BLACKROCK APEX MUNICIPAL FUND INC Form N-Q September 28, 2009 UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM N-Q
QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY
Investment Company Act file number 811-05227
Name of Fund: BlackRock Apex Municipal Fund, Inc. (APX)
Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809
Name and address of agent for service: Anne F. Ackerley, Chief Executive Officer, BlackRock Apex Municipal Fund, Inc., 40 East 52 nd Street New York, NY 10022.
Registrant's telephone number, including area code: (800) 882-0052, Option 4
Date of fiscal year end: 04/30/2010
Date of reporting period: 07/31/2009
Item 1 – Schedule of Investments

BlackRock Apex Municipal Fund, Inc.

Schedule of Investments July 31, 2009 (Unaudited)

State	Municipal Bonds	Par (000)	Value
Alabama - 0.6%	County of Jefferson Alabama, RB, Series A, 5.00%,	Φ 475	ф 450.00 <i>4</i>
	1/01/10 Tuscaloosa Special Care Facilities Financing Authority,	\$ 475	\$ 450,884
	RB, Capstone Village, Series A, 5.88%, 8/01/36 (a)(b)	1,255	534,743
			985,627
Alaska - 1.0%	Alaska Industrial Development & Export Authority, RB, Williams Lynxs Alaska Cargoport, AMT, 8.00%, 5/01/23	2,000	1,669,620
Arizona - 4.2%	Maricopa County IDA, Arizona, RB, Arizona Charter Schools Project 1, Series A, 6.63%, 7/01/20	1,100	829,664
	Maricopa County IDA, Arizona, RB, Sun King Apartments Project, Series A, 6.00%, 11/01/10	15	14,871
	Maricopa County IDA, Arizona, RB, Sun King Apartments Project, Series A, 6.75%, 5/01/31	1,020	786,971
	Phoenix IDA, Arizona, RB, Refunding, America West Airlines Inc., AMT, 6.30%, 4/01/23	2,950	1,769,971
	Pima County IDA, RB, Arizona Charter School Project, Series E, 7.25%, 7/01/31	960	760,426
	Salt Verde Financial Corp., RB, Senior, 5.00%, 12/01/32	1,950	1,534,455
	University Medical Center Corp., Arizona, RB, 6.25%, 7/01/29	540	540,356
	Yavapai County IDA, Arizona, RB, Yavapai Regional Medical Center, Series A, 6.00%, 8/01/33	500	464,680
			6,701,394
California - 2.1%	City of Fontana California, Special Tax, Community Facilities District No. 22 Sierra, Series H, 6.00%,		
	9/01/34 City of San Jose California, RB, Series A (AMBAC),	1,000	758,000
	AMT, 5.50%, 3/01/32 Southern California Public Power Authority, RB,	1,470	1,324,352
	Project No. 1, Series A, 5.00%, 11/01/29	1,435	1,216,392
			3,298,744
Colorado - 4.0%	Colorado Health Facilities Authority, RB, Christian		
	Living Community Project, Series A, 5.75%, 1/01/26 Elk Valley Public Improvement, RB, Public	450	371,884
	Improvement Fee, Series A, 7.30%, 9/01/22 North Range Metropolitan District No. 1, Colorado,	2,800	2,492,588
	GO, 7.25%, 12/15/11 (c)	1,235	1,392,327
	Plaza Metropolitan District No. 1, Colorado, TAN, Public Improvement Fee, Tax Increment, 8.00%,		
	12/01/25	2,000 500	1,741,260 391,930

Plaza Metropolitan District No. 1, Colorado, TAN, Sub Public Improvement Fee, Tax Increment, 8.13%, 12/01/25

6,389,989

Portfolio Abbreviations

The simplify the listings of portfolio holdings in the Schedule of Investments, the names and descriptions of many of the securities have been abbreviated according to the following list.

ACA American Capital Access Corp.
AGC Assured Guaranty Corp.

AMBAC American Municipal Bond Assurance Corp.

