# BLACKROCK APEX MUNICIPAL FUND INC

Form N-CSRS March 09, 2007

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM N-CSRS

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-05227

Name of Fund: BlackRock Apex Municipal Fund, Inc.

Fund Address: P.O. Box 9011

Princeton, NJ 08543-9011

Name and address of agent for service: Robert C. Doll, Jr., Chief Executive Officer, BlackRock Apex Municipal Fund, Inc., 800 Scudders Mill Road, Plainsboro, NJ 08536. Mailing address: P.O. Box 9011, Princeton, NJ 08543-9011

Registrant's telephone number, including area code: (609) 282-2800

Date of fiscal year end: 06/30/07

Date of reporting period: 07/01/06 - 12/31/06

Item 1 - Report to Stockholders

ALTERNATIVES BLACKROCK SOLUTIONS EQUITIES FIXED INCOME LIQUIDITY REAL ESTATE

BlackRock Apex Municipal Fund, Inc.

BLACKROCK

SEMI-ANNUAL REPORT | DECEMBER 31, 2006

NOT FDIC INSURED MAY LOSE VALUE NO BANK GUARANTEE

BlackRock Apex Municipal Fund, Inc.

Announcement of Annual Stockholders Meeting

The Fund has determined that its annual stockholders meeting originally scheduled to be held in April 2007 will be postponed until and will be held in June 2007. Proposals of stockholders intended to be presented at the meeting must be received by the Fund by March 15, 2007 for inclusion in the Fund's proxy statement and form of proxy for that meeting. The persons named as proxies in the proxy materials for the Fund's 2007 annual meeting of stockholders may exercise discretionary authority with respect to any stockholder proposal presented at such meeting if written notice of such proposal has not been received by the Fund by April 1, 2007. Written proposals and notices should be sent to the Secretary of the Fund, 800 Scudders Mill Road, Plainsboro, New

Jersey 08536.

Portfolio Information as of December 31, 2006

Quality Ratings by S&P/Moody's	Percent of Total Investments
AAA/Aaa A/A BBB/Baa BB/Ba  B/B CCC/Caa NR (Not Rated) Other*	6.1% 3.8 24.5 5.8 6.1 5.8 46.6 1.3

<sup>\*</sup> Includes portfolio holdings in short-term investments and variable rate demand notes.

Availability of Quarterly Schedule of Investments

The Fund files its complete schedule of portfolio holdings with the Securities and Exchange Commission ("SEC") for the first and third quarters of each fiscal year on Form N-Q. The Fund's Forms N-Q are available on the SEC's Web site at http://www.sec.gov. The Fund's Forms N-Q may also be reviewed and copied at the SEC's Public Reference Room in Washington, DC. Information on the operation of the Public Reference Room may be obtained by calling 1-800-SEC-0330.

#### Electronic Delivery

Electronic copies of most financial reports and prospectuses are available on the Fund's Web site. Shareholders can sign up for e-mail notifications of quarterly statements, annual and semi-annual reports and prospectuses by enrolling in the Fund's electronic delivery program.

#### To enroll:

Shareholders Who Hold Accounts with Investment Advisers, Banks or Brokerages:

Please contact your financial adviser. Please note that not all investment advisers, banks or brokerages may offer this service.

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### A Letter to Shareholders

### Dear Shareholder

As 2007 begins, we are able to look back on 2006 as a volatile, but ultimately, a positive year for most major markets. Returns for the annual and semi-annual periods ended December 31, 2006 were as follows:

Total Returns as of December 31, 2006	6-month	12-month
U.S. equities (Standard & Poor's 500 Index)	+12.74%	+15.79%

Small cap U.S. equities (Russell 2000 Index)	+ 9.38	+18.37
International equities (MSCI Europe, Australasia, Far East Index)	+14.69	+26.34
Fixed income (Lehman Brothers Aggregate Bond Index)	+ 5.09	+ 4.33
Tax-exempt fixed income (Lehman Brothers Municipal Bond Index)	+ 4.55	+ 4.84
High yield bonds (Credit Suisse High Yield Index)	+ 8.14	+11.92

After raising the target short-term interest rate 17 times between June 2004 and June 2006, the Federal Reserve Board (the Fed) finally opted to pause on August 8, 2006. This left the federal funds rate at 5.25%, where it remained through year-end. In interrupting its two-year interest rate-hiking campaign, the Fed acknowledged that economic growth is slowing, led by a downturn in the housing market, but has maintained a cautionary view on inflation.

Overall, it was a good 12 months for U.S. equities, despite a significant correction in the middle of the year that was largely triggered by rising interest rates, inflation fears, elevated oil prices and geopolitical uncertainties. Nevertheless, strong corporate earnings, abundant liquidity and record merger-and-acquisition activity provided a solid backdrop for stocks. Many international equity markets (with the notable exception of Japan) performed even better, outpacing U.S. stocks for the fifth consecutive year. Strength was especially notable in European equities and select emerging markets.

Bonds experienced a more modest annual return than stocks. Interest rates and bond yields moved higher for much of the year as bond prices, which move opposite of yields, declined. Prices began to improve in the summer as the economy showed signs of weakening and the Fed paused. Notably, the Treasury curve remained inverted for much of 2006. The 10-year Treasury yield ended December at 4.71%, well below the federal funds rate.

As we begin a new year, investors are left with a few key questions: Will the U.S. economy achieve a soft landing, will the Fed reverse its prior policy and cut interest rates, and how might these outcomes impact the investment climate. As you navigate the uncertainties inherent in the financial markets, we encourage you to start the year by reviewing your investment goals with your financial professional and making portfolio changes, as needed. For more reflection on 2006 and our thoughts on the year ahead, please ask your financial professional for a copy of "What's Ahead in 2007: An Investment Perspective," or view it online at www.blackrock.com/funds. We thank you for trusting BlackRock with your investment assets, and we look forward to continuing to serve you in the new year and beyond.

Sincerely,

/s/ Robert C. Doll, Jr.

Robert C. Doll, Jr. President and Director

BLACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006

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The Fund benefited from strong performance in three key sectors of the high yield municipal market -- health care, tax-backed development districts and airlines.

Describe the recent market environment relative to municipal bonds.

Long-term bond yields generally moved lower during the past six months as their prices, which move in the opposite direction, increased. The municipal market's strong technical position allowed municipal bond yields to decline more than taxable yields.

The strength in bond prices came amid a slowdown in U.S. economic growth and the Federal Reserve Board's decision at its August 8 meeting to refrain from raising its target interest rate after 17 consecutive increases since June 2004. Bond prices found additional support in moderating oil prices. Between June 30 and November 30, 2006, 30-year Treasury bond yields declined 73 basis points (.73%) to 4.56%. However, stronger-than-expected economic releases and year-end profit taking pushed yields higher during December. For the six-month period overall, 30-year U.S. Treasury bond yields fell 38 basis points to 4.81% and 10-year Treasury note yields declined 44 basis points to 4.71%.

The tax-exempt bond market outperformed the U.S. Treasury market as investor demand outstripped a resurgent new-issue calendar. For the six-month period ended December 31, 2006, as reported by Municipal Market Data, yields on 30-year, AAA-rated municipal issues declined 56 basis points to 4.07%. Yields on 10-year, AAA-rated tax-exempt bonds declined 44 basis points to 3.68%.

Investor demand for municipal product remained strong throughout the period. The latest available statistics from the Investment Company Institute indicate that, through November, long-term municipal bond funds had net new cash flows of nearly \$14 billion, an increase of more than 120% versus the same 11 months of 2005. As reported by AMG Data, weekly average cash flows exceeded \$400 million throughout the fourth quarter of 2006, representing a solid increase from the \$241 million weekly average seen for the full year. The fourth quarter increase is especially impressive, as holiday spending often results in reduced cash flows into mutual funds at year-end.

New-issue municipal volume surged in the fourth quarter as municipalities rushed to take advantage of low market yields and solid investor demand. More than \$121 billion in new long-term tax-exempt bonds was issued over the last three months of 2006, a 23.4% increase compared to fourth quarter 2005. Issuance in December, which totaled over \$43 billion, was the highest December monthly volume level since 1985. That year, municipalities scurried to issue bonds in anticipation of a more stringent underwriting environment resulting from the Tax Reform Act of 1986. The increased issuance in the final quarter of this past year pushed 2006's annual total volume to over \$383 billion, just 6% off last year's record issuance and close to initial annual issuance estimates. The recent increase in issuance has made the municipal market's outperformance even more impressive.

Looking ahead, the tax-exempt bond market's technical position is expected to remain supportive of continued strong performance. Attractive yield ratios, combined with a relatively steep municipal bond yield curve and manageable new issuance, should help to sustain investor demand for municipal product.

How did the Fund perform during the period?

For the six-month period ended December 31, 2006, the Common Stock of BlackRock Apex Municipal Fund, Inc. (formerly Apex Municipal Fund, Inc.) had net annualized yields of 5.75% and 5.47%, based on a period-end per share net asset value of \$10.14 and a per share market price of \$10.66, respectively, and \$0.294 per share income dividends. Over the same period, the total investment return on the Fund's Common Stock was +5.44%, based on a change in per share net asset

value from \$9.90 to \$10.14, and assuming reinvestment of all distributions.

The Fund's total return, based on net asset value, modestly lagged the +5.82% average return of the Lipper High Yield Municipal Debt Funds category for the six-month period. (Funds in this Lipper category invest at least 50% of their assets in lower-rated municipal debt issues.) Notably, the Lipper group includes high yield municipal bond funds that employ leverage and those that do not, such as BlackRock Apex Municipal Fund, Inc. When the yield curve is positively sloped, as the municipal curve has been, leveraged funds are able to borrow at lower short-term interest rates and invest at higher long-term interest rates, generating additional income. Leverage creates additional volatility as interest rates

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fluctuate, enhancing return as rates decline and detracting from return as rates rise. While leveraged funds have had an advantage, the Fund was a top performer among its unleveraged peers.

Fund performance reflects ongoing investor demand for high yield municipal bonds, which drove credit spreads (versus higher-quality issues of comparable maturity) to historically tight levels. Sectors that we emphasized — health care, tax-backed development districts and airlines — were beneficiaries of this trend. Health care comprised 29% of the portfolio, with emphasis on long-term care (13.6%) and not-for-profit hospitals (12.3%). Ample supply in the health care sector has led to increased appetite for these issues, which have tended to be oversubscribed with bids higher than the bonds' initial pricing. From a credit standpoint, hospitals have seen some of their best operating margins in over a decade, and demographic trends have favored the long-term care sector's growth as the population ages. All of this has benefited our positions in health care.

Development districts, both residential and commercial as well as blends of the two, represented 15.9% of the portfolio. Although the housing market appears to be experiencing a slowdown, most of our purchases in this sector occurred in the past when spreads were wider or have been in existing developments that are nearly complete. As such, our positions have done well. Finally, airline-related debt accounted for 7.9% of the portfolio. Airlines continue to exhibit better profitability amid reduced capacity and have benefited from somewhat lower fuel costs in the past three to six months. An unsolicited bid by USAirways for Delta Airlines before it emerges from bankruptcy touched off speculation about future consolidation, which would further reduce capacity and benefit the profitability of the surviving carriers.

