3,060,000	2.8
City of Homer	Baa	2,190,000	2.0
City of Soldotna	NR	2,115,000	1.9
City of Palmer	NR	1,835,000	1.7
City of Fairbanks	A	1,610,000	1.5
City of Kodiak	Baa	1,425,000	1.3
City of Wrangell	NR	1,405,000	1.3
City of Seward	NR	990,000	0.9
City of Bethel	NR	625,000	0.6
City of Kenai	NR	390,000	0.4
City of Nome	NR	165,000	0.2
TOTAL		\$107,845,000 .	100.0%

SOURCE: Alaska Municipal Bond Bank, Official Statement, March, 1983.

Bank's bonds have additional security that would not be available from purchasing, for example, the City of Ketchikan's bonds directly (the City of Ketchikan is rated Baa). The increase in bond rating translates into lower interest costs. Finally, the Bond Bank, carrying the Alaska State name, is better known than many of Alaska's smaller units of government. This enhances the marketability of the bonds to investors in the "lower 48".

A listing of the debt outstanding to the Bond Bank by each municipality that has issued bonds through the Bank is provided in Table 3.11. With the exception of MatanuskaSusitna Borough and the City of Fairbanks, the municipalities that have used the Bank are rated Baal or lower (or are unrated). The A rating of the Bank's bonds, therefore, has resulted in significant savings in interest costs especially to these communities.

The security behind the bonds issued by the bank, which is multi-layered, is as follows:

1. First, the pledge and assignment of the individual general obligation municipal bonds which the Bond Bank's bond proceeds will be used to purchase.

2. Second, a debt service reserve fund must be maintained at a level equal to 15% of the principal amount of the Bank's bonds outstanding. The reserve account is funded through two sources. State appropriations to the Bank make up 10% of the principal amount. The remaining 5% is borrowed along with each bond issuance.

3. Third, the Bank has a first claim on State aid payments to localities (including school aid payments, the local share of various taxes collected by the State, and State aid to local governments) if the local government defaults on its obligation.

4. Finally, the State has pledged its moral obligation to maintain the debt service reserve fund at its proper level.

Upon creation of the Bond Bank by the State in 1975, it was authorized to have a maximum of \$150 million in debt outstanding. The State appropriated to the Bank an amount equal to 10% of the maximum authorization (\$15 million) partially to fund the debt service reserve account. As of the Bank's most recent issuance (March 1983) \$ 123,540,000 in general obligation bonds had been issued. In addition to general obligation bonds, the Bank has issued a limited amount of revenue-supported debt and federally guaranteed bonds under the Costal Energy Improvement Program (CEIP). Out of a total amount of \$160,097,300 issued since 1976, the following debt remains outstanding:

Table 3.12
Alaska Municipal Bond Bank Issues
1976 - 1983

<u>GENERAL OBLIGATION BONDS</u>		<u>Amount Issued</u>	<u>Amount Outstanding</u>	<u>Interest</u>
<u>Date</u>	<u>Purchased From</u>	<u>By Bank^{1/}</u>	<u>as of 4/1/83</u>	<u>Range</u>
June 1976	Kodiak, Seward	\$3,150,000	2,720,000	N/A
Sept. 1976	Mat-Su	7,245,000	6,345,000	6-8%
Sept. 1976	Homer	430,000	220,000	5-8%
Feb. 1977	Nome, Soldotna	680,000	365,000	4.85-7%
May 1977	Ketchikan, Juneau	4,920,000	4,205,000	5.2-6.5%
Nov. 1977	Bethel	795,000	625,000	5-8%
July 1978	Ketchikan	5,515,000	4,815,000	5.5-7.5%
Oct. 1978	Sitka	3,520,000	3,130,000	5.5-7.5%
Oct. 1978	Juneau	2,100,000	2,100,000	5.5-7.5%
Jan. 1979	Wrangell	1,575,000	1,480,000	5.9-7.5%
May 1979	Fairbanks, Soldotna, Mat-Su	5,335,000	4,925,000	6-8%
Oct. 1979	Palmer, Sitka	3,150,000	2,630,000	6.2-8%
April 1980 ^{2/}	Bristol Bay, Sitka	10,080,000	9,565,000	9.95-11%
Aug. 1980	Kodiak, Homer, Kenai, Unalaska, Fairbanks	16,170,000	15,800,000	7.3-9%
Oct. 1981	Juneau	2,100,000	1,960,000	12-13%
Feb. 1982	Juneau	10,815,000	10,230,000	11.25-14%
Feb. 1982	Mat-Su	15,615,000	15,410,000	13-16%
March 1982	Homer	420,000	400,000	11.5-12%
April 1983	Juneau	24,795,000	24,795,000	8.5-10.75%
April 1983	Unalaska	<u>2,190,000</u>	<u>2,190,000</u>	8-10%
TOTAL G.O.		\$123,540,000	\$113,680,000	
<u>REVENUE BONDS</u>				
July 1980	Ketchikan Airport	\$ 410,000	\$ 410,000	6.2-8.5%
April 1982	Fairbanks Utility	<u>4,440,000</u>	<u>4,440,000</u>	10.25-11.4%
TOTAL REVENUE		\$ 4,850,000	\$4,850,000	
Coastal Energy Improvement Program Bonds ^{3/}		\$31,707,300	\$31,467,300	
TOTAL BOND BANK		\$160,097,300	\$149,997,300	

SOURCE: Alaska Municipal Bond Bank, Official Statement, March, 1983.

- ^{1/} Amount issued by the Bank is approximately equal to the amount of bonds purchased by the Bank plus 5 percent for the debt service reserve fund contribution.
- ^{2/} Bonds issued under 1980 Resolution.
- ^{3/} Federally guaranteed.

Total Municipal Bond Bank Bonds Outstanding

General Obligation Bonds	\$113,680,000
Revenue-Supported Bonds	4,850,000
CEIP Bonds	31,467,300
TOTAL	<u>\$149,997,300</u>

An itemization of these amounts is provided in Table 3.12. Of the \$149.9 million currently outstanding, only the general obligation and revenue bonds are indirect obligations of the State, carrying its moral obligation. The CEIP bonds are secured by the federal government and do not have a claim on the the reserve fund established for the general obligation bond series. At the end of fiscal year 1983 the Bond Bank had exhausted all but \$2,700 of its original authorization of \$150 million. During the 1983 legislative session, however, the State Legislature appropriated an additional \$20 million to the Bond Bank, increasing its borrowing capacity by \$200 million.

Alaska Medical Facility Authority - The Alaska Medical Facility Authority is a public authority administratively located in the Department of Revenue with a separate and independent legal existence. The Authority was created by the legislature in 1978 to finance construction and improvements to medical facilities in the State. As of April 1983, the Authority had sold one bond issue in October 1979, of \$12 million to finance improvements to a Fairbanks hospital. The bonds, rated Baal are secured by hospital lease payments and are not a direct obligation of the State; however, the State has pledged its moral obligation to the maintenance of the debt service reserve fund. The outstanding debt of the Authority at the end of fiscal year 1982 was \$11,410,000.

Alaska Housing Finance Corporation - The Alaska Housing Finance Corporation (AHFC) is a public corporation administratively located within the Department of Revenue but has a separate and independent legal existence. AHFC was chartered in 1971 to provide financing for low- and moderate-income housing and housing located in remote, underdeveloped, or blighted areas of the State. Since 1980, when the AHFC's powers were expanded by removing mortgagor income restrictions, the Corporation has emerged as the largest supplier of mortgage funds in the State, in addition to being the largest issuer of debt (taxable and tax-exempt). Table 3.13 indicates the amounts of AHFC borrowing since 1972, and that 76 percent of this borrowing has occurred since 1980.

The bonds issued by the AHFC are secured by the mortgages purchased with bond proceeds, including federal and private mortgage insurance, state appropriations, a reserve fund, and in certain instances, the State's moral obligation pledge. In addition, the AHFC has issued certain veterans housing bonds which carry the full faith and credit pledge of the State (discussed above).

Table 3.13

Alaska Housing Finance Corporation
Debt Issued by Year
All Programs 1972-1983
(000s)

1972	\$ 13,500
1973	49,000
1975	52,000
1976	45,000
1977	123,000
1978	146,225
1979	170,600
1980	503,800
1981	650,000
1982	652,000
1983 (to 5/30/83)	<u>175,000</u>
Total	\$2,580,125

Source: Alaska Housing Finance Corporation, Selected Corporation and Program Information, December 1982, revised with 1983 data.

The AHFC operates many other loan programs aside from the State guaranteed Veterans Housing bonds. The amounts issued under each program and the amounts outstanding are presented in Table 3.14. The largest program is the Insured Mortgage Program which issued approximately \$984 million from 1975 to 1980. Borrowing was curtailed in 1980 due to federal restrictions on tax-exempt housing mortgage revenue bond issuance. The bonds are secured by the mortgages and a 10% capital reserve fund which the State has pledged its moral obligation to replenish if mortgage income is insufficient to meet debt service. Approximately \$953 million is presently outstanding.

The second largest program is the State Assisted Mortgage Program, with \$875 million issued and currently outstanding. Bonds issued under this program are taxable, because of federal restrictions enacted in 1980 on the use and amount of state tax-exempt housing bonds that may be issued. This program is not subject to the State's moral obligation. The only other program carrying the State's moral obligation is the one issue of \$15 million home improvement loan bonds.

As Table 3.14 indicates, AHFC has \$2.4 billion in taxable and tax-exempt debt outstanding. Of this amount, slightly less than \$970 million (38 percent) is backed by the State's moral obligation. The moral obligation bonds, plus the State fully guaranteed bonds issued to date of \$175 million, are included as indirect debt of the State. Indirect AHFC debt therefore amounts to \$1.14 billion or 45 percent of total AHFC debt outstanding as indicated below.

<u>AHFC Debt Outstanding</u>		
	Amount	
<u>State Back-Up</u>	(millions)	<u>Percent</u>
General Obligation	\$ 175.00	7
Moral Obligation	967.60	38
No Liability	1,390.90	55
TOTAL	\$2,533.50	100

Alaska Industrial Development Authority - The Alaska Industrial Development Authority (AIDA) is a public corporation administratively located in the Department of Commerce and Economic Development but with a separate and independent legal existence. AIDA was created in 1980 as the successor to the Alaska State Development Authority. AIDA promotes economic development within the State by providing low interest loans to industrial and commercial projects. None of the tax-exempt bonds issued to finance the loan programs are direct obligations of the State; however, the State's moral obligation stands behind the debt service reserve fund which secures certain bonds issued by AIDA.

AIDA has three major loan programs. The Economic Development "Umbrella" Bond Program issues tax-exempt industrial development bonds to finance projects of \$1 million or less. Because of their small size, the projects financed under this program are grouped together when AIDA issues bonds, hence the title "umbrella". AIDA does not directly loan bond proceeds. Proceeds of the Authority's bond sales are used to purchase eligible loans from financial

Table 3.14
Alaska Housing Finance Corporation
Amounts Issued and Outstanding by Program
(000s)

	Program Rating	Amount Issued	Amount Outstanding as of 5/30/83
Housing Mortgage Program Bonds	Aa/AA	\$ 109,500	\$ 96,245
Insured Mortgage Program Bonds*	A	983,625	952,625
Home Mortgage Bonds	Aa/AA-	385,000	385,000
State Assisted Mortgage Bonds**	Aa/AA	875,000	875,000
Second Mortgage Bonds	AA	27,000	27,000
Home Improvement Loan Bonds*	A/A-	15,000	15,000
Insured Rural Mortgage Bonds	NR	10,000	10,000
State Guaranteed Bonds***	Aa/AA	<u>175,000</u>	<u>175,000</u>
		\$2,580,125	\$2,533,615

Source: Alaska Housing Finance Corporation, Selected Corporation and Program Information, December 1982.

- * Backed by State Moral Obligation
- ** Taxable Bonds
- *** Backed by State General Obligation

institutions in the State. Security for AIDA's bonds comes from the financed projects, a capital reserve fund established by the State for the Authority, and the full faith and credit of the Authority. This program's debt is considered to be an indirect obligation of the State.

The second program, the Consolidated "Umbrella" Bond Program, is similar to the Economic Development "Umbrella" Bond program except the projects financed are of amounts larger than \$1 million. The bonds are secured by the Authority's general obligation and the moral obligation of the State. As of December 1982, \$101,325,000 of umbrella bonds from both the economic development and consolidated loan programs were outstanding.

The following amounts of umbrella bonds have been issued:

1981	\$17,640,000
1982	60,480,000
1983	23,205,000

In its third and largest loan program, the Revenue Bond Program, AIDA acts as a conduit in the sale and issuance of certain industrial development bonds on behalf of private borrowers who secure the bonds entirely. AIDA does not participate financially in the projects nor is the Authority's full faith and credit pledged as security for the bonds. Bonds issued under this program are not considered to be obligations of the Authority or the State. Furthermore, the State's M.O. does not stand behind bonds issued through the revenue bond program. At the end of December 1982, \$310,690,185 was outstanding under this program.

Alaska Power Authority - The Alaska Power Authority (APA) is a public corporation of the State situated for administrative purposes in the the Department of Commerce and Economic Development but with separate and independent legal existence. The APA was created to finance, construct, and operate power production and transmission facilities. The Authority is subject to the Executive Budget Act (Alaska Statutes 37.07) and must receive legislative authorization for the financing of any project which involves the appropriation of state funds or that exceeds 1.5 million megawatts of installed electrical generating capacity.

To date, the APA has issued only short-term bond anticipation notes with maturities of three years or less. Presently, \$200 million is outstanding with the first maturity of \$35 million in May 1984. Of the remaining shortterm notes, \$50 million matures in October 1984 and \$115 million in May 1985. The notes are rated MIG-1 by Standard & Poor's. MIG-1 is the rating assigned to the highest quality borrower enjoying strong credit protection with adequate cash flows for servicing the debt. The APA short-term notes are so-rated because of a letter of credit backing from various AAA-rated banking institutions. For an annual fee, certain banks will provide issuers with a letter of credit that acts as an external credit support, much like municipal bond insurance. Because the short-term notes are "variable rate" notes -- meaning the interest rate paid to

noteholders is not fixed but changes monthly according to a predetermined index -- a letter of credit was necessary in order to market the bonds. This is true of virtually all variable or floating rate notes.

Other Obligations of Public Corporations

International Airport Revenue Bonds - These bonds have been issued to finance improvements to the State's two international airports and are secured by a first lien on gross revenues derived from airport operations; however, they are also "special" obligations of the State. If airport revenues were ever insufficient to meet debt service requirements, it is likely that the State would be called upon to make up the difference.

The bonds are issued by the State Bond Committee with the approval of the Commissioner of Transportation and Public Facilities. The Commissioner is required by each bond resolution to fix and collect fees, charges and rentals for the use of facilities of the International Airports sufficient each year to provide net revenues at least equal to 130 percent of debt service requirements during that year. Table 3.15 indicates that over that past seven fiscal years, net revenues have far exceeded the amount required to pay debt service.

The State is authorized by statute (A.S. 37.15.410) to issue a maximum of \$43.325 million in international airport revenue bonds. Of this amount, \$34.825 million (80 percent) had been issued as of April 30, 1983. The February 1975 issue (the most recent) was defeased (retired early) in July of 1975 because the bond proceeds were no longer required upon cancellation of the Anchorage Terminal Expansion Project. Therefore, these bonds are no longer considered to be outstanding. The net amount of International airports revenue bonds outstanding as of June 30, 1982 was \$18,285,000.

Municipal Debt

In addition to Municipal Bond Bank debt issuance on behalf of Alaskan municipalities, local governments in the State issue debt independently in the tax-exempt bond market. At the end of fiscal year 1982, approximately \$1.3 billion in general obligation debt and \$347.4 million revenuesupported debt was outstanding at the local government level. The debt of Alaska's localities, therefore, comprises approximately 43 percent of the total amount of public debt outstanding in the State. The debt position of local governments in the State is described at length in Section Five of this Report.

Other Long-Term Obligations

Public Pension System Liabilities - The State administers two major retirement systems: the Public Employees Retirement System (for State employees and employees of political subdivisions who elect to join the system), and the Teachers Retirement System (for teachers and school

Table 3.15

International Airports Revenue Bonds
Coverage Ratios
1975 - 1982

<u>Fiscal Year</u>	<u>Net Revenues (millions)</u>	<u>Debt Service (millions)</u>	<u>Coverage of Net Revenues Over Debt Service</u> ^{1/}
1975	\$ 5.6	\$ 2.1	266%
1976	5.6	1.9	294
1977	7.4	1.9	389
1978	10.0	1.9	526
1979	12.6	1.9	663
1980	13.6	1.9	775
1981	15.9	1.9	836
1982	14.6	1.9	768

SOURCE: Department of Administration, Bonded Debt and Debt Service, Fiscal Years ended 1982.

^{1/} required coverage 130%.

administrators). The difference between the present value of accrued benefits for employees who are covered by the pension system and the value of the particular pension system's assets is the amount of the State's unfunded liability. The unfunded pension liability is not generally treated by the rating agencies or investors as "debt" unless it is judged to constitute a significant burden on the State; however, it is an long-term obligation of the State.

According to William M. Mercer, Inc., the unfunded current liability for each of the State's public pension systems at the end of fiscal year 1982 was as follows:

Public Employees Retirement System
(dollars in millions)

Present Value of Accrued Benefits	\$775,115
Value of Assets	<u>613,653</u>
Unfunded Liability for Accrued Benefits	161,462
Unfunded Liability as Percent of Benefits	20.8%

Teachers Retirement System

Present Value of Accrued Benefits	\$587,016
Value of Assets	<u>451,650</u>
Unfunded Liability for Accrued Benefits	135,366
Unfunded Liability as Percent of Benefits	23.1%

Both of these systems are considered to be "fully funded" since the ratio of assets to accrued benefits, (i.e., the unfunded pension liabilities) is 77 to 80 percent for both of the retirement systems. Unfunded pension liabilities are generally not considered to be a contingent liability until this ratio drops below 60 percent. The State's pension liability, therefore, does not need to be included in calculation of the indirect debt of the State.

Local School Construction Debt - A portion of the State's education assistance program to independent school districts consists of the partial reimbursement for cash expenditures on school construction and debt service on bonds issued to finance school construction. As described in Section Five, approximately \$641 million in school construction debt was outstanding at the local level at the end of fiscal year 1982. The State's legal commitment to repay this debt is restricted to the annual appropriation allocated to this purpose by the legislature; however, because the bonds were issued with the expectation of some level of State assistance, a de facto moral obligation to provide assistance with debt service on school construction debt exists at the State level.

Table 3.16

State of Alaska Classification of Outstanding Debt
(amounts in millions)

	Amount Outstanding June 30, 1982	Amount Retired	Amount Issued	Amount Outstanding May 30, 1983	Percent of State-Level Debt
<u>Direct Debt</u>					
General Obligation Debt	\$842.2	\$81.2	\$185.0	\$946.2	23.5%
Alaska State Housing Auth. Lease-Revenue Bonds	67.1	3.7	-0-	63.4	1.6
University of Alaska	20.3	1.1	-0-	19.2	0.5
NET TAX-SUPPORTED DEBT	\$929.8	\$86.0	\$185.0	\$1,028.8	25.6%
<u>Indirect Debt (moral obligation)</u>					
Alaska Housing Finance Corp. State Guaranteed Veterans Housing Insured Mortgage Bonds	-0-	-0-	\$175.0	\$175.0	4.3%
Home Improvement Loan Bonds	\$963.3	\$ 10.6	-0-	952.7	23.6
Alaska Industrial Devel. Authority	15.0	-0-	-0-	15.0	0.4
Alaska Power Authority	77.9	3.3	23.4	98.0	2.4
Alaska Municipal Bond Bank	200.0	-0-	-0-	200.0	5.0
Alaska State Devel. Corporation	95.8	2.9	27.0	119.9	3.0
Low Income Housing Bonds	11.4	0.3	-0-	11.1	0.3
	-0-	-0-	2.4	2.4	0.0
<u>Indirect Debt (special obligation)</u>					
International Airport Authority	18.3	0.8	-0-	17.5	0.5%
TOTAL INDIRECT DEBT	\$1,381.8	\$ 17.9	\$227.8	\$1,591.6	39.5%
TOTAL DIRECT AND INDIRECT STATE DEBT	\$2,311.6	\$103.9	\$412.8	\$2,620.4	65.1%
<u>Other State-Level Debt</u>					
Alaska Housing Finance Corp. State Assisted Mortgage Bonds	\$675.0	-0-	\$200.0	\$875.0	21.7%
Housing Mortgage Program Bonds	96.2	\$ 2.2	-0-	94.0	2.3
Home Mortgage Bonds	200.0	-0-	185.0	385.0	9.6
Second Mortgage Bonds	27.0	-0-	-0-	27.0	0.6
Fairbanks Residential Mortgage	28.3	-0-	-0-	28.3	0.7
TOTAL OTHER STATE-LEVEL DEBT	\$1,026.5	\$ 2.2	\$385.0	\$1,409.3	34.9%
TOTAL STATE-LEVEL DEBT	\$3,338.1	\$106.1	\$797.8	\$4,029.7	100.0%

Conclusion

From a territory that had slightly less than \$3 million in debt outstanding when it received statehood to today, with nearly \$6 billion outstanding from a variety of public issuers, long-term debt has played an important role in Alaska's development. The borrowing programs profiled above have served the public by financing service provision, education, housing and industrial development. However, because of the large amounts of debt that have been issued from within the State, the interrelationship of the different types of debt, issuers, and the State is an important concept that must be incorporated into State's financial management.

Classification of outstanding State-level debt using the criteria presented in this section will improve the ability of State officials to manage outstanding debt and plan future debt issuance. Table 3.16 presents such a classification of Alaska's debt position as it nears the end of fiscal year 1983. The two most important points that this exercise illuminates are: 1) general obligation debt is not the only State-level debt supported by tax revenues; and 2) indirect (moral and special obligation) State debt comprises a significant share of total State-level debt. According to Table 3.16, over 65 percent (\$2.6 billion) of State-level debt is either direct tax-supported or indirect moral or special obligation debt while only 23 percent (\$946 million) is general obligation debt. Therefore, the use of general obligation debt as the sole measure of State indebtedness understates Alaska's contingent debt position.

It is recommended that the State Bond Committee make use of the concepts of direct tax-supported debt and indirect moral and special obligation debt when assessing the State's current debt position. Such a categorization is more accurate for analytical purposes and more proper for improving debt management than G.O. debt alone. The information from this exercise should also be included in the State's official statements for future debt offerings presented in a format similar to Table 3.16.

CHAPTER IV

MARKET PERFORMANCE AND RECEPTION OF STATE GENERAL OBLIGATION BONDS AND THE ALASKA HOUSING FINANCE CORPORATION

Investors in tax-exempts continually segment the myriad of different issues and issuers into classes of approximately similar standing. Distinctions between general obligation and revenue bonds serve as one example. Institutional investors often refine the market segments to separate housing revenue bonds from public power bonds and many institutions will have portfolio-balancing policies or rules to enforce the perceived benefits from portfolio diversification, on both a type-of-bond and geographic basis. Another method of categorization is the credit quality of an issuer. Exhibit 4.1 lists state credits by their June 1982 Moody's rating. One important and well-defined market segment is the high-grade state general obligation (GO) credit, which can be broadly-defined to include triple-A (Aaa) and well-regarded double-A (Aa) rated states. Alaska, with its June 1980 upgrading by Moody's Investors Service, can now be regarded as a member of this peer group. For comparative purposes the subsequent analysis will compare Alaska State GO market performance with four defined segments of the high-grade state market:

- States that have consistently maintained a Moody's Aaa rating over the 1978-82 period;
- States that have consistently maintained a Moody's Aa rating;
- States that have been downgraded to Aa over the period;
and
- States that have been upgraded to Aa or Aa1 over the 1978-82 period.

The states comprising each group are listed in Exhibit 4.2.

Table 4.1 compares the volume of Alaska GO State new issues with these sample groups. New Alaska debt issuance has risen consistently over the 1977-82 period, except in the difficult period of high interest rates, (calendar year 1981), when Alaska issued no bonds. During the 1977-82 period, State debt commanded a four-fold increase in its market share among all high-grade states. In 1977, Alaska's \$80 million in new financings accounted for only 2.1% of the \$3.7 billion in Aaa or Aa-rated state new issues; by 1982, Alaska's \$385 million accounted for 8.2% of this market segment.

Exhibit 4.1

Moody's State Credit Ratings
(as of June 1982)

<u>Aaa</u>	<u>Aa</u>	<u>A</u>
Georgia	Alabama	Massachusetts ²
Illinois	Alaska	Michigan
Maryland	California	New York
Missouri	Connecticut	Pennsylvania
New Jersey	Delaware	Washington
North Carolina	Florida	West Virginia ²
Oklahoma	Hawaii	
South Carolina	Kentucky	
Tennessee	Louisiana	
Texas	Maine ¹	
Utah	Minnesota	
Virginia	Mississippi	
	Montana ¹	
	Nevada	
	New Mexico ¹	
	Ohio	
	Oregon	
	Rhode Island	
	Vermont	
	Wisconsin	

¹ Rated Aa1
² Rated A1

Exhibit 4.2
Selected Sample States

States Consistently
Maintaining Aaa Ratings

Georgia
Illinois
Maryland
Missouri
New Jersey
North Carolina
Oklahoma
South Carolina
Tennessee
Texas
Utah
Virginia

States Consistently
Maintaining Aa Ratings

Alabama
Connecticut
Florida
Idaho
Kentucky
Louisiana
Mississippi
Nevada
Ohio
Rhode Island
Vermont

States Downgraded
to Aa Ratings

California
Minnesota
Wisconsin

States Upgraded
to Aa Ratings

Delaware
Maine (to Aal)
Montana (to Aal)
New Mexico (to Aal)

Two other points are worth noting from the data in Table 4.1. The volume of new debt commitments from states that were rated Aaa at the outset of this period but subsequently downgraded to Aa (California, Wisconsin and Minnesota) stands out as one example. For these states, average new issue volume per state was more than twice the average for states that maintained a triple-A rating over the period, and this markedly higher volume (especially in the 1977-80 period) serves as one precursor of the negative rating change.

By marked contrast, states that were upgraded over this same period (including Alaska, until the large increase in 1982) stand out for the very modest volume of new obligations. Average borrowings from these states were only 20-30 percent of the new commitments issued by other Aa-rated states.

The lessons embodied in these data are clear: regardless of the level of other resources that are important in determining debt capacity, the pace at which new claims on State resources are added through the debt issuance process can have a measurable impact on perceived credit quality.

Market Performance of GO Bond Issues

One measure of market demand for Alaska GO debt is the number of competitive bids received from underwriters — investment bankers and commercial banks. Underwriters serve as important intermediaries in governmental finance, purchasing bond issues from borrowers and then distributing bonds to investors. Underwriters bear risks in this distribution effort because the purchase price to the issuer is fixed at the time of sale but investor demands may change during the distribution period. In a manner similar to other goods and services, the stronger the demand for the product (e.g. the bond issue), the less uncertainty faced by underwriters and the greater the number of potential underwriters. Exhibit 4.3 lists the managing underwriters for recent State bond sales and highlights the broad appeal of Alaska bonds to underwriters. This data also suggests indirectly that Alaska debt must be designed to appeal to the national market: the absence of underwriters domiciled in Alaska attests to a relatively weak "domestic" market.

Table 4.2 presents statistics on the average number of bids received on selected State GO bonds. Of particular interest, Alaska bonds have received fewer bids since 1980 than in prior years, even though the upgrading of Alaska debt in 1980 could be expected to broaden the appeal of State bonds to investors.

Two factors have contributed to the decline in bid activity. First, as reference to the other state statistics points out, there has been a general trend towards fewer bids since 1980. Exhibit 4.3 points up a corollary — namely, that the number of firms combining to form a syndicate has been increasing. These events — fewer bids and larger syndicates — are responses dictated by the risks of underwriting in markets with high and volatile interest rates.

Table 4.1

New Issues of State General Obligation Bonds

(dollar volume in millions)

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Alaska	\$80.6	\$85.0	\$60.0	\$125.0	--	\$385.0
States Consistently Rated Triple A:						
Total	1688.9	964.8	485.8	1091.6	1361.8	2162.5
Average	105.7	137.8	81.0	136.5	194.5	216.3
States Downgraded To Double A:						
Total	872.0	980.7	856.6	715.0	363.0	705.0
Average	290.7	490.4	285.5	238.3	121.0	235.0
States Upgraded To Double A:						
Total	112.4	86.9	5.0	125.0	36.6	106.2
Average	37.4	21.7	5.0	31.3	36.6	53.1
States Consistently Rated Double A:						
Total	1056.8	853.5	758.0	824.7	333.8	1358.1
Average	105.7	121.9	108.3	103.1	55.6	169.8
Alaska as Percent of:						
All Aa, Aaa States	2.1%	2.9%	2.8%	4.3%	--	8.2%
All Aa States	3.8	4.2	3.6	7.0	--	15.1
All Consistent Aa States	7.6	9.9	7.9	15.2	--	28.3

Exhibit 4.3

Managing Underwriters On State Of Alaska

GO Bond Sales

March 1978

Northern Trust Company (ILL)
First Boston Corporation (NY)
Seattle First National Bank (WASH)
Harris Trust (ILL)
European American Bank (NY)
Foster & Marshall (WASH)

April 1979

Merrill Lynch (NY)
Continental Illinois Bank (ILL)
Harris Trust Bank (ILL)
Lehman Brothers (NY)
First Boston Corp (NY)
Bankers Trust Co., (NY)
Bank of America (CAL)

March 1982

Bankers Trust (NY)
Chemical Bank (NY)
Bank of America (CAL)
Kidder Peabody (NY)
Dean Witter (NY)
Morgan Guarany (NY)
Blyth Eastman (NY)
Shearson American Express (NY)
Weiden (NY)
Prudential-Bache (NY)
Goldman Sachs (NY)
Bear Stearns (NY)
Lehman Brothers (NY)
L.F. Rothschild (NY)
Salomon Brothers (NY)
Donaldson Lufkin Jenrette (NY)
Lazard Freres (NY)
Drexel Burnham (NY)

December 1978

Bank of America (CAL)
Continental Illinois Bank (ILL)
Bache (NY)
Goldman Sachs (NY)
Bear Stearns (NY)
Bankers Trust Co. (NY)
Chemical Bank (NY)
Lehman Brothers (NY)

June 1980

Morgan Guaranty Trust (NY)
Blythe Eastman Paine Webber (NY)
Salomon Brothers (NY)
Stephens, Inc. (NY)

October 1982

Morgan Guaranty (NY)
Bankers Trust (NY)
Bank of America (CAL)
Bear Stearns (NY)
Salomon Brothers (NY)
Merrill Lynch (NY)
First National Bank
of Boston (MASS)
Lazard Freres (NY)

Table 4.2

Average Number Of Bids On
New Issues Of State General Obligation Bonds

	Average Number of Bids					
	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Alaska	4.0	4.5	6.0	3.0	--	2.0
States Consistently Rated Aa	5.4	5.9	5.1	4.8	4.1	5.3
States Upgraded To Aa	11.5	8.5	14.0	10.2	6.0	5.3
States Downgraded To Aa	3.0	3.0	3.3	3.0	3.3	3.1
States Consistently Rated Aaa	4.8	4.2	4.4	3.7	3.7	3.5

A second factor at work is the vastly increased size of new Alaska debt issues. Larger issues add to the distribution risks faced by underwriters and the typical response is, again, the formation of fewer but larger bidding syndicates. A parallel observation supporting this is the consistently lower number of bids received on the large volume of issues from states subsequently downgraded to double-A.

Table 4.3 provides a direct measure of the relationship between issue size and number of bids received for all state GO bonds issued in 1982. Bond issues less than \$20 million received, on average, 8.7 bids, while issues between \$50 and \$100 million received 3.5 bids and bonds of \$100 million or more received only 2.8 bids on average.

These comparisons suggest that Alaska's recent increases in bond issue size have been unfortunately timed to place underwriters with the "double jeopardy" of marketing significantly larger issues in an increasingly hostile and volatile market.

Underwriting Spreads

Underwriters specialize in bearing the risks of distributing securities at fixed prices and they are compensated for these risk-bearing services through the gross underwriting spread. The underwriting spread is the difference between the price paid to the issuer for the bonds and the prices at which they are reoffered (and hopefully sold) to investors. The amount of the spread is determined partially by the anticipated degree of effort required to sell the bonds. Generally the more difficult it is to sell or issue, the spread will be higher. Table 4.4 provides statistics on these underwriting spreads for sample state GO bonds since 1977.

These data indicate that the costs of underwriting Alaska GO bonds have risen dramatically since 1977, from \$6.71 per \$1000 par value in 1977 to \$10.30 per \$1000 par value in 1982. The rising costs of underwriting are not unique to Alaska. Table 4.4 points out that the costs of underwriting other state bonds has risen as well. States maintaining Aa-ratings over the period have witnessed underwriting spread increases from \$8.32 per \$1000 in 1977 to \$12.73 per \$1000 in 1982, a 53 percent increase. Again, the rising risks of entering the volatile credit markets of the past three years account for the increased returns demanded by underwriters for bearing these risks.

Of particular importance, however, is the noticeably lower cost of underwriting for Alaska bonds relative to other states that maintained double-A bond ratings over this period. In 1980, the difference amounted to \$5.79 per \$1000 par value. As an indication of the magnitude of this lower underwriting spread, this savings translates into \$723,750 in lower underwriting charges on the \$125 million in Alaska bonds issued in 1980. In 1982, the lower spread of \$2.43 per \$1000 translates into savings of \$935,000 on the \$385 million in new Alaska bonds.

Table 4.3

Number of Bids and Issue Size
National Bond Market
State GO Bond Issues

1982

Number Of Bids	Issue Size (\$ millions)			
	Less Than \$20	\$20-49	\$50-99	\$100 And Over
1			1	
2			1	10
3		2	3	6
4		3	3	5
5	1	1	3	
6	1			
7	2			
8	3			
9				
10				
11	1			
12	3			
Total Number Of Issues	11	6	11	21
Average Number Of Bids Per Issue	8.7	3.8	3.5	2.8

Table 4.5 points to the principal factor explaining the significantly lower underwriting spreads on Alaska GO bonds. Alaska has consistently issued new debt with relatively short average maturities. In 1982, for example, the average maturity on Alaska bonds was 5.5 years, compared with 8.7 years for states recently upgraded and with more than 11 years for all sample states.

The shorter average maturity reduces interest costs at the time of sale since the tax-exempt yield curve is upward sloping. Interest rates for bonds maturing in, say, 3 years are less than rates for bonds maturing in 10 years. Short maturities also translate into reduced underwriting risks as well. Price changes, which affect underwriter revenues, are less on short-dated securities and demand by banks is concentrated among securities with 10 years or less to maturity.

Interest Rates on Alaska State Bonds

Comparing interest rates on new bond issues is difficult because each new issue differs in several important ways. Most bond issues are sold as serial bonds, with varying amounts of principal maturing each year over the life of the issue. And, as just noted, Alaska bond issues carry significantly shorter maturities than most other comparable state bonds. Moreover, borrowing costs on any given maturity on any given bond issue can be closely associated with the then current market conditions.

Most generally, three broad and interrelated determinants combine to explain the interest rate on a specific bond issue:

1. Issuer characteristics: Credit quality and the risk of default; name recognition, and
2. Issue characteristics: the issue's average maturity, its size, its type, and the method of sale; and
3. Market characteristics: the overall level and trend of interest rates and aggregate investor demand for tax-exempt securities.

Therefore, evaluating the relative market performance of Alaska State GO debt requires a careful matching of these characteristics with other comparable bond issues.

As a first stage of comparison, Table 4.6 compares interest rates on Alaska bonds with other double-A rated state bonds sold within two weeks of the Alaska sale. The combined requirements of double-A rating and an approximately coincident sale date permit comparisons with 5 of the 6 Alaska bond sales since 1978. Based on the net interest cost (NIC)¹ of the entire bond issue, Alaska has consistently carried lower borrowing costs than other comparable states, but these differences are based largely on the far shorter average maturities on Alaska bonds.

Table 4.4

Average Underwriting Spreads On
New Issues of State General Obligation Bonds
1977 - 82

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Average Underwriting Spread:						
Alaska	\$6.71	\$7.71	N.A.	\$8.00	--	\$10.30
Consistently Rated Aa States	8.32	7.53	7.60	13.79	16.42	12.73
Upgraded States	6.93	5.48	5.45	10.31	14.38	N.A.
Downgraded States	6.63	7.02	7.29	12.90	12.28	10.88
Aaa Rated States	6.92	6.84	6.53	11.09	13.27	8.88
Difference in Spreads Alaska vs:						
Consistently Rated Aa States	-\$1.61	\$.18	--	-\$5.79	--	-\$2.43
Upgraded States	-.22	2.23	--	-2.31	--	--
Downgraded States	+.08	.69	--	-4.90	--	-.58
Aaa Rated States	-.21	.87	--	-3.09	--	1.42

Table 4.5
Average Maturities on New Issues
Of State General Obligation Bonds

	Average Maturity (years)					
	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Alaska	8.0	5.5	6.0	6.0	--	5.5
States Consistently Rated Aa	14.6	12.1	14.4	12.2	12.3	11.2
States Upgraded To Aa	5.0	7.5	4.0	10.2	9.3	8.7
States Downgraded To Aa	12.9	11.8	12.0	12.9	10.4	11.6
States Consistently Rated Aaa	11.9	11.9	12.4	12.9	11.2	11.1

More revealing is the comparison of reoffering yields to investors on selected bond maturities. These reoffering yields are measures of the returns required by investors to purchase specific bonds, therefore this measure avoids the problems associated with different average bond issue maturities and comparisons using NIC.

Table 4.6 points out that prior to the June 1980 upgrading of Alaska's bond rating, Alaska GO bonds carried yields above states with double-A bond ratings. Although the June 1980 issue carried an Aa rating, yields on Alaska debt remained well above yields on Louisiana State bonds.

By October 1982, however, new Alaska issues were carrying demonstrably lower yields than comparable maturities on California and Connecticut bond issues. Although these data are somewhat sparse, the matched comparisons suggest that the marketplace, in consent with the opinion of Moody's analysts, has upgraded the performance of Alaska GO debt in the past 5 years. The technical appendix to this section reports the results of a statistical analysis that has been developed as an alternative approach to the evaluation of relative state bond interest costs. This procedure — multiple regression analysis — permits valid comparisons of relative costs on bonds sold with differing characteristics over distinct time periods. This statistical analysis has been applied to a sample of 254 state bonds to develop predictive measures of interest cost on Alaska bonds. By comparing the actual NIC on Alaska bonds with the predicted costs, this analysis can provide a measure of relative market standing.

The results, summarized in Table 4.7, suggest that the NIC on Alaska debt is lower than would be predicted for the average double-A rated state bond sold over this period. The statistical approach indicates that since June 1980, Alaska bond issues have carried NICs that are on average, 51 basis points lower than would be predicted. Prior to 1980, this difference averaged only 20.5 basis points. Expressed in different terms, the 51 basis points in lower NIC translates into \$14.3 million in interest savings over the approximate 5 1/2 year average life of the \$510 million in new Alaska bonds issued since 1980.

Secondary Market Yields

The prior analysis of relative borrowing costs has focused on new issue interest rates. Borrowing costs at the time of sale are generally of most concern to governments since these rates directly affect future budgets. But, investors have a broader perspective and they are continually revising their portfolio holdings through transactions in the secondary market. Underwriters, broker/dealers and investors follow closely the relationships among securities in daily secondary market trading to detect important clues to supply and demand conditions for individual securities as well as broad market trends. These constantly shifting secondary market yield relationships often provide early indicators of market sentiment prior to the offering of a new bond issue.

Table 4.6

Comparison Of State Of Alaska General Obligation Bonds
To Other State General Obligation Bonds

Date Of Issue	Issuer	Issue Size (\$millions)	Average Maturity (years)	NIC	5-Year Reoffer Yield	10-Year Reoffer Yield	Difference in Yields Alaska-Other States (basis points)	
							5-Year	10-Year
3-28-78	Alaska	45.0	6	4.866%	4.50%	5.00%	--	--
3-21-78	Alabama	15.0	10	4.784%	4.25%	4.60%	+25	+40
3-28-78	Florida	18.3	20	5.400%	4.40%	4.80%	+10	+20
12-12-78	Alaska	40.0	5	5.525%	5.35%	5.50%	--	--
12-14-78	Rhode Island	21.3	8	5.717%	5.30%	5.40%	+5	+10
6-24-80	Alaska	125.0	6	5.767%	5.35%	6.00%	--	--
6-10-80	Louisiana	154.5	13	6.375%	5.10%	5.60%	+25	+40
6-10-80	Hawaii	75.0	12	6.594%	5.40%	6.10%	-5	-10
3-10-82	Alaska	200.0	5	9.985%	9.50%	NA	--	--
3-9-82	California	140.0	8	10.309%	9.25%	10.25%	+25	--
3-3-82	Maine	19.4	8	10.275%	9.20%	10.25%	+30	--
10-20-82	Alaska	185.0	6	7.728%	7.00%	8.20%	--	--
10-26-82	California	180.0	9	8.778%	7.30%	8.60%	-30	-40
10-5-82	Connecticut	100.0	11	9.165%	7.75%	8.80%	-75	-60

Table 4.7
Actual and Predicted
Net Interest Costs On
Alaska State GO Bond Sales

<u>Sale Date</u>	<u>Actual NIC</u>	<u>Predicted NIC</u>	<u>Difference (in basis points)</u>
2-17-76	5.867%	6.292%	-42.5
6-29-76	5.804	6.241	-43.7
9-27-77	4.510	4.944	-43.4
3-28-78	4.866	5.002	-13.6
12-12-78	5.525	5.420	10.5
4-10-79	5.592	5.493	9.9
6-24-80	5.767	6.347	-58.0
3-10-82	9.985	10.621	-63.6
10-20-82	7.728	8.042	-31.4

Note : See technical appendix to this section for an explanation of the technique used to predict NIC.

To provide a secondary market perspective on Alaska State debt, selected national traders were polled on May 5, 1983 to get the secondary market yields on a 10-year bond for selected states. The results of this poll are tabulated in Table 4.8.

