APEX MUNICIPAL FUND INC
Form N-30D
February 12, 2002

[LOGO] Merrill Lynch Investment Managers

Semi-Annual Report

December 31, 2001

Apex
Municipal Fund,
Inc.

www.mlim.ml.com

APEX MUNICIPAL FUND, INC.

Managed Dividend Policy

The Fund's dividend policy is to distribute all or a portion of its net investment income to its shareholders on a monthly basis. In order to provide shareholders with a more consistent yield to the current trading price of shares of Common Stock of the Fund, the Fund may at times pay out less than the entire amount of net investment income earned in any particular month and may at times in any particular month pay out such accumulated but undistributed income in addition to net investment income earned in that month. As a result, the dividends paid by the Fund for any particular month may be more or less than the amount of net investment income earned by the Fund during such month. The Fund's current accumulated but undistributed net invest ment income, if any, is disclosed in the Statement of Assets, Liabilities and Capital, which comprises part of the financial information included in this report.

Quality Profile

The quality ratings of securities in the Fund as of December 31, 2001 were as follows:

S&P Rating/Moody's Rating	Percent of Net Assets
AAA/Aaa	7.4%
BBB/Baa	12.6
BB/Ba	15.9
B/B	4.6
CCC/Caa	1.0
NR (Not Rated)	57.0
Other+	0.4

\+ Temporary investments in short-term municipal securities.

Proxy Results

During the six-month period ended December 31, 2001, Apex Municipal Fund, Inc.'s shareholders voted on the following proposal. The proposal was approved at the shareholders' meeting on December 12, 2001. The description of the proposal and number of shares voted are as follows:

	Shares Voted For	Shares Withheld From Voting

1. To elect Robert S. Salomon Jr. as Director.	17,751,905	354,027

Apex Municipal Fund, Inc., December 31, 2001

DEAR SHAREHOLDER

For the six months ended December 31, 2001, Apex Municipal Fund, Inc. earned $0.285 per share income dividends, which included earned and unpaid dividends of $0.047. This represents a net annualized yield of 6.19%, based on a month-end net asset value of $9.13 per share. Over the same period, the Fund's total investment return was -0.24%, based on a change in per share net asset value from $9.45 to $9.13, and assuming reinvestment of $0.288 per share income dividends.

The Municipal Market Environment

Throughout most of the six-month period ended December 31, 2001, long-term fixed income interest rates exhibited considerable volatility. Additionally, during the period, long-term US Treasury bond yields registered moderate declines, while long-term municipal bond yields rose slightly. From early summer through early September 2001, fixed-income yields generally declined. Weak economic growth, exemplified by declines in industrial production and large losses in employment, easily outweighed modest strength in consumer confidence and spending. The consensus was that a meaningful US economic recovery was unlikely before early 2002. Consequently, US equity markets remained under pressure and fixed-income instruments benefited. By the end of August 2001, the Federal Reserve Board had lowered its target for short-term interest rates to 3.50%, cutting interest rates by 300 basis points (3.00%) during the first eight months of 2001.

By early September there were some, albeit few, indications pointing toward the beginning of a US economic recovery. However, immediately following the tragedy of the World Trade Center and Pentagon attacks all such indications effectively vanished. After anemic economic growth of just 0.3% during the second quarter of 2001, US gross domestic product growth was recently reported to have declined 1.3% during the third quarter of 2001. The Federal Reserve Board quickly lowered short-term interest rates an additional 50 basis points immediately following the attacks, just prior to the reopening of the stock exchanges. This marked the eighth time this year the Federal Reserve Board had eased monetary conditions. Despite the events of September 11, the Federal Reserve Board noted that the nation's long-term economic prospects remained favorable.

Initially, long-term interest rates rose during the days following the September 11 attacks. The quick response by both Federal and state governments to stabilize, aid and revive US business activities quickly restored fixed-income investors' confidence. Investor attention again focused on weak US economic fundamentals and on a financial environment further impaired by the economic losses resulting from the attacks. In addition to the immediate loss of four days of equity trading and air transportation, including air cargo transfers, US consumer confidence was expected to be severely shaken, resulting in weaker consumer spending and, eventually, diminished business manufacturing. By September 30, 2001, US Treasury bond yields declined to 5.42%, their approximate level before the September attacks.

