

BLACKROCK APEX MUNICIPAL FUND INC
Form N-CSRS
December 28, 2010
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. (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., 55 East 52nd Street, New York, NY 10055

Registrant's telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 04/30/2011

Date of reporting period: 10/31/2010

Item 1 Report to Stockholders

October 31, 2010

Semi-Annual Report (Unaudited)

BlackRock Apex Municipal Fund, Inc. (APX)

BlackRock MuniAssets Fund, Inc. (MUA)

BlackRock MuniEnhanced Fund, Inc. (MEN)

BlackRock MuniHoldings Fund, Inc. (MHD)

BlackRock MuniHoldings Fund II, Inc. (MUH)

BlackRock MuniHoldings Quality Fund, Inc. (MUS)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

BlackRock MuniVest Fund II, Inc. (MVT)

Not FDIC Insured No Bank Guarantee May Lose Value

Table of Contents

	Page
<u>Dear Shareholder</u>	3
Semi-Annual Report:	
<u>Fund Summaries</u>	4
<u>The Benefits and Risks of Leveraging</u>	12
<u>Derivative Financial Instruments</u>	12
Financial Statements:	
<u>Schedules of Investments</u>	13
<u>Statements of Assets and Liabilities</u>	52
<u>Statements of Operations</u>	54
<u>Statements of Changes in Net Assets</u>	55
<u>Statements of Cash Flows</u>	58
<u>Financial Highlights</u>	59
<u>Notes to Financial Statements</u>	67
<u>Disclosure of Investment Advisory Agreements and Sub-Advisory Agreements</u>	74
<u>Officers and Directors</u>	78
<u>Additional Information</u>	79

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Dear Shareholder

The global economic recovery that began in 2009 has continued on its choppy course this year, delivering mixed but slowly improving economic data and gradual if uneven improvement of investor sentiment. The risks of a double-dip recession continue to recede, but the economy remains mired in a slow-growth environment. In the United States, the National Bureau of Economic Research declared that the Great Recession ended in June 2009. Spanning December 2007 to June 2009, this marked the longest reported recession since the Great Depression. Structural problems of ongoing deleveraging and weak spending among businesses and households weigh heavily on the pace of economic growth. The unemployment rate remains stubbornly high in the face of sluggish job gains in the private sector. The US dollar, along with other developed market currencies, has experienced devaluation resulting from aggressively easy monetary and fiscal policies. Given these long-standing conditions, the Federal Reserve Board has announced that additional policy action will be taken to combat deflation and unemployment and promote economic growth.

The high levels of volatility experienced in global equity markets throughout 2009 continued into 2010 as mixed economic data and lingering credit issues caused stocks to trade in both directions, but by the end of the first quarter, most markets had managed to post gains. The second quarter, in contrast, brought higher levels of volatility and a flight to quality as investor sentiment was dominated by fears of a double-dip recession. Global equity markets saw negative quarterly returns and for many markets, the first significant downturn since the bull market began in March 2009. In the third quarter, economic data turned less negative and strong corporate earnings reports became increasingly consistent. These factors, along with attractive valuations and expectations for additional quantitative easing, drove equity markets higher, with most markets recapturing their second quarter losses. Stocks continued their rally into the beginning of the fourth quarter, closing out the 12-month period in positive territory. International equities posted gains on both a six- and 12-month basis. In the United States, both large and small cap equities posted robust gains for the 12-month period, while on a six-month basis, large cap stocks remained relatively flat and small caps turned slightly negative.

In fixed income markets, yields fluctuated but declined significantly over the past 12 months amid heightened uncertainty. Weak economic data, lingering credit problems and, near the end of the period, the expectation of additional quantitative easing drove interest rates lower and bond prices higher. Treasuries rallied over the period, modestly outperforming the credit spread sectors of the market. Corporate credit spreads benefited from the low interest rate environment and high yield fixed income became increasingly attractive due to declining default rates and better-than-expected results on European bank stress tests. Tax-exempt municipal bonds performed well over the 12-month period, driven primarily by technical factors including favorable supply-and-demand dynamics.

Cash investments, as represented by the 3-month Treasury bill, returned only a fraction over 0% for the 12-month period as short-term interest rates remained low. Yields on money market securities remain near all-time lows.

Against this backdrop, the major market averages posted the following returns:

Total Returns as of October 31, 2010	6-month	12-month
US large cap equities (S&P 500 Index)	0.74%	16.52%
US small cap equities (Russell 2000 Index)	(1.24)	26.58
International equities (MSCI Europe, Australasia, Far East Index)	5.74	8.36
3-month Treasury bill (BofA Merrill Lynch 3-Month Treasury Bill Index)	0.08	0.12
US Treasury securities (BofA Merrill Lynch 10-Year US Treasury Index)	10.63	10.03
US investment grade bonds (Barclays Capital US Aggregate Bond Index)	5.33	8.01
Tax-exempt municipal bonds (Barclays Capital Municipal Bond Index)	3.95	7.78
US high yield bonds (Barclays Capital US Corporate High Yield 2% Issuer Capped Index)	6.73	19.10

Past performance is no guarantee of future results. Index performance shown for illustrative purposes only. You cannot invest directly in an index.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

As global economic conditions continue to improve, investors across the world continue to face uncertainty about the future of economic growth. Through periods of uncertainty, as ever, BlackRock's full resources are dedicated to the management of our clients' assets. For additional market perspective and investment insight, visit www.blackrock.com/shareholdermagazine, where you'll find the most recent issue of our award-winning *Shareholder*® magazine, as well as its quarterly companion newsletter, *Shareholder Perspectives*. As always, we thank you for entrusting BlackRock with your investments, and we look forward to your continued partnership in the months and years ahead.

Sincerely,

Rob Kapito

President, BlackRock Advisors, LLC

THIS PAGE NOT PART OF YOUR FUND REPORT

3

Fund Summary as of October 31, 2010

BlackRock Apex Municipal Fund, Inc.

Fund Overview

BlackRock Apex Municipal Fund, Inc. s (APX) (the Fund) investment objective is to provide high current income exempt from federal income taxes by investing primarily in a portfolio of medium- to lower-grade or unrated municipal obligations, the interest on which is exempt from federal income taxes in the opinion of bond counsel to the issuer. The Fund seeks to achieve its investment objective by investing, under normal market conditions, at least 80% of its assets in municipal bonds exempt from federal income taxes (except that the interest may be subject to the federal alternative minimum tax). The Fund invests at least 75% of its assets in municipal bonds that are rated in the medium to lower categories by nationally recognized rating services (Baa or lower by Moody s Investors Service, Inc. or BBB or lower by Standard & Poor s Corporation) or non-rated securities which are of comparable quality. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund s investment objective will be achieved.

Performance

For the six months ended October 31, 2010, the Fund returned 7.99% based on market price and 6.36% based on net asset value (NAV). For the same period, the closed-end Lipper High Yield Municipal Debt Funds category posted an average return of 7.20% based on market price and 6.92% based on NAV. All returns reflect reinvestment of dividends. The Fund s discount to NAV, which narrowed during the period, accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. The Fund s low concentrations in tax-backed (state, county, city and school district) and development district (special district) issues detracted from performance as these sectors continued to strengthen during the period. The Fund s portfolio duration remained relatively lower than its Lipper category average, which has proven detrimental in the declining interest rate environment. In addition, a majority of peers within the Lipper category employ a higher degree of leverage, which can enhance both returns and distribution yields. Contributing positively to performance was sector allocation, particularly with respect to concentrations in health, transportation, and corporate-related debt, all of which performed well during the period. Also beneficial was the Fund s positioning in the intermediate range of the yield curve, which outperformed the longer end of the curve for the period.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on New York Stock Exchange (NYSE)	APX
Initial Offering Date	July 25, 1989
Yield on Closing Market Price as of October 31, 2010 (\$9.31) ¹	5.67%
Tax Equivalent Yield ²	8.72%
Current Monthly Distribution per Common Share ³	\$0.044
Current Annualized Distribution per Common Share ³	\$0.528
Leverage as of October 31, 2010 ⁴	4%

¹ Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

- ² Tax equivalent yield assumes the maximum federal tax rate of 35%.
- ³ The distribution is not constant and is subject to change.
- ⁴ Represents tender option bond trusts (TOBs) as a percentage of total managed assets, which is the total assets of the Fund, including any assets attributable to TOBs, minus the sum of accrued liabilities. For a discussion of leveraging techniques utilized by the Fund, please see The Benefits and Risks of Leveraging on page 12.

The table below summarizes the changes in the Fund's market price and NAV per share:

	10/31/10	4/30/10	Change	High	Low
Market Price	\$9.31	\$8.87	4.96%	\$9.61	\$8.75
Net Asset Value	\$9.50	\$9.19	3.37%	\$9.54	\$9.16

The following charts show the sector and credit quality allocations of the Fund's long-term investments:

Sector Allocations

	10/31/10	4/30/10
Health	29%	29%
Corporate	21	20
County/City/Special District/School District	16	16
Transportation	12	11
Education	7	7
Utilities	6	4
Tobacco	3	5
Housing	3	4
State	3	4

Credit Quality Allocations⁵

	10/31/10	4/30/10
AAA/Aaa	3%	7%
AA/Aa	6	2
A	10	11
BBB/Baa	27	26
BB/Ba	8	8
B	6	7
CCC/Caa	5	4
Not Rated ⁶	35	35

⁵ Using the higher of Standard & Poor's (S&P's) or Moody's Investors Service (Moody's) ratings.

⁶

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

The investment advisor has deemed certain of these securities to be of investment grade quality. As of October 31, 2010 and April 30, 2010, the market value of these securities was \$14,880,896 representing 8% and \$14,523,630 representing 8%, respectively, of the Fund's long-term investments.

Fund Summary as of October 31, 2010

BlackRock MuniAssets Fund, Inc.

Fund Overview

BlackRock MuniAssets Fund, Inc. s (MUA) (the Fund) investment objective is to provide high current income exempt from federal income taxes by investing primarily in a portfolio of medium- to lower-grade or unrated municipal obligations, the interest on which, in the opinion of bond counsel, is exempt from federal income taxes. The Fund seeks to achieve its investment objective by investing, under normal market conditions, at least 80% of its assets in municipal bonds exempt from federal income taxes (except that the interest may be subject to the federal alternative minimum tax). The Fund invests at least 65% of its assets in municipal bonds that are rated in the medium to lower categories by nationally recognized rating services (for example, Baa or lower by Moody s Investors Service, Inc. or BBB or lower by Standard & Poor s Corporation) or non-rated securities which are of comparable quality. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund s investment objective will be achieved.

Performance

For the six months ended October 31, 2010, the Fund returned 5.72% based on market price and 6.54% based on NAV. For the same period, the closed-end Lipper High Yield Municipal Debt Funds category posted an average return of 7.20% based on market price and 6.92% based on NAV. All returns reflect reinvestment of dividends. The Fund moved from a premium to NAV to a discount by period end, which accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. The Fund s low concentrations in tax-backed (state, county, city and school district) and development district (special district) issues detracted from performance as these sectors continued to strengthen during the period. The Fund s portfolio duration remained relatively lower than its Lipper category average, which has proven detrimental in the declining interest rate environment. In addition, a majority of peers within the Lipper category employ a higher degree of leverage, which can enhance both returns and distribution yields. Contributing positively to performance was sector allocation, particularly with respect to concentrations in health, transportation, and corporate-related debt, all of which performed well during the period. Also beneficial was the Fund s positioning in the intermediate range of the yield curve, which outperformed the longer end of the curve for the period.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on NYSE	MUA
Initial Offering Date	June 25, 1993
Yield on Closing Market Price as of October 31, 2010 (\$12.99) ¹	5.77%
Tax Equivalent Yield ²	8.88%
Current Monthly Distribution per Common Share ³	\$0.0625
Current Annualized Distribution per Common Share ³	\$0.7500
Leverage as of October 31, 2010 ⁴	4%

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.

- ² Tax equivalent yield assumes the maximum federal tax rate of 35%.
- ³ The distribution is not constant and is subject to change.
- ⁴ Represents TOBs as a percentage of total managed assets, which is the total assets of the Fund, including any assets attributable to TOBs, minus the sum of accrued liabilities. For a discussion of leveraging techniques used by the Fund, please see The Benefits and Risks of Leveraging on page 12.

The table below summarizes the changes in the Fund's market price and NAV per share:

	10/31/10	4/30/10	Change	High	Low
Market Price	\$12.99	\$12.65	2.69%	\$13.21	\$12.26
Net Asset Value	\$13.07	\$12.63	3.48%	\$13.12	\$12.57

The following charts show the sector and credit quality allocations of the Fund's long-term investments:

Sector Allocations

	10/31/10	4/30/10
Health	26%	29%
Corporate	25	24
County/City/Special District/School District	13	13
Transportation	12	11
Utilities	7	4
Education	6	6
Tobacco	4	5
Housing	4	4
State	3	4

Credit Quality Allocations⁵

	10/31/10	4/30/10
AAA/Aaa	3%	6%
AA/Aa	6	3
A	11	14
BBB/Baa	29	26
BB/Ba	8	8
B	7	7
CCC/Caa	5	4
Not Rated ⁶	31	32

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

- ⁵ Using the higher of S&P's or Moody's ratings.
- ⁶ The investment advisor has deemed certain of these securities to be of investment grade quality. As of October 31, 2010 and April 30, 2010, the market value of these securities was \$13,096,178 representing 5% and \$15,867,930, representing 6%, respectively, of the Fund's long-term investments.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

5

Fund Summary as of October 31, 2010

BlackRock MuniEnhanced Fund, Inc.

Fund Overview

BlackRock MuniEnhanced Fund, Inc. s (MEN) (the Fund) investment objective is to provide shareholders with as high a level of current income exempt from federal income taxes as is consistent with its investment policies and prudent investment management. The Fund seeks to achieve its investment objective by investing at least 80% of its assets in municipal bonds exempt from federal income taxes (except that the interest may be subject to the federal alternative minimum tax). Under normal market conditions, the Fund invests primarily in long-term municipal bonds rated investment grade quality at the time of investment and invests primarily in long-term municipal bonds with maturities of more than ten years at the time of investment. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund s investment objective will be achieved.

Performance

For the six months ended October 31, 2010, the Fund returned 7.41% based on market price and 6.81% based on NAV. For the same period, the closed-end Lipper Insured Municipal Debt Funds (Leveraged) category posted an average return of 7.94% based on market price and 5.84% based on NAV. All returns reflect reinvestment of dividends. The Fund s discount to NAV, which narrowed during the period, accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. The Fund benefited from its modestly long duration relative to the Lipper category average as bond prices rallied in the declining interest rate environment. The tax-exempt municipal market in general benefited from the Build America Bond Program, which alleviated supply pressure in the tax-exempt space, especially on the long end of the yield curve. The Fund s holdings of insured bonds with lower quality underlying credits contributed positively to performance as did exposure to traditionally higher yielding sectors, including transportation, health and corporate-related debt, as credit quality spreads generally tightened during the period. Conversely, the Fund s holdings of zero-coupon bonds detracted from performance as these securities generally underperformed coupon bonds due to widening spreads in the sector. In addition, the Fund s low exposure to education hindered performance as the sector performed well during the period.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on NYSE	MEN
Initial Offering Date	March 2, 1989
Yield on Closing Market Price as of October 31, 2010 (\$11.26) ¹	6.07%
Tax Equivalent Yield ²	9.34%
Current Monthly Distribution per Common Share ³	\$0.057
Current Annualized Distribution per Common Share ³	\$0.684
Leverage as of October 31, 2010 ⁴	38%

¹ Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.

² Tax equivalent yield assumes the maximum federal tax rate of 35%.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

- ³ The distribution is not constant and is subject to change.
- ⁴ Represents Auction Market Preferred Shares (Preferred Shares) and TOBs as a percentage of total managed assets, which is the total assets of the Fund, including any assets attributable to Preferred Shares and TOBs, minus the sum of accrued liabilities. For a discussion of leveraging techniques used by the Fund, please see The Benefits and Risks of Leveraging on page 12.

The table below summarizes the changes in the Fund's market price and NAV per share:

	10/31/10	4/30/10	Change	High	Low
Market Price	\$11.26	\$10.81	4.16%	\$11.70	\$10.38
Net Asset Value	\$11.29	\$10.90	3.58%	\$11.47	\$10.85

The following charts show the sector and credit quality allocations of the Fund's long-term investments:

Sector Allocations

	10/31/10	4/30/10
County/City/Special District/School District	29%	28%
Transportation	22	24
State	18	19
Utilities	14	14
Health	6	7
Education	5	3
Corporate	3	2
Housing	3	3

Credit Quality Allocations⁵

	10/31/10	4/30/10
AAA/Aaa	12%	46%
AA/Aa	59	23
A	25	26
BBB/Baa	4	5

⁵ Using the higher of S&P's or Moody's ratings.

Fund Summary as of October 31, 2010

BlackRock MuniHoldings Fund, Inc.

Fund Overview

BlackRock MuniHoldings Fund, Inc. s (MHD) (the Fund) investment objective is to provide shareholders with current income exempt from federal income taxes. The Fund seeks to achieve its investment objective by investing at least 80% of its assets in municipal bonds exempt from federal income taxes (except that the interest may be subject to the federal alternative minimum tax). The Fund invests, under normal market conditions, at least 75% of its assets in municipal bonds rated investment grade and invests primarily in long-term municipal bonds with a maturity of more than ten years at the time of investment. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund's investment objective will be achieved.

Performance

For the six months ended October 31, 2010, the Fund returned 9.74% based on market price and 7.36% based on NAV. For the same period, the closed-end Lipper General Municipal Debt Funds (Leveraged) category posted an average return of 7.68% based on market price and 6.42% based on NAV. All returns reflect reinvestment of dividends. The Fund moved from a discount to NAV to a premium by period end, which accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. The Fund's outperformance relative to its Lipper category was driven by sector allocation, particularly with respect to concentrations in health and corporate-related debt, both of which continued to perform well during the period. The Fund's focus on lower quality credits had a positive impact due to the ongoing contraction of credit quality spreads. In addition, the Fund's modestly long portfolio duration (sensitivity to interest rates) relative to the Lipper category average proved beneficial in the declining interest rate environment. Conversely, a concentration of holdings in longer dated issues detracted from performance as the intermediate range of the yield curve outperformed the longer end of the curve.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on NYSE	MHD
Initial Offering Date	May 2, 1997
Yield on Closing Market Price as of October 31, 2010 (\$16.68) ¹	6.40%
Tax Equivalent Yield ²	9.85%
Current Monthly Distribution per Common Share ³	\$0.089
Current Annualized Distribution per Common Share ³	\$1.068
Leverage as of October 31, 2010 ⁴	36%

¹ Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.

² Tax equivalent yield assumes the maximum federal tax rate of 35%.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

- ³ A change in the distribution rate was declared on December 6, 2010. The Monthly Distribution per Common Share was increased to \$0.0905. The Yield on Closing Market Price, Current Monthly Distribution per Common Share and Current Annualized Distribution per Common Share do not reflect the new distribution rate. The new distribution rate is not constant is subject to further change in the future.
- ⁴ Represents Preferred Shares and TOBs as a percentage of total managed assets, which is the total assets of the Fund, including any assets attributable to Preferred Shares and TOBs, minus the sum of accrued liabilities. For a discussion of leveraging techniques used by the Fund, please see The Benefits and Risks of Leveraging on page 12.

The table below summarizes the changes in the Fund's market price and NAV per share:

	10/31/10	4/30/10	Change	High	Low
Market Price	\$16.68	\$15.70	6.24%	\$17.05	\$14.85
Net Asset Value	\$16.37	\$15.75	3.94%	\$16.55	\$15.61

The following charts show the sector and credit quality allocations of the Fund's long-term investments:

Sector Allocations

	10/31/10	4/30/10
Health	23%	23%
Corporate	14	14
State	12	12
Transportation	12	11
Utilities	12	11
County/City/Special District/School District	10	11
Education	8	9
Housing	7	7
Tobacco	2	2

Credit Quality Allocations⁵

	10/31/10	4/30/10
AAA/Aaa	12%	19%
AA/Aa	39	32
A	22	23
BBB/Baa	12	11
BB/Ba	2	2
B	2	2
CCC/Caa	2	2
Not Rated ⁶	9	9

⁵ Using the higher of S&P's or Moody's ratings.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

- ⁶ The investment advisor has deemed certain of these non-rated securities to be of investment grade quality. As of October 31, 2010 and April 30, 2010, the market value of these securities was \$2,891,783 representing 1% and \$2,973,600 representing 1%, respectively, of the Fund's long-term investments.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

7

Fund Summary as of October 31, 2010

BlackRock MuniHoldings Fund II, Inc.

Fund Overview

BlackRock MuniHoldings Fund II, Inc. s (MUH) (the Fund) investment objective is to provide shareholders with current income exempt from federal income taxes. The Fund seeks to achieve its investment objective by investing, under normal market conditions, at least 80% of its assets in municipal bonds exempt from federal income taxes (except that the interest may be subject to the federal alternative minimum tax). The Fund invests, under normal market conditions, at least 75% of its assets in municipal bonds rated investment grade and invests primarily in long-term municipal bonds with a maturity of more than ten years at the time of investment. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund s investment objective will be achieved.

Performance

For the six months ended October 31, 2010, the Fund returned 7.64% based on market price and 7.30% based on NAV. For the same period, the closed-end Lipper General Municipal Debt Funds (Leveraged) category posted an average return of 7.68% based on market price and 6.42% based on NAV. All returns reflect reinvestment of dividends. The Fund s premium to NAV, which widened during the period, accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. The Fund s outperformance relative to its Lipper category was driven by sector allocation, particularly with respect to concentrations in health and corporate-related debt, both of which continued to perform well during the period. The Fund s focus on lower quality credits had a positive impact due to the ongoing contraction of credit quality spreads. In addition, the Fund s modestly long portfolio duration (sensitivity to interest rates) relative to the Lipper category average proved beneficial in the declining interest rate environment. Conversely, a concentration of holdings in longer dated issues detracted from performance as the intermediate range of the yield curve outperformed the longer end of the curve.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on NYSE	MUH
Initial Offering Date	February 27, 1998
Yield on Closing Market Price as of October 31, 2010 (\$15.30) ¹	6.31%
Tax Equivalent Yield ²	9.71%
Current Monthly Distribution per Common Share ³	\$0.0805
Current Annualized Distribution per Common Share ³	\$0.9660
Leverage as of October 31, 2010 ⁴	34%

¹ Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.

² Tax equivalent yield assumes the maximum federal tax rate of 35%.

³ The distribution is not constant and is subject to change.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

- ⁴ Represents Preferred Shares and TOBs as a percentage of total managed assets, which is the total assets of the Fund, including any assets attributable to Preferred Shares and TOBs, minus the sum of accrued liabilities. For a discussion of leveraging techniques used by the Fund, please see The Benefits and Risks of Leveraging on page 12.

The table below summarizes the changes in the Fund's market price and NAV per share:

	10/31/10	4/30/10	Change	High	Low
Market Price	\$15.30	\$14.68	4.22%	\$16.48	\$13.99
Net Asset Value	\$15.22	\$14.65	3.89%	\$15.39	\$14.53

The following charts show the sector and credit quality allocations of the Fund's long-term investments:

Sector Allocations

	10/31/10	4/30/10
Health	22%	21%
City/County/Special District/School District	15	15
Corporate	15	15
State	12	12
Transportation	11	10
Education	9	10
Utilities	9	8
Housing	5	7
Tobacco	2	2

Credit Quality Allocations⁵

	10/31/10	4/30/10
AAA/Aaa	12	18%
AA/Aa	42	37
A	20	20
BBB/Baa	12	12
BB/Ba	2	2
B	1	1
CCC/Caa	2	2
Not Rated ⁶	9	8

⁵ Using the higher of S&P's or Moody's ratings.

⁶ The investment advisor has deemed certain of these securities to be of investment grade quality. As of October 31, 2010 and April 30, 2010, the market value of these securities was \$5,831,267 representing 2% and \$4,406,945 representing 2%, respectively, of the Fund's long-term investments.

Fund Summary as of October 31, 2010

BlackRock MuniHoldings Quality Fund, Inc.

Fund Overview

Effective November 9, 2010, BlackRock MuniHoldings Insured Fund, Inc. changed its name to BlackRock MuniHoldings Quality Fund, Inc.

BlackRock MuniHoldings Quality Fund, Inc. s (MUS) (the Fund) investment objective is to provide shareholders with current income exempt from federal income taxes. The Fund seeks to achieve its investment objective by investing primarily in long-term, investment grade municipal obligations exempt from federal income taxes (except that the interest may be subject to the federal alternative minimum tax). The Fund invests primarily in long-term municipal bonds with a maturity of more than ten years at the time of investment. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund s investment objective will be achieved.

Performance

For the six months ended October 31, 2010, the Fund returned 8.62% based on market price and 6.32% based on NAV. For the same period, the closed-end Lipper Insured Municipal Debt Funds (Leveraged) category posted an average return of 7.94% based on market price and 5.84% based on NAV. All returns reflect reinvestment of dividends. The Fund s premium to NAV, which widened during the period, accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. The Fund s exposure to health, housing and transportation contributed positively to performance as credit quality spreads generally tightened, causing these sectors to outperform other municipal market sectors, particularly among bonds with longer maturities. The tax-exempt municipal market in general benefited from the Build America Bond Program, which alleviated supply pressure in the tax-exempt space, especially on the long end of the yield curve. As such, the Fund s slightly long duration stance enhanced performance for the period. Detracting from performance was the Fund s exposure to bonds with short call features, which did not fully benefit from the price appreciation that occurred among bonds with longer call dates and non-callable bonds.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on NYSE	MUS
Initial Offering Date	May 1, 1998
Yield on Closing Market Price as of October 31, 2010 (\$14.09) ¹	6.30%
Tax Equivalent Yield ²	9.69%
Current Monthly Distribution per Common Share ³	\$0.074
Current Annualized Distribution per Common Share ³	\$0.888
Leverage as of October 31, 2010 ⁴	40%

¹ Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

- ² Tax equivalent yield assumes the maximum federal tax rate of 35%.
- ³ The distribution is not constant and is subject to change.
- ⁴ Represents Preferred Shares and TOBs as a percentage of total managed assets, which is the total assets of the Fund, including any assets attributable to Preferred Shares and TOBs, minus the sum of accrued liabilities. For a discussion of leveraging techniques used by the Fund, please see The Benefits and Risks of Leveraging on page 12.

The table below summarizes the changes in the Fund's market price and NAV per share:

	10/31/10	4/30/10	Change	High	Low
Market Price	\$14.09	\$13.40	5.15%	\$14.73	\$13.10
Net Asset Value	\$13.73	\$13.34	2.92%	\$13.94	\$13.24

The following charts show the sector and credit quality allocations of the Fund's long-term investments:

Sector Allocations

	10/31/10	4/30/10
City/County/Special District/School District	29%	33%
Utilities	22	22
Transportation	21	16
State	11	13
Health	9	9
Housing	5	5
Corporate	3	2

Credit Quality Allocations⁵

	10/31/10	4/30/10
AAA/Aaa	10%	58%
AA/Aa	57	16
A	21	24
BBB/Baa	1	1
Not Rated ⁶	11	1

⁵ Using the higher of S&P's or Moody's ratings.

⁶ The investment advisor has deemed certain of these securities to be of investment grade quality. As of October 31, 2010 and April 30, 2010, the market value of these securities was \$2,426,336 representing 1% and \$2,342,435 representing 1%, respectively, of the Fund's long-term investments.

Fund Summary as of October 31, 2010

BlackRock Muni Intermediate Duration Fund, Inc.

Fund Overview

BlackRock Muni Intermediate Duration Fund, Inc. s (MUI) (the Fund) investment objective is to provide Common Shareholders with high current income exempt from federal income taxes. The Fund seeks to achieve its investment objective by investing at least 80% of its assets in municipal bonds exempt from federal income taxes (except that the interest may be subject to the federal alternative minimum tax). Under normal market conditions, the Fund invests at least 75% of its assets in municipal bonds rated investment grade and invests at least 80% of its assets in municipal bonds with a duration of three to ten years at the time of investment. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund s investment objective will be achieved.

Performance

For the six months ended October 31, 2010, the Fund returned 11.45% based on market price and 7.11% based on NAV. For the same period, the closed-end Lipper Intermediate Municipal Debt Funds category posted an average return of 8.07% based on market price and 6.02% based on NAV. All returns reflect reinvestment of dividends. The Fund s discount to NAV, which narrowed during the period, accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. While the Fund maintained its neutral duration (sensitivity to interest rates) relative to the Lipper category average during most of the period, we increased its exposure to interest rate-sensitive bonds, including new issues, which delivered strong performance as bond prices rallied in the declining interest rate environment. Increased exposure to high yield and economically sensitive corporate-related municipal debt also contributed positively, as did exposure to traditionally higher yielding sectors, including health and housing, all of which performed well as credit quality spreads tightened during the period. Conversely, the Fund s short maturity and low duration holdings hindered relative performance due to their limited upward price movement in the declining interest rate environment. In addition, the Fund s exposure to traditionally higher quality sectors, including utilities and essential services, detracted from performance as these sectors experienced weak demand while investors sought yield.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on NYSE	MUI
Initial Offering Date	August 1, 2003
Yield on Closing Market Price as of October 31, 2010 (\$15.32) ¹	5.60%
Tax Equivalent Yield ²	8.62%
Current Monthly Distribution per Common Share ³	\$0.0715
Current Annualized Distribution per Common Share ³	\$0.8580
Leverage as of October 31, 2010 ⁴	38%

¹ Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

- ² Tax equivalent yield assumes the maximum federal tax rate of 35%.
- ³ The distribution is not constant and is subject to change.
- ⁴ Represents Preferred Shares and TOBs as a percentage of total managed assets, which is the total assets of the Fund, including any assets attributable to Preferred Shares and TOBs, minus the sum of accrued liabilities. For a discussion of leveraging techniques used by the Fund, please see The Benefits and Risks of Leveraging on page 12.

The table below summarizes the changes in the Fund's market price and NAV per share:

	10/31/10	4/30/10	Change	High	Low
Market Price	\$15.32	\$14.13	8.42%	\$16.17	\$13.41
Net Asset Value	\$15.37	\$14.75	4.20%	\$15.59	\$14.70

The following charts show the sector and credit quality allocations of the Fund's long-term investments:

Sector Allocations

	10/31/10	4/30/10
State	24%	23%
City/County/Special District/School District	21	21
Health	15	12
Corporate	11	12
Transportation	8	8
Education	7	6
Utilities	6	8
Tobacco	4	6
Housing	4	4

Credit Quality Allocations⁵

	10/31/10	4/30/10
AAA/Aaa	14%	28%
AA/Aa	41	25
A	23	23
BBB/Baa	10	11
BB/Ba	1	1
B	1	2
CCC/Caa	2	3
Not Rated ⁶	8	7

⁵ Using the higher of S&P's or Moody's ratings.

⁶

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

The investment advisor has deemed certain of these securities to be of investment grade quality. As of October 31, 2010 and April 30, 2010, the market value of these securities was \$21,435,534 representing 2% and \$11,900,188 representing 1%, respectively, of the Fund's long-term investments.

Fund Summary as of October 31, 2010

BlackRock MuniVest Fund II, Inc.

Fund Overview

BlackRock MuniVest Fund II, Inc. s (MVT) (the Fund) investment objective is to provide shareholders with as high a level of current income exempt from federal income taxes as is consistent with its investment policies and prudent investment management. The Fund seeks to achieve its investment objective by investing at least 80% of its assets in municipal bonds exempt from federal income taxes (except that the interest may be subject to the federal alternative minimum tax). The Fund invests, under normal market conditions, at least 75% of its assets in municipal bonds rated investment grade and invests primarily in long-term municipal bonds with a maturity of more than ten years at the time of investment. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund s investment objective will be achieved.

Performance

For the six months ended October 31, 2010, the Fund returned 6.64% based on market price and 7.40% based on NAV. For the same period, the closed-end Lipper General Municipal Debt Funds (Leveraged) category posted an average return of 7.68% based on market price and 6.42% based on NAV. All returns reflect reinvestment of dividends. The Fund s premium to NAV, which narrowed during the period, accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. The Fund s outperformance relative to its Lipper category was driven by sector allocation, particularly with respect to concentrations in health, transportation, and corporate-related debt, all of which continued to perform well during the period. The Fund s focus on lower quality credits had a positive impact due to the ongoing contraction of credit quality spreads. In addition, the Fund s modestly long portfolio duration (sensitivity to interest rates) relative to the Lipper category average proved beneficial in the declining interest rate environment. Conversely, a concentration of holdings in longer dated issues detracted from performance as the intermediate range of the yield curve outperformed the longer end of the curve.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on NYSE	MVT
Initial Offering Date	March 29, 1993
Yield on Closing Market Price as of October 31, 2010 (\$15.38) ¹	6.91%
Tax Equivalent Yield ²	10.63%
Current Monthly Distribution per Common Share ³	\$0.0885
Current Annualized Distribution per Common Share ³	\$1.0620
Leverage as of October 31, 2010 ⁴	40%

¹ Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.

² Tax equivalent yield assumes the maximum federal tax rate of 35%.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

- ³ The distribution is not constant and is subject to change.
- ⁴ Represents Preferred Shares and TOBs as a percentage of total managed assets, which is the total assets of the Fund, including any assets attributable to Preferred Shares and TOBs, minus the sum of accrued liabilities. For a discussion of leveraging techniques used by the Fund, please see The Benefits and Risks of Leveraging on page 12.