These data show a fairly narrow band of yield differentials ranging from 7.60% on 10-year maturities for Maine and Minnesota bonds to 7.90% on 10-year Nevada bonds. Alaska falls exactly midway in this range with an estimated yield of 7.75 percent. These comparisons suggest that, at present, Alaska has a well-defined status as a high-grade state credit, solidly entrenched among the broad range of states carrying similar bond ratings.

Investor Perceptions of State General Obligation Bonds

Interest rates and underwriting spreads established in the marketplace represent an amalgam of the investment choices of many different individuals and institutions. The market reception and performance of Alaska's bonds can, therefore, be viewed as a summary expression of investor perceptions of the relative value of the State's creditworthiness. As part of this study, further and more detailed expressions of investor sentiment were elicited from key participants in the municipal bond market.

As its market performance indicates, Alaska is viewed by most investors as a high-grade AA credit. However, many investors expressed concerns over the future security of state revenues that some believe are too dependent on oil and, therefore, overly exposed to fluctuations in world oil prices. Indeed, one professional market observer quipped, "Alaska is a giant industrial development bond, tied to the fortunes of the oil companies". This sentiment is mirrored in the credit analyses of Alaska general obligation debt by two major participants in the municipal bond market excerpted below:

Continental Illinois National Bank:

Alaska currently enjoys a very strong financial position and has an impressive natural resource base; however, its economy depends heavily upon oil and gas production and defense expenditures. In addition, Alaska's debt load is high, and income growth in the State has slowed considerably. Alaska ranks near the bottom of "Aa" rated states.

E.F. Hutton:

The mineral-rich State of Alaska may have to adjust to the current period of softening oil prices, during which its revenue stream may grow more slowly than has been the case during recent years. Although the balance of the Permanent Fund may approach \$4 billion by the end of fiscal year 1982, the uses of the Fund are restricted by State legislation. We are maintaining our Mid-A rating, but revising the trend from improving to stable in view of the reduced surplus margins in the general fund.

Table 4.8

Estimate of Secondary Market Yields On 10-Year Maturities

Of Selected State GO Bonds

May 5, 1983

<u>State</u>	<u>Yield</u>
Maine	7.60%
Minnesota	7.60
California	7.70
Connecticut	7.70
Florida	7.70
Louisiana	7.70
Ohio	7.70
Alaska	7.75
Alabama	7.75
Mississippi	7.75
New Mexico	7.75
Wisconsin	7.75
Hawaii	7.80
Vermont	7.80
Nevada	7.90

Alaska is seen by some market participants and credit analysts as a classic "boom or bust" economy. Such beliefs did not prevent them from purchasing Alaska bonds at the height of its "boom" in the late 1970s, but the sensitivity of Alaska to a "bust" as demonstrated by the effects of 1982-83 oil price revisions on Alaska revenues is likely to make these investors more cautious in the future. Such concerns will increase investor scrutiny of the State's oil revenue projections and the demands for those revenues in addition to paying debt service. In line with the "boom and bust" attitude, one investor put forth that Alaska may have certain appeal to the speculative investor, and could capitalize on that appeal by selling "equity shares" in the State with both an "up and a downside" potential rather than fixed-income bonds.

The mention of the State's Permanent Fund in the E.F. Hutton credit report deserves comment. The Alaska Permanent Fund was established by a constitutional amendment effective February 21, 1977. The amendment stated that contributions to the fund must consist of at least 25 percent of mineral lease rentals, royalties, royalty sale proceeds, Federal mineral revenue sharing payments, and bonuses received by the State. Enacted legislation (Ch. 18 SLA 1980) has modified this contribution rate to the Permanent Fund from 25 percent to 50 percent on new discoveries.

Because of its massive size, The Permanent Fund is viewed by certain investors as a potential source of repayment for Alaska debt, regardless of the fact that it is constitutionally unavailable for that purpose. The Permanent Fund has other indirect benefits on credit perceptions; establishment of the permanent fund is recognized as a sign of prudent financial management, which is looked upon favorably by investors. This contrasts with the abolishment of the State's individual income tax in 1980 that is considered by some to be a sign of fiscal irresponsibility. Alaska particularly must go out of its way to demonstrate competent responsible fiscal management because of its uniqueness. Such actions as following through on its appropriation commitment to the Permanent Fund and conservatively controlling legislation which erodes the principal or redirects the earnings of the Permanent Fund are necessary to reassure investors that the State is acting responsibly.

Market Performance Of The AHFC

The significance of the borrowing programs of the Alaska Housing Finance Corporation (AHFC) has been discussed in Section Four. AHFC tax-exempt bond sales have accounted for more than 30 percent of all Alaska debt issues since 1978 and constitute more than 60 percent of all state-level debt currently outstanding. In addition, many bonds are backed by the state's credit indirectly through the pledge of the State's moral obligation.

Table 4.9

Comparison of Tax-Exempt Alaska Housing Finance Issues
To Other States' Housing Issues
1978 - 1982

Date Of Issue	Issuer	Issue Size (\$million)	NIC	Spread	RY10	RY15	Difference In Yields	
							RY10	RY15
2-21-78	Alaska Housing Finance Corp	\$47.225	6.365%	\$18.50	5.40%	5.75%	--	--
2-9-78	New Jersey Mortgage Finance	11.105	5.446	18.00	5.00	5.50	+40	+45
6-29-78	Alaska Housing Finance Corp	55.000	7.465	25.00	6.30	6.80	--	--
6-27-78	California Housing Finance	50.000	6.519	NA	5.90	6.35	+40	+45
6-29-78	New Mexico Mortgage Finance	61.200	NA	NA	6.15	6.55	+15	+25
7-9-78	Colorado Housing Finance	90.000	7.000	18.98	6.20	6.70	+10	+10
11-21-78	Alaska Housing Finance Corp	44.000	7.062	19.00	6.10	6.50	--	--
11-10-78	Massachusetts Housing Finance	53.125	7.384	23.81	6.20	6.70	-10	-20
11-30-78	Rhode Island Mortgage Finance	61.610	7.400	18.80	6.30	6.75	-20	-25
2-23-79	Alaska Housing Finance Corp	60.000	7.247	18.71	6.25	6.70	--	--
2-23-79	Michigan State Housing Develop	41.000	7.321	NA	6.25	6.65	0	+5
2-21-79	Delaware State Housing Auth.	23.795	6.990	NA	6.20	6.50	+5	+20
6-18-79	Alaska Housing Finance Corp	\$105.000	7.080%	\$18.50	6.10%	6.60%	--	--
6-18-79	New Mexico Mortgage Finance	175.000	6.900	NA	6.10	6.60	0	0
6-29-79	Wisconsin Housing Finance	20.120	6.322	NA	6.00	6.40	+10	+20
12-18-79	Alaska Housing Finance	39.400	8.748	24.10	7.60	8.20	--	--
12-19-79	Michigan State Housing Devel	50.000	8.050	16.00	7.50	8.20	+10	0
12-20-79	New Hampshire Housing Fin	15.885	8.470	21.94	7.15	7.90	+45	+30
6-30-80	Alaska Housing Finance Corp	230.000	9.248	24.64	7.50	8.40	--	--
7-10-80	Pennsylvania Housing Finance	51.600	9.256	21.55	7.25	8.30	+25	+10
11-14-80	Alaska Housing Finance Corp	230.000	11.070	25.38	9.50	10.50	--	--
10-24-80	Texas Housing Agency	150.000	9.950	22.91	8.00	9.25	+150	+125
11-11-81	Alaska Housing Finance Corp	100.000	12.500	22.52	11.75	NA	--	--
11-6-81	Hawaii Housing Authority	20.000	12.810	27.56	11.75	NA	0	--
11-16-81	Michigan State Housing Dev.	40.000	13.030	26.65	11.80	12.75	-5	--
11-12-81	North Carolina Housing Fin.	30.000	12.802	19.50	10.75	NA	+100	--
11-19-81	Connecticut Housing Finance	200.000	12.890	20.57	11.75	NA	0	--
11-18-81	Minnesota Housing Finance	52.625	12.755	24.95	12.00	NA	-25	--
12-17-81	Alaska Housing Finance Corp	\$100.000	11.540%	\$21.74	NA	13.375%	--	--
12-4-81	Virginia Housing Devel Auth	100.000	13.280	23.31	12.00	NA	--	--
12-18-81	Alabama Housing Finance	100.000	13.471	25.00	12.50	NA	--	--
12-18-81	Louisiana Housing Finance	150.000	11.810	24.80	12.00	13.00	--	+37.5
3-4-82	Alaska Housing Finance Corp	15.000	13.420	28.26	NA	NA	--	--
3-3-82	Minnesota Housing Finance	40.920	13.560	25.00	12.25	NA	--	--
3-5-82	West Virginia Housing Devel	25.000	13.222	27.00	13.00	NA	--	--
9-9-82	Alaska Housing Finance Corp	85.000	10.950	22.25	10.75	NA	--	--
9-1-82	Massachusetts Housing Fin.	17.364	11.724	26.54	10.25	NA	+50	--
9-1-82	Pennsylvania Housing Fin.	28.730	10.972	23.03	10.50	NA	+25	--
9-10-82	Connecticut Housing Finance	150.000	11.061	19.25	10.20	NA	+55	--
9-10-82	California Housing Finance	75.090	NA	20.61	10.00	NA	+75	--
11-24-82	Alaska Housing Finance Corp	93.24	NA	23.21	9.75	NA	--	--
11-12-82	Alabama Housing Finance	100.000	10.170	25.77	9.25	NA	+50	--
11-30-82	Connecticut Housing Finance	50.000	9.735	13.50	9.00	10.20	+75	--
11-24-82	Minnesota Housing Finance	45.000	10.850	25.00	9.60	NA	+15	--

This section provides a brief review of the market performance of AHFC bond issues at the time of sale. Following the approach utilized in analyzing State GO bond sales, the analysis is based on matched comparisons of AHFC bond terms with bonds of comparably rated state housing agencies sold during a similar period. Table 4.9 presents the results of this analysis for those issues of AHFC for which comparisons were possible.

Housing bond issues are structured with long average maturities designed to match expected repayments of mortgage principal. The comparisons of reoffer yields, therefore, focus on 10-year and 15-year maturities. The comparisons on 10- and 15-year maturities indicate that, on average, AHFC bonds have carried yields that are 28.3 and 21.8 basis points higher than other state HFA bonds sold under approximately similar conditions.

AHFC bonds are sold through negotiation as are most mortgage revenue bonds. Table 4.10 summarizes yearly average underwriting spreads for the AHFC issues and other state housing agency issues included in Table 4.9. Based on these comparisons, average costs of underwriting appear to have been higher on AHFC issues in all years but 1981 with an apparent widening of this gap in 1982.

As noted in Section Four, AHFC issues taxable bonds in addition to the tax-exempt issues discussed above. The taxable bond market is different from the municipal market because competition comes not from other governmental borrowers, but, primarily from private corporations. Similarly, the investors and therefore the underwriting process for taxable bonds is different from that of municipals. Table 4.11 presents details on \$775 million of the \$875 million in taxable bonds issued since 1980. The Table does not compare AHFC taxable bonds with other taxable bonds; rather, it compares past AHFC taxable issues with U.S. Treasury Bonds sold during the same week with similar maturities.

Since 1981, the spread has narrowed dramatically from over 300 basis points (3 percent) to 87 basis points (0.87 percent) in 1983. Treasury bonds represent the benchmark security against which all taxable yields are measured because they are the most secure form of fixed-income investment. The narrowing of the difference between AHFC and Treasury yields indicates broad market acceptance and greater investor familiarity with the AHFC name.

Most all of the taxable and tax-exempt AHFC bond issues have been sold through a negotiated sale process of the type described in Section Six. The exception are the 1983 issues of State Guaranteed Veterans Housing Bonds which must be sold at a competitive sale because the State requirements that general obligation bonds be sold competitively. Taxable AHFC issues must be sold in a negotiated sale because of market norms; however, future tax-exempt AHFC issues may profit from a competitive sale if the trend towards improved market acceptance of Taxable AHFC bonds holds true for its tax-exempt offerings.

Table 4.1C

Average Underwriting Spreads
 State Housing Finance Agencies
 1978-82

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Alaska Housing Finance Agency	\$20.83	\$20.44	\$25.01	\$22.13	\$24.57
Other State Housing Agencies	19.89	18.97	22.23	24.04	21.24
Difference: Alaska Less Other SHAs	\$.94	\$1.47	\$2.78	-\$1.91	\$3.33

Table 4.11

ALASKA HOUSING FINANCE CORPORATION

Taxable SAM Bonds (1)
Summary of Principal Terms

Issue	Offering Date	Ratings S&P/Moody's/Fitch	Principal Amount	Maturity	Dollar Price	Coupon	Yield	Spread (2)	Benchmark Treasury
Series B	9/30/81	AA/N.R./N.R.	\$ 75,000,000	12/1/91	98.393	17.500	17.850	203.0	14 7/8s due '91 (15.82%)
Series C	9/30/81	AA/N.R./N.R.	\$ 75,000,000	12/1/01	98.703	18.500	18.750	316.0	13 3/8s due '81 (15.59%)
Series D	10/27/81	AA/N.R./AA	\$ 90,000,000	12/1/91	98.815	17.750	18.000	243.0	14 7/8s due '91 (15.547%)
Series E	10/27/81	AA/N.R./AA	\$ 60,000,000	12/1/01	97.000	18.375	18.950	245.0	15 3/4s due '01 (15.504%)
Series F	5/26/82	AA/N.R./AA	\$225,000,000	6/1/92	99.250	15.250	15.400	179.0	13 3/4s due '92 (13.61%)
Series G	8/3/82	AA/Aa/AA	\$100,000,000	6/1/92	99.250	15.000	15.162	169.6	13 3/4s due '92 (13.466%)
Series H	11/17/82	AA/Aa/AA	\$ 50,000,000	12/1/92	98.400	11.750	12.030	147.8	10 1/2s due '92 (10.55%)
Series I	1/19/83	AA/Aa/AA	\$ 50,000,000	6/1/93	99.750	11.500	11.536	113.6	10 1/2s due '92 (10.412%)
Series J	3/9/83	AA/Aa/N.R.	\$ 50,000,000	6/1/93	100.000	11.375	11.375	87.3	10 7/8s due '93 (10.502%)

(1) Does not include \$27,000,000 Private Placement.

(2) Difference between coupon and treasury bonds.

Source : Salomon Brothers

Technical Appendix
A Statistical Analysis of Interest Costs
On State General Obligation Bonds

The purpose of this study is to determine how investors perceive State of Alaska issues relative to other states' general obligation bonds. The method of analysis is to first determine what factors are significant in explaining the variations in Net Interest Costs (NICs) for a sample of 254 state general obligation bonds sold between 1970 and 1982. These estimates will be obtained by using the statistical technique of ordinary least squares regression. The estimates of how each factor affects NIC will then be used to predict the interest costs on State of Alaska general obligation bonds. If investors perceive State of Alaska issues as comparable to other states' issues, then the actual and predicted interest costs will be the same. On the other hand, if investors consider State of Alaska issues to be more desirable, then the actual NICs will be less than the predicted NICs.

The sample of bonds used to estimate the influence of the explanatory variable on NIC consists of 254 general obligation bonds sold by states other than Alaska between 1970 and 1982. The sample is restricted to those issues having an average maturity of 10 years or less; this selection criterion was used because of the relatively short average maturity of State of Alaska issues.

Table 4.12 presents summary statistics for the sample. Borrowing costs, as measured by NIC, range from 2.979% to 11.794% and averaged 5.894%. The mean average maturity was 8.2 years with a range from 2 to 10 years. The average issue size was \$50.018 million with a range from \$370,000 to \$450 million. Over 80% of the bonds were rated Aaa or Aa and virtually all were sold by competitive bid.

The distribution of bonds by Moody's rating and issue size is presented in Table 4.13. There appears to be some relationship between size and rating. Over one-half of the issues above \$50 million were rated Aaa while only 7 percent of the issues under \$10 million were rated Aaa.

The following explanatory variables have been included in the regression equation:

1. Issue Size (\$ thousands) in logarithm. Size is specified in logarithmic form to reflect the diminishing impact that increases in size have on NIC.
2. Average Maturity (years).
3. Negotiated Dummy Variable (equal to 1 if the issue was sold through negotiation). This variable measures the difference in NIC, if any, due to method of sale. The variable coefficient reflects the differences in NIC on negotiated issues relative to competitive issues.
4. Bond Buyer Index of 11 bonds. This index is a measure of average 20-year reoffer yields for the week of each issue. The index variable is designed to control for the effects of variations over time in the overall levels of interest rates.
5. Moody's Bond Rating in Dummy Variable Form:
 - Aa = 1 if the issue is rated Aa, 0 otherwise;
 - A-1 = 1 if the issue is rated A-1, 0 otherwise;
 - A = 1 if the issue is rated A, 0 otherwise.

Table 4.12
 Summary Statistics For 254 State
 General Obligation Bonds

	<u>Mean</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Standard Deviation</u>
Net Interest Cost (%)	5.894	2.979	11.794	1.937
Average Maturity (years)	8.193	2.000	10.000	2.201
Size (\$ millions)	50.018	0.370	450.000	50.015
Negotiated	0.1%			
Competitive	99.9%			
Moody's Rating (%)				
Aaa	39.4%			
Aa	45.7%			
A-1	7.9%			
A	7.0%			

These variables are specified to capture the effects of differences in Moody's ratings on NIC. Moody's ratings are used as surrogate measures of credit risk. The omitted class is bonds rated Aaa. Therefore, the coefficients on these variables represent the average differences in borrowing costs for bonds of a given rating relative to Aaa rated bonds.

The regression results are presented in Table 4.14. The explanatory variable coefficients have the expected sign and most are statistically different from zero. A t-value greater than two indicates that a coefficient is statistically significant at the 5% level. The regression equation explains approximately 95% of the inter-issue variation in NIC.

The coefficients indicate that extending the maturity of issues by 1 year increases borrowing costs by 11.3 basis points. The rating variable coefficients reflect the difference in NIC between Aaa rated bonds and the indicated rating. For the sample of state GO bonds, Aa rated bonds had NICs that were 32.1 basis points higher, on average, than Aaa rated bonds. The differential was 70.7 basis points and 114.6 basis points for A-1 and A rated bonds, respectively.

The Bond Buyer Index coefficient indicates that for a 100 basis point increase in the index, NIC increases, on average, 85.5 basis points. The issue size variable coefficient indicates that larger issues have higher borrowing costs, but the effect on NIC diminishes as issue size is increased. For instance, increasing size from \$5 to \$10 million increases NIC by 4.8 basis points, while the impact on NIC is only 0.4 basis points for an increase from \$95 to \$100 million. The method of sale variable coefficient was not statistically significant.

These estimates of the influence each factor has on NIC can be used to predict the borrowing cost on State of Alaska issues. This calculation is illustrated below for the State GO issue sold February 17, 1976:

Variable	Coefficient	Issue Feature	Product
Average Maturity	0.1128	10	1.1280
Issue Size	0.0695	10.597*	.7365
Aa	0.3208	0	0
A-1	0.7066	1	.7066
A	1.1459	0	0
Bond Buyer 11	0.8552	6.43	5.4989
Negotiated	-0.1161	0	0
Constant Term	-1.7778	1	-1.7778
		Predicted NIC	<u>6.2922</u>

* Natural logarithm of \$40,000 is 10.597

Table 4.15 shows predicted NIC values for all State of Alaska general obligation issues that were rated A-1 or better and had an average maturity of 10 years or less. Exhibit 4 also shows the actual NIC for each issue and the difference between the actual and predicted NIC; this difference is referred to as the residual.

A positive residual indicates that the actual borrowing cost paid by the State of Alaska was greater than comparable issues sold by other states. A negative residual indicates that the State of Alaska paid less than comparable issues. The data in Table 4.15 indicate that

Table 4.13
 Distribution of Bonds by Moody's Rating
 and Issue Size

<u>Issue Size</u> <u>(\$ million)</u>	<u>Aaa</u>	<u>Aa</u>	<u>A-1</u>	<u>A</u>	<u>Total</u>
2.5 or less	2	15	3	1	21
2.5 - 5.0	1	12	5	2	20
5.0 - 10.0	4	14	1	2	21
10.0 - 25.0	9	30	0	4	43
25.0 - 50.0	25	18	6	2	51
50.0 - 100.0	43	19	2	6	70
More than 100.0	16	8	3	1	28
TOTAL	100	116	20	18	254

Table 4.14
 Summary of Regression Results
 for 254 State GO Bonds

NIC Dependent Variable

<u>Explanatory Variable</u>	<u>Regression Coefficient</u>	<u>t-value</u>
Average Maturity	0.1128	7.62
Issue Size (ln)	0.0695	2.63
Moody's Rating		
Aa	0.3208	4.72
A-1	0.7066	6.15
A	1.1459	9.62
Bond Buyer 11 Index	0.8552	60.57
Negotiated	-0.1161	0.25
Constant Term	-1.7778	
⁻² R	.945	
SEE	.455	

Alaska has consistently experienced lower borrowing costs than other states with the same rating. Between 1976 and 1979, when State of Alaska general obligation bonds were rated A-1, the average interest cost advantage averaged 20 basis points and exceeded 40 basis points on several occasions.

The borrowing cost advantage enjoyed by the State of Alaska increased somewhat after 1980 when the State's GO bonds were upgraded to Aa by Moodys. After controlling the effects of issue size, average maturity, method of sale, and the general level of interest rates, the State of Alaska paid average interest costs that were 31 to 646 basis points lower than the costs on other Aa rated state GOs.

In summary, the results of the regression analysis indicate that investors perceive State of Alaska issues more favorably than general obligation bonds sold by other states. This result holds even after differences in issue and issuer characteristics and market conditions are held constant.

Table 4.15
 Comparison of Predicted Borrowing Costs with Actual
 Borrowing Costs for State of Alaska Issues

<u>Date of Sale</u>	<u>Actual NIC</u>	<u>Predicted NIC</u>	<u>Residuals</u>
2-17-76	5.867	6.292	-.425
6-29-76	5.804	6.241	-.437
9-27-77	4.510	4.944	-.434
3-28-78	4.866	5.002	-.136
12-12-78	5.525	5.420	.105
4-10-79	5.592	5.493	.099
6-24-80	5.767	6.347	-.580
3-10-82	9.985	10.621	-.636
10-20-82	7.728 .	8.042	-.314

CHAPTER V
ANALYSIS OF THE MARKET PERFORMANCE
AND MANAGEMENT OF LOCAL GOVERNMENT DEBT

Profile of Local Borrowing

Local governmental units in Alaska have been active issuers of debt. Alaskan localities had approximately \$1.3 billion in general obligation debt outstanding at the end of June 1982, for a Statewide average of \$4,648 per capita. This level contrasts with the State's own general obligation indebtedness at the end of fiscal year 1982 of \$842 million. In addition to general obligation debt that is supported by local taxes, cities and boroughs also issue debt that is supported by the revenues generated by the project financed through the issuance of debt. At the end of June 1981 (the latest fiscal year for which data are available), approximately \$347.4 million in revenue bonds was outstanding (see Table 5.1). The general obligation and revenue bonds of local governments comprise approximately 43 percent of the total amount of public debt outstanding in the State.

Revenue-supported debt is not appropriate to finance all local governmental capital investment. The construction of schools, roads, and most public buildings generally must be financed through general obligation bonds if debt is raised to finance these capital improvements. Water and sewer systems, waste treatment facilities, municipal utilities and other services for which a user charge can be levied may be financed through the use of revenue bonds. If operation of the project is expected to generate sufficient revenues to provide adequate "coverage" of debt service (excess of net revenues over debt service usually by 1.25 times), revenue bonds are a possibility for the financing instrument.

Revenue bonds account for approximately 25 percent of all local debt outstanding in Alaska, compared with the national average of 54 percent. This comparison indicates that Alaska's municipalities rely on general obligation borrowing at twice the national rate. This is to be expected because of the lack of a concentration of population and resources and the resulting greater efficiency of taxation as a revenue source. The amounts of general obligation and revenue-supported debt outstanding in each city and borough in the State are presented in Table 5.2. The majority of communities that have issued debt have a mix of revenue and general obligation bonds outstanding. The most notable exceptions are the North Slope Borough, Kenai Peninsula Borough, and Matanuska-Susitna Borough, none of which have revenue bonds outstanding. Not surprisingly, these three communities also have ratios of general obligation debt to assessed property value among the highest in the State (see Table 5.3). Table 5.3 also presents the debt per capita ratios for local governments in the State, and the national medians as computed by Moody's Investors Service. Because of the relatively sparse population in the State, these ratios are above the national median in the majority of Alaskan localities.

Table 5.1
 Estimated Alaska Municipal Debt
 (Millions)

<u>Fiscal Year</u>	<u>Amount of Revenue and G.O. Debt Issued</u>	<u>Amount Outstanding</u>		<u>Revenue Debt Outstanding as % of Total</u>
		<u>G.O.</u>	<u>Rev.</u>	
1971	78.7	\$ 30.9	\$ 56.3	19.6%
1972	88.9	279.2	81.0	22.5
1973	46.8	319.9	70.3	18.0
1974	85.3	345.1	77.6	16.4
1975	120.2	415.8	94.8	18.6
1976	70.1	452.5	99.4	18.0
1977	220.8	514.1	215.7	29.6
1978	178.2	449.5	277.7	38.2
1979	320.9	731.6	286.3	28.1
1980	250.0	809.4	316.0	28.1
1981	277.7	1,030.2	347.4	25.2
1982	515.0	1,316.2	N/A	N/A

Source: U.S. Department of Commerce, Bureau of the Census, Governmental Finances, various years, and Moody's Investors Service, Inc. Municipal Bond Record, 1983.

Table 5.2
State of Alaska
Local Government Debt

City/Borough	General Obligation Debt Outstanding 7-1-82 ¹	Revenue- Supported Debt Outstanding ² 12-31-81	Moody's Rating ³
North Slope	\$587,400,000	-0-	A
Anchorage	261,010,000	\$236,660,000	A1/Baa
Kenai Peninsula	98,999,603	-0-	A
Valdez	84,460,000	9,200,000	A
Fairbanks North Star	83,158,350	35,000,000	A/Aa
Matanuska-Susitna	65,218,090	-0-	A
Juneau	27,904,000	146,000	Baal
Kodiak Island	20,042,372	-0-	Baal
Sitka	17,486,200	5,168,000	Baal
Ketchikan Gateway	14,495,000	-0-	Baal
Fairbanks	11,915,000	36,400,000	A
Ketchikan City	8,110,000	12,567,000	Baal/Baa
Bristol Bay	3,895,000	-0-	NR
Kenai	3,695,000	280,000	NR
Palmer City	3,629,401	-0-	NR
Unalaska	3,500,000	456,000	NR
Kodiak City	3,250,000	4,295,000	Baa
Petersburg	2,995,000	2,526,000	Baal
Homer City	2,877,000	1,096,000	Baa
Nenana	2,725,000	-0-	NR
Wrangell	2,578,000	612,000	NR
Skagway	1,826,325	-0-	NR
Cordova	1,673,200	1,611,000	NR
Haines	923,310	-0-	NR
Haines City	805,000	-0-	NR
Bethel	585,000	-0-	NR
Nome	507,872	960,000	NR
Seldovia	430,000	55,000	NR
Dillingham	73,000	231,000	NR
Craig	37,498	93,000	NR
Totals	\$1,316,294,221	\$347,356,000	

NOTES: 1. From Department of Community and Regional Affairs, Alaska Taxable 1982.

2. From Moody's Investors Service, Moody's Municipal and Government Manual 1983, and Department of Community and Regional Affairs.

3. When two ratings are given, the first applies to general obligation debt, and the second to the majority of revenue bonds.

NR = Not Rated.

Table 5.3

Municipal Debt Ratios

<u>City/Borough(population)</u>	<u>G.O. Debt Per Capita</u>	<u>Debt as % of Assessed Value</u>
North Slope *	\$77,781	7.10%
Anchorage *****	1,278	2.46
Kenai Peninsula ***	3,064	4.45
Valdez *	22,864	4.97
Fairbanks North Star ****	1,146	2.78
Matanuska-Susitna ***	2,508	5.42
Juneau **	1,267	2.69
Kodiak Island **	1,576	4.58
Sitka *	2,127	4.15
Ketchikan Gateway **	1,166	2.17
Fairbanks ***	463	1.12
Ketchikan City *	1,043	2.58
Bristol Bay *	3,064	4.45
Kenai *	706	1.80
Palmer City	1,438	3.93
Unalaska *	1,821	4.76
Kodiak City *	553	1.00
Petersburg *	985	2.32
Homer City *	993	1.85
Nenana *	5,046	30.39
Wrangell *	1,085	2.94
Skagway *	2,312	3.21
Cordova *	747	1.44
Haines *	499	1.30
Haines City *	746	0.23
Bethel *	159	0.41
Nome *	148	0.32
Seldovia *	590	2.26
Dillingham *	40	0.11
Craig *	62	0.17
Statewide Average	\$ 4,648	3.75%

Moody's Local Debt Medians
Population

*****	200-300,000	361	2.1%
****	50-100,000	391	1.8
***	25-50,000	289	1.9
**	10-25,000	422	2.7
*	Under 10,000	600	3.2

Source: Department of Community and Regional Affairs,
Alaska Taxable, Fiscal year 1982.

A major use for local general obligation debt has been to finance school construction. As of April 1, 1983, school districts in the State had approximately \$644 million in school construction debt outstanding (see Table 5.4). Under existing programs this debt will be retired, in part, through State aid. Thus, school construction debt comprises approximately 49 percent of all local general obligation debt. Because there are no State restrictions on how school debt must be issued, localities may issue bonds on their own or may make use of the Municipal Bond Bank. Table 5.4 indicates that approximately \$76 million or 12 percent of outstanding school debt has been issued through the Bond Bank.

The State of Alaska's education assistance program to local governments, in part, reimburses boroughs and cities for cash expenditures on school construction and debt service on bonds issued to finance school construction. Under a program created by the State legislature in 1970, and contained in provisions of Alaska Statutes 43.18.100, the State allocates the following amounts to municipalities which are also school districts, subject to annual appropriation by the legislature:

100 percent of payments made in the fiscal year two years prior for debt service on bonds issued prior to July 1, 1977 for school construction;

90 percent of payments made in the fiscal year two years prior for debt service on bonds issued after June 30, 1977 and cash payments for school construction; and

90 percent of payments made in the current fiscal year for debt service on bonds issued after December 31, 1981.

Legislation enacted in 1982 (HB279) raised the State share of construction expenditures from its earlier level of 80 percent to the 90 percent figure. This legislation also eliminated the two-year lag between local payment of school construction costs and receipt of State aid on bonds issued after December 31, 1981.

To qualify for State reimbursement of debt service expenditures, school construction projects must be approved by the State's Department of Education prior to construction. The local school district must submit the school design, schematics, and contract documents for approval. Approval is given once the two parties agree on design, school enrollment, and distribution of space in the school to various required uses. Neither the cost of the project, nor the intended means of financing, are significant factors considered during the approval process.

Once approval is received, the locality may begin construction; using any mix of current revenues or borrowed funds to finance the project. There are no State restrictions on the sources of financing, in spite of the fact that nearly

Table 5.4
State of Alaska
School Debt Outstanding
(as of April 1, 1983)

<u>School District</u>	<u>Amount</u>	<u>Moody's Rating</u>
A) Public Offerings ¹		
North Slope Borough	\$197,235,000	A
Greater Anchorage Area Borough	138,665,000	A1
Fairbanks North Star Borough	101,475,000	A
Kenai Peninsula Borough	56,938,000	A
Matanuska-Susitna Borough	37,995,000	A
Valdez	27,685,000	A
City and Borough of Juneau	3,325,000	Baal
Petersburg	2,995,000	Baal
Greater Sitka Borough	1,560,000	Baal
Kodiak Island Borough	375,000	Baal
Ketchikan Gateway Borough	<u>345,000</u>	Baal
	\$568,593,000	
B) School Bonds Issued Through Bond Bank ²		
City and Borough of Juneau	\$ 35,205,000	Baal
Matanuska-Susitna Borough	22,610,000	A
Kodiak Island Borough	11,810,000	Baal
Bristol Bay Borough	3,785,000	Unrated
City of Wrangell	1,405,000	Unrated
City of Unalaska	<u>975,000</u>	Unrated
	\$ 75,790,000	
Total School Debt Outstanding \$644,383,000		

NOTES: 1) Data through fiscal year 1981 from Moody's Municipal and Government Manual 1983, Moody's Investors Service. Fiscal Year 1981 to date from Public Securities Association data base.

2) Data from Mary J. Hughes, Foster & Marshall/American Express, Inc., Seattle, WA.

90 percent of the cost will be borne by the State. To be reimbursed for debt service and current construction expenditures, the school district must file an annual report with the State Commissioner of Education, certifying the amounts which are eligible for reimbursement in the current year.

Although the statute provides that the State will reimburse school districts for 90 to 100 percent of construction costs, the actual funding for the program is dependent on annual legislative appropriations to the school construction account. Historically, appropriations have not been sufficient to fund the level of payments authorized by statute fully. When amounts in the account are insufficient, the available funds are allocated pro rata among the eligible school districts. Over the fiscal years 1981 to 1984 the program has been or will be funded at the following percent of entitlement due:

<u>Fiscal Year</u>	<u>Amount of Payments</u>	<u>Percent of Entitlement</u>
1981	\$38,380,174	100%
1982	38,262,156	100
1983	36,203,300	79
1984	85,373,459	63

The declining percentage of entitlement paid to school districts since 1982 indicates that the legislature is unwilling to appropriate full funding to this program. Unwillingness to fund this program at statutorily authorized levels could cause concern among investors and credit analysts over the State's willingness to fund other indirect or moral obligations. Eventually this might lead to an erosion of State and local credit quality.

Other concerns that have been raised over the reimbursement program were addressed by emergency regulations promulgated by the State board of Education early in 1983. As a result of the Board's actions, localities must issue debt with a maximum maturity not less than 10 years, cannot refinance outstanding debt if the necessary annual debt service on the refinancing bonds would be greater than on existing bonds, and cannot incur school debt through loans from the general fund. These regulations were necessary to prevent school districts from shortening the maturities on their debt, thereby freeing up local debt capacity, but increasing the burden for State reimbursement.

Local Government Bond Sales and Market Performance

Alaska's local government bond issues are viewed by market participants as attracting an investor of different characteristics from those investing in the State's general obligation bonds. For the most part, interviews with bond analysts have suggested that the market outlet for Alaska's local government debt is the retail market, comprised largely of mutual funds, unit investment trusts, and individual investors. Investors in the State's obligations, on the other hand, include primarily institutional investors such as commercial banks, insurance companies, and other corporations. In part, this market segmentation

Table 5.5

Comparison of State of Alaska and
Local Issues General Obligation Bonds

<u>Issuer</u>	<u>Date Of Sale</u>	<u>Bids</u>	<u>Size (000)</u>	<u>NIC</u>	<u>Spread</u>	<u>Average Maturity</u>	<u>RY 5</u>	<u>RY 10</u>	<u>Moody's Rating</u>
State of Alaska	3-4-70	7	\$11,501	5.4902	\$ 9.90	6	5.10	5.50	Baa-1
Greater Anchorage Borough	3-16-70	3	7,000	6.965	19.00	18	5.60	6.10	Baa
State of Alaska	6-9-71	5	23,830	6.036	13.46	18	4.40	5.25	Baa-1
Greater Anchorage Borough	6-21-71	2	2,550	5.986	16.20	6	5.25	6.20	Baa
State of Alaska	2-8-72	5	23,445	5.239	9.00	15	3.75	4.60	Baa-1
Anchorage	2-22-72	6	4,870	5.460	14.38	10	4.00	5.10	Baa
State of Alaska	5-17-72	6	30,000	5.155	10.41	15	4.00	4.60	Baa-1
Juneau	5-23-72	5	2,500	5.915	15.71	13	4.70	5.40	Baa
State of Alaska	5-15-73	6	27,000	5.106	8.00	15	—	4.60	Baa-1
Mantanuska Borough	5-23-73	8	1,500	5.142	11.24	7	4.75	5.10	Baa
State of Alaska	8-14-73	6	31,000	5.805	16.00	17	5.25	5.40	Baa-1
Juneau	8-14-73	5	2,780	6.218	17.00	13	5.70	5.80	Baa
State of Alaska	1-28-75	4	40,300	5.989	12.75	15	4.55	5.20	A-1
Anchorage	1-28-75	7	5,570	6.127	22.50	11	4.95	5.60	A
State of Alaska	2-17-76	4	40,000	5.867	8.32	10	4.80	5.70	A-1
North Slope Borough	2-10-76	2	8,000	6.916	23.25	7	5.75	6.75	A
State of Alaska	12-12-78	5	40,000	5.525	6.75	5	5.35	5.50	A-1
Anchorage	12-12-78	5	17,625	6.316	15.00	12	5.50	5.75	A
State of Alaska	3-10-82	2	200,000	9.985	10.00	6	9.50	—	AA
Anchorage	3-2-82	4	8,500	12.428	22.00	11	10.00	11.50	A

is based on structural differences between local bonds and the State's obligations; local bonds are issued in lesser amounts, longer in average maturity, and lower in credit rating. These differences, and the attendant market distinctions, are captured in Table 5.5, which presents paired comparisons of State and local issues sold at approximately similar dates since 1970.

Table 5.6 presents summary statistics on the methods of sale, the average number of bids received on competitive issues, and the average underwriting spreads on local issues. By comparison with Table 5.5, and the statistics in Section Four on State general obligation issues, these data indicate that local bonds which are sold competitively attract more bids on average than State issues. This is to be expected since the local issues are smaller in size. In addition, many local issues are sold through negotiation, making the competitive issues more attractive and aggressively sought. The most significant comparison of local and State bond issuance, however, is the markedly higher underwriting cost on local issues. In 1982, the average gross underwriting spread on all local bonds was in excess of \$21 per \$1,000 par value, more than double the underwriting spread on State general obligation issues.

Table 5.7 presents a detailed market analysis of reoffering yields on selected local government bonds sold since 1978. As described in Section Four, reoffering yield is a measure of the return that investors require in order to purchase the bonds. While the reoffering yields are not the coupon interest rate on the bonds, high reoffering yields generally mean that the interest paid by the issuer (coupon rate) on the bonds are also high. Therefore, comparisons of reoffering yields give a reasonable indication of interest cost and market reception of a government's bonds.

Comparing local government issues with issues from other states is impractical and subject to more than the usual ambiguities mentioned in Section Four. The vast number of local issues from other states, and the vastly different local market conditions hinder the selection of matched pairs. As an alternative, the analysis in Table 5.7 compares reoffering yields on Alaska local issues with the monthly average reoffering yield of all bonds with similar ratings and security features. (e.g., general obligation bonds are not matched with revenue bonds).

The results of these comparisons indicate that local government bonds from Alaska carry yields at all maturities significantly above the average for the overall market. On 5-year maturities, the average yield differential is 39 basis points; 35 basis points on 10-year maturities; and 34 basis points on 15-year maturities. These higher interest rates translate to an additional cost to Alaskan municipalities of approximately \$135,000 over the life of a 15-year, \$5 million bond, than would be paid by the average similarly rated locality in the "lower 48".