For a description of the Fund's total investment return based on a change in the per share market value of the Fund's Common Stock (as measured by the trading price of the Fund's shares on the New York Stock Exchange), and assuming reinvestment of dividends, please refer to the Financial Highlights section of this report. As a closed-end fund, the Fund's shares may trade in the secondary market at a premium or discount to the Fund's net asset value. As a result, total investment returns based on changes in the market value of the Fund's Common Stock can vary significantly from total investment returns based on changes in the Fund's net asset value.

What changes were made to the portfolio during the period?

Portfolio activity was focused largely on the new-issue market, where pricing and liquidity generally have been better than in the secondary market. For the most part, in making new purchases, we continued to emphasize our existing sector concentrations, particularly health care. The purchases were funded with

the sale of positions that had performed well, particularly those positions that we viewed to have little additional upside potential. In the airline sector, for example, we reduced one of our larger positions, that being Phoenix, Arizona bonds issued on behalf of America West (now known as USAirways). These bonds have recovered from low levels.

Overall, our approach has become increasingly more tactical given the magnitude of the market's outperformance in the past year. As it becomes more difficult to uncover value in the high yield municipal market, we are more willing to lock in profits as the market presents opportunities. The Fund is in a favorable position to take these gains, as its substantial net capital loss carryforwards can be used to offset the capital gains without passing through a tax consequence to our shareholders.

How would you characterize the Fund's position at the close of the period?

We maintained our three key sector concentrations at period-end, although we recently have refrained from adding exposure to select health care and tax-backed development districts given a general lack of relative value as well as concern over the state of the housing industry in select geographic regions.

The credit profile of the portfolio emerged from this period somewhat improved, primarily due to the advance refunding of some existing holdings. Most recently, we have seen this type of activity among some of our long-term care holdings.

With credit spreads at historically tight levels, we expect that activity in the next year will reflect efforts to upgrade the portfolio somewhat relative to our peers and broader market benchmarks. We intend to remain flexible and cautious in our approach as we pursue our mission of providing shareholders with a high degree of tax-exempt income.

Theodore R. Jaeckel Jr., CFA Vice President and Portfolio Manager

January 12, 2007

BLACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006

Schedule of Investments as of December 31, 2006 (in Thousands)

Face Amount	Municipal Bonds	Value
Alabama1.1%		
\$ 1,000	Brewton, Alabama, IDB, PCR, Refunding (Container Corporation of AmericaJefferson Smurfit Corp. Project), 8% due 4/01/2009	\$ 1 <b>,</b> 006
1,255	Tuscaloosa, Alabama, Special Care Facilities Financing Authority, Residential Care Facility Revenue Bonds (Capstone Village, Inc. Project), Series A, 5.875%	
	due 8/01/2036	1,286
Alaska1.1%		
2,000	Alaska Industrial Development and Expert Authority Revenue Bonds (Williams Lynxs Alaska Cargoport), AMT, 8% due 5/01/2023	2 <b>,</b> 141

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Arizona3.3%		
900	Maricopa County, Arizona, IDA, Education Revenue	
	Bonds (Arizona Charter Schools Project 1), Series A,	0.1.6
	6.625% due 7/01/2020 Maricopa County, Arizona, IDA, M/F Housing Revenue	916
	Bonds (Sun King Apartments Project), Series A:	
55	5.875% due 11/01/2008	5.5
20	6% due 11/01/2010	20
1,020	6.75% due 5/01/2031	1,053
2,950	Phoenix, Arizona, IDA, Airport Facility, Revenue	
	Refunding Bonds (America West Airlines Inc. Project), AMT, 6.30% due 4/01/2023	3,011
1,000	Pima County, Arizona, IDA, Education Revenue Bonds	0,011
,	(Arizona Charter Schools Project), Series E, 7.25%	
	due 7/01/2031	1,095
500	Yavapai County, Arizona, IDA, Hospital Facility Revenue	
	Bonds (Yavapai Regional Medical Center), Series A,	541
=======================================	6% due 8/01/2033	
California2.2%	7.1.7.1.1.7.1.7.1.7.1.7.1.7.1.7.1.1.1.1	1 000
1,800	California State, GO, 5% due 2/01/2033	1,878
1,300	California State, Various Purpose, GO, 5.25% due 11/01/2025	1,395
1,000	Fontana, California, Special Tax, Refunding	1,350
±, •••	(Community Facilities District Number 22Sierra),	
	6% due 9/01/2034	1,065
Colorado5.5%		
450	Colorado Health Facilities Authority, Revenue	
	Refunding Bonds (Christian Living Communities	
0 575	Project), Series A, 5.75% due 1/01/2026	473
2 <b>,</b> 575	Denver, Colorado, Urban Renewal Authority, Tax	
	<pre>Increment Revenue Bonds (Pavilions), AMT, 7.75% due 3/01/2007 (a)</pre>	2,617
2,800	Elk Valley, Colorado, Public Improvement Revenue	2, 01.
•	Bonds (Public Improvement Fee), Series A,	
	7.30% due 9/01/2022	2,981
1,235	North Range, Colorado, Metropolitan District Number 1,	1 001
	GO, 7.25% due 12/15/2031	1,331
	Plaza Metropolitan District Number 1, Colorado, Tax Allocation Revenue Bonds (Public Improvement Fees):	
2,000	8% due 12/01/2025	2,218
500	8.125% due 12/01/2025	504
830	Southlands, Colorado, Medical District, GO	
	(Metropolitan District Number 1), 7.125%	
	due 12/01/2034	920
Connecticut0.3%		
490	Connecticut State Development Authority, Airport	
	Facility Revenue Bonds (Learjet Inc. Project), AMT,	
=======================================	7.95% due 4/01/2026	590 =======
Florida7.9%		
800	Capital Projects Finance Authority, Florida, Continuing	
	Care Retirement Revenue Bonds (Glenridge on	0.5.0
840	Palmer Ranch), Series A, 8% due 6/01/2012 (a) Halifax Hospital Medical Center, Florida, Hospital	956
040	Revenue Refunding Bonds, Series A, 5%	
	due 6/01/2038	858
850	Highlands County, Florida, Health Facilities Authority,	
	Hospital Revenue Bonds (Adventist Health System),	
	Series C, 5.25% due 11/15/2036	905

2 <b>,</b> 500	Hillsborough County, Florida, IDA, Exempt Facilities Revenue Bonds (National Gypsum Company), AMT, Series A, 7.125% due 4/01/2030 Lakewood Ranch, Florida, Community Development	2,744
	District Number 5, Special Assessment Revenue Refunding Bonds, Series A, 6.70% due 5/01/2031 Midtown Miami, Florida, Community Development District, Special Assessment Revenue Bonds, Series A:	818
1,500	6% due 5/01/2024	1,616
1,350	6.25% due 5/01/2037	1,468
1,555	Orlando, Florida, Urban Community Development District, Capital Improvement Special Assessment Bonds, Series A, 6.95% due 5/01/2033	1,682
2,140	Santa Rosa Bay Bridge Authority, Florida, Revenue Bonds, 6.25% due 7/01/2028	2,164
2,515	Tampa Palms, Florida, Open Space and Transportation Community Development District Revenue Bonds, Capital Improvement (Richmond Place Project), 7.50% due 5/01/2018	2,570
Georgia3.8%	Atlanta, Georgia, Tax Allocation Bonds:	
2,000	(Atlantic Station Project), 7.90% due 12/01/2024	2,219
410	(Eastside Project), Series B, 5.40% due 1/01/2020	423
495	(Princeton Lakes Project), 5.50% due 1/01/2031	504

#### Portfolio Abbreviations

To simplify the listings of BlackRock 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
VRDN	Variable Rate Demand Notes

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Schedule of Investments (continued)

(in Thousands)

	Face Amount	Municipal Bonds	,	Value
Georgia	(concluded)	Drungwick and Clump County Coorgin Doyalopment		
		Brunswick and Glynn County, Georgia, Development Authority, First Mortgage Revenue Bonds (Coastal		
		Community Retirement Corporation Project), Series A:		,
	\$ 830	7.125% due 1/01/2025	\$	823
	1,185	7.25% due 1/01/2035		1,181
	1,580	Fulton County, Georgia, Development Authority, PCR		

830	(General Motors Corporation), Refunding, VRDN, 8% due 4/01/2010 (e) Savannah, Georgia, EDA, First Mortgage Revenue Bonds (Marshes of Skidaway), Series A, 7.40% due 1/01/2034		1,580 914
Idaho0.8%	Idaho Health Facilities Authority, Revenue Refunding Bonds (Valley Vista Care Corporation), Series A, 7.75% due 11/15/2016	=====	 1 <b>,</b> 545
			-, -
Illinois7.6% 1,845	Caseyville, Illinois, Senior Tax Increment Revenue Bonds (Forest Lakes Project), 7% due 12/30/2022		1,944
3,000	Chicago, Illinois, O'Hare International Airport, Special Facility Revenue Refunding Bonds (American		
2,605	Airlines Inc. Project), 8.20% due 12/01/2024  Illinois Development Finance Authority Revenue Bonds (Primary Health Care Centers Facilities Acquisition		3,091
2,050	Program), 7.75% due 12/01/2016 Illinois State Finance Authority Revenue Bonds: (Clare At Water Tower Project), Series A,		2,682
430	6.125% due 5/15/2038 (Landing At Plymouth Place Project), Series A,		2,151
490	6% due 5/15/2037 (Primary Health Care Centers Program), 6.60% due 7/01/2024		458 513
755	Lincolnshire, Illinois, Special Service Area Number 1, Special Tax Bonds (Sedgebrook Project), 6.25% due 3/01/2034		805
2,400	Lombard, Illinois, Public Facilities Corporation, First Tier Revenue Bonds (Conference Center and Hotel),		
265	Series A-1, 7.125% due 1/01/2036  Naperville, Illinois, IDR (General Motors Corporation),  Refunding, VRDN, 8% due 12/01/2012 (e)		2 <b>,</b> 577
760	Village of Wheeling, Illinois, Revenue Bonds (North Milwaukee/Lake-Cook Tax Increment Financing (TIF) Redevelopment Project), 6% due 1/01/2025		774
Indiana0.9%		=====	
840	Delaware County, Indiana, Hospital Authority, Hospital Revenue Bonds (Cardinal Health System Obligated		077
820	Group), 5.25% due 8/01/2036  Vanderburgh County, Indiana, Redevelopment  Commission, Redevelopment District Tax Allocation  Bonds, 5.25% due 2/01/2031		877 867
Toyo 1 7%	Bonds, 3.23% due 2/01/2031		======
Iowa1.7% 2,720	<pre>Iowa Finance Authority, Health Care Facilities, Revenue   Refunding Bonds (Care Initiatives Project), 9.25%   due 7/01/2011 (a)</pre>		3 <b>,</b> 348
Kansas0.6%	Wyandotte County, Kansas, Kansas City Unified Government Revenue Refunding Bonds (General Motors Corporation Project), 6% due 6/01/2025	=====	1,241
Louisiana0.7% \$1,300	Louisiana Public Facilities Authority, Hospital Revenue Bonds (Franciscan Missionaries of Our Lady Health System, Inc.), Series A, 5.25% due 8/15/2036	===== \$	1,374