In early October, the Federal Reserve Board lowered short-term interest rates an additional 50 basis points to a target of 2.50%, the lowest rate in nearly 40 years. US economic reports continued to be very weak, pushing US equity prices lower in early October and bond prices higher. US military reprisals in

Afghanistan also helped to support higher bond prices as investors sought the safe haven of US Treasury obligations. At October 31, 2001, the US Treasury announced that it would no longer issue 30-year maturity bonds triggering an explosive fixed-income rally as investors scrambled to purchase soon-to-be-unavailable issues. By the end of October, long-term US Treasury bond yields had declined to 4.87%, declining more than 50 basis points during the month. Despite an additional decrease in its short-term interest rate target to 1.75% by the Federal Reserve Board, long-term fixed-income markets were unable to hold their October gains. Rapid, significant US military success in Afghanistan, stronger-than-expected retail sales and recovering US equity markets combined to suggest to many investors that a US economic recovery was far more imminent than was expected earlier in the fall of 2001. Bond yields rose during November and December, as investors sold securities both to realize recent profits and in anticipation of an early reversal of Federal Reserve Board policy. By December 31, 2001, long-term US Treasury bond yields rose to approximately 5.45%. Over the last six months, however, the generally positive financial environment allowed US Treasury bond yields to decline approximately 30 basis points.

The municipal bond market displayed a very similar pattern during the November period. Long-term tax-exempt bond yields had generally declined through early September as strong investor demand easily outweighed sizable increases in new bond issuance. The disruption in the financial markets following the September 11 attacks also served to push tax-exempt bond yields higher. The municipal bond market was able to reorganize operations quickly and tax-exempt bond yields were able to decline in conjunction with US Treasury bond yields for the remainder of the period. While municipal bond yields were unable to match the dramatic declines witnessed in the US Treasury market, tax-exempt bond prices rose strongly during late October. At October 31, 2001, as measured by the Bond Buyer Revenue Bond Index, long-term municipal bond yields stood at 5.23%, a decline of approximately 20 basis points during October. Similar to its taxable counterpart, the long-term municipal bond market was also unable to maintain the improvements made in September and October. In addition to a slightly stronger financial environment, increased tax-exempt bond issuance during November and December also put upward pressure on municipal bond yields. By the end of December 2001, long-term tax-exempt revenue bond yields rose to approximately 5.60% while during the last six months, tax-exempt bond yields rose approximately 10 basis points.

Investor demand was solid throughout much of 2001. Reports stated that through November 2001, long-term municipal bond funds had net cash inflows of $12.4 billion compared to net outflows of more than $14.3 billion during the same period in 2000. Also, a number of mutual fund families raised over $2.5 billion in new closed-end tax-exempt bond funds during the summer of 2001. Perhaps most importantly, short-term municipal rates continued to move lower in response to Federal Reserve Board actions. Seasonal tax pressures this past March and April kept short-term municipal rates artificially high, although not as high as in recent years. As these pressures abated, short-term municipal rates declined to almost 1%. As interest rates declined, investors extended maturities to take advantage of the steep municipal bond yield curve. All of these factors contributed to a positive technical environment for municipal bonds in recent months.

Recent investor demand has not been strong enough to outweigh the continued dramatic increase in new tax-exempt bond issuance. Historically low municipal bond yields have continued to allow municipalities to refund outstanding, high-couponed debt. Over the past six months, more than $150 billion in long-term tax-exempt bonds was issued, an increase of over 40% compared to the same period a year ago. During the December 2001 quarter, the pace of tax-exempt bond issuance further strengthened with more than $90 billion in long-term municipal bonds underwritten, an increase of nearly 60% compared to the December 2000 quarter. During December 2001, municipalities issued nearly $30 billion in tax-exempt bonds, an increase of more than 80% compared to December 2000 issuance. Recent increases in municipal bond issuance have put considerable pressure on the tax-exempt market, especially in the 10-year - 15-year maturity sector. A large number of bond financings in recent months have been heavily weighted in this maturity sector. Investor demand for these maturities, both institutional and retail, has been limited, in part, by seasonal, year-end factors. Also, demand for municipals, in general, has declined as recovering US equity markets have siphoned away interest in tax-exempt products.

Interest rates are likely to remain near current levels in early 2002, as US economic conditions are expected to remain weak. Going forward, however, business activity is likely to accelerate, perhaps significantly. Immediately after the September 11 attacks, the Federal Government announced a $45 billion aid package for New York City, Washington, DC and the airline industry, with additional fiscal aid packages also expected. The military response to these attacks will continue to require sizable increases in Defense Department spending. Eventually, this governmental spending will result in increased US economic activity, particularly in the construction and defense industries. This governmental stimulus, in conjunction with the actions already taken by the Federal Reserve Board, can be expected to generate significant increases in US gross domestic product growth some time in mid-2002.

As inflationary pressures are expected to remain well-contained going forward, increased economic activity may not result in significant increases in long-term bond yields. Also, throughout much of 2001, the municipal bond market exhibited far less volatility than its taxable counterparts. Since the strong technical position that supported the tax-exempt bond market's performance for much of this year can be expected to continue going forward, any potential increases in municipal bond yields also can be expected to be minimal.