AMT Alternative Minimum Tax (subject to)

CAB Capital Appreciation Bonds

CAB Capital Appreciation Bonds
EDA Economic Development Authority

GO General Obligation Bonds

HDA Housing Development Authority

IDA Industrial Development Authority

MBIA Municipal Bond Investors Assurance

(National Public Finance Guaranty Corp.)

RB Revenue Bonds
TAN Tax Anticipation Notes
VRDN Variable Rate Demand Notes

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Connecticut - 1.8%	Connecticut State Development Authority, RB, Learjet		
	Inc. Project, AMT, 7.95%, 4/01/26 Mashantucket Western Pequot Tribe, RB, Sub-Series A,	\$ 490	\$ 492,989
	5.50%, 9/01/36	615	296,282
	Mohegan Tribe of Indians of Connecticut, RB, Public		
	Improvement, Priority Distribution, 6.25%, 1/01/31	1,785	1,198,360
	Mohegan Tribe of Indians of Connecticut, RB, Public Improvement, Priority Distribution, 5.25%, 1/01/33	1 500	886 080
	improvement, Friority Distribution, 3.23%, 1/01/33	1,500	886,980
			2,874,611
Florida - 10.0%	Capital Region Community Development District,		
	Florida, Special Assessment, Capital Improvement,		
	Series A, 7.00%, 5/01/39	645	469,863
	Halifax Hospital Medical Center, RB, Refunding & Improvement, Series A, 5.00%, 6/01/38	840	656,015
	Hillsborough County IDA, RB, National Gypsum,	040	030,013
	Series A, AMT, 7.13%, 4/01/30	2,500	1,401,675
	Hillsborough County IDA, RB, National Gypsum,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , , , , , , , , , , , , ,
	Series B, AMT, 7.13%, 4/01/30	1,060	594,310
	Jacksonville Economic Development Commission, RB,	000	525 225
	Gerdau Ameristeel US Inc., AMT, 5.30%, 5/01/37	900	537,237
	Jacksonville Economic Development Commission, Refunding RB, Florida Proton Therapy Institute, Series		
	A, 6.00%, 9/01/17	915	820,060
	Lakewood Ranch Community Development District 5,	,	0_0,000
	Florida, Special Assessment, Series A, 6.70%, 5/01/11		
	(c)	725	791,308
	Lee County IDA, Florida, RB, Series A Lee Charter		
	Foundation, 5.38%, 6/15/37	1,810	1,053,691
	Midtown Miami Community Development District, Special Assessment, Series A, 6.00%, 5/01/24	1,430	1 065 270
	Midtown Miami Community Development District,	1,430	1,065,279
	Special Assessment, Series A, 6.25%, 5/01/37	1,350	905,175
	Orlando Urban Community Development District,	,	,
	Florida, Special Assessment, Capital Improvement,		
	Series A, 6.95%, 5/01/11 (c)	1,405	1,539,641
	Santa Rosa Bay Bridge Authority, RB, 6.25%, 7/01/28	2,140	1,155,322
	Sarasota County Health Facilities Authority, Refunding RB, Village On The Isle Project, 5.50%, 1/01/27	590	440,960
	Sarasota County Health Facilities Authority, Refunding	390	440,900
	RB, Village On The Isle Project, 5.50%, 1/01/32	550	387,134
	Sumter Landing Community Development District,		221,22
	Florida, RB, Sub-Series B, 5.70%, 10/01/38	1,645	1,054,050
	Tampa Palms Open Space & Transportation		
	Community Development District, RB, Capital	• •=	
	Improvement, Richmond Place Project, 7.50%, 5/01/18	2,075	1,995,133
	Tolomato Community Development District, Special Assessment, Special Assessment, 6.65%, 5/01/40	1,850	1,260,720
	71550551110111, Special 71550551110111, 0.05 /0, 5/01/40	1,050	1,200,720
			16,127,573