Maine0.4%		
840	Maine Finance Authority, Solid Waste Recycling Facilities Revenue Bonds (Great Northern Paper ProjectBowater), AMT, 7.75% due 10/01/2022	847
Maryland1.6%		<del></del>
385		
1 50/	Bonds, Sub-Series B, 5.875% due 9/01/2039	408
1,500	Maryland State Energy Financing Administration, Limited Obligation Revenue Bonds (Cogeneration	
	AES Warrior Run), AMT, 7.40% due 9/01/2019	1,509
	Maryland State Health and Higher Educational Facilities	
1 000	Authority Revenue Bonds:	
1,000	0 (King Farm Presbyterian Community), Series A, 5.25% due 1/01/2027	998
410		ソシロ
<u></u>	due 7/01/2038	411
Massachusetts3	 .5%	
1,845	1 3 1,	
	First Mortgage Revenue Bonds (Overlook	1 000
1,245	Communities, Inc.), Series A, 6.25% due 7/01/2034  Massachusetts State Development Finance Agency,	1,928
±/ 4 ×	Revenue Refunding Bonds (Eastern Nazarene	
	College), 5.625% due 4/01/2019	1,279
850		
	Authority Revenue Bonds (Jordan Hospital), Series E,	
	6.75% due 10/01/2033	939
	Massachusetts State Health and Educational Facilities Authority, Revenue Refunding Bonds:	
1,350		
•	5.90% due 4/01/2028	1,376
500		512
1,000		
	Revenue Bonds, Sewer Facility (Resource Control Composting), AMT, 9.25% due 6/01/2010	1,016
	Compositing), AMI, 9.23% ade 0,01,2010	
Michigan1.3%	O Maranh County Michigan Hoopital Pinango Authority	
1,150	Macomb County, Michigan, Hospital Finance Authority, Hospital Revenue Bonds (Mount Clemens General	
	Hospital), Series B, 5.875% due 11/15/2034	1,221
1,260		
	Hospital Revenue Refunding Bonds (Mercy Memorial	
	Hospital Corporation), 5.50% due 6/01/2035	1,331 =========
Minnesota0.7%	<del></del>	
1,230		
	Revenue Refunding Bonds (Radisson Kellogg Project),	1 225
	Series 2, 7.375% due 8/01/2008 (a)	1,335
Missouri1.2%	=======================================	=====
1,155	Fenton, Missouri, Tax Increment Revenue Refunding and	
	Improvement Bonds (Gravois Bluffs), 7%	
	due 10/01/2011 (a)	1,327
1,000	0 Kansas City, Missouri, IDA, First Mortgage Health Facilities Revenue Bonds (Bishop Spencer Place),	
	Series A, 6.50% due 1/01/2035	1,061
	11 101 11, 1111 111 111 111 111	1,001

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Schedule of Investments (continued)

(in Thousands)

Face Amount	Municipal Bonds	V	/alue 
Nevada0.2% \$ 430	Clark County, Nevada, Improvement District Number 142, Special Assessment Bonds, 6.375% due 8/01/2023	\$	443
New Hampshire0.4% 835	New Hampshire Health and Education Facilities Authority, Hospital Revenue Bonds (Catholic Medical Center), 5% due 7/01/2036	=========	859
New Jersey12.9% 6,000	Camden County, New Jersey, Pollution Control Financing Authority, Solid Waste Resource Recovery, Revenue Refunding Bonds, AMT, Series A, 7.50% due 12/01/2010		6,088
2,170	New Jersey EDA, Cigarette Tax Revenue Bonds, 5.50% due 6/15/2024		2,287
1,500	New Jersey EDA, IDR, Refunding (Newark Airport Marriott Hotel), 7% due 10/01/2014 New Jersey EDA, Retirement Community Revenue Bonds (a):		1,552
1,000	(Cedar Crest Village, Inc. Facility), Series A, 7.25% due 11/15/2011		1,147
3,700	(Seabrook Village, Inc.), Series A, 8.125% due 11/15/2010 New Jersey EDA, Special Facility Revenue Bonds		4 <b>,</b> 263
3,050 1,750	(Continental Airlines, Inc. Project), AMT: 6.625% due 9/15/2012 6.25% due 9/15/2029		3,265 1,806
1,870	New Jersey Health Care Facilities Financing Authority Revenue Bonds (Pascack Valley Hospital Association), 6.625% due 7/01/2036		2,049
2,760	New Jersey State Transportation Trust Fund Authority, Transportation System Revenue Bonds, Series C, 5.05% due 12/15/2035 (b) (f) Tobacco Settlement Financing Corporation of		771
1,245 1,075	New Jersey, Asset-Backed Revenue Bonds: 5.75% due 6/01/2032 7% due 6/01/2041		1,322 1,247
New Mexico2.6% 5,000	Farmington, New Mexico, PCR, Refunding (Tucson Electric Power CompanySan Juan Project), Series A, 6.95% due 10/01/2020		5,173
New York6.1% 1,000	Dutchess County, New York, IDA, Civic Facility Revenue	=======	
1,890	Bonds (Saint Francis Hospital), Series B, 7.50% due 3/01/2029 Erie County, New York, IDA, Revenue Bonds		1,114
*,*	(Orchard Park CCRC, Inc. Project), Series A, 6% due 11/15/2036		2,022

New York City, New York, City IDA, Civic Facility	
Revenue Bonds:	205
	385
Series C-1, 6.50% due 7/01/2024 864	
New York City, New York, City IDA, Special Facility	
Revenue Bonds (British Airways Plc Project), AMT,	
7.625% due 12/01/2032	1,942
New York Liberty Development Corporation Revenue	
	666
	666
	ŀ
Medical Center Health System), 5.50% due 7/01/2026	2,123
New York State Dormitory Authority, Non-State	
Supported Debt, Revenue Refunding Bonds (Mount	
SinaiNYU Medical Center Health System),	
	1,903
	1,269
	+,
North Carolina Medical Care Commission, Health Care	
Facilities, First Mortgage Revenue Refunding Bonds	
	252
	1,084
Estates F10 Ject, Series A, 0.300 auc 7,01,2032	+, · · ·
Allegheny County, Pennsylvania, IDA, Lease Revenue	
	2.50
	258
	1,236
	1,200
	ŀ
Bonds (Jenners Pond, Inc. Project), 7.625%	ŀ
due 7/01/2012 (a)	2,102
Harrisburg, Pennsylvania, Authority, University Revenue	
Bonds (Harrisburg University of Science), Series B,	
6% due 9/01/2036	610
Montgomery County, Pennsylvania, Higher Education	F
and Health Authority Revenue Bonds (Faulkeways at	1 997
and Health Authority Revenue Bonds (Faulkeways at Gwynedd Project), 6.75% due 11/15/2009 (a)	1,997
and Health Authority Revenue Bonds (Faulkeways at Gwynedd Project), 6.75% due 11/15/2009 (a) Montgomery County, Pennsylvania, IDA, Revenue	1,997
and Health Authority Revenue Bonds (Faulkeways at Gwynedd Project), 6.75% due 11/15/2009 (a)	1,997 1,818
and Health Authority Revenue Bonds (Faulkeways at Gwynedd Project), 6.75% due 11/15/2009 (a)  Montgomery County, Pennsylvania, IDA, Revenue Bonds (Whitemarsh Continuing Care Project),	
and Health Authority Revenue Bonds (Faulkeways at Gwynedd Project), 6.75% due 11/15/2009 (a)  Montgomery County, Pennsylvania, IDA, Revenue Bonds (Whitemarsh Continuing Care Project), 6.25% due 2/01/2035	
and Health Authority Revenue Bonds (Faulkeways at Gwynedd Project), 6.75% due 11/15/2009 (a)  Montgomery County, Pennsylvania, IDA, Revenue Bonds (Whitemarsh Continuing Care Project), 6.25% due 2/01/2035  Philadelphia, Pennsylvania, Authority for IDR:	1,818
and Health Authority Revenue Bonds (Faulkeways at Gwynedd Project), 6.75% due 11/15/2009 (a)  Montgomery County, Pennsylvania, IDA, Revenue Bonds (Whitemarsh Continuing Care Project), 6.25% due 2/01/2035  Philadelphia, Pennsylvania, Authority for IDR: (Air Cargo), AMT, Series A, 7.50% due 1/01/2025	1,818 1,754
and Health Authority Revenue Bonds (Faulkeways at Gwynedd Project), 6.75% due 11/15/2009 (a)  Montgomery County, Pennsylvania, IDA, Revenue Bonds (Whitemarsh Continuing Care Project), 6.25% due 2/01/2035  Philadelphia, Pennsylvania, Authority for IDR: (Air Cargo), AMT, Series A, 7.50% due 1/01/2025 Commercial Development, 7.75% due 12/01/2017	1,818 1,754
and Health Authority Revenue Bonds (Faulkeways at Gwynedd Project), 6.75% due 11/15/2009 (a)  Montgomery County, Pennsylvania, IDA, Revenue Bonds (Whitemarsh Continuing Care Project), 6.25% due 2/01/2035  Philadelphia, Pennsylvania, Authority for IDR: (Air Cargo), AMT, Series A, 7.50% due 1/01/2025	1,818 1,754
	Revenue Bonds: Series C, 6.80% due 6/01/2028 (Special Needs Facility Pooled Program), Series C-1, 6.50% due 7/01/2024 864 New York City, New York, City IDA, Special Facility Revenue Bonds (British Airways Plc Project), AMT, 7.625% due 12/01/2032 New York Liberty Development Corporation Revenue Bonds (National Sports Museum Project), Series A, 6.125% due 2/15/2019 New York State Dormitory Authority, Non-State Supported Debt, Revenue Bonds (Mount Sinai—NYU Medical Center Health System), 5.50% due 7/01/2026 New York State Dormitory Authority, Non-State Supported Debt, Revenue Refunding Bonds (Mount Sinai—NYU Medical Center Health System), Series C, 5.50% due 7/01/2026 Westchester County, New York, IDA, Continuing Care Retirement, Mortgage Revenue Bonds (Kendal on Hudson Project), Series A, 6.50% due 1/01/2034  North Carolina Medical Care Commission, Health Care Facilities, First Mortgage Revenue Refunding Bonds (Salemtowne Project), 5.10% due 10/01/2030 North Carolina Medical Care Commission, Retirement Facilities, First Mortgage Revenue Bonds (Givens Estates Project), Series A, 6.50% due 7/01/2032  Allegheny County, Pennsylvania, IDA, Lease Revenue Refunding Bonds (Residential Resources, Inc. Project), 5.125% due 9/01/2031 Bucks County, Pennsylvania, IDA, Retirement Community Revenue Bonds (Ann's Choice, Inc.), Series A, 6.125% due 1/01/2025 Chester County, Pennsylvania, Health and Education Facilities Authority, Senior Living Revenue Refunding Bonds (Jenners Pond, Inc. Project), 7.625% due 7/01/2012 (a) Harrisburg, Pennsylvania, Authority, University Revenue Bonds (Harrisburg University of Science), Series B, 6% due 9/01/2036

