### 9. Other Information

#### **Audited Information**

# ALBERTA TEACHERS' RETIREMENT FUND BOARD FINANCIAL STATEMENTS AUGUST 31, 2002

Auditor's Report

Statement of Net Assets Available for Benefits and Accrued Pension Benefits and Deficiency

Statement of Changes in Net Assets Available for Benefits

Statement of Changes in Accrued Pension Benefits

Notes to the Financial Statements



#### **AUDITOR'S REPORT**

To the Alberta Teachers' Retirement Fund Board

I have audited the Statement of Net Assets Available for Benefits and Accrued Pension Benefits and Deficiency of the Alberta Teachers' Retirement Fund Board (the "Board") as at August 31, 2002 and the Statements of Changes in Net Assets Available for Benefits and Changes in Accrued Pension Benefits for the year then ended. These financial statements are the responsibility of the Board's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the Net Assets Available for Benefits and Accrued Pension Benefits and Deficiency of the Board as at August 31, 2002 and the Changes in Net Assets Available for Benefits and Changes in Accrued Pension Benefits for the year then ended in accordance with Canadian generally accepted accounting principles.

[original signed by] Fred J. Dunn CA Auditor General

Edmonton, Alberta December 3, 2002



## ALBERTA TEACHERS' RETIREMENT FUND BOARD STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS AND ACCRUED PENSION BENEFITS AND DEFICIENCY AS AT AUGUST 31, 2002

	(in thousands)		
	2002	2001	
Assets			
Cash	\$ 3,471	\$ 1,050	
Investments (Note 4)	2,185,671	2,245,140	
Receivables (Note 5)	38,980	19,799	
Capital assets (Note 6)	1,321	1,453	
	2,229,443	2,267,442	
Liabilities			
Accounts payable (Note 7)	9,198	10,241	
Net assets available for benefits	2,220,245	2,257,201	
Adjustment for fluctuation in fair value of net assets (Note 3c)	221,255	6,099	
Actuarial Value of Net Assets Available for Benefits	2,441,500	2,263,300	
Actuarial Value of Accrued Pension Benefits	8,189,100	6,971,200	
<b>Deficiency</b> (Note 11)	\$ 5,747,600	\$ 4,707,900	

The accompanying notes are part of these financial statements.

#### ALBERTA TEACHERS' RETIREMENT FUND BOARD STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS FOR THE YEAR ENDED AUGUST 31, 2002

	(in thousands)		
	2002	2001	
Increase in Net Assets			
Investment income (Note 8)	\$ 60,343	\$ 72,454	
Change in fair value of investments (Note 8)	(168,116)	(207,494)	
Contributions (Note 9)			
Teachers	179,396	172,154	
Province of Alberta	226,860	214,884	
Employers	387	153	
Past service purchases	1,738	1,347	
Transfers from other plans	5,094	1,776	
	413,475	390,314	
Total increase in net assets	305,702	255,274	
Decrease in Net Assets			
Pension benefits	320,485	297,535	
Termination benefits	9,686	10,917	
Transfers to other plans	4,371	2,774	
Administrative expenses (Note 10)	8,116	7,564	
Total decrease in net assets	342,658	318,790	
Change in Net Assets for the Year	(36,956)	(63,516)	
Net Assets Available for Benefits at Beginning of Year	2,257,201	2,320,717	
Net Assets Available for Benefits at End of Year	\$ 2,220,245	\$ 2,257,201	

## ALBERTA TEACHERS' RETIREMENT FUND BOARD STATEMENT OF CHANGES IN ACCRUED PENSION BENEFITS FOR THE YEAR ENDED AUGUST 31, 2002

	(in thou	sands	)
	 2002		2001
Accrued Pension Benefits at Beginning of Period	\$ 6,971,200	\$	6,535,600
Increase in Accrued Pension Benefits			
Interest on accrued benefits	553,700		527,500
Benefits accrued	226,000		216,800
Experience losses	529,400		-
Changes in actuarial economic assumptions	264,500		-
Changes in actuarial demographic assumptions	 (28,000)		
	 1,545,600		744,300
Decrease in Accrued Pension Benefits			
Benefits paid	 (327,700)		(308,700)
Accrued Pension Benefits at End of Period	\$ 8,189,100	\$	6,971,200