Portfolio Strategy

The six-month period ended December 31, 2001 was characterized by a continuation in the recovery of the tax-exempt high-yield market as investor demand for the relative stability of fixed-income investments accelerated in response to deteriorating conditions in the equity markets. Furthermore, as yields available on municipal bonds at the upper end of the credit spectrum sank to levels that historically proved unsustainable, investors were willing to assume greater credit risk in pursuit of higher potential returns. The resulting contraction in credit spreads proved beneficial for shareholders of the Fund.

Specifically, concentrations in health care-related issues, tax-supported debt and utilities experienced some of the most significant rises in value so far in 2001. The health care sector bore the brunt of last year's liquidity collapse and

stood to benefit the most as attractive yields and a stabilizing credit outlook lured investors. Supported by low interest rates, the housing industry remains one of the more resilient sectors in the economy. Infrastructure-related tax-backed financing for residential development continues to provide attractive investment opportunities given the security provisions inherent in the transaction structure as well as the potential returns associated with project completion. Several of the portfolio's more recent purchases were within this sector and were primarily residential in scope. While selected issues for commercial projects were also added to the portfolio, the more cyclical nature of these ventures warrants a heightened degree of caution with respect to the investment process. Lastly, the utility sector remains a major component of the portfolio as investments in senior unsecured obligations of Tucson Electric Power Company and a variety of independent co-generation facilities have performed well in the current environment. Perhaps most notable are positions not held by the Fund such as debt of the troubled California investor-owned utilities and, more recently, that of Enron Corporation. The portfolio was negatively affected by its exposure to airline debt in the wake of the events of September 11, 2001. While the airline industry faces significant challenges in the coming months, the demonstrated resolve on the part of the Government to provide financial assistance, coupled with the recent decline in fuel costs, should provide enough relief to weather these difficult times. Nevertheless, a shakeout of some sort appears inevitable as the weaker airlines either fail to survive or are acquired by those that remain more financially sound.

Our portfolio strategy remained largely unchanged as we sought to maintain a fully invested position in an effort to enhance the Fund's income distribution. Opportunities have begun to emerge recently as the recovery in bond prices has been decidedly uneven. By selectively engaging in swaps, it was possible to reallocate small portions of the portfolio in an effort to generate both additional income and price appreciation. Typically, the sale of existing holdings reflects our belief that the individual security in question has fulfilled its expected potential in terms of either credit improvement or relative valuation. In this manner, new investments offer the potential to enhance total return within the context of the Fund's stated objective of investing primarily in a portfolio of medium- to lower-grade or unrated municipal obligations.

In Conclusion

We appreciate your ongoing interest in Apex Municipal Fund, Inc., and we look forward to serving your investment needs in the months and years to come.

Sincerely,

/s/ Terry K. Glenn

Terry K. Glenn
President and Director

/s/ Kenneth A. Jacob

Kenneth A. Jacob
Senior Vice President

/s/ John M. Loffredo

John M. Loffredo
Senior Vice President

/s/ Theodore R. Jaeckel Jr.

Theodore R. Jaeckel Jr.
Vice President and Portfolio Manager

February 6, 2002

SCHEDULE OF INVESTMENTS (in Thousands)

STATE	S&P Ratings	Moody's Ratings	Face Amount	Issue
Alabama--0.7%	B	NR*	$ 1,000	Brewton, Alabama, IDB, PCR, Refunding (Container America--Jefferson Smurfit Corp. Project), 8% due
	CCC	NR*	5,285	Mobile, Alabama, IDB, Solid Waste Disposal Revenu (Mobile Energy Services Co. Project), 6.95% due 1
Alaska--1.1%	NR*	NR*	2,000	Alaska Industrial Development and Expert Authorit (Williams Lynxs Alaska Cargoport), AMT, 8% due 5/
Arizona--2.8%	NR*	NR*	1,505	Maricopa County, Arizona, IDA, M/F Housing Revenu Apartments Project), Sub-Series C, 9.50% due 11/0
	NR*	Caa2	4,000	Phoenix, Arizona, IDA, Airport Facility Revenue R (America West Airlines Inc. Project), AMT, 6.30%
	B+	Ba3	2,000	Pima County, Arizona, IDA, Industrial Revenue Ref Electric Power Company Project), Series C, 6% due
California--3.6%	AAA	NR*	5,500	Los Angeles, California, Department of Water and Revenue Bonds, RIB, Series 144, 9.11% due 6/15/20
Colorado--5.2%	NR*	NR*	3,000	Denver, Colorado, Urban Renewal Authority, Tax In (Pavilions), AMT, 7.75% due 9/01/2016
	NR*	NR*	2,800	Elk Valley, Colorado, Public Improvement Revenue Improvement Fee), Series A, 7.30% due 9/01/2022
	NR*	NR*	1,640	Lincoln Park, Colorado, Metropolitan District, GO due 12/01/2026
	NR*	NR*	1,235	North Range, Colorado, Metropolitan District Numb 12/15/2031
	BB+	Ba1	595	Northwest Parkway, Colorado, Public Highway Autho First Tier, Sub-Series D, 7.125% due 6/15/2041
Connecticut--1.6%	BBB-	NR*	1,530	Mohegan Tribe Indians, Connecticut, Gaming Author Revenue Refunding Bonds (Priority Distribution),
	NR*	B1	1,350	New Haven, Connecticut, Facility Revenue Bonds (H Corporation Project), 9.25% due 5/01/2017