Georgia - 2.2%	City of Atlanta Georgia, TAN, Princeton Lakes Project,	205	200 117
	5.50%, 1/01/31	395	300,117
	County of Clayton Georgia, TAN, Ellenwood Project,		
	7.50%, 7/01/33	1,640	1,404,004
	Gainesville & Hall County Development Authority, RB, ACTS Retirement, Life Community, Series A-2, 6.63%,		
	11/15/39	645	649,934
	Rockdale County Development Authority, RB, Visy		
	Paper Project, Series A, AMT, 6.13%, 1/01/34	1,680	1,208,256
		_	
			3,562,311
Guam - 3.3%	Guam Government Waterworks Authority, RB, Water,		
	5.88%, 7/01/35	1.600	1,404,912
	Territory of Guam, GO, Series A, 5.75%, 11/15/14	200	198,598
	Territory of Guam, GO, Series A, 6.00%, 11/15/19	250	245,150
	2		,

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	Territory of Guam, GO, Series A, 6.75%, 11/15/29	\$ 440	\$ 439,842
	Territory of Guam, GO, Series A, 7.00%, 11/15/39	455	453,230
	Territory of Guam, RB, Section 30, Series A, 5.63%,		
	12/01/29	1,000	974,520
	Territory of Guam, RB, Section 30, Series A, 5.75%, 12/01/34	1,540	1,509,677
			5,225,929
Illinois - 4.0%	City of Chicago Illinois, Refunding RB, American Airlines, 5.50%, 12/01/30	2,860	1,059,058
	Illinois Finance Authority, RB, Clare at Water Tower	2,800	1,039,038
	Project, Series A, 6.13%, 5/15/38	2,050	1,029,243
	Illinois Finance Authority, RB, Landing at Plymouth Place Project, Series A, 6.00%, 5/15/37	430	306,960
	Illinois Finance Authority, RB, Monarch Landing Inc.		
	Facilities, Series A, 7.00%, 12/01/37	575	325,467
	Illinois Finance Authority, RB, Primary Health Care	490	292 500
	Centers Program, 6.60%, 7/01/24 Illinois Finance Authority, RB, Rush University	490	382,509
	Medical Center Obligation Group, Series A, 7.25%,		
	11/01/30	2,000	2,131,400
	Lincolnshire Special Service Area No. 1, Illinois,		
	Special Tax, Sedgebrook Project, 6.25%, 3/01/34	755	507,964
	Village of Wheeling Illinois, TAN, North Milwaukee, Lake-Cook TIF Project, 6.00%, 1/01/25	760	608,327
	Earc-Cook 111 110ject, 0.00 //, 1101125	700	
			6,350,928
Indiana - 1.8%	Indiana Health & Educational Facilities Financing Authority, RB, Community Foundation Northwest		
	Indiana, 5.50%, 3/01/37	1,770	1,532,094
	Vanderburgh County Redevelopment Commission,	,	, ,
	Indiana, TAN, 5.25%, 2/01/31	820	733,523
	Vigo County Hospital Authority, Indiana, RB, Union	4.40	24.5.004
	Hospital Inc., 5.70%, 9/01/37	440	315,084
	Vigo County Hospital Authority, Indiana, RB, Union Hospital Inc., 5.75%, 9/01/42	545	385,222
			2,965,923
Louisiana - 2.0%	Louisiana Local Government Environmental Facilities		
Louisiana - 2.0 //	& Community Development Auth, RB, Westlake		
	Chemical Corp. Projects, 6.75%, 11/01/32	2,000	1,663,560
	Parish of Saint John Baptist Louisiana, RB, Marathon		
	Oil Corp., Series A, 5.13%, 6/01/37	1,800	1,538,460
			3,202,020
Maryland - 1.0%		410	204,475
James 100 /0		710	204,473

	Maryland Health & Higher Educational Facilities Authority, RB, Washington Christian Academy, 5.50%, 7/01/38		
	Maryland State Energy Financing Administration Industrial Development, RB, Cogeneration, AES Warrior Run, AMT, 7.40%, 9/01/19	1,500	1,345,665
			1,550,140
Massachusetts - 2.8%	Massachusetts Development Finance Agency, RB, Eastern Nazarene College, 5.63%, 4/01/19	1,245	1,059,607
	Massachusetts Development Finance Agency, RB, First Mortgage, Overlook Community, Series A, 6.25%,	,	
	7/01/34 Massachusetts Health & Educational Facilities	1,845	1,329,913
	Authority, RB, Bay Cove Human Services Issue, Series A, 5.90%, 4/01/28	820	839,926
	Massachusetts Health & Educational Facilities Authority, RB, Jordan Hospital, Series E, 6.75%,		
	10/01/33	850	655,231