Perhaps in recognition of the relatively poor market reception accorded local bond issues, a growing number of issuers and their underwriters have opted to purchase municipal bond insurance from private bond insurers. To qualify for insurance, an issuer must be investment-grade rated, apart from credit

Table 5.6
Selected Summary Statistics On
Local Government Bond Sales In Alaska

	<u>1982</u>	<u>1981</u>	<u>1980</u>	<u>1979</u>	<u>1978</u>
Local Government General Obligation Bonds:					
Number of Issues:					
Negotiated	3	3	3	1	--
Competitive	10	0	2	3	7
Average Number of Bids (Competitive)	3.6	--	4.5	4.6	4.3
Average Underwriter Spread:					
Negotiated	\$23.35	\$26.64	\$14.50	\$16.00	--
Competitive	\$22.11	--	NA	\$15.50	\$11.83
Local Government Revenue Bonds:					
Number:					
Negotiated Issues	3	1	1	3	1
Competitive Issues	3	3	--	2	3
Average Number OF Bids (Competitive)	3.0	3.6	--	4.5	2.7
Average Underwriter Spread:					
Negotiated	\$24.27	\$14.83	\$15.00	\$14.18	\$14.90
Competitive	\$16.00	\$19.53	--	\$22.88	\$11.52

Table 5.7

Analysis of Reoffer Yields on Alaska
Local Government Issues
1978 - 1982

Date of Issue	Issuer	Rating	Type of Issue	RT5/Average ^a	Difference	RT10/Average ^a	Difference	RT15/Average ^a	Difference
1-17-78	Kenai Peninsula Borough	A/A	GO	4.80/4.48	+ .32	5.30/4.95	+ .35	5.70/5.34	+ .36
1-24-78	Anchorage	NR/BBB	Revenue	5.20/4.68	+ .52	5.65/5.27	+ .38	5.90/5.72	+ .18
4-4-78	Matanuska-Susitna	A/NR	GO	4.85/4.58	+ .27	5.35/4.99	+ .36	5.75/5.33	+ .42
4-18-78	Anchorage	Baa-1/BBB+	Revenue	5.00/5.13	- .13	5.50/5.70	- .20	5.90/6.01	- .11
6-5-78	Fairbanks	A/BBB+	Revenue	5.50/5.26	+ .24	6.00/5.82	+ .18	6.40/6.17	+ .23
8-1-78	Anchorage	A/A	GO	5.30/5.05	+ .25	5.60/5.33	+ .27	6.10/5.69	+ .41
9-19-78	Anchorage	Baa-1/BBB+	Revenue	5.30/5.40	- .10	5.75/5.91	- .16	6.10/6.35	- .25
12-12-78	Anchorage	A/A	GO	5.50/5.49	- .01	5.75/5.70	+ .05	6.20/6.06	+ .14
1-9-79	Matanuska-Susitna	A/BBB+	GO	5.85/5.49	+ .36	6.10/5.65	+ .45	6.45/5.93	+ .52
4-20-79	North Slope Borough	A/A	GO	6.25/5.38	+ .87	7.20/5.58	+1.62	---	---
5-16-79	Valdez	A/A	GO	5.75/5.39	+ .36	6.00/5.55	+ .45	6.40/5.69	+ .71
5-8-79	Anchorage	A/A	GO	5.50/5.39	+ .11	5.90/5.55	+ .35	6.25/5.69	+ .56
6-14-79	Sitka	Baa/BBB	Revenue	6.20/5.51	+ .69	6.50/5.75	+ .75	7.00/6.02	+ .98
7-31-79	Anchorage	Baa-1/A	Revenue	5.70/5.43	+ .27	6.00/5.63	+ .37	6.25/5.94	+ .31
4-9-80	North Slope Borough	A-1/A	GO	10.00/7.45	+2.55	10.20/7.78	+2.42	---	---
5-13-80	Anchorage	Baa-1/A	Revenue	6.80/7.31	+1.49	7.25/8.04	- .79	7.70/8.20	- .50
6-26-80	Anchorage	A-1/A	GO	5.80/5.65	+ .15	6.55/6.29	+ .26	7.40/7.02	+ .38
9-19-80	North Slope Borough	A/A	GO	7.70/6.81	+ .89	8.90/7.01	+1.89	---	---
6-2-81	Anchorage	A-1/A	GO	8.80/8.73	+ .07	8.80/9.55	- .75	9.60/10.15	- .55
11-17-81	Anchorage	Baa-1/A	Revenue	10.00/10.21	- .21	11.25/11.56	- .29	---	---
1-26-82	Fairbanks	A/A+	GO	11.00/10.11	+ .89	---	---	---	---
2-2-82	North Slope Borough	A/A	GO	11.25/10.00	+1.25	13.00/11.17	+1.83	13.75/12.86	+ .89
4-6-82	Anchorage	A-1/A	GO	10.25/9.81	+ .44	11.80/11.10	+ .70	13.00/12.02	+ .98
4-30-82	Fairbanks	Aa/AA	Revenue	9.75/9.59	+ .16	11.50/11.28	+ .22	---	---
6-1-82	North Slope Borough	A/A	GO	10.75/9.99	+ .76	12.00/11.24	+ .76	---	---
10-12-82	Anchorage	Baa-1/A	Revenue	7.75/8.32	- .57	8.70/9.72	-1.02	---	---
10-15-82	Ketchikan	Baa/BBB+	Revenue	9.25/8.32	+ .93	10.20/9.72	+ .48	10.90/10.18	+ .72
11-16-82	Anchorage	A/A	Revenue	8.90/8.25	+ .65	9.70/9.50	+ .20	---	---
12-2-82	Anchorage	A-1/A	GO	8.00/7.72	+ .28	9.25/9.00	+ .25	---	---
12-14-82	North Slope Borough	A/A	GO	8.00/7.72	+ .28	9.25/9.00	+ .25	---	---
Average Yield Differential				0.39%		0.35%		0.34%	

^a The Average Reoffer Yields are the average reoffer yields on all like-rated GO or revenue bonds sold during the month of the Alaska issue as reported by the Public Securities Association.

enhancements or external supports (such as a bank letter of credit). Prior to marketing the bonds, an issuer secures an insurance policy commitment from either the American Municipal Bond Assurance Corporation (AMBAC) or Municipal Bond Insurance Association (MBIA), the two leading municipal bond insurers. Bond insurance guarantees investors timely payment of principal and interest on the bonds, and results in a AAA rating on the bonds by Standard & Poor's Corporation. Moody's Investors Service does not recognize the insurance feature in its rating. The issuer pays a one-time premium for the insurance policy, based upon the appraised credit risk and the aggregate liability for principal and interest that is covered by the policy. As a rule of thumb, an issuer can expect to pay between 0.5 and 1.5 percent of aggregate principal and interest due on the bonds for insurance. In return, of course, it is hoped that interest savings on the higher rated bonds will be greater than the insurance premium.

Table 5.8 presents an analysis of reoffering yields on insured local bonds since 1978, comparing these yields with monthly average yields on AAA rated bonds and on bonds with ratings similar to the issuer's uninsured rating. The data in Table 5.8 raise important questions concerning the practice of purchasing bond insurance by Alaska's localities. Yields on Alaska insured bonds generally are much higher than yields on other AAA rated bonds. For 5-year maturities, Alaska insured bonds carried yields that were 85.6 basis points higher on average than AAA rated bonds; for 10-year maturities, Alaska bond yields were 86.9 basis points higher.

Compared with uninsured bonds with similar ratings, Alaska insured bonds carried measurably higher yields. On 5-year maturities, Alaska bond yields were 25.9 basis points higher; on 10-year bonds, the differential was 5.6 basis points higher on average. This indicates that even with bond insurance, yields on Alaska's insured bonds were higher than the average yield for similarly rated bonds without insurance.

Combined with the comparisons derived in Table 5.7, the value of bond insurance appears to be approximately 13.1 basis points on 5-year maturities and 29.4 basis points on 10-year maturities. Although these estimates of yield savings from bond insurance are only approximate, they do suggest that the price Alaska's municipalities are paying for bond insurance may not be worth the slight savings in interest cost they are receiving. These preliminary findings suggest the need for a more thorough analysis that is beyond the scope of this study. Such an analysis should compare the present value of the annual savings in interest cost on insured bonds with the cost of the insurance premium.

A further observation based on Tables 5.6 and 5.7 is that while reoffering yields on the debt of Alaska's localities are higher, on average, than the national average, yields on the North Slope Borough's debt are vastly higher. Until February 1982, the 10-year reoffering yields on North Slope Borough debt were consistently at least 100 basis points (one percent) higher than the monthly average on similarly rated municipal bonds. On an April 1980 bond sale this difference rose to nearly 250 basis points (2.5 percent). Such a large discrepancy in reoffering yields indicates that investors required a higher than

Date	Issuer	Ratings (1)	Method of Sale (2)	Type Issue (3)	* 5-Year		Basis Points Difference	* 10-Year		Basis Points Difference
					Reoffer Yield/Average (4)			Reoffer Yield/Average (4)		
2-16-82	Valdez	Aaa**/A	C	GO	10.50/9.20	+120		12.00/10.50	+150	
					10.50/10.00	+50		12.00/11.17	+83	
3-2-82	Anchorage	Aaa*/A	C	R	10.00/9.57	+43		11.50/11.28	+22	
					10.00/10.08	-8		11.50/11.84	-34	
4-6-82	Anchorage	Aaa**/A	C	R	10.40/8.87	+153		11.40/9.87	+153	
					10.40/10.06	+34		11.40/11.54	-6	
4-26-82	Kenai Peninsula	Aaa*/A	N	GO	11.00/9.18	+182		----	----	
					11.00/9.81	+119		----	----	
6-15-82	Anchorage	Aaa**/A	C	GO	10.50/9.50	+100		12.25/10.73	+152	
					10.50/9.99	+51		12.25/11.24	+101	
6-1-82	Kenai Peninsula	Aaa**/A	N	R	10.20/9.67	+53		----	----	
					10.20/10.08	+12		----	----	
6-29-82	Anchorage	Aaa**/Baa	C	R	11.00/9.67	+133		12.15/10.88	+127	
					11.00/10.74	+26		12.15/12.25	-10	
7-22-82	Fairbanks-North Star	Aaa**/A	C	GO	9.75/9.26	+48		11.00/10.30	+130	
					9.75/9.82	-7		11.00/11.01	-1	
9-29-82	Anchorage	Aaa**/A-1	N	GO	8.40/7.76	+64		9.60/8.95	+65	
					8.40/8.31	+9		9.60/9.48	+12	
1-27-82	Anchorage	Aaa*/A	C	R	8.20/7.25	+95		9.00/8.12	+88	
					8.20/8.09	+11		9.00/9.56	-56	
2-25-81	North Slope Borough	Aaa**/A	N	GO	9.10/7.66	+144		9.70/8.12	+158	
					9.10/8.42	+68		9.70/9.41	+29	
6-3-81	North Slope Borough	Aaa*/A	N	GO	9.60/8.35	+125		10.10/9.15	+95	
					9.60/8.98	+62		10.10/10.01	+9	
10-20-81	Anchorage	Aaa**/A	C	R	10.50/10.62	-12		11.75/11.70	+5	
					10.50/10.65	-15		11.75/11.95	-20	
2-4-80	Valdez	Aaa**/A	C	GO	6.65/6.70	-5		6.90/6.96	-6	
					6.65/6.96	-31		6.90/7.26	-36	
9-11-79	Anchorage	Aaa**/A	C	R	5.80/5.40	+40		6.00/5.46	+54	
					5.80/5.72	+8		6.00/5.92	+8	
3-14-78	Anchorage	Aaa**/A	C	GO	----	--		4.85/4.61	+24	
					----	--		4.85/4.85	0	

Table 5.8
Analysis of Reoffer Yields on Insured
Alaska Local Government Bond Issues

- NOTES: (1) The first rating is the insured rating by Standard & Poor's Corporation
 **Indicates MBIA Insurance
 *Indicates AMBAC Insurance
 The second rating is the Moody's rating on the bond issue
- (2) C = competitive bid
 N = negotiated
- (3) GO = general obligation
 R = revenue bond
- (4) The first yield is the yield on the Alaska bond; the second yield is the monthly average yield on like-rated bonds. The upper pair uses monthly average Aaa-rated yields. The lower pair uses the monthly average yield on uninsured bonds with the same rating as the Moody's rating on insured Alaska bonds.

Table 5.9

Summary Statistics on Selected
State Municipal Bond Bank New Issues, 1978-82

Date	Issuer	Size (\$ Millions)	Average Maturity (Years)	Method of Sale (1)	Rating (2)	Number of Bids	5-Year Rooftop Yield/Average (%)	Difference in Basis Points	10-Year Rooftop Yield/Average (%)	Difference in Basis Points
2-3-82	Alaska	10.8	7	C	A/A	3	11.25/10.00	+125	13.00/11.17	+183
2-3-82	Alaska	15.6	14	C	A/A	3	12.00/10.00	+200	13.20/11.17	+203
3-10-82	New Hampshire	9.7	7	C	Aa/Na	2	9.75/9.35	+40	10.70/10.69	+1
3-10-82	New Hampshire	10.4	7	C	A/A	2	10.00/9.83	+17	11.40/11.21	+19
4-28-82	Maine	2.1	5	C	Aa/Na	5	9.50/9.65	-15	10.60/10.98	-38
4-27-82	Alaska	4.4	—	N	NR/Naa*	—	10.25/9.81	+44	11.20/11.10	+10
7-9-82	Vermont	9.6	—	N	A/A	—	10.50/9.82	+68	12.50/11.01	+149
9-29-82	Maine	8.4	12	C	Aa/Na	5	8.25/7.95	+30	9.30/9.08	+22
10-13-82	New Hampshire	6.5	8	C	A/A	3	7.25/7.60	-35	8.40/8.75	-35
6-5-81	Maine	13.6	12	C	Aa/Na	4	8.50/8.55	-5	9.50/9.35	+15
10-7-81	Maine	13.8	11	C	Aa/Na	5	10.70/9.84	+86	11.75/11.06	+69
5-28-80	Maine	10.1	11	C	Aa/Na	4	5.70/5.66	+6	6.20/6.08	+12
7-22-80	Alaska	16.2	14	N	A/A	—	6.20/5.86	+34	7.25/6.62	+63
7-18-80	New Hampshire	7.6	—	N	A-1/A+	—	6.00/5.86	+14	7.00/6.62	+38
10-22-80	Maine	8.1	10	C	Aa/Na	3	7.25/6.65	+60	8.25/7.33	+92
5-1-79	Alaska	5.3	12	C	A/A	7	5.75/5.39	+36	6.00/5.55	+45
7-19-79	New Hampshire	3.6	—	N	A-1/Na	—	5.40/5.13	+27	5.75/5.30	+45
9-19-79	Alaska	3.2	13	C	A/A	3*	5.95/5.64	+31	6.20/5.79	+41
9/26/79	Maine	19.9	11	C	Aa/Na	4	5.70/5.55	+25	5.85/5.66	+19
6-1-78	Maine	3.9	13	C	Aa/Na	7	4.90/4.82	+8	5.40/5.16	+24
6-7-78	Alaska	5.5	12	C	A/A	4	—	—	5.60/5.39	+21
11-30-78	Maine	9.9	12	C	Aa/Na	6	5.30/5.12	+18	5.50/5.24	+26
12-11-78	Alaska	1.6	14	C	A/A	3	5.70/5.49	+21	6.00/5.70	+30
12-4-78	New Hampshire	9.0	—	N	A-1/Na	—	5.40/5.30	+10	5.55/5.48	+7

* Means an insured bond.

Notes: (1) C Competitive
N Non-Competitive

(2) The first rating is the Moody's Rating; the second rating is the Standard & Poor's Rating.

(3) The first yield is the rooftop yield on the bond bank issues; the second yield is the monthly coupon yield on general obligation bonds with similar Moody's Ratings.

average return on their investment in order to lend to the North Slope Borough. This observation is preliminary; an analysis of the market performance of any single locality is beyond the scope of this report. However, given the high levels of debt that have been issued from this and other localities, the much higher than average interest costs of Alaska's local debt, and the loss of State revenues from taxes levied by this Borough and others to pay the annual debt service on their debt, the State may wish to analyze further local market experience and State policies regarding local debt management.

The Market Performance of the Alaska Municipal Bond Bank

The State has established the Alaska Municipal Bond bank for the express purpose of assisting local communities in the financing of capital improvement projects. The Bank issues its securities and relends the proceeds to participating municipalities. As discussed in Section Three, Bond Bank bonds are secured by several tiers of protection, including pledges of the securities of participating municipalities, a State "pay-over" provision, a reserve fund, and the State's moral obligation to replenish the reserve fund. The "pay-over" provision requires the State to pay to the Bond Bank all State aid funds owed a municipality in the event of a municipal default on its Bond Bank debt obligations. As a result of these layers of security, the Bank's general resolution general obligation bonds carry an A rating.

Table 5.9 reviews selected information on recent Alaska Bond Bank sales and compares the results with bond bank issues from other states. In each case, 5-year and 10-year reoffering yields are compared with the monthly market average yield for general obligation bonds with similar ratings. Alaska Bond Bank issues carried yields that were, on average, 70 basis points (0.70 percent) higher for 5-year bonds and 74.5 basis points (0.745 percent) higher for 10-year bonds than the monthly market yields for like-rated bonds. By contrast, New Hampshire Bond Bank issues carried yields that exceeded the averages by 12.2 and 12.5 basis points respectively; for Maine, these differences were 26.6 and 26.7 basis points.

The discrepancy between the market reception of other state bond banks and that of Alaska's is most likely the result of investor unfamiliarity with the Alaska Bank. This comparison indicates that the Alaska Bank has the potential for saving as many as 50 basis points by undertaking an active national marketing effort. The relatively poor reception given the Bank's bonds also indicates that investors are probably not buying these bonds on the basis of the State's moral obligation pledge. If the bonds were purchased solely on the merits of the State's moral obligation, they would be expected to trade closer to the national average for A-rated bonds.

Table 5.10 summarizes gross underwriting spreads on state bond bank issues. While these data indicate that spreads on Alaska Bond Bank issues are alternately above and below other bond bank issues, most of these differences may be due simply to market timing. Since bond banks are not frequent issuers,

Table 5.10
Average Gross Underwriting Spreads*
State Bond Bank Issues

<u>State</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Alaska	\$11.50	\$20.00	\$12.27	\$15.00	\$19.75
Maine	14.70	11.50	17.17	15.21	15.00
New Hampshire	15.90	15.46	17.83	—	16.00
Vermont	14.40	—	—	—	—
 Average-All Local Issues in Alaska	 NA	 \$16.85	 \$16.75	 \$19.60	 \$20.47

* Expressed in dollars per \$1,000 par value of bonds issued.

these comparisons do not appear to be particularly important. It is important, however, to note that one purpose of the Bank -- achieving economies in marketing costs -- has been partially accomplished. The average underwriting spread on Alaska Bond Bank issues in the past three years has consistently been less than the average spread for the State's local bonds sold directly in the market. Underwriting spreads continue to remain well above the costs of State general obligation issues, however, as summarized in Table 4.3.

Local Debt Management

Effective management of long-term debt by local governments is important to the localities and the State in order to preserve the overall long-term fiscal health of each. Abuses of the power to borrow funds reflects poorly on the locality and can have costly repercussions on the State. For example, improper debt management could cause credit ratings to worsen, forcing higher interest rates. In extreme cases, the local unit may be barred from access to the national credit markets altogether. The taxpayers of the municipality, and the entire State, are the ultimate losers when and if Alaska's local governments abuse their borrowing authority.

There are specific guidelines and practices that local governments can follow to assess their debt management procedures. Many of the conditions that signal potential debt-related problems are listed in Exhibit 5.1. Local government finance officers and financial officials should continually assess their debt position and debt management practices using such a checklist. The Department of Community and Regional Affairs currently receives the annual budgets and financial reports of the State's local governments. These reports are the primary sources of data on local fiscal management. Information contained in these reports could easily be compiled into a computer program that would monitor financial condition along the guidelines presented below. A positive response to any one item may be cause for concern and appropriate measures should be taken first to identify and then to rectify the problem.

In order to evaluate the debt management of individual localities, assessment of the debt position of each Alaskan municipality along the lines suggested by the checklist is necessary. This analysis would highlight those localities which have a problem with their debt management practices. Such an evaluation should be performed by both State officials and by the localities themselves.

The Role of the State in Local Government Borrowing

Analysis of the market experience of Alaska's local governments indicated that these units are paying a premium over similarly rated municipalities to borrow in the national market. In an attempt to lower the cost of borrowing, many localities in the State have taken out municipal bond insurance as was

Exhibit 5.1

Debt Management Checklist

- ___ an increasing amount of bonded debt per capita.
- ___ the percentage increase in debt per capita exceeding the percentage increase in taxable wealth per capita.
- ___ an increasing percentage of annual expenditures for debt service.
- ___ an increasing ratio of debt to assessed value.
- ___ current year operating deficit.
- ___ two consecutive years of operating fund deficit.
- ___ current general fund deficit (two or more years in last five).
- ___ short-term debt (other than bond anticipation notes) at end of year greater than 5 percent of main operating fund revenues.
- ___ short-term interest and current year debt service greater than 20 percent of total revenues.
- ___ total property tax collections less than 92 percent of total levy.
- ___ declining market valuations - two consecutive years on a three year trend.
- ___ overall net debt ratio 50 percent higher than four years ago.
- ___ current year operating deficit larger than previous year's deficit.
- ___ two-year trend of increasing short-term debt outstanding at end of fiscal year.
- ___ property taxes greater than 90 percent of tax limit.
- ___ a trend of decreasing tax collections.
- ___ overall net debt ratio 20 percent greater than previous year.

indicated in Table 5.8. However, the savings achieved by Alaskan municipalities appear to be slight, especially given the high initial premium required to insure bonds.

In addition to paying higher than average interest rates, the State's localities have debt ratios far higher than the national medians for similarly sized local governments. Most localities are unable to tap the vast oil-based revenue sources available to the State. Therefore, the high debt ratios which for the State's own debt do not cause immediate concern, are not as acceptable at the local level. The high levels of local debt, and its relatively high expense, are in themselves reasons for the State to re-assess its current role in local debt management.

Local borrowing costs and debt management practices should be of particular concern to the State for three major reasons. First, is the desire for its localities to be fiscally responsible and able to borrow on as near an equal footing with communities in the "lower 48" as possible. Second, is the State program to reimburse localities for a portion of the annual debt service on school construction bonds. High general obligation borrowing costs on local debt are passed on to the State directly through this program. Third, is the current interrelationship between the State and local property taxes as described in the Appendix to this report on the legal framework for debt issuance in Alaska. Because local governments are able to levy unlimited property taxes for the payment of debt service, and property taxes paid on oil production and transportation facilities to local governments are credited towards the State property tax liability, the State loses revenue to those three jurisdictions (Fairbanks North Star Borough, North Slope Borough, and Valdez) that have high tax rates in order to support high levels of debt issuance.

A high cost of borrowing, however, is not the only reason that the State should be concerned about local debt issuance. Another concern of the State should be the question of what would happen if a municipality were unable to repay its debt obligations. Although the State is not legally obligated to provide relief to localities in default, were this to occur there would likely be pressure on the State to arrange for some sort of "workout". For the above financial reasons, and to promote sound financial management practices at the local level, the State may wish to take the lead in implementing programs that encourage the prudent use, and guard against the misuse of local debt issuance.

The State has demonstrated its concerns over local borrowing costs by creating and administering the Municipal Bond Bank. The Bank helps smaller lesser known municipalities borrow at lower interest rates and issuance costs than they could achieve on their own through pooling the smaller local issues into one, relatively large, bond issue. The security behind the Bank's bonds is greater than that of the individual local governments because of the reserve fund requirements and the State's moral obligation pledge. Although the market performance of the Bond Bank has not been up to that of other state bond banks, it is still better, on balance, than that of separate local units. Our review of the Bond Bank's performance, however, indicated that only \$108 million of the \$1.3 billion in local general obligation debt outstanding, or 8

percent, has been issued through the Bond Bank. Therefore, a State policy to encourage wider use of the Bond Bank by local governmental units should result in lower aggregate borrowing costs.

There are several steps the State could take to improve the market performance of the Bond Bank. Our analysis concluded that, on average, the Alaska Bond Bank is paying a higher cost of borrowing both in terms of interest cost and underwriting spread than are other state bond banks. Although the Alaska Bond Bank is rated one notch below the Maine and New Hampshire bond Banks, the composition of its municipal borrowers is relatively the same as in the other states. According to Table 3.11, 78 percent of the Bond Bank's outstanding general obligation debt is payable from communities rated Baa or below. The similar percentage for the Maine bond bank is 72 percent. The relatively weak market performance of the Bond Bank would be improved if the State undertook an active promotional effort aimed at potential investors. Furthermore, the State could restructure the security behind the Bond Bank, to include a stronger moral obligation pledge or a pledge of the State's full faith and credit. The strengthening of security could be selective, applying only to bonds issued for certain purposes, or valid for all Bank Bonds. The State of New Hampshire Bond Bank issues two types of bonds; one backed by the State's general obligation and the other backed by a moral obligation pledge of the State.

Alternative Programs for Further State Involvement

There are several programs in use in other states which provide a model for Alaska to consider in determining the appropriate level of State involvement in local debt management. These state oversight and assistance activities range from state guarantees and approval of local debt issuance, through statutory limits on the amount of debt that may be issued, to the provision of technical assistance to localities in the debt issuance process. The decision as to the correct role for the State in local debt management is a complicated one, and involves a myriad of factors including the system of intergovernmental fiscal policy, the desired degree of local government autonomy, and cost to the State. In evaluating Alaska's role, the State should keep in mind the following factors:

- . the cost of alternative programs to the State both in terms of direct budgetary impact and indirect effects on the State's own borrowing costs.
- . the degree of assistance must be balanced against the amount of autonomy the State wishes its localities to enjoy. It is generally in the State's interest to place some constraints and conditions on recipients of its aid.
- . while the State may wish to improve local financial management practices, it must be careful that over depen-

dence on the State does not result from its assistance.

State Restrictions on Local Debt Issuance

The State of Alaska places few constraints on the issuance of debt by its local units of government. Except for the voter approval requirement for general obligation bonds, there are few limits on local borrowing. This is in contrast to most states where a limit is placed on the amount of debt that may be issued (generally expressed as a fixed percentage of the assessed value of property). Such debt limits typically apply to general obligation debt only, and it is debatable whether such limits are actually effective in limiting the total amount of debt issued. In those states with the most restrictive limits on local debt issuance, localities have typically issued larger than average amounts of revenue-supported debt in place of tax-supported debt.

Limits on local governmental debt issuance may improve the market reception of their debt, because investors place a value on scarcity and certainty. Debt limits ensure investors that localities will not issue bonds in amounts considered by the state to be excessive. The imposition of a local debt limit would also give the State more control over the revenue loss from localities that have oil production or transportation property within their boundaries, such as the North Slope Borough. Currently the State is being short-changed by those localities that levy a high amount of taxes on oil production property in order to finance debt service. Because taxes paid to the locality are credited towards State property tax liability, this represents a direct revenue loss to the State. Therefore, the State needs to address the absolute level of debt issuance by its localities.

The most common form of state limitation on the level of local debt issuance is a maximum ratio of outstanding debt to the assessed (or true) value of property. Because property taxes generally comprise the largest share of local government revenues, this form of limit ties the amount of debt issuance to the resources available to repay the debt. In states with large disparities in assessed value among jurisdictions, such as Alaska, a debt ceiling defined solely by property values may not be appropriate. An alternative would be to limit the ratio of outstanding debt per capita; however, the resident population of Alaska's jurisdictions and its distribution may not directly correspond to the need for public capital investment. Therefore, it is recommended that the State develop a two-tiered ceiling on local debt issuance that will meet the combined objectives of 1) treating all localities fairly, 2) providing the State with a degree of control over local debt issuance, and 3) encouraging prudent debt management by localities.

Direct State Involvement in Local Debt Issuance

A more effective alternative to debt restrictions is to become directly involved in the debt issuance process of local governments. It must be

recognized, however, that such involvement infringes upon local autonomy. Through the Alaska Municipal Bond Bank, the State has been active in this area for those municipalities that use the Bank. Other forms of direct State involvement could include the approval of local debt issuance, expanding the role of the Bond Bank to assist in the marketing of all local debt, the supervision of local debt management and financial planning, subsidizing local debt service costs, and State guarantee of local debt.

Of greatest assistance, in terms of savings in interest and issuance costs, would be the State guarantee of local debt. Such a program could involve the issuance of State general obligation bonds in lieu of Bond Bank bonds and loaning the proceeds to local governments for approved projects. According to the results of the market analysis of the State's general obligation debt in Table 4.6, the State trades at interest rates slightly better than the average AA issuer. Comparison of the market experience of Alaska's localities provided in Table 5.7 and the AA yields a State guarantee would be likely to bring, indicates that such a program could save localities as much as 100 basis points (one percent) in interest costs. This translates into a total savings of approximately \$395,000 on a 15-year, \$5 million borrowing. However, a State guarantee would encumber State debt issuance capacity for other purposes.

Active participation in debt issuance can include advisory review by the State of the legal provisions of local debt issuance and the fiscal soundness of the borrowing; providing detailed technical assistance in the structuring of the bond issue and in preparing the necessary documents for debt issuance as a surrogate financial advisor; or assisting in the marketing process itself by coordinating bond issues within the State or actually selling the local bonds.

State programs that provide varying degrees of technical assistance to local borrowers are in place in California, Oregon, Florida, New Jersey, Michigan, and Virginia.³ In Alaska, the scope of the Municipal Bond Bank could be expanded to assist all localities regardless of whether the Bond Bank's debt-raising services were used. Another State office which could provide financial management services is the Department of Community and Regional Affairs which already collects the annual budgets and financial reports of local governments.

The State could require that all local debt be approved before sale. Such approval could be based solely on legal and technical grounds, or on a review of the fiscal capability of the government to undertake the project given its existing levels of debt, the revenues generated by the project, if any, and the general financial condition of the borrower. The North Carolina Local Government Commission in the Department of the State Treasurer must approve all local debt issues. In addition, the Commission provides localities with technical assistance and actually markets the bonds; performing such functions as preparation of the official statement, presentations before bond rating agencies, evaluating bids and delivery of the bonds to underwriters.

Financial assistance to support local debt service costs would be similar to the program currently in use for school construction debt. The major problem

with this program, as indicated earlier, is the extra cost borne by the State because debt service on bonds issued directly by localities is higher than debt service on the State's own general obligation bonds would be. Alaskan localities have lower credit ratings and, therefore, higher borrowing costs than the State's own general obligation debt.

It is beyond the scope of this report to address the proper relationship between the State and its local governments. However, a more active State role in local financial management would enhance the creditworthiness of Alaskan localities and result in lower borrowing costs. According to a recent credit analysis of local borrowers in the State of New Jersey, "due to the close scrutiny of budgetary operations and debt management by the State, New Jersey tax-exempt local bond issues enjoy a high degree of market appeal for underwriters and investors."

A reasonable compromise between encumbering the State's debt capacity and providing greater financial assistance to local governments would be to expand the role of the Municipal Bond Bank. Such expansion could entail 1) Strengthening the security structure of the Bond Bank's bonds to take better advantage of the State's high creditworthiness, 2) action to increase the Bank's use by localities, and 3) the provision of financial management assistance to all localities.

Alternatives to the School Construction Assistance Program

Subsidation of school construction is an expensive undertaking; however, its cost could be minimized through attention to the cost of the project and to the means of financing during the approval process. Alternatives to the present programs which the State may wish to consider are given at the end of this Section. Education differs from other locally provided services because it is basically a state responsibility that is provided at the local level. Alaska's program to subsidize school construction evolves from this responsibility. However, because education is a state-level responsibility, the state subsidy should be as equitable and efficient as possible. An equitable subsidy would treat all localities alike in providing school construction assistance; an efficient subsidy would give the State control over its cost.

The present program is not equitable because each locality raises construction funds on its own; the ultimate cost of borrowed money depends upon the locality's credit rating (or the Bond Bank's), and the timing of the bond issuance. Therefore, Community X may spend several hundred thousand dollars more in debt service to build a \$10 million school than Community Y just because it entered the bond market later, or has a lower credit rating than that of Community Y.

From the standpoint of an efficient subsidy, none of the local governments in the State has a credit rating equal to or higher than the AA rating of the State. As a result, the State is paying a penalty on debt service reimbursements

through the construction aid program to local school districts. The additional interest costs over what the State would have to pay if it issued its own general obligation bonds increase as the gap between the credit quality of the locality and the State widens. Table 5.4 indicated that of the 13 school districts that have issued school construction bonds, six are A-rated, five are rated Baal and two are unrated. Juneau, Kodiak, Wrangell and Unalaska (all rated Baal or lower) have lessened the impact of their poorer credit quality by issuing school construction bonds through the Bond Bank. The issuance of school construction bonds, independent of the Bond Bank, by Petersburg, Sitka, Kodiak, Ketchikan, and Juneau (with one exception) occurred before the Bank was established in 1976. Since that time, all school debt from Baal or lower rated communities has been issued through the Bond Bank.

If the State were to issue general obligation bonds to lower its cost of financing school construction, the bonds would encumber the debt capacity of the State for other public purposes. The \$641 million of local school construction bonds currently outstanding represents 63 percent of the \$1.03 billion in State general obligation debt outstanding. Had the State issued 63 percent more debt over the past 10 years than it actually has, it is doubtful whether its credit rating would have improved from Baa to AA.

The additional cost the State is currently incurring may be worth the price if 1) it permits the State itself to borrow at a lower cost, 2) it enables the State to maintain its strong credit rating, and 3) it doesn't encumber capacity to pay debt service for other public purposes. Therefore, State issuance of its own general obligation bonds in lieu of local school bonds or other alternatives to the present system must be assessed against the chances that State borrowing costs would rise and the reduced availability of debt capacity for other State needs.

From a debt management standpoint, the choices available to the State are several:

1) The State could begin issuance of school construction bonds for independent school districts, realizing that this may limit its future bonding capacity and raise future State borrowing costs; however, the cost of the State subsidy would be lower than it is at present;

2) The State could require that the Municipal Bond Bank issue all school debt on behalf of the school district and that the Department of Education work with the Bank to establish guidelines for the debt structure and financing plan of each project. Such guidelines could establish maturity structure, issuance provisions, and maximum amount of debt issuance;

3) The State could establish an independent school building authority that would raise funds for school construction through the issuance of its own bonds. These bonds could be secured by local lease payments on the schools and a pledge of State education aid. A program such as this is an alternative to use of the Bond Bank and must be evaluated against the costs/benefits of using the Bank alone; or

4) The State could continue to reimburse localities for a portion of their debt service costs on school construction bonds. However, the Department of Education should have approval authority of school debt issuance based upon some State and local affordability criteria.

CHAPTER VI

STATE DEBT MANAGEMENT

Introduction

Conservative management of Alaska's outstanding debt and future debt issuance will ensure adequate debt capacity and retention of the State's strong creditworthiness. Our review of the State's debt management practices showed that while past practices have not been imprudent, there are areas where changes are recommended. Generally, we have found that: the scope of the State Bond Committee should be expanded to include oversight of all State-level debt issuance; the State should incorporate a capital financing plan into its budget process; and several debt issuance procedures such as the calculation of interest cost on competitively awarded bond issues and compensation of financial advisors should be reviewed.

These issues and others are addressed in the following chapter which surveys different aspects of State debt management. The specific subjects and the order in which they are covered are:

1. Origins of State Concerns and Actions Regarding Debt Management (pages 143-156)
2. Role of the Alaska State Bond Committee (157-160)
3. Alaska's Use of the Moral Obligation Pledge (161-164)
4. Capital Planning and Capital Financing (165-175)
5. Debt Ceilings and Limits (176-178)
6. Alternative Methods to Determine Lowest Bid: True Interest Cost vs. Net Interest Cost (179-181)
7. Differences Between Competitive and Negotiated Bond Sales (182-184)
8. Selection, Use, and Compensation of Financial Advisors and Underwriters (185-190)
9. Advance Refunding and Debt Defeasance (191-192)

Origins of State Concerns and Actions Regarding Debt Management

Historically, debt management has not been an area of primary concern to state elected officials such as legislators and governors. With the enactment of tight controls over the issuance of general obligation debt -- a product of the excesses of the nineteenth century and of the problems of the depression era -- state elected leaders tended to leave the actual management and issuance of debt to the treasurer, assuming that their function had been fulfilled with the designation of the project and size of the issue, as well as the authorization of the bond or the submission of it to the electorate. Because prior to 1970, most bonds issued were general obligation bonds which required legislative authorization and/or voter approval, there seemed to be plenty of checks to prevent unwise issues, and numerous opportunities for oversight.

In recent years, however, changes in both attitudes of elected officials and the bond market itself have led to a heightened awareness of the need for improved oversight of debt issuance, and the establishment of a variety of state activities to oversee debt issuance. This section provides background to these changes, examines selected state responses to their perceived problems, and discusses some of the strengths and weaknesses of these approaches.

Debt Issuance and Debt Markets

As discussed in Chapter Two, one of the most significant changes in the last decade or so has been the pattern of state debt issuance. While in the late 1960's and early 1970's general obligation debt issuance outpaced revenue and moral obligation debt by a nearly three to one margin, in recent years the pattern has been completely reversed, to where general obligation state debt makes up only about a third of all state debt, and general obligation debt represents only about thirty percent of all tax-exempt debt available in the market place.

Revenue debt is generally less subject to oversight and approval than general obligation debt; indeed, one reason for its growth has been a desire to find a way around constraints on general obligation debt, such as constitutional limits or requirements for voter approval. The use of revenue debt, then, represents an increasing transformation of debt from just a financing technique into an instrument of fiscal policy.

Long-term general obligation debt has historically been used to finance traditional capital outlays for states, such as roads or schools. As a rule of thumb, about half of all capital outlays were paid for with debt, and the balance financed on a pay-as-you-go basis. The choice was dictated by current interest costs, the number of projects to be financed in any one year, expected useful life of the facility to be financed, and the availability of general revenues of the government.

Departure from this tradition came with the creation of special purpose authorities given the power to issue debt payable out of fees imposed for services. These authorities were able to build bridges, ports, airports, tollroads, and other forms of infrastructure and generally avoid constitutional debt limitations or restrictions. By design, the authorities were frequently far removed from the purview of elected officials. Still other authorities were set up as building corporations, who issued debt to construct state offices and other facilities and repaid the debt from leases to the states. They function exactly as private landlords, but -- because of their access to tax-exempt borrowing and their freedom from property and income tax -- are able to provide much cheaper rentals to the state. Building authorities also offered states a way around debt limitations and increased the distance between elected officials and debt issuers.² While the creation of special authorities for capital construction meant a decrease in the frequency and quality of state oversight, the purposes of borrowing remained the same as general obligation debt -- that of matching

long-lived facilities with long-term financing, so that no one budget year was unfairly burdened with payment for a structure whose useful life lasted decades.

A second form of borrowing -- special purpose authorities whose goal was to channel tax-exempt financing to private users -- also changed borrowing into an element of fiscal policy. Beginning in the New Deal and proliferating up to the present, a new group of authorities was created to provide an interest subsidy to private borrowers whose activity was defined as being in the public interest. The recipients of these subsidies included homeowners and renters (through Housing Finance Agencies), hospitals, nursing homes, students (through loan authorities and dormitory construction -- at both private and public universities), utilities, private corporations (industrial development and pollution control bonds), professional sports teams, and a myriad of similar groups.

Like special tax treatment for certain groups, these borrowings were meant as a form of fiscal policy, another tool beyond direct appropriation to subsidize a politically worthy activity. And -- also like tax preferences -- they received far less scrutiny than would a direct expenditure of the same amount of money. The increasing recognition of the changed character of authorities was one important factor in a changed perception of them on the part of state officials. Since they were no longer financial technicians, but rather more like operating agencies of a state program, legislators in some states came to feel that they deserved the same scrutiny as any other operating program.

This changed perception was accentuated by the growth in revenue debt detailed in Chapter Two. Not only were the non-traditional borrowers changing the nature of borrowing, but the sheer size of their borrowing was making the change more obvious. Total new issues increased from \$7.1 billion in 1960 to \$76.0 billion in 1980, a more than ten-fold increase in two decades. Revenue-supported debt rose from 36 percent of outstanding tax-exempt debt in 1960 to over 50 percent in 1980.

A third factor which entered into the change was the long-term rise in interest rates, coupled with the volatility of the market. Since the end of World War II, tax-exempt interest rates have been about 30 percent lower than taxable ones. When interest rates were low, this difference amounted to only one and a fraction percentage points, but the difference became more striking in the eighties. As corporate rates ran up into double digits, the difference between taxable and tax-exempt rates amounted to as much as four or five percentage points. This differential made tax-exempt borrowing obviously more attractive; coming at a time of fiscal austerity in the state and local government sector, the opportunity to provide a subsidy at relatively little cost was very appealing to state policy makers.

All of these factors -- the changing nature of borrowing, the growth of revenue debt, and the rise in interest rates with a concomitant growth in debt service costs -- made states more attentive to debt policy and management. The major catalyst to action, however, was the temporary default of the Urban Development Corporation (UDC), a moral obligation authority of New York State, in 1975. With over \$2 billion in authorized bonding levels, UDC was one

of the largest authorities in the country. When it was unable to pay some short-term notes coming due, the State stepped in and created a new agency to loan money to UDC, as well as to purchase UDC-owned mortgages in order to provide extra cash. The State also appropriated funds directly to UDC to bring the debt service reserve fund up to required levels. As the first major "near-default" by a public authority in modern times, the plight of the UDC dramatically demonstrated both the commitment of "moral obligation" bonds, and the degree to which the State was inextricably intertwined with the actions taken by an ostensibly autonomous authority. "Even if the State is not obligated to underwrite every authority's specific bonds, the refusal of the State to support poor investment decisions by any independent authority would have a negative impact upon the entire public credit structure," said the Chairman of New York's Assembly Ways and Means Committee.

When the UDC default was followed by fiscal crisis in New York City and Yonkers, public attention was drawn to the need for more effective oversight of local bond issuance — an issue which was dramatically heightened by subsequent fiscal crises in Cleveland and Detroit. While there was a flurry of interest in state oversight of local debt practices, oversight of state debt became an increasingly recurrent issue. In recent years, New York, California, Oregon, Vermont, Maryland, New Hampshire, Michigan, Kentucky, Illinois, and Wisconsin have all undertaken significant reviews and reforms of their debt issuance practices. Such interest can be expected to continue. Public awareness of the deteriorating capital infrastructure has meant that states are paying increasing attention to the problems of capital planning and budgeting; debt policy review is a natural concomitant to the review of capital outlay procedures. Just as states became more interested in overall policy review, rather than reviewing individual projects or bond authorizations, they have also shown increasing interest in reviewing debt policy as a whole rather than considering each bond authorization without reference to the others.

Principal Concerns

We reviewed recent state actions in debt management and debt policy to discover what problem areas states were addressing, what their specific concerns were, what approaches they were adopting or considering to deal with these concerns. While selective, this review provides a representative sample of state activities from across the country; in addition, we use examples from other states as necessary to illustrate programs undertaken.

Generally, states have undertaken reviews of debt management and implemented new practices because of concerns over the size of debt and debt service commitments, and the quality of state credit ratings. States have also shown a growing interest in oversight of authorities and coordination of issues among various agencies. Nationally, state debt has risen dramatically in the last decade, but it has not risen faster than state spending; and although high, it has not grown as fast as either local debt or federal debt.

Those states that undertake analysis of their debt have generally concentrated on three distinct, but interrelated, areas. First, they have analyzed overall debt levels and debt service requirements. Such analysis generally focuses upon general obligation debt, and has been less concerned with revenue and authority debt. For example, the Maryland Debt Affordability Committee makes annual recommendations on general obligation debt authorization levels with the aim of adjusting debt authorizations so as to reduce steadily outstanding debt to 3.2 percent of Maryland personal income, and debt service to 8 percent of general fund and state property tax revenues. While no one guideline can serve each state, it is useful for a state to develop such guidelines to measure the need for debt. Unlike budgets, which must be weighed against available revenues, debt issuances frequently lack an explicit yardstick against which they must be measured; consequently, there is little incentive for competing projects to be measured against each other or to establish a debt authorization ceiling. Such a ceiling, however, is useful as an analytical tool where general obligation bonds are concerned.

Legislators and other state officials generally -- and rightfully -- separate out those projects which have a defined revenue stream to liquidate their obligations, and have been concerned not so much with total size of revenue-supported obligations as they have with process reforms, which give them some assurance that revenue bonds will not be issued unwisely. Therefore, the second area of emphasis has been the creation of oversight bodies for the issuers, which monitor issues to ensure that each one is prudent, and the creation of standard formats for issuance, bidding, measurement of interest costs, and other concerns. Finally, and perhaps less common, are the creation of bodies to recommend total debt authorizations, such as the Maryland Committee, and the creation of standing legislative committees or subcommittees to provide a single reference point in the legislature for all debt related legislation and oversight.

All of these policies can serve a state well; while no one state has enacted all of them, their record suggests that any state looking to reform its procedures and policies could usefully benefit from an analysis of other state actions.