The table below summarizes the changes in the Fund's market price and NAV per share:

	10/31/10	4/30/10	Change	High	Low
Market Price	\$15.38	\$14.94	2.95%	\$15.84	\$14.02
Net Asset Value	\$14.94	\$14.41	3.68%	\$15.12	\$14.29

The following charts show the sector and credit quality allocations of the Fund's long-term investments:

Sector Allocations

	10/31/10	4/30/10
Health	25%	22%
State	15	14
Corporate	15	18
Transportation	12	12
County/City/Special District/School District	11	10
Utilities	11	10
Education	6	6
Housing	4	5
Tobacco	1	3

Credit Quality Allocations⁵

	10/31/10	4/30/10
AAA/Aaa	11%	18%
AA/Aa	46	39
A	18	18
BBB/Baa	11	11
BB/Ba	1	1
B	3	3
CCC/Caa	1	1
Not Rated ⁶	10	10

⁵ Using the higher of S&P's or Moody's ratings.

⁶ The investment advisor has deemed certain of these securities to be of investment grade quality. As of October 31, 2010 and April 30, 2010, the market value of these securities was \$6,274,996 representing 1% and \$5,505,082 representing 1%, respectively, of the Fund's long-term investments.

The Benefits and Risks of Leveraging

The Funds may utilize leverage to seek to enhance the yield and NAV of their Common Shares. However, these objectives cannot be achieved in all interest rate environments.

To leverage, all of the Funds, except APX and MUA, issue Preferred Shares, which pay dividends at prevailing short-term interest rates, and invest the proceeds in long-term municipal bonds. In general, the concept of leveraging is based on the premise that the cost of assets to be obtained from leverage will be based on short-term interest rates, which normally will be lower than the income earned by each Fund on its longer-term portfolio investments. To the extent that the total assets of each Fund (including the assets obtained from leverage) are invested in higher-yielding portfolio investments, each Fund's Common Shareholders will benefit from the incremental net income.

To illustrate these concepts, assume a Fund's Common Shares capitalization is \$100 million and it issues Preferred Shares for an additional \$50 million, creating a total value of \$150 million available for investment in long-term municipal bonds. If prevailing short-term interest rates are 3% and long-term interest rates are 6%, the yield curve has a strongly positive slope. In this case, the Fund pays dividends on the \$50 million of Preferred Shares based on the lower short-term interest rates. At the same time, the securities purchased by the Fund with assets received from the Preferred Shares issuance earn the income based on long-term interest rates. In this case, the dividends paid to Preferred Shareholders are significantly lower than the income earned on the Fund's long-term investments, and therefore the Common Shareholders are the beneficiaries of the incremental net income.

If short-term interest rates rise, narrowing the differential between short-term and long-term interest rates, the incremental net income pickup on the Common Shares will be reduced or eliminated completely. Furthermore, if prevailing short-term interest rates rise above long-term interest rates of 6%, the yield curve has a negative slope. In this case, the Fund pays dividends on the higher short-term interest rates whereas the Fund's total portfolio earns income based on lower long-term interest rates.

Furthermore, the value of a Fund's portfolio investments generally varies inversely with the direction of long-term interest rates, although other factors can influence the value of portfolio investments. In contrast, the redemption value of the Funds' Preferred Shares does not fluctuate in relation to interest rates. As a result, changes in interest rates can influence the Funds' NAV positively or negatively in addition to the impact on Fund performance from leverage from Preferred Shares discussed above.

The Funds may also leverage their assets through the use of tender option bond (TOB) programs, as described in Note 1 of the Notes to Financial Statements. TOB investments generally will provide the Funds with economic benefits in periods of declining short-term interest rates, but expose the Funds to risks during periods of rising short-term interest rates similar to those associated with Preferred Shares issued by the Funds, as described above. Additionally, fluctuations in the market value of municipal bonds deposited into the TOB trust may adversely affect each Fund's NAV per share.

The use of leverage may enhance opportunities for increased income to the Funds and Common Shareholders, but as described above, it also creates risks as short- or long-term interest rates fluctuate. Leverage also will generally cause greater changes in the Funds' NAV, market price and dividend rate than a comparable portfolio without leverage. If the income derived from securities purchased with assets received from leverage exceeds the cost of leverage, the Funds' net income will be greater than if leverage had not been used. Conversely, if the income from the securities purchased is not sufficient to cover the cost of leverage, each Fund's net income will be less than if leverage had not been used, and therefore the amount available for distribution to Common Shareholders will be reduced. Each Fund may be required to sell portfolio securities at inopportune times or at distressed values in order to comply with regulatory requirements applicable to the use of leverage or as required by the terms of leverage instruments, which may cause a Fund to incur losses. The use of leverage may limit each Fund's ability to invest in certain types of securities or use certain types of hedging strategies, such as in the case of certain restrictions imposed by ratings agencies that rate Preferred Shares issued by the Funds. Each Fund will incur expenses in connection with the use of leverage, all of which are borne by Common Shareholders and may reduce income to the Common Shares.

Under the Investment Company Act of 1940, the Funds are permitted to issue Preferred Shares in an amount up to 50% of their total managed assets at the time of issuance. Under normal circumstances, each Fund anticipates that the total economic leverage from Preferred Shares and/or TOBs will not exceed 50% of its total managed assets at the time such leverage is incurred. As of October 31, 2010, the Funds had economic leverage from Preferred Shares and/or TOBs as a percentage of their total managed assets as follows:

	Percent of Leverage
APX	4%
MUA	4%
MEN	38%
MHD	36%
MUH	34%
MUS	40%
MUI	38%
MVT	40%

Derivative Financial Instruments

The Funds may invest in various derivative instruments, including financial futures contracts, as specified in Note 2 of the Notes to Financial Statements, which may constitute forms of economic leverage. Such instruments are used to obtain exposure to a market without owning or taking physical custody of securities or to hedge market and/or interest rate risks. Such derivative instruments involve risks, including the imperfect correlation between the value of a derivative instrument and the underlying asset or illiquidity of the derivative instrument. The Funds ability to successfully use a derivative instrument depends on the investment advisor's ability to accurately predict pertinent market movements, which cannot be assured. The use of derivative instruments may result in losses greater than if they had not been used, may require the Funds to sell or purchase portfolio investments at inopportune times or for distressed values, may limit the amount of appreciation a Fund can realize on an investment, may result in lower dividends paid to shareholders or may cause the Funds to hold an investment that they might otherwise sell. The Funds' investments in these instruments are discussed in detail in the Notes to Financial Statements.

Schedule of Investments October 31, 2010 (Unaudited)

BlackRock Apex Municipal Fund, Inc. (APX)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Alabama 0.2%		
County of Jefferson Alabama, RB, Series A, 5.25%, 1/01/17	\$ 365	\$ 345,615
Alaska 1.0%		
Alaska Industrial Development & Export Authority, RB, Williams Lynxs, Alaska Cargoport, AMT, 8.00%, 5/01/23	2,000	1,969,820
Arizona 3.9%		
Maricopa County IDA Arizona, RB, Series A:		
Arizona Charter Schools Project, 6.63%, 7/01/20	900	703,512
Sun King Apartments Project, 6.00%, 11/01/10	5	5,000
Phoenix IDA Arizona, Refunding RB, America West Airlines Inc. Project, AMT, 6.30%, 4/01/23	2,950	2,591,103
Pima County IDA, RB:		
Arizona Charter Schools Project, Series E, 7.25%, 7/01/31	935	951,073
Tucson Electric Power Co., Series A, 5.25%, 10/01/40	1,635	1,627,593
Pima County IDA, Refunding IDR, Tucson Electric Power, 5.75%, 9/01/29	460	475,355
University Medical Center Corp. Arizona, RB, 6.25%, 7/01/29	540	586,985
Yavapai County IDA Arizona, RB, Yavapai Regional Medical Center, Series A, 6.00%, 8/01/33	500	506,260
		7,446,881
California 3.4%		
California Statewide Communities Development Authority, Refunding RB:		
American Baptist Homes of the West, 6.25%, 10/01/39	885	898,231
Senior Living, Southern California, 7.00%, 11/15/29	400	437,224
Senior Living, Southern California, 7.25%, 11/15/41	1,440	1,584,230
City of Fontana California, Special Tax Bonds, Refunding, Community Facilities District No. 22-Sierra, Series H, 6.00%, 9/01/34	1,000	1,000,240
State of California, GO, Various Purpose, 6.00%, 3/01/33	2,120	2,435,117
		6,355,042

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Municipal Bonds	Par (000)	Value
Colorado 3.0%		
E-470 Public Highway Authority, Refunding RB, CAB, 7.08%, 9/01/35 (a)	\$ 1,505	\$ 274,452
Elk Valley Public Improvement Corp., RB, Public Improvement Fee, Series A, 7.30%, 9/01/22	2,800	2,803,976
Plaza Metropolitan District No. 1 Colorado, Tax Allocation Bonds, Tax Increment:		
Public Improvement Fee, 8.00%, 12/01/25	2,000	2,089,540
Subordinate Public Improvement Fee, 8.13%, 12/01/25	500	464,940
		5,632,908
Connecticut 2.3%		
Harbor Point Infrastructure Improvement District, Tax Allocation Bonds, Harbor Point Project, Series A, 7.88%, 4/01/39	1,610	1,730,347
Mohegan Tribe of Indians of Connecticut, RB, Public Improvement, Priority Distribution:		
6.25%, 1/01/31	1,785	1,478,391
5.25%, 1/01/33 (b)	1,500	1,082,055
		4,290,793
Delaware 0.9%		
Delaware State EDA, RB, Exempt Facilities, Indian River Power, 5.38%, 10/01/45	1,720	1,713,189
District of Columbia 2.2%		
District of Columbia, RB, Methodist Home District of Columbia, Series A:		
7.38%, 1/01/30	680	695,144
7.50%, 1/01/39	1,110	1,135,663
District of Columbia Tobacco Settlement Financing Corp., Refunding RB, Asset-Backed, 6.50%, 5/15/33	730	721,466
Metropolitan Washington Airports Authority, RB, CAB, 2nd Senior Lien, Series B (AGC), 6.76%, 10/01/39 (a)	9,770	1,680,342
		4,232,615

Portfolio Abbreviations

To simplify the listings of portfolio holdings in the Schedules 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.
AGM	Assured Guaranty Municipal Corp.
AMBAC	American Municipal Bond Assurance Corp.
AMT	Alternative Minimum Tax (subject to)
ARB	Airport Revenue Bonds
BHAC	Berkshire Hathaway Assurance Corp.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

CAB	Capital Appreciation Bonds
COP	Certificates of Participation
EDA	Economic Development Authority
EDC	Economic Development Corp.
ERB	Education Revenue Bonds
FGIC	Financial Guaranty Insurance Co.
FHA	Federal Housing Administration
GARB	General Airport Revenue Bond
GO	General Obligation Bonds
HDA	Housing Development Authority
HFA	Housing Finance Agency
HRB	Housing Revenue Bonds
HUD	US Department of Housing and Urban Development
IDA	Industrial Development Authority
IDB	Industrial Development Board
IDRB	Industrial Development Revenue Bonds
ISD	Independent School District
LRB	Lease Revenue Bonds
M/F	Multi-Family
MRB	Mortgage Revenue Bonds
NPFGC	National Public Finance Guarantee Corp.
PSF-GTD	Permanent School Fund Guaranteed
RB	Revenue Bonds
S/F	Single Family
TE	Tax-Exempt
TIF	Tax Increment Financing

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

13

Schedule of Investments (continued)

BlackRock Apex Municipal Fund, Inc. (APX)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Florida 8.7%		
County of Miami-Dade Florida, Refunding RB, Miami International Airport, Series A-1, 5.38%, 10/01/41	\$ 360	\$ 371,581
Hillsborough County IDA, RB, AMT, National Gypsum Co.: Series A, 7.13%, 4/01/30	2,500	2,437,050
Series B, 7.13%, 4/01/30	1,560	1,520,719
Jacksonville Economic Development Commission, RB, Gerdau Ameristeel US Inc., AMT, 5.30%, 5/01/37	900	791,649
Jacksonville Economic Development Commission, Refunding RB, Florida Proton Therapy Institute, Series A, 6.00%, 9/01/17	750	787,620
Lee County IDA Florida, RB, Series A, Lee Charter Foundation, 5.38%, 6/15/37	1,810	1,559,731
Midtown Miami Community Development District, Special Assessment Bonds, Series A: 6.00%, 5/01/24	1,370	1,357,506
6.25%, 5/01/37	1,350	1,327,685
Santa Rosa Bay Bridge Authority, RB, 6.25%, 7/01/28	2,140	993,409
Sarasota County Health Facilities Authority, Refunding RB, Village on the Isle Project: 5.50%, 1/01/27	370	354,305
5.50%, 1/01/32	550	517,853
Sumter Landing Community Development District Florida, RB, Sub-Series B, 5.70%, 10/01/38	1,585	1,318,577
Tampa Palms Open Space & Transportation Community Development District, RB, Capital Improvement, Richmond Place Project, 7.50%, 5/01/18	1,905	1,905,838
Tolomato Community Development District, Special Assessment Bonds, Special Assessment, 6.65%, 5/01/40	1,850	1,360,323
		16,603,846
Georgia 4.0%		
City of Atlanta Georgia, Tax Allocation Bonds, Princeton Lakes Project, 5.50%, 1/01/31	395	361,682
Clayton County Development Authority, RB, Delta Air Lines Inc. Project, Series A, 8.75%, 6/01/29	1,375	1,589,885
County of Clayton Georgia, Tax Allocation Bonds, Ellenwood Project, 7.50%, 7/01/33	1,335	1,319,047
DeKalb County Hospital Authority Georgia, RB, DeKalb Medical Center Inc. Project, 6.13%, 9/01/40	1,805	1,866,117
Gainesville & Hall County Development Authority, Refunding RB, Acts Retirement Life Community, Series A-2, 6.63%, 11/15/39	645	681,552
Rockdale County Development Authority, RB, Visy Paper Project, Series A, AMT, 6.13%, 1/01/34	1,680	1,688,215

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

	7,506,498
--	-----------

Guam 1.5%

Guam Government Waterworks Authority, Refunding RB, Water, 6.00%, 7/01/25	515	527,885
Territory of Guam, GO, Series A: 6.00%, 11/15/19	250	267,255
6.75%, 11/15/29	440	487,362
7.00%, 11/15/39	455	509,786
Territory of Guam, RB, Section 30, Series A, 5.63%, 12/01/29	1,000	1,046,640

	2,838,928
--	-----------

Illinois 6.4%

City of Chicago Illinois, Refunding RB, American Airlines Inc. Project, 5.50%, 12/01/30	2,860	2,395,393
Illinois Finance Authority, RB: Navistar International, Recovery Zone, 6.50%, 10/15/40	650	674,381
Roosevelt University Project, 6.50%, 4/01/44	1,700	1,818,507
Rush University Medical Center Obligation Group, Series A, 7.25%, 11/01/30	2,000	2,309,580

Municipal Bonds	Par (000)	Value
-----------------	--------------	-------

Illinois (concluded)

Illinois Finance Authority, Refunding RB: CAB, Clare Water Tower, Series B, 0.04%, 5/15/50 (a)	\$ 615	\$ 7,755
Clare Water Tower, Series A-7, 6.13%, 5/15/41	1,435	947,875
Friendship Village of Schaumburg, 7.25%, 2/15/45	1,630	1,686,496
Primary Health Care Centers Program, 6.60%, 7/01/24	490	446,155
Metropolitan Pier & Exposition Authority, Refunding RB, CAB, McCormick Place Expansion Project, Series B (AGM), 6.25%, 6/15/46 (a)	4,015	452,812
Village of Lincolnshire Illinois, Special Tax Bonds, Sedgebrook Project, 6.25%, 3/01/34	755	683,849
Village of Wheeling Illinois, Tax Allocation Bonds, North Milwaukee/Lake-Cook TIF Project, 6.00%, 1/01/25	750	708,900

	12,131,703
--	------------

Indiana 0.8%

Indiana Finance Authority, Refunding RB, Improvement, U.S. Steel Corp., 6.00%, 12/01/26	620	659,934
Vigo County Hospital Authority Indiana, RB, Union Hospital Inc. (b): 5.70%, 9/01/37	440	411,911
5.75%, 9/01/42	545	510,338

	1,582,183
--	-----------

Kentucky 0.4%

Kentucky Economic Development Finance Authority, Refunding RB, Owensboro Medical Health System, Series A, 6.38%, 6/01/40	645	683,623
--	-----	---------

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Louisiana 1.1%		
Louisiana Local Government Environmental Facilities & Community Development Authority, RB, Westlake Chemical Corp. Projects, 6.75%, 11/01/32	2,000	2,121,920

Maryland 2.7%		
Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35	420	437,569
Maryland EDC, Refunding RB, CNX Marine Terminals, Inc., 5.75%, 9/01/25	1,675	1,710,175
Maryland Health & Higher Educational Facilities Authority, RB, Washington Christian Academy, 5.50%, 7/01/38	410	176,288
Maryland Health & Higher Educational Facilities Authority, Refunding RB, Doctor s Community Hospital, 5.75%, 7/01/38	1,265	1,245,936
Maryland State Energy Financing Administration, RB, Cogeneration, AES Warrior Run, AMT, 7.40%, 9/01/19	1,500	1,500,795
		5,070,763

Massachusetts 1.3%		
Massachusetts Development Finance Agency, RB, First Mortgage, Overlook Communities, Series A, 6.25%, 7/01/34	1,845	1,638,379
Massachusetts Development Finance Agency, Refunding RB, Eastern Nazarene College, 5.63%, 4/01/19	40	39,773
Massachusetts Health & Educational Facilities Authority, RB, Jordan Hospital, Series E, 6.75%, 10/01/33	850	852,278
		2,530,430

Michigan 2.8%		
Advanced Technology Academy, RB, 6.00%, 11/01/37	625	604,744
County of Wayne Michigan, GO, Building Improvement, Series A, 6.75%, 11/01/39	375	401,509
Monroe County Hospital Finance Authority, Refunding RB, Mercy Memorial Hospital Corp. Obligation, 5.50%, 6/01/35	1,260	1,111,887
Royal Oak Hospital Finance Authority Michigan, Refunding RB, William Beaumont Hospital, 8.25%, 9/01/39	2,575	3,095,304
		5,213,444

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Apex Municipal Fund, Inc. (APX)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Missouri 0.5%		
Kirkwood IDA Missouri, RB, Aberdeen Heights, Series A, 8.25%, 5/15/39	\$ 945	\$ 999,895
Multi-State 0.3%		
MuniMae TE Bond Subsidiary LLC, 7.50%, 6/30/49 (b)(c)(d)	653	600,682
Nevada 0.2%		
County of Clark Nevada, Special Assessment Bonds, Special Improvement District No. 142, Local Improvement, 6.38%, 8/01/23	370	360,983
New Hampshire 0.4%		
New Hampshire Health & Education Facilities Authority, RB, Catholic Medical Center, 5.00%, 7/01/36	835	738,190
New Jersey 5.9%		
New Jersey EDA, RB, Continental Airlines Inc. Project, AMT: 6.63%, 9/15/12	3,050	3,091,205
6.25%, 9/15/29	1,000	979,960
New Jersey EDA, Refunding RB, Newark Airport Marriott Hotel, 7.00%, 10/01/14	1,500	1,505,580
New Jersey Educational Facilities Authority, Refunding RB, University of Medicine & Dentistry, Series B: 7.13%, 12/01/23	670	792,168
7.50%, 12/01/32	1,065	1,236,081
New Jersey Health Care Facilities Financing Authority, RB, Pascack Valley Hospital Association, 6.63%, 7/01/36 (e)(f)	1,870	19
New Jersey Health Care Facilities Financing Authority, Refunding RB, St. Joseph's Healthcare System, 6.63%, 7/01/38	1,680	1,761,497
New Jersey Transportation Trust Fund Authority, RB, CAB, Transportation System, Series C (AMBAC), 5.05%, 12/15/35 (a)	2,760	645,923
Tobacco Settlement Financing Corp. New Jersey, Refunding RB, Series 1A, 4.50%, 6/01/23	1,190	1,113,697
		11,126,130
New York 6.4%		
Brooklyn Arena Local Development Corp., RB, Barclays Center Project, 6.38%, 7/15/43	685	743,985
Chautauqua County Industrial Development Agency, RB, NRG Dunkirk Power Project, 5.88%, 4/01/42	1,710	1,788,421

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Dutchess County Industrial Development Agency New York, RB, St. Francis Hospital, Series B, 7.50%, 3/01/29	1,000	1,004,890
Metropolitan Transportation Authority, RB, Series 2008C, 6.50%, 11/15/28	2,000	2,362,100
New York City Industrial Development Agency, RB: American Airlines Inc., JFK International Airport, AMT, 8.00%, 8/01/28	720	772,466
British Airways Plc Project, AMT, 7.63%, 12/01/32	1,730	1,772,385
Series C, 6.80%, 6/01/28	350	367,549
Special Needs Facilities Pooled Program, Series C-1, 6.50%, 7/01/24	830	804,660
New York Liberty Development Corp., Refunding RB, Second Priority, Bank of America Tower at One Bryant Park Project, 6.38%, 7/15/49	520	557,144
New York State Dormitory Authority, RB, North Shore-Long Island Jewish Health System, Series A, 5.50%, 5/01/37	1,000	1,044,860
Yonkers Industrial Development Agency New York, RB, Sarah Lawrence College Project, Series A, 6.00%, 6/01/41	850	904,451
		12,122,911

Municipal Bonds	Par (000)	Value
North Carolina 2.4%		
North Carolina Capital Facilities Finance Agency, RB, Duke Energy Carolinas, Series B, 4.38%, 10/01/31	\$ 680	\$ 666,726
North Carolina Capital Facilities Finance Agency, Refunding RB, Duke Energy Carolinas, Series B, 4.63%, 11/01/40	680	661,708
North Carolina Medical Care Commission, Refunding RB, First Mortgage, Deerfield, Series A, 6.13%, 11/01/38	3,230	3,277,869
		4,606,303

Ohio 1.4%		
Buckeye Tobacco Settlement Financing Authority, RB, Asset-Backed, Senior Series A-2: 5.13%, 6/01/24	1,110	966,322
6.50%, 6/01/47	2,000	1,672,320
		2,638,642

Pennsylvania 6.6%		
Allegheny County Hospital Development Authority, Refunding RB, Health System, West Penn, Series A, 5.38%, 11/15/40	1,885	1,451,073
Bucks County IDA, RB, Ann s Choice Inc. Facility, Series A, 6.13%, 1/01/25	1,160	1,170,997
Cumberland County Municipal Authority, RB, Diakon Lutheran, 6.38%, 1/01/39	2,510	2,652,769
Lancaster County Hospital Authority, RB, Brethren Village Project, Series A: 6.25%, 7/01/26	475	481,659
6.50%, 7/01/40	675	671,402
Montgomery County IDA Pennsylvania, MRB, Whitemarsh Continuing Care, 6.25%, 2/01/35	1,700	1,537,344

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Philadelphia Authority for Industrial Development, RB, AMT:		
Commercial Development, 7.75%, 12/01/17	3,000	3,003,840
Subordinate, Air Cargo, Series A, 7.50%, 1/01/25	1,600	1,581,776
		12,550,860

Puerto Rico 0.8%		
Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.50%, 8/01/44		
	1,000	1,151,140
Puerto Rico Sales Tax Financing Corp., Refunding RB, CAB, First Sub-Series C, 6.52%, 8/01/38 (a)		
	1,815	324,486
		1,475,626

Rhode Island 0.8%		
Central Falls Detention Facility Corp., Refunding RB, 7.25%, 7/15/35		
	1,750	1,525,230

South Carolina 0.4%		
Connector 2000 Association Inc., RB, CAB, Senior Series B, 11.47%, 1/01/14 (a)(e)(f)		
	1,075	141,308
South Carolina Jobs, EDA, Refunding RB, Palmetto Health, 5.50%, 8/01/26		
	670	687,916
		829,224

Tennessee 0.1%		
Shelby County Health Educational & Housing Facilities Board, RB, Village at Germantown, 6.25%, 12/01/34		
	245	216,132

Texas 10.9%		
Bexar County Health Facilities Development Corp., RB, Army Retirement Residence Project, 6.20%, 7/01/45		
	2,055	2,115,006
Brazos River Authority, Refunding RB, Texas Utility Co., Series, AMT, 7.70%, 4/01/33		
	2,530	936,100
Central Texas Regional Mobility Authority, RB: CAB, 7.48%, 1/01/28 (a)		
	1,000	348,130
CAB, 7.78%, 1/01/33 (a)		
	2,150	507,336
CAB, 7.79%, 1/01/34 (a)		
	4,000	849,400
Senior Lien, 5.75%, 1/01/25		
	450	475,569

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Apex Municipal Fund, Inc. (APX)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Texas (concluded)		
City of Houston Texas, RB, Special Facilities, Continental Airlines, Series E, AMT, 6.75%, 7/01/21	\$ 1,865	\$ 1,872,628
Danbury Higher Education Authority Inc., RB, A.W. Brown Fellowship Charter, Series A (ACA), 5.13%, 8/15/36	1,000	1,168,240
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, Series B, 7.25%, 12/01/35	1,110	1,274,424
Matagorda County Navigation District No. 1 Texas, Refunding RB, Central Power & Light Co. Project, Series A, 6.30%, 11/01/29	850	939,259
North Texas Tollway Authority, RB, Toll, 2nd Tier, Series F, 6.13%, 1/01/31	1,650	1,780,267
Tarrant County Cultural Education Facilities Finance Corp., RB, Series A:		
CC Young Memorial Home, 8.00%, 2/15/38	710	749,859
Senior Living Center Project, 8.25%, 11/15/44	1,710	1,729,374
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien:		
LBJ Infrastructure Group LLC, LBJ Freeway Managed Lanes Project, 7.00%, 6/30/40	1,815	1,972,869
NTE Mobility Partners LLC, North Tarrant Express Managed Lanes Project, 6.88%, 12/31/39	1,605	1,741,650
Texas State Public Finance Authority, Refunding ERB, KIPP Inc., Series A (ACA), 5.00%, 2/15/28	2,250	2,173,995
		20,634,106
U.S. Virgin Islands 1.1%		
United States Virgin Islands, Refunding RB, Senior Secured, Hovensa Coker Project, AMT, 6.50%, 7/01/21	2,100	2,136,435
Utah 1.2%		
County of Carbon Utah, Refunding RB, Laidlaw Environmental, Series A, AMT, 7.45%, 7/01/17	2,240	2,245,331
Vermont 0.3%		
Vermont Economic Development Authority, Refunding MRB, Wake Robin Corp. Project, Series A (ACA), 6.30%, 3/01/33	650	632,482
Virginia 2.2%		
Dulles Town Center Community Development Authority, Special Assessment Bonds, Dulles Town Center Project, 6.25%, 3/01/26	2,330	2,284,775
Tobacco Settlement Financing Corp. Virginia, Refunding RB, Senior Series B1, 5.00%, 6/01/47	2,790	1,958,747

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

		4,243,522
Wisconsin 2.2%		
Wisconsin Health & Educational Facilities Authority, RB:		
New Castle Place Project, Series A, 7.00%, 12/01/31	1,320	1,322,416
Wheaton Franciscan Healthcare, 5.25%, 8/15/34	2,540	2,385,619
Wisconsin Health & Educational Facilities Authority, Refunding RB, St. John's Communities Inc., Series A:		
7.25%, 9/15/29	175	181,055
7.63%, 9/15/39	350	368,777
		4,257,867
Wyoming 1.3%		
County of Sweetwater Wyoming, Refunding RB, FMC Corp. Project, AMT, 5.60%, 12/01/35		
	2,500	2,522,950
Total Municipal Bonds	92.0%	174,733,702
Municipal Bonds Transferred to Tender Option Bond Trusts (g)		
	Par (000)	Value
District of Columbia 1.6%		
District of Columbia Water & Sewer Authority, RB, Series A, 6.00%, 10/01/35	\$ 2,730	\$ 3,107,869
Florida 3.3%		
County of Miami-Dade Florida, RB, Miami International Airport, Series A, AMT (AGC), 5.25%, 10/01/33	6,130	6,232,984
Virginia 3.1%		
Virginia HDA, RB, Sub-Series H-1 (NPFGC), 5.38%, 7/01/36	5,710	5,816,548
Total Municipal Bonds Transferred to Tender Option Bond Trusts	8.0%	15,157,401
Total Long-Term Investments (Cost \$186,374,178)	100.0%	189,891,103
Short-Term Securities		
	Shares	
FII Institutional Tax-Exempt Fund, 0.14% (h)(i)	998,663	998,663
Total Short-Term Securities (Cost \$998,663)	0.5%	998,663
Total Investments (Cost \$187,372,841*)	100.5%	190,889,766
Other Assets Less Liabilities	3.3%	6,330,193
Liability for Trust Certificates, Including Interest Expense and Fees Payable	(3.8)%	(7,289,948)

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Net Assets 100.0%

\$ 189,930,011

* The cost and unrealized appreciation (depreciation) of investments as of October 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 179,453,252
Gross unrealized appreciation	\$ 12,728,160
Gross unrealized depreciation	(8,577,092)
Net unrealized appreciation	\$ 4,151,068

- (a) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (b) Security exempt from registration under Rule 144A of the Securities Act of 1933. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (c) Security represents a beneficial interest in a trust. The collateral deposited into the trust is federally tax-exempt revenue bonds issued by various state or local governments, or their respective agencies or authorities. The security is subject to remarketing prior to its stated maturity.
- (d) Variable rate security. Rate shown is as of report date.
- (e) Issuer filed for bankruptcy and/or is in default of interest payments.
- (f) Non-income producing security.
- (g) 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. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.
- (h) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at April 30, 2010	Net Activity	Shares Held at October 31, 2010	Income
FFI Institutional Tax-Exempt Fund	648,958	349,705	998,663	\$993

- (i) Represents the current yield as of report date.

See Notes to Financial Statements.

Schedule of Investments (concluded)

BlackRock Apex Municipal Fund, Inc. (APX)

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 assets and liabilities

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 methodologies 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 Note 1 of the Notes to Financial Statements.

The following table summarizes the inputs used as of October 31, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments ¹		\$ 189,891,103		\$ 189,891,103
Short-Term Securities	\$ 998,663			998,663
Total	\$ 998,663	\$ 189,891,103		\$ 190,889,766

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

See Notes to Financial Statements.