## ALBERTA TEACHERS' RETIREMENT FUND BOARD NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED AUGUST 31, 2002

#### NOTE 1 AUTHORITY AND NATURE OF OPERATIONS

The Alberta Teachers' Retirement Fund Board, a provincial corporation, is the trustee and administrator of the Teachers' Pension Plan and the Private School Teachers' Pension Plan (the "Plans"). The Alberta Teachers' Retirement Fund Board operates under the authority of the Teachers' Pension Plans Act, Chapter T-1.5.

#### NOTE 2 DESCRIPTION OF THE PENSION PLANS

The following description of the Plans is a summary only.

#### a) General

The Plans are contributory defined-benefit pension plans for the teachers of Alberta.

#### b) Guarantee

The payment of all benefits for service prior to September 1, 1992 under the Teachers' Pension Plan is guaranteed by the Province of Alberta (the "Province").

#### c) Funding

The determination of the value of the benefits and the required contributions for the Plans is made on the basis of periodic actuarial valuations (Note 11).

All teachers under contract with school jurisdictions and charter schools in Alberta are required to contribute to the Teachers' Pension Plan. Current service costs and related actuarial losses are funded by equal contributions from the Province and the teachers. An additional 10 percent cost-of-living adjustment for service earned after 1992, as described in Note 2(i), is funded entirely by the teachers.

#### NOTE 2 DESCRIPTION OF THE PENSION PLANS (CONTINUED)

The unfunded liability for service credited prior to September 1, 1992 is being funded by additional contributions in the proportions of 67.35 percent by the Province and 32.65 percent by the teachers over the period ending August 31, 2060. In accordance with an agreement reached on April 18, 2002 between the plan sponsors, the Province will pay 100 percent of these additional contributions relating to the 2002-03 fiscal year.

Certain public colleges and other designated organizations in Alberta also participate in the Teachers' Pension Plan under the same funding arrangements, except these organizations make the employer contributions in lieu of the Province.

Certain private schools participate in the Private School Teachers' Pension Plan. Plan costs are funded by contributions from the employers and the teachers.

#### d) Retirement Pensions

Retirement pensions are based on the number of years of pensionable service and the highest consecutive five-year average salary. Pensions are payable to teachers who retire after completion of at least five years of pensionable service, with certain restrictions, and who have attained age 65. Unreduced pensions are also payable to teachers who have reached at least age 55 and the sum of their age and service equals 85. With certain restrictions, reduced early retirement pensions are payable to teachers who retire on or after age 55 with a minimum of five years of pensionable service.

#### e) Disability Benefits

Teachers who are disabled after August 31, 1992 are credited with pensionable service while disabled. Teachers do not contribute to the Plans while disabled.

#### f) Termination Benefits

Subject to lock-in provisions, refunds and commuted value transfers are available when a teacher ceases employment.

#### g) Death Benefits

Death benefits are available upon the death of a teacher and may be available upon the death of a pensioner. The benefit may take the form of a lump sum payment or a survivor pension.

#### NOTE 2 DESCRIPTION OF THE PENSION PLANS (CONTINUED)

#### h) Other Provisions

Purchase of past service and reinstatement of refunded service is allowed on a basis that is cost neutral to the Plans.

#### i) Cost-of-Living Adjustments

Pensions payable are increased each year by an amount equal to 60 percent of the increase in the Alberta Consumer Price Index. The portion of pension earned after 1992 is increased by an additional 10 percent of the increase in the Alberta Consumer Price Index.

#### j) Income Taxes

The Plans are Registered Pension Plans as defined in the Income Tax Act and are not subject to income taxes. The income tax registration number is 0359125.

### NOTE 3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND REPORTING PRACTICES

#### a) Basis of Presentation

The financial statements are prepared on a going-concern basis in accordance with Canadian generally accepted accounting principles and present the aggregate financial position of the Plans. The statements disclose the net assets available to meet future benefit payments, and are prepared to assist participants and others in reviewing the activities of the Plans for the fiscal year. They do not reflect the benefit security of individual participants.