South Carolina--4.1%

Connector 2000 Association, Inc., South Carolina, Toll Road and Capital Appreciation Revenue Bonds,

ļ	Senior Series B (f):	
966	6.50% due 1/01/2009	1,100
623	7.969% due 1/01/2014	1,075
	Myrtle Beach, South Carolina, Tax Increment Revenue	615
	Bonds (Myrtle Beach Air Force Base), Series A,	
626	5.30% due 11/01/2035	
	South Carolina Housing Finance and Development	5,715
	Authority, Mortgage Revenue Refunding Bonds,	
5 <b>,</b> 917	AMT, Series A-2, 5.15% due 7/01/2037 (b)	

8 BLACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006

Schedule of Investments (concluded)

(in Thousands)

Face Amount	Municipal Bonds	Value
m 0.10		
Tennessee3.1%		
\$ 5,000	Knox County, Tennessee, Health, Educational and Housing Facilities Board, Hospital Facilities Revenue Refunding Bonds (Covenant Health), Series A,	
	5.03% due 2/01/2037 (f)	\$ 1,11
	Shelby County, Tennessee, Health, Educational and	7 -/
	Housing Facilities Board Revenue Bonds	
	(Germantown Village):	
245	6.25% due 12/01/2034	21
1,800	Series A, 7.25% due 12/01/2034	1,80
2,980	Sullivan County, Tennessee, Health, Educational and	,
,	Housing Facilities Board, Hospital Revenue Bonds	
	(Wellmont Health System Project), Series C, 5.25%	
	due 9/01/2036	3,13
Texas7.5%		
1,000	Austin, Texas, Convention Center Revenue Bonds	
•	(Convention Enterprises, Inc.), First Tier, Series A,	
	6.70% due 1/01/2011 (a)	1,10
2,530	Brazos River Authority, Texas, PCR, Refunding	
	(Texas Utility Company), AMT, Series A, 7.70%	
	due 4/01/2033	2,97
1,220	Brazos River Authority, Texas, Revenue Refunding	
	Bonds (Reliant Energy, Inc. Project), Series B,	
	7.75% due 12/01/2018	1,29
2,275	Dallas-Fort Worth, Texas, International Airport Facilities	
	Improvement Corporation Revenue Bonds (American	
	Airlines Inc.), AMT, 7.25% due 11/01/2030	2,30
830	Grand Prairie, Texas, Housing Finance Corporation	
	Revenue Bonds (Independent Senior Living Center),	
	7.75% due 1/01/2034	82
655	HFDC of Central Texas, Inc., Retirement Facilities	
	Revenue Bonds, Series A, 5.625% due 11/01/2026	67
1,000	Houston, Texas, Health Facilities Development	
	Corporation, Retirement Facility Revenue Bonds	
	(Buckingham Senior Living Community), Series A,	
	7.125% due 2/15/2034	1,11
875	Kerrville, Texas, Health Facilities Development	

2,31	Corporation, Hospital Revenue Bonds (Sid Peterson Memorial Hospital Project), 5.375% due 8/15/2035 O Matagorda County, Texas, Navigation District	916
1,33	Number 1, Revenue Refunding Bonds (Reliant Energy, Inc.), Series C, 8% due 5/01/2029 Port Corpus Christi, Texas, Individual Development Corporation, Environmental Facilities Revenue	2,446
	Bonds (Citgo Petroleum Corporation Project), AMT, 8.25% due 11/01/2031	1,370
Utah1.2%		
2,24	Carbon County, Utah, Solid Waste Disposal, Revenue Refunding Bonds (Laidlaw Environmental), AMT, Series A, 7.45% due 7/01/2017	2,314
2,47	Dulles Town Center, Virginia, Community Development Authority, Special Assessment Tax (Dulles Town Center Project), 6.25% due 3/01/2026	2 <b>,</b> 570
31	O Farms of New Kent, Virginia, Community Development Authority, Special Assessment Bonds, Series C,	
72	5.80% due 3/01/2036 Suffolk, Virginia, IDA, Retirement Facilities, Revenue Refunding Bonds (Lake Prince Center), 5.15%	312
	due 9/01/2024	738
West Virginia0	Princeton, West Virginia, Hospital Revenue Refunding Bonds (Community Hospital Association, Inc. Project),	1 120
	6.20% due 5/01/2013	1,126 =======
Wisconsin0.7% 1,32	Wisconsin State Health and Educational Facilities Authority Revenue Bonds (New Castle Place Project), Series A, 7% due 12/01/2031	1,380
		-, =========
Puerto Rico1.3 2,50		2 <b>,</b> 604
U.S. Virgin Isla		
U.S. Virgin Isla 2,10		2 <b>,</b> 368
	Total Municipal Bonds (Cost\$183,802)98.7%	197,47
Share Hel		
90	7 Merrill Lynch Institutional Tax-Exempt Fund, 5.19% (c)(d)	90*
	Total Short-Term Securities (Cost\$907)0.4%	90*
	s (Cost\$184,709*)99.1%	198 <b>,</b> 384

Other Assets Less Liabilities--0.9% 1,732 Net Assets--100.0% \$ 200,116 \_\_\_\_\_ The cost and unrealized appreciation (depreciation) of investments as of December 31, 2006, as computed for federal income tax purposes, were as follows: Aggregate cost ..... \$ 184,343 Gross unrealized appreciation ...... \$ 14,082 Gross unrealized depreciation ......(41) Net unrealized appreciation ......\$ 14,041 Prerefunded. (a) (b) AMBAC Insured. Investments in companies considered to be an affiliate of the Fund, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, were as follows: Net Dividend Activity Income Affiliate \_\_\_\_\_\_ (194) \$ Merrill Lynch Institutional Tax-Exempt Fund \_\_\_\_\_\_ (d) Represents the current yield as of December 31, 2006. Security may have a maturity of more than one year at the time of (e) issuance, but has variable rate and demand features that qualify it as a short-term security. The rate disclosed is that currently in effect. This rate changes periodically based upon prevailing market rates. (f) Represents a zero coupon bond; the interest rate shown reflects the effective yield at the time of purchase. See Notes to Financial Statements. BLACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006 Statement of Assets, Liabilities and Capital As of December 31, 2006 \_\_\_\_\_\_ \_\_\_\_\_\_ Investments in unaffiliated securities, at value (identified cost--\$183,802,491) ... Investments in affiliated securities, at value (identified cost--\$906,897) ...... Cash ..... Interest receivable ..... Prepaid expenses ..... Total assets .....

\_\_\_\_\_\_

Liabilitie	S
	Payables: Securities purchased Investment adviser Other affiliates
	Accrued expenses
	Total liabilities
Net Assets	
	Net Assets
Capital	
	Common Stock, \$.10 par value, 150,000,000 shares authorized; 19,726,039 shares issued and outstanding
	Total accumulated lossesnet
	Total capitalEquivalent to \$10.14 net asset value per share of Common Stock (market price\$10.66)
See 1	Notes to Financial Statements.
10 BL	ACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006
Statement	of Operations
For the Siz	x Months Ended December 31, 2006
Investment	Income
	Interest Dividends from affiliates
	Total income
Expenses	
	Investment advisory fees Accounting services Professional fees Printing and shareholder reports Transfer agent fees Pricing fees Listing fees Directors' fees and expenses

Edg	gar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS
	Custodian fees
	Other
	Total expenses before reimbursement
	Total expenses
	Investment incomenet
Realized &	Unrealized Gain (Loss)Net
	Realized loss on investments
	Total realized and unrealized gainnet
	Net Increase in Net Assets Resulting from Operations
See N	otes to Financial Statements.
BLA	CKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006 11
Increase (D	ecrease) in Net Assets:
Operations	
	Investment incomenet
	Net increase in net assets resulting from operations
Dividends t	o Shareholders
	Investment incomenet
	Net decrease in net assets resulting from dividends to shareholders
	k Transactions
	Net increase in net assets derived from Common Stock issued to shareholders in reinvestment of dividends
Net Assets	

Total increase in net assets .....

Beginning of period .....

End of period*									
* Undistributed investment incomer	net					• • • • • • •			
See Notes to Financial Statements.									
12 BLACKROCK APEX MUNICIPAL FUND, INC. DEC	CEMBER	31, 2006							
Financial Highlights									
The following per share data and ratios have been derived from information provided in the financial statements.	Mont Dec	the Six hs Ended ember 31, 2006		 2006		2005	2		
Per Share Operating Performance									
Net asset value, beginning of period									
Investment incomenet		.30+		.08		.69			
Total from investment operations		.53		.66		1.27			
Less dividends and distributions to Common Stock shareholders:  Investment incomenet		(.29) 				(.58) 			
Total dividends and distributions to Common Stock shareholders		(.29)		(.58)		(.58)			
Net asset value, end of period	\$	10.14	\$	9.90	\$	9.82	\$		
Market price per share, end of period	\$	10.66							
Total Investment Return**									
Based on net asset value per share		5.44%++		7.00%		14.67%			
Based on market price per share		7.06%++		14.76%		14.76% 22.36%		22.36%	
Ratios to Average Net Assets									
Expenses, net of reimbursement		.80%*		.80%		.80%			
Expenses				.81%		.80%			
Investment incomenet		5.96%*		5.83%		6.11%			
Supplemental Data		=======				======			

Net assets, end of period (in thousands)	\$200,116	\$194 <b>,</b> 646	\$192 <b>,</b> 475	\$17
Portfolio turnover	8%	19% 	 22% ========	

- \* 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.
- \*\*\* Amount is less than \$(.01) per share.
- + Based on average shares outstanding.
- ++ Aggregate total investment return.

See Notes to Financial Statements.

BLACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006 13

Notes to Financial Statements

#### 1. Significant Accounting Policies:

On September 29, 2006, Apex Municipal Fund, Inc. was renamed BlackRock Apex Municipal Fund, Inc. (the "Fund"). The Fund is registered under the Investment Company Act of 1940, as amended, as a non-diversified, closed-end management investment company. The Fund's financial statements are prepared in conformity with U.S. generally accepted accounting principles, which may require the use of management accruals and estimates. Actual results may differ from these estimates. These unaudited financial statements reflect all adjustments which are, in the opinion of management, necessary to present a fair statement of the results for the interim period. 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 daily basis. The Fund's Common Stock shares are 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 ("OTC") markets and are valued at the last available bid price in the OTC market or on the basis of values as obtained by a pricing service. Pricing services use valuation matrixes that incorporate both dealer-supplied valuations and valuation models. The procedures of the pricing service and its valuations are reviewed by the officers of the Fund under the general direction of the Board of Directors. Such valuations and procedures are reviewed periodically by the Board of Directors of the Fund. 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. Options traded in the OTC market are valued at the last asked price (options written) or the last bid price (options purchased). Swap agreements are valued by quoted fair values received daily by the Fund's pricing service. Short-term investments with a remaining maturity of 60 days or less are valued at amortized cost, which approximates market value, under which method the investment is valued at cost and any premium or discount is amortized on a straight line basis to maturity. Investments in open-end investment companies are valued at their net asset value each business day. Securities and other 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.
- (b) Derivative financial instruments -- The Fund may engage in various portfolio

investment strategies both to increase the return of the Fund and to hedge, or protect, its exposure to interest rate movements and movements in the securities markets. Losses may arise due to changes in the value of the contract or if the counterparty does not perform under the contract.

- Financial futures contracts -- The Fund may purchase or sell financial futures contracts and options on such financial futures contracts. Financial 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 may 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.

- o Forward interest rate swaps -- The Fund may enter into forward interest rate swaps. In a forward interest rate swap, the Fund and the counterparty agree to make periodic net payments on a specified notional contract amount, commencing on a specified future effective date, unless terminated earlier. When the agreement is closed, the Fund records a realized gain or loss in an amount equal to the value of the agreement.
- 14 BLACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006

Notes to Financial Statements (continued)

Swaps -- The Fund may enter into swap agreements, which are OTC contracts in which the Fund and a counterparty agree to make periodic net payments on a specified notional amount. The net payments can be made for a set period of time or may be triggered by a pre-determined credit event. The net periodic payments may be based on a fixed or variable interest rate; the change in market value of a specified security, basket of securities, or index; or the return generated by a security. These periodic payments received or made by the Fund are recorded in the accompanying Statement of Operations as realized gains or losses, respectively. Gains or losses are also realized upon termination of the swap agreements. Swaps are marked-to-market daily and changes in value are recorded as unrealized appreciation (depreciation). Risks include changes in the returns of the underlying instruments, failure of the counterparties to perform under the contracts' terms and the possible lack of liquidity with respect to the swap agreements.

- (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. The Fund amortizes all premiums and discounts on debt securities.
- (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.
- (f) Recent accounting pronouncements -- In July 2006, the Financial Accounting Standards Board ("FASB") issued Interpretation No. 48 ("FIN 48"), "Accounting for Uncertainty in Income Taxes -- an interpretation of FASB Statement No. 109." FIN 48 prescribes the minimum recognition threshold a tax position must meet in connection with accounting for uncertainties in income tax positions taken or expected to be taken by an entity including mutual funds before being measured and recognized in the financial statements. Adoption of FIN 48 is required for the last net asset value calculation in the first required financial statement reporting period for fiscal years beginning after December 15, 2006. The impact on the Fund's financial statements, if any, is currently being assessed.

In addition, in September 2006, Statement of Financial Accounting Standards No. 157, "Fair Value Measurements" ("FAS 157"), was issued and is effective for fiscal years beginning after November 15, 2007. FAS 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. Management is currently evaluating the implications of FAS 157. At this time, its impact on the Fund's financial statements has not been determined.

2. Investment Advisory Agreement and Transactions with Affiliates:

On September 29, 2006, BlackRock, Inc. and Merrill Lynch & Co., Inc. ("Merrill Lynch") combined Merrill Lynch's investment management business, Merrill Lynch Investment Managers, L.P., and its affiliates, including Fund Asset Management, L.P. ("FAM"), with BlackRock, Inc. to create a new independent company. Merrill Lynch has a 49.8% economic interest and a 45% voting interest in the combined company and The PNC Financial Services Group, Inc., has approximately a 34% economic and voting interest. The new company operates under the BlackRock name and is governed by a board of directors with a majority of independent members.

On August 15, 2006, shareholders of the Fund approved a new Investment Advisory Agreement with BlackRock Advisors, Inc. (the "Manager"), an indirect, wholly owned subsidiary of BlackRock, Inc. BlackRock Advisors, Inc. was recently reorganized into a limited liability company and renamed BlackRock Advisors, LLC. The new Investment Advisory Agreement between the Fund and the Manager became effective on September 29, 2006. Prior to September 29, 2006, FAM was the Fund's Manager. The general partner of FAM is Princeton Services, Inc. ("PSI"), an indirect, wholly owned subsidiary of Merrill Lynch, which is the limited partner.

The Manager 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 daily net assets. In addition, the Manager has entered into a sub-advisory agreement with BlackRock Investment Management, LLC, an affiliate of the Manager, under which the Manager pays the Sub-Adviser for services it provides a fee that is a

percentage of the management fee paid by the Fund to the Manager. The Manager (and previously FAM) has agreed to reimburse its management fee by the amount of management fees the Fund pays to the Manager (and previously FAM) indirectly through its investment in Merrill Lynch

BLACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006

Notes to Financial Statements (concluded)

Institutional Tax-Exempt Fund. For the period July 1, 2006 to September 29, 2006, FAM reimbursed the Fund \$1,381 and for the period September 30, 2006 to December 31, 2006 the Manager reimbursed the Fund \$1,019.

For the six months ended December 31, 2006, the Fund reimbursed FAM and the Manager \$998 and \$998, respectively, for certain accounting services.

Prior to September 29, 2006, certain officers and/or directors of the Fund were officers and/or directors of FAM, PSI, and/or Merrill Lynch.

Commencing September 29, 2006, certain officers and/or directors of the Fund are officers and/or directors of BlackRock, Inc. or its affiliates.

#### 3. Investments:

Purchases and sales of investments, excluding short-term securities, for the six months ended December 31, 2006 were \$27,057,264 and \$14,677,796, respectively.

#### 4. Common Stock Transactions:

At December 31, 2006, 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 for the six months ended December 31, 2006 increased by 56,128 as a result of dividend reinvestment. Shares issued and outstanding for the year ended June 30, 2006 increased by 73,179 as a result of dividend reinvestment.

#### 5. Capital Loss Carryforward:

On June 30, 2006, the Fund had a net capital loss carryforward of \$13,818,112, of which \$2,542,361 expires in 2008, \$5,341,699 expires in 2009, \$2,075,987 expires in 2010, \$2,163,492 expires in 2011, \$1,659,281 expires in 2012 and \$35,292 expires in 2013. This amount will be available to offset like amounts of any future taxable gains.

# 6. Subsequent Event:

The Fund paid a tax-exempt dividend to holders of Common Stock in the amount of \$.049000 per share on February 1, 2007 to shareholders of record on January 16, 2007.

Disclosure of Investment Advisory Agreement

BlackRock Investment Advisory Agreement -- Matters Considered by the Board

The following disclosure appeared in the June 30, 2006 Annual Report of the Fund and is the discussion referred to in "New BlackRock Sub-Advisory Agreement -- Matters Considered by the Board" below. The term "Investment Adviser" as used herein refers to Fund Asset Management, L.P.

In connection with the Transaction between Merrill Lynch and BlackRock, the

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Fund's Board of Directors considered a new investment advisory agreement (the "New Investment Advisory Agreement") between the Fund and BlackRock Advisors, Inc. or its successor ("BlackRock Advisors"). If the New Investment Advisory Agreement is approved by the Fund's shareholders, it will become effective upon the closing of the Transaction, which is expected in the third quarter of 2006.

The Board discussed the New Investment Advisory Agreement at telephonic and in-person meetings held during April and May 2006. The Board, including the independent directors, approved the New Investment Advisory Agreement at a meeting held on May 9, 2006.

To assist the Board in its consideration of the New Investment Advisory Agreement, BlackRock provided materials and information about BlackRock, including its financial condition and asset management capabilities and organization, and Merrill Lynch provided materials and information about the Transaction. The independent directors, through their independent legal counsel, also requested and received additional information from Merrill Lynch and BlackRock in connection with their consideration of the New Investment Advisory Agreement. The additional information was provided in advance of the May 9, 2006 meeting. In addition, the independent directors consulted with their counsel and Fund counsel on numerous occasions, discussing, among other things, the legal standards and certain other considerations relevant to the directors' deliberations.

At the Board meetings, the directors discussed with Merrill Lynch management and certain BlackRock representatives the Transaction, its strategic rationale and BlackRock's general

16 BLACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006

Disclosure of Investment Advisory Agreement (continued)

plans and intentions regarding the Fund. At these Board meetings, representatives of Merrill Lynch and BlackRock made presentations to and responded to questions from the Board. The directors also inquired about the plans for and anticipated roles and responsibilities of certain employees and officers of the Investment Adviser and certain affiliates being transferred to BlackRock in connection with the Transaction. The independent directors of the Board also conferred separately and with their counsel about the Transaction and other matters related to the Transaction on a number of occasions, including in connection with the April and May 2006 meetings. After the presentations and after reviewing the written materials provided, the independent directors met in executive sessions with their counsel to consider the New Investment Advisory Agreement.

In connection with the Board's review of the New Investment Advisory Agreement, Merrill Lynch and/or BlackRock advised the directors about a variety of matters. The advice included the following, among other matters:

- o that there is not expected to be any diminution in the nature, quality and extent of services provided to the Fund and its shareholders by BlackRock Advisors, including compliance services;
- o that operation of New BlackRock as an independent investment management firm will enhance its ability to attract and retain talented professionals;
- o that the Fund should benefit from having access to BlackRock's state of the art technology and risk management analytic tools, including investment tools, provided under the BlackRock Solutions(R) brand name;

- o that BlackRock has no present intention to alter any applicable expense waivers or reimbursements currently in effect and, while it reserves the right to do so in the future, it would seek the approval of the Board before making any changes;
- that in connection with the Transaction, Merrill Lynch and BlackRock have agreed to conduct, and use reasonable best efforts to cause their respective affiliates to conduct, their respective businesses in compliance with the conditions of Section 15(f) of the Investment Company Act of 1940 (the "1940 Act") in relation to any public funds advised by BlackRock or the Investment Adviser (or its affiliates), respectively; and
- o that Merrill Lynch and BlackRock would derive benefits from the Transaction and that, as a result, they have a different financial interest in the matters that were being considered than do Fund shareholders.