Portfolio Abbreviations

To simplify the listings of Apex Municipal Fund, Inc.'s portfolio holdings in the Schedule of Investments, we have abbreviated the names of many of the securities according to the list at right.

AMT Alternative Minimum Tax (subject to)
EDA Economic Development Authority
GO General Obligation Bonds
IDA Industrial Development Authority
IDB Industrial Development Board
IDR Industrial Development Revenue Bonds
M/F Multi-Family
PCR Pollution Control Revenue Bonds
RIB Residual Interest Bonds
VRDN Variable Rate Demand Notes

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Apex Municipal Fund, Inc., December 31, 2001

SCHEDULE OF INVESTMENTS (continued) (in Thousands)

STATE	S&P Ratings	Moody's Ratings	Face Amount	Issue
Florida--9.5%	NR*	NR*	$ 935	Arbor Greene Community Development District, Flor Revenue Bonds, 7.60% due 5/01/2018
	NR*	NR*	2,500	Hillsborough County, Florida, IDA, Exempt Facilit (National Gypsum), AMT, Series A, 7.125% due 4/01
	NR*	NR*	935	Lakewood Ranch, Florida, Community Development Di Assessment Revenue Refunding Bonds, Series A, 6.7
	NR*	NR*	3,000	Lee County, Florida, IDA, Health Care Facilities (Cypress Cove Healthpark), Series A, 6.375% due 1
	NR*	NR*	2,000	Orlando, Florida, Special Assessment Bonds (Conro Project), Series A, 5.80% due 5/01/2026
	NR*	NR*	1,650	Orlando, Florida, Urban Community Development Dis Improvement Special Assessment Bonds, Series A, 6
	NR*	NR*	3,600	Parkway Center, Florida, Community Development Di Assessment Refunding Bonds, Series B, 8% due 5/01
	NR*	NR*	3,285	Tampa Palms, Florida, Open Space and Transportati District Revenue Bonds, Capital Improvement (Rich 7.50% due 5/01/2018
Georgia--3.2%	NR*	NR*	2,000	Atlanta, Georgia, Tax Allocation Revenue Bonds (A 7.90% due 12/01/2024
	NR*	NR*	3,680	Atlanta, Georgia, Urban Residential Finance Autho Revenue Bonds (Northside Plaza Apartments Project due 11/01/2020
Idaho--0.8%	NR*	NR*	1,470	Idaho Health Facilities Authority, Revenue Refund Care Corporation), Series A, 7.75% due 11/15/2016
Illinois--1.9%	NR*	NR*	3,190	Illinois Development Finance Authority, Primary H Facilities, Acquisition Program Revenue Bonds, 7.
Indiana--2.6%	NR*	NR*	2,600	Indiana State Educational Facilities Authority, R (Saint Joseph's College Project), 7% due 10/01/20
	NR*	NR*	1,925	Indianapolis, Indiana, M/F Revenue Bonds (Lake No Series B, 7.50% due 10/01/2029
Iowa--6.6%	NR*	NR*	10,000	Iowa Finance Authority, Health Care Facilities Re Bonds (Care Initiatives Project), 9.25% due 7/01/
Louisiana--3.1%	BB-	NR*	5,500	Port New Orleans, Louisiana, IDR, Refunding (Cont Company Project), 7.50% due 7/01/2013
Maryland--2.9%	NR*	NR*	1,875	Anne Arundel County, Maryland, Special Obligation (Arundel Mills Project), 7.10% due 7/01/2029
	NR*	NR*	3,000	Maryland State Energy Financing Administration, L Revenue Bonds (Cogeneration-AES Warrior Run), AMT
Massachusetts--2.4%	NR*	Ba2	3,000	Massachusetts State Health and Educational Facili Refunding Bonds (Bay Cove Human Services Issue), due 4/01/2028