Debt Ceilings

While revenue bonds have certain built-in ceilings, constrained by the amount of revenue available to liquidate their obligations, there is no such obvious measure for general obligation bonds. Some states have chosen (or have had thrust upon them) limits to the amount of general obligation debt outstanding, the amount that can be issued in any one year, or the amount of debt service. A summary of selected state debt limits and their calculation is provided in Exhibit 6.1. A debt limitation which is tied to an economic indicator, rather than a flat amount, makes intuitive sense. Like a spending limitation, it provides a baseline for evaluating whether debt is too large for a state to handle. The choice of a debt limitation need not be arbitrary, but there is no magic formula which a state must adopt either. In Vermont, for example, the Governor argued that the State should set as its goal that certain standard

Exhibit 6.1

Selected State Debt Limits

1) Aggregate Debt Levels

Wisconsin. The lesser of a) 3/4 of 1% of the aggregate value of all taxable property or b) 5% of the aggregate value of all taxable property less net indebtedness as of January 1.

Vermont. New debt issuance cannot exceed 90% of amount retired during previous year (statutory); maintain debt as a percentage of personal income to average for AAA states (governor's proposal).

Maryland. Maintain general obligation debt at 3.2% of state personal income.

2) Debt Service Levels

Maryland	8% of general fund and state property tax revenues
South Carolina	7% of general fund revenues
Tennessee	15% of general fund receipts
Connecticut	4.5% of previous year's tax receipts

ratios used by Moody's and Standard & Poors -- debt service as a percentage of general fund and highway revenues, debt as a percentage of state personal income, and debt as a percentage of assessed property valuation -- be held to the average for all other states enjoying AAA credit ratings. In other words, Vermont's "debt limit" would be to ensure that debt burden did not make Vermont stand out from other AAA rated states.

Similarly, as noted above, the Maryland Debt Affordability Committee adopted as its goal that general obligation debt be no more than 3.2 percent of State personal income, and that debt service be no more than 8 percent of State general fund and property tax revenues. In this case, the goals were to be met by gradually decreasing new authorizations until debt was lowered to the target levels. Wisconsin uses a different approach, which limits annual debt authorizations to the lesser of (1) $3/4$ of 1 percent of the aggregate value of all taxable property in the State, or (2) 5 percent of the aggregate value of all taxable property in the State less the State's net indebtedness as of January 1 of the current year. The Wisconsin limit was modeled on local government limits, where aggregate taxable property is an excellent measure of potential tax capacity of a jurisdiction; however, at the state level, where less than 2 percent of all tax revenues are from property taxes, its usefulness as a proxy for state capacity to pay is limited. South Carolina law limits debt service payments to 7 percent of its general fund revenues. Debt service in Tennessee may not exceed 15 percent of its general fund receipts. Connecticut limits debt service to 4.5 percent of the previous year's State tax receipts. Like Maryland, these three states tie their debt limitation to some measure of state income.

In reviewing indebtedness for their states, both the California Legislative Analyst and the Committee on Program Review and Investigation in Kentucky recommended that debt limitations, if adopted, should be tied to some flexible measure of either state revenues or the state economy. By holding debt to a percentage of state personal income, or debt service (for non-self-liquidating bonds) to a certain percentage of general fund revenues or expenditures, it is possible to manage debt and still retain flexibility. Such a limit may be adopted as a statute or as a written managerial policy, in order to provide the opportunity for later adjustment should there be a significant change in the mix of state revenues. For example, growth in dedicated revenues at the expense of general funds, or state assumption or shedding of significant service responsibilities could make the limit too generous or too constraining. It is important to note that a debt service limitation is only a management tool; the wide variety in such limits suggests that states have designed them to be rough measures of affordability, even when there was no present danger of being overbonded. The California report states: "There is always the possibility that excessive bonding might become a problem at some point in the future in which case a debt limit of some sort could provide a means for detecting problems at an early state. Even if debt limits are revised over time, their very presence increases the ability of the Legislature to oversee borrowing activities and consider the trade-offs between differing bond-supported activities."

Oversight and Controls

If there is no magic formula for deciding how much general obligation debt a state can afford, the optimum amount of revenue bonding is even more elusive to determine. Bonds which are financed out of user fees are, in a sense, self-determining. Toll roads, airports, sewerage plants, water supply systems, and the like have detailed feasibility plans accompanying them, and -- assuming there is no gross miscalculation in the amount of future revenues available for debt service -- the size of the issue and its composition are relatively straightforward. In the case of "on behalf of" financing -- such as mortgage loans, health facilities loans, pollution control and industrial development financing, and the like -- evaluation is usually on a case-by-case basis. The state's interest is not primarily in the size of the issue, since that is determined by demand, nor in its legal permissibility, since that is effectively determined by Congress and the Internal Revenue Service. Instead, a state must be concerned with the local social or economic usefulness of the financing and that its own credit and debt service costs will not be adversely affected by the quality and quantity of bond issues outstanding. It must also be concerned that financings are prudently planned and executed, and that the state is not left "holding the bag" on a contingent financing. Even where there is no legal or moral obligation for the debt of a particular authority or public corporation, nor any investment of state funds (since the interest subsidy provided is from the federal treasury rather than the state), the failure or threat of failure to make timely payment on debt is a default, and any default can create a political obligation for a state. The current controversy over the repayment of bonds for the Washington Public Power Supply System is testimony to that fact.

Because of the potential liabilities created by their actions, states seem generally to be concerned about the activity of public authorities and corporations. Yet, because of the specialized nature of their work, and because of the difficulty in ascertaining what an appropriate level of bonding should be, some states have concentrated on reviewing the process of bond issuance, rather than its size or fiscal impact. Few states have been as harsh in their judgment as Oregon, where the review panel stated:

...general agreement that the industrial development revenue bond program in Oregon, as it is presently constituted, is an ineffective public policy instrument. The state legislature should develop a clear statement of program goals and objectives against which public benefit can be evaluated...If the state legislature is unable to develop...(such) guidelines...the Panel would support discontinuation of such financings in Oregon.

Most states, accepting the legitimacy of revenue bond programs, have been more concerned with the quality of their administration. This creates a dilemma, since the purpose of creating an independent authority is to distance it from the political process. Moreover, it is neither practical nor appropriate for a legislature or governor to involve themselves too directly in the day-to-day administration of an agency. At the same time, states have expressed concern at the thought of agencies proceeding to unchecked issuance of debt and unsupervised distribution of proceeds.

The result has been a series of controls established to ensure that the process runs smoothly. For example, a number of states have established interest rate ceilings, hoping thereby to avoid the sale of bonds at excessive costs. The ceilings were originally set at fixed levels, but the rapid run-up in interest rates and the volatility of interest rate levels made such ceilings obsolete. Florida responded by creating a floating interest rate ceiling, which is set monthly at 150 basis points (1.5 percent) over the most recent Bond Buyer 20-Bond Index level. Florida also exempted bonds having the three highest credit ratings from the ceiling. The goal was to set up a screening mechanism: bonds that were highly rated, or issued at market rates, were allowed to go through without review. Bonds which could not meet this test (both State and local) were required to appeal to the State Board of Administration (composed of the Governor, Treasurer, and Comptroller). This Board is empowered to allow exceptions provided that the issuer can demonstrate that similarly situated projects pay similar rates, and that the project is financially feasible. "The State's principal objective has been to restrict the issuance of exceptionally risky debt." Minnesota has adopted a similar floating ceiling for interest rates.

This kind of ceiling can serve as an early warning system; unusually expensive issues will be called to the attention of whatever oversight body has authority to set ceilings, and bonds which are reviewed and found acceptable may move ahead. The use of such a ceiling is an example of the need to balance debt issuance accountability against the impetus to finance high cost or marginal projects.

State interest in several other areas of the issuance process is noteworthy. States have often imposed requirements for competitive sale of bonds, specified the form in which bids can be made, and proscribed discounts. The California Legislative Analyst's study looked at these issues in more depth than any other state review, and its conclusions are worth reviewing.

The California study suggested that bonds should be allowed to sell at a reasonable discount, roughly equivalent to the normal underwriting spread; that technical constraints (such as maximum interest rates, discounts and maturities, as well as restrictions on refunding and bond anticipation notes) be made uniform for all bonds; that negotiated sales be allowed as well as competitive bidding; and that bids be evaluated by the True Interest Cost (TIC) method.

There has been considerable technical and analytical discussion about discounting over the years. The general consensus seems to be that investors prefer to buy bonds at par value. Since underwriters cannot afford to buy bonds at par and reoffer them at the same price, an allowance for a discount of 1 1/2 to 2 percent of the issue value would seem to allow for underwriters to be more competitive on interest rates. Such bidding makes it easier to evaluate both competitive and negotiated bids, since the underwriters' profit is more clearly expressed rather than hidden in a complex interest rate structure.

A number of states have moved to the use of True Interest Cost (TIC) rather than Net Interest Cost (NIC) to measure the interest rate on bonds. The differences between the two methods of computing effective interest costs are discussed later in this chapter (page 179). TIC is more complex to calculate, but it is probably a superior method of measuring both competitive and negotiated offerings. Its complexities are no obstacle to a computerized world, and discounting to present value is an appropriate method of measuring the long-term cost of money.

There has been extensive discussion over the years as to the comparative costs of competitive versus negotiated bidding, and the major points of this argument are covered later in this chapter (page 179). Advocates of competitive bidding insist that it is the only way to force competition among underwriters; negotiated bidding supporters point to the fact that increasing complexity of issues requires that they be custom tailored, and that such tailoring saves money in the long run. Whatever merits may be, there is no doubt that negotiated sales are becoming increasingly more common. The continuing growth in negotiated sales, combined with the popularity of creative finance instruments, which almost always require a negotiated sale, suggest that states will do well to allow issuers a choice, rather than requiring only competitive sales. The key to improved debt policy seems to be flexibility, rather than an a priori assumption that competitive or negotiated sales are superior to the opposite approach.

Two related concerns which emerged in most state reviews were the overall level of debt which a state and its authorities had outstanding, and the maintenance or improvement of a state credit rating. Many states seemed to feel that even though individual issues were prudent, a total level of debt which was excessive by some measure could lead to a decline in the credit rating, and thus an increase in interest costs. In addition, there was some concern that overall debt levels might push interest cost up even where credit ratings were steady because of an oversupply of that state's debt in the market. Such an oversupply could lead to an interest penalty for both the state and its local governments.

The Oregon Bonded Debt Advisory Panel, for example, expressed concern that the frequency and size of borrowings under its Veterans Farm and Home Loan program had created an oversupply of Oregon debt in the market. They found that there was an interest penalty of 25 to 75 basis points on every issue for both State and local bonds. The penalty results from investor preferences for geographic diversity in their portfolios, with no one state being overrepresented. This is particularly a problem in recent years with a major shift to individuals as the primary purchasers of bonds, most of whom buy through mutual funds. These funds are managed with an eye toward geographic diversity, and a state which has what these managers perceive as an excess of bonds on the market will find that yields will have to increase to compensate for that perceived excess. Both the Maryland and Wisconsin Reviews noted the same concern for their states.

Oregon and Maryland both recommended the creation of a group to determine an overall state debt level, and suggest what new issues should be allowed. In Maryland's case, this group is the Capital Debt Affordability Committee, composed of the Treasurer, State Comptroller, and Secretaries of the State Planning and Budget and Fiscal Planning Departments and an appointee of the Governor. (See Exhibit 5.2) Aside from setting targets for general obligation debt (as discussed above), the committee recommended the creation of controls over the timing and amount of special authority debt, in order to avoid an oversupply of Maryland debt on the market, although this is not yet implemented. The Committee also recommended a cancellation of authorized but unissued debt, in order to reassure potential investors that their purchase of Maryland debt would not be diluted by large issuances of new debt. Oregon also recommended the creation of an authoritative planning committee chaired by the Treasurer to develop long-term capital outlay plans, recommend overall debt limitations, and assist in the coordination of sales. Oregon also urged the cancellation of outstanding unissued debt authorizations.

In California, a slightly different approach has been taken. While there has been no attempt to create a central oversight mechanism, the Treasurer has that authority *de facto* through his membership on, and chairmanship of, virtually every State agency or authority which issues debt in the State. While some observers think this is testimony more to the personal ascendancy of Jesse Unruh, the former Speaker of the Assembly who is the current Treasurer, it serves the same function as the Debt Affordability Committee in Maryland. Indeed, through the Creation of the California Municipal Debt Advisory Commission, which has review (although no veto) over virtually every local bond issuance in the State, the Treasurer's purview touches all State and local debt policy.

These actions reflect not only a state-level concern over potential investor reactions, but an active attempt to communicate more effectively with rating agencies, underwriters, and investors. The importance of effective communication was highlighted by the public finance director for Kidder, Peabody and Company when he identified improved and regularized communications between issuers and investment bankers as a key to a continued healthy market for state debt; he argues that a regular program of meetings and information can improve both working relationships and investor perceptions.¹⁰ The Oregon review explicitly argued for a program of improved investor relations.

There is some empirical evidence to suggest that the total amount of debt outstanding can contribute to the cost of debt issuance. Aside from the Oregon evidence -- which looks primarily at the value of Oregon bonds on the secondary market -- one study has suggested that for many states, the market for local debt is primarily state-wide and regional, rather than national. As a consequence, the conclusion is therefore that an appropriate state role is to monitor credit markets and local debt issuance in order to be aware of such problems and to ensure an orderly market for tax-exempt debt of all types.¹¹

Exhibit 6.2

Oversight Committees for State Debt

<u>State</u>	<u>Title</u>	<u>Composition</u>
Maryland	Capitol Debt Affordability Committee	Treasurer, Controller Planning Director, Budget Director
New York	Public Authorities Control Board	Budget Director, Senate Finance Chair Assembly Ways and Means Chairman
California	No formal mechanism, but treasurer chairs oversight bodies for all debt issues.	
Louisiana	State Bond Commission	Treasurer (chairman), Governor, Lieutenant Governor, Commissioner of Administration Secretary of State Attorney General, Senate Finance Comm- ittee Chairman, Senate Revenue and Fiscal Affairs Chair- man, Speaker of the House, House Ways and Means Chairman, House Appropriations Chair- man.

Several states have moved in this area, with the most famous effort being the North Carolina Local Government Commission. This group actually markets the bonds on behalf of the local governments. No other state has such sweeping powers of control, although the Louisiana Bond Commission holds veto power over all local and State bond issues. In Michigan, the Municipal Finance Commission reviews all local debt issues before they go to market, as does the California Municipal Debt Advisory Commission. Numerous other states have informational systems, review processes, or assistance programs. These range the gamut from merely collecting information to actively assisting local governments with access to the market.¹²

If a state is going to develop a comprehensive debt policy, then there must be some mechanisms for overseeing the implementation of that policy. Two approaches have been developed so far that show promise; one is to ensure that both governors and legislatures have a body to articulate and monitor ongoing debt policy. This is the function which groups like the Capital Debt Affordability Committee play in Maryland, or the State Treasurer in California. Virtually every state which has reviewed their policy has suggested that there be a legislative body with specific authority for debt policy as well. In New York, this is exercised by the Assembly Ways and Means Committee and the Senate Finance Committee, who already have jurisdiction over all bills with fiscal impact, whether they deal with taxes or spending. Oregon suggested a subcommittee of Ways and Means be created; in California, the Analyst argued for a joint subcommittee of the fiscal committees (Oregon's Ways and Means Committee is already joint). In Wisconsin, the Joint Finance Committee has jurisdiction; in Michigan, it is the Joint Subcommittee on Capital Outlay. Illinois uses a slightly different approach; here the legislature has a joint Economic and Fiscal Commission, which has responsibility for preparing revenue estimates and fiscal notes on tax bills. This commission also has a permanent charge to study the long-term debt position of the State, prepare debt impact notes on bills, assess capital plans and the State's ability to market bonds, and make special studies. Almost unique among the states, it even publishes a quarterly journal, The Illinois Bond Watcher. The intent is to ensure that there is informed observation of the debt issuance process.

New York State has two innovations which deserve further discussion: the Public Authorities Control Board (PACB) and the Securities Coordinating Committee (SCC). The PACB consists of three members, appointed by the Governor, the Senate Majority Leader, and the Speaker of the Assembly. Since its creation in 1976, it has consisted of the State Budget Director, the Chairman of the Senate Finance Committee, and the Chairman of the Assembly Ways and Means Committee. All major State authorities must have prior PACB approval before entering into any agreement or incurring any indebtedness for the purposes of acquiring, constructing, or financing any project. The PACB reviews all projects for feasibility, affordability, and coordination with the State's capital program as defined under New York's "Accounting, Financial Reporting, and Budget Accountability Act of 1981". Only the Louisiana Bond Commission, among state agencies, matches the PACB in its power to review and coordinate authority financing.

The SCC adds to the PACB review a scheduling mechanism for debt. The SCC is chaired by the State Comptroller, and includes the State Budget Director and the chairmen or chief operating officers of the ten largest authorities. It produces a quarterly schedule of proposed borrowings which ensures that the State and its authorities do not jostle each other in the market, and that the approach to the market is orderly.

Although these approaches provide New York with controls that only Louisiana and California -- to some extent -- can match, there are further reforms to be made. Both the Assembly Speaker and the Ways and Means chairman have suggested merging the PACB and SCC to broaden their coverage to all authorities, including interstate ones, and to include local borrowings in the scheduling process in order to coordinate better the marketing of New York securities.

These bodies provide a useful approach for other states to consider as well. As one observer of the markets has noted, all control mechanisms rest on trust; if elected officials trust authority boards and staff, no further oversight is needed. But even with oversight, trust must repose somewhere: with the Treasurer, the Governor, a legislative body, or some group. If it is true that debt issuance is an instrument of public policy and not just the technical translation of public fiscal decisions -- as this chapter has earlier argued -- it follows that trust should be reposed in those same elected officials whose function it is to make public policy decisions. Trust may be one part of the issue, but so is accountability; debt policy, like tax policy and spending decisions, is ultimately the responsibility of legislatures and governors, and their constituents as well as the marketplace will hold them accountable for the results of that policy. The preceding overview of state activities suggests that states have begun to recognize and act upon that responsibility.

Role of the State Bond Committee

The Alaska State Bond Committee was established by the State Bonding Act (AS 37.15.110). The statute requires that the Committee be composed of three members, as follows:

Commissioner of Commerce and Economic Development
(as permanent Chairman),

Commissioner of Revenue,
(as Secretary), and the

Commissioner of Administration

The principal role for the Committee is to authorize the sale of Alaska's general obligation bonds. The Committee also approves the allocation of funding to capital projects, authorizes the prefinancing of projects to be bonded (i.e., the use of general fund loans in anticipation of bond sale receipts), and is responsible for International Airport Revenue Bond sales. In the past, the Governor has supplemented the membership of the State Bond Committee with ex officio members. During Governor Hammond's administration the ex officio members were the Commissioner of Transportation and Public Facilities and the Director of the Office of Management and Budget.

Based largely upon interviews with individuals who have been members of the Committee over the past ten years, there appears to be a consensus that the Committee's present role is limited and that it is not substantively active in the State's debt management. We believe this to be the result of several factors, chiefly: 1) legislative design of a routine, perfunctory board rather than an active management- and oversight-oriented board, and 2) lack of staff to the Committee.

Each corporate-type entity of the State that is authorized to issue debt has virtual autonomous power of self-governance over its debt issuance and debt management. The autonomy enjoyed by these issuers is, however, subject to review and oversight by the Legislature through its approval of upset or maximum debt authorization levels. In addition, through appointment privileges, the Governor of the State has effective control over the governing boards of most State government corporations and authorities. Yet, each of these levels of legislative and executive oversight is subject to the dynamics of the political process, and, as a practical matter, the Executive Board positions are frequently more ceremonial than substantive. This is due to the inherent remoteness of Board members from day-to-day involvement in the State corporations and the practical limitations on the commitment of time to a wide array of corporate-type activities.

It is important that some body at the State level take responsibility for monitoring, analyzing, and reporting on the total amount of debt outstanding in the State and State debt management practices. As pointed out elsewhere in this report, the size and scope of State debt in Alaska is significant, and on a

per capita basis greater than anywhere else in the United States. The rate of growth in overall public debt is among the highest in the nation, due principally to the debt issued under the auspices of the State through its public authorities and corporations. Unlike the State's full faith and credit bonds, this debt does not require approval by vote of the people at public referendum. In addition, nearly 40 percent of the State's revenue-supported debt is backed by a pledge of the State's moral obligation and, therefore, represents a contingent liability of the State (see Table 3.16).

The experience of New York State with its Urban Development Corporation is the most graphic example of the consequence of inadequate control of public authority debt issuance. In fact, New York only regained financial credibility after what had been very limited control over the borrowings of its vast and diverse public corporations was tightened through several oversight mechanisms. Of course, Alaska is not in a comparable position, nor is the State threatened in any similar way to the fiscal crisis of New York State and City in the early to mid-1970's. Yet, it is the uncontrolled growth of enormous amounts of debt that brought New York State to the brink of bankruptcy. A revamping of the role and responsibility of the State Bond Committee in Alaska, at this time, would be a positive sign to the financial markets that the State is sensitive to its fiscal posture and in control of its financial destiny.

Considering the role and impact of both direct (tax-supported) and indirect (contingent or moral obligation) debt upon the State's fiscal condition and economic well-being, and considering recent developments in oil prices that alerted the rest of the nation to the volatility of the State's basic revenue source, we believe that the mid-1980's is a good time for the State to broaden and strengthen the role of the State Bond Committee. Revising both the membership and its scope of responsibility would be a timely signal to the investment, underwriting, and credit analyst communities that the State is on top of its overall debt management program and that the State's debt issuance is being controlled so as to prevent getting in "over-its-head". A departure from business-as-usual is appropriate at this time as a sign of fiscal responsibility, especially regarding debt management.

In order to carry out its expanded scope of activity, the Committee should be reconstituted. The chairmanship should reside in a senior-level fiscal official, such as the Commissioner of Revenue or the Director of the Office of Management and Budget who is close to and familiar with the State's debt management practices. Voting membership should also include the Commissioners of Commerce and Economic Development, Administration, Transportation and Public Facilities, and Community and Regional Affairs, and a representative from the governing board of a State corporation who does not hold any other official State position. In addition, a State legislator, such as the Chair of the Legislative Budget and Audit Committee or the Senate Finance Committee, could be informally added to the committee in an ex-officio capacity. This would constitute a seven member voting board. To assist in fulfilling its expanded duties, the State Bond Committee should be staffed by a professional in the field of public finance who, as Executive Secretary to the Committee, sits ex-officio on the Committee itself as a member.

One major role for the newly reconstituted State Bond Committee would be continual oversight of the State's total indebtedness -- including all State-level debt -- as a final check on debt issues before going to market. The impact of the magnitude of both direct and indirect debt upon the State's creditworthiness is a matter of balanced fiscal judgment. Neither Standard & Poor's nor Moody's, the two predominant national credit rating agencies, has a quantifiable parameter for signaling dangerously high contingent liability levels (due to large amounts of moral obligation debt, for example). The amount of State guaranteed debt will effect the credit rating of all guaranteed debt, and, depending upon the degree of the guaranteed bonds' self-sufficiency, the amount and type of moral obligation bonds may affect the credit rating and market access of State debt of any description, including general obligation bonds.

The Committee should be required to take a global view of debt-related activities in a formal way, not in the loose, informal manner that presently exists. Determining the level where aggregate indebtedness adversely affects credit quality and market access is a matter of judgment. Those closest to the scene are in the best position to make such judgment. An active and involved State Bond Committee, with the advice and counsel of bond market experts, would be in a position to oversee all State debt activities and serve as an effective mechanism to promote fiscal management and avert fiscal misfortune. Several persons who are close to the Bond Committee noted that the overlapping membership of Bond Committee appointees as appointees to the governing boards of other State level issuers, such as AIDA, AHFC, and the Bond Bank, provided for an informal linkage of information among and between most all State debt issuers. Such high-level officials, however, do not have the time to follow and analyze the trends in State-level debt issuance necessary to make informed decisions about financing methods and the structuring and timing of bond issues. Hence, it is important that the responsibility for overseeing coordinative, and analyzing state debt issuance be given to one central body.

We believe that the oversight exercised by the State Bond Committee should be passive in nature. The State Bond Committee should not supplant the activities or authority of independent agencies and corporations. The Committee should serve both as an information center and as a final check-off point for debt issues. In order to carry out this role, the Committee should receive annually a financing plan from each entity of the State authorized to issue bonds. The plan would identify the amounts to be borrowed, the approximate time of bond sale, describe the projects or programs to be financed, explain the basic security structure supporting the proposed debt, and otherwise provide an explanation of the purpose of the financing along with the key features to the extent then known. The Committee should annually compile a master debt issuance schedule from the individual financing plans and inform all State and local local issuers of announced plans in order to facilitate coordination of bond issue timing.

The overview of proposed bond sales could become the basis for analyzing the aggregate impact of debt issues upon the financial condition of the State. In this connection, as described in the chapter on debt affordability, the

Committee should annually prepare a comprehensive profile of outstanding debt and monitor its impact on the State's fiscal condition. Analysis and categorization of outstanding debt in a manner similar to that presented in Table 3.16 should be an element of this comprehensive profile. The inclusion of such a report in the State's official statement would improve its disclosure and usefulness to investors.

Closely related to this activity would be responsibility on behalf of the Committee to review each financing before it is brought to market. When bond or note issues are formulated and near completion, approximately thirty days in advance of the scheduled sale date, the Bond Committee would receive all pertinent project documents for review. The Committee's only power would be to defer or veto the issue because, in the judgment of the Committee, the security structure or sources of repayment are inadequate or the issue jeopardizes the credit of the State. The committee would not be responsible for approving all State-level debt issuance.

It should be noted that the Municipal Bond Bank should be included within the scope of authority of the State Bond Committee. Likewise, any local unit of government expecting to sell instruments of indebtedness outside the State Bond Bank would be expected to file with the Committee its annual financing plan, but the Committee would have no responsibility other than including such local government issues in the master debt issuance schedule as an information item. The primary purpose of the master debt issuance schedule is to alert all issuers of bonds and notes as to the timing of what are potentially competing issues in the marketplace. This allows for coordination of bond issue timing among and between the issuers themselves, facilitates market access, may tend to increase the number of bids when issues are sold competitively, and may allow for rearranging the size (amount) and frequency of certain issues in order to more effectively attract buyers. All of the Committee's procedures and policies should be implemented by rule and regulation, and failure to comply should subject the negligent agency or local unit to loss of, or withholding of, State financial assistance.

The Moral Obligation Pledge

The State itself does not issue moral obligation bonds. Such bonds are issued by public authorities and corporations under statutory authorization that provides for the creation out of funds raised by the bonds, or otherwise, of a reserve fund equal to the maximum annual debt service on the bonds. Typically, the moral obligation language states that if an issuer (public authority or corporation), because it does not have sufficient revenues, is obliged to draw on its reserve fund to meet debt service payments, the governor must be notified and shall inform the legislature of the deficiency in the debt service reserve fund. The legislature must then consider whether it will or will not appropriate the amount needed to make up the deficiency in the reserve fund. An example of the State's moral obligation is given on page 71.

Customarily and traditionally, public corporations and authorities issue revenue bonds which are backed-up by revenues generated by the projects financed by the bonds. The projects are considered self-liquidating, and the public authority is thus considered self-supporting. The moral obligation pledge is a useful and sometimes necessary supplement to the guaranteed pledge of revenues when the issuing corporation or authority is a relatively new enterprise; when there is an insufficient track record of repayment capacity for the type of projects being financed; or when there are other unusual elements of risk involved for the investors. Unusual elements of risk in the State of Alaska might, for example, be considered to be reliance on a single industry (oil production) for a substantial portion of statewide economic productivity, the State's geographic isolation, climate, and susceptibility to natural disaster or acts of terrorism against the pipeline. Hence, we do not see the possibility of entirely eliminating the use of the moral obligation bond in the case of all Alaska financings.

The term "moral obligation" is a phrase which takes on different meanings depending upon the perspective of the interpreter. The language surrounding moral obligation bonds may mislead those not trained in public finance words-of-art. To bond counsel, and others experienced in structuring programs of public indebtedness, the moral obligation pledge means that if the primary source of revenues guaranteed to repay a particular debt is insufficient, the legislative intent is to examine the situation and determine if supplemental revenues will be made available to meet debt repayment requirements. The moral obligation pledge is a contingent liability -- a potential call -- upon State resources. It is not a legal liability. It does not, as a matter of law, mandate that the legislature or the governor provide any funds to repay bonded indebtedness.

To legislators and many public officials, the moral obligation pledge is removed from any linkage to direct fiscal responsibility because the projects and programs to which the moral obligation pledge has been given are understood to be self-supporting. Public officials view the moral obligation as merely a device which helps to sell revenue bonds at a lower interest rate, and at no cost to the State. They generally assume that those persons responsible

for the financing have thoroughly analyzed and approved two financial assumptions supporting the debt issue.

To investors, the moral obligation is viewed just one step below the credit quality of the State's general obligation pledge. Although investors know that the moral obligation is not a legal obligation, they nonetheless tend to treat it close to the equivalent of a guarantee by the state. The popular perception is that Alaska, or any other state, will never let its moral obligation bonds go into default. The practical reality is that if a state moral obligation bond were to enter default the fiscal credibility of the state would be impaired, and the state would be at least temporarily barred from access to the bond market. Perhaps even more troublesome is the fact that the value of the moral obligation as a financing security device would be eroded which would make certain future revenue financings more costly and more difficult.

Although most legislators approve moral obligation debt issuance on the premise that the projects or programs being financed are self-sufficient, the perception on the part of investors and the investment banking community is quite different. We discovered through interviews with members of the banking and underwriting communities that the moral obligation of the State and the concomitant strength of State revenues was the basis for securing a letter of credit which backs-up the Alaska Power Authority's bond anticipation notes, and not the fiscal merits of the projects being financed. This interpretation of the moral obligation is widely held among bond market participants. Many investors and underwriters look through the projects being financed to the moral obligation backing. If a moral obligation pledge is present, they may not be concerned with the financial feasibility of the project, rather, they will assume that State officials have thoroughly assessed the project before granting the moral obligation.

A careful look at the procedure for implementing a call upon the moral obligation pledge reveals that the legislature must appropriate monies from available revenues. In light of the structure of the State revenue system, the value of Alaska's moral obligation pledge has several limitations. The limited sources of State revenue, and the unstable nature of oil prices may make it difficult for the State to allocate substantial amounts to meet moral obligation debt service requirements, especially in the face of other budgetary commitments and obligations. This fact has not gone unnoticed among bankers and underwriters of State moral obligation bonds. For this reason, the existence of the Permanent Fund provides comfort to bond holders. In spite of the State's current financial stability, investors believe that the State would be able to meet its moral obligations, if necessary, through the assets of the Permanent Fund. This is true even though such action could not be taken automatically nor without a change in law.

The State's moral obligation pledge has facilitated the borrowing activities of APA, AIDA, AHFC, and the Municipal Bond Bank. When these public corporations were in their infancy, it is unlikely that they would have been able to borrow from the national credit markets without the State's moral obligation backing due to the absence of a mature, diversified and stable State economy.

For certain programs, such as the APA and the Municipal Bond Bank, the presence of the moral obligation may be necessary for continued borrowing at reasonable interest rates. Other issuers, such as the AHFC, may have established themselves among investors through frequent and sizeable borrowings to the point where the moral obligation is no longer necessary as a marketing tool, nor to obtain lower interest rates. Where it is possible to borrow funds without use of the State's moral obligation pledge, its use should be avoided. When it is necessary to enhance the credit quality of a revenue bond with the moral obligation, it should be applied with discretion and sensitivity to the fact that it will encumber, albeit to an indeterminate degree, the State's overall creditworthiness and may in the future be a burden on the Permanent Fund or other State revenues.

It should be the responsibility of the State Bond Committee to determine the importance of the State's moral obligation to the success of the agency's (or public corporation) borrowing program and its potential impact on the State's creditworthiness. Based upon this analysis, the Committee should recommend whether or not the State should grant its moral obligation. The moral obligation pledge should not be treated as a right, available to most State debt issuers, as it is at present. Rather, it should be an indication to the bond market that, after close scrutiny, the State believes the project meets State objectives and is financially sound.

Moody's Investor Service does not consider the presence of a moral obligation pledge in the assignment of credit ratings to revenue bonds because they believe that the moral obligation itself is fraught with many risks and considerable speculation. Standard & Poor's acknowledges the moral obligation as a component of the security behind a revenue bond, but also acknowledges that it is impossible to determine at what point and under what set of political and economic circumstances meeting the State's moral commitments would be too large a burden to bear. These factors considered, it is evident that the strength or utility of the moral obligation commitment varies in inverse proportion to the frequency or amount of its use. The more heavily it is used, the more diluted it becomes.

Some may suggest that because the moral obligation is interpreted by many investors as tantamount to the State's general obligation pledge, the State should abandon the use of the moral obligation and substitute its full faith and credit pledge. The supposed objective would be the lowest possible borrowing costs which the general obligation pledge would bring. Such a policy change would not be in the best interests of the State. This is due to the fact that the State has specifically identifiable revenues and budgetary allocations which support its general obligation bonds, and the repayment of these bonds has a reasonable sense of predictability since the debt retirement schedule is tailored to the flow of receipts from known oil resources. Burdening the general obligation pledge with what would otherwise have been moral obligation commitments would quickly erode the State's credit rating and drive the cost of borrowing for general public purposes upward. This would occur without a concomitant decrease in the cost of borrowing for the revenue-type bonds because of the imbalance that this type of borrowing would place on the

creditworthiness of the State as a result of adding a large direct obligation to a limited source of revenue.

Capital Planning and Capital Financing

The effectiveness of the State's capital planning process will have very important implications for its future financial condition, since adequate physical facilities and public infrastructure have a major impact on the State's future tax base and its economic development, and, as well, important implications for its credit rating.

For many years, tax-exempt credit analysts have emphasized the significant relationship between a government's financing plan and the creditworthiness of the government's bonds. The importance of this relationship has been reflected in credit ratings assigned to the debt obligations, and in the reception afforded the bonds in the markets. It is especially informative to review comments offered by Moody's Investors Service, Inc., the national credit rating agency, on this subject:

Most governments, however, have recurring needs for (capital) improvements, and consequently must plan for those needs. Even having no plan is, in a sense, planning -- to a municipal bond analyst, it is a plan to meet the problem hit or miss, instead of systematically. The annual preparation of such programs, comprising appropriations for the next year and estimates or projections for the five years following, has been standard practice for well-run (local) governments for nearly a generation now...It (capital improvement program) should be comprehensive in scope of projects covered and should show not only the amount to be spent but also the source of funds -- how much from current budget contributions (taxes, etc.), how much from Federal and State grants, how much from Capital Fund balances carried forward, how much from the sale of new bonds.

Many other credit market analysts have also stressed that careful capital planning and orderly debt execution are essential for meeting the physical needs of a government. The development of a coordinated approach toward the capital budget and debt management programs can improve the credit posture and marketability of debt obligations for issuers of tax-exempt securities. Indeed, a comprehensive capital improvement program and an associated financing plan are important priority-setting devices which indicate to the investment community an astute sense of managerial awareness. Demonstrating keen managerial attention to capital financing is important in Alaska's case because of the developing nature of its economy and the need to allocate scarce resources to projects producing the greatest return on investment. It is important that the State promote capital projects that will encourage the development of a diverse economy that will be able to support the investment in public infrastructure. A comprehensive capital investment program and financing plan will help the State achieve these goals. In formulating such a plan one key element will be the decision to use current revenues, as opposed to bonded indebtedness, to pay for capital investments.

Pay-as-You-Go Vs. Debt Financing

Capital financing decisions typically involve a trade-off between paying for the project through otherwise available current revenues or through the issuance of bonds. Many factors influence this decision, including other demands for current revenues, the type of project to be financed, and the financial costs of either approach. When revenues are tight, there often is little choice between bonding and paying from current revenues; capital projects must be bond-financed unless the government chooses to raise taxes.

If the capital project is expected to generate revenues sufficient to service bonds, it may be fiscally responsible to finance construction through project revenue bonds even if current general revenues are available to cover project costs. Revenue-supported debt does not increase the direct (general obligation) debt burden of a government, and may encourage sound financial management of the particular public enterprise.

One of the final decision-making criteria in the choice between long-term debt and current revenue financing is the anticipated costs of either financing alternative. Other important criteria include the affordability of future debt, as discussed in Chapter Seven. The ultimate financing decision must be based upon a careful assessment of all financial and economic costs. Certain economic conditions tend to favor the use of one or the other technique. Below, we develop a framework for choosing between bond and current revenue financing from an economic and financial perspective. At one extreme will be the "pay-as-you-go" approach, wherein all capital investments are paid for out of current revenues. At the other extreme is the debt financing approach where all long-term investment is financed over a long time period through the issuance of debt. Realistically, most capital improvement budgets will be financed using a combination of the two financing strategies. However, in order to appreciate the trade-offs involved in both approaches, it is useful to look at them as two distinct alternatives.

Arguments for and against "pay-as-you-go" versus borrowing are not based solely on the external economic climate. Other reasons why one or the other method may be preferred are to promote intergenerational equity, i.e., to share the financing burden among current and future taxpayers, or to smooth out the peak cash needs of major capital outlays. The approach taken in this section is to apply a valuation of the savings or costs to individual taxpayers of using either current revenues or borrowing under varying assumptions regarding the probable future course of prices and interest rates versus their current levels.

In periods of prosperity when prices are rising, current-dollar costs are growing, and real demands for investment seem endless, the propensity has been to use the debt market. As the economy slows down, however, and inflation abates, there tends to be a greater reliance on financing fewer projects and doing so through current revenues or taxation. "Taxation" will refer to the "pay-as-you-go" school of thought -- financing investment through current

revenues raised from a government's own sources. It will use the economic and financial consequences to individual taxpayers of the two alternatives as the basis for deciding between the two. Likewise, "debt" will refer to the issuance of a long-term security on which the local government is obligated to make annual debt service payments. The general arguments for each approach will first be presented, followed by a model illustrating the net cost of either approach.

The fundamental characteristic of taxation is the compulsory reduction in income (or wealth) imposed on the individual in order that the government may finance some service or capital investment which, in turn, will yield in the future some addition to real income. Residents of a particular community have little choice (aside from moving) but to pay their annually assessed taxes. In order to finance a capital improvement plan solely through current revenues a government must choose between:

1. undertaking fewer capital projects than if debt were issued because the current budget does not have a sufficient amount of "excess" funds to finance the needed amount of investment; or
2. raising taxes in each year of the construction period by an amount that will cover construction cost.

It is likely that, given a slate of necessary capital investments, deciding to use pay-as-you-go financing from current revenues rather than debt issuance will most frequently entail taking the second alternative of raising taxes.

Borrowing, on the other hand, enables governments to finance public investments without much reduction in the purchasing power of private taxpayers during the period in which the funds are required. Debt service is paid over a period of years, and the effect on the annual budget is minimized in any given period. Thus, current taxes have to be raised only slightly to support higher levels of debt service resulting from a given capital project. But, because of interest payments, a much larger total amount is paid out overall.

From an individual taxpayer's standpoint, the difference between the two alternatives is important. Paying the increased tax to finance the construction forces individuals to forgo using relatively large amounts of their income for alternative purposes for the years that the tax is levied. For states which tax mineral resources rather than incomes, the opportunity cost of not using current revenues for other purposes is borne by its citizens, and also can be viewed as a reduction in real income. The "cost" of this forced reduction in income, what may be viewed as an individual's "time value of money", is short-term interest rates. This assumes that the alternative use for the income paid out in taxes is investment in short-term, highly-liquid, non-risk securities. This is essentially the current-period cost of the use of money devoid of any credit or liquidity risk. For lower-income individuals with no excess income to invest, the time value of money may be higher. Conversely, for individuals who keep their excess income in non-interest-bearing checking accounts, the time-value of money may be lower.

The total cost to the government of the two financing alternatives also varies considerably. This is especially true in times of high tax-exempt interest rates when the sum of required annual debt service payments over the life of an issue may exceed the actual proceeds of an issue by as much as two and one-half times. However, when inflation is expected to be at high levels or productivity is growing, the future dollars paying the debt service will be worth less (or easier to come by) than the dollars when they were borrowed. High growth, therefore, may largely offset the effect of high interest rates by lowering the true cost of borrowing. This ability to repay in cheaper dollars is a major supporting argument for borrowing to finance long-term capital investment. But when inflation or growth are slowing, perhaps to a level half that of the cost of borrowing, the financial arguments for borrowing will require reconsideration.

In order to illustrate a comparison of the two alternatives, a hypothetical project and two financing schemes are presented in Table One. The project under consideration is estimated to cost \$30 million and take three years to complete. The two financing options available are:

-- Taxation -- The government raises taxes on a per-capita basis for each of the three years in the construction period. The model assumes that taxes are levied to cover one-third of the total project cost each year. It is further assumed that there are one million residents for whom taxes will be raised. This alternative results in a per capita burden of \$10 for each of three years.

-- Borrowing -- The government issues 20-year bonds with equal annual debt service payments. The costs of this alternative are presented at interest rates of 8, 9, 10, 11, and 12 percent. To comport with reality, it is also assumed that during the three-year construction period, unused proceeds from the bond sale are invested in securities paying the same rate as on the long-term borrowing. Such investment earnings are used to reduce the debt service payments.

Table 6.1 presents the annual costs of the taxation alternative and the five borrowing alternatives. The annual figures are on a per capita basis. In order to compare the total costs of either alternative, it is necessary to look at the discounted or present value of the annual pay-as-you-go tax payment and annual debt service under the five borrowing assumptions. These present value figures are presented in Table 6.2.

It should be noted that the per capita figures assume a constant population base of one million persons throughout the 20 years of the example. If population over this time period grows or, indeed, shrinks, the per capita figures would also decline or grow.