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	Massachusetts Health & Educational Facilities Authority, RB, Milton Hospital, Series C, 5.50%, 7/01/16 Massachusetts Industrial Finance Agency, RB, Sewer	\$ 500	\$ 414,670
	Facility, Resource Control Composting, AMT, 9.25%, 6/01/10	200	202,044
			4,501,391
Michigan - 2.6%	Advanced Technology Academy, RB, 6.00%, 11/01/37 Monroe County Hospital Finance Authority, RB,	625	443,981
	Refunding, Mercy Memorial Hospital Corp. Obligation, 5.50%, 6/01/35	1,260	891,878
	Royal Oak Hospital Finance Authority, Michigan, RB, William Beaumont Hospital, 8.25%, 9/01/39	2,575	2,904,780
			4,240,639
Missouri - 0.4%	Kansas City IDA, Missouri, RB, First Mortgage, Bishop Spencer, Series A, 6.50%, 1/01/35	1,000	730,950
Nevada - 0.7%	Clark County Improvement District, Nevada, Special Assessment, Special Improvement District No. 142,		
	Local Improvement, 6.38%, 8/01/23 County of Clark Nevada, RB, Nevada Power Co.	390	306,037
	Project, Series A, AMT, 5.60%, 10/01/30	955	797,387
			1,103,424
New Hampshire - 0.4%	New Hampshire Health & Education Facilities Authority, RB, Catholic Medical Center, 5.00%, 7/01/36	835	609,291
New Jersey - 10.3%	Camden County Pollution Control Financing Authority,		
	RB, Series A, AMT, 7.50%, 12/01/10	6,000	5,986,380
	New Jersey EDA, RB, Cigarette Tax, 5.50%, 6/15/24 New Jersey EDA, RB, Continental Airlines Inc. Project,	2,170	1,855,827
	AMT, 6.63%, 9/15/12 New Jersey EDA, RB, Continental Airlines Inc. Project,	3,050	2,801,242
	AMT, 6.25%, 9/15/29 New Jersey EDA, Refunding RB, Newark Airport	1,000	684,900
	Marriott Hotel, 7.00%, 10/01/14	1,500	1,452,735
	New Jersey Educational Facilities Authority, Refunding RB, University Medical & Dentistry, Series B, 7.13%, 12/01/23	670	709,979
	New Jersey Educational Facilities Authority, Refunding RB, University Medical & Dentistry, Series B, 7.50%,	1.065	1 125 502
	12/01/32 New Jersey Health Care Facilities Financing Authority, RB, Pascack Valley Hospital Association, 6.63%,	1,065	1,125,503
	7/01/36 (a)(b)	1,870	47,872

	New Jersey Health Care Facilities Financing Authority, RB, Saint Joseph's Healthcare System, 6.63%, 7/01/38 New Jersey Transportation Trust Fund Authority, New	1,680	1,409,570
	Jersey, RB, CAB, Transportation System, Series C (AMBAC), 5.05%, 12/15/35 (d)	2,760	475,603
			16,549,611
New Mexico - 3.1%	Farmington New Mexico, RB, Tucson Electric Power Co. San Juan, Series A, 6.95%, 10/01/20	5,000	5,000,700
New York - 4.9%	Dutchess County Industrial Development Agency, New York, RB, Saint Francis Hospital, Series B, 7.50%, 3/01/29	1,000	933,140
	Metropolitan Transportation Authority, RB, Series 2008-C, 6.50%, 11/15/28	2,000	2,215,860
	New York City Industrial Development Agency, RB, American Airlines, JFK International Airport, AMT, 8.00%, 8/01/28	720	573,588
	New York City Industrial Development Agency, RB, British Airways Plc Project, AMT, 7.63%, 12/01/32 New York City Industrial Development Agency, RB,	1,730	1,333,415
	Series C, 6.80%, 6/01/28 4	350	358,099