The directors considered the information provided by Merrill Lynch and BlackRock above, and, among other factors, the following:

- o the potential benefits to Fund shareholders from being part of a combined fund family with BlackRock-sponsored funds, including possible economies of scale and access to investment opportunities;
- o the reputation, financial strength and resources of BlackRock and its investment advisory subsidiaries and the anticipated financial strength and resources of New BlackRock;
- o the compliance policies and procedures of BlackRock Advisors;
- o the terms and conditions of the New Investment Advisory Agreement, including the fact that the schedule of the Fund's total advisory fees will not increase by virtue of the New Investment Advisory Agreement, but will remain the same;
- that in November 2005, the Board performed a full annual review of the investment advisory agreement currently in effect for the Fund (the "Current Investment Advisory Agreement") as required by the 1940 Act and has determined that the Investment Adviser has the capabilities, resources and personnel necessary to provide the advisory and administrative services currently provided to the Fund; and that the advisory and/or management fees paid by the Fund, taking into account any applicable agreed-upon fee waivers and breakpoints, represent reasonable compensation to the Investment Adviser in light of the services provided, the costs to the Investment Adviser of providing those services, economies of scale, the fees and other expenses paid by similar funds (including information provided by Lipper Inc. ["Lipper"]), and such other matters as the directors have considered relevant in the exercise of their reasonable judgment; and
- that Merrill Lynch agreed to pay all expenses of the Fund in connection with the Board's consideration of the New Investment Advisory Agreement and related agreements and all costs of shareholder approval of the New Investment Advisory Agreement and as a result the Fund would bear no costs in obtaining shareholder approval of the New Investment Advisory Agreement.

BLACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006

Disclosure of Investment Advisory Agreement (continued)

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Certain of these considerations are discussed in more detail below.

In its review of the New Investment Advisory Agreement, the Board assessed the nature, scope and quality of the services to be provided to the Fund by the personnel of BlackRock Advisors and its affiliates, including administrative services, shareholder services, oversight of fund accounting and assistance in meeting legal and regulatory requirements. In its review of the New Investment Advisory Agreement, the Board also considered a range of information in connection with its oversight of the services to be provided by BlackRock Advisors and its affiliates. Among the matters considered were: (a) fees (in addition to management fees) to be paid to BlackRock Advisors and its affiliates by the Fund; (b) Fund operating expenses paid to third parties; (c) the resources devoted to and compliance reports relating to the Fund's investment objective, policies and restrictions, and its compliance with its Code of Ethics and BlackRock Advisors' compliance policies and procedures; and (d) the nature, cost and character of non-investment management services to be provided by BlackRock Advisors and its affiliates.

In the period prior to the Board meetings to consider renewal of the Current Investment Advisory Agreement, the Board had requested and received materials specifically relating to the Current Investment Advisory Agreement. These materials included (a) information compiled by Lipper on the fees and expenses and the investment performance of the Fund as compared to a comparable group of funds as classified by Lipper; (b) information comparing the Fund's market price with its net asset value per share; (c) a discussion by the Fund's portfolio management team on investment strategies used by the Fund during its most recent fiscal year; (d) information on the profitability to the Investment Adviser of the Current Investment Advisory Agreement and other payments received by the Investment Adviser and its affiliates from the Fund; and (e) information provided by the Investment Adviser concerning services related to the valuation and pricing of Fund portfolio holdings, the Fund's portfolio turnover statistics, and direct and indirect benefits to the Investment Adviser and its affiliates from their relationship with the Fund.

In their deliberations, the directors considered information received in connection with their most recent continuation of the Current Investment Advisory Agreement, in addition to information provided by BlackRock and BlackRock Advisors in connection with their evaluation of the terms and conditions of the New Investment Advisory Agreement. The directors did not identify any particular information that was all-important or controlling. The directors, including a majority of the independent directors, concluded that the terms of the New Investment Advisory Agreement are appropriate, that the fees to be paid are reasonable in light of the services to be provided to the Fund, and that the New Investment Advisory Agreement should be approved and recommended to Fund shareholders.

Nature, Quality and Extent of Services Provided -- The Board reviewed the nature, extent and quality of services provided by the Investment Adviser, including the investment advisory services and the resulting performance of the Fund, as well as the nature, quality and extent of services expected to be provided by BlackRock Advisors. The Board focused primarily on the Investment Adviser's advisory services and the Fund's investment performance, but also considered certain areas in which both the Investment Adviser and the Fund receive services as part of the Merrill Lynch complex. The Board compared the Fund's performance -- both including and excluding the effects of fees and expenses -- to the performance of a comparable group of funds, and the performance of a relevant index or combination of indexes. While the Board reviews performance data at least quarterly, consistent with the Investment Adviser's investment goals, the Board attaches more importance to performance over relatively long periods of time, typically three to five years.

In evaluating the nature, quality and extent of the services to be provided by

BlackRock Advisors under the New Investment Advisory Agreement, the directors considered, among other things, the expected impact of the Transaction on the operations, facilities, organization and personnel of New BlackRock and how it would affect the Fund; the ability of BlackRock Advisors to perform its duties after the Transaction; and any anticipated changes to the current investment and other practices of the Fund.

The directors were given information with respect to the potential benefits to the Fund and its shareholders from having access to BlackRock's state of the art technology and risk management analytic tools, including the investment tools provided under the BlackRock Solutions brand name.

The directors were advised that, as a result of Merrill Lynch's equity interest in BlackRock after the Transaction, the Fund will continue to be subject to restrictions concerning certain transactions involving Merrill Lynch affiliates (for example, transactions with a Merrill Lynch broker-dealer acting as principal) absent revised or new regulatory relief. The directors were advised that a revision of existing regulatory relief with respect to these restrictions was being sought from the Securities and Exchange Commission and were advised of

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the possibility of receipt of such revised regulatory relief. There can be no assurance that such relief will be obtained.

Based on their review of the materials provided and the assurances they had received from the management of Merrill Lynch and of BlackRock, the directors determined that the nature and quality of services to be provided to the Fund under the New Investment Advisory Agreement were expected to be as good or better than that provided under the Current Investment Advisory Agreement. It was noted, however, that it is expected that there will be changes in personnel following the Transaction and the combination of the operations of the Investment Adviser and its affiliates with those of BlackRock. The directors noted that if current portfolio managers or other personnel cease to be available, the Board would consider all available options, which could include seeking the investment advisory or other services of BlackRock affiliates. Accordingly, the directors concluded that, overall, they were satisfied at the present time with assurances from BlackRock and BlackRock Advisors as to the expected nature, extent and quality of the services to be provided to the Fund under the New Investment Advisory Agreement.

Costs of Services Provided and Profitability -- It was noted that, in conjunction with the recent review of the Current Investment Advisory Agreement, the directors had received, among other things, a report from Lipper comparing the Fund's fees, expenses and performance to those of a peer group selected by Lipper, and information as to the fees charged by the Investment Adviser or its affiliates to other registered investment company clients for investment management services. The Board reviewed the Fund's contractual management fee rate and actual management fee rate as a percentage of total assets at common asset levels -- the actual rate includes advisory fees and the effects of any fee waivers -- compared to the other funds in its Lipper category. They also compared the Fund's total expenses to those of other comparable funds. The information showed that the Fund had fees and expenses within the range of fees and expenses of comparable funds. The Board concluded that the Fund's management fee and fee rate and overall expense ratio are reasonable compared to those of other comparable funds.

In evaluating the costs of the services to be provided by BlackRock Advisors under the New Investment Advisory Agreement, the directors considered, among other things, whether advisory fees or other expenses would change as a result of the Transaction. Based on their review of the materials provided and the fact

that the New Investment Advisory Agreement is substantially similar to the Current Investment Advisory Agreement in all material respects, including the rate of compensation, the directors determined that the Transaction should not increase the total fees payable, including any fee waivers or after any expense caps or expense reimbursements, for advisory and administrative services. The directors noted that it was not possible to predict how the Transaction would affect BlackRock Advisors' profitability from its relationship with the Fund.

The directors discussed with BlackRock Advisors its general methodology to be used in determining its profitability with respect to its relationship with the Fund and noted that they expect to receive profitability information from BlackRock Advisors on at least an annual basis.

Fees and Economies of Scale -- The Board considered the extent to which economies of scale might be realized as the assets of the Fund increase and whether there should be changes in the management fee rate or structure in order to enable the Fund to participate in these economies of scale. The Board considered economies of scale to the extent applicable to the Fund's closed-end structure and determined that the Fund currently appropriately benefits from any economies of scale and no changes were currently necessary.

In reviewing the Transaction, the directors considered, among other things, whether advisory fees or other expenses would change as a result of the Transaction. Based on the fact that the New Investment Advisory Agreement is substantially similar to the Current Investment Advisory Agreement in all material respects, including the rate of compensation, the directors determined that as a result of the Transaction, the Fund's total advisory fees would be no higher than the fees under its Current Investment Advisory Agreement. The directors concluded that, because the rates for advisory fees for the Fund would be no higher than its current fee rates, the proposed management fee structure, including any fee waivers, was reasonable and that no additional changes were currently necessary.

Fall-Out Benefits -- The directors considered whether the Fund would generate any fall-out benefits to BlackRock Advisors. Fall-out benefits are indirect profits from other activities that accrue to the adviser or its affiliates solely because of the existence of the Fund. In evaluating the fall-out benefits to be received by BlackRock Advisors under the New Investment Advisory Agreement, the directors considered whether the Transaction would have an impact on the fall-out benefits received by the Investment Advisor by virtue of the Current Investment Advisory Agreement. Based on their review of the materials provided, including materials received in connec-

BLACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006 19

Disclosure of New Investment Advisory Agreement (concluded)

tion with their most recent approval or continuance of the Current Investment Advisory Agreement, and their discussions with management of the Investment Adviser and BlackRock, the directors determined that those benefits could include increased ability for BlackRock to distribute shares of its funds and other investment products. The directors noted that any such benefits were difficult to quantify with certainty at this time, and indicated that they would continue to evaluate them going forward.

Investment Performance -- The directors considered investment performance for the Fund. The directors compared the Fund's performance -- both including and excluding the effects of fees and expenses -- to the performance of a comparable group of funds, and the performance of a relevant index or combination of indexes. The comparative information received from Lipper showed Fund performance at various levels within the range of performance of comparable

funds over different time periods. The directors believed the Fund's performance was satisfactory. The Board noted BlackRock's considerable investment management experience and capabilities, but was unable to predict what effect, if any, consummation of the Transaction would have on the future performance of the Fund.

Conclusion -- After the independent directors of the Fund deliberated in executive session, the entire Board, including the independent directors, approved the New Investment Advisory Agreement, concluding that the advisory fee rate was reasonable in relation to the services provided and that the New Investment Advisory Agreement was in the best interests of the shareholders. In approving the New Investment Advisory Agreement, the Board noted that it anticipated reviewing the continuance of the agreement in advance of the expiration of the initial two-year period.