Schedule of Investments October 31, 2010 (Unaudited)

BlackRock MuniAssets Fund, Inc. (MUA)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Alabama 0.2%		
County of Jefferson Alabama, RB, Series A, 5.25%, 1/01/17	\$ 530	\$ 501,852
Alaska 0.1%		
Alaska Industrial Development & Export Authority, RB, Williams Lynxs, Alaska Cargoport, AMT, 7.80%, 5/01/14	395	393,416
Arizona 6.7%		
Coconino County Pollution Control Corp. Arizona, Refunding RB, Tucson Electric Power-Navajo, Series A, AMT, 7.13%, 10/01/32	3,000	3,004,530
Maricopa County IDA Arizona, RB, Arizona Charter Schools Project, Series A, 6.63%, 7/01/20	1,520	1,188,154
Phoenix IDA Arizona, Refunding RB, America West Airlines Inc. Project, AMT, 6.30%, 4/01/23	4,800	4,216,032
Pima County IDA, RB: Arizona Charter Schools Project, Series E, 7.25%, 7/01/31	1,365	1,388,464
Tucson Electric Power Co., Series A, 5.25%, 10/01/40	2,380	2,369,218
Pima County IDA, Refunding IDR, Tucson Electric Power, 5.75%, 9/01/29	670	692,365
Pima County IDA, Refunding RB: Arizona Charter Schools Project, Series O, 5.25%, 7/01/31	450	400,522
Charter Schools II, Series A, 6.75%, 7/01/31	670	672,466
Salt Verde Financial Corp., RB, Senior: 5.00%, 12/01/32	1,840	1,777,845
5.00%, 12/01/37	1,350	1,269,891
Show Low Improvement District, Special Assessment Bonds, District No. 5, 6.38%, 1/01/15	745	746,043
University Medical Center Corp., Arizona, RB: 6.25%, 7/01/29	280	304,363
6.50%, 7/01/39	500	543,775
		18,573,668
California 3.3%		
California Statewide Communities Development Authority, Refunding RB: American Baptist Homes of the West, 6.25%, 10/01/39	1,290	1,309,285
Senior Living, Southern California, 7.00%, 11/15/29	600	655,836
Senior Living, Southern California, 7.25%, 11/15/41	2,060	2,266,330
City of Fontana California, Special Tax Bonds, Refunding, Community Facilities District No. 22-Sierra, Series H,	1,320	1,320,317

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

6.00%, 9/01/34		
State of California, GO, Various Purpose, 6.00%, 3/01/33	3,075	3,532,068
		<u>9,083,836</u>

Colorado 2.9%

Colorado Health Facilities Authority, Refunding RB, Total Longterm Care National Obligated Group Project, Series A, 6.00%, 11/15/30	610	618,241
E-470 Public Highway Authority, Refunding RB, CAB, 7.08%, 9/01/35 (a)	2,190	399,368
Elk Valley Public Improvement Corp., RB, Public Improvement Fee: Series A, 7.10%, 9/01/14	1,220	1,245,144
Series A, 7.30%, 9/01/22	2,095	2,097,975
Series B, 7.45%, 9/01/31	200	193,474
Plaza Metropolitan District No. 1 Colorado, Tax Allocation Bonds, Tax Increment: Public Improvement Fee, 8.00%, 12/01/25	2,850	2,977,595
Subordinate Public Improvement Fee, 8.13%, 12/01/25	525	488,187
		<u>8,019,984</u>

Municipal Bonds	Par (000)	Value
Connecticut 2.9%		
Connecticut State Development Authority, RB, AFCO Cargo BDL LLC Project, AMT, 8.00%, 4/01/30	\$ 3,490	\$ 3,391,129
Harbor Point Infrastructure Improvement District, Tax Allocation Bonds, Harbor Point Project, Series A, 7.88%, 4/01/39	2,340	2,514,915
Mohegan Tribe of Indians of Connecticut, RB, Public Improvement, Priority Distribution, 6.25%, 1/01/31	2,610	2,161,680
		<u>8,067,724</u>

Delaware 0.9%

Delaware State EDA, RB, Exempt Facilities, Indian River Power, 5.38%, 10/01/45	2,505	2,495,080
---	-------	-----------

District of Columbia 2.1%

District of Columbia, RB, Methodist Home District of Columbia, Series A: 7.38%, 1/01/30	985	1,006,936
7.50%, 1/01/39	1,615	1,652,339
District of Columbia Tobacco Settlement Financing Corp., Refunding RB, Asset-Backed, 6.50%, 5/15/33	1,055	1,042,667
Metropolitan Washington Airports Authority, RB, CAB, 2nd Senior Lien, Series B (AGC), 6.54%, 10/01/30 (a)	7,000	2,147,460
		<u>5,849,402</u>

Florida 7.4%

County of Miami-Dade Florida, Refunding RB, Miami International Airport, Series A-1, 5.38%, 10/01/41	705	727,680
	1,180	1,151,645

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Greater Orlando Aviation Authority Florida, RB, Special Purpose, JetBlue Airways Corp., AMT, 6.38%, 11/15/26		
Harbor Bay Community Development District Florida, Special Assessment Bonds, Series A, 7.00%, 5/01/33	455	456,024
Hillsborough County IDA, RB, AMT, National Gypsum Co.: Series A, 7.13%, 4/01/30	2,000	1,949,640
Series B, 7.13%, 4/01/30	1,540	1,501,223
Jacksonville Economic Development Commission, RB, Gerdau Ameristeel US Inc., AMT, 5.30%, 5/01/37	1,300	1,143,493
Jacksonville Economic Development Commission, Refunding RB, Florida Proton Therapy Institute, Series A, 6.00%, 9/01/17	765	803,372
Lee County IDA Florida, RB, Series A, Lee Charter Foundation, 5.38%, 6/15/37	2,620	2,257,733
Midtown Miami Community Development District, Special Assessment Bonds, Series A, 6.25%, 5/01/37	3,255	3,201,195
Santa Rosa Bay Bridge Authority, RB, 6.25%, 7/01/28	3,040	1,411,198
Sarasota County Health Facilities Authority, Refunding RB, Village on the Isle Project: 5.50%, 1/01/27	585	560,184
5.50%, 1/01/32	795	748,532
Sarasota County Public Hospital District, RB, Sarasota Memorial Hospital Project, Series A, 5.63%, 7/01/39	615	647,035
Sumter Landing Community Development District Florida, RB, Sub-Series B, 5.70%, 10/01/38	2,350	1,954,988
Tolomato Community Development District, Special Assessment Bonds, Special Assessment, 6.65%, 5/01/40	2,680	1,970,631
		20,484,573

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniAssets Fund, Inc. (MUA)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Georgia 3.3%		
City of Atlanta Georgia, Tax Allocation Bonds, Princeton Lakes Project, 5.50%, 1/01/31	\$ 640	\$ 586,016
Clayton County Development Authority, RB, Delta Air Lines Inc. Project, Series A, 8.75%, 6/01/29	1,990	2,300,997
County of Clayton Georgia, Tax Allocation Bonds, Ellenwood Project, 7.50%, 7/01/33	1,775	1,753,789
DeKalb County Hospital Authority Georgia, RB, DeKalb Medical Center Inc. Project, 6.13%, 9/01/40	1,100	1,137,246
Gainesville & Hall County Development Authority, Refunding RB, Acts Retirement Life Community, Series A-2: 6.38%, 11/15/29	700	740,607
6.63%, 11/15/39	235	248,318
Rockdale County Development Authority, RB, Visy Paper Project, Series A, AMT, 6.13%, 1/01/34	2,435	2,446,907
		9,213,880
Guam 1.5%		
Guam Government Waterworks Authority, Refunding RB, Water, 6.00%, 7/01/25	750	768,765
Territory of Guam, GO, Series A: 6.00%, 11/15/19	365	390,192
6.75%, 11/15/29	635	703,351
7.00%, 11/15/39	660	739,471
Territory of Guam, RB, Section 30, Series A, 5.63%, 12/01/29	1,460	1,528,094
		4,129,873
Illinois 5.6%		
City of Chicago Illinois, Refunding RB, American Airlines Inc. Project, 5.50%, 12/01/30	4,140	3,467,457
Illinois Finance Authority, RB: Navistar International, Recovery Zone, 6.50%, 10/15/40	950	985,635
Roosevelt University Project, 6.50%, 4/01/44	2,470	2,642,184
Rush University Medical Center Obligation Group, Series B, 7.25%, 11/01/30	1,170	1,351,104
Illinois Finance Authority, Refunding RB: CAB, Clare Water Tower, Series B, 0.04%, 5/15/50 (a)	885	11,160
Clare Water Tower, Series A-7, 6.13%, 5/15/41	2,065	1,364,015
Friendship Village of Schaumburg, 7.25%, 2/15/45	2,370	2,452,144
Primary Health Care Centers Program, 6.60%, 7/01/24	685	623,706

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Metropolitan Pier & Exposition Authority, Refunding RB, CAB, McCormick Place Expansion Project, Series B (AGM), 6.25%, 6/15/46 (a)	5,845	659,199
Village of Lincolnshire Illinois, Special Tax Bonds, Sedgebrook Project, 6.25%, 3/01/34	1,070	969,163
Village of Wheeling Illinois, Tax Allocation Bonds, North Milwaukee/Lake-Cook TIF Project, 6.00%, 1/01/25	825	779,790

15,305,557

Indiana 0.8%

Indiana Finance Authority, Refunding RB, Improvement, U.S. Steel Corp., 6.00%, 12/01/26	900	957,969
Vigo County Hospital Authority Indiana, RB, Union Hospital Inc. (b): 5.70%, 9/01/37	615	575,738
5.75%, 9/01/42	765	716,346

2,250,053

Municipal Bonds	Par (000)	Value
-----------------	--------------	-------

Kentucky 0.4%

Kentucky Economic Development Finance Authority, Refunding RB, Owensboro Medical Health System, Series A, 6.38%, 6/01/40	\$ 935	\$ 990,988
--	--------	------------

Louisiana 1.1%

Louisiana Local Government Environmental Facilities & Community Development Authority, RB, Westlake Chemical Corp. Projects, 6.75%, 11/01/32	3,000	3,182,880
--	-------	-----------

Maryland 2.3%

Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35	615	640,726
Maryland EDC, Refunding RB, CNX Marine Terminals, Inc., 5.75%, 9/01/25	2,435	2,486,135
Maryland Health & Higher Educational Facilities Authority, RB, Washington Christian Academy, 5.50%, 7/01/38	590	253,682
Maryland Health & Higher Educational Facilities Authority, Refunding RB, Doctor s Community Hospital, 5.75%, 7/01/38	1,845	1,817,196
Maryland State Energy Financing Administration, RB, Cogeneration, AES Warrior Run, AMT, 7.40%, 9/01/19	1,080	1,080,572

6,278,311

Massachusetts 0.4%

Massachusetts Development Finance Agency, Refunding RB, Eastern Nazarene College, 5.63%, 4/01/29	80	74,818
Massachusetts Health & Educational Facilities Authority, RB, Jordan Hospital, Series E, 6.75%, 10/01/33	1,150	1,153,082

1,227,900

Michigan 2.7%

Advanced Technology Academy, RB, 6.00%, 11/01/37	900	870,831
--	-----	---------

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

County of Wayne Michigan, GO, Building Improvement, Series A, 6.75%, 11/01/39	545	583,526
Monroe County Hospital Finance Authority, Refunding RB, Mercy Memorial Hospital Corp. Obligation, 5.50%, 6/01/35	1,740	1,535,463
Royal Oak Hospital Finance Authority Michigan, Refunding RB, William Beaumont Hospital, 8.25%, 9/01/39	3,735	4,489,694
		<u>7,479,514</u>
Minnesota 0.7%		
City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series A, 6.75%, 11/15/32	1,785	2,035,418
Missouri 0.5%		
Kirkwood IDA Missouri, RB, Aberdeen Heights, Series A, 8.25%, 5/15/39	1,370	1,449,583
Multi-State 0.3%		
MuniMae TE Bond Subsidiary LLC, 7.50%, 6/30/49 (b)(c)(d)	933	858,116
Nevada 0.2%		
County of Clark Nevada, Special Assessment Bonds, Special Improvement District No. 142, Local Improvement, 6.38%, 8/01/23	605	590,256
New Hampshire 0.4%		
New Hampshire Health & Education Facilities Authority, RB, Catholic Medical Center, 5.00%, 7/01/36	1,165	1,029,930

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

19

Schedule of Investments (continued)

BlackRock MuniAssets Fund, Inc. (MUA)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
New Jersey 7.0%		
New Jersey EDA, RB, Continental Airlines Inc. Project, AMT: 6.63%, 9/15/12	\$ 1,000	\$ 1,013,510
6.25%, 9/15/19	2,000	1,986,400
6.40%, 9/15/23	1,000	999,910
6.25%, 9/15/29	3,330	3,263,267
9.00%, 6/01/33 (d)	1,250	1,329,237
New Jersey EDA, Refunding RB, Newark Airport Marriott Hotel, 7.00%, 10/01/14	2,500	2,509,300
New Jersey Educational Facilities Authority, Refunding RB, University of Medicine & Dentistry, Series B, 7.50%, 12/01/32	2,510	2,913,206
New Jersey Health Care Facilities Financing Authority, RB, Pascack Valley Hospital Association, 6.63%, 7/01/36 (e)(f)	2,000	20
New Jersey Health Care Facilities Financing Authority, Refunding RB, St. Joseph's Healthcare System, 6.63%, 7/01/38	2,410	2,526,909
New Jersey Transportation Trust Fund Authority, RB, CAB, Transportation System, Series C (AMBAC), 5.05%, 12/15/35 (a)	3,450	807,404
Tobacco Settlement Financing Corp. New Jersey, Refunding RB, Series 1A, 4.50%, 6/01/23	2,310	2,161,883
		19,511,046
New York 6.2%		
Brooklyn Arena Local Development Corp., RB, Barclays Center Project, 6.38%, 7/15/43	1,000	1,086,110
Chautauqua County Industrial Development Agency, RB, NRG Dunkirk Power Project, 5.88%, 4/01/42	2,485	2,598,962
Dutchess County Industrial Development Agency New York, Refunding RB, St. Francis Hospital, Series A, 7.50%, 3/01/29	1,400	1,406,846
Metropolitan Transportation Authority, RB, Series 2008C, 6.50%, 11/15/28	3,685	4,352,169
New York City Industrial Development Agency, RB: American Airlines Inc., JFK International Airport, AMT, 8.00%, 8/01/28 (d)	1,045	1,121,149
British Airways Plc Project, AMT, 7.63%, 12/01/32	2,400	2,458,800
Series C, 6.80%, 6/01/28	510	535,571
Special Needs Facilities Pooled Program, Series C-1, 6.63%, 7/01/29	1,515	1,424,479
New York Liberty Development Corp., Refunding RB, Second Priority, Bank of America Tower at One Bryant Park Project, 6.38%, 7/15/49	750	803,573
Yonkers Industrial Development Agency New York, RB, Sarah Lawrence College Project, Series A, 6.00%,	1,240	1,319,435

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

6/01/41

	17,107,094
--	------------

North Carolina 1.6%

North Carolina Capital Facilities Finance Agency, RB, Duke Energy Carolinas, Series B, 4.38%, 10/01/31	985	965,773
North Carolina Capital Facilities Finance Agency, Refunding RB, Duke Energy Carolinas, Series B, 4.63%, 11/01/40	985	958,503
North Carolina Medical Care Commission, Refunding RB, First Mortgage, Deerfield, Series A, 6.13%, 11/01/38	2,335	2,369,605
		4,293,881

Ohio 1.6%

Buckeye Tobacco Settlement Financing Authority, RB, Asset-Backed, Senior Series A-2: 5.13%, 6/01/24	2,250	1,958,760
6.50%, 6/01/47	3,935	2,508,481
		4,467,241

Municipal Bonds	Par (000)	Value
Pennsylvania 8.5%		
Allegheny County Hospital Development Authority, Refunding RB, Health System, West Penn, Series A, 5.38%, 11/15/40	\$ 2,460	\$ 1,893,708
Bucks County IDA, RB, Ann s Choice Inc. Facility, Series A: 6.13%, 1/01/25	200	201,896
6.25%, 1/01/35	1,550	1,523,480
Cumberland County Municipal Authority, RB, Diakon Lutheran, 6.38%, 1/01/39	3,655	3,862,896
Lancaster County Hospital Authority, RB, Brethren Village Project, Series A: 6.25%, 7/01/26	685	694,604
6.50%, 7/01/40	990	984,723
Montgomery County IDA Pennsylvania, MRB, Whitmarsh Continuing Care, 6.13%, 2/01/28	2,330	2,146,979
Pennsylvania Economic Development Financing Authority, RB, AMT: National Gypsum Co., Series A, 6.25%, 11/01/27	3,250	2,900,332
Reliant Energy, Series B, 6.75%, 12/01/36	2,040	2,101,118
Philadelphia Authority for Industrial Development, RB, AMT: Commercial Development, 7.75%, 12/01/17	5,000	5,006,400
Subordinate, Air Cargo, Series A, 7.50%, 1/01/25	2,270	2,244,145
		23,560,281

Puerto Rico 0.9%

Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.50%, 8/01/44	1,650	1,899,381
Puerto Rico Sales Tax Financing Corp., Refunding RB, CAB, First Sub-Series C, 6.52%, 8/01/38 (a)	2,630	470,191

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

		2,369,572
Rhode Island 0.8%		
Central Falls Detention Facility Corp., Refunding RB, 7.25%, 7/15/35	2,495	2,174,542
South Carolina 0.4%		
Connector 2000 Association Inc., RB, CAB, Senior Series B, 11.47%, 1/01/14 (a)(e)(f)	1,485	195,203
South Carolina Jobs, EDA, Refunding RB, Palmetto Health, 5.50%, 8/01/26	975	1,001,072
		1,196,275
Tennessee 0.6%		
Knox County Health Educational & Housing Facilities Board Tennessee, Refunding RB, Covenant, Series A (AGM), 4.69%, 1/01/40 (a)	5,820	1,212,190
Shelby County Health Educational & Housing Facilities Board, RB, Village at Germantown, 6.25%, 12/01/34	355	313,170
		1,525,360
Texas 9.7%		
Bexar County Health Facilities Development Corp., RB, Army Retirement Residence Project, 6.20%, 7/01/45	2,985	3,072,162
Brazos River Authority, Refunding RB, Texas Utility Co., Series, AMT, 7.70%, 4/01/33	2,550	943,500
Central Texas Regional Mobility Authority, RB: CAB, 7.56%, 1/01/29 (a)	2,000	643,340
CAB, 7.65%, 1/01/30 (a)	1,170	341,324
CAB, 7.71%, 1/01/31 (a)	2,000	542,880
CAB, 7.77%, 1/01/32 (a)	3,500	886,935
CAB, 7.78%, 1/01/33 (a)	1,540	363,394
Senior Lien, 5.75%, 1/01/25	650	686,933
City of Houston Texas, RB, Special Facilities, Continental Airlines, Series E, AMT, 6.75%, 7/01/21	2,685	2,695,982
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, Series B, 7.13%, 12/01/31	1,500	1,724,925

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniAssets Fund, Inc. (MUA)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Texas (concluded)		
La Vernia Higher Education Finance Corp., RB, KIPP Inc., 6.38%, 8/15/44	\$ 860	\$ 909,063
Matagorda County Navigation District No. 1 Texas, Refunding RB, Central Power & Light Co. Project, Series A, 6.30%, 11/01/29	1,240	1,370,212
North Texas Tollway Authority, RB, Toll, 2nd Tier, Series F, 6.13%, 1/01/31	2,775	2,994,086
Tarrant County Cultural Education Facilities Finance Corp., RB, Series A:		
CC Young Memorial Home, 8.00%, 2/15/38	1,035	1,093,105
Senior Living Center Project, 8.25%, 11/15/44	2,490	2,518,212
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien:		
LBJ Infrastructure Group LLC, LBJ Freeway Managed Lanes Project, 7.00%, 6/30/40	2,640	2,869,627
NTE Mobility Partners LLC, North Tarrant Express Managed Lanes Project, 6.88%, 12/31/39	2,330	2,528,376
Texas State Public Finance Authority, Refunding ERB, KIPP Inc., Series A (ACA), 5.00%, 2/15/28	575	555,577
		26,739,633
U.S. Virgin Islands 1.1%		
United States Virgin Islands, Refunding RB, Senior Secured, Hovensa Coker Project, AMT, 6.50%, 7/01/21	3,000	3,052,050
Utah 0.6%		
County of Carbon Utah, Refunding RB, Laidlaw Environmental, Series A, AMT, 7.45%, 7/01/17	1,660	1,663,951
Vermont 0.3%		
Vermont Economic Development Authority, Refunding MRB, Wake Robin Corp. Project, Series A (ACA), 6.30%, 3/01/33	950	924,397
Virginia 2.0%		
Dulles Town Center Community Development Authority, Special Assessment Bonds, Dulles Town Center Project, 6.25%, 3/01/26	1,410	1,382,632
Fairfax County EDA, Refunding RB, Goodwin House Inc.: 5.13%, 10/01/37	585	583,701
5.13%, 10/01/42	450	444,060
Lexington IDA, Refunding MRB, Kendal at Lexington, Series A, 5.38%, 1/01/28	40	36,382
Tobacco Settlement Financing Corp. Virginia, Refunding RB, Senior Series B1, 5.00%, 6/01/47	4,350	3,053,961

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

		5,500,736
Wisconsin 2.2%		
Wisconsin Health & Educational Facilities Authority, RB:		
New Castle Place Project, Series A, 7.00%, 12/01/31	1,855	1,858,395
Wheaton Franciscan Healthcare, 5.25%, 8/15/34	3,695	3,470,418
Wisconsin Health & Educational Facilities Authority, Refunding RB, St. John's Communities Inc., Series A:		
7.25%, 9/15/29	250	258,650
7.63%, 9/15/39	505	532,093
		6,119,556
Wyoming 1.3%		
County of Sweetwater Wyoming, Refunding RB, FMC Corp. Project, AMT, 5.60%, 12/01/35		
	3,600	3,633,048
Total Municipal Bonds	91.5%	253,330,457

Municipal Bonds Transferred to Tender Option Bond Trusts (g)	Par (000)	Value
District of Columbia 1.6%		
District of Columbia Water & Sewer Authority, RB, Series A, 6.00%, 10/01/35	\$ 3,951	\$ 4,496,733
Florida 3.3%		
County of Miami-Dade Florida, RB, Miami International Airport, Series A, AMT (AGC), 5.25%, 10/01/33	8,870	9,019,016
Virginia 3.2%		
Virginia HDA, RB, Sub-Series H-1 (NPFGC), 5.38%, 7/01/36	8,690	8,852,156
Total Municipal Bonds Transferred to Tender Option Bond Trusts	8.1%	22,367,905

Total Long-Term Investments (Cost \$270,850,753) 99.6%	275,698,362
--	-------------

Short-Term Securities	Shares
FII Institutional Tax-Exempt Fund, 0.12% (h)(i)	2,949,596
Total Short-Term Securities (Cost \$2,949,596) 1.1%	2,949,596
Total Investments (Cost \$273,800,349*) 100.7%	278,647,958
Other Assets Less Liabilities 3.2%	8,909,854

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Liability for Trust Certificates, Including Interest Expense and Fees Payable	(3.9)%	(10,762,397)
Net Assets	100.0%	\$ 276,795,415

* The cost and unrealized appreciation (depreciation) of investments as of October 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 262,507,383
Gross unrealized appreciation	\$ 17,379,332
Gross unrealized depreciation	(11,994,403)
Net unrealized appreciation	\$ 5,384,929

- (a) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (b) Security exempt from registration under Rule 144A of the Securities Act of 1933. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (c) Security represents a beneficial interest in a trust. The collateral deposited into the trust is federally tax-exempt revenue bonds issued by various state or local governments, or their respective agencies or authorities. The security is subject to remarketing prior to its stated maturity.
- (d) Variable rate security. Rate shown is as of report date.
- (e) Issuer filed for bankruptcy and/or is in default of interest payments.
- (f) Non-income producing security.
- (g) 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. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.
- (h) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at April 30, 2010	Net Activity	Shares Held at October 31, 2010	Income
FFI Institutional Tax-Exempt Fund	149,925	2,799,671	2,949,596	\$1,248

- (i) Represents the current yield as of report date.

See Notes to Financial Statements.

Schedule of Investments (concluded)

BlackRock MuniAssets Fund, Inc. (MUA)

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 assets and liabilities

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 methodologies 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 Note 1 of the Notes to Financial Statements.

The following table summarizes the inputs used as of October 31, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments ¹		\$ 275,698,362		\$ 275,698,362
Short-Term Securities	\$ 2,949,596			2,949,596
Total	\$ 2,949,596	\$ 275,698,362		\$ 278,647,958

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

See Notes to Financial Statements.

Schedule of Investments October 31, 2010 (Unaudited)

BlackRock MuniEnhanced Fund, Inc. (MEN)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Alabama 1.3%		
County of Jefferson Alabama, RB, Series A:		
5.50%, 1/01/22	\$ 2,750	\$ 2,554,310
4.75%, 1/01/25	2,200	1,802,372
		4,356,682
Alaska 0.4%		
Borough of Matanuska-Susitna Alaska, RB, Goose Creek Correctional Center (AGC), 6.00%, 9/01/28		
	1,200	1,404,420
Arizona 1.5%		
State of Arizona, COP, Department of Administration, Series A (AGM):		
5.00%, 10/01/27	3,250	3,402,263
5.25%, 10/01/28	1,000	1,058,350
5.00%, 10/01/29	400	413,360
		4,873,973
California 21.1%		
Alameda Corridor Transportation Authority, Refunding RB, CAB, Subordinate Lien, Series A (AMBAC) (a):		
5.65%, 10/01/24	10,185	8,579,538
5.57%, 10/01/25	6,000	5,025,720
Anaheim Public Financing Authority California, RB, Senior, Public Improvements Project, Series A (AGM), 6.00%, 9/01/24		
	5,000	5,861,250
Antelope Valley Community College District, GO, Election of 2004, Series B (NPFGC), 5.25%, 8/01/39		
	600	624,150
Arcadia Unified School District California, GO, CAB, Election of 2006, Series A (AGM), 4.96%, 8/01/39 (b)		
	1,600	262,176
Cabrillo Community College District California, GO, CAB, Election of 2004, Series B (NPFGC), 5.18%, 8/01/37 (b)		
	2,400	457,224
California Health Facilities Financing Authority, Refunding RB, St. Joseph Health System, Series A, 5.75%, 7/01/39		
	550	584,661
California State University, RB, Systemwide, Series A (NPFGC), 5.00%, 11/01/35		
	1,405	1,420,146
California State University, Refunding RB, Systemwide, Series A (AGM), 5.00%, 11/01/37		
	2,000	2,055,860
Chino Valley Unified School District, GO, Election of 2002, Series C (NPFGC), 5.25%, 8/01/30		
	850	876,588
City of Redding California, COP, Refunding, Series A (AGM), 5.00%, 6/01/30		
	1,420	1,483,730
	900	935,487

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Fresno Unified School District California, GO, Election of 2001, Series E (AGM), 5.00%, 8/01/30		
Los Angeles Department of Water & Power, RB, Series C (NPFGC), 5.00%, 7/01/29	5,160	5,350,662
Metropolitan Water District of Southern California, RB, Series B-1 (NPFGC):		
5.00%, 10/01/29	2,965	3,075,565
5.00%, 10/01/36	1,655	1,703,392
Norco Redevelopment Agency California, Tax Allocation Bonds, Refunding, Project Area No. 1 (NPFGC), 5.13%, 3/01/30	5,000	4,783,850
Orange County Sanitation District, COP, Series B (AGM):		
5.00%, 2/01/30	1,500	1,599,300
5.00%, 2/01/31	900	955,458
Poway Redevelopment Agency California, Tax Allocation Bonds, Refunding, Paguay Redevelopment Project (AMBAC), 5.13%, 6/15/33	1,750	1,629,145
Sacramento Unified School District California, GO, Election of 2002 (NPFGC), 5.00%, 7/01/30	4,150	4,285,705
San Mateo County Community College District, GO, CAB, Election of 2001, Series C (NPFGC), 5.54%, 9/01/30 (b)	12,740	4,431,864

	Par (000)	Value
--	--------------	-------

California (concluded)

State of California, GO:		
5.13%, 6/01/27	\$ 20	\$ 20,296
5.13%, 6/01/31	60	60,137
Stockton Public Financing Authority California, RB, Parking & Capital Projects (NPFGC), 5.13%, 9/01/30	6,145	6,228,879
Ventura County Community College District, GO, Election of 2002, Series B (NPFGC), 5.00%, 8/01/30	2,325	2,418,511
West Basin Municipal Water District California, COP, Refunding, Series B (AGC), 5.00%, 8/01/30	5,035	5,264,999
		69,974,293

Colorado 0.6%

Colorado Health Facilities Authority, RB, Covenant Retirement Communities, Series A (Radian):		
5.50%, 12/01/27	1,200	1,147,452
5.50%, 12/01/33	675	631,476
Colorado Housing & Finance Authority, Refunding RB, S/F Program, Senior Series A-2, AMT, 7.50%, 4/01/31	335	353,144
		2,132,072

District of Columbia 1.7%

District of Columbia, RB, Series B-1 (NPFGC), 5.00%, 2/01/31	5,530	5,572,747
--	-------	-----------

Florida 12.7%

Broward County School Board Florida, COP, Series A (AGM), 5.25%, 7/01/33	1,600	1,664,384
City of Tallahassee Florida, RB (NPFGC), 5.00%, 10/01/32	4,000	4,139,320
Collier County School Board, COP (AGM), 5.00%, 2/15/23	3,000	3,202,890

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

County of Broward Florida, RB, Series A, 5.25%, 10/01/34	850	910,180
County of Duval Florida, COP, Master Lease Program (AGM), 5.00%, 7/01/33	3,000	3,050,850
County of Miami-Dade Florida, GO, Building Better Communities Program, Series B-1, 5.75%, 7/01/33	1,400	1,528,506
County of Miami-Dade Florida, RB, Water & Sewer System (AGM), 5.00%, 10/01/39	4,950	5,199,975
County of Miami-Dade Florida, Refunding RB, Miami International Airport, AMT (AGC), 5.00%, 10/01/40	9,900	9,853,866
County of Orange Florida, Refunding RB, Series B (NPFGC), 5.13%, 1/01/32	4,200	4,323,354
Hillsborough County Aviation Authority Florida, RB, Series A, AMT (AGC), 5.38%, 10/01/33	1,750	1,793,575
Miami-Dade County School Board, COP, Refunding, Series B (AGC):		
5.25%, 5/01/31	100	105,907
5.00%, 5/01/33	2,000	2,028,740
Orange County School Board, COP, Series A (NPFGC), 5.00%, 8/01/31	2,000	2,056,200
Sarasota County Public Hospital District, RB, Sarasota Memorial Hospital Project, Series A, 5.63%, 7/01/39	275	289,325
South Florida Water Management District, COP (AGC), 5.00%, 10/01/22	2,000	2,138,740
		42,285,812

Georgia 4.0%

Augusta-Richmond County Georgia, RB (AGM), 5.25%, 10/01/39	2,300	2,402,488
Gwinnett County Hospital Authority, Refunding RB, Gwinnett Hospital System, Series D (AGM), 5.50%, 7/01/41	825	857,794
Municipal Electric Authority of Georgia, Refunding RB, Series EE (AMBAC), 7.00%, 1/01/25	7,475	9,969,407
		13,229,689

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniEnhanced Fund, Inc. (MEN)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Illinois 21.5%		
Chicago Board of Education Illinois, GO, Refunding, Series A: (AGM), 5.50%, 12/01/31	\$ 3,000	\$ 3,495,750
Chicago School Reform Board, (NPFGC), 5.50%, 12/01/26	1,000	1,156,590
City of Chicago Illinois, ARB, General, Third Lien, Series B-2, AMT: (AGM), 5.75%, 1/01/23	5,670	5,950,438
(Syncora), 6.00%, 1/01/29	2,500	2,612,525
City of Chicago Illinois, RB, Series A (AGC), 5.00%, 1/01/38	2,000	2,059,360
City of Chicago Illinois, Refunding RB, General Airport, Third Lien, Series A, AMT (NPFGC), 5.75%, 1/01/21	9,000	9,219,690
County of Cook Illinois, GO, Capital Improvement, Series C (AMBAC), 5.50%, 11/15/12 (c)	2,460	2,710,133
County of Cook Illinois, GO, Refunding, Series A, 5.25%, 11/15/33	1,350	1,443,460
Illinois Municipal Electric Agency, RB, Series A (NPFGC), 5.25%, 2/01/35	1,000	1,036,010
Illinois Sports Facilities Authority, RB, State Tax Supported (AMBAC), 5.50%, 6/15/30	20,120	21,313,720
Metropolitan Pier & Exposition Authority, RB, CAB, McCormick Place Expansion Project, Series A (NPFGC), 5.96%, 12/15/33 (b)	9,950	2,529,588
Metropolitan Pier & Exposition Authority, Refunding RB, CAB, McCormick Place Expansion Project, Series B (AGM) (b): 5.82%, 6/15/27	1,300	521,456
6.25%, 6/15/44	3,450	441,255
Regional Transportation Authority, RB, Series A (AMBAC), 7.20%, 11/01/20	10,115	12,524,393
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/34	4,275	4,473,916
		71,488,284
Indiana 0.7%		
Indiana Municipal Power Agency, RB, Series B, 5.75%, 1/01/34	400	432,780
Indianapolis Local Public Improvement Bond Bank, Refunding RB, Waterworks Project, Series A (AGC), 5.50%, 1/01/38	1,825	2,004,781
		2,437,561
Iowa 1.9%		

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Iowa Finance Authority, RB, Series A (AGC), 5.63%, 8/15/37	5,725	6,248,895
---	-------	-----------

Louisiana 1.2%

Louisiana Public Facilities Authority, Refunding RB, Christus Health, Series B (AGC), 6.50%, 7/01/30	1,250	1,431,225
Rapides Finance Authority Louisiana, RB, Cleco Power LLC Project, AMT (AMBAC), 4.70%, 11/01/36 (d)	900	817,767
State of Louisiana, RB, Series A (NPFGC), 5.00%, 5/01/35	1,740	1,788,685
		4,037,677

Maryland 0.4%

Maryland Community Development Administration, Refunding RB, Residential, Series A, AMT, 5.75%, 9/01/39	1,200	1,268,484
---	-------	-----------

Municipal Bonds	Par (000)	Value
------------------------	----------------------	--------------

Massachusetts 3.1%

Massachusetts HFA, RB, AMT (AGM):		
Rental Mortgage, Series F, 5.25%, 1/01/46	\$ 2,700	\$ 2,719,116
S/F Housing, Series 128, 4.80%, 12/01/27 (d)	1,600	1,609,168
Massachusetts HFA, Refunding RB, Rental Housing, Series A, AMT (AGM), 5.15%, 7/01/26	2,870	2,928,232
Massachusetts Water Resources Authority, Refunding RB, General, Series A (NPFGC), 5.00%, 8/01/34	2,700	2,859,921
		10,116,437

Michigan 5.0%

City of Detroit Michigan, RB, Series B:		
Second Lien, (AGM), 6.25%, 7/01/36	400	444,916
Second Lien, (AGM), 7.00%, 7/01/36	200	234,146
Senior Lien, (AGM), 7.50%, 7/01/33	700	853,006
System, Second Lien, (NPFGC), 5.00%, 7/01/36	3,600	3,518,280
City of Detroit Michigan, Refunding RB, Second Lien, Series E (BHAC), 5.75%, 7/01/31	2,500	2,704,050
Kalamazoo Hospital Finance Authority, RB, Bronson Methodist Hospital (AGM), 5.25%, 5/15/36	425	438,511
Michigan Higher Education Student Loan Authority, Refunding RB, Student Loan, Series XVII-G, AMT (AMBAC), 5.20%, 9/01/20	1,500	1,520,625
Michigan Strategic Fund, RB, Detroit Edison Co. Project, Series C, AMT (Syncora), 5.45%, 12/15/32	4,300	4,245,304
Michigan Strategic Fund, Refunding RB, AMT (Syncora), Detroit Edison Co.:		
Pollution, Series C, 5.65%, 9/01/29	1,410	1,414,230
Project, Series A, 5.50%, 6/01/30	1,300	1,300,299
		16,673,367

Minnesota 0.9%

City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series B (AGC), 6.50%, 11/15/38	2,500	2,848,750
---	-------	-----------

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Mississippi 0.9%

Mississippi Development Bank Special Obligation, Refunding RB, Jackson Mississippi Water and Sewer System (AGM), 5.00%, 9/01/34	2,800	2,862,552
---	-------	-----------

Nevada 5.2%

City of Carson City Nevada, RB, Carson-Tahoe Hospital Project, Series A (Radian), 5.50%, 9/01/33	3,100	3,052,229
City of Las Vegas Nevada, GO, Limited Tax, Performing Arts Center, 6.00%, 4/01/34	850	950,529
County of Clark Nevada, RB: Las Vegas-McCarran International Airport, Series A (AGC), 5.25%, 7/01/39	3,800	3,936,838
Southwest Gas Corp. Project, Series A, AMT (FGIC), 4.75%, 9/01/36	75	67,285
Southwest Gas Corp. Project, Series D, AMT (NPFGC), 5.25%, 3/01/38	1,200	1,182,432
Subordinate Lien, Series A-2 (NPFGC), 5.00%, 7/01/30	1,500	1,521,990
Subordinate Lien, Series A-2 (NPFGC), 5.00%, 7/01/36	3,200	3,209,344
System, Subordinate Lien, Series C (AGM), 5.00%, 7/01/26	1,475	1,556,656
Las Vegas Valley Water District, GO, Refunding, Series A (NPFGC), 5.00%, 6/01/24	1,600	1,693,984