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State	Municipal Bonds	Par (000)	Value
	New York City Industrial Development Agency, RB, Special Needs Facilities Pooled Program, Series C-1, 6.50%, 7/01/24	\$ 830	\$ 661,950
	New York Liberty Development Corp., RB, National Sports Museum Project, Series A, 6.13%, 2/15/19 (a)(b) New York State Dormitory Authority, RB, NYU	630	630
	Hospitals Center, Series A, 5.00%, 7/01/20	2,040	1,804,747
			7,881,429
North Carolina - 1.7%	North Carolina Medical Care Commission, RB, First Mortgage, Deerfield, Series A, 6.13%, 11/01/38	3,230	2,756,385
Ohio - 3.0%	Buckeye Tobacco Settlement Financing Authority, RB, Asset-Backed, Senior, Turbo, Series A-2, 5.13%,	2.740	2 069 957
	6/01/24 Buckeye Tobacco Settlement Financing Authority, RB, Asset-Backed, Senior, Turbo, Series A-2, 6.50%,	3,740	3,068,857
	6/01/47	2,685	1,707,687
			4,776,544
Pennsylvania - 7.1%	Bucks County IDA, RB, Ann s Choice Inc. Facilities, Series A, 6.13%, 1/01/25 Chester County Health & Education Facilities	1,160	947,036
	Authority, RB, Jenners Pond Inc. Project, 7.63%, 7/01/12 (c)	1,750	2,101,995
	Lancaster County Hospital Authority, RB, Brethren Village Project, Series A, 6.25%, 7/01/26 Lancaster County Hospital Authority, RB, Brethren	475	443,527
	Village Project, Series A, 6.50%, 7/01/40 Montgomery County IDA, Pennsylvania, RB, Mortgage, Whitemarsh Continuing Care, 6.25%,	410	366,733
	2/01/35 Pennsylvania Economic Development Financing Authority, RB, Reliant Energy, Series B, AMT, 6.75%,	1,700	1,108,859
	12/01/36 Philadelphia Authority for Industrial Development, RB,	1,405	1,304,205
	Commercial Development, Remarketed, AMT, 7.75%, 12/01/17	4,460	3,844,163
	Philadelphia Authority for Industrial Development, RB, Air Cargo, Series A, AMT, 7.50%, 1/01/25	1,600	1,350,320
			11,466,838
Puerto Rico - 0.7%	Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.50%, 8/01/44	1,000	1,047,150
Rhode Island - 0.8%	Central Falls Detention Facility Corp., Rhode Island, Refunding RB, 7.25%, 7/15/35	1,750	1,216,600

Connector 2000 Association Inc., RB, CAB, Senior, Series B, 8.88%, 1/01/14 (d)	1,075	604,956
South Carolina State Housing Finance & Development Authority, RB, Series A-2 (AMBAC), AMT, 5.15%, 7/01/37	4,000	3,704,720
	-	4,309,676
Shelby County, Health, Educational & Housing Facilities Board, RB, Germantown Village, Series A,		
7.25%, 12/01/34 Shelby County, Health, Educational & Housing Facilities Board, RB, Village at Germantown, 6.25%	1,800	1,512,900
12/01/34	245	179,475
		1,692,375
Brazos River Authority, Refunding RB, TXU Electric Co. Project, Series C, AMT, 5.75%, 5/01/36	1,475	1,143,464
Brazos River Authority, Refunding RB, Texas Utility Co., Series A, Remarketed, AMT, 7.70%, 4/01/33	2,530	1,189,125
	Series B, 8.88%, 1/01/14 (d) South Carolina State Housing Finance & Development Authority, RB, Series A-2 (AMBAC), AMT, 5.15%, 7/01/37 Shelby County, Health, Educational & Housing Facilities Board, RB, Germantown Village, Series A, 7.25%, 12/01/34 Shelby County, Health, Educational & Housing Facilities Board, RB, Village at Germantown, 6.25%, 12/01/34 Brazos River Authority, Refunding RB, TXU Electric Co. Project, Series C, AMT, 5.75%, 5/01/36 Brazos River Authority, Refunding RB, Texas Utility Co., Series A, Remarketed, AMT, 7.70%, 4/01/33	Series B, 8.88%, 1/01/14 (d) South Carolina State Housing Finance & Development Authority, RB, Series A-2 (AMBAC), AMT, 5.15%, 7/01/37 Shelby County, Health, Educational & Housing Facilities Board, RB, Germantown Village, Series A, 7.25%, 12/01/34 Shelby County, Health, Educational & Housing Facilities Board, RB, Village at Germantown, 6.25%, 12/01/34 245 Brazos River Authority, Refunding RB, TXU Electric Co. Project, Series C, AMT, 5.75%, 5/01/36 Brazos River Authority, Refunding RB, Texas Utility Co., Series A, Remarketed, AMT, 7.70%, 4/01/33 2,530