For evaluation purposes, the rate at which the two streams of payments are discounted will not necessarily be the same. In the taxation case, the

Table 6.1

Pay As You Go versus Debt Financing

Assumptions:

Cost of Capital Improvements:	30000000
Length of Project:	3
Population:	1000000
Term of Bond:	20
Annual Tax Increase per capita:	10

Interest Rate:	8.00	9.00	10.00	11.00	12.00
Annual Debt Service:	3055566	3286394	3523789	3767269	4016363 (2)
Per Cap.	3.06	3.29	3.52	3.77	4.02

YEAR	TAX	DEBT	DEBT	DEBT	DEBT	DEBT
1	10	1.06	1.04	1.02	1.02	1.02
2	10	1.86	1.94	2.02	2.12	2.22
3	10	2.66	2.84	3.02	3.22	3.42
4		3.06	3.29	3.52	3.77	4.02
5		3.06	3.29	3.52	3.77	4.02
6		3.06	3.29	3.52	3.77	4.02
7		3.06	3.29	3.52	3.77	4.02
8		3.06	3.29	3.52	3.77	4.02
9		3.06	3.29	3.52	3.77	4.02
10		3.06	3.29	3.52	3.77	4.02
11		3.06	3.29	3.52	3.77	4.02
12		3.06	3.29	3.52	3.77	4.02
13		3.06	3.29	3.52	3.77	4.02
14		3.06	3.29	3.52	3.77	4.02
15		3.06	3.29	3.52	3.77	4.02
16		3.06	3.29	3.52	3.77	4.02
17		3.06	3.29	3.52	3.77	4.02
18		3.06	3.29	3.52	3.77	4.02
19		3.06	3.29	3.52	3.77	4.02
20		3.06	3.29	3.52	3.77	4.02
TOTAL COST:	30.00	57.51	61.68	65.98	70.40	74.93
Cost without Arbitrage Earnings:		61.11	65.73	70.48	75.35	80.33

Debt service calculation for years 1,2,3 assumes arbitrage earnings at a rate equal to the bond interest rate. Drawdown of the construction fund takesplace at a rate of 33.3%, 33.3% & 33.3% of the total bond issue.

TABLE 6.2: Present Value of Financing Alternatives on a Per Capita Basis

	3-YEAR TAX -----	LONG-TERM FINANCING ALTERNATIVE				
		8 % Coupon	9 % Coupon	10 % Coupon	11 % Coupon	12 % Coupon
Dollar Cost:	30	58	62	66	70	75
Discount Rate:						
2	29	46	50	53	57	60
4	28	38	41	44	47	50
6	27	32	34	36	39	41
8	26	27	29	31	33	35
10	25	23	24	26	28	30
12	24	20	21	23	24	25

timeframe is much shorter (3 years) than in the borrowing alternative (20 years), and it is assumed that income or short-term savings will actually be reduced in order to pay the tax. As was discussed above, the proxy for the near-term time value of money in this case is risk-free short-term interest rates.

For long-term debt, however, there is little annual reduction in income, and it occurs over a long period of time. A more appropriate discount rate would appear to be the expected average rate of nominal growth in the economy over the 20 years. For example, 3 percent growth in GNP coupled with a 9 percent of inflation yields a nominal growth rate of slightly over 12 percent. Looking at the discounted or present values (P.V.) in Table 6.2 for the five long-term financing alternatives, it is clear that as the nominal growth rate (in the column headed "Discount Rate") rises from zero (total dollar cost) to 12 percent, the P.V. cost of borrowing drops dramatically. Under the 12 percent coupon-rate hypothesis, the P.V. cost drops from \$75 (at a zero discount) to \$25 (at a 12 percent discount) on a per capita basis.

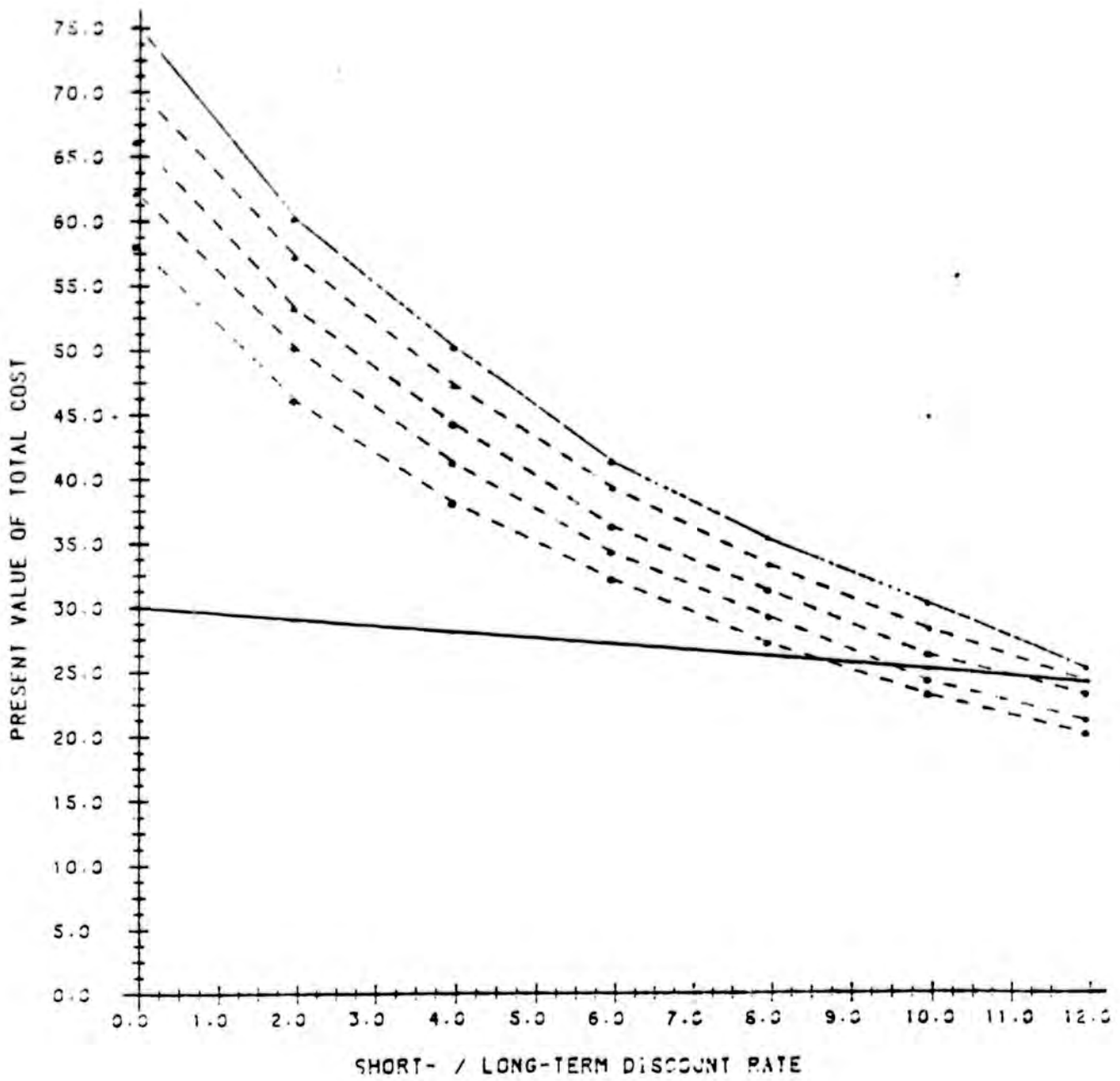
Assuming a short-term time value of money equal to 8 percent (close to current levels of low-risk money market interest rates), the P.V. cost per capita of raising taxes over three years for the project is \$26 (see Table 6.2). The long-term borrowing alternatives that result in a lower P.V. cost than \$26 can be depicted using the graph shown in Exhibit 6.3. Each line of the graph shows the present value of various short- and long-term financing alternatives under varying discount rate assumptions.

The graph facilitates comparison of the total P.V. cost of the financing alternatives. For example, at an 8 percent short-term discount rate, the combinations of long-term discount rates and coupon rates that yield a lower P.V. fall in the shaded area shown in Exhibit 6.4. Generally, the long-term discount rate must exceed the borrowing coupon rate to produce a lower P.V. For example, if the long-term discount rate is 12 percent and the coupon rate is 11 percent, the P.V. per capita is \$24 — it is cheaper to borrow than it is to use pay-as-you-go financing.

Using the discounted values as a guide, it can be seen that long-term borrowing is a more competitive alternative to current taxation when expected inflation and/or real growth in the economy are relatively high. Borrowing is, however, always relatively more attractive at lower interest rates, whatever the expected rate of growth in the economy. However, the figures show that changing assumptions on the nominal growth rate has a greater impact on the P.V. cost of borrowing than does the coupon interest rate on the bonds. As the level of future expected inflation plus growth in GNP falls toward 5 percent, the borrowing alternative becomes much more expensive in present value terms, whatever the level of short-term discount rates.

It might be noted that if the project were to be paid for in one year (rather than over three), the short-term P.V. line in Exhibit 6.4 would shift to become horizontal at \$30 per capita. At this point borrowing becomes more attractive at higher coupon rates and lower discount rates than before. If, however, one attempts to extend the pay-as-you-go payment period beyond a

Exhibit 6.3
 PRESENT VALUE OF DEBT AND TAX FINANCING ALTERNATIVES



relatively short period (for example, to five years), the above cost differentials become much less significant. This is because the community would delay having the use of the facility (which it is assumed to enjoy within 3 years in the above exercise and such things as prices and interest rate risks transform the short-term "consumption" choice into a long-term "investment" phenomenon. It would no longer be valid to differentiate between long- and short-term discount rates.

It is important to note that the examples given are dependent on the particular assumptions regarding project build-out, structure of principal repayments, growth in population, and so forth, and the trade-offs depicted will be somewhat altered under differing assumptions.

In summary, the lower the interest coupon on long-term bonds in relation to the expected rate of long-term nominal growth in the economy, the more desirable it is to borrow.

The lower the interest coupon on long-term bonds in relation to short-term discount rates used for the taxation alternative, the more desirable it is to borrow.

The higher the long-term discount rate in relation to the short-term discount rate, the more desirable it is to borrow for any given coupon rate.

Generally, the use of long-term borrowing will be more desirable if the long-term coupon rate is equal to or less than the short-term rate and/or less than the long-term expected nominal growth rate.

Financial Reporting

In addition to capital planning and capital financing, financial reporting is an important element in the total debt management picture. States that use an accounting system that conforms to, and is consistent with, generally accepted accounting principles (GAAP) benefit in several ways. Because GAAP financial reports require that the accounts and the annual reports reflect the unified accounting entity -- which in Alaska's case would be likely to include all of its public corporate borrowers -- in addition to the State itself, preparation of GAAP would force the State to take the global view that is necessary to manage debt and the State's entire finances effectively. The footnotes to a GAAP-based financial report regarding governmental debt would alone result in a much more comprehensive picture of the State's indebtedness than is currently provided in the State's Annual Financial Report or the other fine publications of the Departments of Administration and Revenue.

Investors and the credit rating agencies also prefer to see GAAP financial statements when assessing credit quality. Standard & Poor's requests that financial statements submitted for review conform to GAAP, and they estimate that governmental borrowers who do not conform to GAAP pay a penalty of between 0.125 and 0.25 percentage points in ultimate interest rates¹⁴.

According to the Maryland State Comptroller, the conversion to GAAP by the State in 1975 has been a contributing factor to the State's ability to maintain a very strong AAA credit rating¹⁵. The States of New York, Delaware, Iowa, and Tennessee are among those using or in the stages of conversion into GAAP accounting.

Last year, Standard & Poor's placed the State of Florida's general obligation bonds on CreditWatch -- an early warning system alerting investors to changes in credit quality -- because of several factors including a decline in financial position and weak accounting practices. Because the State's records were not kept on a GAAP basis, there was no way, without a site visit, for Standard & Poor's to ascertain the State's true financial position. Florida, whose debt has been removed from CreditWatch, is now working toward a GAAP-based financial report for Statewide financial operations.¹⁶

It is recommended that the State consider converting its annual financial reports to generally accepted accounting principles. Such action will provide the State with vital information on its financial condition, improve financial management, and will be looked upon favorably by investors in the State's bonds.

Debt Ceilings and Limits

A legislatively mandated limit on state debt issuance is often suggested as the simple solution to over-indebtedness. The most convincing argument for a debt ceiling is that it would serve as a device which forces public policy makers to assess the level of outstanding debt on a regular basis in a formalized manner. In the absence of this type of limitation, some fear, bonded debt will grow at uncontrolled paces. This certainly is something to be fearful of since it implies unlimited spending for capital projects with little serious evaluation of need or the necessity for deciding priorities among alternative projects. In order for debt ceilings to be affective in controlling debt issuance they must be linked in some manner to resources and ability to pay. Obviously, both resources and ability to pay are constantly changing and, accordingly, any debt ceiling must be flexible. One need only observe the apparent ineffectiveness of the federal debt limit to grasp the futility of using an absolute debt ceiling to control the amount of debt. At the federal level, it has become necessary for the Congress to change the ceiling at frequent intervals in order to provide funds for financing of the huge budgetary deficit. This inherent contradiction, raising a debt ceiling to finance going further into debt, suggests that an absolute ceiling on debt issuance is of little usefulness.

This is not to say that debt limits or ceilings are always inappropriate. They are most appropriate for smaller units of government that have relatively simple revenue and expenditure structures. At the state level of government, where the revenue structure is usually more complex and the expenditure pattern is quite diversified, the application of a single debt ceiling would be futile. When one considers the scope of Alaska's State government, including its general budgetary operations, local assistance programs, and the various independent agencies and corporations, it becomes impractical to establish a debt limit that will have widespread applicability.

The standards and ceiling-setting methodology that would apply to general obligation debt are unrelated to the criteria that would be appropriate in setting a debt limit for AHFC mortgage revenue bonds, or the borrowings of AIDA, APA, the Bond Bank and others. Thus, if ceilings were to be used it would be necessary to establish a discrete limit for each category of debt. Even if this could be accomplished, and such an exercise would entail considerable technical analyses and require complex fiscal judgments, the ceiling, in order to be on any value, would have to be reexamined periodically and changed as appropriate to reflect the changing character of resources and ability to pay.

Furthermore, a debt limit or ceiling is a second-best alternative to control the impact of debt on governmental budgets. Bonded indebtedness works its way into the State's fiscal structure not as an aggregate sum but rather through semi-annual payments of debt service. Hence, the length of the term of the debt, the timing of the maturity of principal, and the annual interest rate all combine to reflect the true "debt burden". An absolute ceiling on outstanding debt does not reflect the terms of the bonds outstanding, the principal retirement schedule, or the interest rate. Debt ceilings are, therefore, only approximations of debt burden.

Exhibit 6.5
Debt Ceilings

Pro

- Fiscally conservative: puts constraints on changing political environment.
- Brings debt management closer to the legislators because laws must be changed to change ceiling.
- Sets a measurable standard so that debt managers know where they stand in relation to debt issues.
- Apparent political accountability and fiscal responsibility: visible affordability limit.
- Device to force policy makers to come to grips with priority setting for projects to be debt financed.
- Ceilings force elected officials to a day of reckoning with the amount of total debt on a periodic basis.

Con

- Ceiling standards are set in today's economy whereas future economy will be source of repayment.
- Encourages debt manipulation to get around ceiling.
- State debt ceilings do not reflect margins for overlapping debt or "participation" debt.
- Ceilings are usually arbitrary; i.e., the standard of measurement is difficult to define (income, assessable base, percent of revenue, per capita, etc.) and determine.
- Ceiling is an "illusion" because it only reflects principal portion of debt and the interest impact may vary from 25% to 150% of the debt itself.
- Ceilings usually inflexible and difficult to change when circumstances vary.
- Ceilings for one debt category are usually different from those for another (general obligation vs. revenue bonds).
- Ceilings usually bear no relationship to capital requirements; ceiling may cause legitimate needs for capital facilities to go unmet because peak has been reached.

In discussion with officials from the credit rating agencies concerning the imposition of debt limits for states, it was determined that they believe debt limits may have a more negative than positive effect on debt management and should be avoided or be of such a flexible nature that they are virtually meaningless. This interpretation is due to the nature of debt limits; they are usually set at some arbitrary level, based on easily measurable criteria, and do not reflect the actual capital "needs" of the state. Too much emphasis, therefore, may be placed on the size of the debt, which is only one of the criteria for a favorable debt posture, and too little emphasis may be placed on the reasons for debt — the actual capital needs of the state as perceived by the executive and legislative bodies. It is for this reason — important capital needs may be postponed indefinitely — that the credit rating agencies believe limitations on the absolute level of state debt issuance should be avoided. The amount of State debt issuance should not be determined artificially or based solely upon the desire for favorable interest rates or high credit ratings. Rather, debt issuance should be based on a thorough assessment of capital needs and the ability to pay for them.

A summary of the positive and negative attributes of debt ceilings discussed above is presented in Exhibit 6.5. While we do not believe that Alaska should institute a ceiling on the amount of State debt issuance, it is essential that the State exercise some degree of oversight and control of debt issuance by the State and its public corporations. The responsibility for oversight should be given to the State Bond Committee, and be part of its effort to follow and analyze the impact of debt issuance on the State. The State Bond Committee should develop guidelines for assessing debt capacity and affordability of general obligation debt and for contingent liabilities such as moral obligation debt. Using fiscal standards and criteria as outlined in the chapter on affordability, and as refined over time, the Committee should evaluate each debt issuance proposal in light of current trends and circumstances and determine the impact of each debt financing upon the State's ability to repay, its ability to meet contingent liabilities in the future, and the effect on the overall financial condition of the State and its agencies and corporations. These guidelines will serve the purposes of a legislatively mandated limit on debt issuance.

Interest Rate Ceilings

Although not directly related to a ceiling on debt issuance, a ceiling on the interest rate that State obligations may carry can also impair a debt management program. The State's current interest rate ceiling is a floating rate equal to the higher of 110 percent of the Bond Buyer 20-bond index for the week preceding the bond sale or 11 percent. While this type of ceiling allows for greater flexibility than the fixed-rate of 10 percent that it replaced, the State may wish to consider removal of the legislative interest rate ceiling altogether. To improve the flexibility of the the State's debt management, an administratively established ceiling -- determined by the State Bond Committee -- is preferred to the more rigid, legislatively established ceiling.

True Interest Cost vs. Net Interest Cost:
Alternative Methods to Determine Lowest Bid

In both negotiated and competitive bond sales, accurate determination of the cost of borrowing is essential. In a negotiated sale this is important as the basis for an informed decision and for debt management purposes. In a competitive sale the determination of interest costs on competing bids is crucial because the bid producing the lowest interest cost — as defined in the notice of sale — will be selected. Although this important task appears on the surface to be relatively straightforward, in practice it is one area of debt management in which significant and costly errors are often made.

The two methods currently in use to determine the lowest bid on a competitive municipal bond sale and the total interest cost of a negotiated bond sale are Net Interest Cost (NIC) and True Interest Cost (TIC). NIC is the traditional way of computing the average interest cost of an entire issue, largely due to the simplicity of its calculation; NIC can be calculated by hand without the assistance of a computer. The computation of TIC is more difficult, requiring the use of a sophisticated computer program. However, the two methods do not produce identical results. The limitations of the NIC method have caused some states and municipalities to use TIC to award a bond sale instead of NIC.

The two methods differ in the way the coupon interest payments on a serial bond are valued. The NIC calculation gives equal weight to each interest payment regardless of the time period in which it is paid. One dollar paid in year one is valued the same as one dollar paid in the twentieth year. In contrast, TIC takes account of the time value of money by treating interest payments in present value terms. Because a dollar paid out in five years is worth more than a dollar paid out in fifteen years, TIC gives greater weight to earlier payments than to later payments of equal dollar magnitude.

The formula for computing NIC is as follows:

$$\text{NIC} = \frac{\text{Total interest payments} + \text{discount (or - premium)}}{\text{Bond year dollars (amount of bonds X years they are outstanding)}}$$

It is obvious that total interest payments are lumped together with no attention to the time period in which they are paid. TIC, on the other hand, is found by computing the interest rate that will discount all future debt service payments by the issuer (principal and interest) to a present value equal to the bond proceeds received by the issuer. TIC is analogous to the internal rate of return calculation used in private-sector financial decisions to analyze the effective cost or benefit from a certain investment.

Besides being a more accurate indicator of the true costs of a bond issue, awarding bids on a TIC-basis has other advantages. Investors generally prefer to receive a dollar interest payment sooner rather than later and are willing to pay more for the higher early coupon payment. Underwriters have an incentive, therefore, to place high coupons at the front (in the early maturities) of an issue in order to improve their spread and the marketability of the bonds. This

Exhibit 6.6

Alternative Methods to Compute Effective Interest Costs
 Net Interest Cost vs. True Interest Cost

<u>Years to Maturity</u>	<u>Par Value</u>	<u>BID A</u>		<u>BID B</u>	
		<u>Coupon Rate</u>	<u>Annual Debt Service</u>	<u>Coupon Rate</u>	<u>Annual Debt Service</u>
1	1,000	12.0%	1,190	2.0%	1,130
2	1,000	3.0%	1,070	5.0%	1,110
3	<u>1,000</u>	4.0%	<u>1,040</u>	6.0%	<u>1,060</u>
TOTAL	3,000		3,300		3,300

NIC (Bid A): 5.00%
 TIC (Bid A): 5.04%

NIC (Bid B): 5.00%
 TIC (Bid B): 4.98%

practice is known as "frontloading". At the same time, governments prefer to pay debt service later rather than sooner and would favor the largest coupon rates on later maturities. TIC helps the government issuer because under TIC computation there is no incentive to front-load interest coupons as TIC would be higher than NIC.

The following example illustrates the difference between TIC and NIC computation of two hypothetical bids on a three-year serial issue of \$3,000. As can be seen in Figure 6.6, both Bid A and Bid B resulted in identical NIC to the issuer. If bids were awarded on a NIC basis, it would be impossible to choose between the two. This is because the calculation of NIC took into consideration only the aggregate amount of debt service which is the same under both bids (\$3,000). Upon closer examination it can be seen that Bid A is front-loaded for it contains an interest coupon of 12 percent in year one. While this may help the underwriter, it forces the government to make unnecessarily high debt service payments in the first year. This bid compensates for the high initial coupon by placing unusually low coupons on bonds maturing in years two and three. This brings NIC down to a competitive level (5 percent in this case), however, the true cost of payments in the later years is less than in year one.

If TIC were used as the basis for awarding the bids, the time value of the respective payments would be recognized and the high coupon of Bid A would result in a TIC higher than NIC. Similarly, the more "efficient" Bid B, with a gradual increase in coupon rates, would result in a TIC lower than NIC. Using TIC as the criterion, the winning bid would be Bid B resulting in lower true interest cost to the government over the life of the issue.

Neither the Alaska State Bonding Act (AS 37.15) nor the State statutes regarding municipal debt (AS 29.58) specify the method by which the effective interest rate must be calculated. However, the State, and most municipalities, have chosen to use the NIC method to compare alternative bids at competitive sale. This method may not be in the best interests of the State because, as shown above, the winning bid on a NIC basis does not necessarily produce the lowest TIC. For this reason, we recommend that the State Bond Committee review the current procedures for awarding the State's general obligation bond issues, and that municipalities be encouraged to do so as well, with a view toward awarding future bond sales on a TIC basis.

The only true constraint which the State places on bidding is that the spread between the highest and lowest interest coupon not exceed two percentage points. This does not prevent the front-loading of interest coupons as is evident from the winning bid presented in Exhibit 2.5 (page 46). Here, the winning bid was front-loaded because the highest coupon rates, 8 3/4 percent, were placed on bonds maturing in the earliest years, with descending coupon rates towards the later years where the time value of money is lower. This can be prevented by the use of a non-descending order constraint on underwriter bidding which requires the submission of bids that increase with maturity. A non-descending order constraint used in conjunction with the TIC method of computing the lowest cost bid assures that coupons will not be front-loaded, and that the winning bid truly results in the lowest cost to the State.

Differences Between Competitive and Negotiated Bond Sales

Alaska's State Bonding Act requires that the State sell its general obligation debt in a competitive manner (see Appendix). As described in Chapter Two, the sale of bonds at competitive bid means that the bond sale is completely structured as to its terms and conditions by the time the notice of sale inviting prospective purchasers to come forward and submit a bid to buy the bonds is published. The award of purchase is made to that underwriting firm, or syndicate of firms, offering the lowest interest cost. Because the winning underwriter is not known until the bids are opened, there is no opportunity for the underwriter to "pre-sell" the bond issue. All sales activity and structuring of the reoffering yields occurs after the sale is awarded.

State-level revenue bond issuers, and Alaska's localities are able to choose between the competitive and the negotiated sale approach in determining the proper method of sale. The sale of bonds through negotiation means that the bond sale itself, the terms, conditions, and interest rate is negotiated by the issuer of the bonds and an underwriting firm, or syndicate of firms, that is preselected to buy the bonds. A competitive procedure involving a formal request for proposals is often used in the selection of the negotiating underwriter as described later in this chapter (page 188). The underwriter or syndicate is generally chosen based upon prior experience in selling the particular entity's bonds and the ability to reach the broadest base of investors. Before the final terms of the sale are decided, the negotiating underwriter will test the market by soliciting investor interest during pre-sale trading. This procedure is described on page 190. Once the final interest rates are determined, the last element of the negotiation process is the gross underwriting spread. The spread represents the underwriter's compensation. Its composition is described on page 190.

Customarily, about 80 percent of the volume of general obligation bonds is sold using competitive bidding, and 70 percent of the volume of revenue bonds is sold using negotiated sales. The reason for this relationship between type of bond and method of sale is that general obligation bonds are usually issued by a general purpose governmental entity for a traditional public purpose, which is a relatively straightforward means of raising money. It is important to the firm or syndicate winning a competitive bid to have an easily understood product that can be quickly and readily reoffered to the ultimate investor.

On the other hand, revenue bonds are usually characterized by a repayment pledge consisting of a complex revenue stream formula, they frequently carry a unique set of terms and conditions as to their maturity and security structure, and they are usually issued by a special entity of a government for an often novel purpose. Due to their complexity they are not easily understood, nor are they easily marketed without their special-story being pre-sold through the firm negotiating to buy the bonds.

Accordingly, there is a place for both techniques of selling bonds in a prudent debt management strategy. Indeed, there may exist special conditions which would necessitate or justify even the sale of general obligation bonds

through a negotiated sale, although there are thirty-seven states, including Alaska, that require the sale of state general obligation bonds at competitive bid. For example, if the credit quality of a general obligation issuer is severely impaired, such as in the case of New York, Detroit, Cleveland, or Camden, then the negotiated sale of full faith and credit bonds would be appropriate in order to assure that the purchase can be executed successfully, that the "special-story" is properly told, and that the money is raised.

As a general rule, the costs of borrowing (underwriting spread and the interest cost) are less when the competitive approach is used for general obligation bond sales. Various studies have determined that savings in the range of 10 to 25 basis points (.10 to .25 percent) are achieved, overall, and on balance, when general obligation bonds are sold competitively. It must be kept in mind, however, that some bonds are not possible to offer for sale competitively because their uniqueness preempts easy market access. The interest rates obtained from a competitive sale could be less favorable than those from a negotiated sale.

There are several general principles that can be looked to in determining whether a particular bond sale might best be sold by either competitive bid or negotiation. These guidelines are discussed below:

1. Condition of the market -- in a strong market where interest rates are stable and there is substantial investor demand for tax-exempt bonds, the tendency should be toward competitive sales. A weak market where interest rates are fluctuating daily and/or investor interest is unknown may result in the most effective sale through negotiation. If market conditions are erratic and the timing ; if market conditions are reasonably stable and the fluctuation in interest rates is expected to be within an acceptable ban between the announcement and the sale, then competitive bidding is appropriate.

2. Novelty of the financing approach -- if the issuer is an established "name" in the marketplace, then a competitive sale is possible; if the issuer is an infrequent name in the market, or has not previously sold debt at all, then a negotiated sale is appropriate. Generally, if there are precedents for the financing approach, use competitive; if not, use negotiated.

3. Transaction characteristics -- if the structure of the terms and conditions and the security backing up the bonds is reasonably straightforward, the bonds can be sold competitively; if the bond characteristics are complex, then a negotiated sale is proper. If the type or purpose of the bond is not especially unique, then it can be sold competitively; if substantial market or investor education is necessary, then a negotiated sale would be best.

4. Perceived creditworthiness -- if either the issue or the issuer offers a widely understood credit structure, there are no problems with the credit quality, and the disclosures are routine, then the bond can be sold competitively; if investor concerns must be dealt with or if the credit quality is subject to considerable economic uncertainty, then it is preferable to negotiate the sale.

5. Depth of technical participation -- if a large amount of pre-sale documentation is necessary, such as complex covenants or financial analyses, and outside expertise is necessary, then a negotiated sale is appropriate. Likewise if internal staff capacity is lacking, a negotiated sale may be preferable since pre-sale particulars would be handled by the firm selected to carry out the negotiation. On the other hand, if pre-sale activity is routine, or if staff capacity is available and experienced, a competitive sale may be entirely feasible. A negotiated sale is most likely in cases where there is direct participation by the ultimate investor, such as in the case of a private placement of the bond.

6. Cost effectiveness -- the sensitivity of the bond to interest rates may necessitate a negotiated sale because the timing of bringing the bond to market can be controlled, and this minimizes the risk of random entry which is characteristic of a competitive sale. A competitive sale, on the other hand, usually results in a lower spread or fee which is paid to the firm buying and marketing the bonds.

The decision between the use of competitive or negotiated sales is one of the most important in debt management; however, there are no right answers. The final decision on bringing a bond sale to market by competitive bid or through negotiation must take into account the general principles described above. Each sale warrants an independent decision based upon the characteristics of the bond sale. In instances where a negotiated sale is used, the assistance of a financial advisor is important to represent the issuer during the negotiation process.

It appears that the tax-exempt bonds of the AHFC issued for its well-established programs during periods of favorable market conditions are likely candidates for sale by competitive bid. This observation is based upon the demonstrable market access the AHFC has achieved, its well-known, important role as the dominant mortgage lender in the State, the strength of its security structure and credit rating, and its frequent, sizeable borrowings. Only the most recent sales of State guaranteed veterans housing bonds have been sold competitively, due to the competitive sale requirement on State general obligation bonds.

Selection, Use, and Compensation of Financial Advisors and Underwriters

When bonded indebtedness is sold, a fixed-cost contract is established that will be valid for many future years. It is important, therefore, that the interest rate payable on the bonds and any bond covenants result in the lowest possible cost to the issuer. Because of the dynamics and volatility of interest rates, the shifting objectives of bond buyers, and the variety of funding sources and methods that are available it is essential that issuers obtain the most current expert advice when structuring and marketing a bond sale. A financial advisor is a specialist who is able to assist issuers with knowledge of current trends and market conditions, and the bond issuance process in general. An underwriter is a representative of an investment or commercial banking firm that acts as the intermediary between the issuer and the ultimate purchaser of the bonds.

The Use of a Financial Advisor

The services of a financial advisor will vary, depending upon such factors as the nature and size of the bond issuer, the frequency with which bonds are issued, and the competence level of the government's own staff in the debt field. Services commonly provided may include: developing a financial plan, assisting in securing voter approval, designing the features of the bond issue, and assisting in marketing the bonds. Other areas in which a financial advisor can be of assistance are:

- o choosing the type of security to pledge and the credit market position to be accorded the debt;
- o presentation to the rating agencies;
- o deciding upon the timing of the sale;
- o preparing the official statement;
- o selecting and evaluating bond counsel services;
- o assessing the probable range of interest costs for alternative means of financing;
- o analysing pay-as-you-go vs. bond financing;
- o commenting on the reasonableness of fees for other specialized services;
- o assessing the suitability of fees for the underwriters;
- o designing call provisions appropriate for the issue;
- o assuring conformance to bidding requirements and other terms of sale are met;
- o conducting negotiated sales;
- o evaluating bids on a competitive sale; and
- o evaluating the performance of members of the syndicate in negotiated financings.

Professional assistance in each of these phases can improve an issuer's chances of securing a favorable credit rating and obtaining lower interest costs.

State governments, which frequently issue debt, can do most of the preparation for the sale of general obligation bonds with their own in-house staff. Thus, Alaska may use the financial advisor only in technical areas, such as timing the issuance of the bonds, constructing the maturity schedule, and presenting the State's credit to the rating agencies. Other governments benefit most from the services of a financial advisor if they are infrequent users of debt or if a limited liability or revenue bond is being issued. A limited liability or revenue bond is more complex than a general obligation issue and, as such, requires special assistance. Financial advisors are also important in a negotiated sale to represent the issuer in the transaction.

There are three types of firms which provide financial advisory services:

1. investment banking firms;
2. commercial banking firms; and
3. independent consultants who do not trade in municipal bonds.

The first two sources, investment banking firms and the municipal departments of commercial banks trading in bonds, may provide financial advice for a fee or, as is often the case, they will not directly charge for services in exchange for the exclusive right to purchase the bonds without competitive bidding through a negotiated sale. These advisor's services are often paid for out of its profit (a component of the underwriting spread, described below) made in reselling the bonds. Alternatively, the public finance department of one of these firms may be hired to provide financial advice independent of underwriting the bonds. The State of Alaska currently follows this approach because its financial advisor is also an investment banking firm and is not paid from the underwriter's spread. In the later case, compensation should be based upon the services provided.

The third source of assistance is the independent consultant who does not trade in municipal bonds but, for a fee, agrees to help plan, design, and market the issue. The issue can be sold at a public sale to the lowest bidder, to a third party in a privately negotiated sale, or through a negotiated underwriting with investment bankers. Independent advisors typically provide technical assistance only; they do not buy, sell, or trade tax-exempt securities nor do their fees derive from such activity. Since a conflict of interest may arise when the same firm provides advice on the structuring of tax-exempt bond issue, on the one hand, and then markets the same bond issue, some governments as a matter of policy elect to separate the advisory function from the underwriting function. This can be accomplished either by contractually prohibiting the advisor from an active role or participation in the buying or trading of the government's securities in the primary market during such period as the firm acts as advisor, or by utilizing the services of an independent financial advisor. The Alaska State Bond Act (AS 37.15) prohibits firms which provide financial advice under contract to the State from bidding on or otherwise participating in an underwriting syndicate which purchases the bonds. Furthermore, AHFC and the Municipal Bond Bank preclude their advisors, because they currently are

investment banking firms, from an underwriting role on bond issues for which the firms serve as advisor. These are responsible practices and should be continued.

Selection of Financial Advisors

The generally preferred method of selecting firms to provide financial advice is to solicit proposals from as diverse a body of potential firms as possible. A Request for Proposals (RFP) should be written and sent to those advisors who have the general qualifications to do the work. Several sources of assistance are available in identifying financial advisors to whom the RFP can be sent are:

1. state and national associations of governmental units or public officials;
2. governments in the region which have had extensive experience with fiscal advisors; and
3. Directory of Municipal Bond Dealers of the U.S., which lists both dealers and municipal finance consultants. This is prepared annually by the Bond Buyer. Note that this directory does not include all financial advisors and should only be used as a supplement to firms otherwise identified. Advisors are listed by state locations, but generally serve a national clientele.

The RFP for consulting services should cover all the particular job requirements. On the basis of the proposals received, the state government can then decide on the most qualified fiscal advisor and write a contract for the work. Alaska has generally used the RFP approach in selecting advisors and appears to evaluate responses and make¹⁸ contract awards in a manner that is consistent with sound business practices.

Compensation of Financial Advisors

The fee paid an independent advisor can be structured as fixed, hourly compensation, a minimum guarantee (or retainer) plus an hourly amount, or a flat fee based upon an estimate of necessary services. The compensation for financial advice should be based upon the services provided, regardless of whether an underwriting firm or an independent firm is providing these services, and not upon the size of the bond sale (amount of issue) or the successful delivery of the bonds. Tying the advisor's compensation to the amount of bonds sold or to the successful delivery of the bonds builds in an unnecessary risk of conflict of interest. Obviously, the quality, motivation, and impartiality of advice might be questioned if the advisor's compensation is directly related to either the amount of bonds or to the completion of the sale. For example, it may not be in the issuer's best interests to finance a certain project through the sale of bonds, or to enter the market at a period of high interest rates; however, a financial advisor whose compensation depends upon the successful

completion of bond sales may not recommend alternative financing techniques, such as using current revenues, or postponement of the bond sale.

The industry standard, however, has been to calculate compensation as a certain percentage of the amount of bonds sold (for example, \$1 per \$1,000 of bonds sold or .1 percent). This standard is due to the preponderance of commercial and investment banking firms that also act as financial advisors. These firms are accustomed to payment through the underwriting spread and the charge per bond for financial advice is similar to this method. However, independent financial advisory firms, and certain investment banks, often charge hourly rates, just as do many bond counsels and other professionals, regardless of the amount of bonds sold. Although the work required to advise on a \$100 million bond sale is generally greater than on a \$10 million sale, the level of effort required can be estimated in advance, making it unnecessary to compensate advisors on a percentage basis.

In our review of selected financial advisory (and bond counsel) contracts, we noted that compensation of advisors to the State and its agencies has historically been tied to a rate per bond or a fixed percentage of the principal amount sold. Such a method of compensating those providing financial and other advice may not be in the State's best interest. The State should review its existing financial advisory contracts to determine the method of compensation used and seek to provide for compensation arrangements that do not encourage situations where conflicts may arise between advisory services and the payment thereof. Flat fee or hourly compensation is most appropriate for professional and impartial financial advice.

Compensation and Use of Negotiating Underwriter

In a competitive bond sale the underwriting firm which purchases the issuer's bonds is the firm whose bid results in the lowest overall borrowing cost to the State. If for whatever reason (as discussed above) the sale is to be negotiated, the underwriting firms or syndicate of firms must be selected in advance of the sale by criteria different from a competitive sale. One method of selection is to solicit proposals from underwriting firms detailing their expertise in selling and structuring the type of bonds to be sold. Factors to consider when evaluating negotiating underwriters are described above on page xxx.

Underwriters are compensated by the "spread" between what they pay the issuing government for its bonds and the price at which they are able to re-sell the bonds to investors. This is true of both competitive and negotiated underwritings. However, in a negotiated sale, the spread is negotiated along with the terms of sale (maturity structure, coupon rates). In a competitive sale, the spread is included in the price and interest rates bid for the bonds.

The syndicate divides the spread among four purposes. First, a provision will be made for expenses which are incurred by the syndicate in the form of

bills from other parties. Second, the managing underwriters will receive a management fee for putting the bond issue together and bringing it to market. These two components compensate the underwriter for any financial advice provided in conjunction with the issue; however, if a firm independent from the transaction provides this advice, its fee will not be included in the spread. Third, a selling concession (often called a "take-down allowance") will be paid to syndicate members in proportion to the amount of bonds sold by each. The selling concession is the source of funds from which the individual salesmen are compensated for their efforts. Fourth, the underwriting profit will be divided among members of the syndicate in proportion to the underwriting participation taken by each firm at the time of the purchase of the bonds.

The expenses customarily incurred by the underwriting syndicate, which will be passed on to the issuer in the spread are:

- o Legal fees of underwriter's counsel;
- o Certain printing costs for syndicate documents such as the agreement among underwriters, bond purchase agreement, institutional lists, blue sky survey, and legal investment memorandum, letter of instructions, etc.;
- o Expenses of advertising for the bond issue, both presale ads and the final "tombstone" ad;
- o Costs of securing a day loan and/or Federal funds to pay for the bonds at the closing;
- o Reasonable computer costs for computation of debt service schedules, performing cash flow analysis, and calculating net interest cost for the bond issue;
- o Out-of-pocket expenses for travel, lodging and meals incurred by the managing underwriters;
- o Communications expenses such as telegraphic notice to syndicate members of pricing information; and
- o Certain other minor expenses relating to the marketing and delivery of the bonds.

Normally, neither the syndicate nor the managing underwriters undertake to pay the following expenses. These costs must generally be covered by the issuer.

- o Fees of bond counsel;

- o Costs of printing of the bond resolution, final official statements, and other legal documentation for the transaction;
- o Fees of auditors of the issuer; or
- o Fees of independent financial advisors.

The procedure in a negotiated bond sale normally follows along the following lines. When the bond issue is ready for sale, the underwriter will present a preliminary bond purchase proposal to the issuer. The proposal will be made after careful assessment of the acceptability of the bonds through "pre-marketing" feedback from prospective purchasers. The proposal will state the interest rate or rates to be borne by the bonds, the re-offering prices, the purchase price, and the spread. It will also state the division of the spread among the four purposes. Detailed information about interest rates and spreads on other comparable bond issues sold under similar bond market conditions should be made available.

The issuer will then consider the preliminary proposal, ask questions and respond with approval, comments, or suggested changes. Negotiations on the preliminary terms of the bond issue ensue until the underwriting syndicate is comfortable that the bonds can be successfully marketed, and the issuer is convinced that it is receiving an equitable and competitive pricing.

After the preliminary terms have been negotiated, the underwriter will release the terms to all members of the underwriting syndicate. After a day or two of promoting the sale, the managing underwriters will review the investors' reactions. This "test marketing" will be discussed with the issuer, and adjustments to the bond issue's terms which fit actual market conditions will be negotiated. For example, if the entire issue is "oversubscribed" (i.e., pre-sale orders exceed the amount of bonds to be sold), then the underwriting profit should be reduced to reflect the syndicate's low risk of being left with unsold bonds.

Since bond market conditions change rapidly, the spread necessary to place a bond issue is not finally determined until the pricing is complete. Depending upon the size of the issue and prevailing market conditions, a representative revenue bond spread (or "underwriters' discount") and its components are as follows:

<u>Item</u>	<u>Per \$1,000</u>
Expenses	\$ 2.50
Management Fee	4.50
Selling Concession or Takedown	12.50
Underwriting Profit or Risk Factor	<u>1.50</u>
TOTAL	\$21.00

Advance Refunding and Defeasance

If interest rates continue to decline from their historic high levels of 1980-81, it is likely that the State, its public corporations, and localities may find it financially advantageous to "advance refund" debt issued at high rates of interest. Refunding is a financing device intended to reduce annual debt service payments and lower the effective cost of borrowing. The technique involves the issuance of new debt to replace outstanding bonds in advance of the bonds' maturity. The issuance of refunding bonds by the State and its localities is permitted under AS 37.15.210 and AS 29.58.240 respectively. The bonds do not require the approval of voters.

Advance refunding can be a financially attractive arrangement for several reasons:

- . it can reduce interest costs if market interest rates have fallen significantly (by approximately 300 basis points or 3 percent) or if the issuer's credit standing has improved;
- . it can reduce future annual debt service costs by restructuring or "stretching out" outstanding debt; or
- . it can remove restrictive bond covenants under which the earlier bonds may have been issued.