Contingent BlackRock Sub-Advisory Agreement -- Matters Considered by the Board

At the telephonic and in-person meetings held during April and May 2006 at which the Board of Directors discussed and approved the New Investment Advisory Agreement, the Board, including the independent directors, also discussed and approved a contingent sub-advisory agreement (the "Contingent Sub-Advisory Agreement") between the Investment Adviser and BlackRock Advisors (the "BlackRock Sub-Adviser"). The Contingent Sub-Advisory Agreement is intended to ensure that the Fund operate with efficient portfolio management services until the closing of the Transaction, in the event that the Board deems it necessary and in the best interests of the Fund and its shareholders that the BlackRock Sub-Adviser assist in managing the operations of the Fund during the interim period until the closing of the Transaction. If shareholders approve the Contingent Sub-Advisory Agreement, it will take effect only upon recommendation from the Investment Adviser and upon subsequent approval of the Board in the period up to the closing of the Transaction. The effectiveness of the Contingent Sub-Advisory Agreement, therefore, would be contingent on further Board approval after shareholders approve it. Pursuant to the Contingent Sub-Advisory Agreement, the BlackRock Sub-Adviser would receive a monthly fee from the Investment Adviser equal to 50% of the advisory fee received by the Investment Adviser. The Investment Adviser would pay the BlackRock Sub-Adviser out of its own resources. There would be no increase in Fund expenses as a result of the Contingent Sub-Advisory Agreement.

In making its approval at the May in-person meeting, the Board considered the Contingent Sub-Advisory Agreement in conjunction with the New Investment Advisory Agreement and reviewed the same information and factors discussed above, and came to the same conclusions. The Board also considered in conjunction with the Contingent Sub-Advisory Agreement the necessity of ensuring that the Fund operate with effective management services until the closing of the Transaction. In reviewing the sub-advisory fee rate provided in the Contingent Sub-Advisory Agreement, the Board took note of the fact that both the Investment Adviser and the BlackRock Sub-Adviser would have significant responsibilities under their respective advisory agreements. The Investment Adviser would remain responsible for oversight of the Fund's operations and administration and the BlackRock Sub-Adviser would provide advisory services to the Fund under the Contingent Sub-Advisory Agreement. The Board also took into account the expected short duration of the term of any Contingent Sub-Advisory Agreement and the fact that total advisory fees paid by the Fund would not increase as a result of the Contingent Sub-Advisory Agreement. Under all of the circumstances, the Board concluded that it was a reasonable allocation of fees for the BlackRock Sub-Adviser to receive 50% of the advisory fee paid by the Fund to the Investment Adviser.

After the independent directors deliberated in executive session, the entire Board, including the independent directors, approved the Contingent Sub-Advisory Agreement, concluding that the advisory fee was reasonable in relation to the

services provided and that the Contingent Sub-Advisory Agreement was in the best interests of shareholders.

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Disclosure of Sub-Advisory Agreement

New BlackRock Sub-Advisory Agreement -- Matters Considered by the Board

At an in-person meeting held on August 22-23, 2006, the Board of Directors, including the independent directors, discussed and approved the sub-advisory agreement with respect to the Fund between BlackRock Advisors, LLC (previously organized as BlackRock Advisors, Inc.) ("BlackRock Advisors") and its affiliate, BlackRock Investment Management, LLC (the "Sub-Advisor") (the "BlackRock Sub-Advisory Agreement"). The BlackRock Sub-Advisory Agreement became effective on September 29, 2006, at the same time the New Investment Advisory Agreement with BlackRock Advisors (which had been approved by the Fund's shareholders) became effective.

Pursuant to the BlackRock Sub-Advisory Agreement, the Sub-Adviser receives a monthly fee from BlackRock Advisors at an annual rate equal to 59% of the advisory fee received by BlackRock Advisors from the Fund. BlackRock Advisors pays the Sub-Adviser out of its own resources, and there is no increase in Fund expenses as a result of the BlackRock Sub-Advisory Agreement.

In approving the BlackRock Sub-Advisory Agreement at the August in-person meeting, the Board reviewed its considerations in connection with its approval of the New Investment Advisory Agreement in May 2006. The Board relied on the same information and considered the same factors as those discussed above in connection with the approval of the New Investment Advisory Agreement, and came to the same conclusions. In reviewing the sub-advisory fee rate provided for in the BlackRock Sub-Advisory Agreement, the Board noted the fact that both BlackRock Advisors and the Sub-Adviser have significant responsibilities under their respective advisory agreements. Under the New Investment Advisory Agreement, BlackRock Advisors remains responsible for the overall management of the Fund and for oversight of the Fund's operations and administration. Under the BlackRock Sub-Advisory Agreement, the Sub-Adviser provides advisory services to the Fund and is responsible for the day-to-day management of the Fund's portfolio. The Board also took into account the fact that there is no increase in total advisory fees paid by the Fund as a result of the BlackRock Sub-Advisory Agreement. Based on its considerations, the Board concluded that it was a reasonable allocation of fees for the Sub-Adviser to receive a fee at an annual rate equal to 59% of the advisory fee paid by the Fund to BlackRock Advisors.

After the independent directors deliberated in executive session, the entire Board, including the independent directors, approved the BlackRock Sub-Advisory Agreement, concluding that the sub-advisory fee was reasonable in relation to the services provided and that the BlackRock Sub-Advisory Agreement was in the best interests of the Fund's shareholders.

BLACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006 21

Proxy Results

During the six-month period ended December 31, 2006, BlackRock Apex Municipal Fund, Inc. s shareholders voted on the following proposals, which were approved at a special shareholders' meeting on August 15, 2006. A description of the proposals and number of shares voted are as follows:

	Shares Voted For	Shares Voted Against	Shares Voted Abstain
To approve a new investment advisory agreement with BlackRock Advisors, Inc.	10,327,585	373,261	537 <b>,</b> 898
To approve a contingent subadvisory agreement with BlackRock Advisors, Inc.	10,304,098	391,621	543,025

#### 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 stable level of dividend distributions, 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 investment income, if any, is disclosed in the Statement of Assets, Liabilities and Capital, which comprises part of the financial information included in this report.

#### Officers and Directors

Robert C. Doll, Jr., President and Director
James H. Bodurtha, Director
Kenneth A. Froot, Director
Joe Grills, Director
Herbert I. London, Director
Roberta Cooper Ramo, Director
Robert S. Salomon, Jr., Director
Donald C. Burke, Vice President and Treasurer
John M. Loffredo, Senior Vice President
Theodore R. Jaeckel Jr., Vice President
Jeffrey Hiller, Fund Chief Compliance Officer
Alice A. Pellegrino, Secretary

#### Custodian

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

#### Transfer Agent

The Bank of New York 101 Barclay Street -- 11 East New York, NY 10286

NYSE Symbol

APX

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#### 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 floaters, 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. Certain inverse floaters may be presented for financial reporting purposes as secured borrowings by the Fund. As of December 31, 2006, none of the Fund's total net assets were invested in inverse floaters.

#### BlackRock Privacy Principles

BlackRock is committed to maintaining the privacy of its current and former fund investors and individual clients (collectively, "Clients") and to safeguarding their nonpublic personal information. The following information is provided to help you understand what personal information BlackRock collects, how we protect that information and why in certain cases we share such information with select parties.

If you are located in a jurisdiction where specific laws, rules or regulations require BlackRock to provide you with additional or different privacy-related rights beyond what is set forth below, then BlackRock will comply with those specific laws, rules or regulations.

BlackRock obtains or verifies personal nonpublic information from and about you from different sources, including the following: (i) information we receive from you or, if applicable, your financial intermediary, on applications, forms or other documents; (ii) information about your transactions with us, our affiliates, or others; (iii) information we receive from a consumer reporting agency; and (iv) from visits to our Web sites.

BlackRock does not sell or disclose to nonaffiliated third parties any nonpublic personal information about its Clients, except as permitted by law or as is necessary to service Client accounts. These nonaffiliated third parties are required to protect the confidentiality and security of this information and to use it only for its intended purpose.

We may share information with our affiliates to service your account or to provide you with information about other BlackRock products or services that may be of interest to you. In addition, BlackRock restricts access to nonpublic personal information about its Clients to those BlackRock employees with a legitimate business need for the information. BlackRock maintains physical, electronic and procedural safeguards that are designed to protect the nonpublic personal information of its Clients, including procedures relating to the proper storage and disposal of such information.

BLACKROCK APEX MUNICIPAL FUND, INC. DECEMBER 31, 2006

BlackRock Apex Municipal Fund, Inc. seeks to provide shareholders with high

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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 BlackRock 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.

A description of the policies and procedures that the Fund uses to determine how to vote proxies relating to portfolio securities is available (1) without charge, upon request, by calling toll-free 1-800-441-7762; (2) at www.blackrock.com; and (3) on the Securities and Exchange Commission's Web site at http://www.sec.gov. Information about how the Fund voted proxies relating to securities held in the Fund's portfolio during the most recent 12-month period ended June 30 is available (1) at www.blackrock.com and (2) on the Securities and Exchange Commission's Web site at http://www.sec.gov.

BlackRock Apex Municipal Fund, Inc. P.O. Box 9011 Princeton, NJ 08543-9011

BLACKROCK

#10955-12/06

- Item 2 Code of Ethics Not Applicable to this semi-annual report
- Item 3 Audit Committee Financial Expert Not Applicable to this semi-annual report
- Item 4 Principal Accountant Fees and Services Not Applicable to this
   semi-annual report
- Item 5 Audit Committee of Listed Registrants Not Applicable to this semi-annual report
- Item 6 Schedule of Investments Not Applicable
- - (a) (1) BlackRock Apex Fund, Inc. is managed by a team of investment professionals comprised of Theodore R. Jaeckel, Jr., CFA, Managing Director at BlackRock, and Walter O'Connor, Managing Director at BlackRock. Each is a member of BlackRock's municipal tax-exempt management group. Mr. Jaeckel and Mr. O'Connor are responsible for setting the Fund's overall investment strategy and overseeing the management of the Fund. Mr. Jaeckel is also the Fund's lead portfolio manager and is responsible for the day-to-day management of the Fund's portfolio and the selection of its investments. Mr. O'Connor has been a member of the Fund's management team since 2006 and Mr. Jaeckel has been the Fund's portfolio manager since 1997.

Mr. Jaeckel joined BlackRock in 2006. Prior to joining BlackRock, he was a Managing Director (Municipal Tax-Exempt Fund Management) of Merrill Lynch Investment Managers, L.P. ("MLIM") from 2005 to 2006 and a Director of MLIM from 1997 to 2005. He has been a portfolio manager with BlackRock or MLIM since 1991.

Mr. O'Connor joined BlackRock in 2006. Prior to joining BlackRock, he was a Managing Director (Municipal Tax-Exempt Fund Management) of MLIM from 2003 to 2006 and was a Director of MLIM from 1997 to 2002. He has been a portfolio manager with BlackRock or MLIM since 1991.