17,171,287

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniEnhanced Fund, Inc. (MEN)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
New Jersey 9.0%		
New Jersey EDA, RB:		
Cigarette Tax (Radian), 5.50%, 6/15/31	\$ 600	\$ 584,940
Cigarette Tax (Radian), 5.75%, 6/15/34	305	296,911
Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/31	9,325	9,651,188
Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/33	7,800	8,038,056
School Facilities Construction, Series O, 5.13%, 3/01/28	2,250	2,406,668
School Facilities Construction, Series Z (AGC), 6.00%, 12/15/34	2,000	2,291,840
New Jersey EDA, Refunding RB, School Facilities Construction, Series N-1:		
(AGM), 5.50%, 9/01/25	5,000	5,814,600
(NPFGC), 5.50%, 9/01/28	815	929,320
		30,013,523
New York 3.3%		
Erie County Industrial Development Agency, RB, City School District of Buffalo Project, Series A (AGM), 5.75%, 5/01/28		
	1,500	1,696,710
Metropolitan Transportation Authority, RB, Series 2008C, 6.50%, 11/15/28	4,000	4,724,200
New York City Transitional Finance Authority, RB, Fiscal 2009, Series S-4, 5.50%, 1/15/34	2,750	3,072,822
New York State Dormitory Authority, ERB, Series B, 5.75%, 3/15/36	1,200	1,385,112
		10,878,844
North Carolina 0.5%		
North Carolina Medical Care Commission, RB, Novant Health Obligation, Series A, 4.75%, 11/01/43 (e)		
	1,700	1,634,295
Ohio 0.3%		
Ohio Higher Educational Facility Commission, Refunding RB, Summa Health System, 2010 Project (AGC), 5.25%, 11/15/40		
	1,025	1,050,728
Pennsylvania 1.2%		
Pennsylvania HFA, Refunding RB, Series 99A, AMT, 5.25%, 10/01/32		
	1,500	1,536,705
Pennsylvania Turnpike Commission, RB, CAB, Sub-Series E, 6.48%, 12/01/38 (a)	2,750	2,057,715

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Philadelphia School District, GO, Series E, 6.00%, 9/01/38	400	436,204
		<u>4,030,624</u>

Puerto Rico 1.9%

Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.38%, 8/01/39	3,200	3,657,376
Puerto Rico Sales Tax Financing Corp., Refunding RB: CAB, Series A (NPFGC), 5.70%, 8/01/41 (b)	8,500	1,365,355
First Sub-Series C, 6.00%, 8/01/39	1,180	1,328,350
		<u>6,351,081</u>

Rhode Island 2.1%

Providence Public Building Authority Rhode Island, RB, Series A (AGM), 6.25%, 12/15/10 (c)	4,345	4,421,690
Rhode Island Health & Educational Building Corp., Refunding RB, Public Schools Financing Program, Series E (AGC), 6.00%, 5/15/29	2,375	2,668,336
		<u>7,090,026</u>

Municipal Bonds	Par (000)	Value
Tennessee 1.8%		
Knox County Health Educational & Housing Facilities Board Tennessee, Refunding RB, Covenant Health, Series A, 5.04%, 1/01/38 (b)	\$ 600	\$ 123,684
Metropolitan Government of Nashville & Davidson County Health & Educational Facilities Board, Refunding RB, Vanderbilt University, Series B, 5.50%, 10/01/29	5,000	5,789,600
		<u>5,913,284</u>

Texas 12.8%

City of Houston Texas, Refunding RB, Combined, First Lien, Series A (AGC):		
6.00%, 11/15/35	2,100	2,432,682
5.38%, 11/15/38	1,350	1,482,179
Dallas-Fort Worth International Airport Facilities Improvement Corp., RB, Series A, AMT (NPFGC), 5.50%, 11/01/33	13,000	13,171,990
Lewisville ISD Texas, GO, Refunding, CAB, School Building (NPFGC), 4.67%, 8/15/24 (b)	4,475	2,396,228
Mansfield ISD Texas, GO, School Building (PSF-GTD), 5.00%, 2/15/33	1,725	1,840,816
Matagorda County Navigation District No. 1 Texas, Refunding RB, Central Power & Light Co. Project, AMT (NPFGC), 5.20%, 5/01/30 (d)	2,400	2,437,104
North Texas Tollway Authority, RB (AGC), System, First Tier:		
Series K-1, 5.75%, 1/01/38	3,800	4,206,410
Series K-2, 6.00%, 1/01/38	4,015	4,536,950
North Texas Tollway Authority, Refunding RB First Tier:		
Series A, 6.00%, 1/01/28	2,795	3,123,385
System, (NPFGC), 5.75%, 1/01/40	1,600	1,697,168

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Texas State Turnpike Authority, RB, First Tier, Series A (AMBAC), 5.50%, 8/15/39	5,150	5,224,520
		42,549,432
Utah 1.6%		
Utah Transit Authority, RB, Series A (AGM), 5.00%, 6/15/36	5,000	5,332,450
Virginia 0.6%		
Virginia HDA, RB, Sub-Series H-1 (NPFGC), 5.35%, 7/01/31	1,955	1,969,506
Washington 1.4%		
Washington Health Care Facilities Authority, RB, Providence Health & Services, Series A: 5.00%, 10/01/39	900	930,726
5.25%, 10/01/39	625	658,200
Washington Health Care Facilities Authority, Refunding RB, Providence Health, Series D (AGM), 5.25%, 10/01/33	2,800	2,990,820
		4,579,746
Wisconsin 1.0%		
Wisconsin Health & Educational Facilities Authority, RB, Ascension Health Senior Credit Group, 5.00%, 11/15/33	1,375	1,432,956
Wisconsin Housing & EDA, Refunding RB, Series E, AMT, 5.50%, 9/01/38	1,800	1,937,268
		3,370,224
Total Municipal Bonds 121.6%		403,746,745

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniEnhanced Fund, Inc. (MEN)
(Percentages shown are based on Net Assets)

Municipal Bonds Transferred to Tender Option Bond Trusts (f)	Par (000)	Value
Arizona 0.4%		
Phoenix Civic Improvement Corp., RB, Junior Lien, Series A, 5.00%, 7/01/34	\$ 1,200	\$ 1,282,608
California 5.2%		
Anaheim Public Financing Authority California, RB, Electric System Distribution Facilities, Series A (AGM), 5.00%, 10/01/31	959	966,449
Los Angeles Community College District California, GO, Election of 2001, Series A (AGM), 5.00%, 8/01/32	2,500	2,622,425
Orange County Sanitation District, COP (NPFGC), 5.00%, 2/01/33	7,458	7,625,172
San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33	404	437,973
San Diego County Water Authority, COP, Refunding, Series 2008-A (AGM), 5.00%, 5/01/33	2,810	2,962,695
Tamalpais Union High School District California, GO, Election of 2001 (AGM), 5.00%, 8/01/28	1,605	1,688,412
University of California, RB, Series O, 5.75%, 5/15/34	840	957,886
		<u>17,261,012</u>
Colorado 0.3%		
Colorado Health Facilities Authority, Refunding RB, Catholic Healthcare, Series A, 5.50%, 7/01/34	900	969,088
District of Columbia 1.0%		
District of Columbia, RB, Series A, 5.50%, 12/01/30	1,005	1,151,026
District of Columbia Water & Sewer Authority, RB, Series A, 6.00%, 10/01/35	1,770	2,014,992
		<u>3,166,018</u>
Florida 5.8%		
City of Tallahassee Florida, RB (NPFGC), 5.00%, 10/01/37	7,500	7,711,650
Florida State Board of Education, GO, Series D, 5.00%, 6/01/37	1,349	1,414,672
Miami-Dade County School Board, COP, Refunding, Series B (AGC), 5.00%, 5/01/33	10,000	10,143,700
		<u>19,270,022</u>
Georgia 5.4%		
City of Atlanta Georgia, RB, General, Series B (AGM), 5.25%, 1/01/33	17,356	17,921,700

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Illinois 0.6%		
Illinois State Toll Highway Authority, RB, Series B, 5.50%, 1/01/33	1,880	2,031,973
Louisiana 1.7%		
State of Louisiana, RB, Series A (AGM), 5.00%, 5/01/36	5,400	5,629,230
Massachusetts 3.4%		
Massachusetts School Building Authority, RB, Series A (AGM), 5.00%, 8/15/30	10,600	11,216,981
Nevada 3.4%		
City of Las Vegas Nevada, GO, Limited Tax, Performing Arts Center, 6.00%, 4/01/39	3,778	4,201,606
Clark County Water Reclamation District, GO, Series B: 5.50%, 7/01/29	4,499	5,030,795
5.75%, 7/01/34	1,829	2,061,968
		11,294,369
New Hampshire 2.3%		
New Hampshire Health & Education Facilities Authority, RB, Dartmouth-Hitchcock Obligation (AGM), 5.50%, 8/01/27	7,390	7,761,495
Municipal Bonds Transferred to Tender Option Bond Trusts (f)		
	Par (000)	Value
New York 1.8%		
New York City Municipal Water Finance Authority, RB, Fiscal 2009, Series A, 5.75%, 6/15/40	\$ 1,260	\$ 1,438,918
New York State Thruway Authority, RB, Series G (AGM), 5.00%, 1/01/32	3,100	3,233,424
Triborough Bridge & Tunnel Authority, RB, General, Series A-2, 5.25%, 11/15/34	1,300	1,420,159
		6,092,501
Ohio 0.2%		
State of Ohio, RB, Cleveland Clinic Health, Series B, 5.50%, 1/01/34	580	628,326
South Carolina 2.7%		
Charleston Educational Excellence Finance Corp., RB, Charleston County School (AGC):		
5.25%, 12/01/28	3,120	3,363,079
5.25%, 12/01/29	2,765	2,955,149
5.25%, 12/01/30	1,010	1,073,519
South Carolina State Public Service Authority, RB, Santee Cooper, Series A, 5.50%, 1/01/38	1,275	1,415,569
		8,807,316
Texas 0.7%		
Clear Creek ISD Texas, GO, Refunding, School Building (PSF-GTD), 5.00%, 2/15/33	2,200	2,421,562

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Virginia 0.1%		
Fairfax County IDA Virginia, Refunding RB, Health Care, Inova Health System, Series A, 5.50%, 5/15/35	350	380,818
Washington 1.3%		
Central Puget Sound Regional Transit Authority, RB, Series A (AGM), 5.00%, 11/01/32	4,004	4,224,228
Wisconsin 0.4%		
Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community Health Inc., 5.25%, 4/01/39	1,430	1,504,115
Total Municipal Bonds Transferred to Tender Option Bond Trusts 36.7%		121,863,362
Total Long-Term Investments (Cost \$505,115,498) 158.3%		525,610,107
Short-Term Securities	Shares	
FBI Institutional Tax-Exempt Fund, 0.13% (g)(h)	6,417,821	6,417,821
Total Short-Term Securities (Cost \$6,417,821) 2.0%		6,417,821
Total Investments (Cost \$511,533,319*) 160.3%		532,027,928
Other Assets Less Liabilities 1.3%		4,159,303
Liability for Trust Certificates, Including Interest Expense and Fees Payable (18.6)%		(61,643,192)
Preferred Shares, at Redemption Value (43.0)%		(142,601,192)
Net Assets Applicable to Common Shares 100.0%		\$ 331,942,847

See Notes to Financial Statements.

Schedule of Investments (concluded)

BlackRock MuniEnhanced Fund, Inc. (MEN)

* The cost and unrealized appreciation (depreciation) of investments as of October 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 450,680,035
Gross unrealized appreciation	\$ 23,575,034
Gross unrealized depreciation	(3,810,048)
Net unrealized appreciation	\$ 19,764,986

- (a) Represents a step-up bond that pays an initial coupon rate for the first period and then a higher coupon rate for the following periods. Rate shown reflects the current yield as of report date.
- (b) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (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) Variable rate security. Rate shown is as of report date.
- (e) When-issued security. Unsettled when-issued transactions were as follows:

Counterparty	Unrealized Value	Appreciation
JPMorgan Chase & Co.	\$1,634,295	\$2,652

- (f) 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. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.
- (g) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at April 30, 2010	Net Activity	Shares Held at October 31, 2010	Income

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

FII Institutional Tax-Exempt Fund 7,207,423 (789,602) 6,417,821 \$5,978

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

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 assets and liabilities

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 methodologies 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 Note 1 of the Notes to Financial Statements.

The following table summarizes the inputs used as of October 31, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments ¹		\$ 525,610,107		\$ 525,610,107
Short-Term Securities	\$ 6,417,821			6,417,821
Total	\$ 6,417,821	\$ 525,610,107		\$ 532,027,928

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

See Notes to Financial Statements.

Schedule of Investments October 31, 2010 (Unaudited)

BlackRock MuniHoldings Fund, Inc. (MHD)
 (Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Alabama 1.7%		
County of Jefferson Alabama, RB, Series A, 5.00%, 1/01/24	\$ 4,550	\$ 3,970,011
Arizona 5.0%		
Maricopa County IDA Arizona, RB, Arizona Charter Schools Project, Series A, 6.75%, 7/01/29	2,200	1,528,758
Maricopa County Pollution Control Corp., Refunding RB, Southern California Edison Co., Series A, 5.00%, 6/01/35	1,185	1,211,224
Phoenix IDA Arizona, Refunding RB, America West Airlines Inc. Project, AMT, 6.30%, 4/01/23	2,215	1,945,523
Pima County IDA, Refunding IDR, Tucson Electric Power, 5.75%, 9/01/29	770	795,703
Salt River Project Agricultural Improvement & Power District, RB, Series A, 5.00%, 1/01/38	1,370	1,444,994
Salt Verde Financial Corp., RB, Senior: 5.00%, 12/01/32	2,000	1,932,440
5.00%, 12/01/37	2,360	2,219,957
Show Low Improvement District, Special Assessment Bonds, District No. 5, 6.38%, 1/01/15	305	305,427
		11,384,026
California 14.8%		
Agua Caliente Band of Cahuilla Indians, RB, 5.60%, 7/01/13 (a)	255	252,399
California Health Facilities Financing Authority, Refunding RB, St. Joseph Health System, Series A, 5.75%, 7/01/39	1,530	1,626,421
California State Public Works Board, RB, Various Capital Projects, Sub-Series I-1, 6.38%, 11/01/34	820	898,777
California Statewide Communities Development Authority, RB:		
Health Facility, Memorial Health Services, Series A, 6.00%, 10/01/23	3,870	4,081,650
John Muir Health, 5.13%, 7/01/39	1,510	1,516,720
Los Angeles Department of Airports, RB, Series A, 5.25%, 5/15/39	555	585,292
Los Angeles Department of Airports, Refunding RB, Senior, Los Angeles International Airport, Series A, 5.00%, 5/15/40	4,115	4,266,679
Montebello Unified School District California, GO, CAB (NPFGC) (b):		
5.63%, 8/01/22	2,405	1,258,031
5.62%, 8/01/23	2,455	1,202,115
San Diego Unified School District California, GO, CAB, Election of 2008, Series A, 6.06%, 7/01/29 (b)	3,475	1,188,346

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

San Francisco City & County Public Utilities Commission, RB, Series B, 5.00%, 11/01/39	6,600	6,992,502
State of California, GO, Various Purpose, 6.50%, 4/01/33	8,370	9,840,358
		33,709,290

Colorado 3.4%

Colorado Educational & Cultural Facilities Authority, RB, Charter School, Colorado Springs, 5.50%, 7/01/40	1,455	1,478,891
Colorado Health Facilities Authority, Refunding RB, Sisters of Leavenworth, Series A, 5.00%, 1/01/40	1,525	1,554,112
Elk Valley Public Improvement Corp., RB, Public Improvement Fee, Series A, 7.35%, 9/01/31	2,645	2,533,196
Plaza Metropolitan District No. 1 Colorado, Tax Allocation Bonds, Subordinate Public Improvement Fee, Tax Increment, 8.13%, 12/01/25	1,000	929,880
University of Colorado, RB, Series A, 5.38%, 6/01/38	1,250	1,360,575
		7,856,654

Municipal Bonds	Par (000)	Value
-----------------	--------------	-------

Connecticut 2.8%

Connecticut State Development Authority, RB, AFCO Cargo BDL LLC Project, AMT, 8.00%, 4/01/30	\$ 2,735	\$ 2,657,517
Connecticut State Health & Educational Facility Authority, RB: Ascension Health Senior Credit, 5.00%, 11/15/40	955	1,000,257
Wesleyan University, 5.00%, 7/01/35	2,515	2,719,143
		6,376,917

Delaware 1.2%

Delaware State EDA, RB, Exempt Facilities, Indian River Power, 5.38%, 10/01/45	2,830	2,818,793
---	-------	-----------

District of Columbia 2.2%

Metropolitan Washington Airports Authority, RB: CAB, 2nd Senior Lien, Series B (AGC), 7.10%, 10/01/35 (b)	13,485	2,987,332
First Senior Lien, Series A, 5.00%, 10/01/39	505	525,367
First Senior Lien, Series A, 5.25%, 10/01/44	1,470	1,551,335
		5,064,034

Florida 7.6%

City of Clearwater Florida, RB, Series A, 5.25%, 12/01/39	1,195	1,271,384
County of Broward Florida, RB, Series A, 5.25%, 10/01/34	750	803,100
County of Miami-Dade Florida, RB: CAB, Sub-Series A (NPFGC), 5.24%, 10/01/37 (b)	2,340	394,618
Water & Sewer System, 5.00%, 10/01/34	3,935	4,097,319
County of Miami-Dade Florida, Refunding RB, Miami International Airport, Series A-1, 5.38%, 10/01/41	2,620	2,704,285
	2,095	2,038,582

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Greater Orlando Aviation Authority Florida, RB, Special Purpose, JetBlue Airways Corp., AMT, 6.50%, 11/15/36

Hillsborough County IDA, RB, National Gypsum Co., Series B, AMT, 7.13%, 4/01/30	1,900	1,852,158
---	-------	-----------

Midtown Miami Community Development District, Special Assessment Bonds, Series B, 6.50%, 5/01/37	2,450	2,459,089
--	-------	-----------

Palm Coast Park Community Development District, Special Assessment Bonds, 5.70%, 5/01/37	675	421,423
--	-----	---------

Preserve at Wilderness Lake Community Development District, Special Assessment Bonds, Series A, 5.90%, 5/01/34	1,535	1,369,097
--	-------	-----------

17,411,055

Georgia 1.4%

De Kalb Private Hospital Authority, Refunding RB, Children s Healthcare, 5.25%, 11/15/39	585	615,514
--	-----	---------

Metropolitan Atlanta Rapid Transit Authority, RB, Third Series, 5.00%, 7/01/39	2,410	2,585,014
--	-------	-----------

3,200,528

Guam 0.7%

Territory of Guam, GO, Series A:		
6.00%, 11/15/19	440	470,369
6.75%, 11/15/29	630	697,813
7.00%, 11/15/39	430	481,776

1,649,958

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Illinois 5.3%		
City of Chicago Illinois, Special Assessment Bonds, Lake Shore East, 6.75%, 12/01/32	\$ 1,200	\$ 1,178,304
Illinois Finance Authority, RB, Navistar International, Recovery Zone, 6.50%, 10/15/40	1,070	1,110,136
Illinois Finance Authority, Refunding RB, Central DuPage Health, Series B, 5.50%, 11/01/39	1,115	1,184,085
Illinois HDA, RB, Homeowner Mortgage, Sub-Series C2, AMT, 5.35%, 2/01/27	2,730	2,764,398
Metropolitan Pier & Exposition Authority, Refunding RB, McCormick Place Expansion Project (AGM): CAB, Series B, 6.25%, 6/15/47 (b)	13,220	1,392,462
Series B, 5.00%, 6/15/50	2,190	2,186,124
Series B-2, 5.00%, 6/15/50	1,740	1,713,326
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/34	440	460,473
		<u>11,989,308</u>
Indiana 1.7%		
Indiana Finance Authority, RB, Sisters of St. Francis Health, 5.25%, 11/01/39	585	609,272
Indiana Finance Authority, Refunding RB, Parkview Health System, Series A, 5.75%, 5/01/31	2,300	2,424,844
Indiana Municipal Power Agency, RB, Series B, 6.00%, 1/01/39	775	852,035
		<u>3,886,151</u>
Kansas 1.7%		
Kansas Development Finance Authority, Refunding RB: Adventist Health, 5.75%, 11/15/38	2,465	2,724,589
Sisters of Leavenworth, Series A, 5.00%, 1/01/40	1,155	1,187,444
		<u>3,912,033</u>
Kentucky 0.6%		
Kentucky Economic Development Finance Authority, Refunding RB, Owensboro Medical Health System, Series A, 6.38%, 6/01/40	700	741,916
Louisville & Jefferson County Metropolitan Sewer District Kentucky, RB, Series A (NPFGC), 5.50%, 5/15/34	700	733,390
		<u>1,475,306</u>
Louisiana 2.1%		

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

East Baton Rouge Sewerage Commission, RB, Series A, 5.25%, 2/01/39	570	608,891
Louisiana Local Government Environmental Facilities & Community Development Authority, RB, Westlake Chemical Corp. Projects, 6.75%, 11/01/32	3,500	3,713,360
New Orleans Aviation Board, Refunding RB, Passenger Facility Charge, Series A, 5.25%, 1/01/41	430	435,590
		4,757,841
Maine 0.1%		
Maine Health & Higher Educational Facilities Authority, RB, Series A, 5.00%, 7/01/39	210	218,299
Maryland 1.3%		
Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35	300	312,549
Maryland EDC, Refunding RB, CNX Marine Terminals, Inc., 5.75%, 9/01/25	580	592,180
Maryland State Energy Financing Administration, RB, Cogeneration, AES Warrior Run, AMT, 7.40%, 9/01/19	1,970	1,971,044
		2,875,773

Municipal Bonds	Par (000)	Value
Massachusetts 2.4%		
Massachusetts Development Finance Agency, Refunding RB, Boston University, Series P, 5.45%, 5/15/59	\$ 1,165	\$ 1,260,390
Massachusetts HFA, RB, M/F Housing, Series A, AMT, 5.25%, 12/01/48	2,900	2,867,317
Massachusetts Health & Educational Facilities Authority, Refunding RB, Partners Healthcare, Series J1, 5.00%, 7/01/39	1,255	1,290,492
		5,418,199
Michigan 3.6%		
City of Detroit Michigan, RB, Senior Lien, Series B (AGM), 7.50%, 7/01/33	635	773,798
Flint Hospital Building Authority Michigan, Refunding RB, Hurley Medical Center (ACA), 6.00%, 7/01/20	1,245	1,242,161
Kalamazoo Hospital Finance Authority, Refunding RB, Bronson Methodist Hospital, 5.50%, 5/15/36	955	978,484
Michigan State Hospital Finance Authority, Refunding RB, Hospital, Henry Ford Health, 5.75%, 11/15/39	2,105	2,176,886
Michigan Strategic Fund, Refunding RB, Detroit Edison Co., Pollution, Series B, AMT, 5.65%, 9/01/29	3,000	3,010,950
		8,182,279
Minnesota 1.1%		
City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series A, 6.75%, 11/15/32	2,135	2,434,519

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Mississippi 0.7%		
Mississippi Development Bank Special Obligation, Refunding RB, Gulfport Water & Sewer System Project (AGM):		
5.25%, 7/01/17	395	448,700
5.25%, 7/01/19	485	538,413
University of Southern Mississippi, RB, Campus Facilities Improvements Project, 5.38%, 9/01/36		
	675	732,504
		1,719,617
Montana 0.7%		
Montana Facility Finance Authority, Refunding RB, Sisters of Leavenworth, Series A, 4.75%, 1/01/40		
	1,575	1,629,369
New Hampshire 1.4%		
New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth-Hitchcock, 6.00%, 8/01/38		
	3,035	3,270,121
New Jersey 6.4%		
New Jersey EDA, RB: Cigarette Tax, 5.75%, 6/15/29		
	5,385	5,299,971
Continental Airlines Inc. Project, AMT, 6.63%, 9/15/12		
	1,000	1,013,510
Continental Airlines Inc. Project, AMT, 6.25%, 9/15/29		
	2,950	2,890,882
New Jersey State Turnpike Authority, RB, Series C (AGM), 5.00%, 1/01/30		
	3,500	3,678,395
Tobacco Settlement Financing Corp. New Jersey, Refunding RB, Series 1A, 4.50%, 6/01/23		
	1,770	1,656,507
		14,539,265

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

29

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
New York 3.5%		
City of Troy New York, Refunding RB, Rensselaer Polytechnic, Series A, 5.13%, 9/01/40	\$ 950	\$ 982,965
Dutchess County Industrial Development Agency New York, Refunding RB, St. Francis Hospital, Series A, 7.50%, 3/01/29	1,100	1,105,379
Long Island Power Authority, Refunding RB, Series A, 5.75%, 4/01/39	1,450	1,608,862
Metropolitan Transportation Authority, Refunding RB, Series B, 5.00%, 11/15/34	1,740	1,851,899
New York City Industrial Development Agency, RB: Continental Airlines Inc. Project, AMT, 8.00%, 11/01/12	300	304,962
Continental Airlines Inc. Project, Mandatory Put Bonds, AMT, 8.38%, 11/01/16	725	735,266
Series C, 6.80%, 6/01/28	535	561,825
New York Liberty Development Corp., Refunding RB, Second Priority, Bank of America Tower at One Bryant Park Project, 6.38%, 7/15/49	850	910,716
		<u>8,061,874</u>
North Carolina 2.1%		
North Carolina Capital Facilities Finance Agency, RB, Duke Energy Carolinas, Series B, 4.38%, 10/01/31	1,120	1,098,138
North Carolina Capital Facilities Finance Agency, Refunding RB, Duke Energy Carolinas, Series A, 4.63%, 11/01/40	1,875	1,824,562
North Carolina Medical Care Commission, RB, Duke University Health System, Series A, 5.00%, 6/01/42	970	1,009,809
North Carolina Municipal Power Agency No. 1 Catawba, Refunding RB, Series A, 5.00%, 1/01/30	740	778,458
		<u>4,710,967</u>
Ohio 0.8%		
Buckeye Tobacco Settlement Financing Authority, RB, Asset-Backed, Senior Series A-2, 6.50%, 6/01/47	2,160	1,806,106
Pennsylvania 8.3%		
Allegheny County Hospital Development Authority, Refunding RB, Health System, West Penn, Series A, 5.38%, 11/15/40	1,510	1,162,398
Bucks County IDA, RB, Ann s Choice Inc. Facility, Series A, 6.25%, 1/01/35	1,700	1,670,913
Montgomery County Higher Education & Health Authority, Refunding RB, Abington Memorial Hospital,	795	806,822

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Series A, 5.13%, 6/01/33		
Pennsylvania Economic Development Financing Authority, RB:		
American Water Co. Project, 6.20%, 4/01/39	2,520	2,772,932
Aqua Pennsylvania Inc. Project, 5.00%, 11/15/40	1,315	1,355,489
National Gypsum Co., Series B, AMT, 6.13%, 11/01/27	3,500	3,081,400
Pennsylvania Turnpike Commission, RB, Sub-Series B, 5.25%, 6/01/39	4,775	4,964,090
Philadelphia Authority for Industrial Development, RB:		
Arbor House Inc. Project, Series E, 6.10%, 7/01/33	1,105	1,103,541
Commercial Development, AMT, 7.75%, 12/01/17	725	725,928
Saligman House Project, Series C (HUD), 6.10%, 7/01/33	1,245	1,243,357
		18,886,870

Municipal Bonds	Par (000)	Value
Puerto Rico 3.7%		
Commonwealth of Puerto Rico, GO, Refunding, Public Improvement, Series C, 6.00%, 7/01/39	\$ 2,070	\$ 2,275,178
Puerto Rico Industrial Medical & Environmental Pollution Control Facilities Financing Authority, RB, Special Facilities, American Airlines, Series A, 6.45%, 12/01/25	1,205	1,132,760
Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.50%, 8/01/44	3,860	4,443,401
Puerto Rico Sales Tax Financing Corp., Refunding RB, CAB, First Sub-Series C, 6.52%, 8/01/38 (b)	2,975	531,871
		8,383,210
Tennessee 2.8%		
Educational Funding of the South Inc., RB, Senior, Sub-Series B, AMT, 6.20%, 12/01/21	2,685	2,688,329
Hardeman County Correctional Facilities Corp. Tennessee, RB, 7.75%, 8/01/17	3,025	3,011,146
Rutherford County Health & Educational Facilities Board, RB, Ascension Health Senior Credit Group, 5.00%, 11/15/40	710	746,899
		6,446,374
Texas 12.5%		
Brazos River Authority, Refunding RB, TXU Electric Co. Project, Series C, Mandatory Put Bonds, AMT, 5.75%, 5/01/36 (c)	2,570	2,441,500
Brazos River Harbor Navigation District, Refunding RB, Dow Chemical Co. Project, Series A7, AMT, 6.63%, 5/15/33	3,655	3,751,309
City of Dallas Texas, Refunding RB, 5.00%, 10/01/35	1,050	1,129,916
City of Houston Texas, RB, Senior Lien, Series A, 5.50%, 7/01/39	1,070	1,156,360
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, Series B, 7.25%, 12/01/35	1,910	2,192,928

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

La Vernia Higher Education Finance Corp., RB, KIPP Inc., 6.38%, 8/15/44	820	866,781
Matagorda County Hospital District Texas, RB (FHA), 5.00%, 2/15/35	3,750	3,788,288
North Texas Tollway Authority, RB, Toll, 2nd Tier, Series F, 6.13%, 1/01/31	4,190	4,520,800
San Antonio Energy Acquisition Public Facility Corp., RB, Gas Supply: 5.50%, 8/01/24	1,100	1,189,485
5.50%, 8/01/25	1,120	1,208,290
Texas Department of Housing & Community Affairs, RB, Series A, AMT (Ginnie Mae), 5.70%, 1/01/33	35	35,073
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien: LBJ Infrastructure Group LLC, LBJ Freeway Managed Lanes Project, 7.00%, 6/30/40	2,990	3,250,070
NTE Mobility Partners LLC, North Tarrant Express Managed Lanes Project, 6.88%, 12/31/39	2,695	2,924,452
		28,455,252
Utah 1.1%		
City of Riverton Utah, RB, IHC Health Services Inc., 5.00%, 8/15/41	2,525	2,624,990
U.S. Virgin Islands 1.5%		
United States Virgin Islands, Refunding RB, Senior Secured, Hovensa Coker Project, AMT, 6.50%, 7/01/21	3,460	3,520,031
Vermont 1.1%		
Vermont Educational & Health Buildings Financing Agency, RB, Developmental & Mental Health, Series A, 6.00%, 6/15/17	2,370	2,410,835

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Virginia 2.1%		
Tobacco Settlement Financing Corp. Virginia, Refunding RB, Senior Series B1, 5.00%, 6/01/47	\$ 3,990	\$ 2,801,219
Virginia HDA, RB, Sub-Series H-1 (NPPGC), 5.35%, 7/01/31	2,025	2,040,026
		<u>4,841,245</u>
Washington 0.6%		
Seattle Housing Authority Washington, HRB, Replacement Housing Projects, 6.13%, 12/01/32	1,305	1,270,287
Wisconsin 4.4%		
State of Wisconsin, Refunding RB, Series A, 6.00%, 5/01/36	4,980	5,665,198
Wisconsin Health & Educational Facilities Authority, RB: Ascension Health Senior Credit Group, 5.00%, 11/15/33	1,710	1,782,077
New Castle Place Project, Series A, 7.00%, 12/01/31	825	826,510
SynergyHealth Inc., 6.00%, 11/15/32	1,755	1,816,845
		<u>10,090,630</u>
Wyoming 0.1%		
Wyoming Municipal Power Agency, RB, Series A, 5.00%, 1/01/42	210	213,081
Total Municipal Bonds 114.5%		<u>261,471,098</u>

Municipal Bonds Transferred to
Tender Option Bond Trusts (d)

California 4.7%		
Bay Area Toll Authority, Refunding RB, San Francisco Bay Area, Series F-1, 5.63%, 4/01/44	2,270	2,519,900
California Educational Facilities Authority, RB, University of Southern California, Series A, 5.25%, 10/01/39	1,845	1,997,600
Los Angeles Community College District California, GO, Election of 2001, Series A (AGM), 5.00%, 8/01/32	1,620	1,699,331
	748	811,061

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33		
Sequoia Union High School District California, GO, Refunding, Election of 2004, Series B (AGM), 5.50%, 7/01/35	3,494	3,699,633
		<hr/>
		10,727,525

Colorado 2.6%

Colorado Health Facilities Authority, RB (AGM), Catholic Health: Series C-3, 5.10%, 10/01/41	2,580	2,652,808
Series C-7, 5.00%, 9/01/36	1,650	1,695,705
Colorado Health Facilities Authority, Refunding RB, Catholic Healthcare, Series A, 5.50%, 7/01/34	1,490	1,604,379
		<hr/>
		5,952,892

Connecticut 3.0%

Connecticut State Health & Educational Facility Authority, RB, Yale University: Series T-1, 4.70%, 7/01/29	3,180	3,414,175
Series X-3, 4.85%, 7/01/37	3,270	3,450,799
		<hr/>
		6,864,974

Georgia 1.1%

Private Colleges & Universities Authority, Refunding RB, Emory University, Series C, 5.00%, 9/01/38	2,259	2,397,420
--	-------	-----------

**Municipal Bonds Transferred to
Tender Option Bond Trusts (d)**

	Par (000)	Value
Massachusetts 2.3%		
Massachusetts School Building Authority, RB, Series A (AGM), 5.00%, 8/15/30	\$ 4,994	\$ 5,284,901
New Hampshire 0.7%		
New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth College, 5.25%, 6/01/39	1,409	1,549,195
New York 4.4%		
New York City Municipal Water Finance Authority, RB, Series FF-2, 5.50%, 6/15/40	1,110	1,252,571
New York State Dormitory Authority, ERB, Series F, 5.00%, 3/15/35	4,035	4,214,809
Sales Tax Asset Receivable Corp., RB, Series A (AMBAC), 5.25%, 10/15/27	4,240	4,682,364
		<hr/>
		10,149,744

North Carolina 0.5%

North Carolina Capital Facilities Finance Agency, Refunding RB, Wake Forest University, 5.00%, 1/01/38	1,080	1,143,018
--	-------	-----------

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Ohio 4.6%

State of Ohio, Refunding RB, Cleveland Clinic Health, Series A, 5.50%, 1/01/39	9,650	10,391,989
--	-------	------------

Tennessee 1.0%

Shelby County Health Educational & Housing Facilities Board, Refunding RB, St. Jude's Children's Research Hospital, 5.00%, 7/01/31	2,250	2,353,748
--	-------	-----------

Texas 2.1%

County of Harris Texas, RB, Senior Lien, Toll Road, Series A, 5.00%, 8/15/38	4,620	4,851,000
--	-------	-----------

Virginia 7.6%

University of Virginia, Refunding RB, General, 5.00%, 6/01/40	3,750	4,021,125
Virginia HDA, RB, Sub-Series H-1 (NPFGC), 5.38%, 7/01/36	10,940	11,144,140
Virginia Small Business Financing Authority, Refunding RB, Sentara Healthcare, 5.00%, 11/01/40	2,094	2,206,166

17,371,431

Washington 0.9%

Central Puget Sound Regional Transit Authority, RB, Series A (AGM), 5.00%, 11/01/32	1,860	1,961,814
---	-------	-----------

Wisconsin 1.8%

Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community Health Inc., 5.25%, 4/01/39	3,959	4,165,241
--	-------	-----------

Total Municipal Bonds Transferred to Tender Option Bond Trusts 37.3%

85,164,892

Total Long-Term Investments (Cost \$332,204,086) 151.8%

346,635,990

Short-Term Securities

Shares

FFI Institutional Tax-Exempt Fund, 0.13% (e)(f)	967,139	967,139
---	---------	---------

Total Short-Term Securities (Cost \$967,139) 0.4%

967,139

Total Investments (Cost \$333,171,225*) 152.2%

347,603,129

Other Assets Less Liabilities 3.5%

7,939,169

Liability for Trust Certificates, Including

Interest Expense and Fees Payable (19.0)% (43,519,724)

Preferred Shares, at Redemption Value (36.7)% (83,705,999)

Net Assets Applicable to Common Shares 100.0%

\$ 228,316,575

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

33

Schedule of Investments (concluded)

BlackRock MuniHoldings Fund, Inc. (MHD)

* The cost and unrealized appreciation (depreciation) of investments as of October 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 288,799,108
Gross unrealized appreciation	\$ 18,117,701
Gross unrealized depreciation	(2,801,302)
Net unrealized appreciation	\$ 15,316,399

- (a) Security exempt from registration under Rule 144A of the Securities Act of 1933. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (b) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date. (c) Variable rate security. Rate shown is as of report date.
- (d) 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. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.
- (e) Represents the current yield as of report date.
- (f) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at April 30, 2010	Net Activity	Shares Held at October 31, 2010	Income
FFI Institutional Tax-Exempt Fund	3,354,654	(2,387,515)	967,139	\$ 2,341

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 assets and liabilities

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)

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

The inputs or methodologies 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 Note 1 of the Notes to Financial Statements.