In a "direct refunding", the refunding bonds are issued concurrent with the call date on the bonds to be refunded. The proceeds of the refunding bonds are used to retire or call the older debt. The debt generated through the refunding issue replaces the previously outstanding debt so that the net effect on the total amount of outstanding debt on the books of the issuer or in circulation is minimal.

In contrast, "advance refunding" requires the sale of the refunding bonds before the first call or maturity date of the original obligation. The proceeds of the refunding issue are deposited in escrow and invested until the old obligation can be retired. The escrow securities are special U.S. Treasury obligations with maturities designed to provide the cash flow necessary to pay the debt service and eventually retire the old issue. The refunding bonds defease the previously outstanding bonds. Therefore, under advance refunding there are two bond issues outstanding concurrently, sometimes for a long period of time.

An advance refunding will generate net savings if the present value of the stream of payments for debt service on the refunding bonds is less than the present value of the debt service on the refunded bonds, including the expense of issuing the refunding bonds and the payment of the call premium on the refunded bond, if any. The direct expenses of a refunding are the same as with other bond issues (legal, financial, and administrative expenses) as well as any call premium on the refunded bonds. However, there are certain unquantifiable costs and benefits from advance refunding that policy makers must consider before undertaking a financing of this type.

For example, by refunding a bond issue prior to the first call date, advance refunding provides governments with greater flexibility with respect to the timing of the refunding process. The risk of future interest rate fluctuations can be reduced by locking in a known interest rate prior to the call date. This benefit, albeit unquantifiable, may enhance financial planning and improve management of outstanding debt.

A negative attribute of advance refunding is that the refunding bonds cause an increase in the overall supply of outstanding municipal debt because there are two outstanding bond issues concurrently; one is comprised of the original bonds, issued for a specific capital project and the second is the "financing bonds" which are not related to a particular project, but are issued eventually to replace the original bonds. This doubling -- or in some cases tripling -- of debt outstanding may result in higher borrowing costs for all issuers of tax-exempt bonds if the market becomes saturated with debt.

Empirical studies have shown that advance refunding bond issues increase municipal bond interest rates because of the additional supply generated by their issuance. The increase in borrowing costs to all issuers in the State is not easy to isolate or identify, but, as a matter of policy, must be considered against the savings that accrue to the individual unit which issues the refunding bonds. Because the potential volume of refunding bonds is large, and could raise the borrowing costs of all issuers in the State if the market became saturated with bonds from Alaska, we believe that the State should establish criteria for judging when the issuance of refunding bonds by the State and local governments is appropriate. In addition the State Bond Committee should be required to review and approve all proposed refunding issues. This action would give the State control over the volume of refunding debt bearing the Alaska name, aid in the coordination and timing of refunding issues, and would force issuers to analyze thoroughly the financial feasibility of the refunding. Criteria to determine financial feasibility should include a minimum net present value savings in debt service payments of 10 to 15 percent, including issuance costs. Below this level of savings, it is questionable whether the dollars saved by the individual issuing jurisdiction are worth the uncertain affect the increased volume of tax-exempt debt has on the general level of interest rates for all borrowers.

Cash defeasance is similar to advance refunding because it involves paying off outstanding debt. However, instead of issuing bonds, a cash appropriation is made in an amount equal to what the advance refunding bond proceeds would be. Defeasance may be a more attractive option than refunding because it does not increase the amount of Statewide debt outstanding, which is the major disadvantage of refunding bonds. If the State wishes to pay off a portion of its outstanding debt, the choice between the use of cash or bond proceeds should follow, in part, the guidelines outlined on pages xxx to xxx on pay-as-you-go versus debt financing.

CHAPTER VII DEBT AFFORDABILITY AND FUTURE DEBT CAPACITY

Introduction

One of the most important concerns to the State of Alaska in the area of debt management is the question of how much debt the State can afford to issue today and repay in the future. Although the State's taxable-base is substantial relative to the amounts of debt it presently has outstanding, the national bond market and investors are likely to become more cautious with respect to Alaska securities in the future. Recent fluctuations in the price of oil and the decline in the Prudhoe Bay curve within the 10-year range have alerted investors to the "boom and bust" nature of the Alaskan economy. Investor concerns over the coming decade will focus on both general obligation and revenue-supported debt because of the interdependence of all components of the Alaskan economy on oil-related activities.

Simply stated, the affordability of debt is determined by two elements: 1) the ability and 2) the willingness to repay the long-term obligation. Ability and willingness are influenced by the interaction of several factors, including: State financial resources available to repay the debt; impact of debt repayment on budgetary priorities; severity of capital investment needs; political preferences regarding long-term vs. current spending; and the market impact (on credit rating and future interest cost) of future debt issuance. These factors are largely judgmental; future debt issuance must be weighed against the State's willingness and ability to apply future resources to finance current capital spending. There are certain guidelines, however, that State officials can employ in making these important decisions.

Theoretically, the State can afford to issue debt up to an amount where the debt service payments required to support the debt place an intolerable strain on available revenues. The affordable level of debt thus becomes that point where trade-off decisions must be made in the allocation of resources between appropriations for debt service and spending on other public programs. Once bonds are issued, the payment of debt service becomes a mandatory budgetary item, not subject to cost-cutting in the budget process. The strain of debt service on the State's budget is one measure of affordability that can be measured by the ratio of annual debt service to current appropriations and general fund revenues as discussed below.

Another consideration in determining debt capacity is the degree to which capital projects are financed from current revenues instead of from the proceeds of the sale of long-term bonds. It is frequently argued that financing through current revenues places a burden on current taxpayers, whereas debt financing spreads the burden over a period of years that more closely approximates the useful life of the capital project. Debt financing is, therefore, said to promote "intergenerational equity" for taxpayers because facilities are

paid for as they are used. Alaska is somewhat different in this regard, because its greatest tax burden falls on a natural resource, and not on its citizens. However, Alaskans pay an opportunity cost if the decision to finance capital projects through current revenues precludes spending on other public priorities. The pay-as-you-go vs. current spending trade-offs are outlined further in the debt management portion of this report (see pages 166 to 175).

The above framework for assessing affordability is concerned primarily with current resources and priorities, however, and does not directly take into account the long-term impact of debt issuance. One such impact is upon the ability of future taxpayers to repay debt; if debt issuance occurs at too high a level, future state resources may be strained to meet both debt service and current budget needs. For this reason, current debt issuance and affordability must be judged based on an assessment of future ability and willingness to repay in addition to the State's present situation.

Other long-term affordability factors include the impact of large amounts of debt issuance on the State's credit rating, and the reception accorded the State's debt in the marketplace. If too much debt bearing the Alaska name enters the market, investor's portfolios could become overloaded, forcing the State and other issuers in the State to pay higher interest rates in order to attract investors. In addition, excessive debt issuance relative to economic and financial resources is likely to result in a downgrading of the State's AA credit rating which would also raise future borrowing costs for all issuers in the State.

The question of affordable debt levels must be considered separately for general obligation and revenue-supported debt, since different standards of ability to repay apply to the two types of debt. For instance, where the full faith and credit of the State is pledged, such as in the case of general obligation debt, affordability considerations involve tax rate levels; available revenues; personal income levels; tax sources used and unused; and overall budgetary priorities.

In the case of revenue-supported debt, however, affordability considerations revolve more around the revenue-raising potential of the project being financed; the bondholder trust guarantees for debt service sinking fund protection; the revenue coverage relative to present and future debt issues; the authority of the issuer to levy fees and charges; and the protection accorded the investors in the event of default. Because of the more business-like determinants of affordability with revenue-supported debt, investors as much determine the affordable level of debt issues through the standards required for the purchase of bonds as does the issuing authority through the determination of financing requirements. In the case of general obligation debt, however, investors play a much more passive role in the assessment of affordability. This means that the State must take the lead in assessing its own debt affordability.

The distinction between the affordability criteria for general obligation and revenue debt is significant. For general obligation debt, selected measures of debt capacity can be evaluated in a "macro" sense, with the result being a general assessment of affordable debt levels based upon a reasonable estimate

of overall future State resources. For revenue-supported debt, each bond issue and each project being financed must be evaluated separately and meet the test of self-sufficiency on its own merits. This requires that State officials formulate programs or projects with substantial economic soundness, a dependable underlying security structure, adequate reserve funds, and strong cash flows which generate monies in excess of operating costs that more than cover the debt service requirements.

Considering this distinction between measuring debt affordability for general government (general obligation) purposes in contrast to special agency (revenue supported) purposes it is practical in this report to address only affordability levels on overall State general obligation debt. An analysis of special purpose revenue debt is beyond the scope of this project because it is not practical to identify and evaluate future and yet to be defined revenue-supported projects. However, because revenue-supported debt affects the State's own debt affordability indirectly, a framework for assessing revenue debt is presented below. Following the discussion of revenue debt, the affordability of the State's own general obligation is addressed.

Revenue-Supported Debt

Revenue bonds influence the affordability of State general obligation debt in two principal ways. First, when bonds of this type carry a moral obligation pledge of the State there is an indirect encroachment upon the creditworthiness of the State itself since they represent a contingent liability to the State. As the volume of moral obligation bonds outstanding increases, the amount of the State's contingent liability also increases. If moral obligation debt increases at a time when overall State revenues are stable, are experiencing a rate of growth lower than the rate of growth in contingent liabilities, or are declining, the moral obligation burden may encumber the State's credit capacity. Such an occurrence would make general obligation debt more costly, and therefore, less affordable due to weaker credit quality.

Second, the volume of revenue bonds may affect the cost of borrowing paid by all tax-exempt debt issuers in the State. Prices (interest rates) in the tax-exempt bond market are affected by many forces; one of which is the supply of tax-exempt bonds of the same type (revenue or general obligation), with a certain maturity, or from a particular region of the country. Institutional investors and bond portfolio managers generally try to diversify geographically their bond holdings. Therefore, excess supply of Alaska debt may saturate the market and cause interest rates for all borrowers in the State to rise, making any debt less affordable than before.

Although it is difficult to measure empirically the impact of revenue and moral obligation debt on the affordability of general obligation debt, it is worthwhile to develop a framework for analysis of the affordable levels of revenue-supported debt that covers both the financial feasibility of the project being financed and any indirect impact on the State's creditworthiness. Assessment and monitoring of the affordable level of revenue debt should be a

concern to Alaska particularly because extensive use has been made of both moral obligation debt and revenue-supported debt.

The first phase in monitoring revenue bonds is to ensure that only fiscally sound programs or projects are financed. This entails (a) ensuring that no program or project is brought to financing unless its need and usefulness is well established, (b) ensuring that every program or project to be financed meets the test of self-sufficiency, and (c) ensuring that no project is brought to market with the State's moral obligation backing if the project's financial feasibility itself is marginal. The first phase review will protect against a program or project being financed "before its time". This is especially important because if the State is ever called upon to "bail out" a revenue bond project where the moral obligation has been pledged, and the State fails to act on its "moral" commitment, the State itself could effectively be barred from the marketplace until the problem was resolved. Hence, the State must satisfy itself that each individual revenue bond is creditworthy itself. This is the first step in ensuring not only revenue bond affordability but protecting this type of bond from negatively affecting the affordability of general State debt.

The second phase should monitor the aggregate impact of revenue-type bonds on the perception of the Alaska name as a credit in the national municipal bond market. In order to protect and preserve the quality of the Alaska bond as a trading instrument it is important that Alaska-based bonds do not proliferate to a point of saturation. Market saturation occurs when the total volume of bonds entering the marketplace (supply) out paces the demand for the bond. Determining the point at which saturation occurs is more a matter of judgment than of measurement. The dynamics of market interaction and the multiple number of participants in the market necessitates that this kind of assessment be made by consulting periodically with a diversified array of municipal bond experts. Although this exercise can not produce concrete results, its usefulness as a tool in the assessment of the affordability of revenue-supported debt is important.

Measures Of General Obligation Debt Capacity

Credit analysts and investors have developed certain summary statistics which measure debt burden and debt capacity. These statistics generally take the form of debt ratios that measure the amount of debt outstanding relative to a certain economic or demographic indicator (such as outstanding debt per dollar of state personal income or debt per capita). The ratios are used not because of their comprehensive nature, but because the data are readily available and provide a uniform base against which the relative indebtedness of states can be compared. While a state should be aware of how it stands against these ratios, and its relative position to other states, individual assessment of debt capacity should be based not only upon these ratios but also upon comprehensive data covering the economic resources available to the state to repay the debt; the state's managerial and organizational characteristics; and the uniqueness of the state's debt structure in relation to its fiscal position and taxing capacity.

Before calculation of debt-related ratios can take place, however, the types of State debt that should be included in the numerator must be determined. As discussed in the Debt Profile, there are three classifications that can be considered. General obligation debt, tax-supported debt (comprised of general obligation debt and revenue debt dependent on State appropriations), and total State-level debt (general obligation and all revenue-supported debt). Finding comparable data in these three categories for all states is difficult because of the different methods used in each state to structure debt issues.

Perhaps the most reliable and consistent data are those compiled by the U.S. Department of Commerce, Bureau of the Census. However, the annual data published in the Census publication, Governmental Finances, recognizes only the distinction between general obligation debt and nonguaranteed debt (revenue-supported debt that does not have a pledge of the jurisdiction's taxing power). This distinction does not take account of all "tax-supported" debt which in Alaska's case includes ASHA lease-revenue debt, and University of Alaska debt in addition to the State's general obligation debt. The most recent Census data available are for fiscal year 1980-81. The alternative to the Census figures are the Net Tax-Supported Debt calculations of Moody's Investors Service which take account of all debt that is directly supported by state spending. However, this data is only available from Moody's beginning with 1978. Both Census and Moody's data, where appropriate, will be used in the following discussion of debt ratios.

Traditional Measures of Debt Capacity

State Debt Per Capita: A frequently used measure of debt burden is the ratio of outstanding debt to population. This statistic measures the dollar amount of debt outstanding for each state resident. This ratio, however, has many shortcomings, most noticeably that it provides no information about the resources of the individuals who in the aggregate are to pay the debt. For low-population states such as Alaska, the absolute value of this statistic is far higher than that for more populous states. In 1981, the national average for state general obligation debt per capita was \$229.31 (see Table 7.1), whereas this ratio for Alaska was \$1,700.97, the highest in the country. Next highest was the State of Hawaii with \$1,357.08 general obligation debt per capita, which, like Alaska, is sparsely populated. Oregon's large amount of general obligation debt is comprised largely of State-guaranteed veterans mortgage bonds and is ignored for these purposes because it is primarily revenue-supported.

Alaska also has the highest per capita amount of total state-level debt (general obligation and revenue) of all states. Table 7.2 indicates that total debt amounted to \$5,824 in fiscal year 1981 compared with a national average of \$588. Although Alaska's per capita figures are distorted, the rate of change in per capita debt does provide comparable information on the relationship of the growth in debt issuance to population growth. A comparison of the absolute level of per capita debt, and the annual rate of change from fiscal year 1973 to

Table 7.1

Per Capita Total Outstanding State General Obligation Debt
(1974-75 to 1980-81)^a

State	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Alabama	\$24.74	\$26.63	\$30.32	\$35.74	\$32.90	\$33.27	\$30.66
Alaska	1,035.64	1,143.02	1,299.04	1,443.78	1,651.49	1,579.31	1,700.97
Arizona	--	--	--	--	--	--	--
Arkansas	--	--	--	--	--	--	--
California	264.63	260.86	260.46	260.90	265.92	266.93	255.65
Colorado	--	--	--	--	--	--	--
Connecticut	702.04	778.95	774.89	759.33	735.62	703.76	738.39
Delaware	739.48	974.36	702.28	707.79	715.02	676.27	681.10
Florida	20.99	25.64	51.13	71.64	71.59	63.51	116.68
Georgia	26.52	65.93	73.36	100.89	97.33	100.15	94.94
Hawaii	933.20	1,178.85	1,305.11	1,482.16	1,468.61	1,470.22	1,357.08
Idaho	1.53	1.41	1.27	1.13	.99	.84	.73
Illinois	86.71	122.18	145.30	191.11	216.62	228.72	250.28
Indiana	--	--	--	--	--	--	--
Iowa	.90	.45	--	--	--	--	--
Kansas	--	--	--	--	--	11.76	11.67
Kentucky	106.47	100.79	95.52	90.36	84.73	76.95	72.09
Louisiana	189.85	248.87	329.90	373.48	415.66	453.95	560.38
Maine	262.35	260.47	253.55	250.62	240.79	226.52	229.83
Maryland	340.96	415.02	499.45	524.05	519.50	502.94	519.68
Massachusetts	344.78	518.87	555.38	558.47	574.64	567.00	573.58
Michigan	53.23	63.02	80.93	77.31	69.43	73.06	72.89
Minnesota	156.14	152.73	186.76	205.03	210.10	219.97	224.23
Mississippi	219.07	283.60	303.58	505.52	317.92	298.43	291.74
Missouri	12.13	11.00	16.39	15.00	13.58	12.96	16.45
Montana	--	9.79	9.64	8.94	8.58	8.26	7.82
Nebraska	--	--	--	--	--	--	--
Nevada	54.38	56.06	57.25	103.49	157.38	133.72	123.55
New Hampshire	171.17	211.30	263.41	278.66	298.64	274.15	352.88
New Jersey	209.62	208.33	230.07	235.23	249.31	251.69	257.60
New Mexico	18.81	14.93	20.91	15.56	14.88	17.75	17.39
New York	207.58	198.59	207.94	221.65	232.78	215.37	228.96
North Carolina	74.49	103.23	114.65	105.47	116.14	124.36	128.24
North Dakota	26.96	25.03	23.17	21.25	19.20	17.38	15.20
Ohio	161.27	181.87	185.82	196.00	210.73	212.24	219.27
Oklahoma	68.53	65.33	62.11	85.16	79.83	65.37	54.45
Oregon	732.12	859.05	1,009.28	1,220.00	1,428.88	1,717.32	2,074.76
Pennsylvania	256.80	292.66	326.37	327.27	332.44	326.31	328.33
Rhode Island	295.23	297.90	293.55	298.25	297.85	264.32	237.46
South Carolina	170.58	172.53	175.29	202.26	189.09	160.73	159.71
South Dakota	--	--	--	--	--	--	--
Tennessee	114.92	135.36	161.31	171.15	159.90	141.88	145.32
Texas	58.86	65.74	69.21	67.29	65.64	63.86	59.49
Utah	20.73	72.64	66.61	60.74	73.24	60.57	58.30
Vermont	544.99	532.93	523.68	478.84	502.32	466.30	527.52
Virginia	10.54	9.26	8.01	6.79	5.65	4.41	42.45
Washington	115.10	112.23	303.07	307.21	317.22	320.25	334.36
West Virginia	375.25	406.16	463.25	465.63	612.40	474.45	474.18
Wisconsin	133.57	194.38	259.92	304.68	343.26	362.25	362.93
Wyoming	--	--	--	--	--	--	--
Total U.S.	\$158.88	\$179.55	\$198.93	\$212.89	\$220.04	\$218.55	\$229.31

a. Debt data from the U.S. Department of Commerce, Bureau of the Census, State Government Finances (series GF), various years. State general obligation debt is defined as all state-guaranteed debt for which states pledge their full faith and credit. Debt data measured as of June 30 of each fiscal year shown. Figures exclude debt issued by local governments, and debt issued by the District of Columbia.

Reprinted from: The Use of Tax-Exempt Bonds in California: Policy Issues and Recommendations, Legislative Analyst, Jon David Vasche, State of California, December 1982.

Table 7.2

Per Capita Total Outstanding State General Obligation and Revenue Bond Debt
(1974-75 to 1980-81)^a

State	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Alabama	\$247.88	\$267.71	\$270.23	\$268.22	\$279.49	\$265.38	\$336.97
Alaska	1,872.88	2,044.06	2,246.53	2,744.65	3,355.98	3,861.39	5,824.03
Arizona	39.71	40.92	44.79	41.29	39.25	34.59	50.04
Arkansas	58.20	61.36	65.56	81.06	112.04	158.61	205.49
California	304.98	300.03	307.88	316.90	338.24	353.28	371.24
Colorado	48.20	48.77	74.61	114.73	153.75	159.40	240.44
Connecticut	943.57	989.66	1,021.38	1,064.98	1,152.79	1,248.13	1,407.59
Delaware	1,024.04	1,267.19	1,276.13	1,313.93	1,469.00	1,755.46	1,778.93
Florida	193.57	208.41	236.22	270.64	301.47	269.70	276.51
Georgia	233.21	259.62	252.33	265.17	267.87	257.70	247.26
Hawaii	1,342.02	1,479.02	1,664.36	1,878.24	1,854.48	1,931.83	1,889.50
Idaho	48.57	47.18	25.91	147.16	244.04	346.75	395.10
Illinois	250.33	299.48	360.92	457.72	509.21	549.76	603.71
Indiana	115.82	112.59	109.75	110.39	107.49	110.67	187.25
Iowa	44.28	43.49	42.70	78.19	128.45	130.79	151.36
Kansas	133.93	176.74	172.81	179.75	193.81	185.42	176.29
Kentucky	579.41	580.56	588.41	749.99	796.85	829.08	826.93
Louisiana	319.85	375.48	449.62	513.29	656.28	708.14	809.84
Maine	434.82	499.39	520.36	639.18	634.05	649.13	735.66
Maryland	509.12	610.56	737.33	914.57	889.64	830.70	933.99
Massachusetts	682.06	859.87	895.92	876.72	938.55	1,008.35	1,088.31
Michigan	183.20	206.87	213.50	234.26	272.13	314.98	377.12
Minnesota	222.40	256.90	309.48	439.94	461.51	507.70	585.34
Mississippi	261.00	326.66	339.79	538.35	347.11	323.30	313.71
Missouri	58.06	70.09	91.32	114.39	146.21	207.01	270.25
Montana	108.97	112.51	132.02	174.63	187.02	393.31	382.35
Nebraska	44.42	41.19	37.99	35.70	33.46	126.97	156.18
Nevada	87.80	87.15	86.12	369.91	494.39	660.79	656.33
New Hampshire	305.26	366.46	247.27	483.41	832.67	976.17	1,109.83
New Jersey	531.42	548.88	554.58	646.99	734.11	886.31	1,029.17
New Mexico	133.27	159.36	177.46	283.77	414.10	544.45	573.95
New York	811.21	1,137.00	1,119.93	1,261.99	1,302.29	1,346.48	1,400.80
North Carolina	113.56	129.73	146.26	139.66	197.53	215.48	226.99
North Dakota	98.92	108.32	103.42	124.70	199.07	335.80	322.19
Ohio	248.12	283.07	299.14	320.53	349.01	371.86	437.32
Oklahoma	346.70	342.11	334.14	388.47	522.46	504.38	559.06
Oregon	732.12	859.05	1,017.26	1,267.82	1,507.23	1,855.79	2,225.54
Pennsylvania	453.09	498.70	541.43	554.40	549.66	534.92	533.20
Rhode Island	494.13	546.39	686.31	924.35	1,267.92	1,544.98	1,810.18
South Carolina	331.26	368.28	457.25	607.48	542.33	621.11	779.00
South Dakota	99.15	133.58	335.56	560.15	841.50	1,035.18	1,010.64
Tennessee	185.44	224.66	280.52	319.21	317.04	306.24	319.41
Texas	158.07	165.61	166.00	162.70	173.16	173.50	179.61
Utah	73.73	122.92	114.06	220.63	287.53	367.61	380.96
Vermont	975.91	882.96	941.09	947.54	1,035.74	1,280.15	1,305.04
Virginia	138.58	140.73	170.68	242.56	319.95	360.32	394.40
Washington	357.01	338.76	382.28	380.98	385.84	387.51	425.25
West Virginia	589.38	640.81	720.36	746.06	871.61	931.53	944.06
Wisconsin	219.43	294.64	361.68	425.10	473.30	519.87	546.35
Wyoming	205.00	192.18	180.05	236.53	480.16	770.48	915.65
Total U.S.	\$339.68	\$394.32	\$418.14	\$471.46	\$509.20	\$539.96	\$588.06

a. Debt data from the U.S. Department of Commerce, Bureau of the Census, *State Government Finances* (series GF), various years. Debt data measured as of June 30 of each fiscal year shown. Figures exclude debt issued by local governments, and debt issued by the District of Columbia.

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Table 7.3

General Obligation and Total State-Level
Debt Per Capita
1973 - 1981

<u>Fiscal Year</u>	<u>Alaska State G.O. Debt Per Capita</u>	<u>U.S. Average State G.O. Debt Per Capita</u>	<u>Total Alaska State-Level Debt Per Capita</u>	<u>U.S. Average Total State-Level Debt Per Capita</u>
1973	\$ 832.05	\$ 134.57	\$1,260.75	\$ 264.92
1975	1,035.64	158.88	1,872.88	339.68
1976	1,143.02	179.55	2,044.06	394.32
1977	1,299.04	198.93	2,246.53	418.14
1978	1,448.78	212.89	2,744.65	471.46
1979	1,651.49	220.04	3,355.98	509.20
1980	1,579.31	218.55	3,861.39	539.96
1981	1,700.97	229.31	5,824.03	588.06

Annual Rates of Change

<u>Fiscal Years</u>	<u>Alaska State G.O. Debt Per Capita</u>	<u>U.S. Average State G.O. Debt Per Capita</u>	<u>Total Alaska State-Level Debt Per Capita</u>	<u>U.S. Average Total State-Level Debt Per Capita</u>
1973-1975	12.19%	9.33%	24.28%	13.96%
1975-1976	10.43	12.58	9.18	16.22
1976-1977	13.65	11.17	9.88	6.09
1977-1978	11.55	7.04	22.17	12.67
1978-1979	13.94	3.29	22.30	8.07
1979-1980	-4.36	-0.45	15.05	5.89
1980-1981	7.73	4.57	50.84	9.09

Source : U.S. Department of Commerce, Bureau of the Census, State Government Finances, various years.

1981 is provided in Table 7.3. The rate of growth of both Alaska general obligation debt and total State debt has exceeded the national average in seven of the eight fiscal years indicated. Moreover, the average rate of growth nationwide in total state debt was 10 percent over the 1973-81 period whereas in Alaska the average rate of growth was over 21 percent. Two factors must be noted, however, one is that Alaska did not begin to issue debt until 1958, so the base amount of debt outstanding was much less at the start of this period than for most other states. Second, Alaska's needs for basic capital infrastructure were greater during this period than for other states, so debt issuance would be expected to occur at a faster pace. Therefore, comparison of the rates of growth in Alaska and the nation does not provide a fair basis for assessment of the State's relative debt position.

State Debt per \$1,000 of Personal Income: Personal income is a better measure than population of ability to repay debt, because, as a rough approximation for the level of economic activity and growth in the economy of most states, it provides information on the amount of resources available to repay the debt. In addition, many states rely on the personal income tax or sales tax for a large share of state revenue, and personal income has traditionally been the most readily available measure of the base for each of these taxes.

Personal income may be the most readily available and comparable proxy for economic growth; however, it is not necessarily the best measure of tax-generating capacity for all states, and especially those states (such as Alaska) which do not rely on a personal income tax. There are two fundamental problems with the personal income statistic; one pertaining to the definition of income, and the other to its use as a realistic measurement of a state's tax base. Such problems may cause personal income to overstate or understate tax capacity.

The definitional problem occurs in the double counting of certain types of income. Personal income figures include transfer payment income to individuals. However, taxes paid by the residents of a state to finance those transfers are not deducted (except for the employee share of social insurance contributions). This treatment results in a doublecounting and a systematic overstatement of the real income of those states in which government transfer programs, as well as taxes, are relatively large. Furthermore, personal income is generally much higher than adjusted gross income as defined by the Internal Revenue Service and which would likely form the tax base for a personal income tax if Alaska were to re-institute this tax. For example, comparison of Alaska personal income for 1979-1980 of \$5.136 billion with the 1979 I.R.S. adjusted gross income of State residents of \$4.097 billion demonstrates that personal income overstated the personal income tax base in that year by 25%.

As mentioned above, a critical problem with personal income is that it does not directly correspond to the broad menu of taxes which generate revenue for the State. In fiscal year 1981-82, State revenues were derived from the following sources:

Sales Taxes and User Fees	4%
Oil and Gas Based Taxes	95%
Corporate Income Tax	1%

Because Alaska no longer relies on the personal income tax, an income-based estimate of debt capacity does not address the State's true revenue-raising ability. This is true of other states which derive a large portion of state revenue from taxes on a natural resource. Under these circumstances, personal income may understate the tax capacity of a given state.

Another reason State personal income is not an accurate indicator of debt affordability in Alaska is the significant contribution that State spending makes to the Alaska economy and, therefore, to State personal income. Eight percent of the State labor force and nearly 5 percent of the State's population are State employees. However, the importance of State spending to State personal income extends beyond the large proportion of State employees. Though difficult to measure, the multiplier effects of State expenditures on aid to local governments, capital projects, and procurement are obviously considerable. Therefore, Alaska's total personal income would likely be severely affected by a change in State spending due to declining oil revenues, for instance. In other states, personal income is generally not as subject to spending from one or two sectors of the economy — the State and oil production, in Alaska's case — and is a better indicator of the economic base of the State than in Alaska.

Regardless of the deficiencies in using personal income to assess relative debt capacity, it is still a measurement that is widely used. In comparison with the general obligation debt of other states as a share of total personal income, Alaska's general obligation debt ranked highest in fiscal year 1981 (excluding Oregon), at \$124 per \$1,000 of State personal income, closely ahead of Hawaii (Table 7.4). Similarly, total state-level debt in Alaska comprises a far larger share of state personal income than it does in other states. This figure for Alaska is \$423 per \$1,000 whereas the national average is \$56 (Table 7.5).

The rate of increase in outstanding debt compared with the rate of increase in personal income also serves as an interesting comparison. Table 7.6 indicates that the national averages of both general obligation debt and total state debt outstanding per \$1,000 of personal income have trended gradually downward over the last 6 years, whereas similar figures for the State of Alaska have been erratic. The rate of change in State general obligation debt as a share of personal income has fluctuated from an increase of nearly 12 percent in 1978 to a drop of over 16 percent in 1980.

Ratio of Debt to Assessed Full Value: The ratio of debt to the true value of taxable property is a frequent measure of local governmental debt burden. The logic behind this is two-fold: 1) property is an indication of wealth, and 2) the property tax is an important revenue base for many types of local government. However, taxable property is not a very pertinent measure for state revenue systems. Although many states levy a nominal property tax, it does not comprise

Table 7.4

Total Outstanding State General Obligation Debt
Per \$1,000 of Personal Income
(1974-75 to 1980-81)^a

State	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Alabama	\$5.30	\$5.13	\$5.32	\$5.61	\$4.70	\$4.43	\$3.73
Alaska	110.75	109.78	122.12	136.54	146.81	123.00	123.66
Arizona	--	--	--	--	--	--	--
Arkansas	--	--	--	--	--	--	--
California	39.72	35.71	32.48	29.29	26.41	24.34	21.44
Colorado	--	--	--	--	--	--	--
Connecticut	102.72	105.12	95.26	83.94	71.29	59.91	57.62
Delaware	112.76	136.78	91.68	84.00	75.87	65.19	61.34
Florida	3.65	4.13	7.46	9.39	8.32	6.98	11.48
Georgia	5.19	11.71	11.93	14.62	12.64	12.38	10.63
Hawaii	139.61	165.99	165.95	173.02	154.94	145.14	123.01
Idaho	.29	.24	.20	.16	.13	.10	.08
Illinois	12.67	16.51	17.93	21.44	21.99	21.68	21.62
Indiana	--	--	--	--	--	--	--
Iowa	.15	.07	--	--	--	--	--
Kansas	--	--	--	--	--	1.18	1.08
Kentucky	21.88	18.65	16.06	13.77	11.63	10.08	8.56
Louisiana	38.92	45.54	54.52	54.81	53.86	53.54	58.88
Maine	54.46	47.89	43.20	38.79	33.30	28.51	26.93
Maryland	52.57	58.68	65.35	61.23	54.26	47.96	45.28
Massachusetts	55.65	77.74	76.57	70.16	64.12	55.86	51.54
Michigan	8.87	9.35	10.68	9.15	7.40	7.33	6.76
Minnesota	26.62	24.24	26.16	25.97	23.66	22.56	20.82
Mississippi	53.68	62.11	59.48	89.59	50.73	45.25	39.38
Missouri	2.22	1.84	2.48	2.05	1.64	1.44	1.71
Montana	--	1.69	1.57	1.24	1.08	.97	.83
Nebraska	--	--	--	--	--	--	--
Nevada	8.08	7.52	6.87	10.88	14.84	12.43	10.67
New Hampshire	31.31	34.80	39.40	37.29	35.59	29.95	35.33
New Jersey	30.78	28.19	28.62	26.62	25.41	22.96	21.24
New Mexico	3.87	2.77	3.55	2.34	2.02	2.26	2.04
New York	31.72	28.40	27.61	26.86	25.42	20.93	19.97
North Carolina	15.02	18.85	19.31	15.90	15.79	15.87	14.83
North Dakota	4.39	4.23	3.80	2.77	2.32	1.98	1.49
Ohio	27.66	28.26	26.08	24.92	24.06	22.38	21.26
Oklahoma	12.98	11.28	9.59	11.63	9.54	7.15	5.31
Oregon	125.79	132.13	141.49	152.29	161.87	183.91	207.35
Pennsylvania	43.71	45.53	46.49	42.47	38.39	34.51	31.66
Rhode Island	51.47	47.40	42.74	39.06	34.49	27.89	23.39
South Carolina	36.50	33.30	30.74	32.18	27.31	22.06	19.87
South Dakota	--	--	--	--	--	--	--
Tennessee	23.66	25.27	27.56	26.02	21.81	18.33	17.20
Texas	10.52	10.54	10.01	8.68	7.45	6.67	5.54
Utah	4.20	13.33	11.11	9.16	10.04	7.90	7.01
Vermont	109.60	97.66	89.63	73.31	68.92	59.38	60.53
Virginia	1.81	1.46	1.14	.88	.65	.47	4.10
Washington	18.19	16.10	39.88	35.50	32.75	30.99	29.65
West Virginia	75.88	74.08	77.03	70.70	82.48	60.69	56.60
Wisconsin	23.80	31.70	37.99	40.36	40.16	38.65	36.17
Wyoming	--	--	--	--	--	--	--
Total U.S.	\$26.79	\$27.71	\$27.98	\$26.96	\$24.90	\$22.82	\$21.86

a. Debt data from the U.S. Department of Commerce, Bureau of the Census, State Government Finances (series GF), various years. State general obligation debt is defined as all state-guaranteed debt for which states pledge their full faith and credit. Debt data measured as of June 30 of each fiscal year shown. Figures exclude debt issued by local governments, and debt issued by the District of Columbia.

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Table 7.5

Total Outstanding State General Obligation and Revenue Bond Debt
Per \$1,000 of Personal Income
(1974-75 to 1980-81)^a

State	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Alabama	\$53.08	\$51.57	\$47.45	\$42.12	\$39.92	\$35.36	\$40.99
Alaska	200.29	196.31	211.19	258.67	298.34	300.73	423.42
Arizona	7.31	6.83	6.81	5.59	4.59	3.92	5.13
Arkansas	12.74	12.23	11.83	13.02	15.93	21.78	25.55
California	45.78	41.07	38.39	35.57	33.60	32.22	31.14
Colorado	7.94	7.38	10.33	14.11	16.73	15.86	21.44
Connecticut	138.06	133.55	125.56	117.73	111.73	106.25	109.83
Delaware	156.15	177.88	166.60	155.93	155.87	169.23	160.21
Florida	33.66	33.55	34.47	35.46	35.02	29.62	27.20
Georgia	45.65	46.10	41.03	38.41	34.78	31.77	27.68
Hawaii	200.77	208.25	211.63	219.25	195.65	190.71	171.26
Idaho	9.07	8.11	4.09	20.83	31.74	42.92	44.19
Illinois	36.59	40.48	44.53	51.34	51.70	52.12	52.16
Indiana	20.44	17.86	15.85	14.45	12.67	12.35	19.27
Iowa	7.34	6.87	6.11	9.68	14.75	13.94	14.45
Kansas	22.14	27.03	24.36	22.49	21.21	18.53	16.31
Kentucky	119.10	107.44	98.92	114.31	109.37	108.64	98.20
Louisiana	65.56	68.70	74.31	75.33	85.04	83.52	85.09
Maine	90.26	91.83	88.66	98.93	87.69	81.69	86.20
Maryland	78.50	86.33	96.48	106.86	92.91	79.22	81.38
Massachusetts	110.09	128.84	123.52	110.14	104.72	99.34	97.79
Michigan	30.50	30.69	28.18	27.73	28.99	31.58	34.95
Minnesota	37.92	40.77	43.35	55.73	51.98	52.08	54.36
Mississippi	63.96	71.53	66.58	95.41	55.39	49.02	42.35
Missouri	10.63	11.75	13.83	15.65	17.68	22.99	28.00
Montana	20.03	19.44	21.52	24.15	23.60	45.98	40.65
Nebraska	7.39	6.65	5.61	4.69	3.89	13.53	15.07
Nevada	13.04	11.69	10.33	38.91	46.62	61.41	56.70
New Hampshire	55.83	60.36	63.92	64.69	99.23	106.66	111.10
New Jersey	78.02	74.26	68.98	73.21	74.82	80.85	84.87
New Mexico	27.42	29.59	30.11	42.65	56.13	69.26	67.31
New York	123.95	162.61	148.73	152.90	142.19	130.86	122.17
North Carolina	22.90	23.68	24.64	21.06	26.85	27.49	26.24
North Dakota	16.11	18.32	16.94	16.24	24.00	38.31	31.52
Ohio	42.56	43.98	41.99	40.75	39.85	39.20	42.41
Oklahoma	65.69	59.06	51.62	53.04	62.42	55.19	54.55
Oregon	125.79	132.13	142.61	158.26	170.74	198.73	222.42
Pennsylvania	77.12	77.59	77.12	71.95	63.48	56.57	51.42
Rhode Island	86.15	86.94	99.93	121.05	146.82	163.02	178.29
South Carolina	70.88	71.09	80.20	96.66	78.33	85.24	96.91
South Dakota	19.39	26.28	57.27	83.73	112.04	132.08	114.48
Tennessee	38.17	41.94	47.93	48.53	43.24	39.58	37.81
Texas	28.26	26.56	24.01	20.98	19.64	18.13	16.74
Utah	14.93	22.56	19.03	33.25	39.42	47.94	45.83
Vermont	196.26	161.80	161.07	145.06	142.12	163.01	149.74
Virginia	23.85	22.15	24.36	31.25	36.97	38.27	38.11
Washington	56.43	48.61	50.31	44.03	39.93	37.50	37.71
West Virginia	119.17	116.88	119.79	113.28	117.39	119.17	112.70
Wisconsin	39.10	48.06	52.87	56.32	55.38	55.47	54.45
Wyoming	33.21	28.08	23.68	27.25	48.60	70.44	78.51
Total U.S.	\$57.27	\$60.85	\$58.81	\$59.71	\$57.61	\$56.39	\$56.06

a. Debt data from the U.S. Department of Commerce, Bureau of the Census, State Government Finances (series GF), various years. Debt data measured as of June 30 of each fiscal year shown. Figures exclude debt issued by local governments, and debt issued by the District of Columbia.

Reprinted from : The Use of Tax-Exempt Bonds in California : Policy Issues and Recommendations, Legislative Analyst, Jon David Vasche, State of California, December 1982.

Table 7.6

General Obligation and Total State-Level
Debt Per \$1,000 of Personal Income
1973 - 1981

<u>Fiscal Year</u>	<u>Alaska State G.O. Debt Per \$1,000 P.I.</u>	<u>U.S. Average State G.O. Debt Per \$1,000 P.I.</u>	<u>Total Alaska State-Level Debt Per \$1,000 P.I.</u>	<u>U.S. Average State-Level Debt Per \$1,000 P.I.</u>
1973	\$ 140.23	\$ 23.18	\$ 212.48	\$ 52.36
1975	110.75	26.79	200.29	57.27
1976	109.78	27.71	196.31	60.85
1977	122.12	27.98	211.19	58.81
1978	136.54	26.96	258.67	59.71
1979	146.81	24.90	298.34	57.61
1980	123.00	22.82	300.73	56.39
1981	123.66	21.86	423.42	56.06

Annual Rates of Change

<u>Fiscal Years</u>	<u>Alaska State G.O. Debt Per \$1,000 P.I.</u>	<u>U.S. Average State G.O. Debt Per \$1,000 P.I.</u>	<u>Total Alaska State-Level Debt Per \$1,000 P.I.</u>	<u>U.S. Average State-Level Debt Per \$1,000 P.I.</u>
1973-1975	-10.51%	7.79%	-2.87%	4.81%
1975-1976	-0.88	3.43	-1.99	7.02
1976-1977	11.24	0.97	7.48	-4.92
1977-1978	11.81	-3.65	22.27	1.72
1978-1979	7.52	-7.64	15.50	-3.39
1979-1980	-16.22	-8.35	0.67	-1.75
1980-1981	0.53	-4.20	41.00	-0.59

Source : U.S. Department of Commerce, Bureau of the Census, State Government Finances, various years.

as large a share of total revenues as it does at the local level. In fiscal year 1983, for example, property tax revenue accounted for just over four percent of Alaska's general fund unrestricted revenue. Data on assessed value is not collected annually by the Census Bureau, however the state debt medians as calculated by Moody's Investors Service for calendar year 1982 indicate that Alaska's tax-supported debt as a percent of assessed full value was 3.7 percent or 3.3 times the national median of 1.1 percent.

- Comparison of other Moody's figures for net tax-supported debt at the end of 1982 indicate that Alaska had the highest per capita debt and debt as a percentage of total personal income according to this measure as well. Table 7.7 indicates that Alaska's tax-supported debt per capita is 11 times the national median, whereas tax-supported debt per dollar of personal income is 8 times the national median.

The preceding discussion of national debt ratios demonstrated that Alaska is an "outlier" regardless of the standard used to compare amounts of general obligation debt outstanding. Debt ratios such as these are useful when comparing states with an established and familiar record of debt issuance and a degree of certainty about their future economic prospects; however, Alaska does not fit into either of these categories. The State has been able to issue debt in amounts that exceed otherwise prudent guidelines because of its vast wealth in oil reserves and the proven ability to tax these resources. None of the above statistics measures the oil or other natural resource wealth of a state. Therefore, assessment of the affordable levels of debt in Alaska, and comparison of the State's position with other states, must be based on criteria that tailor the analysis to Alaska. As long as Alaska exhibits strong revenue generating potential from its oil reserves, traditional measures of debt capacity will be relatively meaningless; however, as the State's oil wealth contracts, the State will have to broaden its base of taxes and pay attention to traditional debt ratios.