(a) (2) As of December 31, 2006:

(ii) Number of Other Accounts Managed						Ass	ets	for W
and A	ssets by Accor	ınt T	'уре					Perfo
Other						Other		
Registered	Other Pool $\epsilon$	ed.				Registered		
Investment	Investment	:		Other		Investment		
Companies	Vehicles			Accounts		Companies		
80		0			0		0	
\$29,473,952,253	\$	0	\$		0	\$	0	\$
80		0			0		0	
\$29,473,952,253	\$	0	\$		0	\$	0	\$
	and A Other Registered Investment Companies 80 \$29,473,952,253 80	and Assets by Accound the Accound the Accound the Accound the Account the Acco	and Assets by Account TO Other Registered Other Pooled Investment Companies Vehicles  80 0 0 0 \$29,473,952,253 \$ 0 80 0	and Assets by Account Type Other Registered Other Pooled Investment Investment Companies Vehicles  80 0 \$29,473,952,253 \$ 0 \$ 80 0	and Assets by Account Type Other Registered Other Pooled Investment Investment Other Companies Vehicles Accounts  80 0 \$29,473,952,253 \$ 0 \$ 80 0	and Assets by Account Type Other Registered Other Pooled Investment Investment Other Companies Vehicles Accounts  80 0 0 \$29,473,952,253 \$ 0 \$ 0 80 0 0	and Assets by Account Type Other Registered Other Pooled Registered Investment Investment Other Investment Companies Vehicles Accounts Companies  80 0 0 0 \$29,473,952,253 \$ 0 \$ 0 \$ 80 0 0 0	and Assets by Account Type  Other  Registered Other Pooled Registered Investment Investment Other Investment Companies Vehicles Accounts Companies  80 0 0 0 0  \$29,473,952,253 \$ 0 \$ 0 \$ 0  80 0 0 0 0

# (iv) Potential Material Conflicts of Interest

BlackRock has built a professional working environment, firm-wide compliance culture and compliance procedures and systems designed to protect against potential incentives that may favor one account over another. BlackRock has adopted policies and procedures that address the allocation of investment opportunities, execution of portfolio transactions, personal trading by employees and other potential conflicts of interest that are designed to ensure that all client accounts are treated equitably over time. Nevertheless, BlackRock furnishes investment management and advisory services to numerous clients in addition to the Fund, and BlackRock may, consistent with applicable law, make investment recommendations to other clients or accounts (including accounts which are hedge funds or have performance or higher fees paid to BlackRock, or in which portfolio managers have a personal interest in the receipt of such fees), which may be the same as or different from those made to the Fund. In addition, BlackRock, its affiliates and any officer, director, stockholder or employee may or may not have an interest in the securities whose purchase and sale BlackRock recommends to the Fund. BlackRock, or any of its affiliates, or any officer, director, stockholder, employee or any member of their families may take different actions than those recommended to the Fund by BlackRock with respect to the same securities. Moreover, BlackRock may refrain from rendering any advice or services concerning securities of companies of which any of BlackRock's (or its affiliates') officers, directors or employees are directors or officers, or companies as to which BlackRock or any of its affiliates or the officers, directors and employees of any of them has any substantial economic interest or

(iii) Number

possesses material non-public information. Each portfolio manager also may manage accounts whose investment strategies may at times be opposed to the strategy utilized for the Fund. In this connection, it should be noted that certain portfolio managers currently manage certain accounts that are subject to performance fees. In addition, certain portfolio managers assist in managing certain hedge funds and may be entitled to receive a portion of any incentive fees earned on such funds and a portion of such incentive fees may be voluntarily or involuntarily deferred. Additional portfolio managers may in the future manage other such accounts or funds and may be entitled to receive incentive fees.

As a fiduciary, BlackRock owes a duty of loyalty to its clients and must treat each client fairly. When BlackRock purchases or sells securities for more than one account, the trades must be allocated in a manner consistent with its fiduciary duties. BlackRock attempts to allocate investments in a fair and equitable manner among client accounts, with no account receiving preferential treatment. To this end, BlackRock has adopted a policy that is intended to ensure that investment opportunities are allocated fairly and equitably among client accounts over time. This policy also seeks to achieve reasonable efficiency in client transactions and provide BlackRock with sufficient flexibility to allocate investments in a manner that is consistent with the particular investment discipline and client base.

#### (a) (3) As of December 31, 2006:

Portfolio Manager Compensation

Compensation Program

The elements of total compensation for portfolio managers on BlackRock's municipal team include a fixed base salary, annual performance-based cash and stock compensation (cash and stock bonus) and other benefits. BlackRock has balanced these components of pay to provide these portfolio managers with a powerful incentive to achieve consistently superior investment performance. By design, compensation levels for these portfolio managers fluctuate--both up and down--with the relative investment performance of the portfolios that they manage.

#### Base compensation

Like that of many asset management firms, base salaries represent a relatively small portion of a portfolio manager's total compensation. This approach serves to enhance the motivational value of the performance-based (and therefore variable) compensation elements of the compensation program.

#### Performance-Based Compensation

BlackRock believes that the best interests of investors are served by recruiting and retaining exceptional asset management talent and managing their compensation within a consistent and disciplined framework that emphasizes pay for performance in the context of an intensely competitive market for talent. To that end, BlackRock and its affiliates portfolio manager incentive compensation is based on a formulaic compensation program. BlackRock's formulaic portfolio manager compensation program includes: investment performance relative to a subset of general closed-end, high yield, municipal debt funds over 1-, 3- and 5-year performance periods and a measure of operational efficiency. Portfolio managers are compensated based on the pre-tax

performance of the products they manage. If a portfolio manager's tenure is less than 5 years, performance periods will reflect time in position. Portfolio managers are compensated based on products they manage. A discretionary element of portfolio manager compensation may include consideration of: financial results, expense control, profit margins, strategic planning and implementation, quality of client service, market share, corporate reputation, capital allocation, compliance and risk control, leadership, workforce diversity, supervision, technology and innovation. All factors are considered collectively by BlackRock management.

Long-Term Retention and Incentive Plan (LTIP)

The LTIP is a long-term incentive plan that seeks to reward certain key employees. The plan provides for the grant of awards that are expressed as an amount of cash that, if properly vested and subject to the attainment of certain performance goals, will be settled in cash and/or in BlackRock, Inc. common stock.

Cash Bonus

Performance-based compensation is distributed to portfolio managers in a combination of cash and stock. Typically, the cash bonus, when combined with base salary, represents more than 60% of total compensation for portfolio managers.

Stock Bonus

A portion of the dollar value of the total annual performance-based bonus is paid in restricted shares of BlackRock stock. Paying a portion of annual bonuses in stock puts compensation earned by a portfolio manager for a given year "at risk" based on the company's ability to sustain and improve its performance over future periods. The ultimate value of stock bonuses is dependent on future BlackRock stock price performance. As such, the stock bonus aligns each portfolio manager's financial interests with those of the BlackRock shareholders and encourages a balance between short-term goals and long-term strategic objectives. Management strongly believes that providing a significant portion of competitive performance-based compensation in stock is in the best interests of investors and shareholders. This approach ensures that portfolio managers participate as shareholders in both the "downside risk" and "upside opportunity" of the company's performance. Portfolio managers therefore have a direct incentive to protect BlackRock's reputation for integrity.

Other Compensation Programs

Portfolio managers who meet relative investment performance and financial management objectives during a performance year are eligible to participate in a deferred cash program. Awards under this program are in the form of deferred cash that may be benchmarked to a menu of BlackRock mutual funds (including their own fund) during a five-year vesting period. The deferred cash program aligns the interests of participating portfolio managers with the investment results of BlackRock products and promotes continuity of successful portfolio management teams.

Other Benefits

Portfolio managers are also eligible to participate in broad-based plans offered generally to employees of BlackRock and its

affiliates, including broad-based retirement, 401(k), health, and other employee benefit plans.

- (a) (4) Beneficial Ownership of Securities. As of December 31, 2006, Messrs. Jaeckel and O'Connor do not beneficially own any stock issued by the Fund.
- Item 10 Submission of Matters to a Vote of Security Holders Not Applicable
- Item 11 Controls and Procedures
- 11(a) The Registrant's principal executive and principal financial officers have evaluated the Registrant's disclosure controls and procedures, including internal control over financial reporting, within 90 days of this filing. Such principal officers have concluded that as of February, 2007 the Registrant's disclosure controls and procedures were effective in design and operation to reasonably ensure that information required to be disclosed by the Registrant in this Form N-CSR was recorded, processed, summarized, and reported within the required time periods, and were sufficient to form the basis of the certifications required by Rule 30a-2 of the Investment Company Act of 1940, as amended. Prior to reaching that conclusion, such principal officers had become aware of matters relating to the Registrant's participation in certain inverse floater structures that necessitated adjustments to financial information included in Item 1 of this filing. As a result, management of the Registrant had reevaluated certain disclosure controls and procedures determined not to be effective, as discussed more fully below.

Management of the Registrant is responsible for establishing and maintaining effective internal control over financial reporting. In fulfilling this responsibility, estimates and judgments by management are required to assess the expected benefits and related costs of controls. The Registrant's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. Such internal control includes policies and procedures that provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of a registrant's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the Registrant's ability to initiate, authorize, record, process or report

financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of the Registrant's annual or interim financial statements that is more than inconsequential will not be prevented or detected. A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected.

Prior to the filing of the Registrant's Form N-CSR, the Registrant identified the following control deficiency, that was determined to be a material weakness, as defined above, in the Registrant's internal control over financial reporting at December 31, 2006. The Registrant's controls related to the review and analysis of relevant terms and conditions of transfers of certain assets pertaining to inverse floater structures were not operating effectively to appropriately determine whether the transfers of assets qualified for sale accounting under the provisions of Statement of Financial Accounting Standards No. 140, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities" ("SFAS 140"). As a result, these controls did not detect that certain transfers were not appropriately recorded as borrowings. Accordingly, the Registrant's financial statements as of and for the period ended December 31, 2006, including prior periods where applicable, were adjusted prior to being issued to appropriately reflect transfers of such securities as secured borrowings and to report the related income and expense. These adjustments had no impact on net assets, net asset value per share or total return.

Prior to the evaluation of the design and operation of the Registrant's disclosure controls and procedures at February, 2007, the Registrant's disclosure controls and procedures were modified to enhance the review and analysis of the relevant terms and conditions of transfers of securities in connection with inverse floater structures in light of SFAS 140.

11(b) - There have been no changes in the Registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the Investment Company Act of 1940, as amended) that occurred during the second half of the Registrant's fiscal year that have materially affected, or are reasonably likely to materially affect, the Registrant's internal control over financial reporting. However, as discussed above, as of February 2007, the Registrant has enhanced controls related to the application of SFAS 140.

Item 12 - Exhibits attached hereto

12(a)(1) - Code of Ethics - Not Applicable to this semi-annual report

12(a)(2) - Certifications - Attached hereto

12(a)(3) - Not Applicable

12(b) - Certifications - Attached hereto

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BlackRock Apex Municipal Fund, Inc.

By: /s/ Robert C. Doll, Jr.

Robert C. Doll, Jr.,
Chief Executive Officer of
BlackRock Apex Municipal Fund, Inc.

Date: February 20, 2007

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ Robert C. Doll, Jr.

Robert C. Doll, Jr.,
Chief Executive Officer of
BlackRock Apex Municipal Fund, Inc.

Date: February 20, 2007

By: /s/ Donald C. Burke

Donald C. Burke,
Chief Financial Officer of
BlackRock Apex Municipal Fund, Inc.

Date: February 20, 2007