The following table summarizes the inputs used as of October 31, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments ¹		\$ 346,635,990		\$ 346,635,990
Short-Term Securities	\$ 967,139			967,139
Total	\$ 967,139	\$ 346,635,990		\$ 347,603,129

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

See Notes to Financial Statements.

Schedule of Investments October 31, 2010 (Unaudited)

BlackRock MuniHoldings Fund II, Inc. (MUH)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Alabama 1.8%		
County of Jefferson Alabama, RB, Series A, 5.00%, 1/01/24	\$ 3,450	\$ 3,010,229
Arizona 4.2%		
Maricopa County Pollution Control Corp., Refunding RB, Southern California Edison Co., Series A, 5.00%, 6/01/35	855	873,921
Phoenix IDA Arizona, Refunding RB, America West Airlines Inc. Project, AMT, 6.30%, 4/01/23	2,060	1,809,380
Pima County IDA, RB, Arizona Charter Schools Project, Series C, 6.75%, 7/01/31	950	953,496
Pima County IDA, Refunding IDRIB, Tucson Electric Power, 5.75%, 9/01/29	560	578,693
Salt River Project Agricultural Improvement & Power District, RB, Series A, 5.00%, 1/01/38	990	1,044,193
Salt Verde Financial Corp., RB, Senior, 5.00%, 12/01/37	1,385	1,302,814
Show Low Improvement District, Special Assessment Bonds, District No. 5, 6.38%, 1/01/15	605	605,847
		<u>7,168,344</u>
California 19.5%		
Benicia Unified School District, GO, CAB, Series A (NPFGC), 5.62%, 8/01/20 (a)	2,000	1,224,020
California Health Facilities Financing Authority, Refunding RB, St. Joseph Health System, Series A, 5.75%, 7/01/39	1,110	1,179,952
California State Public Works Board, RB, Various Capital Projects, Sub-Series I-1, 6.38%, 11/01/34	600	657,642
California Statewide Communities Development Authority, RB, John Muir Health, 5.13%, 7/01/39	1,090	1,094,850
Los Angeles Department of Airports, RB, Series A, 5.25%, 5/15/39	400	421,832
Los Angeles Department of Airports, Refunding RB, Senior, Los Angeles International Airport, Series A, 5.00%, 5/15/40	2,975	3,084,658
Poway Unified School District, Special Tax Bonds, Community Facilities District No. 6 Area, Series A, 6.13%, 9/01/33	1,750	1,767,990
San Diego Unified School District California, GO, CAB, Election of 2008, Series A, 6.06%, 7/01/29 (a)	2,525	863,474
San Francisco City & County Public Utilities Commission, RB, Series B, 5.00%, 11/01/39	4,770	5,053,672
San Marino Unified School District California, GO, Series A (NPFGC) (a):		

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

5.51%, 7/01/17	1,820	1,459,585
5.56%, 7/01/18	1,945	1,463,710
5.60%, 7/01/19	2,070	1,467,651
State of California, GO, Various Purpose:		
6.00%, 3/01/33	1,265	1,453,030
6.50%, 4/01/33	7,325	8,611,783
University of California, RB, Limited Project, Series B,		
4.75%, 5/15/38	3,495	3,520,968
		33,324,817
Colorado 2.8%		
Colorado Educational & Cultural Facilities Authority, RB,		
Charter School, Colorado Springs, 5.50%, 7/01/40	1,055	1,072,323
Colorado Health Facilities Authority, Refunding RB,		
Sisters of Leavenworth, Series A, 5.00%, 1/01/40	1,100	1,120,999
Elk Valley Public Improvement Corp., RB, Public		
Improvement Fee, Series A, 7.10%, 9/01/14	800	816,488
Plaza Metropolitan District No. 1 Colorado, Tax Allocation		
Bonds, Subordinate Public Improvement Fee, Tax		
Increment, 8.13%, 12/01/25	860	799,697
University of Colorado, RB, Series A, 5.38%, 6/01/38	920	1,001,383
		4,810,890

Municipal Bonds	Par (000)	Value
Connecticut 1.6%		
Connecticut State Health & Educational Facility		
Authority, RB:		
Ascension Health Senior Credit, 5.00%, 11/15/40	\$ 685	\$ 717,462
Wesleyan University, 5.00%, 7/01/35	1,875	2,027,194
		2,744,656

Delaware 1.2%		
Delaware State EDA, RB, Exempt Facilities, Indian River		
Power, 5.38%, 10/01/45	2,050	2,041,882

District of Columbia 2.0%		
Metropolitan Washington Airports Authority, RB:		
CAB, 2nd Senior Lien, Series B (AGC), 7.08%,		
10/01/34 (a)	10,170	2,404,493
First Senior Lien, Series A, 5.00%, 10/01/39	255	265,284
First Senior Lien, Series A, 5.25%, 10/01/44	745	786,221
		3,455,998

Florida 6.4%		
Ballantrae Community Development District, Special		
Assessment Bonds, 6.00%, 5/01/35	1,570	1,546,230
City of Clearwater Florida, RB, Series A, 5.25%,		
12/01/39	870	925,610
County of Broward Florida, RB, Series A, 5.25%,		
10/01/34	545	583,586
County of Miami-Dade Florida, RB:		

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

CAB, Sub-Series A (NPFGC), 5.24%, 10/01/37 (a)	1,765	297,650
Water & Sewer System, 5.00%, 10/01/34	2,845	2,962,356
County of Miami-Dade Florida, Refunding RB, Miami International Airport, Series A-1, 5.38%, 10/01/41	330	340,616
Greater Orlando Aviation Authority Florida, RB, Special Purpose, JetBlue Airways Corp., AMT, 6.50%, 11/15/36	1,515	1,474,201
Hillsborough County IDA, RB, National Gypsum Co., Series B, AMT, 7.13%, 4/01/30	1,380	1,345,252
Palm Coast Park Community Development District, Special Assessment Bonds, 5.70%, 5/01/37	495	309,043
Preserve at Wilderness Lake Community Development District, Special Assessment Bonds, Series A, 5.90%, 5/01/34	1,195	1,065,845
		10,850,389

Georgia 1.4%

De Kalb Private Hospital Authority, Refunding RB, Children's Healthcare, 5.25%, 11/15/39	420	441,907
Metropolitan Atlanta Rapid Transit Authority, RB, Third Series, 5.00%, 7/01/39	1,740	1,866,359
		2,308,266

Guam 0.5%

Territory of Guam, GO, Series A: 6.75%, 11/15/29	455	503,976
7.00%, 11/15/39	275	308,113
		812,089

Idaho 1.2%

Power County Industrial Development Corp., RB, FMC Corp. Project, AMT, 6.45%, 8/01/32	2,000	2,010,640
---	-------	-----------

Illinois 4.2%

City of Chicago Illinois, Special Assessment Bonds, Lake Shore East, 6.75%, 12/01/32	1,000	981,920
Illinois Finance Authority, RB, Navistar International, Recovery Zone, 6.50%, 10/15/40	775	804,070
Illinois Finance Authority, Refunding RB, Central DuPage Health, Series B, 5.50%, 11/01/39	800	849,568

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniHoldings Fund II, Inc. (MUH)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Illinois (concluded)		
Metropolitan Pier & Exposition Authority, Refunding RB (AGM), McCormick Place Expansion Project: CAB, Series B, 6.25%, 6/15/47 (a)	\$ 9,555	\$ 1,006,428
Series B, 5.00%, 6/15/50	1,585	1,582,195
Series B-2, 5.00%, 6/15/50	1,260	1,240,684
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/34	315	329,657
Territory of Guam, GO, Series A, 6.00%, 11/15/19	320	342,087
		7,136,609
Indiana 1.6%		
Indiana Finance Authority, RB, Sisters of St. Francis Health, 5.25%, 11/01/39	420	437,426
Indiana Finance Authority, Refunding RB, Parkview Health System, Series A, 5.75%, 5/01/31	1,660	1,750,105
Indiana Municipal Power Agency, RB, Series B, 6.00%, 1/01/39	565	621,161
		2,808,692
Kansas 1.7%		
Kansas Development Finance Authority, Refunding RB: Adventist Health, 5.75%, 11/15/38	1,785	1,972,979
Sisters of Leavenworth, Series A, 5.00%, 1/01/40	835	858,455
		2,831,434
Kentucky 0.3%		
Kentucky Economic Development Finance Authority, Refunding RB, Owensboro Medical Health System, Series A, 6.38%, 6/01/40	510	540,539
Louisiana 2.0%		
East Baton Rouge Sewerage Commission, RB, Series A, 5.25%, 2/01/39	420	448,657
Louisiana Local Government Environmental Facilities & Community Development Authority, RB, Westlake Chemical Corp. Projects, 6.75%, 11/01/32	2,500	2,652,400
New Orleans Aviation Board, Refunding RB, Passenger Facility Charge, Series A, 5.25%, 1/01/41	310	314,030
		3,415,087
Maine 0.1%		

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Maine Health & Higher Educational Facilities Authority, RB, Series A, 5.00%, 7/01/39	150	155,928
--	-----	---------

Maryland 0.8%

Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35	220	229,203
Maryland EDC, Refunding RB, CNX Marine Terminals, Inc., 5.75%, 9/01/25	415	423,715
Maryland State Energy Financing Administration, RB, Cogeneration, AES Warrior Run, AMT, 7.40%, 9/01/19	750	750,397
		1,403,315

Massachusetts 4.3%

Massachusetts Development Finance Agency, RB, Neville Communities, Series A (Ginnie Mae): 5.75%, 6/20/22	600	660,324
6.00%, 6/20/44	1,500	1,639,005
Massachusetts Development Finance Agency, Refunding RB, Boston University, Series P, 5.45%, 5/15/59	845	914,188
Massachusetts Health & Educational Facilities Authority, Refunding RB, Partners Healthcare, Series J1, 5.00%, 7/01/39	910	935,735
Massachusetts HFA, RB, M/F Housing, Series A, AMT, 5.25%, 12/01/48	2,100	2,076,333
Massachusetts HFA, Refunding HRB, Series F, AMT, 5.70%, 6/01/40	1,100	1,135,156
		7,360,741

Municipal Bonds	Par (000)	Value
-----------------	--------------	-------

Michigan 4.0%

City of Detroit Michigan, RB, Senior Lien, Series B (AGM), 7.50%, 7/01/33	\$ 460	\$ 560,547
Flint Hospital Building Authority Michigan, Refunding RB, Hurley Medical Center (ACA), 6.00%, 7/01/20	960	957,811
Kalamazoo Hospital Finance Authority, Refunding RB, Bronson Methodist Hospital, 5.50%, 5/15/36	690	706,967
Michigan State Hospital Finance Authority, Refunding RB, Hospital, Henry Ford Health, 5.75%, 11/15/39	1,520	1,571,908
Michigan Strategic Fund, Refunding RB, Detroit Edison Co., Pollution, Series C, AMT (Syncora), 5.65%, 9/01/29	2,935	2,943,805
		6,741,038

Minnesota 1.0%

City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series A, 6.75%, 11/15/32	1,540	1,756,047
--	-------	-----------

Montana 0.7%

Montana Facility Finance Authority, Refunding RB, Sisters of Leavenworth, Series A, 4.75%, 1/01/40	1,120	1,158,662
--	-------	-----------

New Hampshire 1.0%

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth-Hitchcock, 6.00%, 8/01/38	1,530	1,648,529
<hr/>		
New Jersey 5.0%		
New Jersey EDA, RB:		
Cigarette Tax, 5.75%, 6/15/29	3,050	3,001,840
Continental Airlines Inc. Project, AMT, 6.63%, 9/15/12	2,000	2,027,020
New Jersey State Turnpike Authority, RB, Series C (AGM), 5.00%, 1/01/30	2,500	2,627,425
Tobacco Settlement Financing Corp. New Jersey, Refunding RB, Series 1A, 4.50%, 6/01/23	920	861,010
		<hr/>
		8,517,295
<hr/>		
New York 5.7%		
City of Troy New York, Refunding RB, Rensselaer Polytechnic, Series A, 5.13%, 9/01/40	685	708,769
Dutchess County Industrial Development Agency New York, Refunding RB, St. Francis Hospital, Series A, 7.50%, 3/01/29	885	889,328
Long Island Power Authority, Refunding RB, Series A, 5.75%, 4/01/39	1,050	1,165,038
Metropolitan Transportation Authority, Refunding RB, Series B, 5.00%, 11/15/34	1,270	1,351,674
New York City Industrial Development Agency, RB: Continental Airlines Inc. Project, AMT, 8.00%, 11/01/12	350	355,789
Continental Airlines Inc. Project, Mandatory Put Bonds, AMT, 8.38%, 11/01/16	525	532,434
Series C, 6.80%, 6/01/28	415	435,808
New York City Transitional Finance Authority, RB, Fiscal 2009, Series S-3, 5.25%, 1/15/39	3,300	3,571,689
New York Liberty Development Corp., Refunding RB, Second Priority, Bank of America Tower at One Bryant Park Project, 6.38%, 7/15/49	615	658,929
		<hr/>
		9,669,458
<hr/>		
North Carolina 1.7%		
North Carolina Capital Facilities Finance Agency, RB, Duke Energy Carolinas, Series B, 4.38%, 10/01/31	810	794,189
North Carolina Capital Facilities Finance Agency, Refunding RB, Duke Energy Carolinas, Series A, 4.63%, 11/01/40	1,355	1,318,551
North Carolina Medical Care Commission, RB, Duke University Health System, Series A, 5.00%, 6/01/42	705	733,933
		<hr/>
		2,846,673
<hr/>		

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniHoldings Fund II, Inc. (MUH)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Ohio 0.8%		
Buckeye Tobacco Settlement Financing Authority, RB, Asset-Backed, Senior Series A-2, 6.50%, 6/01/47	\$ 1,565	\$ 1,308,590
Pennsylvania 6.0%		
Allegheny County Hospital Development Authority, Refunding RB, Health System, West Penn, Series A, 5.38%, 11/15/40	1,095	842,931
Montgomery County Higher Education & Health Authority, Refunding RB, Abington Memorial Hospital, Series A, 5.13%, 6/01/33	325	329,833
Pennsylvania Economic Development Financing Authority, RB:		
American Water Co. Project, 6.20%, 4/01/39	1,830	2,013,677
Aqua Pennsylvania Inc. Project, 5.00%, 11/15/40	950	979,251
National Gypsum Co., Series A, AMT, 6.25%, 11/01/27	2,750	2,454,127
Pennsylvania Turnpike Commission, RB, Sub-Series B, 5.25%, 6/01/39	2,955	3,072,018
Philadelphia Authority for Industrial Development, RB, Commercial Development, AMT, 7.75%, 12/01/17	540	540,691
		<u>10,232,528</u>
Puerto Rico 4.8%		
Commonwealth of Puerto Rico, GO, Refunding, Public Improvement, Series C, 6.00%, 7/01/39	1,490	1,637,689
Puerto Rico Industrial Medical & Environmental Pollution Control Facilities Financing Authority, RB, Special Facilities, American Airlines, Series A, 6.45%, 12/01/25	905	850,745
Puerto Rico Sales Tax Financing Corp., RB: CAB, Series A, 6.40%, 8/01/35 (a)	10,000	2,163,800
First Sub-Series A, 6.52%, 8/01/44	2,790	3,211,681
Puerto Rico Sales Tax Financing Corp., Refunding RB, CAB, First Sub-Series C, 6.30%, 8/01/38 (a)	2,145	383,483
		<u>8,247,398</u>
Tennessee 1.6%		
Hardeman County Correctional Facilities Corp. Tennessee, RB, Series B, 7.38%, 8/01/17	2,200	2,146,188
Rutherford County Health & Educational Facilities Board, RB, Ascension Health Senior Credit Group, 5.00%, 11/15/40	510	536,505
		<u>2,682,693</u>

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Texas 10.5%		
Brazos River Authority, Refunding RB, TXU Electric Co. Project, Series C, Mandatory Put Bonds, AMT, 5.75%, 5/01/36 (b)	825	783,750
Brazos River Harbor Navigation District, Refunding RB, Dow Chemical Co. Project, Series A7, AMT, 6.63%, 5/15/33	2,500	2,565,875
City of Dallas Texas, Refunding RB, 5.00%, 10/01/35	760	817,844
City of Houston Texas, RB, Senior Lien, Series A, 5.50%, 7/01/39	535	578,180
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, Series B, 7.25%, 12/01/35	1,380	1,584,419
La Vernia Higher Education Finance Corp., RB, KIPP Inc., 6.38%, 8/15/44	590	623,659
Matagorda County Hospital District Texas, RB (FHA), 5.00%, 2/15/35	3,265	3,298,336
North Texas Tollway Authority, RB, Toll, 2nd Tier, Series F, 6.13%, 1/01/31	3,020	3,258,429

Municipal Bonds	Par (000)	Value
Texas (concluded)		
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien:		
LBJ Infrastructure Group LLC, LBJ Freeway Managed Lanes Project, 7.00%, 6/30/40	\$ 2,165	\$ 2,353,312
NTE Mobility Partners LLC, North Tarrant Express Managed Lanes Project, 6.88%, 12/31/39	1,940	2,105,171
		17,968,975

U.S. Virgin Islands 1.6%		
United States Virgin Islands, Refunding RB, Senior Secured, Hovensa Coker Project, AMT, 6.50%, 7/01/21	2,680	2,726,498

Utah 0.8%		
City of Riverton Utah, RB, IHC Health Services Inc., 5.00%, 8/15/41	1,400	1,455,440

Vermont 0.6%		
Vermont Educational & Health Buildings Financing Agency, RB, Developmental & Mental Health, Series A, 6.50%, 6/15/32	1,000	972,780

Virginia 1.9%		
Tobacco Settlement Financing Corp. Virginia, Refunding RB, Senior Series B1, 5.00%, 6/01/47	2,505	1,758,660
Virginia HDA, RB, Sub-Series H-1 (NPFGC), 5.35%, 7/01/31	1,500	1,511,130
		3,269,790

Washington 0.5%		
Seattle Housing Authority Washington, HRB, Replacement Housing Projects, 6.13%, 12/01/32	945	919,863

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Wisconsin 4.0%

State of Wisconsin, Refunding RB, Series A, 6.00%, 5/01/36	3,620	4,118,076
Wisconsin Health & Educational Facilities Authority, RB: Ascension Health Senior Credit Group, 5.00%, 11/15/33	1,235	1,287,055
SynergyHealth Inc., 6.00%, 11/15/32	1,360	1,407,926
		6,813,057

Total Municipal Bonds 109.8%

187,125,859

**Municipal Bonds Transferred to
Tender Option Bond Trusts (c)**

California 6.4%

Bay Area Toll Authority, Refunding RB, San Francisco Bay Area, Series F-1, 5.63%, 4/01/44	1,640	1,820,544
California Educational Facilities Authority, RB, University of Southern California, Series A, 5.25%, 10/01/39	1,335	1,445,418
Los Angeles Community College District California, GO, Election of 2001, Series A (AGM), 5.00%, 8/01/32	1,170	1,227,295
San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33	553	600,185
Sequoia Union High School District California, GO, Refunding, Election of 2004, Series B (AGM), 5.50%, 7/01/35	5,519	5,843,198
		10,936,640

Colorado 2.5%

Colorado Health Facilities Authority, RB (AGM): Catholic Health, Series C-3, 5.10%, 10/01/41	1,870	1,922,771
Catholic Health, Series C-7, 5.00%, 9/01/36	1,200	1,233,240
Colorado Health Facilities Authority, Refunding RB, Catholic Healthcare, Series A, 5.50%, 7/01/34	1,080	1,162,906
		4,318,917

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniHoldings Fund II, Inc. (MUH)
(Percentages shown are based on Net Assets)

Municipal Bonds Transferred to Tender Option Bond Trusts (c)	Par (000)	Value
Connecticut 2.9%		
Connecticut State Health & Educational Facility Authority, RB, Yale University:		
Series T-1, 4.70%, 7/01/29	\$ 2,300	\$ 2,469,372
Series X-3, 4.85%, 7/01/37	2,370	2,501,037
		<u>4,970,409</u>
Georgia 1.0%		
Private Colleges & Universities Authority, Refunding RB, Emory University, Series C, 5.00%, 9/01/38		
	1,649	1,750,329
Massachusetts 1.9%		
Massachusetts School Building Authority, RB, Series A (AGM), 5.00%, 8/15/30		
	2,999	3,174,115
New Hampshire 0.7%		
New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth College, 5.25%, 6/01/39		
	1,019	1,120,694
New York 4.4%		
New York City Municipal Water Finance Authority, RB, Series FF-2, 5.50%, 6/15/40		
	810	914,039
New York State Dormitory Authority, ERB, Series F, 5.00%, 3/15/35		
	2,910	3,039,676
Sales Tax Asset Receivable Corp., RB, Series A (AMBAC), 5.25%, 10/15/27		
	3,200	3,533,859
		<u>7,487,574</u>
North Carolina 0.5%		
North Carolina Capital Facilities Finance Agency, Refunding RB, Wake Forest University, 5.00%, 1/01/38		
	800	846,680
Ohio 4.4%		
State of Ohio, Refunding RB, Cleveland Clinic Health, Series A, 5.50%, 1/01/39		
	6,980	7,516,692
Tennessee 1.5%		
Shelby County Health Educational & Housing Facilities Board, Refunding RB, St. Jude s Children s Research Hospital, 5.00%, 7/01/31		
	2,500	2,615,275
Texas 2.1%		

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

County of Harris Texas, RB, Senior Lien, Toll Road, Series A, 5.00%, 8/15/38	3,360	3,528,000
---	-------	-----------

Virginia 7.4%		
University of Virginia, Refunding RB, General, 5.00%, 6/01/40	2,730	2,927,379
Virginia HDA, RB, Sub-Series H-1 (NPFGC), 5.38%, 7/01/36	7,900	8,047,414
Virginia Small Business Financing Authority, Refunding RB, Sentara Healthcare, 5.00%, 11/01/40	1,553	1,635,417
		12,610,210

Washington 0.8%		
Central Puget Sound Regional Transit Authority, RB, Series A (AGM), 5.00%, 11/01/32	1,365	1,439,718

Wisconsin 1.8%		
Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community Health Inc., 5.25%, 4/01/39	2,859	3,008,230

Total Municipal Bonds Transferred to Tender Option Bond Trusts 38.3%		65,323,483
---	--	------------

Total Long-Term Investments (Cost \$240,530,777) 148.1%		252,449,342
--	--	-------------

Short-Term Securities	Shares	Value
FFI Institutional Tax-Exempt Fund, 0.13% (d)(e)	1,177,035	\$ 1,177,035
Total Short-Term Securities (Cost \$1,177,035) 0.7%		1,177,035
Total Investments (Cost \$241,707,812*) 148.8%		253,626,377
Other Assets Less Liabilities 3.2%		5,504,236
Liability for Trust Certificates, Including Interest Expense and Fees Payable (19.7)%		(33,642,528)
Preferred Shares, at Redemption Value (32.3)%		(55,054,000)
Net Assets Applicable to Common Shares 100.0%		\$ 170,434,085

* The cost and unrealized appreciation (depreciation) of investments as of October 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 207,383,238
Gross unrealized appreciation	\$ 14,245,185
Gross unrealized depreciation	(1,619,230)
Net unrealized appreciation	\$ 12,625,955

- (a) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (b) Variable rate security. Rate shown is as of report date.
- (c) 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. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.
- (d) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at April 30, 2010	Net Activity	Shares Held at October 31, 2010	Income
FFI Institutional Tax-Exempt Fund	607,735	569,300	1,177,035	\$ 916

- (e) Represents the current yield as of report date.

See Notes to Financial Statements.

Schedule of Investments (concluded)

BlackRock MuniHoldings Fund II, Inc. (MUH)

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 assets and liabilities

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 methodologies 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 Note 1 of the Notes to Financial Statements.

The following table summarizes the inputs used as of October 31, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments ¹		\$ 252,449,342		\$ 252,449,342
Short-Term Securities	\$ 1,177,035			1,177,035
Total	\$ 1,177,035	\$ 252,449,342		\$ 253,626,377

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

See Notes to Financial Statements.

Schedule of Investments October 31, 2010 (Unaudited)

BlackRock MuniHoldings Quality Fund, Inc. (MUS)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Alabama 2.6%		
Birmingham Special Care Facilities Financing Authority, RB, Children s Hospital (AGC), 6.00%, 6/01/39	\$ 2,330	\$ 2,558,503
County of Jefferson Alabama, RB, Series A, 5.50%, 1/01/22	2,170	2,015,583
		<u>4,574,086</u>
Arizona 0.5%		
State of Arizona, COP, Department of Administration, Series A (AGM):		
5.25%, 10/01/28	715	756,720
5.00%, 10/01/29	185	191,179
		<u>947,899</u>
Arkansas 3.6%		
Arkansas Development Finance Authority, Refunding RB, Series C (NPFGC):		
5.35%, 12/01/11 (a)	535	568,860
5.35%, 12/01/35	5,685	5,763,112
		<u>6,331,972</u>
California 12.0%		
Central Unified School District, GO, Election of 2008, Series A (AGC), 5.63%, 8/01/33	1,325	1,473,334
City of Vista California, COP, Refunding, Community Projects (NPFGC), 5.00%, 5/01/37	2,265	2,212,950
County of Sacramento California, RB, Senior Series A (AGC), 5.50%, 7/01/41	2,100	2,234,841
East Side Union High School District-Santa Clara County California, GO, Election of 2002, Series B (NPFGC), 5.00%, 8/01/11 (a)	1,800	1,899,810
Modesto Schools Infrastructure Financing Agency, Special Tax Bonds (AMBAC), 5.50%, 9/01/36	2,565	2,426,336
Oceanside Unified School District California, GO, Series A (AGC), 5.25%, 8/01/33	1,825	1,951,856
Oxnard Union High School District, GO, Refunding, Election of 2004, Series A (AGM), 5.00%, 8/01/40	1,885	1,948,091
San Pablo Joint Powers Financing Authority California, Tax Allocation Bonds, Refunding, CAB (NPFGC) (b):		
5.66%, 12/01/24	2,635	1,114,763
5.66%, 12/01/25	2,355	926,386
5.66%, 12/01/26	2,355	858,704
Santa Ana Unified School District, GO (NPFGC), 5.00%, 8/01/32	790	794,550

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

West Contra Costa Unified School District California, GO, Election of 2000, Series C (NPFGC), 5.00%, 8/01/21	3,480	3,534,149
		21,375,770
Colorado 1.2%		
Colorado Health Facilities Authority, RB, Hospital, NMC Inc. Project, Series B (AGM), 6.00%, 5/15/26	1,900	2,159,445
District of Columbia 0.2%		
District of Columbia, RB, Deed Tax, Housing Production Trust Fund, Series A (NPFGC), 5.00%, 6/01/32	400	407,624
Florida 13.0%		
County of Miami-Dade Florida, RB: CAB, Sub-Series A (NPFGC), 5.24%, 10/01/37 (b)	1,075	181,288
Miami International Airport, Series A, AMT (AGM), 5.50%, 10/01/41	3,900	4,015,830
Water & Sewer System (AGM), 5.00%, 10/01/39	6,640	6,975,320
County of Miami-Dade Florida, Refunding RB, Water & Sewer System (AGM), 5.00%, 10/01/29	1,565	1,700,106
Jacksonville Port Authority, RB, AMT (AGC), 6.00%, 11/01/38	2,215	2,269,622
Orange County School Board, COP, Series A (AGC), 5.50%, 8/01/34	7,395	7,997,027
		23,139,193

Municipal Bonds	Par (000)	Value
Georgia 4.8%		
Augusta-Richmond County Georgia, RB (AGM), 5.25%, 10/01/39	\$ 3,495	\$ 3,650,737
Georgia Higher Education Facilities Authority, RB, USG Real Estate III, Series A (AGC), 5.00%, 6/15/38	1,305	1,341,070
Gwinnett County Hospital Authority, Refunding RB, Gwinnett Hospital System, Series D (AGM), 5.50%, 7/01/41	2,075	2,157,481
Metropolitan Atlanta Rapid Transit Authority, RB, Third Indenture, Series B (AGM), 5.00%, 7/01/34	1,260	1,337,629
		8,486,917
Illinois 12.5%		
Chicago Board of Education Illinois, GO, Refunding, Chicago School Reform Board, Series A (NPFGC), 5.50%, 12/01/26	1,200	1,387,908
Chicago Transit Authority, RB, Federal Transit Administration Section 5309, Series A (AGC), 6.00%, 6/01/26	2,000	2,334,180
City of Chicago Illinois, GO, Refunding, Projects, Series A (AGM): 5.00%, 1/01/28	1,405	1,499,669
5.00%, 1/01/29	2,180	2,311,498
5.00%, 1/01/30	870	917,728
City of Chicago Illinois, RB (AGM):		

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

General, Third Lien, Series C, 5.25%, 1/01/35	1,255	1,317,311
Series A, 5.00%, 1/01/33	8,000	8,188,160
City of Chicago Illinois, Refunding RB, Second Lien (NPFGC), 5.50%, 1/01/30	1,310	1,481,937
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/28	2,500	2,699,475
		22,137,866

Indiana 4.3%

Indiana Municipal Power Agency, RB, Series A (NPFGC), 5.00%, 1/01/42	6,000	6,114,420
Indianapolis Local Public Improvement Bond Bank, Refunding RB, Waterworks Project, Series A (AGC), 5.50%, 1/01/38	1,430	1,570,869
		7,685,289

Iowa 1.1%

Iowa Finance Authority, Refunding RB, Iowa Health System (AGC), 5.25%, 2/15/29	1,770	1,906,626
--	-------	-----------

Kentucky 0.8%

Kentucky Economic Development Finance Authority, RB, Louisville Arena, Sub-Series A-1 (AGC), 6.00%, 12/01/38	320	345,434
Kentucky State Property & Buildings Commission, Refunding RB, Project No. 93 (AGC), 5.25%, 2/01/29	1,000	1,099,630
		1,445,064