	NR*	NR*	1,800	Massachusetts State Industrial Finance Agency Rev Facility (Resource Control Composting), AMT, 9.25
Michigan--0.5%	BBB-	Baa3	1,000	Michigan State Hospital Finance Authority, Revenu (Detroit Medical Center Obligation Group), Series
Minnesota--1.8%	NR*	NR*	3,200	Anoka, Minnesota, M/F Housing Revenue Bonds (Rain Project), 9.375% due 12/01/2024
Missouri--0.7%	NR*	NR*	1,200	Fenton, Missouri, Tax Increment Revenue Refunding (Gravois Bluffs), 7% due 10/01/2021
Nevada--1.2%	BBB	Baa2	2,500	Henderson, Nevada, Health Care Facility Revenue B West--Saint Rose Dominican Hospital), 5.375% due
New Jersey--14.1%				Camden County, New Jersey, Improvement Authority, (Holt Hauling & Warehousing), AMT, Series A (d):
	NR*	NR*	2,000	9.625% due 1/01/2011
	NR*	NR*	4,500	9.875% due 1/01/2021
	CCC	B2	6,000	Camden County, New Jersey, Pollution Control Fina Waste Resource Recovery Revenue Refunding Bonds, due 12/01/2010
	NR*	NR*	1,000	New Jersey EDA, Economic Development Revenue Bond Project), AMT, 6% due 11/01/2028
	BBB-	NR*	1,500	New Jersey EDA, First Mortgage Revenue Bonds (Fel Series C, 5.50% due 1/01/2028
	NR*	Ba3	1,500	New Jersey EDA, IDR, Refunding (Newark Airport Ma due 10/01/2014
				New Jersey EDA, Retirement Community Revenue Bond
	NR*	NR*	1,000	(Cedar Crest Village Inc. Facility), 7.25% due
	NR*	NR*	3,700	(Seabrook Village Inc.), 8.125% due 11/15/2023
	BB-	B3	3,050	New Jersey EDA, Special Facility Revenue Bonds (C Project), AMT, 6.625% due 9/15/2012
	BBB-	Baa3	2,000	New Jersey Health Care Facilities Financing Autho Bonds (Trinitas Hospital Obligation Group), 7.375
New Mexico--2.8%	B+	Ba3	5,000	Farmington, New Mexico, PCR, Refunding (Tucson El Juan Project), Series A, 6.95% due 10/01/2020
New York--1.9%				Utica, New York, GO, Public Improvement:
	BB	Ba1	700	9.25% due 8/15/2004
	BB	Ba1	700	9.25% due 8/15/2005
	BB	Ba1	475	8.50% due 8/15/2006 (c)
	BB	Ba1	475	8.50% due 8/15/2006 (c)
	BB	Ba1	635	9.25% due 8/15/2006
North Carolina-- . 0.9%	NR*	NR*	1,600	North Carolina Medical Care Commission, Health Ca Mortgage Revenue Refunding Bonds (Presbyterian Ho due 10/01/2031
Ohio--1.6%	BB-	B3	4,135	Cleveland, Ohio, Airport Special Revenue Refundin Airlines Inc. Project), AMT, 5.70% due 12/01/2019
Oregon--1.8%	NR*	NR*	2,160	Klamath Falls, Oregon, Electric Revenue Refunding Cogeneration Project), Senior Lien, 6% due 1/01/2
	NR*	NR*	1,000	Western Generation Agency, Oregon, Cogeneration P (Wauna Cogeneration Project), AMT, Series B, 7.40

Apex Municipal Fund, Inc., December 31, 2001

SCHEDULE OF INVESTMENTS (concluded) (in Thousands)