Alaska-Specific Measures of Debt Capacity

Representative Tax Capacity: As mentioned above, neither population, personal income, nor assessed value correspond to the tax base available to the State to repay its indebtedness. A more comprehensive measure of tax capacity for all states, the representative tax system, has been developed by the U.S. Advisory Commission on Intergovernmental Relations (ACIR)³. The representative tax system calculates tax capacity by estimating the amount of revenue that each state would raise were an identical set of tax rates used across all states. The rates that are used are the national averages for each of the 24 tax bases that make up the index.

By combining a wide variety of taxable resources -- such as income, property, retail sales, motor fuel, and the value of natural resources -- the ACIR method generates a broad measure of a state's tax capacity. As a measure of debt capacity, the system has the major advantage that, for each

Table 7.7
STATE DEBT MEDIANS

	Net Tax- Supported Debt(000)	Debt Per Capita	Rank	% E. F. V.	Rank	% Per. Income (1981)	Rank
Alabama	\$1,630,380	\$ 419.06	12	5.1%	6	5.1%	9
Alaska	1,114,718	2,783.45	1	3.7	5	19.6	1
Arizona	219,245	80.67	37	0.5	32	0.8	37
Arkansas	12,698	5.55	47	0.05	45	0.07	45
California	2,718,110	114.84	32	0.5	35	0.9	35
Colorado	22,755	7.88	45	0.05	46	0.06	47
Connecticut	2,222,886	715.31	4	3.2	8	5.5	7
Delaware	609,260	1,023.58	3	9.0	1	9.2	3
Florida	2,498,779	256.55	23	1.1	25	2.4	26
Georgia	1,421,025	260.08	21	1.1	24	2.8	20
Hawaii	1,488,061	1,542.03	2	5.0	2	13.7	2
Idaho	20,465	21.68	44	0.1	44	0.2	44
Illinois	3,272,210	286.57	17	1.6	13	2.5	24
Indiana	2,330	0.42	50	0.00	50	0.0	50
Iowa	3,700	1.27	49	0.01	48	0.01	49
Kansas	240,130	101.61	35	0.5	34	0.9	36
Kentucky	1,232,847	336.71	16	1.1	27	4.0	13
Louisiana	2,471,377	587.87	7	3.1	9	6.0	5
Maine	279,220	248.28	25	1.2	21	2.9	19
Maryland	2,853,725	672.54	6	2.8	10	5.8	6
Massachusetts	3,967,092	691.49	5	4.5	3	6.2	4
Michigan	1,059,091	114.39	33	0.5	33	1.1	32
Minnesota	1,001,624	245.67	26	1.3	20	2.3	27
Mississippi	696,827	276.45	19	2.0	12	3.7	15
Missouri	197,396	40.14	43	0.3	39	0.4	43
Montana	72,215	91.80	36	0.5	36	1.0	33
Nebraska	10,900	6.90	46	0.03	47	0.06	46
Nevada	96,866	121.21	31	0.4	38	1.0	34
New Hampshire	344,298	373.99	15	1.3	19	3.7	16
New Jersey	2,695,866	366.08	14	1.4	16	3.0	17
New Mexico	337,317	259.48	22	1.5	15	3.0	18
New York	9,042,000	514.99	8	3.3	7	4.5	11
North Carolina	933,700	158.94	29	0.9	29	1.8	29
North Dakota	35,000	53.62	41	0.1	43	0.5	42
Ohio	2,768,705	256.42	24	1.1	26	2.5	23
Oklahoma	186,669	61.70	39	0.3	41	0.6	39
Oregon	467,415	177.54	28	0.6	31	1.7	30
Pennsylvania	4,650,235	391.87	13	4.0	4	3.8	14
Rhode Island	269,629	284.67	18	1.2	22	2.8	21
South Carolina	619,805	198.74	27	1.4	17	2.4	25
South Dakota	32,055	46.44	42	0.3	40	0.5	41
Tennessee	707,003	154.01	30	1.2	23	1.8	28
Texas	867,421	60.96	40	0.3	42	0.6	40
Utah	158,325	108.36	34	0.8	30	1.7	31
Vermont	221,606	433.28	11	1.6	14	4.9	10
Virginia	420,146	78.59	38	0.4	37	0.7	38
Washington	2,033,073	492.25	9	1.4	18	4.2	12
West Virginia	899,006	461.11	10	2.2	11	5.5	8
Wisconsin	1,249,198	265.48	20	1.0	28	2.7	22
Wyoming	2,300	4.88	48	0.01	49	0.04	48
Median		\$250		1.1%		2.4%	

Source: Moody's Investor Service, State Debt Medians, January 27, 1983.

source of tax revenue that in total will actually be used to pay-off debt, it measures the economic activity subject to the tax. In so doing, it provides a measure of the multiple resources claimable by state governments through a variety of taxes.

Computation of the ACIR's representative tax capacity figures is complicated, and certainly more difficult than using personal income alone; however, it can be done using readily available statistics. The most current figures available from the ACIR are for fiscal year 1980-81. Using the ACIR data for 1979 through 1981, and the ratio of tax capacity to unrestricted general fund revenues in each year, projections of Alaska's tax capacity under the representative tax system for 1982 and 1983 were made by the GFRC and are presented below.

<u>Fiscal Year</u>	<u>Representative Tax Capacity</u>	<u>Rate of Change</u>
1979	773	
1980	990	28.1%
1981	1373	38.7%
1982	1474	7.4%
1983	1324	- 10.2%

This chart indicates that tax capacity expanded rapidly between 1979 and 1981 as State severance tax revenues rose; however, the rate of change in tax capacity slowed and even declined in 1983 in line with the drop in oil-based revenues to the State.

The ratio of general obligation debt outstanding to the representative tax capacity index provides another measure of debt capacity against which Alaska can compare its relative position to that of other states. Table 7.8 presents such comparative ratios for general obligation debt in selected years between 1975 and 1981. Whereas the ratio for the majority of states has been fairly level, Alaska's debt as a share of tax capacity dropped from 1977 to 1981. Data on general obligation debt outstanding for all states is not yet available for 1982; however the ratio can be computed for Alaska itself. As indicated in the table below, the debt capacity index reached a low of 51 percent in 1981, however, the positive trend towards a lower index reversed in 1982 and climbed sharply in 1983.

<u>Fiscal Year</u>	<u>General Obl. Debt</u>	<u>Tax Capacity</u>	<u>Debt Capacity Index</u>
1975	392	411	95.5
1977	530	490	108.0
1979	671	773	86.7
1980	632	990	67.7
1981	746	1,373	51.0
1982	846	1,474	57.4
1983	946	1,324	71.7

Table 7.8
Debt Capacity Index
State General Obligation Debt

STATE	1975	1977	1979	1980	1981
Alabama	4.4	5.0	4.9	4.4	4.0
Alaska	95.5	108.0	86.7	67.7	51.0
California	24.8	14.3	12.1	10.7	9.1
Connecticut	70.2	75.3	65.5	57.7	54.9
Delaware	81.2	73.6	72.9	65.9	59.6
Florida	2.8	6.3	7.8	6.8	11.2
Georgia	4.2	11.0	13.2	11.7	11.3
Hawaii	115.9	155.6	159.6	137.4	126.0
Idaho	0.2	0.2	0.1	0.1	0.1
Illinois	10.3	16.6	22.0	20.8	23.4
Iowa	0.1	-	-	-	-
Kentucky	17.0	14.6	11.1	10.3	8.5
Louisiana	26.2	39.2	41.5	36.6	38.0
Maine	42.0	39.5	34.1	30.9	28.1
Maryland	46.1	63.9	60.0	54.2	51.5
Massachusetts	39.3	64.1	59.0	52.0	45.7
Michigan	7.2	10.1	7.7	7.5	7.4
Minnesota	22.0	24.5	23.4	21.5	21.8
Mississippi	32.6	46.0	43.5	39.9	34.1
Missouri	1.7	2.2	1.6	1.5	1.7
Montana	-	1.2	0.9	0.8	0.7
Nevada	5.1	4.7	10.9	9.1	8.1
New Hampshire	22.8	22.9	24.0	19.8	23.6
New Jersey	23.1	25.7	26.1	23.8	22.9
New Mexico	2.8	2.7	1.6	1.7	1.5
New York	19.2	19.9	21.8	19.5	18.1
North Carolina	12.0	17.7	16.0	16.4	15.7
North Dakota	3.7	3.0	2.0	1.7	1.2
Ohio	15.3	14.7	12.5	11.3	10.5
Oklahoma	9.6	7.6	8.0	5.9	4.2
Oregon	99.4	124.7	154.1	175.0	203.5
Pennsylvania	35.7	42.6	40.7	37.1	35.3
Rhode Island	39.2	36.7	34.6	28.0	23.9
South Carolina	27.7	27.9	25.2	20.4	19.3
Tennessee	18.6	31.8	22.2	18.9	17.9
Texas	7.3	7.6	6.1	5.4	4.4
Utah	3.3	9.5	9.4	7.4	6.5
Vermont	79.3	72.9	66.4	57.9	61.0
Virginia	1.6	1.1	0.7	0.5	2.5
Washington	16.1	38.8	34.9	32.7	32.8
West Virginia	57.4	65.6	72.9	53.3	51.2
Wisconsin	18.5	34.3	40.5	40.2	38.8

Source : U.S. Advisory Commission on Intergovernmental Relations, and U.S. Department of Commerce, Bureau of the Census, State Government Finances, various years.

The debt capacity index shown in Table 7.8 provides the best measure against which to compare the amounts of debt issued by Alaska to that of other states. It is the only nationally available statistic that attempts to measure all revenue sources available to a state to repay its debt obligations. Alaska does not top the list by this measure of debt capacity, but ranks sixth (excluding Oregon) out of the 41 states with general obligation debt outstanding.

Although the tax-capacity measure shows Alaska to be in a more favorable position relative to other states than the earlier measures of debt burden, the volatility of this ratio demonstrates the sensitivity of the State's debt capacity to fluctuations in oil revenues. Therefore, any criteria used to assess the State's debt capacity must rely heavily on forecasts of future oil prices and their impact on tax revenues because of the preponderant role this revenue source plays in the State's ability to repay debt.

State Expenditures and Revenues: Another good measure of debt capacity which accurately measures ability to repay debt is the share of general fund unrestricted revenues that is committed to pay debt service each year. Since the state treasury must ultimately pay the debt service on general obligation and other tax-supported debt, it is the level of state tax revenues and other demands for those revenues that determine ability to repay debt. This can be measured in two ways; first by comparing the amount of debt service payments to the level of other general expenditures; and second, by comparing annual debt service requirements to unrestricted general fund revenues. These ratios provide an indication of the importance of debt service to the state budget. Because debt service is not a discretionary item once the debt has been issued, the ratios indicate whether such payments are placing a strain on the budget relative to other state spending priorities and permit a comparison with other states.

The ratio of debt service to general revenue illustrates the ability of the state to make required debt service payments in any particular year. As long as revenues are sufficient to cover debt service and other demands for state spending, high per capita or other standard debt ratios need not be of grave concern.

The ratios of debt service to general state expenditures and revenues are computed in Table 7.9 for fiscal years 1970, 1975, and 1980. The states are grouped by their Moody's Investors Service May 1982 bond rating. The ratios were computed for total state debt (revenue and general obligation) because statistics covering interest on general obligation debt alone are not available from the Census Bureau. This comparison indicates that Alaska's ratios were close to those of other states in each of these years, with the exception of 1975.

Similar figures on Alaska general obligation debt are available from the Department of Revenue. The ratios of debt service to general fund appropriations and to general unrestricted revenues for the past five years are

Table 7.9

DEBT SERVICE AS PERCENT OF STATE EXPENDITURES AND REVENUES
States Grouped by Moody's May 1982 Rating

AAA STATES	Expenditures			Revenues		
	1970	1975	1980	1970	1975	1980
Georgia	6.53	3.87	1.83	4.59	3.95	1.83
Illinois	5.34	3.16	2.84	3.14	3.31	2.84
Maryland	15.70	6.03	4.46	8.90	6.80	4.35
Missouri	6.28	3.77	1.78	4.05	3.76	1.76
New Jerse	7.40	9.53	2.42	4.59	10.69	2.47
N. Caroli	6.42	1.77	1.18	3.63	1.76	1.17
Oklahoma	4.64	5.86	1.98	3.58	5.43	1.81
S. Caroli	5.26	4.15	2.58	3.56	4.52	2.48
Tennessee	4.30	2.83	2.65	3.05	3.04	2.63
Texas	3.01	2.43	0.80	2.03	2.24	0.72
Utah	2.52	1.11	1.20	1.86	1.15	1.23
Virginia	3.27	2.40	1.27	2.16	2.50	1.24
Mean	5.89	3.91	2.08	3.76	4.10	2.04
AA STATES						
Alabama	7.61	4.83	2.96	5.40	4.74	2.92
Alaska	4.47	7.90	4.35	1.10	10.13	2.79
Californi	7.74	3.78	1.40	4.19	3.71	1.39
Connectic	16.50	14.97	7.84	13.67	16.54	7.46
Florida	7.78	2.92	1.41	4.57	3.10	1.35
Hawaii	7.39	8.23	6.19	8.58	9.06	5.82
Kentucky	8.30	6.20	2.31	6.56	5.77	2.60
Louisiana	26.45	4.02	2.51	17.44	3.99	2.34
Maine	7.72	5.71	4.79	6.32	5.99	4.64
Minnesota	4.14	3.01	3.26	2.13	2.74	3.14
Mississip	6.28	3.77	1.78	4.05	3.76	1.76
Montana	4.13	1.68	1.00	3.48	1.58	0.92
Nevada	1.20	1.22	0.88	0.84	1.15	0.87
New Mexic	4.86	2.68	2.15	3.01	2.29	1.80
Ohio	8.35	4.92	4.46	5.65	5.24	4.77
Oregon	8.13	7.40	3.93	6.44	7.24	3.81
Rhode Isl	7.40	6.55	5.87	6.07	6.68	5.86
Vermont	5.74	11.19	7.43	5.06	11.59	7.17
Wisconsin	2.51	2.64	1.63	1.29	2.72	1.62
Mean	7.72	5.45	3.48	5.57	5.69	3.32
A STATES						
Delaware	17.99	12.45	8.35	15.09	12.26	7.67
Massachus	13.58	7.11	5.53	11.26	8.32	5.50
Michigan	5.31	2.35	1.99	3.23	2.56	2.04
New Hamps	6.25	4.62	4.85	6.22	5.43	5.30
New York	11.31	7.15	7.05	4.88	7.56	6.83
Pennsylva	9.82	5.43	2.59	7.64	5.96	2.37
Washingto	6.20	3.90	1.30	4.49	3.95	1.30
W. Virgin	5.26	6.99	3.14	4.37	6.62	3.26
Mean	9.47	6.25	4.35	7.15	6.58	4.28

Source: U.S. Bureau of the Census, Governmental Finances, various years.
Data are for all state level debt

presented in Tables 7.10 and 7.11 respectively. The share of general fund appropriations accounted for by debt service over this time has averaged 5 percent. This is a manageable level and does not indicate that trade-offs between spending on current programs and debt service are being forced on the State during the annual appropriation process.

Furthermore, over this same period debt service as a percent of general fund unrestricted revenues declined from 9.03 percent in fiscal year 1975 to 2.37 percent in 1982, indicating sufficient revenue coverage of debt service. However, the ratio rose to 4.05 percent in fiscal year 1983 due to of the combined effects of a sharp increase in debt service payable and a drop in general fund revenues.

Rapidity of Principal Repayment: Ratios based on debt service and debt outstanding do not account for the length of time over which payments must be made or that the debt will be outstanding. Debt which matures in five years will have the same effect on a debt per \$1,000 of personal income ratio, for example, as debt which matures in 15 years. However, the maturity structure of outstanding debt affects a state's ability to repay the debt and the ability to incur additional debt and, therefore, should be considered in assessing future affordable levels of debt issuance. The average life of a bond issue is a measure of the length of time that the bonds will be outstanding. A 20-year serial bond, with equal principal maturities in each year, will have an average life of approximately 10 years. Bonds with short average lives place a heavier current strain on the issuer because debt service payments are higher than on bonds with longer average lives due to the rapid repayment of principal. However, short average lives and rapid principal repayment mean that future debt capacity will be greater, because the early retirement of debt usually creates additional later year capacity for debt issuance, other things being equal.

The credit rating agencies have developed a guideline for high-quality general obligation issuers to follow in structuring the maturities of their obligations. The maturity structure they encourage would result in 25 percent of the debt retired within 5 years, 50 percent within 10 years, and 75 percent within 15 years. This guideline is not appropriate for revenue-supported debt issuance where debt maturities should be tailored to cash flows. For example, AHFC debt should be structured to mature coincidentally with the repayment schedules of its mortgages.

The general obligation guideline is also not appropriate for Alaska's general obligation debt because of the uncertainty over the level of State revenues 20 years hence. For this reason, as mentioned in the Debt Profile of the State's general obligation bonds (Chapter Two), Alaska has developed a strategy to market the State's debt that involves shortening the average maturities of bond issues to conform with the Prudhoe Bay oil curve. Table 3.10 indicates that the decrease in average life of the State's debt corresponds to an improvement in its credit rating, because maturities now correspond to more predictable State revenue streams.

Table 7.10
Debt Service Percentage of Total
General Funds Appropriations
(All figures in \$ thousands)

<u>Fiscal Year</u>	<u>Total General Funds Appropriations^{1/}</u>	<u>Debt Service^{2/}</u>	<u>Debt Service Percentage of Total General Appropriations</u>
1975	\$ 528,260.1	\$ 30,144.0	5.7%
1976	627,274.5	35,115.1	5.6
1977	734,626.0	41,883.9	5.7
1978	833,794.7	50,028.0	6.0
1979	1,079,827.8	60,024.2	5.6
1980	1,135,400.0	75,072.3	6.6
1981	4,960,500.0	97,623.0	2.0
1982	5,663,400.0	102,400.0	1.8
1983	3,053,896.9	143,624.0	4.7
1984	3,158,700.0	163,415.0	5.2

SOURCE: Alaska Executive Budget, Book II-Capital Budget FY84.

^{1/} Total General Funds Appropriations -- Figures developed by Management and Budget to represent total appropriations of General Funds from all types of legislation, including supplementals, associated with the given fiscal year.

^{2/} Includes September 1982 General Obligation Bond Sale.

Table 7.11

Debt Service as a Percentage of
General Fund Unrestricted Revenues

<u>Fiscal Year</u>	<u>General Fund Unrestricted Revenues</u>	<u>Current General Obligation Debt Service</u>	<u>Percent Required for Debt Service</u>	<u>Moody's State Rating</u>
1973	\$214.6	\$23.5	10.95%	Baa
1974	258.1	26.3	10.22	A
1975	333.6	30.1	9.03	A
1976	705.4	35.1	4.98	A
1977	877.4	41.8	4.77	A
1978	768.0	50.0	6.51	A
1979	1,117.4	60.0	5.36	A
1980	2,467.3	75.1	3.04	AA
1981	3,718.2	97.6	2.63	AA
1982	4,108.4	97.5	2.37	AA
1983	3,542.0	143.6	4.05	AA

Source: John Nuveen & Co., Alaska, A New Look, April, 1981. p. 19. updated with Alaska Department of Revenue, Revenue Sources FY 1982-85, January, 1983 and Department of Administration and Finance, Bonded Debt and Debt Service, FY 1982.

Looking at the rapidity of principal repayment of the State's general obligation debt and that of all State issuers demonstrates that the extremely short average life is particular to the State's tax-supported debt, and not other State agency issuers. Table 7.12 lists the cumulative percentage of debt that will be retired by the end of each fiscal year indicated for all State-level issuers. For example, by 1987, the State will have retired 47 percent of its general obligation bonds. However, by the same year, the AHFC will have retired only 10 percent of its debt. Table 7.13 condenses the rapidity of principal repayment information for all issuers in the State. Within ten years, 85 percent of tax-supported debt, and 42 percent of indirect debt will have been retired.

Future Debt Capacity

As discussed above, the affordable level of general obligation debt is determined by a state's ability and willingness to pay debt service on the amounts borrowed. It was shown that traditional measures of debt capacity do not adequately measure Alaska's immediate ability to repay debt, and are, therefore, not appropriate for assessing the State's debt capacity for the near future. Over the next six years State tax revenues in current dollars are projected to increase due largely to Prudhoe Bay production. Although the rate of increase in State revenues will depend upon fluctuating petroleum prices worldwide, the size of the Prudhoe oil field virtually assures a reasonably strong revenue stream for the short-term. However, after the Prudhoe Curve reaches its peak around the year 1989, oil revenues as forecasted by the Department of Revenue, begin to decline. Furthermore, if expressed in real, 1983 dollars (a measure of purchasing power), total petroleum revenues are projected to decline beginning in 1983. It will become necessary for the State to diversify its economy and its tax-revenue base, and, assuming it is able to broaden its tax base, the more traditional measures of ability to pay will be more appropriate for assessing debt capacity and will be of greater concern to investors.

Assessment of Alaska's capacity for future debt issuance must be based upon 1) known and predictable resources that the State is legally able to tap through currently available taxes, and 2) other unrestricted revenue streams. The State must not issue debt today with the intention of repaying the debt through the proceeds of an individual income tax, for example, if those tax revenues are not presently available. Furthermore, although the State's Permanent Fund is a valuable resource, and is expected to grow to nearly \$10 billion by 1990, it must not be treated as an asset in determining debt capacity (except to the extent that interest earnings flow to the general fund) because by law the principal of the fund is untouchable.

Projections of future unrestricted general fund revenues are made quarterly by the Department of Revenue. Because these revenues are the ultimate source of repayment of the State's debt, they are the best available measure of the State's "ability to pay" in assessing debt capacity. The ratio of debt service payable in a given year to unrestricted general fund revenues is

Table 7.12

STATE OF ALASKA ISSUERS
Rapidly of Principal Repayment
Debt Outstanding as of June 30, 1982

Fiscal	State G.O. Bonds ^{1/}	University of Alaska	State Housing Agency	Municipal Bond Bank	Housing Finance Corp.	Alaska Power Authority	Alaska Industrial Authority	Medical Facilities	State Development Corp.	International Airport
1983	7.91	5.49	9.15	3.04	0.88	0.00	4.25	2.85	100.00	4.35
1984	17.66	9.80	18.90	6.57	2.55	17.50	8.49	5.92		8.97
1985	27.40	14.33	29.28	10.39	4.68	100.00	12.29	9.20		13.86
1986	37.27	17.95	40.33	14.58	7.04		15.82	12.75		19.03
5 1987	47.06	21.75	46.79	19.15	9.59		19.09	16.56		24.53
1988	56.88	25.75	53.60	23.94	12.29		21.97	20.64		30.35
1989	66.22	30.05	60.83	29.28	15.20		24.78	25.02		36.59
1990	74.76	34.57	68.50	36.19	18.39		27.69	29.71		43.20
1991	81.54	39.34	76.62	44.69	21.85		30.97	34.75		50.18
10 1992	86.25	44.37	85.24	54.62	36.90		34.20	40.14		57.51
1993	90.49	49.72	93.37	61.40	39.80		37.25	45.92		65.22
1994	92.49	54.38	97.80	66.29	42.88		40.57	52.10		73.34
1995	94.35	59.41	100.00	71.20	46.16		44.19	58.76		81.87
1996	96.16	64.67		76.98	49.63		48.28	65.91		90.84
15 1997	97.61	70.28		81.57	53.30		52.31	73.58		95.21
1998	98.91	76.22		85.04	56.87		55.79	81.77		100.00
1999	99.75	82.53		88.98	60.70		59.69	90.58		
2000	100.00	89.19		93.36	64.11		64.07	100.00		
2001		93.57		97.37	67.41		69.07			
20 2002		95.54		100.00	70.11		74.04			
2003		96.85			72.74		78.24			
2004		97.91			75.45		82.86			
2005		98.50			78.23		88.13			
2006		99.09			81.19		94.07			
25 2007		99.70			84.52		99.29			
2008		100.00			87.76		100.00			
2009					91.53					
2010					94.74					
2011					97.93					
30 2012					100.00					

^{1/} Includes October 1982 general obligation bond issue.

Table 7.13

State of Alaska
 Combined Rapidity of Principal Repayment
 Debt Outstanding as of June 30, 1982

Fiscal Year 1983	Tax-Supported Debt ^{1/}	Indirect Debt ^{2/}	All State Issuers
1983	7.94%	1.04%	3.22%
1984	17.59	4.21	8.44
1985	27.27	13.16	17.63
1986	37.10	15.47	22.31
5 1987	46.58	17.93	27.00
1988	56.12	20.53	31.79
1989	65.23	23.33	36.59
1990	73.65	26.42	41.37
1991	80.48	29.83	45.85
10 1992	85.42	42.93	56.38
1993	89.92	45.80	59.76
1994	92.12	48.76	62.48
1995	94.06	51.90	65.24
1996	95.82	55.25	68.09
15 1997	97.26	58.68	70.89
1998	98.56	61.99	73.56
1999	99.45	65.50	76.24
2000	99.80	68.70	78.54
2001	99.88	71.77	80.66
20 2002	99.92	74.27	82.39
2003	99.94	76.60	83.99
2004	99.96	79.01	85.64
2005	99.97	81.50	87.34
2006	99.98	84.15	89.16
25 2007	99.99	87.09	91.17
2008	100.00	89.81	93.04
2009		92.95	95.18
2010		95.62	97.01
2011		98.27	98.82
30 2012		100.00	100.00

^{1/} State General Obligation, University of Alaska, and Alaska State Housing Authority bonds.

^{2/} Alaska Housing Finance Corporation, Alaska Power Authority, Alaska Industrial Development Authority, Alaska Medical Facilities Authority, Municipal Bond Bank, State Development Corporation, and International Airport revenue bonds.

relatively straightforward and can be computed for many years into the future (currently, the Department of Revenue projects revenues until the year 2000). The reliability of these projections weakens as one gets further into the future; however, for the immediate term, they meet the aforementioned criteria of "known and predictable".

A good starting point for assessing future debt capacity is to compare future debt service payments to which the State is currently committed to the projected levels of unrestricted general fund revenues. This comparison (shown in Table 7.14) indicates the trend in this ratio if the State does not issue further general obligation debt. Table 7.14 shows that according to the March 1983 Department of Revenue projections of unrestricted general fund revenues, debt service on general obligation debt will account for nearly 6 percent of these revenues in 1984. This figure exceeds 5 percent until 1988. Thereafter, as presently committed debt service gradually declines, the ratio falls to below 1 percent after 1994.

In assessing the State's future debt capacity, it is important to define the type of debt that should be considered in such an exercise. Because of the different considerations that surround the affordability analysis of revenue-supported debt (see page xxx), the choice is essentially between general obligation debt and tax-supported debt. In Alaska, tax-supported debt includes the lease-revenue debt of ASHA and the University of Alaska debt in addition to general obligation debt. Generally, states that have a low ratio of general obligation debt to total tax-supported debt should use the broader concept of tax-supported debt in analysing debt capacity. In Alaska this ratio is relatively high at 92 percent (\$946 million general obligation debt out of \$1.028 billion tax-supported debt, see Table 3.16). Because very little non-general obligation tax-supported debt has been issued from Alaska, the following analysis concentrates on general obligation debt only. However, if the ratio of general obligation debt to total tax-supported debt should drop below approximately 85 percent, the analysis of debt capacity should be broadened to include all tax-supported debt.

Short-term Guidelines

In order to plan future debt issuance, the State should establish a maximum target ratio of debt service to unrestricted general fund revenues. Such action will not only assist the State in deciding how to finance capital projects over the coming decade, it will also be favorably viewed by investors and the credit rating agencies. Deciding upon the proper level of this target ratio is not a simple task. There is no one target ratio that is recommended by credit analysts as fiscally responsible, the proper level depends on each individual state's circumstances.

As mentioned above, debt will continue to be affordable if, in the judgement of State officials, the payment of debt service does not prevent the State from attaining other objectives. The level of five to six percent of State revenues at which the most recent projections indicate the State will be until

Table 7.14
 Alaska State General Obligation Debt
 Projected Ratio of Debt
 Service to General Fund Revenues

<u>Fiscal Year</u>	<u>Unrestricted General Fund Revenue (1) (millions)</u>	<u>Debt Service Committed as of Dec. 1982 (millions)</u>	<u>Debt Service Commitment as % of Unrestricted General Fund Revenue</u>
1983	\$3542	\$143.6	4.05%
1984	2737	163.4	5.97
1985	2772	156.2	5.63
1986	2838	150.6	5.31
1987	2960	142.8	4.82
1988	2871	136.3	4.75
1989	3065	124.5	4.06
1990	2946	109.8	3.73
1991	2704	85.6	3.17
1992	2631	58.9	2.24
1993	2519	50.9	2.02
1994	2423	25.8	1.06
1995	2359	23.1	0.98
1996	2206	21.5	0.97
1997	2230	16.7	0.75
1998	2261	14.4	0.64
1999	2259	9.1	0.40
2000	2268	2.6	0.11

(1) March, 1983, 30th percentile projections of The Department of Revenue.

1987, is a "safe" level. If the State maintains this ratio of debt service to unrestricted general fund revenues and continues to issue debt with maximum maturities within the "known and predictable" revenue range, it is likely that the State's creditworthiness will be preserved. Therefore, five percent is a conservative estimate of the affordable ratio of debt service to revenues.

Table 7.15 demonstrates the use of a 5 percent target ratio of debt service to projections of unrestricted general fund revenues in determining future general obligation debt capacity. Column 1 contains the March 1983, 30th percentile projections of unrestricted general fund revenues made by the Department of Revenue. Column 2 lists the 5 percent target ratio. Column 3 contains annual (by fiscal year) debt service to which the State has previously committed itself. Column 4 is the debt service payable on debt that is assumed to have been issued in the future (Column 6). Column 5 lists the additional capacity for debt service created in each fiscal year. This figure is derived by subtracting previously committed debt service (columns 3 and 4) from the 5 percent target. Column 6 lists the amount of debt that can be supported by the amount of revenues available for debt service at the 5 percent level, assuming 10-year bonds, level amortization, and an 8.0 percent average interest rate (AA-rated bonds were trading at approximately 8.4 percent at the end of May 1983, and Alaska trades slightly below the AA rates). The example in Table 7.15 assumes that an amount of bonds equal to the total debt capacity as identified in Column 5 is issued when the capacity becomes available. Alternatively, capacity could accumulate but remain unused in order to spread debt issuance over several years.

According to this framework for assessing future debt capacity, the State may issue approximately \$252 million in general obligation debt through 1990 commencing in 1987; an additional \$349 million between 1990 and 1995; and, if known and predictable revenues are available after 2005 at the same level as in the year 2000, an additional \$401 could be issued. Total future debt capacity using this criteria is slightly over \$1 billion; however, it is dependent upon the reliability of the revenue projections in Table 7.15, and the assumption that revenues beyond 2000 will continue at the same level as in 2000. If revenues beyond 2000 are lower, debt issuance as early as 1990 may have to be cut back. Uncertainty over future revenues requires that continual monitoring and revising of this kind of capacity analysis must occur as new projections become available from the Department of Revenue. Similarly, the analysis should be performed periodically when tax-exempt interest rates are fluctuating.

If the State made a conscious decision, as part of a long-term capital investment strategy, to spend a larger share of unrestricted general fund revenues on debt service, additional debt capacity would be created. Such a decision would likely require trade-offs between paying debt service and spending on other priorities. As long as the payment of debt service does not prevent the State from providing "essential" services, an increase in debt service to as much as 10 percent of revenues would not significantly erode the State's creditworthiness or access to the bond market. However, committing ten percent of revenues to the payment of debt service may cause the national

Table 7.15

Alaska State General Obligation Debt

Future Debt Capacity
Debt Service at 5 Percent of
General Fund Revenues
(millions)

Fiscal Year	(1) Unrestricted General Fund Revenue ¹	(2) Available for Debt Service ²	(3) Debt Service Committed as of Dec. 1982	(4) Debt Service on future Borrowing ³	(5) Additional Debt Service Capacity	(6) Future G.O. Debt Capacity ⁴
1983	3542	-	143.6	-	0	0
1984	2737	137	163.4	-	0	0
1985	2772	139	156.2	-	0	0
1986	2838	142	150.6	-	0	0
1987	2960	148	142.8	-	5.2	35
1988	2871	144	136.3	5.2	2.5	17
1989	3065	153	124.5	7.7	20.8	141
1990	2946	147	109.8	28.5	8.7	59
1991	2704	135	85.6	37.2	12.2	83
1992	2631	132	58.9	49.4	23.7	161
1993	2519	126	50.9	73.1	2.0	14
1994	2423	121	25.8	75.1	13.4	91
1995	2359	118	23.1	88.5	0	0
1996	2206	110	21.5	88.5	0	0
1997	2230	111	16.7	83.3	11.0	75
1998	2261	113	14.4	91.8	6.8	46
1999	2259	113	9.1	77.8	26.1	177
2000	2268	113	2.6	95.2	15.2	103
					1476	1002

- 1 March 1983, 30th percentile projections of the Department of Revenue.
- 2 5 percent of column 1.
- 3 Assumes that debt equal to full capacity (column 6) is issued.
- 4 10-year bonds at 8.0 percent (AA-rated) level amortization debt service constant is .1472 (e.g., column 5 ÷ .1472 = column 6).

credit rating agencies to reevaluate the State and result in a rating change from an AA to an A.

Using the framework described for Table 7.15, Table 7.16 presents a calculation of future debt capacity using a debt service target ratio of 10 percent. If the State allocated 10 percent of revenues to debt service, we have conservatively assumed that the credit rating would drop to an A, increasing average interest costs from 8 percent to 8.7 percent (A-rated bonds were trading at this level at the end of May 1983). Table 7.16 indicates that debt capacity rises over the 16 years until 2000 by \$1.672 billion (from \$1.002 billion to \$2.674 billion) as a result of the increase from 5 percent to 10 percent. The timing of debt capacity also differs between the two scenarios, using the 10 percent guideline, \$1.215 billion could be issued by the year 1990 rather than \$252 million, and debt issuance could commence in fiscal year 1984 instead of 1987.

The decision to increase debt issuance beyond the 5 percent target level would require the State to commit a substantial portion of its budget to the payment of debt service. Maintaining the 5 percent ratio over the 27-year period from 1983 to 2010 (for debt issued between 1983 and 2000) will require the appropriation of nearly \$1.4 billion more than currently committed debt service (of \$1.47 billion). Raising the share of debt service to 10 percent would result in additional appropriations of \$2.6 billion above the 5 percent level (a total of over \$4 billion) over the 27 years.

Because debt capacity depends upon a government's willingness to repay, in addition to its ability to repay, no precise level of future debt capacity can be recommended by this study. Rather, it is recommended that the State determine an acceptable range of annual debt issuance, the low point of which (e.g., 5 percent ratio of debt service to revenues) adequately meets public service demands and the high point of which (e.g., 10 percent) results in debt service not placing a strain on resources to the extent that other public priorities must suffer. The debt affordability question, therefore, is calculated in reverse. First the affordable level of debt service must be established and from this a calculation of the level of debt that this amount of debt service can support. Once the affordable range for debt issuance has been determined, the actual amount of debt issued within this range will depend upon the costs and priorities of capital projects.

Long-term Guidelines

As long as the State continues to demonstrate an ability to tax its vast oil resources at a level that can support the payment of debt service and the provision of essential services, attention to traditional measures of ability to pay are not suitable for assessing Alaska's debt capacity. However, if there comes a time when the State's tax revenues are more broadly based, with income, sales and use, and property taxes comprising a significant share of State revenues, traditional debt capacity analysis will become applicable. As Alaska becomes more similar to other states in terms of its resources available

Table 7.16

Alaska State General Obligation Bonds

Future Debt Capacity
Debt Service at 10 Percent of
General Fund Revenues
(millions)

Fiscal Year	(1) Unrestricted General Fund Revenue ¹	(2) Available for Debt Service ²	(3) Debt Service Committed as Dec. 1982	(4) Debt Service on future Borrowing ³	(5) Additional Debt Service Capacity	(6) Future G.O. Debt Capacity ⁴
1983	3542	354	143.6	0	0	0
1984	2737	274	163.4	0	110.6	729
1985	2772	277	156.2	110.6	10.2	67
1896	2838	284	150.6	120.8	12.6	83
1987	2960	296	142.8	133.4	17.3	114
1988	2871	287	136.3	150.7	0	0
1989	3065	306	124.5	150.7	30.8	203
1990	2946	295	109.8	181.5	2.9	19
1991	2704	270	85.6	184.4	0	0
1992	2631	263	58.9	184.4	16.7	110
1993	2519	252	50.9	201.1	0	0
1994	2423	242	25.8	201.1	15.1	99
1995	2359	236	23.1	212.9	104.1	686
1996	2206	221	21.5	199.5	0	0
1997	2230	223	16.7	186.9	19.4	128
1998	2261	226	14.4	189.0	22.6	149
1999	2259	226	9.1	211.6	5.3	35
2000	2268	227	2.6	186.1	38.3	252
					4,059	2,674

- 1 March 1983, 30th percentile projections of the Department of Revenue.
- 2 10 percent of column 1.
- 3 Assumes that debt equal to full capacity (column 6) is issued.
- 4 10-year bonds at 8.7 percent (A-rated), level amortization debt service constant .1518 (e.g., column 5 ÷ .1518 = column 6).

TABLE 7.17

CALCULATION OF FUTURE DEBT RATIOS

		FY 1983 Tax-Supported Debt Outstanding:		1114843000			
Fiscal Year	Debt Retired	Increase In Debt Outstanding	Debt Per- Capita	Debt Per- Assessed Value	Debt Per \$1,000 of Personal Income		
-----	-----	-----	-----	-----	-----		
		Growth:	.005	Growth:	.05	Growth:	.062
1	1983	88484	0	2198.80	2.77	170.54	
2	1984	107595	0	1958.50	2.37	143.75	
3	1985	107950	0	1719.79	1.99	125.35	
4	1986	109616	0	1479.89	1.64	109.76	
5	1987	105686	0	1250.58	1.32	97.38	
6	1988	106272	0	1022.30	1.04	84.78	
7	1989	101650	0	805.86	0.78	73.84	
8	1990	93829	0	607.74	0.56	64.75	
9	1991	76118	0	448.02	0.40	58.29	
10	1992	55154	0	332.82	0.28	49.55	
11	1993	50109	0	229.04	0.19	42.10	
12	1994	24520	0	178.18	0.14	37.54	
13	1995	21593	0	133.72	0.10	33.60	
14	1996	19678	0	93.54	0.07	30.15	
15	1997	16004	0	61.10	0.04	27.24	
16	1998	14585	0	31.81	0.02	24.67	
17	1999	9921	0	12.02	0.01	22.60	
18	2000	3884	0	4.32	0.00	21.05	
19	2001	889	0	2.56	0.00	19.77	
			0				

Base Year Assumptions: (1982)

Population:	464460
Personal Income:	5667000
Assessed Value:	3.523E10

to repay debt, its relative debt position among all states will play a greater role in determining its cost of borrowing and market access. It is recommended, therefore, that the State continually assess the impact of future debt issuance on its "external" debt statistics, and its position relative to other states.

The external debt analysis includes the types of statistics mentioned in the first half of this section. Among these are:

- . tax-supported debt measured against personal income;
- . net State and local debt measured against personal income;
- . general obligation debt and tax-supported debt measured against the ACIR tax-capacity index;
- . net State and local debt measured against market value of taxable property;
- . incremental revenues measured against incremental debt service;
- . Overall economic and demographic trends, such as employment, population, industrial base, bank deposits, consumer installment credit, and retail sales.

Table 7.17 demonstrates projection of the ratio of current tax-supported debt to population, assessed value, and personal income for the period 1983 to 2001 (when all currently outstanding State general obligation bonds will have been retired). The growth rates assumed for each of the variables are based on their 1978-1982 average, and are listed at the head of each column. Because of the rapid retirement of State debt, these ratios approach the current Moody's medians by 1988 (debt to assessed value), 1991 (debt to personal income), and 1994 (debt per capita). As the State issues further tax-supported debt, this type of analysis should be conducted to assess the impact of the debt on the future levels of these external debt statistics.

NOTES

CHAPTER II

- 1 Marnie Shaul, The Taxable Bond Option for Municipal Bonds. Columbus, OH: The Academy for Contemporary Problems, 1977.
- 2 The amount of revenue lost to the federal treasury depends on the tax bracket of the bondholder and is, therefore, difficult to measure.
- 3 John E. Petersen, "An Analysis of the Impact of the Proposed Corporate Minimum Income Tax on Tax-Exempt Interest Rates and Borrowing Costs", Washington, DC: The Government Finance Research Center, 1982.
- 4 Lennox L. Moak, Municipal Bonds: Planning, Sale, and Administration. Chicago: The Municipal Finance Officers Association, 1982. page 147.

CHAPTER III

- 1 This chapter was compiled using primarily the following sources:

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CHAPTER IV

- 1 Net Interest Cost (NIC) rather than True Interest Cost (TIC) is used as the basis of comparison because it is the method most often used by states at present to report effective interest costs.

CHAPTER V

- 1 Martin T. Katzman, "Measuring the Savings from State Municipal Bond Banking", Governmental Finance, Vol. 9, No. 1, March 1980.

2 see William E. Mitchell, "The Effectiveness of Debt Limits on State and Local Borrowing", The Bulletin, New York University Graduate School of Business Administration, Institute of Finance, October 1967 and Government Finance Research Center, The Fiscal Effects of State Regulations on Local Taxation and Debt Issuance, Washington, DC: The Municipal Finance Officers Association, 1983.

3 see John E. Petersen, Lisa A. Cole and Maria L. Petrillo, Watching and Counting: A Survey of State Assistance to and Supervision of Local Government Debt and Financial Administration, Chicago: Municipal Finance Officers Association and National Conference of State Legislatures, 1977.