Louisiana 1.3%

Louisiana State Citizens Property Insurance Corp., RB, Series C-3 (AGC), 6.13%, 6/01/25	2,055	2,313,827
---	-------	-----------

Maine 1.0%

City of Portland Maine, RB, General (AGM), 5.25%, 1/01/35	1,680	1,768,570
---	-------	-----------

Massachusetts 1.6%

Massachusetts HFA, RB, Rental Mortgage, Series C, AMT (AGM), 5.50%, 7/01/32	2,440	2,468,133
Massachusetts HFA, Refunding RB, Housing Development, Series A, AMT (NPFGC), 5.15%, 6/01/11	315	315,684
		2,783,817

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniHoldings Quality Fund, Inc. (MUS)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Michigan 15.3%		
City of Detroit Michigan, RB:		
Second Lien, Series B (NPFGC), 5.50%, 7/01/29	\$ 2,410	\$ 2,515,293
Senior Lien, Series B (AGM), 7.50%, 7/01/33	2,000	2,437,160
City of Detroit Michigan, Refunding RB:		
Second Lien, Series C (BHAC), 5.75%, 7/01/27	1,580	1,734,761
Second Lien, Series E (BHAC), 5.75%, 7/01/31	3,240	3,504,449
Senior Lien, Series C-1 (AGM), 7.00%, 7/01/27	4,810	5,737,608
Senior Lien, Series C-2 (BHAC), 5.25%, 7/01/29	1,910	2,008,269
Michigan State Building Authority, Refunding RB, Facilities Program, Series I (AGC):		
5.25%, 10/15/24	875	959,858
5.25%, 10/15/25	455	495,327
Michigan Strategic Fund, Refunding RB, AMT (Syncora)		
Detroit Edison Co.:		
Pollution, Series B, 5.65%, 9/01/29	1,500	1,504,500
Pollution, Series C, 5.65%, 9/01/29	2,050	2,056,150
Project, Series A, 5.50%, 6/01/30	2,000	2,000,460
Royal Oak Hospital Finance Authority Michigan, Refunding RB, William Beaumont Hospital, 8.25%, 9/01/39	1,910	2,295,935
		27,249,770
Minnesota 0.9%		
City of Minneapolis Minnesota, Refunding RB, Fairview		
Health Services, Series B (AGC), 6.50%, 11/15/38	1,325	1,509,838
Mississippi 1.4%		
Mississippi Development Bank Special Obligation, Refunding RB, Jackson Mississippi Water and Sewer System (AGM), 5.00%, 9/01/34		
	2,500	2,555,850
Nevada 6.4%		
County of Clark Nevada, RB:		
Las Vegas-McCarran International Airport, Series A (AGC), 5.25%, 7/01/39	3,510	3,636,395
Las Vegas-McCarran, Series A-1, AMT (AGM), 5.00%, 7/01/23	1,750	1,796,795
Subordinate Lien, Series A-2 (NPFGC), 5.00%, 7/01/36	6,000	6,017,520
		11,450,710
New Jersey 7.4%		
New Jersey EDA, RB, Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/33		
	6,700	6,904,484

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

New Jersey Health Care Facilities Financing Authority, RB, Virtua Health (AGC), 5.50%, 7/01/38	2,100	2,277,513
New Jersey Transportation Trust Fund Authority, RB, Transportation System, Series A (AGC), 5.63%, 12/15/28	3,500	3,971,695
		<u>13,153,692</u>

New York 3.4%

New York City Transitional Finance Authority, RB, Fiscal 2009, Series S-3, 5.25%, 1/15/39	1,400	1,515,262
Sales Tax Asset Receivable Corp., RB, Series A (AMBAC), 5.25%, 10/15/27	4,095	4,521,863
		<u>6,037,125</u>

Pennsylvania 1.0%

Delaware River Port Authority, RB, Series D (AGC), 5.00%, 1/01/40	1,720	1,797,090
--	-------	-----------

Puerto Rico 1.4%

Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.38%, 8/01/39	2,115	2,417,297
--	-------	-----------

Municipal Bonds	Par (000)	Value
Texas 21.9%		
City of Austin Texas, Refunding RB, Series A (AGM): 5.00%, 11/15/28	\$ 1,080	\$ 1,169,521
5.00%, 11/15/29	1,365	1,467,621
City of Dallas Texas, Refunding RB (AGC), 5.25%, 8/15/38	1,250	1,309,062
City of Houston Texas, Refunding RB, Combined, First Lien, Series A (AGC), 6.00%, 11/15/35	4,000	4,633,680
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, Series B, 7.25%, 12/01/35	600	688,878
Lower Colorado River Authority, Refunding RB, LCRA Transmission Services Project (AGC), 5.50%, 5/15/36	2,610	2,801,052
Lubbock Cooper ISD Texas, GO, School Building (AGC), 5.75%, 2/15/42	775	843,061
North Texas Tollway Authority, Refunding RB (NPFGC) System, First Tier: 5.75%, 1/01/40	6,710	7,117,498
Series A, 5.13%, 1/01/28	5,000	5,258,250
Series A, 5.63%, 1/01/33	6,585	7,017,766
Series B, 5.75%, 1/01/40	6,275	6,656,081
		<u>38,962,470</u>

Utah 1.5%

City of Riverton Utah, RB, IHC Health Services Inc., 5.00%, 8/15/41	2,485	2,583,406
--	-------	-----------

Virginia 1.7%

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Virginia HDA, RB, Sub-Series H-1 (NPFGC), 5.35%, 7/01/31	1,260	1,269,349
Virginia Public School Authority, RB, School Financing, 6.50%, 12/01/35	1,500	1,751,265
		<u>3,020,614</u>

Washington 1.3%

Chelan County Public Utility District No. 1, RB, Chelan Hydro System, Series A, AMT (AMBAC), 5.45%, 7/01/37	2,310	2,315,290
--	-------	-----------

Total Municipal Bonds 124.1%

220,517,117

**Municipal Bonds Transferred to
Tender Option Bond Trusts (c)**

Alabama 1.2%

Mobile Board of Water & Sewer Commissioners, RB (NPFGC), 5.00%, 1/01/31	2,120	2,180,123
--	-------	-----------

California 2.6%

City of San Jose California, GO, Libraries, Parks, and Public Safety Project (NPFGC), 5.00%, 9/01/30	1,258	1,320,136
Sequoia Union High School District California, GO, Refunding, Election of 2004, Series B (AGM), 5.50%, 7/01/35	3,149	3,334,433
		<u>4,654,569</u>

Colorado 3.3%

Colorado Health Facilities Authority, RB, Catholic Health, Series C-3 (AGM), 5.10%, 10/01/41	5,610	5,768,314
---	-------	-----------

District of Columbia 0.7%

District of Columbia Water & Sewer Authority, RB, Series A, 6.00%, 10/01/35	1,040	1,183,950
--	-------	-----------

See Notes to Financial Statements.

Schedule of Investments (concluded)

BlackRock MuniHoldings Quality Fund, Inc. (MUS)
(Percentages shown are based on Net Assets)

Municipal Bonds Transferred to Tender Option Bond Trusts (c)	Par (000)	Value
Florida 8.0%		
City of St. Petersburg Florida, Refunding RB (NPFGC), 5.00%, 10/01/35	\$ 4,302	\$ 4,378,703
County of Miami-Dade Florida, GO, Building Better Communities Program, Series B-1, 6.00%, 7/01/38	7,500	8,424,150
Lee County Housing Finance Authority, RB, Multi-County Program, Series A-2, AMT (Ginnie Mae), 6.00%, 9/01/40	1,290	1,450,902
		<u>14,253,755</u>
Georgia 2.4%		
Augusta-Richmond County Georgia, RB (AGM), 5.25%, 10/01/34	4,000	4,187,120
Illinois 1.5%		
City of Chicago Illinois, Refunding RB, Second Lien (AGM), 5.25%, 11/01/33	2,509	2,704,499
Kentucky 0.9%		
Kentucky State Property & Building Commission, Refunding RB, Project No. 93 (AGC), 5.25%, 2/01/27	1,406	1,558,538
Massachusetts 4.8%		
Massachusetts School Building Authority, RB, Series A (AGM), 5.00%, 8/15/30	8,008	8,474,887
Nevada 5.5%		
Clark County Water Reclamation District, GO: Limited Tax, 6.00%, 7/01/38	5,000	5,647,700
Series B, 5.50%, 7/01/29	3,749	4,192,329
		<u>9,840,029</u>
New Jersey 1.4%		
New Jersey State Housing & Mortgage Finance Agency, RB, S/F Housing, Series CC, 5.25%, 10/01/29	2,401	2,535,938
Washington 2.5%		
City of Bellevue Washington, GO, Refunding (NPFGC), 5.50%, 12/01/39	4,002	4,493,078
Total Municipal Bonds Transferred to Tender Option Bond Trusts 34.8%		<u>61,834,800</u>

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Total Long-Term Investments
 (Cost \$270,162,093) 158.9% 282,351,917

Short-Term Securities	Shares
FFI Institutional Tax-Exempt Fund, 0.13% (d)(e)	10,941,587 10,941,587
Total Short-Term Securities (Cost \$10,941,587) 6.2%	10,941,587
Total Investments (Cost \$281,103,680*) 165.1%	293,293,504
Other Assets Less Liabilities 1.8%	3,163,431
Liability for Trust Certificates, Including	
Interest Expense and Fees Payable (17.9)%	(31,838,750)
Preferred Shares, at Redemption Value (49.0)%	(87,004,682)
Net Assets Applicable to Common Shares 100.0%	\$ 177,613,503

* The cost and unrealized appreciation (depreciation) of investments as of October 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$	249,235,422
Gross unrealized appreciation	\$	13,192,266
Gross unrealized depreciation		(949,598)
Net unrealized appreciation	\$	12,242,668

- (a) 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.
- (b) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (c) 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. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.
- (d) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at April 30, 2010	Net Activity	Shares Held at October 31, 2010	Income
-----------	--	-----------------	--	--------

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

FFI Institutional Tax-Exempt Fund

8,653,666 2,287,921 10,941,587 \$ 8,749

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

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 assets and liabilities

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 methodologies 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 Note 1 of the Notes to Financial Statements.

The following table summarizes the inputs used as of October 31, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments ¹		\$ 282,351,917		\$ 282,351,917
Short-Term Securities	\$ 10,941,587			10,941,587
Total	\$ 10,941,587	\$ 282,351,917		\$ 293,293,504

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

See Notes to Financial Statements.

Schedule of Investments October 31, 2010 (Unaudited)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Alabama 2.8%		
Birmingham Special Care Facilities Financing Authority, RB, Children s Hospital (AGC), 6.00%, 6/01/34	\$ 4,615	\$ 5,093,068
County of Jefferson Alabama, RB, Series A: 5.50%, 1/01/21	5,500	5,133,535
5.25%, 1/01/23	6,500	5,870,345
		16,096,948
Arizona 5.3%		
City of Tucson Arizona, COP (AGC): 4.25%, 7/01/21	1,870	1,976,908
4.25%, 7/01/22	1,895	1,984,539
4.50%, 7/01/24	2,120	2,220,679
Refunding, 4.00%, 7/01/20	2,325	2,468,638
Maricopa County IDA Arizona, RB, Arizona Charter Schools Project, Series A, 6.63%, 7/01/20	2,610	2,040,185
Pima County IDA, RB: Arizona Charter Schools Project, Series C, 6.70%, 7/01/21	970	975,655
Charter Schools, Series K, 6.38%, 7/01/13 (a)	820	939,671
Charter Schools, Series K, 6.38%, 7/01/31	930	934,185
Pima County IDA, Refunding RB, Tucson Electric Power Co., San Juan, Series A, 4.95%, 10/01/20	2,325	2,459,431
Salt River Project Agricultural Improvement & Power District, RB, Series A, 5.00%, 1/01/25	4,000	4,436,360
Scottsdale IDA, RB, Scottsdale Healthcare, Series C (AGC), 5.00%, 9/01/35	7,710	7,835,365
State of Arizona, COP, Department of Administration, Series A (AGM), 4.25%, 10/01/23	2,750	2,847,047
		31,118,663
California 16.7%		
Antelope Valley Healthcare District California, RB, Series A, 5.25%, 9/01/17	8,000	7,939,600
California HFA, RB, Home Mortgage, Series K, AMT, 4.55%, 8/01/21	3,805	3,638,874
California HFA, Refunding RB, Home Mortgage, Series M, AMT, 4.55%, 8/01/21	7,210	6,895,211
California Pollution Control Financing Authority, RB, AMT: Republic Services Inc. Project, Series B, Mandatory Put Bonds, 5.25%, 6/01/23 (b)	605	649,328
Waste Management Inc. Project, Series A-2, 5.40%, 4/01/25	1,240	1,284,677
	9,035	9,036,175

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

California Pollution Control Financing Authority, Refunding RB, Pacific Gas, Series C, AMT (FGIC), 4.75%, 12/01/23		
California State Public Works Board, RB, Department of Corrections, Series C, 5.50%, 6/01/20	10,000	10,481,500
California Statewide Communities Development Authority, RB, Health Facility, Memorial Health Services, Series A, 6.00%, 10/01/23	2,500	2,636,725
City of Sacramento California, Special Tax Bonds, North Natomas Community Facilities, Series 4-C: 5.75%, 9/01/22	1,715	1,743,143
6.00%, 9/01/28	2,990	3,028,481
Golden State Tobacco Securitization Corp. California, Refunding RB, Asset-Backed, Senior Series A-1, 5.00%, 6/01/15	5,000	5,254,600
Los Angeles Regional Airports Improvement Corp. California, Refunding RB, Facilities, LAXFUEL Corp., LA International, AMT (AMBAC), 5.50%, 1/01/32	1,435	1,441,501
Rowland Unified School District California, GO, Election of 2000, Series B (AGM), 5.25%, 8/01/27	1,515	1,569,858

Municipal Bonds	Par (000)	Value
-----------------	--------------	-------

California (concluded)		
State of California, GO: 5.50%, 4/01/14 (a)	\$ 14,795	\$ 17,129,503
5.50%, 4/01/28	15	15,883
(NPFGC), 5.25%, 2/01/27	5,000	5,165,750
Refunding (AMBAC), 4.50%, 8/01/28	3,000	2,917,530
Various Purpose, 5.25%, 10/01/21	2,550	2,835,651
Various Purpose, 6.00%, 11/01/39	10,000	11,202,800
Tustin Unified School District California, Special Tax Bonds, Senior Lien, Community Facilities District 97-1, Series A (AGM), 5.00%, 9/01/32	2,610	2,639,049
		97,505,839

Colorado 2.0%		
Elk Valley Public Improvement Corp., RB, Public Improvement Fee, Series A, 7.10%, 9/01/14	600	612,366
Montrose Memorial Hospital, RB, 6.38%, 12/01/23	2,250	2,322,045
Plaza Metropolitan District No. 1 Colorado, Tax Allocation Bonds, Public Improvement Fee, Tax Increment, 7.50%, 12/01/15	7,500	7,765,875
Southlands Metropolitan District No. 1, GO, 6.75%, 12/01/14 (a)	930	1,068,895
		11,769,181

Connecticut 0.2%		
Connecticut State Development Authority, RB, Learjet Inc. Project, AMT, 7.95%, 4/01/26	1,160	1,244,065

Florida 4.3%		
County of Miami-Dade Florida, Refunding RB, Series C (BHAC), 5.00%, 10/01/23	8,000	8,806,320
	2,770	2,189,491

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Harbor Bay Community Development District Florida, Special Assessment Bonds, 6.75%, 5/01/34		
Highlands County Health Facilities Authority, Refunding RB, Adventist Health, Series G, 5.13%, 11/15/16 (a)	35	41,976
Midtown Miami Community Development District, Special Assessment Bonds:		
Series A, 6.00%, 5/01/24	3,190	3,160,907
Series B, 6.50%, 5/01/37	1,925	1,932,142
Panther Trace II Community Development District, Special Assessment Bonds, Special Assessment, 5.13%, 11/01/13	1,960	1,733,738
Portofino Shores Community Development District, Special Assessment Bonds, Series A, 6.40%, 5/01/34	1,085	1,090,045
South Lake County Hospital District, RB, South Lake Hospital Inc., 6.63%, 10/01/23	2,390	2,478,286
Sterling Hill Community Development District, Special Assessment Bonds, Refunding, Series B, 5.50%, 11/01/10 (c)(d)	160	123,184
University of Florida Research Foundation Inc., RB (AMBAC), 5.13%, 9/01/33	4,000	3,831,040
		25,387,129

Georgia 1.3%

Fulton County Development Authority, Refunding RB, Robert Woodruff, Series B, 5.25%, 3/15/24	4,000	4,367,640
Medical Center Hospital Authority, Refunding RB, Columbus Regional Healthcare (AGM):		
4.00%, 8/01/23	1,500	1,497,990
4.13%, 8/01/24	2,000	1,988,060
		7,853,690

Guam 0.8%

Territory of Guam, GO, Series A, 6.00%, 11/15/19	1,530	1,635,601
Territory of Guam, RB, Section 30, Series A, 5.38%, 12/01/24	2,620	2,731,743
		4,367,344

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Idaho 0.7%		
Idaho Health Facilities Authority, RB, St. Luke's Regional Medical Center (AGM), 4.63%, 7/01/30	\$ 3,700	\$ 3,682,277
University of Idaho, RB, General, Series B, 5.00%, 4/01/32	400	423,716
		<u>4,105,993</u>
Illinois 7.9%		
City of Chicago Illinois, ARB, General, 3rd Lien, Series B-2, AMT: (AGM), 5.75%, 1/01/23	8,130	8,532,110
(Syncora), 6.00%, 1/01/29	7,510	7,848,025
City of Chicago Illinois, Refunding ARB, General, 3rd Lien, Series A-2, AMT (AGM), 5.75%, 1/01/19	2,550	2,729,418
Du Page & Will Counties Community School District No. 204 Indian, GO, School Building, Series A (NPFGC), 5.25%, 12/30/22	8,650	9,707,030
Du Page County Forest Preservation District Illinois, GO, Refunding, Series A, 3.50%, 11/01/24	3,000	2,952,600
Illinois Finance Authority, RB, Community Rehabilitation Providers Facilities, Series A, 6.63%, 7/01/12 (a)	6,930	6,792,647
Village of Hodgkins Illinois, RB, MBM Project, AMT, 5.90%, 11/01/17	6,000	6,004,860
Village of Wheeling Illinois, Tax Allocation Bonds, North Milwaukee/Lake-Cook TIF Project, 6.00%, 1/01/25	1,560	1,474,512
		<u>46,041,202</u>
Indiana 0.4%		
County of Jasper Indiana, Refunding RB, Northern Indiana Public Service Co., Series C (NPFGC), 5.85%, 4/01/19	2,000	2,260,920
Iowa 0.6%		
Iowa Higher Education Loan Authority, Refunding RB, Private College Facility: 5.00%, 9/01/20	1,000	1,038,530
5.00%, 9/01/22	2,315	2,352,642
		<u>3,391,172</u>
Kansas 1.5%		
City of Dodge City Kansas, RB (AGC), 4.00%, 6/01/24	2,245	2,310,442
Kansas Development Finance Authority, Refunding RB: Adventist Health, 5.00%, 11/15/23	1,500	1,659,645

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Adventist/Sunbelt, Series D, 5.00%, 11/15/24	1,000	1,081,240
Sisters of Leavenworth, Series A, 4.00%, 1/01/22	3,775	3,821,168
		8,872,495

Kentucky 3.1%

Kentucky Economic Development Finance Authority, Refunding RB, Owensboro Medical Health System, Series A, 5.25%, 6/01/23	8,650	8,895,054
Kentucky State Property & Buildings Commission, Refunding RB, Project No. 93 (AGC), 5.25%, 2/01/24	8,000	9,024,560
		17,919,614

Louisiana 3.2%

Louisiana Public Facilities Authority, RB (NPFGC): Nineteenth Judicial District Court, 5.50%, 6/01/41	2,000	2,093,120
University of New Orleans Research & Technology, 5.25%, 3/01/26	6,965	7,310,394
Louisiana Public Facilities Authority, Refunding RB, Entergy Gulf States Louisiana, LLC Project, Series A, 5.00%, 9/01/28	5,000	5,059,600
New Orleans Aviation Board Louisiana, Refunding GARB, Restructuring, Series A-2 (AGC), 6.00%, 1/01/23	850	979,617
Port of New Orleans Louisiana, Refunding RB, Continental Grain Co. Project, 6.50%, 1/01/17	3,500	3,500,595
		18,943,326

Municipal Bonds	Par (000)	Value
-----------------	--------------	-------

Maine 0.3%

Portland New Public Housing Authority Maine, Refunding RB, Senior Living, Series A, 6.00%, 2/01/34	\$ 1,965	\$ 1,970,915
---	----------	--------------

Maryland 0.5%

Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20	1,750	1,827,420
Maryland EDC, Refunding RB, CNX Marine Terminals, Inc., 5.75%, 9/01/25	790	806,590
Maryland Industrial Development Financing Authority, RB, Our Lady of Good Counsel School, Series A, 6.00%, 5/01/35	500	496,195
		3,130,205

Massachusetts 0.7%

Massachusetts Development Finance Agency, RB, Ogden Haverhill Project, Series B, AMT: 5.35%, 12/01/15	1,210	1,211,428
5.50%, 12/01/19	2,000	2,002,360
Massachusetts Health & Educational Facilities Authority, RB, Winchester Hospital, 5.00%, 7/01/25	1,060	1,066,392
		4,280,180

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Michigan 4.2%

City of Detroit Michigan, Refunding RB, Second Lien, Series C (BHAC), 5.75%, 7/01/26	4,235	4,670,231
Kalamazoo Hospital Finance Authority, Refunding RB, Bronson Methodist Hospital, 4.25%, 5/15/25	2,120	2,027,377
Michigan State Hospital Finance Authority, Refunding RB: Hospital, Henry Ford Health, 5.25%, 11/15/24	4,900	5,063,758
Hospital, Oakwood Obligation Group, Series A, 6.00%, 4/01/22	4,795	4,937,603
Wayne County Airport Authority, RB, Detroit Metropolitan Wayne County Airport, AMT (AGC), 4.75%, 12/01/18	7,665	7,920,628
		24,619,597

Minnesota 1.7%

City of St. Cloud Minnesota, RB, CentraCare Health System, Series A, 4.25%, 5/01/21	2,300	2,346,920
Minneapolis & St. Paul Housing & Redevelopment Authority, RB, HealthPartners Obligation Group Project: 6.00%, 12/01/19	1,000	1,050,470
6.00%, 12/01/21	2,545	2,652,348
Minnesota Higher Education Facilities Authority, RB, St. Olaf College, Series 7-F, 4.50%, 10/01/30	2,000	2,048,700
Minnesota State Municipal Power Agency, RB, Series A, 5.25%, 10/01/24	2,000	2,114,400
		10,212,838

Mississippi 1.6%

Mississippi Business Finance Corp., Refunding RB, System Energy Resource Inc. Project: 5.88%, 4/01/22	5,000	5,025,000
5.90%, 5/01/22	3,110	3,125,550
Mississippi Hospital Equipment & Facilities Authority, Refunding RB, Baptist Memorial Healthcare, Series B2, 4.50%, 9/01/23	1,120	1,169,784
		9,320,334

Missouri 1.4%

Missouri State Health & Educational Facilities Authority, RB, SSM Health Care, Series B, 4.25%, 6/01/25	8,125	8,194,875
---	-------	-----------

Montana 0.5%

Montana Facility Finance Authority, Refunding RB, Series B, 5.00%, 1/01/24	2,625	2,892,540
--	-------	-----------

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Nebraska 1.5%		
Douglas County Hospital Authority No. 2, RB, Health Facilities, Immanuel Obligation Group, 5.50%, 1/01/30	\$ 500	\$ 520,415
Douglas County School District No. 17 Nebraska, GO, Refunding:		
2.00%, 6/15/24	4,390	3,636,939
2.00%, 6/15/25	4,480	3,634,445
Lancaster County Hospital Authority No. 1, RB, Immanuel Obligation Group, 5.50%, 1/01/30	1,000	1,038,590
		<u>8,830,389</u>
Nevada 1.0%		
County of Clark Nevada, Special Assessment Bonds, Special Improvement District No. 142, Local Improvement, 6.38%, 8/01/23	2,110	2,058,579
County of Humboldt Nevada, Refunding RB, Idaho Power Co. Project, 5.15%, 12/01/24	3,800	4,045,974
		<u>6,104,553</u>
New Jersey 11.5%		
Garden State Preservation Trust, RB, Election of 2005, Series A (AGM):		
5.80%, 11/01/21	3,635	4,320,706
5.80%, 11/01/23	5,050	5,946,526
New Jersey EDA, RB:		
Cigarette Tax, 5.75%, 6/15/29	9,810	9,655,100
Continental Airlines Inc. Project, AMT, 6.63%, 9/15/12	5,540	5,614,845
Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/33	17,900	18,446,308
New Jersey EDA, Refunding RB:		
New Jersey American Water Co., Series E, AMT, 4.70%, 12/01/25 (e)	3,250	3,223,513
School Facilities Construction, Series AA, 4.25%, 12/15/24	5,000	5,130,650
New Jersey Health Care Facilities Financing Authority, Refunding RB, Hackensack University Medical, Series B (AGM), 4.00%, 1/01/24	1,000	981,070
New Jersey Higher Education Assistance Authority, Refunding RB, Series 1A, 4.75%, 12/01/21	2,400	2,503,968
New Jersey State Housing & Mortgage Finance Agency, RB, S/F Housing, Series X, AMT, 5.10%, 10/01/23	4,500	4,691,520
New Jersey Transportation Trust Fund Authority, RB, CAB, Transportation System, Series C (AMBAC), 5.71%,	9,450	4,437,437

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

12/15/25 (f)

South Jersey Port Corp., RB, Marine Terminal, Series O-1 (AGC), 4.63%, 1/01/23	1,375	1,480,518
University of Medicine & Dentistry of New Jersey, RB, Series A (AMBAC), 5.50%, 12/01/23	1,000	1,025,100
		<u>67,457,261</u>

New Mexico 1.9%

New Mexico Finance Authority, RB, Senior Lien, Series A (NPFGC), 5.13%, 6/15/14 (a)	9,520	10,928,389
---	-------	------------

New York 24.4%

City of New York New York, GO: Series D1, 5.13%, 12/01/26	4,615	5,021,628
Sub-Series I-1, 5.50%, 4/01/21	5,000	5,865,150
Dutchess County Industrial Development Agency New York, RB, St. Francis Hospital, Series B, 7.25%, 3/01/19	895	915,272
Long Island Power Authority, Refunding RB, Series A, 5.50%, 4/01/24	1,475	1,665,570
Metropolitan Transportation Authority, RB, Transportation, Series A, 5.00%, 11/15/25	1,980	2,118,244

Municipal Bonds	Par (000)	Value
-----------------	--------------	-------

New York (concluded)

Metropolitan Transportation Authority, Refunding RB: Series A, 5.13%, 1/01/29	\$ 8,000	\$ 8,253,360
Series B, 5.25%, 11/15/25	4,000	4,505,560
Monroe County Industrial Development Corp., RB, Unity Hospital of Rochester Project (FHA), 4.20%, 8/15/25 (e)	1,345	1,352,814
New York City Industrial Development Agency, RB: Continental Airlines Inc. Project, Mandatory Put Bonds, AMT, 8.38%, 11/01/16	3,500	3,549,560
New York City Industrial Development Agency, RB: Special Needs Facilities Pooled Program, Series C-1, 6.80%, 7/01/19	2,055	2,072,509
New York City Industrial Development Agency, Refunding RB, New York Stock Exchange Project, Series A, 4.25%, 5/01/24	2,740	2,826,885
New York City Transitional Finance Authority, RB: Fiscal 2007, Series S-1 (NPFGC), 5.00%, 7/15/24	500	539,315
Fiscal 2009, Series S-3, 5.00%, 1/15/23	3,560	3,871,536
New York Liberty Development Corp., Refunding RB, Second Priority, Bank of America Tower at One Bryant Park Project, 5.63%, 7/15/47	4,000	4,167,400
New York State Dormitory Authority, LRB, Municipal Health Facilities, Sub-Series 2-4, 5.00%, 1/15/27	6,900	7,253,073
New York State Dormitory Authority, RB: Interagency Council Pooled, Series A-1, 4.25%, 7/01/25	405	411,087
Mental Health Services Facilities Improvement, Series A (AGM), 5.00%, 2/15/22	4,000	4,412,600
Mount Sinai School of Medicine, Series A (NPFGC), 5.15%, 7/01/24	1,000	1,063,210
North Shore-Long Island Jewish Health System, Series A, 5.50%, 5/01/30	1,495	1,581,276

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

University of Rochester, Series A, 4.00%, 7/01/24	1,515	1,571,752
University of Rochester, Series C, 4.00%, 7/01/24	625	648,888
New York State Dormitory Authority, Refunding RB:		
Mount Sinai Hospital, Series A, 4.25%, 7/01/23	4,575	4,601,855
North Shore-Long Island Jewish Health System, Series E, 5.00%, 5/01/22	650	690,358
North Shore-Long Island Jewish Health System, Series E, 5.00%, 5/01/23	2,160	2,281,414
Yeshiva University, 4.00%, 9/01/23	2,860	2,978,862
Yeshiva University, 4.25%, 9/01/24	2,750	2,882,055
New York State Environmental Facilities Corp., RB, Environment, Series A (FGIC), 5.25%, 12/15/14 (a)	7,380	8,668,031
New York State Urban Development Corp., Refunding RB, Service Contract, Series B, 5.00%, 1/01/21	8,000	8,932,080
Port Authority of New York & New Jersey, Refunding RB: Consolidated, 152nd Series, AMT, 5.00%, 11/01/23	2,500	2,634,525
Consolidated, 153rd Series, 5.00%, 7/15/24	2,010	2,265,511
Sales Tax Asset Receivable Corp., RB, Series A (NPFGC), 5.00%, 10/15/20	9,070	10,103,164
Tobacco Settlement Financing Corp. New York, RB, Asset-Backed:		
Series A-1 (AMBAC), 5.25%, 6/01/22	6,510	6,983,407
Series B-1C, 5.50%, 6/01/21	7,000	7,574,420
Series B-1C, 5.50%, 6/01/22	10,000	10,797,500
Trust for Cultural Resources, RB, Carnegie Hall, Series A, 5.00%, 12/01/29	4,250	4,544,312
United Nations Development Corp. New York, Refunding RB, Series A, 4.25%, 7/01/24	2,985	3,057,804
		142,661,987

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

43

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
North Carolina 0.8%		
Gaston County Industrial Facilities & Pollution Control Financing Authority North Carolina, RB, Exempt Facilities, National Gypsum Co. Project, AMT, 5.75%, 8/01/35	\$ 3,105	\$ 2,571,157
North Carolina Eastern Municipal Power Agency, Refunding RB, Series B, 5.00%, 1/01/26	1,925	2,056,574
		<u>4,627,731</u>
Northern Mariana Islands 0.8%		
Commonwealth of the Northern Mariana Islands, GO, Series A:		
6.75%, 10/01/13 (a)	3,800	4,451,738
6.75%, 10/01/33	250	247,453
		<u>4,699,191</u>
Pennsylvania 7.9%		
City of Philadelphia Pennsylvania, RB, Series A, AMT (AGM), 5.00%, 6/15/20	2,895	3,065,921
City of Philadelphia Pennsylvania, Refunding RB, Series B, AMT (AGM), 5.00%, 6/15/19	3,905	4,176,163
City of Pittsburgh Pennsylvania, GO, Refunding, Series B (AGM), 5.25%, 9/01/17	9,630	10,842,609
City of Pittsburgh Pennsylvania, GO, Series C (AGM), 5.25%, 9/01/18	6,430	7,143,666
Montgomery County IDA Pennsylvania, MRB, Whitemarsh Continuing Care, 6.00%, 2/01/21	3,500	3,380,195
Montgomery County IDA Pennsylvania, RB, New Regional Medical Center Project (FHA), 5.00%, 8/01/24	3,500	3,704,750
Pennsylvania Economic Development Financing Authority, RB, National Gypsum Co., Series A, AMT, 6.25%, 11/01/27	7,710	6,880,481
South Fork Municipal Authority, RB, Conemaugh Valley Memorial, Series A (AGC), 6.00%, 7/01/26	6,225	6,955,504
		<u>46,149,289</u>
Puerto Rico 12.3%		
Commonwealth of Puerto Rico, GO, Refunding, Public Improvement, Series A (NPPFGC), 5.50%, 7/01/21	3,290	3,579,290
Puerto Rico Aqueduct & Sewer Authority, RB, Senior Lien, Series A (AGC), 5.00%, 7/01/25	3,215	3,427,608
Puerto Rico Electric Power Authority, RB: Series CCC, 4.25%, 7/01/23	2,360	2,373,853

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Series NN, 5.50%, 7/01/13 (a)	5,000	5,642,750
Series TT, 5.00%, 7/01/27	8,500	8,791,635
Series WW, 5.50%, 7/01/38	3,000	3,152,880
Puerto Rico Highway & Transportation Authority, RB: Series Y (AGM), 6.25%, 7/01/21	3,000	3,415,950
Subordinate (FGIC), 5.75%, 7/01/21	4,375	4,512,069
Puerto Rico Housing Finance Authority, Refunding RB, Subordinate, Capital Fund Modernization, 5.13%, 12/01/27	13,900	14,236,658
Puerto Rico Industrial Medical & Environmental Pollution Control Facilities Financing Authority, RB, Special Facilities, American Airlines, Series A, 6.45%, 12/01/25	5,390	5,066,869
Puerto Rico Public Buildings Authority, RB, Government Facilities, Series I, 5.50%, 7/01/14 (a)	8,000	9,282,160
Puerto Rico Public Buildings Authority, Refunding RB, Government Facilities: Series D, 5.25%, 7/01/27	3,930	3,956,567
Series M-3 (NPFGC), 6.00%, 7/01/28	1,900	2,049,796
Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 5.75%, 8/01/37	2,000	2,171,580
		71,659,665