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	City of Houston Texas, RB, Special Facilities, Continental, Series E, AMT, 6.75%, 7/01/21 Danbury Higher Education Authority Inc, RB, AW Brown Fellowship Charter, Series A (ACA), 5.13%,	\$ 1,865	\$ 1,460,631
	8/15/36 Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System,	1,000	705,460
	Series B, 7.25%, 12/01/35 Matagorda County Navigation District No. 1, Texas,	1,110	1,198,878
	Refunding RB, Central Power & Light Co. Project, Series A, Remarketed, 6.30%, 11/01/29 North Texas Tollway Authority, Refunding RB, Toll	850	881,705
	2nd Tier, Series F,6.13%, 1/01/31 Texas State Public Finance Authority, RB, Kipp Inc. Education, Series A (ACA), 5.00%, 2/15/28	1,650 2,250	1,662,491 1,589,738
	Education, Series A (ACA), 5.00%, 2/13/20	2,230	9,831,492
U.S. Virgin Islands - 1.3%	United States Virgin Islands, RB, Senior Secured, Hovensa Coker Project, AMT, 6.50%, 7/01/21	2,100	2,075,892
Utah - 1.4%	County of Carbon Utah, Refunding RB, Laidlaw Environmental, Series A, AMT, 7.45%, 7/01/17	2,240	2,241,994
Virginia - 1.5%	Dulles Town Center Community Development Authority, Virginia, Special Assessment, Dulles Town		
	Center Project, 6.25%, 3/01/26 Tobacco Settlement Financing Corp., Virginia, RB, Senior, Series B-1, 5.00%, 6/01/47	2,385 1,250	1,748,634 679,113
			2,427,747
West Virginia - 0.5%	City of Princeton West Virginia, Refunding RB, Princeton Community Hospital, 6.20%, 5/01/13	795	752,706
Wisconsin - 0.7%	Wisconsin Health & Educational Facilities Authority, RB, New Castle Place Project, Series A, 7.00%, 12/01/31	1,320	1 112 900
W		1,320	1,112,800
Wyoming - 1.9%	County of Sweetwater Wyoming, Refunding RB, FMC Corp. Project, AMT, 5.60%, 12/01/35 Wyoming Municipal Power Agency, Wyoming, RB,	2,500	2,020,450
	Series A, 5.38%, 1/01/42	1,000	973,760
			2,994,210
	Total Municipal Bonds - 93.6%		150,224,653