STATE	S&P Ratings	Moody's Ratings	Face Amount	Issue
Pennsylvania--9.1%	NR*	Ba2	$ 2,000	Lehigh County, Pennsylvania, General Purpose Auth Refunding Bonds (Kidspeace Obligation Group), 6%
				Montgomery County, Pennsylvania, Higher Education Authority, Revenue Refunding Bonds (Faulkeways at
	BBB+	NR*	900	6.75% due 11/15/2024
	BBB+	NR*	925	6.75% due 11/15/2030
	AAA	Aaa	2,000	Pennsylvania State Higher Education Assistance Ag Loan Revenue Bonds, RIB, AMT, 10.647% due 3/01/20
	AAA	NR*	4,000	Pennsylvania State Higher Educational Facilities University Revenue Bonds (Eastern College), Serie due 10/15/2006 (c)
	NR*	NR*	5,500	Philadelphia, Pennsylvania, Authority for IDR, Co AMT, 7.75% due 12/01/2017
South Carolina--0.6%	BBB-	NR*	1,000	South Carolina Jobs, EDA, Revenue Bonds (Myrtle B Series A, 6.625% due 4/01/2036
Texas--4.6%	BBB-	Baa3	1,000	Austin, Texas, Convention Center Revenue Bonds (C Inc.), First Tier, Series A, 6.70% due 1/01/2028
	A1+	NR*	800	Harris County, Texas, Health Facilities Developme Revenue Refunding Bonds (Methodist Hospital), VRD due 12/01/2025 (f)
	BBB+	Baa2	6,500	Lower Colorado River Authority, Texas, PCR (Samsu AMT, 6.375% due 4/01/2027
Utah--1.3%	NR*	NR*	2,240	Carbon County, Utah, Solid Waste Disposal Revenue Environmental), AMT, Series A, 7.45% due 7/01/201
Virginia--6.8%	NR*	NR*	2,500	Dulles Town Center, Virginia, Community Developme Assessment Tax (Dulles Town Center Project), 6.25
	NR*	NR*	4,215	Peninsula Ports Authority, Virginia, Revenue Refu Facility--Zeigler Coal), 6.90% due 5/02/2022 (d)
	NR*	NR*	3,000	Pittsylvania County, Virginia, IDA, Revenue Refun Exempt-Facility, AMT, Series A, 7.50% due 1/01/20
				Pocahontas Parkway Association, Virginia, Toll Ro
	NR*	Ba1	6,200	First Tier, Sub-Series C, 6.25%** due 8/15/2033
	NR*	Ba1	6,200	First Tier, Sub-Series C, 6.25%** due 8/15/2034
	BBB-	Baa3	32,600	Senior Series B, 5.875%** due 8/15/2025
Washington--1.2%	NR*	NR*	2,600	Port Seattle, Washington, Special Facilities Reve (Northwest Airlines Project), AMT, 7.25% due 4/01
	Total Investments (Cost--$188,343)--98.9%			
	Other Assets Less Liabilities--1.1%			
	Net Assets--100.0%			

(a) AMBAC Insured.
(b) FSA Insured.
(c) Prerefunded.
(d) Non-income producing security.
(e) The interest rate is subject to change periodically and inversely based upon prevailing market rates. The interest rate shown is the rate in effect at December 31, 2001.
(f) The interest rate is subject to change periodically based upon prevailing market rates. The interest rate shown is the rate in effect at December 31, 2001.
* Not Rated.
** Represents a zero coupon bond; the interest rate shown reflects the effective yield at the time of purchase by the Fund.

See Notes to Financial Statements.

STATEMENT OF ASSETS, LIABILITIES AND CAPITAL

	As of December 31, 2001
Assets:	Investments, at value (identified cost--$188,342,506) ....
	Cash ....
	Interest receivable ....
	Prepaid expenses and other assets ....
	Total assets ....
Liabilities:	Payables:
	Securities purchased ....
	Investment adviser ....
	Dividends to shareholders ....
	Accrued expenses ....
	Total liabilities ....
Net Assets:	Net assets ....
Capital:	Common Stock, $.10 par value, 150,000,000 shares authorized; 19,596,732 shares issu and outstanding ....
	Paid-in capital in excess of par ....
	Undistributed investment income--net ....
	Accumulated realized capital losses on investments--net ....
	Unrealized depreciation on investments--net ....
	Total capital--Equivalent to $9.13 net asset value per share of Common Stock (market price--$8.32) ....

See Notes to Financial Statements.

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Apex Municipal Fund, Inc., December 31, 2001

STATEMENT OF OPERATIONS

For the Six Months Ended December 31, 2001			
Investment Income:	Interest		$ 6,406
Expenses:	Investment advisory fees	$605,226	
	Accounting services	37,058	
	Professional fees	32,575	
	Transfer agent fees	24,349	
	Directors' fees and expenses	19,486	
	Printing and shareholder reports	18,315	
	Listing fees	17,209	
	Custodian fees	7,937	
	Pricing fees	5,241	
	Other	9,856	
	Total expenses		777
	Investment income--net		5,629
Realized & Unrealized Loss on Investments--Net:	Realized loss on investments--net		(931
	Change in unrealized depreciation on investments--net		(5,300
	Net Decrease in Net Assets Resulting from Operations		$ (602

See Notes to Financial Statements.

STATEMENTS OF CHANGES IN NET ASSETS

	Increase (Decrease) in Net Assets:	For the Six Months Ended December 31, 2001
Operations:	Investment income--net	$ 5,629,47
	Realized loss on investments--net	(931,39
	Change in unrealized appreciation/depreciation on investments--net.	(5,300,77
	Net increase (decrease) in net assets resulting from operations ...	(602,69
Dividends to Shareholders:	Investment income--net	(5,636,58

	Net decrease in net assets resulting from dividends to shareholders	(5,636,58
Net Assets:	Total increase (decrease) in net assets	(6,239,28
	Beginning of period	185,246,31
	End of period*	$ 179,007,03
	*Undistributed investment income--net	$ 946,37

See Notes to Financial Statements.