#### b) Investments

Investments are recorded as of the trade date and are stated at market value, which approximates fair value. The methods used to determine year-end fair value are explained in the following paragraphs.

- Short-term deposits are recorded at cost which approximates fair value.
- The fair value of publicly traded securities is based on market prices quoted by an independent supplier of securities related data.

### NOTE 3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND REPORTING PRACTICES (CONTINUED)

- The fair value of mortgages is based on the present value of future cash flows. These cash flows are discounted using the year-end mortgage rates offered by Canadian banks.
- Fair value of real estate, oil and gas properties, and private placements, not publicly traded, is based on estimates as determined by management in conjunction with industry specialists.

Premiums and discounts arising on acquisitions are amortized using the effective interest rate method and included in investment income. Changes in fair value subsequent to acquisition are included in change in fair value of investments (Note 8).

#### c) Actuarial Value of Net Assets Available for Benefits

To moderate the effects of market volatility on investment values, the actuarial value of net assets available for benefits is determined by averaging projected net assets available for benefits over a five-year period. A constraint limits the actuarial value of net assets available for benefits to be no less than 90% and no greater than 110% of the net assets available for benefits. This calculation results in the adjustment for fluctuation in fair value of net assets.

#### d) Foreign Exchange

Foreign currency transactions are translated into Canadian dollars at rates of exchange prevailing at the dates of the transactions. At year end, the fair value of investments and any other assets and liabilities denominated in a foreign currency are translated at the year-end exchange rate. Gains or losses resulting from exchange differences are included in the determination of the change in fair value of investments.

#### e) Derivative Financial Instruments

Gains or losses on forward foreign exchange contracts are recognized with changes in market value, and are included in the determination of current year change in fair value of investments.

#### (f) Capital Assets

Capital assets are recorded at cost. Amortization is calculated using the straight-line method at the following annual rates so as to expense the cost of the assets over their estimated useful lives. Software under development is not amortized until implemented.

Furniture and equipment 10-25% Computer hardware and software 20-33.3%

## NOTE 3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND REPORTING PRACTICES (CONTINUED)

#### g) Measurement Uncertainty

The preparation of financial statements, in conformity with generally accepted accounting principles, requires management to make estimates and assumptions that affect the amounts reported in the financial statements. Actual results could differ from these estimates.

#### NOTE 4 INVESTMENTS

(in thousa	nds)
------------	------

	(iii tiiousulus)							
	2002				200	1		
	F	air Value		Cost	Fair	· Value		Cost
Fixed Income and Cash								
Cash	\$	14,417	\$	14,417	\$	12,251	\$	12,251
Short terms		23,567		23,567		63,696		63,696
Bonds and debentures		451,738		428,465		468,565		449,824
Real return bonds		194,918		185,103		182,731		183,253
Mortgages		1,770		1,553		1,787		1,602
		686,410		653,105		729,030		710,626
Equities								
Canadian equities		687,871		672,807		775,014		680,219
International equities		397,474		457,500		361,512		401,608
US equity pooled funds		411,052		502,155		376,556		389,996
Real estate and								
other assets		2,864		3,690		3,028		3,694
		1,499,261		1,636,152		1,516,110		1,475,517
	\$	2,185,671	\$	2,289,257	\$ 2	2,245,140	\$	2,186,143

#### a) US Equity Pooled Funds

The Plans' US equity investments are held through ownership of units in two pooled funds each managed using a passive strategy with the objective of replicating the return of the *Standard & Poor's 500 United States Equity Index*. One fund invests directly in the US equity market and as at August 31, 2002, the Plans' proportionate interest in this pool had a fair value of \$167,284,000 (2001: \$181,507,000). The other fund invests in stock index futures contracts and Canadian dollar short-term fixed income investments. As at August 31, 2002, the Plans' proportionate interest in this pool had a fair value of \$243,768,000 (2001: \$195,049,000). A stock index futures contract is an agreement to take or make a delivery of an amount of cash equal to the difference between changes in the level of the stock index over a specified period.