	Municipal Bonds Transferred to Tender Option Bond Trusts (e)		
District of Columbia - 1.8%	District of Columbia Water & Sewer Authority, Refunding RB, Series A, 6.00%, 10/01/35	2,730	2,954,060
Florida - 3.4%	County of Miami-Dade, Florida, Refunding RB, Miami International Airport, Series A (AGC), AMT, 5.25%, 10/01/33	6,130	5,432,896
Virginia - 3.6%	Virginia HDA, RB, Series H, Sub-Series H-1 (MBIA), 5.38%, 7/01/36	5,710	5,732,897
	Total Municipal Bonds Transferred to Tender Option Bond Trusts - 8.8%		14,119,853
	Total Long-Term Investments (Cost - \$188,289,461) - 102.4%		164,344,506
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State	Short-Term Securities	Par (000)	Value
Mississippi - 0.4%	Mississippi Business Finance Corp., RB, Waste Management Inc. Project, AMT, VRDN, 6.88%, 3/01/10 (f)	\$ 1,000	\$ 1,015,610
		Shares	
Money Market Fund - 0.6%	FFI Institutional Tax-Exempt Fund, 0.55% (g)(h)	600,000	600,000
	Total Short-Term Securities (Cost - \$1,600,000) - 1.0%		1,615,610
	Total Investments (Cost - \$189,889,461*) - 103.4%		165,960,116
	Other Assets Less Liabilities - 1.1%		1,855,130
	Liability for Trust Certificates, Including Interest Expense and Fees Payable - (4.5)%		(7,293,621)
	Net Assets - 100.0%		\$ 160,521,625

^{*} The cost and unrealized appreciation (depreciation) of investments as of July 31, 2009, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 182,737,626
Gross unrealized appreciation Gross unrealized depreciation	\$ 4,747,569 (28,810,525)
Net unrealized depreciation	\$ (24,062,956)

- (a) Issuer filed for bankruptcy and/or is in default of interest payments.
- (b) Non-income producing security.
- (c) US government securities, held in escrow, are used to pay interest on this security as well as to retire the bond in full at the date indicated, typically at a premium to par.
- (d) Represents a zero coupon bond. Rate shown is as of report date.
- (e) Securities represent bonds transferred to a tender option bond trust in exchange for which the Fund acquired residual interest certificates. These securities serve as collateral in a financing transaction.

- (f) Security may have a maturity of more than one year at the time of issuance, but has variable rate and demand features that qualify it as a short-term security. Rate shown is as of report date and maturity shown is the date the principal owed can be recovered through demand.
- (g) 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:

Affiliate	Net Activity Income				
FFI Institutional Tax-Exempt Fund	499,994	\$	749		

(h) Represents the current yield as of report date.

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Financial Accounting Standards Board Statement of Financial Accounting Standards No. 157, Fair Value Measurements clarifies the definition of fair value, establishes a framework for measuring fair values and requires additional disclosures about the use of fair value measurements. Various inputs are used in determining the fair value of investments, which are as follows:

Level 1 - price quotations in active markets/exchanges for identical securities

Level 2 - other observable inputs (including, but not limited to: quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 - unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund s own assumptions used in determining the fair value of investments)

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. For information about the Fund s policy regarding valuation of investments and other significant accounting policies, please refer to the Fund s most recent financial statements as contained in its annual report.

The following table summarizes the inputs used as of July 31, 2009 in determining the fair valuation of the Fund s investments:

Valuation Inputs	Investments in Securities			
	Assets			
Level 1 - Short-Term Securities Level 2 -	\$ 600,000			
Long-Term Investments ¹ Short-Term Securities	164,344,506 1,015,610			
Total Level 2 Level 3	165,360,116			
Total	\$ 165,960,116			

¹ See above Schedule of Investments for values in each state or political classification.

Item 2 - Controls and Procedures

- 2(a) The registrant's principal executive and principal financial officers or persons performing similar functions have concluded that the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the "1940 Act")) are effective as of a date within 90 days of the filing of this report based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rule 13(a)-15(b) under the Securities Exchange Act of 1934, as amended.
- 2(b) There were no changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act) that occurred during the registrant's last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.

Item 3 - Exhibits

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/ Anne F. Ackerley
Anne F. Ackerley
Chief Executive Officer of
BlackRock Apex Municipal Fund, Inc.

Date: September 22, 2009

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/ Anne F. Ackerley
Anne F. Ackerley
Chief Executive Officer (principal executive officer) of
BlackRock Apex Municipal Fund, Inc.

Date: September 22, 2009

By: /s/ Neal J. Andrews
Neal J. Andrews
Chief Financial Officer (principal financial officer) of
BlackRock Apex Municipal Fund, Inc.

Date: September 22, 2009