Municipal Bonds	Par (000)	Value
Rhode Island 0.5%		
Rhode Island Health & Educational Building Corp., RB, University of Rhode Island, Series A (AGC), 4.75%, 9/15/24	\$ 2,500	\$ 2,683,300
South Carolina 0.2%		
County of Florence South Carolina, RB, McLeod Regional Medical Center, Series A, 4.50%, 11/01/25	1,000	1,004,240
South Dakota 0.4%		
Educational Enhancement Funding Corp., RB, Series B, 6.50%, 6/01/32	2,200	2,253,350
Tennessee 2.1%		
Chattanooga-Hamilton County Hospital Authority Tennessee, Refunding RB, Erlanger Health (AGM), 5.00%, 10/01/22	1,620	1,726,110
Johnson City Health & Educational Facilities Board, RB, Appalachian Christian Village Project, Series A, 6.00%, 2/15/19	1,660	1,659,984
Memphis-Shelby County Sports Authority Inc., Refunding RB, Memphis Arena Project: Series A, 5.00%, 11/01/23	2,695	2,936,903
Series B, 5.00%, 11/01/22	1,000	1,096,390
Shelby County Health Educational & Housing Facilities Board, RB, Germantown Village, Series A: 6.75%, 12/01/18	3,550	3,425,679
7.00%, 12/01/23	1,450	1,377,355
		12,222,421

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Texas 3.4%		
Brazos River Authority, Refunding RB, TXU Electric Co. Project, Series C, Mandatory Put Bonds, AMT, 5.75%, 5/01/36 (b)	6,770	6,431,500
Dallas-Fort Worth International Airport Facilities Improvement Corp., RB, Series 2001-A-1, AMT, 6.15%, 1/01/16	4,000	4,001,880
Dallas-Fort Worth International Airport Facilities Improvement Corp., Refunding RB, Series A, Sub-Series 2, Mandatory Put Bonds, AMT, 9.00%, 5/01/29 (b)	3,000	3,154,230
Gulf Coast IDA, RB, Citgo Petroleum Corp. Project, Mandatory Put Bonds, AMT, 7.50%, 5/01/25 (b)	2,440	2,495,144
Gulf Coast Waste Disposal Authority, Refunding RB, Series A, AMT, 6.10%, 8/01/24	2,000	2,026,960
Houston Health Facilities Development Corp., RB, Buckingham Senior Living Community, Series A, 7.00%, 2/15/14 (a)	1,500	1,791,615
		19,901,329

U.S. Virgin Islands 1.5%		
United States Virgin Islands, Refunding RB, Senior Secured, Hovensa Coker Project, AMT, 6.50%, 7/01/21	1,860	1,892,271
Virgin Islands Public Finance Authority, RB, Senior Secured, Hovensa Refinery, AMT, 6.13%, 7/01/22	6,750	6,837,413
		8,729,684

Virginia 3.2%		
James City County EDA, Refunding RB, First Mortgage, Williamsburg Lodge, Series A: 5.75%, 3/01/17	3,285	3,352,310
6.00%, 3/01/23	1,150	1,164,616
Roanoke Economic Development Authority, Refunding RB, Carilion Health System, Series B (AGM), 5.00%, 7/01/38	4,705	4,824,413
Tobacco Settlement Financing Corp. Virginia, RB, Asset-Backed, 5.63%, 6/01/15 (a)	7,800	9,294,090
		18,635,429

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
West Virginia 0.7%		
West Virginia Hospital Finance Authority, Refunding RB, Charleston, Series A, 5.13%, 9/01/23	\$ 4,000	\$ 4,251,480
Wisconsin 0.4%		
Wisconsin Housing & EDA, RB, Series C, AMT, 4.85%, 9/01/26	2,000	2,026,800
Total Municipal Bonds 136.2%		796,325,553

Municipal Bonds Transferred to
Tender Option Bond Trusts (g)

California 4.9%		
City of San Jose California, GO, Libraries, Parks, and Public Safety Project (NPFGC), 5.00%, 9/01/30	3,101	3,253,191
Peralta Community College District, GO, Election of 2000, Series D (AGM), 5.00%, 8/01/30	10,140	10,570,139
Sequoia Union High School District California, GO, Refunding, Election of 2004, Series B (AGM), 5.50%, 7/01/35	9,028	9,558,709
Tamalpais Union High School District California, GO, Election of 2001 (AGM), 5.00%, 8/01/28	4,875	5,128,354
		28,510,393
Illinois 2.3%		
McHenry County Conservation District Illinois, GO (AGM), 5.13%, 2/01/27	12,695	13,683,827
Massachusetts 1.5%		
Massachusetts School Building Authority, RB, Series A (AGM), 5.00%, 8/15/30	8,338	8,824,040
Minnesota 1.9%		
State of Minnesota, GO, State Various Purpose, Series A, 4.00%, 8/01/29	10,525	10,842,004
New Jersey 2.1%		
New Jersey Transportation Trust Fund Authority, RB, Transportation System, Series D (AGM),	11,120	12,227,219

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

5.00%, 6/15/19

New York 6.9%		
City of New York New York, GO, Sub-Series B-1, 5.25%, 9/01/22	8,250	9,340,650
New York City Municipal Water Finance Authority, Refunding RB, Series A, 4.75%, 6/15/30	8,000	8,436,480
New York State Urban Development Corp., RB, State Personal Income Tax, State Facilities, Series A-1 (NPFGC), 5.25%, 3/15/34	10,000	10,461,600
Sales Tax Asset Receivable Corp., RB, Series A (AMBAC), 5.25%, 10/15/27	11,101	12,258,074
		40,496,804

Washington 1.9%		
Snohomish County School District No. 15-Edmonds Washington, GO (NPFGC), 5.00%, 12/01/19	10,000	11,308,500

Total Municipal Bonds Transferred to Tender Option Bond Trusts 21.5%		125,892,787
---	--	-------------

Total Long-Term Investments (Cost \$883,491,937) 157.7%		922,218,340
--	--	-------------

Short-Term Securities	Shares	Value
FFI Institutional Tax-Exempt Fund, 0.13% (h)(i)	10,237,333	\$ 10,237,333
Total Short-Term Securities (Cost \$10,237,333) 1.7%		10,237,333
Total Investments (Cost \$893,729,270*) 159.4%		932,455,673
Other Assets Less Liabilities 1.1%		6,202,963
Liability for Trust Certificates, Including Interest Expense and Fees Payable (11.4)%		(66,658,625)
Preferred Shares, at Redemption Value (49.1)%		(287,239,117)
Net Assets Applicable to Common Shares 100.0%		\$ 584,760,894

* The cost and unrealized appreciation (depreciation) of investments as of October 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 826,656,040
Gross unrealized appreciation	\$ 45,339,792
Gross unrealized depreciation	(6,148,971)
Net unrealized appreciation	\$ 39,190,821

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

- (a) 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.
- (b) Variable rate security. Rate shown is as of report date.
- (c) Non-income producing security.
- (d) Issuer filed for bankruptcy and/or is in default of interest payments.
- (e) When-issued security. Unsettled when-issued transactions were as follows:

Counterparty	Value	Unrealized Appreciation (Depreciation)
JPMorgan Securities	\$ 1,352,814	\$ 10,827
Morgan Stanley Co. Inc.	\$ 3,223,513	\$ (26,487)

- (f) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (g) 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. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.
- (h) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at April 30, 2010	Net Activity	Shares Held at October 31, 2010	Income
FFI Institutional Tax-Exempt Fund	17,541,876	(7,304,543)	10,237,333	\$ 7,206

- (i) Represents the current yield as of report date.

See Notes to Financial Statements.

Schedule of Investments (concluded)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

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 assets and liabilities

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 methodologies 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 Note 1 of the Notes to Financial Statements.

The following table summarizes the inputs used as of October 31, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments ¹		\$ 922,218,340		\$ 922,218,340
Short-Term Securities	\$ 10,237,333			10,237,333
Total	\$ 10,237,333	\$ 922,218,340		\$ 932,455,673

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

See Notes to Financial Statements.

Schedule of Investments October 31, 2010 (Unaudited)

BlackRock MuniVest Fund II, Inc. (MVT)
 (Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Alabama 1.0%		
Prattville IDB Alabama, RB, International Paper Co. Project, Series A, AMT, 4.75%, 12/01/30	\$ 3,500	\$ 3,151,540
Arizona 2.6%		
Maricopa County IDA Arizona, RB, Arizona Charter Schools Project, Series A, 6.75%, 7/01/29	1,000	694,890
Maricopa County Pollution Control Corp., Refunding RB, Southern California Edison Co., Series A, 5.00%, 6/01/35	1,705	1,742,732
Pima County IDA, RB, Arizona Charter Schools Project, Series C, 6.75%, 7/01/31	1,920	1,927,065
Pima County IDA, Refunding IDR, Tucson Electric Power, 5.75%, 9/01/29	1,110	1,147,052
Pima County IDA, Refunding RB, Charter Schools II, Series A, 6.75%, 7/01/21	475	477,931
Salt River Project Agricultural Improvement & Power District, RB, Series A, 5.00%, 1/01/38	1,980	2,088,385
		8,078,055
California 13.4%		
California Health Facilities Financing Authority, Refunding RB, St. Joseph Health System, Series A, 5.75%, 7/01/39	2,200	2,338,644
California State Public Works Board, RB, Various Capital Projects, Sub-Series I-1, 6.38%, 11/01/34	1,185	1,298,843
Los Angeles Department of Airports, RB, Series A, 5.25%, 5/15/39	800	843,664
Los Angeles Department of Airports, Refunding RB, Senior, Los Angeles International Airport, Series A, 5.00%, 5/15/40	5,930	6,148,580
San Francisco City & County Public Utilities Commission, RB, Series B, 5.00%, 11/01/39	9,475	10,038,478
State of California, GO, Various Purpose: 6.00%, 3/01/33	2,525	2,900,316
6.50%, 4/01/33	14,925	17,546,875
		41,115,400
Colorado 3.9%		
Colorado Health Facilities Authority, RB, Catholic Health Initiatives, Series D, 6.25%, 10/01/33	1,060	1,192,341
Colorado Health Facilities Authority, Refunding RB, Sisters of Leavenworth, Series A, 5.00%, 1/01/40	2,190	2,231,807
Colorado Housing & Finance Authority, Refunding RB, S/F Program, Senior Series A-2, AMT, 7.50%, 4/01/31	95	100,145

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Elk Valley Public Improvement Corp., RB, Public Improvement Fee:		
Series A, 7.35%, 9/01/31	3,025	2,897,133
Series B, 7.45%, 9/01/31	400	386,948
Plaza Metropolitan District No. 1 Colorado, Tax Allocation Bonds, Public Improvement Fee, Tax Increment:		
8.00%, 12/01/25	3,300	3,447,741
Subordinate, 8.13%, 12/01/25	820	762,502
University of Colorado, RB, Series A, 5.75%, 6/01/28	750	868,200
		11,886,817

Connecticut 2.2%

Connecticut State Health & Educational Facility Authority, RB:		
Ascension Health Senior Credit, 5.00%, 11/15/40	1,375	1,440,161
Wesleyan University, 5.00%, 7/01/35	3,385	3,659,761
Mohegan Tribe of Indians of Connecticut, RB, Public Improvement, Priority Distribution, 6.25%, 1/01/31		
	2,000	1,656,460
		6,756,382

Delaware 1.3%

Delaware State EDA, RB, Exempt Facilities, Indian River Power, 5.38%, 10/01/45		
	4,065	4,048,903

Municipal Bonds	Par (000)	Value
District of Columbia 1.9%		
Metropolitan Washington Airports Authority, RB:		
CAB, Second Senior Lien, Series B (AGC), 7.05%, 10/01/33 (a)	\$ 6,590	\$ 1,662,262
CAB, Second Senior Lien, Series B (AGC), 7.08%, 10/01/34 (a)	4,830	1,141,957
CAB, Second Senior Lien, Series B (AGC), 7.10%, 10/01/35 (a)	6,515	1,443,268
First Senior Lien, Series A, 5.25%, 10/01/44	1,500	1,582,995
		5,830,482

Florida 6.4%

County of Miami-Dade Florida, RB, Water & Sewer System, 5.00%, 10/01/34		
	5,680	5,914,300
County of Miami-Dade Florida, Refunding RB, Miami International Airport:		
AMT (AGC), 5.00%, 10/01/40	4,975	4,951,817
Series A-1, 5.38%, 10/01/41	1,165	1,202,478
Fiddlers Creek Community Development District No. 2, Special Assessment Bonds (b)(c):		
Series A, 6.38%, 5/01/35	2,350	752,000
Series B, 5.75%, 5/01/13	400	128,000
Hillsborough County IDA, RB:		
H. Lee Moffitt Cancer Center Project, Series A, 5.25%, 7/01/37	1,400	1,389,962
National Gypsum Co., Series B, AMT, 7.13%, 4/01/30	2,720	2,651,510

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Midtown Miami Community Development District, Special Assessment Bonds, Series A, 6.25%, 5/01/37	915	899,875
Palm Coast Park Community Development District, Special Assessment Bonds, 5.70%, 5/01/37	1,225	764,804
Preserve at Wilderness Lake Community Development District, RB, Series A, 7.10%, 5/01/33	875	882,744
		19,537,490

Georgia 4.9%

De Kalb Private Hospital Authority, Refunding RB, Children s Healthcare, 5.25%, 11/15/39	845	889,075
Fulton County Residential Care Facilities for the Elderly Authority, Refunding RB, Canterbury Court Project, Series A, 6.13%, 2/15/26	2,000	1,896,620
Metropolitan Atlanta Rapid Transit Authority, RB, Third Series, 5.00%, 7/01/39	3,465	3,716,628
Municipal Electric Authority of Georgia, RB, Series W: 6.60%, 1/01/18	5,560	6,536,837
6.60%, 1/01/18 (d)	380	431,171
Municipal Electric Authority of Georgia, Refunding RB, Series X, 6.50%, 1/01/20	1,205	1,453,037
		14,923,368

Guam 0.5%

Territory of Guam, GO, Series A: 6.00%, 11/15/19	630	673,483
6.75%, 11/15/29	895	991,338
7.00%, 11/15/39	615	689,052
		2,353,873

Idaho 0.00%

Idaho Housing & Finance Association, Refunding RB, S/F Mortgage, Senior Series E-2, AMT, 6.90%, 1/01/27	15	15,030
---	----	--------

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniVest Fund II, Inc. (MVT)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Illinois 12.7%		
City of Chicago Illinois, RB, Series C, AMT (Ginnie Mae), 7.00%, 3/01/32	\$ 125	\$ 125,040
City of Chicago Illinois, Special Assessment Bonds, Lake Shore East, 6.75%, 12/01/32	800	785,536
City of Chicago Illinois, Tax Allocation Bonds, Kingsbury Redevelopment Project, Series A, 6.57%, 2/15/13	900	900,351
Illinois Finance Authority, RB: Advocate Health Care Network, Series D, 6.50%, 11/01/38	5,000	5,676,800
Community Rehabilitation Providers Facilities, Series A, 6.50%, 7/01/22	1,000	999,880
Navistar International, Recovery Zone, 6.50%, 10/15/40	1,540	1,597,765
Illinois Finance Authority, Refunding RB: Central DuPage Health, Series B, 5.50%, 11/01/39	1,610	1,709,756
Friendship Village Schaumburg, Series A, 5.63%, 2/15/37	250	206,250
Metropolitan Pier & Exposition Authority, Refunding RB (AGM), McCormick Place Expansion Project: CAB, Series B, 6.25%, 6/15/45 (a)	12,580	1,513,500
CAB, Series B, 6.25%, 6/15/46 (a)	6,400	721,792
Series B, 5.00%, 6/15/50	3,150	3,144,424
Series B-2, 5.00%, 6/15/50	2,500	2,461,675
Regional Transportation Authority, RB: Series A (AMBAC), 7.20%, 11/01/20	1,500	1,857,300
Series A (NPFGC), 6.70%, 11/01/21	7,000	8,630,790
Series C (NPFGC), 7.75%, 6/01/20	2,500	3,253,450
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/34	630	659,314
Village of Hodgkins Illinois, RB, MBM Project, AMT, 6.00%, 11/01/23	2,800	2,802,268
Village of Wheeling Illinois, Tax Allocation Bonds, North Milwaukee/Lake-Cook TIF Project, 6.00%, 1/01/25	1,550	1,465,060
		38,510,951
Indiana 6.1%		
Indiana Finance Authority, RB, Sisters of St. Francis Health, 5.25%, 11/01/39	840	874,852
Indiana Finance Authority, Refunding RB: Ascension Health Senior Credit, Series B-5, 5.00%, 11/15/36	1,500	1,528,935
Parkview Health System, Series A, 5.75%, 5/01/31	3,295	3,473,853
Indiana Health & Educational Facilities Financing Authority, RB, Clarian Health Obligation, Series A, 5.25%, 2/15/40	500	499,215

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Indiana Transportation Finance Authority, RB, Series A:		
7.25%, 6/01/15	160	165,955
6.80%, 12/01/16	3,775	4,306,595
Indianapolis Local Public Improvement Bond Bank, Refunding RB, Series D, 6.75%, 2/01/14		
	7,450	8,056,355
		18,905,760

Kansas 0.6%		
Kansas Development Finance Authority, Refunding RB, Sisters of Leavenworth, Series A, 5.00%, 1/01/40		
	1,660	1,706,629

Kentucky 0.3%		
Kentucky Economic Development Finance Authority, Refunding RB, Owensboro Medical Health System, Series A, 6.38%, 6/01/40		
	1,010	1,070,479

Louisiana 3.6%		
Port of New Orleans Louisiana, Refunding RB, Continental Grain Co. Project, 6.50%, 1/01/17		
	7,500	7,501,275
Sabine River Authority Louisiana, Refunding RB, International Paper Co. Project, 6.20%, 2/01/25		
	3,600	3,646,404
		11,147,679

Municipal Bonds	Par (000)	Value
Maryland 2.0%		
County of Montgomery Maryland, GO, West Germantown Development District, Senior Series A (Radian), 6.70%, 7/01/27		
	\$ 1,175	\$ 1,214,363
Maryland Community Development Administration, Refunding RB, Residential, Series D, AMT, 4.90%, 9/01/42		
	1,500	1,501,515
Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35		
	435	453,196
Maryland EDC, Refunding RB, CNX Marine Terminals, Inc., 5.75%, 9/01/25		
	830	847,430
Maryland Health & Higher Educational Facilities Authority, RB:		
King Farm Presbyterian Community, Series B, 5.00%, 1/01/17		
	875	855,426
University of Maryland Medical System, Series B (NPFGC), 7.00%, 7/01/22		
	1,000	1,189,640
		6,061,570

Massachusetts 4.1%		
Massachusetts HFA, HRB, Series A, AMT, 5.20%, 12/01/37		
	3,000	3,056,790
Massachusetts HFA, RB, S/F, Series 130, AMT, 5.00%, 12/01/32		
	2,720	2,738,333
Massachusetts HFA, Refunding HRB, AMT: Series D, 4.85%, 6/01/40		
	2,770	2,693,963
Series F, 5.70%, 6/01/40		
	2,210	2,280,632
	1,805	1,856,045

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Massachusetts Health & Educational Facilities Authority,
 Refunding RB, Partners Healthcare, Series J1,
 5.00%, 7/01/39

12,625,763

Michigan 6.9%

City of Detroit Michigan, RB, Senior Lien, Series B (AGM), 7.50%, 7/01/33	910	1,108,908
Flint Hospital Building Authority Michigan, Refunding RB, Hurley Medical Center (ACA), 6.00%, 7/01/20	2,695	2,688,855
Kalamazoo Hospital Finance Authority, Refunding RB, Bronson Methodist Hospital, 5.50%, 5/15/36	1,380	1,413,934
Michigan State Hospital Finance Authority, Refunding RB: Henry Ford Health System, Series A, 5.25%, 11/15/46	7,050	7,036,182
McLaren Health Care, 5.75%, 5/15/38	8,560	9,008,544

21,256,423

Mississippi 3.1%

County of Lowndes Mississippi, Refunding RB, Weyerhaeuser Co. Project, Series A, 6.80%, 4/01/22	3,000	3,387,240
Mississippi Business Finance Corp., Refunding RB, System Energy Resource Inc. Project, 5.90%, 5/01/22	5,000	5,025,000
University of Southern Mississippi, RB, Campus Facilities Improvements Project, 5.38%, 9/01/36	1,065	1,155,727

9,567,967

Montana 0.8%

Montana Facility Finance Authority, Refunding RB, Sisters of Leavenworth, Series A, 4.75%, 1/01/40	2,265	2,343,188
--	-------	-----------

Nevada 0.2%

County of Clark Nevada, Special Assessment Bonds, Special Improvement District No. 142, Local Improvement, 6.38%, 8/01/23	570	556,109
---	-----	---------

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock MuniVest Fund II, Inc. (MVT)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
New Jersey 2.8%		
New Jersey EDA, RB: Cigarette Tax, 5.50%, 6/15/24	\$ 2,420	\$ 2,422,444
Continental Airlines Inc. Project, AMT, 6.25%, 9/15/29	3,000	2,939,880
New Jersey Health Care Facilities Financing Authority, RB, Pascack Valley Hospital Association, 6.63%, 7/01/36 (b)(c)	1,680	17
New Jersey State Housing & Mortgage Finance Agency, RB, Series AA, 6.38%, 10/01/28	1,215	1,313,937
Tobacco Settlement Financing Corp. New Jersey, Refunding RB, Series 1A, 4.50%, 6/01/23	2,160	2,021,501
		8,697,779
New York 7.9%		
Metropolitan Transportation Authority, RB, Series 2008C, 6.50%, 11/15/28	9,405	11,107,775
New York City Industrial Development Agency, RB: British Airways Plc Project, AMT, 7.63%, 12/01/32	1,920	1,967,040
Series C, 6.80%, 6/01/28	690	724,597
Special Needs Facilities Pooled Program, Series C-1, 6.50%, 7/01/17	890	887,090
New York City Transitional Finance Authority, RB, Fiscal 2009, Series S-3, 5.25%, 1/15/39	6,700	7,251,611
New York Liberty Development Corp., Refunding RB, Second Priority, Bank of America Tower at One Bryant Park Project, 6.38%, 7/15/49	1,220	1,307,144
Westchester County Industrial Development Agency New York, RB, Special Needs Facilities Pooled Program, Series E-1, 6.50%, 7/01/17	1,000	996,730
		24,241,987
North Carolina 2.9%		
Gaston County Industrial Facilities & Pollution Control Financing Authority North Carolina, RB, Exempt Facilities, National Gypsum Co. Project, AMT, 5.75%, 8/01/35	1,675	1,387,017
North Carolina Capital Facilities Finance Agency, RB, Duke Energy Carolinas, Series B, 4.38%, 10/01/31	1,610	1,578,573
North Carolina Capital Facilities Finance Agency, Refunding RB, Duke Energy Carolinas, Series A, 4.63%, 11/01/40	2,695	2,622,505
North Carolina Medical Care Commission, RB, Duke University Health System, Series A, 5.00%, 6/01/42	1,400	1,457,456
	2,000	1,750,900

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

North Carolina Medical Care Commission, Refunding
RB, Carolina Village Project, 6.00%, 4/01/38

8,796,451

Ohio 0.9%

Buckeye Tobacco Settlement Financing Authority, RB,
Asset-Backed, Senior Series A-2, 6.50%, 6/01/47

3,250 2,717,520

Pennsylvania 4.3%

Bucks County IDA, RB, Ann's Choice Inc. Facility,
Series A, 6.13%, 1/01/25

880 888,342

Lancaster County Hospital Authority, RB, Brethren
Village Project, Series A, 6.50%, 7/01/40

2,000 1,989,340

Montgomery County IDA Pennsylvania, MRB,
Whitemarsh Continuing Care:
6.13%, 2/01/28

470 433,082

6.25%, 2/01/35

1,090 985,709

Pennsylvania Economic Development Financing
Authority, RB:

Aqua Pennsylvania Inc. Project, 5.00%, 11/15/40

1,890 1,948,193

National Gypsum Co., Series B, AMT, 6.13%,
11/01/27

2,000 1,760,800

Municipal Bonds

**Par
(000)**

Value

Pennsylvania (concluded)

Pennsylvania Turnpike Commission, RB, Sub-Series B,
5.25%, 6/01/39

\$ 3,915 \$ 4,070,034

Philadelphia Authority for Industrial Development, RB,
Commercial Development, AMT, 7.75%, 12/01/17

1,265 1,266,619

13,342,119

Puerto Rico 2.7%

Commonwealth of Puerto Rico, GO, Refunding, Public
Improvement, Series C, 6.00%, 7/01/39

2,990 3,286,369

Puerto Rico Sales Tax Financing Corp., RB, First
Sub-Series A, 6.50%, 8/01/44

4,255 4,898,101

8,184,470

Tennessee 0.7%

Johnson City Health & Educational Facilities Board, RB,
Appalachian Christian Village Project, Series A,
6.00%, 2/15/24

1,000 989,080

Rutherford County Health & Educational Facilities
Board, RB, Ascension Health Senior Credit Group,
5.00%, 11/15/40

1,025 1,078,269

2,067,349

Texas 9.4%

Brazos River Authority, Refunding RB, Texas Utility Co.,
Series, AMT, 7.70%, 4/01/33

1,500 555,000

Brazos River Harbor Navigation District, Refunding RB,
Dow Chemical Co. Project, Series A7, AMT, 6.63%,

3,000 3,079,050

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

5/15/33		
City of Dallas Texas, Refunding RB, 5.00%, 10/01/35	1,510	1,624,926
City of Houston Texas, RB, Special Facilities, Continental Airlines, Series E, AMT, 6.75%, 7/01/21	4,820	4,839,714
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, Series B, 7.25%, 12/01/35	2,000	2,296,260
North Texas Tollway Authority, Refunding RB, First Tier, Series A, 6.25%, 1/01/39	7,000	7,738,710
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien:		
LBJ Infrastructure Group LLC, LBJ Freeway Managed Lanes Project, 7.00%, 6/30/40	4,310	4,684,884
NTE Mobility Partners LLC, North Tarrant Express Managed Lanes Project, 6.88%, 12/31/39	3,875	4,204,917
		29,023,461
U.S. Virgin Islands 2.0%		
United States Virgin Islands, Refunding RB, Senior Secured, Hovensa Coker Project, AMT, 6.50%, 7/01/21	6,000	6,104,100
Utah 0.9%		
City of Riverton Utah, RB, IHC Health Services Inc., 5.00%, 8/15/41	2,780	2,890,088
Virginia 1.8%		
Fairfax County EDA, Refunding RB, Goodwin House Inc.: 5.13%, 10/01/37	1,000	997,780
5.13%, 10/01/42	3,440	3,394,592
Tobacco Settlement Financing Corp. Virginia, Refunding RB, Senior Series B1, 5.00%, 6/01/47	1,405	986,394
		5,378,766
Washington 1.4%		
Washington Health Care Facilities Authority, Refunding RB, Catholic Health Initiatives, Series D, 6.38%, 10/01/36	3,700	4,181,555

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

49

Schedule of Investments (continued)

BlackRock MuniVest Fund II, Inc. (MVT)
(Percentages shown are based on Net Assets)

Municipal Bonds	Par (000)	Value
Wisconsin 4.4%		
State of Wisconsin, Refunding RB, Series A, 6.00%, 5/01/36	\$ 7,100	\$ 8,076,889
Wisconsin Health & Educational Facilities Authority, RB: Ascension Health Senior Credit Group, 5.00%, 11/15/33	2,465	2,568,900
SynergyHealth Inc., 6.00%, 11/15/32	2,215	2,293,057
Wisconsin Housing & EDA, Refunding RB, Series A, AMT, 5.63%, 3/01/31	695	730,104
		13,668,950
Total Municipal Bonds 120.6%		370,744,453

**Municipal Bonds Transferred to
Tender Option Bond Trusts (e)**

California 3.3%		
Bay Area Toll Authority, Refunding RB, San Francisco Bay Area, Series F-1, 5.63%, 4/01/44	3,271	3,629,988
California Educational Facilities Authority, RB, University of Southern California, Series A, 5.25%, 10/01/39	2,610	2,825,873
Los Angeles Community College District California, GO, Election of 2001, Series A (AGM), 5.00%, 8/01/32	2,290	2,402,141
San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33	1,077	1,167,928
		10,025,930
Colorado 0.8%		
Colorado Health Facilities Authority, Refunding RB, Catholic Healthcare, Series A, 5.50%, 7/01/34	2,129	2,293,508
Connecticut 2.1%		
Connecticut State Health & Educational Facility Authority, RB, Yale University, Series Z-3, 5.05%, 7/01/42	6,000	6,416,160
Illinois 1.5%		
City of Chicago Illinois, Refunding RB, Second Lien (AGM), 5.25%, 11/01/33	1,320	1,422,286
	2,999	3,242,510

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Illinois State Toll Highway Authority, RB, Series B, 5.50%, 1/01/33		4,664,796
Maryland 0.8%		
Maryland State Transportation Authority, RB, Transportation Facility Project (AGM), 5.00%, 7/01/41	2,290	2,447,689
Massachusetts 3.4%		
Massachusetts School Building Authority, RB, Series A (AGM), 5.00%, 8/15/30	10,000	10,582,400
New Hampshire 0.7%		
New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth College, 5.25%, 6/01/39	2,009	2,208,427
New York 4.7%		
New York City Municipal Water Finance Authority, RB: Series DD, 5.00%, 6/15/37	6,299	6,679,610
Series FF-2, 5.50%, 6/15/40	1,575	1,777,297
New York State Dormitory Authority, ERB, Series F, 5.00%, 3/15/35	5,790	6,048,016
		14,504,923
North Carolina 2.1%		
North Carolina Capital Facilities Finance Agency, Refunding RB, Duke University Project, Series A, 5.00%, 10/01/41	6,239	6,555,042
Municipal Bonds Transferred to Tender Option Bond Trusts (e)		
	Par (000)	Value
Ohio 5.7%		
Ohio Higher Educational Facility Commission, Refunding RB, Hospital, Cleveland Clinic Health, Series A, 5.25%, 1/01/33	\$ 2,400	\$ 2,536,248
State of Ohio, Refunding RB, Cleveland Clinic Health, Series A, 5.50%, 1/01/39	13,840	14,904,157
		17,440,405
South Carolina 1.8%		
South Carolina State Public Service Authority, RB, Santee Cooper, Series A, 5.50%, 1/01/38	4,995	5,545,699
Texas 6.3%		
Harris County Health Facilities Development Corp., Refunding RB, School Health Care System, Series B, 5.75%, 7/01/27 (d)	10,000	12,422,100
Texas Department of Housing & Community Affairs, MRB, Series B, AMT (Ginnie Mae), 5.25%, 9/01/32	3,901	4,002,574
Texas State University Systems, Refunding RB (AGM), 5.00%, 3/15/30	2,743	2,869,474

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

		19,294,148
Washington 5.7%		
Central Puget Sound Regional Transit Authority, RB, Series A:		
5.00%, 11/01/36	4,000	4,194,940
(AGM), 5.00%, 11/01/32	7,693	8,116,214
Central Puget Sound Regional Transportation Authority, Washington, RB, Series A, 5.00%, 11/01/34		
	5,000	5,243,675
		17,554,829
Wisconsin 0.9%		
Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community Health Inc., 5.25%, 4/01/39		
	2,499	2,629,571
Total Municipal Bonds Transferred to Tender Option Bond Trusts 39.8%		122,163,527
Total Long-Term Investments (Cost \$464,877,306) 160.4%		492,907,980
Short-Term Securities		
	Shares	
FII Institutional Tax-Exempt Fund, 0.13% (f)(g)	137,942	137,942
Total Short-Term Securities (Cost \$137,942) 0.0%		137,942
Total Investments (Cost \$465,015,248*) 160.4%		493,045,922
Other Assets Less Liabilities 5.4%		16,705,502
Liability for Trust Certificates, Including Interest Expense and Fees Payable (20.3)%		(62,281,805)
Preferred Shares, at Redemption Value (45.5)%		(140,016,058)
Net Assets Applicable to Common Shares 100.0%		\$ 307,453,561

* The cost and unrealized appreciation (depreciation) of investments as of October 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 402,599,350
Gross unrealized appreciation	\$ 35,010,761
Gross unrealized depreciation	(6,794,102)
Net unrealized appreciation	\$ 28,216,659

- (a) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (b) Issuer filed for bankruptcy and/or is in default of interest payments.
- (c) Non-income producing security.
- (d) Security is collateralized by Municipal or US Treasury obligations.

See Notes to Financial Statements.

50

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

Schedule of Investments (concluded)

BlackRock MuniVest Fund II, Inc. (MVT)

- (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. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.
- (f) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at April 30, 2010	Net Activity	Shares Held at October 31, 2010	Income
FFI Institutional Tax-Exempt Fund	552,231	(414,289)	137,942	\$ 2,911

- (g) Represents the current yield as of report date.

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 assets and liabilities

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 methodologies 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 Note 1 of the Notes to Financial Statements.