#### NOTE 4 INVESTMENTS (CONTINUED)

#### b) Interest Rate Risk

Interest rate risk relates to the impact of interest rate changes on the Plans' cash flows and financial position. This risk arises from differences in the timing and amount of cash flows related to the Plans' assets and liabilities.

As at August 31, 2002, a 1% increase in nominal interest rates would result in a decline in the fair value of Fixed Income investments of 9.2% (2001: 8.0%). Excluding the impact of real return bonds, the decline in fair value would be 5.5% (2001: 4.5%).

Based on fair values at August 31, 2002, Fixed Income investments have the following average effective yields and term structures:

ĺ	dollar	amounts	in	thousands'	1
١	aomai	announts	111	uiousaiius	,

2002									 2001		
		Terms of Maturity						Average		Average	
	1	Within		1 to 5		Over		Effective		Effective	
	1	l Year		Years		5 Years	Total	Yield	Total	Yield	
Short terms	\$	23,567	\$	-	- \$	5 - \$	23,567	2.84%	\$ 63,696	4.06%	
Bonds and debentures		5,114		172,286	)	274,338	451,738	5.27%	468,565	5.56%	
Real return bonds		-		-	-	194,918	194,918	2.89%	182,731	3.26%	
Mortgages		-		-	-	1,770	1,770	6.80%	1,787	7.60%	

#### c) Investments with the Province of Alberta

Investments include bonds issued by the Province of Alberta of \$5,513,155 (2001: \$5,465,100).

#### d) Credit Risk

Credit risk arises from the possibility that a loss may occur from the failure of another party to perform according to the terms of a contract.

The Plans limit their credit risk by dealing with counter parties that are considered to be of high quality, setting and monitoring compliance with portfolio guidelines, diversification and obtaining collateral where appropriate.

The Plans record all investments at fair value. Consequently, investment values reflected in Note 4 of these financial statements represent the maximum credit risk exposure of the Plans as at August 31, 2002.

#### NOTE 4 INVESTMENTS (CONTINUED)

#### e) Currency Risk

Currency risk arises from the Plans' holding of equities that are denominated in foreign currencies. A portion of the currency exposure is hedged by foreign currency forwards. Foreign currency forwards are contractual obligations either to buy or sell a specified amount of foreign currencies at predetermined future dates and exchange rates.

The Plans' foreign currency exposure is as follows:

(in thousands)

				(III tillo	asana	15)					
		2001									
	Foreign Currency		Č			Currency Currency		t Foreign urrency xposure	Net Foreign Currency Exposure		
		rposure		Tieuge	Exposure		Laposuic				
United States	\$	438,155	\$	-	\$	438,155	\$	398,633			
Euro		173,708		-		173,708		167,507			
United Kingdom		79,257		-		79,257		75,459			
Japan		50,877		7,487		43,390		32,905			
Switzerland		30,130		-		30,130		18,993			
Australia		14,794		-		14,794		15,124			
Other		35,999		-		35,999		36,345			
	\$	822,920	\$	7,487	\$	815,433	\$	744,966			

Foreign currency exposure includes \$14,394,000 (2001: \$12,068,000) in cash.

#### NOTE 5 RECEIVABLES

	(in thousands)			
		2002	2	001
Accrued income	\$	10,784	\$	11,396
Amounts due from pending trades		2,897		614
Contributions - teachers		14,722		7,684
Contributions - Province of Alberta		10,449		-
Other		128		105
	\$	38,980	\$	19,799

#### NOTE 6 CAPITAL ASSETS

(in	th	OHS	and	(ah
(	ULI	Cas	· call	45,

			2001				
Accumulated							
C	ost	Amo	rtization		Net	Ne	et
\$	372	\$	276	\$	96	\$	122
	4,020		2,887		1,133		1,028
	92		-		92		303
\$	4,484	\$	3,163	\$	1,321	\$	1,453
	\$	4,020	Cost Amo \$ 372 \$ 4,020	Cost       Amortization         \$ 372       \$ 276         4,020       2,887         92       -	Accumulated Cost Amortization  \$ 372 \$ 276 \$ 4,020 2,887	Accumulated Cost Amortization Net  \$ 372 \$ 276 \$ 96  4,020 2,887 1,133  92 - 92	Accumulated Cost Amortization Net Net  \$ 372 \$ 276 \$ 96 \$  4,020 2,887 1,133  92 - 92