FINANCIAL HIGHLIGHTS

The following per share data and ratios have been derived from information provided in the financial statements.

	Increase (Decrease) in Net Asset Value:	For the Six Months Ended December 31, 2001	2001
Per Share Operating Performance:	Net asset value, beginning of period	$ 9.45	$ 9.3
	Investment income--net	.29	.5
	Realized and unrealized gain (loss) on investments--net	(.32)	.1
	Total from investment operations	(.03)	.7
	Less dividends from investment income--net	(.29)	(.6
	Net asset value, end of period	$ 9.13	$ 9.4
	Market price per share, end of period	$ 8.32	$ 9.1
Total Investment Return:**	Based on market price per share	(5.60%)+	9.05
	Based on net asset value per share	(.24%)+	8.48
Ratios to Average Net Assets:	Expenses	.83%*	.82
	Investment income--net	6.04%*	6.35
Supplemental Data:	Net assets, end of period (in thousands)	$179,007	$185,24
	Portfolio turnover	10%	17

* Annualized.

** Total investment returns based on market value, which can be significantly greater or lesser than the net asset value, may result in substantially different returns. Total investment returns exclude the effects of sales

charges.
+ Aggregate total investment return.

See Notes to Financial Statements.

NOTES TO FINANCIAL STATEMENTS

1. Significant Accounting Policies:

Apex Municipal Fund, Inc. (the "Fund") is registered under the Investment Company Act of 1940 as a non-diversified, closed-end management investment company. The Fund's financial statements are prepared in conformity with accounting principles generally accepted in the United States of America, which may require the use of management accruals and estimates. These unaudited financial statements reflect all adjustments, which are, in the opinion of management, necessary to a fair statement of the results for the interim period presented. All such adjustments are of a normal, recurring nature. The Fund determines and makes available for publication the net asset value of its Common Stock on a weekly basis. The Fund's Common Stock is listed on the New York Stock Exchange under the symbol APX. The following is a summary of significant accounting policies followed by the Fund.

(a) Valuation of investments--Municipal bonds are traded primarily in the over-the-counter markets and are valued at the most recent bid price or yield equivalent as obtained by the Fund's pricing service from dealers that make markets in such securities. Financial futures contracts and options thereon, which are traded on exchanges, are valued at their closing prices as of the close of such exchanges. Options written or purchased are valued at the last sale price in the case of exchange-traded options. In the case of options traded in the over-the-counter market, valuation is the last asked price (options written) or the last bid price (options purchased). Securities with remaining maturities of sixty days or less are valued at amortized cost, which approximates market value. Securities and assets for which market quotations are not readily available are valued at fair value as determined in good faith by or under the direction of the Board of Directors of the Fund, including valuations furnished by a pricing service retained by the Fund, which may utilize a matrix system for valuations. The procedures of the pricing service and its valuations are reviewed by the officers of the Fund under the general supervision of the Board of Directors.

(b) Derivative financial instruments--The Fund may engage in various portfolio investment strategies to increase or decrease the level of risk to which the Fund is exposed more quickly and efficiently than transactions in other types of instruments. Losses may arise due to changes in the value of the contract or if the counterparty does not perform under the contract.

o Financial futures contracts--The Fund may purchase or sell financial futures contracts and options on such futures contracts for the purpose of hedging the market risk on existing securities or the intended purchase of securities. Futures contracts are contracts for delayed delivery of securities at a specific future date and at a specific price or yield. Upon entering into a contract, the Fund deposits and maintains as collateral such initial margin as required by the exchange on which the transaction is effected. Pursuant to the contract, the Fund agrees to receive from or pay to the broker an amount of cash equal to the daily fluctuation in value of the contract. Such receipts or payments are known as variation margin and are recorded by the Fund as unrealized gains or losses.

When the contract is closed, the Fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed.

o Options--The Fund is authorized to write covered call options and purchase put options. When the Fund writes an option, an amount equal to the premium received by the Fund is reflected as an asset and an equivalent liability. The amount of the liability is subsequently marked to market to reflect the current market value of the option written.

When a security is purchased or sold through an exercise of an option, the related premium paid (or received) is added to (or deducted from) the basis of the security acquired or deducted from (or added to) the proceeds of the security sold. When an option expires (or the Fund enters into a closing transaction), the Fund realizes a gain or loss on the option to the extent of the premiums received or paid (or gain or loss to the extent the cost of the closing transaction exceeds the premium paid or received).

Written and purchased options are non-income producing investments.

(c) Income taxes--It is the Fund's policy to comply with the requirements of the Internal Revenue Code applicable to regulated investment companies and to distribute substantially all of its taxable income to its shareholders. Therefore, no Federal income tax provision is required.