4 William Wizeman and Jane Curtis, New Jersey's Local Units: Scurity Highlights of Municipal and School Bonds. New York: Prudential-Bache Securities. 1983.

CHAPTER VI

1 Steven Gold, "Trends in the Magnitude and Character of State Debt", published in Debt Policy: Pressing Problems, Emerging Solutions: (Summary of Conference proceedings), New York, January, 1982. Published by the National Conference of State Legislatures in cooperation with the Government Finance Research Center of the Municipal Finance Officers Association and the New York State Assembly. (Hereinafter cited as: Debt Policy Proceedings.) See also John Petersen, "The Municipal Bond Market: Recent Changes and Future Prospects", in Norman Walzer and David Chicoine, editors, Financing State and Local Governments in the 1980's (Cambridge: Oelgeschlager, Gunn and Hain, 1981), pp. 129-142.

2 Robert Lamb and Stephen Rappaport, Municipal Bonds, (New York, McGraw-Hill, 1980), 131ff.

3 Assemblyman Arthur J. Kremer, "Controls Over New York Agencies Need to Be Tightened", The Weekly Bond Buyer, (April 25, 1983), p. 13.

4 Bonded Indebtedness in Kentucky, p. 42; The Use of Tax-Exempt Bonds in California, pp. 208-9.

5 The Use of Tax-Exempt Bonds in California, pp. 208-9.

6 State of Oregon's Bonded Debt: A Review of Borrowing Practices, Industrial Development Bonds, p. 32.

7 Ed Montaneor, "The State Role in Local Government Debt Management in Florida", Debt Policy Proceedings, pp. 43-47.

8 State of Oregon's Bonded Debt: A Review of Borrowing Practices, General Obligation and Direct Revenue Bonds, pp. 23-31.

9 Robert Fairbanks, "New Power for an 'Old Statesman': Unruh's \$3 billion lending machine", California Journal (February, 1983) pp. 48-52. The article provides a list of state debt issuers with the Treasurer's role delineated in each one.

- 10 Michael Hernandez in Debt Policy Proceedings, pp. 50-54.
- 11 Patrick J. Sullivan, "The Effect of Local Municipal Bond Markets on Local Government Borrowing Costs".
- 12 For details see Watching and Counting, Municipal Finance Officers Association and National Conference of State Legislatures, 1977; "How States Can Assist Local Governments with Debt Financing for Infrastructure", Legislative Finance Paper #19, National Conference of State Legislatures, 1982.
- 13 Moody's Investors Service, Inc., Pitfalls in Issuing Municipal Bonds, (New York: Moody's Investors Service), 1977.
- 14 Standard & Poor's Corporation, Perspective, November 26, 1980.
- 15 Ibid.
- 16 Standard & Poor's Corporation, CreditWeek, July 5, 1983.
- 17 Ronald W. Forbes and John E. Petersen, Local Government General Obligation Bond Sales In Pennsylvania: The Cost Implications of Negotiation vs. Competitive Bidding, Government Finance Research Center, 1979.
- 18 Charles K. Coe, Getting the Most From Professional Services: Fiscal Advisor, University of Georgia, Institute of Government, 1979.
- 19 Michael D. Joehnk and David S. Kidwell, "Advance Refunding: A Controversial Tool", The Daily Bond Buyer, April 18, 1977.

CHAPTER VII

- 1 Alaska Pacific Bancorporation, The Alaska Economy: An Introductory Overview, 1982.
- 2 from U.S. Department of Commerce, Bureau of the Census, State Government Finances, Fiscal Year 1982.
- 3 see U.S. Advisory Commission on Intergovernmental Relations, The Tax Capacity of the Fifty States: Methodology and Estimates, 1982.
- 4 Alaska Department of Revenue, Petroleum Revenue Division, Petroleum Production Revenue Forecast, March 1983.

APPENDIX ONE

The Basis for Incurring and Repaying Debt at the State and Local Levels

The Constitution of the State of Alaska and State law as established by the Alaska Legislature and embodied in the Alaska Statutes determine the legal framework within which the State and its political subdivisions must conduct their fiscal affairs. State laws govern the types of debt that may be incurred, the structuring and procedures for debt issuance, and the level and types of taxes or other revenues available to repay that debt.

State Debt

Article IX, "Finance and Taxation", of the Alaska Constitution addresses the taxing authority and ability to incur debt at both State and local levels. Section 8 of Article IX, "State Debt", requires that general obligation debt be incurred only for capital improvements or to provide housing assistance to qualified veterans. This section also requires that State general obligation debt be approved by a majority of voters, except for the purposes of repelling invasion, suppressing insurrection, defending the State in war, or meeting natural disasters. Section 10, "Interim Borrowing", permits the State to issue short-term notes in anticipation of the collection of revenues for that year (called tax or revenue anticipation notes) provided that such notes are repaid before the end of the following fiscal year.

Section 11, "Exceptions", exempts the revenue-supported debt of the State, its public corporations, and local governments from the voter referendum requirement, and other constitutional restrictions on contracting debt. The restrictions do not apply to any debt that secured solely by the revenues of the public enterprise or corporation. Refunding bonds and special assessment bonds are also exempted.

Section 37, Chapter 15, the "State Bonding Act", of the Alaska Statutes sets forth the specific issuance procedure and bond structure requirements for State general obligation bonds, bond anticipation notes, and International Airport revenue bonds. This act requires selling general obligation bonds to the highest responsible bidder (i.e., the bid resulting in the lowest interest cost) at an interest rate not to exceed 11 percent a year or 110 percent of the Bond Buyer 20-Bond Index for the preceding week. The maturity structure may be set by the State Bond Committee, with a maximum maturity of 30 years unless a longer period is authorized by Statute. Bonds may be issued in either coupon or registered form, with the place of payment determined by the State Bond Committee. Facsimile signatures of the Governor and Lieutenant Governor may be used.

The State Bonding Act also creates, and establishes the composition and duties of the State Bond Committee. The required members of the Committee are the Commissioner of Commerce and Economic Development (chairman), the Commissioner of Administration, and the Commissioner of Revenue (secretary). The statutorily defined responsibilities of the Committee are to adopt the resolution and prepare the documents necessary for the issuance, sale, and delivery of State general obligation and international airport revenue bonds. The Committee must certify annually to the Department of Administration the amount of debt service which must be paid during the following year. The State

Bond Committee may secure professional legal and financial advisory services; however, firms providing financial advice may not bid on State bond issues for which they provide such assistance.

The general authority to levy taxes and charges in order to repay debt and provide for general governmental operation is contained in Article IX, Section 1 of the State Constitution. The specific taxes, their tax base and rate, that the legislature has decided to levy are identified in several State statutes. The major sources of revenue are the oil and gas production tax (AS 43.55) and the oil and gas property tax (AS 43.56). Other sales, use, and licenses taxes and charges are also levied, however their contribution to State revenues is minimal. The State does not presently levy a personal income tax.

The oil and gas property tax is a 20 mill ad valorem tax on oil and gas transportation facilities and on facilities used in oil and gas exploration or production. Most notable of the properties subject to this tax are the Trans-Alaska Pipeline System (including the terminal at Valdez) and the field production system at Prudhoe Bay. State revenues from this tax are limited, however, because the State also permits local governments to tax this property and allows the oil companies to credit local taxes paid on this property against their State property tax liability.

Debt of State Public Corporations

The ability of State public corporations such as the Alaska Housing Finance Corporation to incur debt is established in the enabling legislation for each corporation. The basic requirement is that bonds must be secured by the revenues generated by the project being financed or by revenues from other projects of the corporation, but not by State taxing authority. The Alaska Housing Finance Corporation, Alaska Industrial Development Authority, and the Municipal Bond Bank must receive annual authorization for a maximum (unspecified) level of debt issuance. The Alaska Power Authority must notify the Governor and the Legislative Budget and Audit Committee 60 days before the issuance of debt. If the Alaska State Housing Agency issues bonds through a negotiated sale, it must hire a financial advisor that is independent of the negotiating underwriter to assist in the sale.

Local Governmental Units

Article IX, Section 9, "Local Debts", of the Alaska Constitution grants local governments the authority to issue general obligation debt for capital improvements upon approval of qualified voters without limit as to amount. This section also permits local governments to issue short-term notes to be repaid from anticipated tax collections within the following fiscal year. Section 29, Chapter 58, "Municipal Debt", of the Alaska Statutes regulates local debt issuance in greater detail. General obligation bonds may be sold through negotiation or a competitive sale, with interest rates not to exceed the contract usury rate of interest provided by law. Bonds may not be sold at a price less than their par value.

Bonds issued for the construction of school facilities are eligible for State assistance in the payment of debt service (AS 43.18.100). The dollar amount of this program varies each year depending on legislative authorization. There are

no limits placed on the amount of debt that that can be issued under this program.

Other sources of repayment for municipal indebtedness are general tax revenues and specific utility or other project revenues. Article X, Section 2, "Local Government Powers", of the Constitution states that the power to tax may be delegated only to organized boroughs and cities. Alaska Statutes Chapter 29 Section 53 permits these units to levy a general property tax, subject to certain limits, and a sales tax not to exceed 6 percent on sales, rents, or services. Property taxes levied in order to pay debt service on general obligation bonds are not subject to limitation.

APPENDIX TWO

Interviews and Contacts

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APPENDIX THREE

GLOSSARY OF

BASIC PUBLIC FINANCE TERMINOLOGY

ACCRUED INTEREST: In an original governmental bond sale, accrued interest is the amount which has accumulated on the bonds from the dated date of issue up to, but not including, the date of delivery. Where a bond is purchased by a governmental unit, accrued interest is the amount which has accumulated on the bond from the last interest date up to, but not including, the date of purchase.

AD VALOREM TAX: A tax based on value, such as the assessed value of real (land and improvements) and personal property.

ADVANCE REFUNDING BONDS: Bonds issued to refund an outstanding bond issue prior to the date on which the outstanding bonds become due or callable. Proceeds of the advance refunding bonds are deposited in escrow with a fiduciary, invested in U.S. Treasury Bonds or other authorized securities, and used to redeem the underlying bonds at maturity or call date and to pay interest on the bonds being refunded or the advance refunding bonds.

Since the investments in which the proceeds of the advance refunding issue are invested will frequently earn a higher rate of interest than that paid on the outstanding bond issue and the advance refunding issue, the issuing agency may realize a net interest gain from the refunding operation, depending upon arbitrage restrictions.

AMORTIZATION: A straight-line reduction of debt by means of periodic payment sufficient to meet current interest and liquidate the debt at maturity.

AMORTIZATION OF PREMIUM: The periodic charges made against the interest received on bonds in order to offset any premium paid for the bonds above their par value or call price.

ARBITRAGE: The practice of investing bond proceeds at a yield greater than the coupon rate being paid on the bonds. This "profit" is strictly limited by the Internal Revenue Service.

ASSESSED VALUATION: The valuation placed on real estate or other property by a government for the purpose of levying taxes.

ASSESSMENT RATIO: The ratio of the assessed value of property to the full or true market value. Full value may be defined as fair market value at the bid side of the market less a reasonable allowance for sales and other expenses.

ASSETS: Property owned by a government which has monetary value.

AUTHORITY: A governmental unit or public agency created to perform a single function or restricted group of related activities. Usually such units are financed from service charges, fees and tolls, but in some instances they also have taxing powers. An authority may be completely independent of other governmental units, or in some cases it may be partially dependent upon other governments for its creation, its financing or the existence of certain powers.

AUTHORITY BONDS: Bonds payable from the earnings or other revenues of a specific authority created by a governmental action for a public purpose. Since such authorities usually have no revenue other than charges for services, their bonds are ordinarily revenue bonds.

AUTHORIZATION: Permission to issue the bonds. In addition to the Constitution, Statute or Charter enabling language, an election is often also required.

AVERAGE NET INTEREST COSTS: This is the expression of the average annual interest rate payable semiannually in respect to an issue or other group of bonds. There are a number of methods by which average net interest costs may be computed.

BALANCE SHEET: A statement purporting to present the financial position of an entity by disclosing the value of its assets, liabilities, and equities as of a specified date.

BALLOON MATURITY: The last bonds of an issue maturing in a substantially larger amount than those of earlier maturities. Very often a provision is made for the redemption of a part of all of these bonds by a purchase or call prior to maturity.

BASIS BOOK: A book of mathematical tables used to convert yield to maturity to equivalent dollar prices at various rates of interest.

BASIS POINT: One one-hundredth of one percent (0.01). One hundredth basis points equals one percent.

BEARER BOND: A bond which does not have the owner's name registered on the books of the Issuer. It is presumed to be owned by the bearer or the person who holds it.

BID: A statement of what a bank or syndicate of banks will pay for an entire bond issue, implying an offer to purchase the bonds. The lowest bid, i.e., the bid with lowest net or true cost, is the winning bid.

BOND: A certificate representing a promise to pay a specified sum of money, called the face value or principal sum of money, called the face value or principal amount, at a specified date or dates in the future, called the maturity date(s), together with periodic interest at a specified rate. The difference between a note and a bond is that the latter usually runs for a longer period of time and is usually a permanent financing tool while a note is typically an interim device.

- BOND AND INTEREST RECORD (Also called Bond Register):** The permanent and complete record maintained by a government for each bond issue. It shows the amount of interest and principal coming due each date, the bond and coupon numbers, and all other pertinent information concerning the bond issue.
- BOND ANTICIPATION NOTE (BAN):** Short-term interest bearing notes issued by a government unit in anticipation of bonds to be issued at a later date. The notes are retired from proceeds of the bond issue to which they are related.
- BOND BUYER:** A daily trade paper of the municipal bond market. It also publishes The Weekly Bond Buyer which is devoted to capital market news and provides a summary of the week's municipal news.
- BOND COUNSEL:** Legal firm hired to advise the issuer regarding the legal and tax aspects of the sale.
- BOND ORDINANCE OR RESOLUTION:** A legal order approved by the appropriate body of government unit authorizing a bond issue. The rights of the bond holders and the obligations of the issuer are carefully detailed in this formal document. State laws and municipal charters prescribe whether a bond issue may be authorized by resolution, or must be made by ordinance. The latter is a more formal act of the governing body.
- BONDED DEBT:** That portion of indebtedness represented by outstanding bonds.
- BONDS AUTHORIZED AND UNISSUED:** Bonds which have been legally authorized but not issued and which can be offered and sold without further authorization. This term should not be confused with the term "margin of borrowing power" or "legal debt margin" either one of which represents the difference between the debt limit of a governmental unit and the debt outstanding against it.
- BOND ISSUED:** Bonds sold.
- BONDS PAYABLE:** The face value of bonds issued and unpaid.
- CALL DATE:** The date on which a bond may be redeemed before maturity at the option of the Issuer.
- CALL FEATURE ("Redemption Feature"):** Enables the Issuer to pay off ("redeem") a bond prior to its maturity date. The "call date" is the earliest date the bond may be redeemed ("called"). Usually a premium is paid for the earliest call dates.
- CALLABLE BOND:** A type of bond which permits the issuer to pay the obligation before the stated maturity date by giving notice of redemption in a manner specified in the bond contract. Synonym: **OPTIONAL BOND.**

CALL PRICE: The price at which callable bonds will be redeemed if called.

CAPITAL ASSETS: Assets of significant value and having a useful life of several years. Capital Assets are also called **FIXED ASSETS**.

CAPITAL BUDGET: A plan of proposed capital expenditures and the means of financing them. The capital budget is usually adopted as part of the complete annual budget which includes both operations and capital outlays. The capital budget should be based on capital improvement program (CIP).

CAPITAL IMPROVEMENT PROGRAM: A plan for capital expenditures to be incurred each year over a fixed period, setting forth each capital project, identifying the expected beginning and ending date for each project, the amount to be expended in each year, and the method of financing those expenditures.

CAPITAL OUTLAYS: Expenditures for the acquisition of capital assets.

CAPITAL PROJECTS: Projects which purchase or construct capital assets. Typically, a capital project encompasses a purchase of land and/or the construction of a building or facility.

CAPITALIZED INTEREST: The issuer pays the first few interest payments from bond proceeds, usually until construction of the project is completed and the project can begin to generate revenues with which to make debt service payments.

CASH FLOW BUDGET (Cash Budget): A projection of the cash receipts and disbursements anticipated during a given period. Typically, this projection covers a year and is broken down into separate projections for each month, week and/or day during the year.

CLOSING (Also called Delivery): After the sale, the bonds must be printed and signed by the Issuer; the transcript prepared by the bond counsel; and the funds drawn and prepared for transmission by the Underwriter. On the day of closing, the bonds are "delivered" to the Underwriter; the bond counsel delivers the "legal opinion" to the Underwriter; and the Issuer receives the funds.

Note Regarding Dates - The sale date and the closing date have no further relevance. The bonds are assigned an arbitrary "issue date" or "date of the bonds," usually the beginning of a month, upon which interest begins to accrue. The bonds have this date printed upon them and often are referred to by that date (e.g. "the December 1, 1982 bonds"). Any interest which is owed between the issue date and the closing date ("accrued interest") is paid by the Underwriter to the Issuer at the closing.

COMPETITIVE BIDDING: (Also called Public Bidding): Sale of a bond issue by public advertisement in which any bidder may submit an offer to purchase the bonds and the bonds are sold to the bid with lowest interest cost.

CONCESSION: The allowance (or profit) that an Underwriter allows a non-member of the account; sometimes referred to as dealer's reallowance.

COUPON: That detachable part of a bond which serves as proof of interest due. Bondholders detach coupons from bonds, usually at semiannual intervals, and present them for payment to the issuer's paying agent or to the bondholder's own bank for collection.

COUPON RATE (Also called Nominal Interest Rate): The interest coupons attached to a bond. In the case of registered bonds, it is the rate payable by the issuer's automatic check to the holder.

CONVENANT: A binding agreement in the bond contract. Most are found in revenue bonds. For example, they can stipulate that the rates charged for use of the facilities are sufficient to maintain coverage of maximum annual debt service at a given level.

COVER: The spread between the winning bid and the next highest bidder. It is useful as a basis for evaluation of the bids.

COVERAGE: This term is usually connected with revenue and corporate bonds. It is usually the ratio of net revenue available for debt service to the average annual debt service requirements for an issue of revenue bonds. This ratio indicates the margin of safety for payment of debt service, reflecting the number of times by which earnings for a period of time exceed debt service payable in such periods, e.g., 1.20, referred to as "one-twenty"

CURRENT YIELD: A relation stated as a percent of the annual interest to the actual market price of the bond — same procedure as computing a stock yield.

DEBENTURES OR MUNICIPAL DEBENTURES: A term used in Canada or other countries for municipal bonds or a corporate security other than an equity security.

DEBT: An obligation resulting from the borrowing of money or from the purchase of goods and services. Debt of governmental units include bonds, time warrants, notes, and floating debt.

Bonds: An interest-bearing promise to pay with a specific maturity.

Notes: In general, an unconditional written promise signed by the maker to pay a certain sum of money on demand or at a fixed or determinable time either to the bearer or to the order of a person therein.

Time Warrant: A negotiable obligation of a governmental unit having a term shorter than bonds and frequently tendered to individuals and firms in exchange for contractual services, capital acquisitions, or equipment purchases.

Floating Debt: Liabilities other than bonded debt and time warrants which are payable on demand or at an early date. Examples are accounts payable, notes and bank loans.

- DEBT LIMIT:** The maximum amount of debt which a governmental unit may incur under constitutional, statutory, or charter authorizations. The limitation is usually a percentage of assessed valuation and may be fixed upon either gross or net debt. If the latter is the case, the legal provision will usually specify what deductions from gross debt are allowed in order to determine net debt.
- DEBT RATIO:** The ratio of the Issuer's debt to a measure of value such as assessed valuation or real value.
- DEBT SERVICE:** Interest requirements plus the stipulated payment of principal on outstanding debt, usually reported on an annual basis.
- DEBT SERVICE FUND:** A fund established to account for the payment of interest and principal on all general obligation debt, both serial and term. Usually separate funds are created for special assessment and revenue debt issued for and serviced by a governmental enterprise.
- DEBT SERVICE REQUIREMENT:** The amount of money required to pay the interest on outstanding debt, serial maturities of principal for serial bonds, required contributions to a debt service fund for term bonds and reserve fund payments.
- DEFAULT:** Failure to pay principal or interest promptly when due. If caused by a minor omission which is remedied promptly, it is known as a **TECHNICAL DEFAULT**.
- DEFERRED SERIAL BONDS:** Serial Bonds in which the first installment does not fall due for two or more years from the date of issue.
- DENOMINATION:** The face amount or par value of a bond which the issuer promises to pay on the bond's maturity date.
- DEPRECIATION:** (1) Expiration of the service life of capital assets attributable to wear and tear, deterioration, action of the physical elements, inadequacy or obsolescence. (2) That portion of the cost of a capital asset which is charged as an expense during a particular period.
- DIRECT DEBT:** The debt for which the issuing unit has sole responsibility. Direct debt is usually in the name of the unit, but occasionally one government assumes the debt of another. When adjoining lands are annexed to a school district, for example, there may be some assumed debt.
- DIRECT OR PRIVATE PLACEMENT:** The direct sale of a new security by the issuer to investors, bypassing the underwriter or middleman.
- DISCOUNT:** The difference between the cost of a security and its value at maturity when quoted at lower than face value. A security selling below original offering price shortly after sale also is considered to be at a discount. Note that the price does not include accrued interest at the date of acquisition or sale.

- DISCOUNT BOOK:** A book of mathematical tables used to determine the rate of return on a dollar bond for a specified discounted rate at a specified maturity.
- DOLLAR BOND:** A bond which is quoted and traded in terms of dollars rather than yield. For example a quotation of 97-1/2 means \$97.50 per \$100 of par value or \$975 per \$1000 par value of bonds.
- DOUBLE-BARRELED BOND (Also called Dually-Secured Bond):** A bond secured by a pledge of two or more sources of payment such as the unlimited taxing power of the issuer plus a special assessment of revenue pledge.
- DOUBLE EXEMPTION:** A municipal term applied to bonds which pay interest that is exempt from both state and federal income taxes.
- EFFECTIVE INTEREST RATE:** The rate of earning on a bond investment based on the actual price paid for the bond, the coupon rate, the maturity date, and the length of time between interest dates in contrast with the nominal interest rate or "coupon" rate.
- ENTERPRISE DEBT:** Debt which is to be retired primarily from the earnings of publicly owned and operated enterprises. (see REVENUE BOND).
- ESCROWED FUND:** A fund put in the hands of a third party who administers the money according to a written agreement.
- FACE VALUE:** The par value of a bond that appears on the face. This is the amount that the Issuer promises to pay at maturity and also the amount on which interest is computed.
- FINANCIAL CONSULTANT OR ADVISOR:** Consulting firm or individual hired to advise the Issuer regarding the financial and market aspects of the sale.
- FISCAL AGENT:** An Agent (usually an incorporated bank or trust company) designated by a government to act for it in any of several capacities in the sale, administration and payment of bonds and coupons.
- FULL FAITH AND CREDIT:** A pledge of the general taxing power for the payment of debt obligation. Bonds carrying such pledges are usually referred to as general obligation bonds or full faith and credit bonds.
- FUND:** An independent fiscal and accounting entity with a self-balancing set of accounts recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities which are segregated for the purpose of carrying on specific activities or attaining certain objectives.
- FUNDED DEBT (Also called Bonded Debt):** That portion of the indebtedness of a municipality represented by outstanding bonds.

- GENERAL LONG-TERM DEBT:** Long-term debt legally payable from general revenues and backed by the full faith and credit of a governmental unit.
- GENERAL OBLIGATION BONDS:** A bond for whose payment the full faith and credit of the issuer is usually pledged. Most commonly general obligation bonds are payable from ad valorem property taxes.
- GENERAL PROPERTY TAX:** The tax usually levied on real and personal property. This tax is typically levied locally. In many emergencies it is the tax which is increased to balance the budget.
- GOOD FAITH CHECK:** The check which must be included with a bid on a bond sale. The bidding notice ordinarily provides that if the bonds are awarded to a syndicate that does not pick them up as agreed, the good faith check will be held as liquidated damages. The good faith checks of the unsuccessful bidders are promptly returned.
- GRANT:** A contribution of assets (usually cash) by one governmental unit or other organization to another. Typically, these contributions are made to local governments from the state and federal governments. Grants are usually made for specified purposes.
- GROSS DEBT:** The sum total of a debtor's obligations; however, in reporting gross debt, the amount of unfunded obligations of pension and retirement funds is ordinarily not included.
- GROSS YIELD:** The percentage return on a security which is determined by dividing the dollar price into the annual interest payment and calculating the return to maturity.
- INDENTURE:** A written agreement used in connection with a bond issue setting forth maturity date, interest rate, security and other terms.
- INDUSTRIAL DEVELOPMENT REVENUE BONDS (IDSs, IDRBs, IRBs):** Bonds issued by governmental units, the proceeds of which are used to construct plant facilities for private industrial concerns. Lease payment is made by the industrial concern to the governmental unit are used to service the bonds. Such bonds may be in the form of general obligation bonds, revenue bonds, or a combination thereof.
- INTEREST:** Compensation paid or to be paid for the use of money, including amounts payable at periodic intervals or as discount at the time a loan is made.
- INTEREST RATE:** The interest payable, expressed as a percentage of the principal available for use during a specified period of time.
- INTERIM BORROWING:** (1) Short-term loans to be repaid from general revenues during the course of a fiscal year. (2) Short-term loans in anticipation of tax collections or bond issuance. (See BOND ANTICIPATION NOTES and TAX ANTICIPATION NOTES)

INVERTED SCALE: When the yield is higher on the shorter maturities than on the longer ones.

INVESTMENT: Securities and real estate purchased and held for the production of income in the form of interest, dividends, rentals or base payments.

INVESTMENT BANKING (Also known as Underwriting): It is the for-profit business of financing corporations or governmental units by marketing their new securities.

INVESTMENT INSTRUMENT: The specific type of security which a government purchases and holds.

INVESTOR: ("Bondholder"): Ultimate buyer of any number of bonds from an issuer who intends to hold the bonds for investment purposes.

ISSUER: A municipal unit which borrows money through the sale of bonds, notes, or other evidence of indebtedness.

LEASE or LEASE-PURCHASE REVENUE BONDS: Revenue bonds paid from lease payments made on projects financed by bonds.

LEGAL OPINION: The opinion of a specialized bond attorney as to the legality of a municipal bond issue. A preliminary legal opinion is made in advance of the original sale of the bonds; the final opinion, after the bonds have been sold and issued.

LEGAL DEBT SERVICE: An arrangement of serial maturities in which the volume of maturing bonds increases at approximately the same rate as the interest declines.

LEVY: (verb) To impose taxes, special assessments, or service charges for the support of government activities. (noun) The total amount of taxes, special assessments or service charges imposed by a governmental unit.

LIABILITY: Debt or other legal obligations arising out of transactions in the past which must be liquidated, renewed or refunded at some future date.

LIMITED LIABILITY BONDS: When a government issues bonds which do not pledge the full faith and credit of the jurisdiction, it issues limited liability bonds. typically pledges are made to dedicate one specific revenue source to repay these bonds, or some other special repayment arrangements are made.

LIMITED TAX BOND: A bond secured by the pledge of a special tax, a group of taxes, or specified portion of the real estate tax which is limited as to rate or amount.

LIQUIDITY: (of investments) The ability to convert an investment to cash promptly with minimum risk to principal or accrued interest.

LONG-TERM DEBT: Debt with a maturity of more than one year after date of issuance.

MARKET PRICE: The price of an issued bond varies continuously as new bond issues come to market and previously issued bonds are re-traded. Thus, the market price that an investor will pay for a ten percent, ten year bond today may be different tomorrow. Therefore, the total market value of a portfolio changes daily.

MARKETABILITY: A measure of the ease with which a security can be sold in the secondary market.

MATURITY: The date upon which the principal or stated value of a bond becomes due and payable.

MATURITY SCHEDULE: A listing of the total principal amount of bonds maturing in each year.

MORTGAGE BONDS: Bonds secured by a mortgage against specified properties of a governmental unit, usually its public utilities or other enterprises. If primarily payable from enterprise revenues, they are also classed as revenue bonds.

MORTGAGE REVENUE BONDS ("Housing Bonds"): Revenue bonds paid from mortgage payments or rental payments from housing projects financed by bonds. (e.g. State Housing Division Low-Income Housing Bonds.) Note: State of Oregon bonds issued for the elderly are General Obligation Housing bonds.

MUNICIPAL: In its broadest sense, an adjective which denotes the state and all subordinate units of government. In a more restricted sense, an adjective which denotes a city or town as opposed to other units of local government.

MUNICIPALS: Municipal bonds. As used in the bond trade, this term includes not only the bonds of all local subdivisions such as cities, town, villages, counties and schools, park, sanitary and other special taxing districts, but also bonds of states and agencies of the state.

NEGOTIATED SALE: The private arrangement between two or more parties to purchase the securities of an issuer without competitive public bidding.

NET DEBT: The gross debt of a state or political subdivision less sinking fund accumulations and all self-supporting debt.

NET INTEREST COST (NIC): The average rate of interest over the life of a bond issue.

NET REVENUE AVAILABLE FOR DEBT SERVICE: Gross operating revenues of an enterprise less operating and maintenance expenses, but exclusive of depreciation and bond interest. "Net Revenue," thus defined, is used to compute "coverage" on revenue bond issues. Under the laws of some states and the provisions of some revenue bond indentures, net revenues used for computation of coverage are required to be on a cash basis rather than an accrual basis.

- NEW ISSUE:** The first offering of an issued security. The proceeds may be used to retire outstanding debt or for capital purposes.
- NON-LITIGATION CERTIFICATE:** A statement issued by the bond attorney that there are no legal suits pending (and as far as he knows none is being planned) which might result in an impairment of the validity of the bonds.
- NOMINAL INTEREST RATE:** The contractual interest rate shown on the face and in the body of the bond and representing the amount of interest to be paid, in contrast to the effective interest rate. This term is synonymous with **COUPON RATE**.
- NOTICE OF SALE:** Legal notice announcing the terms and conditions of the bond sale. Its content and timing for publication is prescribed by Statute. Official Statements must be available for distribution on the first day ("first publication date") the notice of sale is published.
- OFFICIAL STATEMENT ("O.S.": also called Prospectus):** The legal disclosure document prepared by a municipal bond issuer or its chosen representative, which sets forth all material facts necessary to fully describe the financial condition of the issuer and clarify the offering, as prescribed by law.
- ORDER PERIOD:** For one or two hours after the sale, the winning syndicate takes orders for the bonds from all dealers.
- OVERLAPPING DEBT:** That portion of the debt of other governmental units or which residents of a particular municipality are responsible. Except or special assessment debt, the amount of debt of each unit applicable to the reporting unit is arrived at by (1) determining what percentage of the total assessed value of the overlapping jurisdiction lies within the limits of the reporting unit, and (2) applying this percentage to the total debt of the overlapping jurisdiction. Special assessment debt is allocated on the basis of the ratio of assessments receivable in each jurisdiction which will be used wholly or in part to pay off the debt to total assessments receivable which will be used wholly or in part for this purpose.
- OVER-THE-COUNTER SALES:** Direct sales by governments to the investor public without the marketing facilities of bond dealers.
- PAR VALUE:** The value of a security as expressed on its face without consideration to any premium or discount; it is the amount that must be paid at maturity. It also signifies the dollar value on which bond interest is figured. Although bonds are usually issued in denominations of \$5000 a quotation of 100 means "at par." Bonds quoted at 98 are selling at a discount. That is, they cost \$980 for a \$1000 bond. Bonds quoted at 102 are selling at a premium, that is, \$1020 for a \$1000 bond.
- PAY-AS-YOU-GO-BASIS:** A term used to describe the financial policy of a governmental unit which finances all of its capital outlays from current revenues rather than by borrowing. A governmental unit which pays for some improvements from current revenues and others by borrowing is said to be on a partial or modified pay-as-you-go basis.

PAYDOWN: The net reduction in debt when the amount of a new issue is less than the maturing issue.

PAYING AGENT: The agency, practically always a commercial bank, where the maturing interest coupons and principal of an issue will be paid. Municipal bonds usually are payable also at the office of a public treasurer.

PRELIMINARY OFFICIAL STATEMENT: The disclosure document used by the underwriting community to assess the credit and investment value of a forthcoming bond issue and used as the basis of establishing bids (in addition to market conditions). The Preliminary Official Statement is updated after the bond sale results and any other material facts necessary for full and accurate disclosure of the financial condition of the issuer, as prescribed by law.

PREMIUM: The excess of the price at which a bond is acquired or sold over its face value or maturity value. Note that the price does not include accrued interest at the date of acquisition or sale. Also, the premium is the amount payable to the holder of a callable bond by the issuer, if and when the bond is called and assuming there is provision for a call premium.

PREMIUM CALL PRICE: Price above par at which a municipality, according to the bond contract, may call optional bonds for retirement or sinking fund purposes.

PRIMARY MARKET (the "New Issue Market"): The market for bonds, notes, or other evidences of indebtedness. Purchasers in this market are usually banks or investment banking firms.

PRINCIPAL: The face or par value of a bond, exclusive of accrued interest.

PRIVATE BIDDING: A method of issuing a bond in which the bond is not advertised in a financial journal. Within this category there are two subcategories, negotiated and competitive.

Negotiated Bids: Offers in which both parties sit down and discuss the interest rate schedule and price.

Competitive Private Bidding: Occurs when a unit solicits bids from a few selected investors and underwriters.

PRIVATE PLACEMENT: The purchase of a bond issue to be included in the portfolio of a private investor (such as a bank) rather than to be reoffered for resale to the public.

PROSPECTUS: A detailed statement issued by a company or municipality prior to the sale of new or additional securities, giving a full description of facts and information as required by the Securities and Exchange Commission or other authority.

PUBLIC BIDDING: A method of issuing debt in which the issue is advertised in a financial journal and any investor is welcome to submit an offer to purchase.

- PURCHASE PRICE:** Price paid by the Underwriter to the Issuer for the entire bond issue. The price may include a premium or discount from the full par value of the issue.
- QUALIFIED LEGAL OPINION:** Conditional affirmation of the legality of bonds, before or after they are sold. An **UNQUALIFIED LEGAL OPINION**, on the other hand, is an unconditional affirmation of the legality of the bonds.
- RATE OF RETURN:** The yield obtainable on a security based on its purchase price or its current market price. This may be the amortized yield to maturity on a bond or the current income return.
- RATING:** The designation used by investors' services to give relative indications of quality. Moody's ratings from the highest Aaa, down to C, while Standard & Poor's ratings range from the highest, AAA down to D.
- REDEMPTION:** The liquidation of indebtedness by retiring an outstanding obligation, usually at the issuer's option and prior to a stated final maturity.
- REDEMPTION FUND:** A fund created for the purpose of retiring a callable obligation maturing serially, or for purchasing such obligation as funds became available.
- REDEMPTION PRICE:** The price at which a bond may be redeemed prior to maturity, at the option of the issuer.
- REFINANCING:** Retiring existing securities by the sale of new issues. The object may be to save interest costs or to extend the maturity of the loan. (See **REFUNDING**)
- REFUNDING:** The redemption of existing debt on or before its first call date in order to reduce the fixed interest charge, to reduce the amount of fixed payment or to restructure the obligation. The **REFUNDING BONDS** may be sold for cash and outstanding bonds redeemed in cash, or the refunding bonds may be exchanged with holders of outstanding bonds.
- REFUNDING BOND:** A bond issued to retire a bond already outstanding. Refunding bonds may be sold for cash and outstanding bonds redeemed in cash, or the refunding bonds may be exchanged with holders of outstanding bonds.
- REGISTERED BOND:** A bond whose owner is registered with the issuing governmental unit and which cannot be sold or exchanged without a change of registration. When fully registered there are no coupons attached and the interest is paid to the owner by check by the paying agent.
- RESERVE:** An account used to indicate that a portion of fund equity is legally restricted for a specific purpose or not available for appropriation and subsequent spending.

RESERVE FOR RETIREMENT OF SINKING FUND BONDS: A reserve representing the amount of cash and other resources which should have been accumulated in the sinking fund at a certain date, according to actuarial computation, in order that the bonds outstanding may be redeemed at maturity.

REVENUE BONDS: Bonds whose principal and interest are payable exclusively from earnings of a public enterprise, such as bridges, toll roads, or utility systems. Such bonds have no claim on the borrower's taxable resources unless otherwise specified in the bond indenture. In addition to a pledge of revenues, such bonds sometimes contain a mortgage on the enterprises's property and are then known as **MORTGAGE REVENUE BONDS**.

SCALE: Re-offering terms to the public of a serial bond issue showing prices or yields offered on each maturity. May also refer to the coupon rates on each maturity proposed by underwriters at the time of sale.

SECONDARY MARKET: The selling and trading of bonds after the underwriting account has dissolved and the bonds are distributed. Some dealers may hold a portion of the bonds in inventory for future sale.

NOTE: Any Investor may buy either bonds of a new issue or bonds previously issued and available for sale in the secondary market. A bond issue's trading success in the secondary market can thus affect future bond issues' success in the primary market. Also the supply of an Issuer's bonds in the secondary market can affect the demand for its new issues in the primary market.

SECURITIES: Bonds, notes, mortgages, or other forms of negotiable or non-negotiable instruments.

SELF-SUPPORTING or SELF-LIQUIDATING DEBT: Debt obligations whose principal and interest are payable solely from the earnings of the given municipal utility or enterprise. The earnings must be sufficient to cover the debt service with a reasonable margin of protection if the bonds are to be marketable as entirely self-liquidating. (See **REVENUE BONDS**).

SERIAL BONDS: Bonds the principal of which is repaid in periodic installments over the life of the issue.

Serial Annuity Bonds: Serial bonds in which the annual installments of bond principal are so arranged that the combined payments for principal and interest are approximately the same each year.

Deferred Serial Bonds: Serial bonds in which the first principal installments does not fall due for two or more years for the date of issue.

SHORT-TERM DEBT: Debt with a maturity of one year or less after the date of issuance. Short-term debt usually includes floating debt bond anticipation notes, tax anticipation notes, and interim warrants.

SINKING FUND: A fund of earning assets and cash to which additions are made periodically so that future contributions plus interest earned will accumulate to the par value of the bonds at maturity and can thus be used to redeem them. Difficulties of administration have made this practice rare today, but the term is sometimes used to cover any retirement of principal other than by serial maturities. Thus, a call of a part of a bond issue in order to retire debt may be called "for sinking fund purposes."

SPECIAL ASSESSMENT: A compulsory levy made by a local government against certain properties to defray part or all of the cost of a specific improvement or service which is presumed to be of general benefit to the public and of special benefit to such properties. The term should not be used without a modifier (e.g. "special assessments for street pavings," or "special assessments for street sprinkling") unless the intention is to have it cover both improvements and services or unless the particular use is apparent from the context.

SPECIAL TAX BOND: A bond secured by a special tax, such as a gasoline tax.

SYNDICATE: A group of investment bankers who buy (that is, underwrite) a new bond issue. The syndicate is headed by a manager who submits the bid for the purchase of the securities as a lot. The syndicate members agree to distribute a specified amount of the securities to them on a pro rata or other agreed basis. Upon final distribution of all securities, the syndicate is closed and the obligation of all members is terminated. The securities are reoffered to the general public at a profit (usually) for the syndicate members.

TAKE-DOWN (Also called Take-Down Concession): The discount from the list price allowed to a member of an underwriting account on any bonds he sells.

TAX ANTICIPATION NOTES (TANs; also called Warrants): Notes issued in anticipation of collection of taxes usually retirable only from tax collections, and frequently only from the proceeds of the tax levy whose collection they anticipate.

TAX-EXEMPT BOND: Bonds exempt from federal income, state income, or state or local personal property taxes. "Municipals" are exempt from federal income taxation at present and may or may not be exempt from the state income or personal property taxation in the state where originally issued or held. Most state do not tax "municipals" issued by their own state or local jurisdictions.

TAX-INCREMENT REVENUE BOND (Also called Tax Allocation Bond, or Urban Renewal Bond): Revenue bonds paid from monies derived from "tax increment financing," a special application of taxes levied in urban renewal districts on the growth in taxable value.

TAX LIMIT: The maximum rate or amount of tax which a local government may levy. It may apply to taxes raised for a particular purpose, to taxes raised for all purposes, to a single government or class of governments, or to all governments operating in a particular area.

TAX RATE: The amount of tax stated in terms of a unit of the tax base; for example, 25 mills per thousand of assessed valuation of taxable property.

TAX RATE LIMIT: The maximum legal rate at which a municipality may levy a tax. The limit may apply to taxes raised for a particular purpose or for general purposes.

TAXES: Compulsory charges levied by a governmental unit for the purpose of financing services performed for the common benefit. The term does not include specific charges made against particular persons or property for current or permanent benefits such as special assessments. Neither does the term include charges for services rendered only to those paying such charges as, for example, sewer service charges.

TERM BONDS: Bonds the entire principal of which matures on one date. Also called **SINKING FUND BONDS**.

TRADER or Dealer: Persons in securities firms or banks who buy, sell, or trade individual bonds but do not hold the securities as investments. Certain dealers hold inventories ("take a position") in certain types of issues of bonds.

TRUSTEE: A bank designated as the custodian of funds and official representative of bondholders.

UNDERLYING DEBT: The debt of smaller geo-political units within a given government's jurisdiction.

UNDERWRITER: The investment house or houses that purchase a bond offering from the issuing government. A joint venture account of a number of underwriters is called the **UNDERWRITING SYNDICATE** or **SYNDICATE**.

UNLIMITED TAX BOND: A bond secured by pledge of taxes which may be levied in unlimited rate or amount.

UTILITY DEBT: Debt which has been created to provide or acquire certain utility assets, such as hydro-electric, gas or water works, street, railways etc. Utility debt may be incurred through the issuance of either general obligation bonds or revenue bonds.

WARRANT: An order drawn by the legislative body or an officer of a governmental unit upon its treasurer directing the latter to pay a specified amount to the person named or to the bearer.

YIELD: The rate earned on an investment based on the price paid for the investment, the interest earned during the period held and the selling price or redemption value of the investment.

SOURCE: Municipal Bond Division, Oregon State Treasury, Capital Planning and Debt Issuance: An Informational Manual for Oregon Municipalities, Salem, OR: Oregon State Treasury, 1982.