#### NOTE 7 ACCOUNTS PAYABLE

(in	thousan	ds)
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		`	,	
	2	002	2	001
Tax withholdings	\$	4,379	\$	4,110
Contributions - Province of Alberta		-		2,626
Amounts payable from pending trades		2,454		1,898
Other investment transactions		893		888
Miscellaneous		1,472		719
	\$	9,198	\$	10,241

#### NOTE 8 INVESTMENT INCOME

#### (in thousands)

	(III tilousullus)			
	2002		2001	
Interest income				
Cash and short terms	\$	1,498	\$	1,993
Bonds and debentures		26,033		29,377
Real return bonds		8,790		10,363
Mortgages		162		167
Dividend income				
Canadian equities		13,382		14,470
International equities		10,015		14,710
Real estate and other assets		463		1,374
	\$	60,343	\$	72,454

#### NOTE 8 INVESTMENT INCOME (CONTINUED)

Investment income includes interest of \$375,000 (2001: \$375,000) earned on bonds issued by the Province of Alberta.

The change in fair value of investments, of a net loss of \$168,116,000, includes a realized net loss on disposal of investments of \$5,534,000 (2001: net gain of \$41,341,000) and an unrealized net loss of \$162,582,000 (2001: net loss of \$248,835,000).

#### NOTE 9 CONTRIBUTIONS (NOTE 2C)

	(in thousands)			
	_	2001		
Teachers				
Current service	\$	115,922	\$	109,719
Unfunded liability		54,218		54,061
Additional COLA		9,256		8,374
	\$	179,396	\$	172,154
Province of Alberta				
Current service	\$	115,230	\$	106,595
Unfunded liability		111,630		108,289
	\$	226,860	\$	214,884
Employers				
Current service	\$	332	\$	91
Unfunded liability		55		62
	\$	387	\$	153

#### NOTE 10 ADMINISTRATIVE EXPENSES

	(in thousands) <b>2002</b>					
					2001	
	Budget		Actual		Actual	
Investment management	\$	2,954	\$	3,129	\$	3,028
Salaries and benefits (Note 13)		2,769		2,629		2,430
Premises and equipment		824		835		722
Custodial and banking charges		517		502		447
Communications		534		456		421
Consultant fees		558		389		392
Board and Investment Committee		88		86		44
Audit fees		57		43		56
Miscellaneous		29		47		24
	\$	8,330	\$	8,116	\$	7,564

#### NOTE 11 OBLIGATIONS FOR BENEFITS

Actuarial valuations of the Plans were done as at August 31, 2002 by Buck Consultants Limited, a firm of consulting actuaries. Extrapolations prepared by Buck Consultants Limited were used for reporting purposes as at August 31, 2001. The present value of accrued benefits was determined using the projected benefit method prorated on service. The assumptions used in the valuations and extrapolations are based on the Board's best estimate of future events.

The major long-term economic assumptions used in the current year actuarial valuations and prior actuarial extrapolations are:

	2002	2001
Rate of return on invested assets	7.50%	8.00%
Rate of inflation	3.00%	3.50%
Real wage increases	1.00%	1.00%
Population growth	0.75%	0.75%

Future experience will differ from those assumptions. Any differences between the actuarial assumptions and future experience will emerge as gains or losses in future actuarial valuations.

As at August 31, 2002, a 0.25% decrease in population growth rate under the Teachers' Pension Plan, holding all other assumptions constant, would increase the amount of contributions required to finance the unfunded liability attributable to service credited prior to September 1992 by 0.49% of total teacher salaries. No change would occur to the value of accrued pension benefits.

#### NOTE 11 OBLIGATIONS FOR BENEFITS (CONTINUED)

As at August 31, 2002, a 0.50% increase in the rate of return on invested assets and in the rate of inflation under the Teachers' Pension Plan, holding all other assumptions constant, would decrease:

- i) the amount of contributions required to finance current service costs by 0.35%,
- ii) the amount of contributions required to finance the unfunded liablity attributable to service credited prior to September 1992 by 0.12%, and
- the amount of contributions required to finance the deficiency attributable to service credited after August 1992 by 0.40%.