(d) Security transactions and investment income--Security transactions are recorded on the dates the transactions are entered into (the trade dates). Realized gains and losses on security transactions are determined on the identified cost basis. Interest income is recognized on the accrual basis.

(e) Dividends and distributions--Dividends from net investment income are declared daily and paid monthly. Distributions of capital gains are recorded on the ex-dividend dates.

2. Investment Advisory Agreement and Transactions with Affiliates:

The Fund has entered into an Investment Advisory Agreement with Fund Asset Management, L.P. ("FAM"). The general partner of FAM is Princeton Services, Inc. ("PSI"), an indirect, wholly-owned subsidiary of Merrill Lynch & Co., Inc. ("ML & Co."), which is the limited partner.

FAM is responsible for the management of the Fund's portfolio and provides the necessary personnel, facilities, equipment and certain other services necessary to the operations of the Fund. For such services, the Fund pays a monthly fee at an annual rate of .65% of the Fund's average weekly net assets.

For the six months ended December 31, 2001, the Fund reimbursed FAM $3,299 for certain accounting services.

Certain officers and/or directors of the Fund are officers and/or directors of FAM, PSI, Merrill Lynch, Pierce, Fenner & Smith Incorporated, and/or ML & Co.

3. Investments:

Purchases and sales of investments, excluding short-term securities, for the six months ended December 31, 2001 were $19,825,567 and $18,750,091, respectively.

Net realized losses for the six months ended December 31, 2001 and net unrealized losses as of December 31, 2001 were as follows:

	Realized	Unrealized

	Losses	Losses
Long-term investments	$(931,395)	$(11,303,570)
Total	$(931,395)	$(11,303,570)

As of December 31, 2001, net unrealized depreciation for Federal income tax purposes aggregated $11,303,570, of which $6,583,290 related to appreciated securities and $17,886,860 related to depreciated securities. The aggregate cost of investments at December 31, 2001 for Federal income tax purposes was $188,342,506.

4. Common Stock Transactions:

At December 31, 2001, the Fund had one class of shares of Common Stock, par value $.10 per share, of which 150,000,000 shares were authorized. Shares issued and outstanding during the six months ended December 31, 2001 and the year ended June 30, 2001 remained constant.

5. Capital Loss Carryforward:

At June 30, 2001, the Fund had a net capital loss carryforward of approximately $22,153,000, of which $2,775,000 expires in 2002, $1,754,000 expires in 2003, $7,057,000 expires in 2004, $1,312,000 expires in 2005, $938,000 expires in 2006, $2,975,000 expires in 2008 and $5,342,000 expires in 2009. This amount will be available to offset like amounts of any future taxable gains. Expired capital loss carryforward in the amount of $3,879,734 has been reclassified to paid-in capital in excess of par.

6. Subsequent Event:

On January 3, 2002, the Fund's Board of Directors declared an ordinary income dividend to Common Stock shareholders in the amount of $.046778 per share, payable on January 30, 2002 to shareholders of record as of January 15, 2002.

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Apex Municipal Fund, Inc., December 31, 2001

ABOUT INVERSE FLOATERS

As a part of its investment strategy, the Fund may invest in certain securities whose potential income return is inversely related to changes in a floating interest rate ("inverse floaters"). In general, income on inverse floaters will decrease when short-term interest rates increase and increase when short-term interest rates decrease. Investments in inverse floaters may be characterized as derivative securities and may subject the Fund to the risks of reduced or eliminated interest payments and losses of invested principal. In addition, inverse floaters have the effect of providing investment leverage and, as a result, the market value of such securities will generally be more volatile than that of fixed rate, tax-exempt securities. To the extent the Fund invests in inverse securities, the market value of the Fund's portfolio and the net asset value of the Fund's shares may also be more volatile than if the Fund did not invest in these securities.

OFFICERS AND DIRECTORS

Terry K. Glenn, President and Director

Walter Mintz, Director and Vincent R. Giordano, Senior Vice President of Apex Municipal Fund, Inc., have recently retired. The Fund's Board of Directors wishes Messrs. Mintz and Giordano well in their retirements.

Custodian & Transfer Agent

The Bank of New York
100 Church Street
New York, NY 10286

NYSE Symbol

APX

[LOGO] Merrill Lynch Investment Managers

[GRAPHIC OMITTED]

Apex Municipal Fund, Inc. seeks to provide shareholders with high current income exempt from Federal income taxes by investing primarily in a portfolio of medium-to-lower grade or unrated municipal obligations, the interest on which is exempt from Federal income taxes in the opinion of bond counsel to the issuer.

This report, including the financial information herein, is transmitted to shareholders of Apex Municipal Fund, Inc. for their information. It is not a prospectus. Past performance results shown in this report should not be considered a representation of future performance. Statements and other information herein are as dated and are subject to change.

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