The accrued pension benefits would decrease approximately \$264 million.

The valuation for the Teachers' Pension Plan to August 31, 2002 determined an unfunded liability of \$5.342 billion, attributable to service credited prior to September 1992 and a \$407 million deficiency attributable to service after August 1992. The unfunded liability and deficiency are being financed as described in Note 2c.

The valuation for the Private School Teachers' Pension Plan to August 31, 2002 determined a surplus of \$1.4 million.

(in thousands)

	2002				2001
	Teachers' Pension Plan		<b>Private School</b>		
	Pre-Sept.	Post-Aug.	Teachers'		
	1992	1992	<b>Pension Plan</b>	Total	Total
Net assets at beginning of year	\$ 165,786 \$	2,068,855	\$ 22,560	\$ 2,257,201	\$ 2,320,717
Net contributions	161,788	237,003	627	399,418	376,623
Benefits	(282,826)	(36,942)	(717)	(320,485)	(297,535)
Investment earnings	(1,246)	(105,460)	(1,067)	(107,773)	(135,040)
Administrative expenses	(327)	(7,708)	(81)	(8,116)	(7,564)
Net assets available for benefits	43,175	2,155,748	21,322	2,220,245	2,257,201
Adjustment for fluctuation in asset value	3,825	215,252	2,178	221,255	6,099
Actuarial value of accrued benefits	(5,389,000)	(2,778,000)	(22,100)	(8,189,100)	(6,971,200)
(Deficiency)/surplus	\$ (5,342,000)	(407,000)	\$ 1,400	\$ (5,747,600)	\$(4,707,900)

#### NOTE 12 INVESTMENT PERFORMANCE

The following is a summary of the investment performance results attained by the Alberta Teachers' Retirement Fund Board:

	One-Year	Five-Year Average
	Return	Annual
		Compound Rate
Alberta Teachers' Retirement Fund Board	(4.6%)	4.6%
Benchmark (1)	(6.4%)	3.5%

<sup>(1)</sup> The benchmark return is a weighted average of certain market index returns, approved by the Board, based on the fund's policy asset mix.

The Board adopts a long-term real rate of return assumption for actuarial valuations. This long-term rate of return target was set at 3.5 percent over inflation for the year ended August 31, 1993, 4 percent over inflation for the four years ended August 31, 1997 and 4.5 percent over inflation since September 1, 1997. Over the ten-year period since September 1, 1992, the Fund's average annual compound rate of return was 8.2 percent, compared to the long-term target of 6.4 percent.

#### NOTE 13 SALARIES AND BENEFITS

	2002				2001
	Benefits &				
	Salary (1)	Allov	vances (3)	Total	Total
Board Chair	\$ -	\$	- \$	-	\$ -
Board Members	5,000	(2)	_	5,000	5,000
<b>Executive Director</b>	185,000		26,000	211,000	173,000
Director of Investments	201,000		22,000	223,000	211,000
Portfolio Manager,					
Equities	181,000		17,000	198,000	151,000
Portfolio Manager,					
Bonds	134,000		14,000	148,000	121,000
Coordinator					
Information Services	101,000		14,000	115,000	108,000

#### NOTE 13 SALARIES AND BENEFITS (CONTINUED)

- (1) Salary includes regular base pay, bonuses, honoraria for Board members and any other direct cash remuneration.
- (2) Honoraria for Board members is paid to Board members who are not employed by the Province of Alberta or by an employer participating in the Plans.
- (3) Benefits and Allowances includes the employer's share of all employee benefits and contributions or payments made on behalf of employees, including pension, health care, dental coverage, vision coverage, group life insurance, long-term disability plan, professional memberships and tuitions, and car allowances.

#### NOTE 14 BUDGET INFORMATION

The accrued pension benefits are based on management's best estimates of future events after consultation with the Plans' actuary. Differences between actual results and management's expectations are disclosed as net experience gains in the statement of changes in accrued pension benefits. Accordingly, a budget is not included in these financial statements, with the exception of administrative expenses (Note 10).