The following table summarizes the inputs used as of October 31, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments ¹		\$ 492,907,980		\$ 492,907,980
Short-Term Securities	\$ 137,942			137,942

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Total	\$	137,942	\$	492,907,980	\$	493,045,922
--------------	----	---------	----	-------------	----	-------------

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

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

51

Statements of Assets and Liabilities

October 31, 2010 (Unaudited)	BlackRock Apex Municipal Fund, Inc. (APX)	BlackRock MuniAssets Fund, Inc. (MUA)	BlackRock MuniEnhanced Fund, Inc. (MEN)	BlackRock MuniHoldings Fund, Inc. (MHD)	BlackRock MuniHoldings Fund II, Inc. (MUH)	BlackRock MuniHoldings Quality Fund, Inc. (MUS)	BlackRock Muni Intermediate Duration Fund, Inc. (MUI)	Black Muni Fund (M)
Assets								
Investments at value unaffiliated ¹	\$ 189,891,103	\$ 275,698,362	\$ 525,610,107	\$ 346,635,990	\$ 252,449,342	\$ 282,351,917	\$ 922,218,340	\$ 492,340,000
Investments at value affiliated ²	998,663	2,949,596	6,417,821	967,139	1,177,035	10,941,587	10,237,333	1,000,000
Investments sold receivable	3,724,610	5,320,066		3,695,387	2,579,619	147,750	755,168	10,000,000
Interest receivable	3,605,313	5,051,997	7,696,630	5,654,413	3,947,187	4,150,374	13,950,360	8,000,000
Income receivable affiliated								370
Prepaid expenses	16,684	21,259	41,393	22,162	24,559	20,167	74,081	
Other assets							101,700	
Total assets	198,236,373	289,041,280	539,765,951	356,975,091	260,177,742	297,611,795	947,337,352	511,340,000

Accrued Liabilities

Bank overdraft							14,590	
Income dividends payable Common Shares	879,588	1,323,533	1,677,113	1,241,076	901,472	957,137	2,719,498	1,000,000
Investment advisory fees payable	108,974	134,400	228,723	166,590	121,455	167,230	439,869	

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Interest expense and fees payable	4,502	6,751	60,285	32,102	25,344	23,336	49,813	
Other affiliates payable	1,208	1,756	3,308	2,180	1,592	1,836	5,744	
Officers and Directors fees payable	352	2,937	821	560	402	802	108,972	
Investments purchased payable			1,631,643				5,340,307	
Other accrued expenses payable	26,292	20,842	37,112	22,387	22,208	27,855	49,736	
Total accrued liabilities	1,020,916	1,490,219	3,639,005	1,464,895	1,072,473	1,178,196	8,728,529	2,000,000

Other Liabilities

Trust certificates ³	7,285,446	10,755,646	61,582,907	43,487,622	33,617,184	31,815,414	66,608,812	62,000,000
Total Liabilities	8,306,362	12,245,865	65,221,912	44,952,517	34,689,657	32,993,610	75,337,341	64,000,000

Preferred Shares at Redemption Value

\$25,000 per share liquidation preference, plus unpaid dividends ^{4,5}			142,601,192	83,705,999	55,054,000	87,004,682	287,239,117	140,000,000
Net Assets Applicable to Common Shareholders	\$ 189,930,011	\$ 276,795,415	\$ 331,942,847	\$ 228,316,575	\$ 170,434,085	\$ 177,613,503	\$ 584,760,894	\$ 307,000,000

¹ Investments at cost unaffiliated	\$ 186,374,178	\$ 270,850,753	\$ 505,115,498	\$ 332,204,086	\$ 240,530,777	\$ 270,162,093	\$ 883,491,937	\$ 464,000,000
---	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------

² Investments at cost affiliated	\$ 998,663	\$ 2,949,596	\$ 6,417,821	\$ 967,139	\$ 1,177,035	\$ 10,941,587	\$ 10,237,333	\$ 10,000,000
---	------------	--------------	--------------	------------	--------------	---------------	---------------	---------------

³ Represents short-term floating rate certificates issued by tender option bond trusts.

⁴ Preferred Shares outstanding:

Par value \$0.025 per share

4,575

Par value \$0.05 per share

Par value \$0.10 per share

1,128

3,348

2,202

3,480

11,487

⁵ Preferred Shares authorized

7,480

5,000

3,480

5,360

12,800

See Notes to Financial Statements.

Statements of Assets and Liabilities (concluded)

October 31, 2010 (Unaudited)	BlackRock Apex Municipal Fund, Inc. (APX)	BlackRock MuniAssets Fund, Inc. (MUA)	BlackRock MuniEnhanced Fund, Inc. (MEN)	BlackRock MuniHoldings Fund, Inc. (MHD)	BlackRock MuniHoldings Fund II, Inc. (MUH)	BlackRock MuniHoldings Quality Fund, Inc. (MUS)	BlackRock Muni Durat Fund, (MU
Net Assets Applicable to Common Shareholders Consist of							
Paid-in capital ^{6,7}	\$ 194,551,693	\$ 296,473,229	\$ 315,005,419	\$ 207,692,862	\$ 153,941,127	\$ 174,213,484	\$ 540,500
Undistributed net investment income	1,676,187	1,081,133	5,633,582	4,159,425	3,535,638	3,306,259	10,010
Accumulated net realized gain (loss)	(9,814,794)	(25,606,556)	(9,190,763)	2,032,384	1,038,755	(12,096,064)	(4,480)
Net unrealized appreciation/depreciation	3,516,925	4,847,609	20,494,609	14,431,904	11,918,565	12,189,824	38,720
Net Assets Applicable to Common Shareholders	\$ 189,930,011	\$ 276,795,415	\$ 331,942,847	\$ 228,316,575	\$ 170,434,085	\$ 177,613,503	\$ 584,760
Net Asset Value Applicable to Common Shareholders							
Net asset value per share	\$ 9.50	\$ 13.07	\$ 11.29	\$ 16.37	\$ 15.22	\$ 13.73	\$
⁶ Common shares outstanding, \$0.10 par value	19,990,638	21,176,532	29,409,600	13,944,672	11,198,414	12,934,276	38,030
⁷ Common Shares authorized	150 Million	200 Million	200 Million	200 Million	200 Million	200 Million	200 Million

See Notes to Financial Statements.

Statements of Operations

Six Months Ended October 31, 2010 (Unaudited)	BlackRock Apex Municipal Fund, Inc. (APX)	BlackRock MuniAssets Fund, Inc. (MUA)	BlackRock MuniEnhance Fund, Inc. (MEN)	BlackRock MuniHoldings Fund, Inc. (MHD)	BlackRock MuniHoldings Fund II, Inc. (MUH)	BlackRock MuniHoldings Quality Fund, Inc. (MUS)	BlackRock Muni Intermediate Duration Fund, Inc. (MUI)
Investment Income							
Interest	\$ 6,318,030	\$ 9,143,900	\$ 12,533,793	\$ 9,230,707	\$ 6,725,117	\$ 6,825,857	\$ 21,940,486
Income affiliated	993	1,248	5,978	2,341	916	8,749	10,882
Total income	6,319,023	9,145,148	12,539,771	9,233,048	6,726,033	6,834,606	21,951,368
Expenses							
Investment advisory	628,621	773,922	1,325,666	961,350	700,801	806,899	2,538,466
Professional	23,765	25,630	41,935	37,776	30,594	30,838	44,214
Accounting services	18,217	26,767	43,503	30,300	24,435	27,119	70,189
Transfer agent	16,504	19,156	37,013	21,063	17,705	18,023	45,823
Officer and Directors	9,602	13,543	17,818	12,332	9,459	9,894	31,460
Custodian	9,067	9,461	13,773	10,070	7,852	8,508	22,211
Printing	5,873	9,513	14,033	9,444	7,067	8,171	26,476
Registration	4,530	4,844	4,986	4,643	4,780	4,789	6,819
Commissions for Preferred Shares			104,445	62,959	42,827	66,233	226,005
Miscellaneous	22,890	27,385	42,955	34,892	33,712	36,489	63,753
Total expenses excluding interest expense and fees	739,069	910,221	1,646,127	1,184,829	879,232	1,016,963	3,075,416
Interest expense and fees ¹	33,431	49,336	229,795	163,925	125,483	119,808	244,366
Total expenses	772,500	959,557	1,875,922	1,348,754	1,004,715	1,136,771	3,319,782
Less fees waived by advisor	(238)	(294)	(1,423)	(540)	(200)	(69,119)	(113,923)
Total expenses after fees waived	772,262	959,263	1,874,499	1,348,214	1,004,515	1,067,652	3,205,859
Net investment income	5,546,761	8,185,885	10,665,272	7,884,834	5,721,518	5,766,954	18,745,509

Realized and Unrealized Gain (Loss)

Net realized gain (loss)

from:

Investments	(355,779)	(441,834)	(92,354)	847,374	1,002,944	776,686	3,286,442
Financial futures contracts	4,454	6,998	(170,354)	5,726	4,453	8,271	
	(351,325)	(434,836)	(262,708)	853,100	1,007,397	784,957	3,286,442

Net change in unrealized appreciation/depreciation on investments

6,298,829	9,463,427	11,506,919	7,486,514	5,125,745	4,446,607	19,403,375
-----------	-----------	------------	-----------	-----------	-----------	------------

Total realized and unrealized gain

5,947,504	9,028,591	11,244,211	8,339,614	6,133,142	5,231,564	22,689,817
-----------	-----------	------------	-----------	-----------	-----------	------------

Dividends to Preferred Shareholders From

Net investment income		(449,806)	(229,485)	(116,212)	(182,778)	(2,124,876)
-----------------------	--	-----------	-----------	-----------	-----------	-------------

Net Increase in Net Assets Applicable to Common Shareholders Resulting from Operations

\$ 11,494,265	\$ 17,214,476	\$ 21,459,677	\$ 15,994,963	\$ 11,738,448	\$ 10,815,740	\$ 39,310,450
---------------	---------------	---------------	---------------	---------------	---------------	---------------

¹ Related to tender option bond trusts.

See Notes to Financial Statements.

Statements of Changes in Net Assets

	BlackRock Apex Municipal Fund, Inc. (APX)		BlackRock MuniAssets Fund, Inc. (MUA)		BlackRock MuniEnhanced Fund, Inc. (MEN)	
	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30, 2010	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30, 2010	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30, 2010
Increase (Decrease) in Net Assets Applicable to Common Shareholders:						
Operations						
Net investment income	\$ 5,546,761	\$ 11,440,748	\$ 8,185,885	\$ 16,818,625	\$ 10,665,272	\$ 22,103,824
Net realized loss	(351,325)	(618,845)	(434,836)	(505,303)	(262,708)	(2,514,799)
Net change in unrealized appreciation/depreciation	6,298,829	30,737,544	9,463,427	43,885,403	11,506,919	33,008,361
Dividends to Preferred Shareholders from net investment income					(449,806)	(972,174)
Net increase in net assets applicable to Common Shareholders resulting from operations	11,494,265	41,559,447	17,214,476	60,198,725	21,459,677	51,625,212
Dividends to Shareholders From						
Net investment income	(5,275,468)	(11,310,084)	(7,930,553)	(17,164,842)	(10,049,090)	(18,620,500)
Capital Share Transactions						
Reinvestment of common dividends	89,094	412,211	680,252	1,897,902	449,066	
Net Assets Applicable to Common Shareholders						
Total increase in net assets applicable to Common Shareholders	6,307,891	30,661,574	9,964,175	44,931,785	11,859,653	33,004,712
Beginning of period	183,622,120	152,960,546	266,831,240	221,899,455	320,083,194	287,078,482
End of period	\$ 189,930,011	\$ 183,622,120	\$ 276,795,415	\$ 266,831,240	\$ 331,942,847	\$ 320,083,194
Undistributed net investment income	\$ 1,676,187	\$ 1,404,894	\$ 1,081,133	\$ 825,801	\$ 5,633,582	\$ 5,467,206

See Notes to Financial Statements.

Statements of Changes in Net Assets (continued)

Increase (Decrease) in Net Assets Applicable to Common Shareholders:	BlackRock MuniHoldings Fund, Inc. (MHD)		BlackRock MuniHoldings Fund II, Inc. (MUH)		BlackRock MuniHoldings Quality Fund, Inc. (MUS)	
	Six Months Ended		Six Months Ended		Six Months Ended	
	October 31, 2010 (Unaudited)	Year Ended April 30, 2010	October 31, 2010 (Unaudited)	Year Ended April 30, 2010	October 31, 2010 (Unaudited)	Year Ended April 30, 2010
Operations						
Net investment income	\$ 7,884,834	\$ 15,784,697	\$ 5,721,518	\$ 11,430,386	\$ 5,766,954	\$ 12,056,685
Net realized gain (loss)	853,100	983,601	1,007,397	848,274	784,957	(267,028)
Net change in unrealized appreciation/depreciation	7,486,514	32,294,227	5,125,745	22,414,189	4,446,607	12,924,699
Dividends and distributions to Preferred Shareholders from:						
Net investment income	(229,485)	(478,200)	(116,212)	(252,975)	(182,778)	(395,183)
Net realized gain		(21,023)				
Net increase in net assets applicable to Common Shareholders resulting from operations	15,994,963	48,563,302	11,738,448	34,439,874	10,815,740	24,319,173
Dividends and Distributions to Common Shareholders From						
Net investment income	(7,270,591)	(13,840,853)	(5,402,986)	(10,095,056)	(5,735,412)	(10,496,334)
Net realized gain		(323,547)				
Decrease in net assets resulting from dividends and distributions to Common Shareholders	(7,270,591)	(14,164,400)	(5,402,986)	(10,095,056)	(5,735,412)	(10,496,334)
Capital Share Transactions						
Reinvestment of common dividends and distributions	458,801	49,523	376,800		555,971	93,344
Net Assets Applicable to Common Shareholders						
Total increase in net assets applicable to Common Shareholders	9,183,173	34,448,425	6,712,262	24,344,818	5,636,299	13,916,183
Beginning of period	219,133,402	184,684,977	163,721,823	139,377,005	171,977,204	158,061,021
End of period	\$ 228,316,575	\$ 219,133,402	\$ 170,434,085	\$ 163,721,823	\$ 177,613,503	\$ 171,977,204
Undistributed net investment income	\$ 4,159,425	\$ 3,774,667	\$ 3,535,638	\$ 3,333,318	\$ 3,306,259	\$ 3,457,495

See Notes to Financial Statements.

56

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

Statements of Changes in Net Assets (concluded)

	BlackRock Muni Intermediate Fund, Inc. (MUI)		BlackRock MuniVest Fund II, Inc. (MVT)	
	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30, 2010	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30, 2010
Increase (Decrease) in Net Assets Applicable to Common Shareholders:				
Operations				
Net investment income	\$ 18,745,509	\$ 38,883,136	\$ 11,738,805	\$ 24,074,947
Net realized gain	3,286,442	735,933	269,428	1,639,858
Net change in unrealized appreciation/depreciation	19,403,375	59,229,788	10,073,981	45,862,257
Dividends to Preferred Shareholders from net investment income	(2,124,876)	(4,345,317)	(463,494)	(992,540)
Net increase in net assets applicable to Common Shareholders resulting from operations	39,310,450	94,503,540	21,618,720	70,584,522
Dividends to Common Shareholders From				
Net investment income	(15,689,410)	(29,610,196)	(10,706,844)	(20,330,657)
Capital Share Transactions				
Reinvestment of common dividends			1,076,345	1,628,414
Net Assets Applicable to Common Shareholders				
Total increase in net assets applicable to Common Shareholders	23,621,040	64,893,344	11,988,221	51,882,279
Beginning of period	561,139,854	496,246,510	295,465,340	243,583,061
End of period	\$ 584,760,894	\$ 561,139,854	\$ 307,453,561	\$ 295,465,340
Undistributed net investment income	\$ 10,017,068	\$ 9,085,845	\$ 5,667,271	\$ 5,098,804

See Notes to Financial Statements.

Statements of Cash Flows

Six Months Ended October 31, 2010 (Unaudited)	BlackRock MuniEnhanced Fund, Inc. (MEN)	BlackRock MuniHoldings Fund, Inc. (MHD)	BlackRock MuniHoldings Fund II, Inc. (MUH)	BlackRock MuniHoldings Quality Fund, Inc. (MUS)	BlackRock MuniVest Fund II, Inc. (MVT)
Cash Provided by Operating Activities					
Net increase in net assets resulting from operations, excluding dividends to Preferred Shareholders	\$ 21,909,483	\$ 16,224,448	\$ 11,854,660	\$ 10,998,518	\$ 22,082,214
Adjustments to reconcile net increase in net assets resulting from operations to net cash provided by operating activities:					
(Increase) decrease in interest receivable	(300,587)	199,497	118,518	75,612	292,173
Increase in investment advisory fees payable	1,480	2,218	1,618	49,730	2,495
Increase (decrease) in interest expense and fees payable	(9,643)	(24)	(430)	(2,994)	1,938
Increase in other affiliates payable	77	74	59	41	95
Decrease in accrued expenses payable	(28,648)	(34,183)	(25,173)	(23,883)	(32,591)
Increase in Officers and Directors payable	88	81	50	207	2,479
Net realized and unrealized gain on investments	(11,407,502)	(8,333,756)	(6,131,296)	(5,222,694)	(10,556,473)
Amortization of premium and accretion and discount on investments	(79,221)	71,261	(159,909)	298,551	55,116
Proceeds from sales of long-term investments	22,265,952	28,689,043	23,432,146	29,147,224	41,131,043
Purchases of long-term investments	(25,292,308)	(34,407,970)	(24,977,608)	(27,532,708)	(46,979,258)
Net proceeds from sales (purchases) of short-term securities	789,602	2,387,515	(569,300)	(2,287,921)	414,289
Cash provided by operating activities	\$ 7,848,773	\$ 4,798,204	\$ 3,543,335	\$ 5,499,683	\$ 6,413,520
Cash Used for Financing Activities					
Cash receipts from trust certificates	3,728,311	3,779,156	2,747,390	1,060,000	8,859,565
Cash payments from trust certificates.	(1,540,000)	(1,580,000)	(1,150,000)	(1,200,000)	(5,225,167)
Cash dividends paid to Common Shareholders	(9,596,994)	(6,767,508)	(5,024,163)	(5,176,408)	(9,572,729)
Cash dividends paid to Preferred Shareholders	(440,090)	(229,852)	(116,562)	(183,275)	(475,189)
Cash used for financing activities	(7,848,773)	(4,798,204)	(3,543,335)	(5,499,683)	(6,413,520)
Cash					
Net increase in cash					
Cash at beginning of period					

Cash at end of period

Cash Flow Information

Cash paid during the period for interest	\$	239,438	\$	163,949	\$	125,913	\$	122,802	\$	226,436
--	----	---------	----	---------	----	---------	----	---------	----	---------

Noncash Financing Activities

Capital shares issued in reinvestment of dividends paid to Common Shareholders	\$	449,066	\$	458,801	\$	376,800	\$	555,971	\$	1,076,345
--	----	---------	----	---------	----	---------	----	---------	----	-----------

A Statement of Cash Flows is presented when a Fund has a significant amount of borrowing during the period, based on the average borrowing outstanding in relation to average total assets.

See Notes to Financial Statements.

Financial Highlights

BlackRock Apex Municipal Fund, Inc. (APX)

	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30, 2010	Period July 1, 2008 to April 30, 2009	Year Ended June 30,			
				2008	2007	2006	2005
Per Share Operating Performance							
Net asset value, beginning of period	\$ 9.19	\$ 7.67	\$ 9.14	\$ 9.95	\$ 9.90	\$ 9.82	\$ 9.13
Net investment income ¹	0.28	0.57	0.48	0.54	0.58	0.58	0.58
Net realized and unrealized gain (loss)	0.29	1.51	(1.48)	(0.77)	0.06	0.08	0.69
Net increase (decrease) from investment operations	0.57	2.08	(1.00)	(0.23)	0.64	0.66	1.27
Dividends from net investment income	(0.26)	(0.56)	(0.47)	(0.58)	(0.59)	(0.58)	(0.58)
Net asset value, end of period	\$ 9.50	\$ 9.19	\$ 7.67	\$ 9.14	\$ 9.95	\$ 9.90	\$ 9.82
Market price, end of period	\$ 9.31	\$ 8.87	\$ 7.72	\$ 9.28	\$ 10.23	\$ 10.25	\$ 9.48

Total Investment Return²

Based on net asset value	6.36% ³	27.99%	(10.81)% ³	(2.40)%	6.48%	7.00%	14.67%
Based on market price	7.99% ³	22.73%	(11.58)% ³	(3.61)%	5.73%	14.76%	22.36%

Ratios to Average Net Assets

Total expenses	0.83% ⁴	0.84%	0.91% ⁴	0.85%	0.80%	0.81%	0.80%
Total expenses after fees waived	0.83% ⁴	0.84%	0.91% ⁴	0.84%	0.80%	0.80%	0.80%
Total expenses after fees waived and excluding interest expense and fees ⁵	0.79% ⁴	0.80%	0.84% ⁴	0.80%	0.80%	0.80%	0.80%
Net investment income	5.96% ⁴	6.64%	7.16% ⁴	5.64%	5.75%	5.83%	6.11%

Supplemental Data

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Net assets, end of period (000)	\$ 189,930	\$ 183,622	\$ 152,961	\$ 181,656	\$ 196,826	\$ 194,646	\$ 192,475
Portfolio turnover	9%	46%	20%	25%	22%	19%	22%

¹ Based on average shares outstanding.

² Total investment returns based on market price, which can be significantly greater or lesser than the net asset value, may result in substantially different returns. Where applicable, total investment returns exclude the effects of any sales charges and include the reinvestment of dividends and distributions.

³ Aggregate total investment return.

⁴ Annualized.

⁵ Interest expense and fees relate to tender option bond trusts. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

59

Financial Highlights

BlackRock MuniAssets Fund, Inc. (MUA)

	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30, 2010	Period July 1, 2008 to April 30, 2009	Year Ended May 30,			
				2008	2007	2006	2005
Per Share Operating Performance							
Net asset value, beginning of period	\$ 12.63	\$ 10.59	\$ 12.79	\$ 13.87	\$ 13.65	\$ 13.40	\$ 12.36
Net investment income ¹	0.40	0.80	0.72	0.78	0.82	0.81	0.81
Net realized and unrealized gain (loss)	0.42	2.06	(2.18)	(1.04)	0.24	0.27	1.04
Net increase (decrease) from investment operations	0.82	2.86	(1.46)	(0.26)	1.06	1.08	1.85
Dividends and distributions from:							
Net investment income	(0.38)	(0.82)	(0.74)	(0.82)	(0.84)	(0.83)	(0.81)
Net realized gain				(0.00) ²			
Total dividends and distributions	(0.38)	(0.82)	(0.74)	(0.82)	(0.84)	(0.83)	(0.81)
Net asset value, end of period	\$ 13.07	\$ 12.63	\$ 10.59	\$ 12.79	\$ 13.87	\$ 13.65	\$ 13.40
Market price, end of period	\$ 12.99	\$ 12.65	\$ 10.91	\$ 13.35	\$ 15.29	\$ 14.13	\$ 13.27
Total Investment Return³							
Based on net asset value	6.54% ⁴	27.72%	(11.29)% ⁴	(1.90)%	7.72%	8.31%	15.65%
Based on market price	5.72% ⁴	24.17%	(12.45)% ⁴	(7.12)%	14.71%	13.22%	24.39%
Ratios to Average Net Assets							
Total expenses	0.71% ⁵	0.72%	0.77% ⁵	0.70%	0.68%	0.68%	0.67%
Total expenses after fees waived and paid indirectly	0.71% ⁵	0.72%	0.76% ⁵	0.69%	0.68%	0.68%	0.67%
Total expenses after fees waived and paid indirectly and excluding interest expense and fees ⁶	0.67% ⁵	0.67%	0.70% ⁵	0.66%	0.68%	0.68%	0.67%

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Net investment income	6.05% ⁵	6.72%	7.13% ⁵	5.81%	5.91%	5.97%	6.30%
-----------------------	--------------------	-------	--------------------	-------	-------	-------	-------

Supplemental Data

Net assets, end of period (000)	\$ 276,795	\$ 266,831	\$ 221,899	\$ 266,913	\$ 287,367	\$ 280,793	\$ 273,382
Portfolio turnover	9%	44%	23%	23%	25%	17%	20%

¹ Based on average shares outstanding.

² Amount is less than \$(0.01) per share.

³ Total investment returns based on market price, which can be significantly greater or lesser than the net asset value, may result in substantially different returns. Where applicable, total investment returns exclude the effects of any sales charges and include the reinvestment of dividends and distributions.

⁴ Aggregate total investment return.

⁵ Annualized.

⁶ Interest expense and fees relate to tender option bond trusts. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.

See Notes to Financial Statements.

Financial Highlights

BlackRock MuniEnhanced Fund, Inc. (MEN)

	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30, 2010	Period July 1, 2009 to April 30, 2009	Year Ended January 31,			
				2009	2008	2007	2006
Per Share Operating Performance							
Net asset value, beginning of period	\$ 10.90	\$ 9.77	\$ 9.15	\$ 11.16	\$ 11.55	\$ 11.52	\$ 11.85
Net investment income ¹	0.36	0.75	0.18	0.72	0.78	0.76	0.77
Net realized and unrealized gain (loss)	0.39	1.04	0.58	(2.02)	(0.41)	0.06	(0.22)
Dividends to Preferred Shareholders from net investment income	(0.02)	(0.03)	(0.01)	(0.19)	(0.24)	(0.22)	(0.16)
Net increase (decrease) from investment operations	0.73	1.76	0.75	(1.49)	0.13	0.60	0.39
Dividends to Common Shareholders from net investment income	(0.34)	(0.63)	(0.13)	(0.52)	(0.52)	(0.57)	(0.72)
Net asset value, end of period	\$ 11.29	\$ 10.90	\$ 9.77	\$ 9.15	\$ 11.16	\$ 11.55	\$ 11.52
Market price, end of period	\$ 11.26	\$ 10.81	\$ 8.88	\$ 8.31	\$ 10.66	\$ 10.77	\$ 11.03
Total Investment Return²							
Based on net asset value	6.81% ³	18.76%	8.40% ³	(13.19)%	1.44%	5.66%	3.63%
Based on market price	7.41% ³	29.59%	8.48% ³	(17.46)%	3.92%	2.90%	7.58%
Ratios to Average Net Assets Applicable to Common Shareholders							
Total expenses ⁴	1.15% ⁵	1.20%	1.46% ⁵	1.77%	1.72%	1.69%	1.51%
Total expenses after fees waived and paid indirectly ⁴	1.15% ⁵	1.20%	1.45% ⁵	1.76%	1.72%	1.69%	1.51%
Total expenses after fees waived and paid indirectly and excluding interest expense and fees ^{4,6}	1.01% ⁵	1.04%	1.22% ⁵	1.18%	1.08%	1.08%	1.07%

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Net investment income ⁴	6.53% ⁵	7.17%	7.72% ⁵	7.43%	6.85%	6.57%	6.63%
Dividends to Preferred Shareholders	0.28% ⁵	0.32%	0.56% ⁵	1.92%	2.08%	1.88%	1.34%
Net investment income to Common Shareholders	6.25% ⁵	6.85%	7.16% ⁵	5.51%	4.77% ⁵	4.69%	5.29%

Supplemental Data

Net assets applicable to Common Shareholders, end of period (000)	\$ 331,943	\$ 320,083	\$ 287,078	\$ 268,689	\$ 327,711	\$ 339,237	\$ 338,450
Preferred Shares outstanding at \$25,000 liquidation preference, end of period (000)	\$ 142,575	\$ 142,575	\$ 158,850	\$ 158,850	\$ 187,000	\$ 187,000	\$ 187,000
Portfolio turnover	4%	23%	6%	24%	18%	31%	22%
Asset coverage per Preferred Share at \$25,000 liquidation preference, end of period	\$ 83,210	\$ 81,128	\$ 70,185	\$ 67,294	\$ 68,834	\$ 70,373	\$ 70,262

¹ Based on average shares outstanding.

² Total investment returns based on market price, which can be significantly greater or lesser than the net asset value, may result in substantially different returns. Where applicable, total investment returns exclude the effects of any sales charges and include the reinvestment of dividends and distributions.

³ Aggregate total investment return.

⁴ Do not reflect the effect of dividends to Preferred Shareholders.

⁵ Annualized.

⁶ Interest expense and fees relate to tender option bond trusts. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.

See Notes to Financial Statements.

Financial Highlights

BlackRock MuniHoldings Fund, Inc. (MHD)

	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30,				
		2010	2009	2008	2007	2006
Per Share Operating Performance						
Net asset value, beginning of period	\$ 15.75	\$ 13.27	\$ 15.20	\$ 16.51	\$ 16.14	\$ 16.31
Net investment income ¹	0.57	1.13	1.07	1.16	1.17	1.16
Net realized and unrealized gain (loss)	0.59	2.39	(1.94)	(1.20)	0.42	(0.00) ²
Dividends and distributions to Preferred Shareholders from:						
Net investment income	(0.02)	(0.03)	(0.18)	(0.31)	(0.32)	(0.23)
Net realized gain		(0.00) ²	(0.01)	(0.03)		
Net increase (decrease) from investment operations	1.14	3.49	(1.06)	(0.38)	1.27	0.93
Dividends and distributions to Common Shareholders from:						
Net investment income	(0.52)	(0.99)	(0.85)	(0.85)	(0.90)	(1.08)
Net realized gain		(0.02)	(0.02)	(0.08)		
Total dividends and distributions to Common Shareholders	(0.52)	(1.01)	(0.87)	(0.93)	(0.90)	(1.08)
Capital charges with respect to issuance of Preferred Shares						(0.02)
Net asset value, end of period	\$ 16.37	\$ 15.75	\$ 13.27	\$ 15.20	\$ 16.51	\$ 16.14
Market price, end of period	\$ 16.68	\$ 15.70	\$ 11.97	\$ 14.77	\$ 16.49	\$ 16.20
Total Investment Return³						
Based on net asset value	7.36% ⁴	27.31%	(6.24)%	(2.08)%	8.06%	5.69%
Based on market price	9.74% ⁴	40.68%	(12.97)%	(4.74)%	7.52%	7.34%
Ratios to Average Net Assets Applicable to Common Shareholders						
Total expenses ⁵	1.21% ⁶	1.25%	1.65%	1.56%	1.54%	1.30%

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Total expenses after fees waived and paid indirectly ⁵	1.21% ⁶	1.25%	1.64%	1.56%	1.54%	1.30%
Total expenses after fees waived and paid indirectly and excluding interest expense and fees ^{5,7}	1.06% ⁶	1.11%	1.25%	1.20%	1.17%	1.15%
Net investment income ⁵	7.07% ⁶	7.67%	7.98%	7.27%	7.14%	7.15%
Dividends to Preferred Shareholders	0.20% ⁶	0.24%	1.32%	1.96%	1.93%	1.45%
Net investment income to Common Shareholders	6.87% ⁶	7.43%	6.66%	5.31%	5.20%	5.70%

Supplemental Data

Net assets applicable to Common Shareholders, end of period (000)	\$ 228,317	\$ 219,133	\$ 184,685	\$ 211,429	\$ 229,376	\$ 223,658
Preferred Shares outstanding at \$25,000 liquidation preference, end of period (000)	\$ 83,700	\$ 83,700	\$ 91,925	\$ 125,000	\$ 125,000	\$ 125,000
Portfolio turnover	8%	41%	19%	30%	20%	45%
Asset coverage per Preferred Share at \$25,000 liquidation preference, end of period	\$ 93,197	\$ 90,454	\$ 75,230	\$ 67,294	\$ 70,889	\$ 69,742

¹ Based on average shares outstanding.

² Amount is less than \$(0.01) per share.

³ Total investment returns based on market price, which can be significantly greater or lesser than the net asset value, may result in substantially different returns. Where applicable, total investment returns exclude the effects of any sales charges and include the reinvestment of dividends and distributions.

⁴ Aggregate total investment return.

⁵ Do not reflect the effect of dividends to Preferred Shareholders.

⁶ Annualized.

⁷ Interest expense and fees relate to tender option bond trusts. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.

See Notes to Financial Statements.

Financial Highlights

BlackRock MuniHoldings Fund II, Inc. (MUH)

	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30, 2010	Period August 1, 2008 to April 30, 2009	Year Ended July 31,			
				2008	2007	2006	2005
Per Share Operating Performance							
Net asset value, beginning of period	\$ 14.65	\$ 12.47	\$ 13.66	\$ 14.78	\$ 14.82	\$ 15.03	\$ 13.98
Net investment income ¹	0.51	1.02	0.72	1.04	1.05	1.04	1.08
Net realized and unrealized gain (loss)	0.55	2.08	(1.22)	(1.14)	(0.05)	(0.11)	1.15
Dividends to Preferred Shareholders from net investment income	(0.01)	(0.02)	(0.10)	(0.26)	(0.27)	(0.23)	(0.14)
Net increase (decrease) from investment operations	1.05	3.08	(0.60)	(0.36)	0.73	0.70	2.09
Dividends to Common Shareholders from net investment income	(0.48)	(0.90)	(0.59)	(0.76)	(0.77)	(0.91)	(1.04)
Net asset value, end of period	\$ 15.22	\$ 14.65	\$ 12.47	\$ 13.66	\$ 14.78	\$ 14.82	\$ 15.03
Market price, end of period	\$ 15.30	\$ 14.68	\$ 11.33	\$ 13.01	\$ 13.99	\$ 14.12	\$ 15.25
Total Investment Return²							
Based on net asset value	7.30% ³	25.71%	(3.55)% ³	(2.30)%	5.08%	4.89%	15.46%
Based on market price	7.64% ³	38.64%	(7.99)% ³	(1.69)%	4.39%	(1.50)%	21.04%
Ratios to Average Net Assets Applicable to Common Shareholders							
Total expenses ⁴	1.21% ⁵	1.25%	1.60% ⁵	1.55%	1.63%	1.44%	1.27%
Total expenses after fees waived ⁴	1.21% ⁵	1.25%	1.60% ⁵	1.55%	1.63%	1.44%	1.27%
Total expenses after fees waived and excluding interest expense and fees ^{4,6}	1.06% ⁵	1.10%	1.22% ⁵	1.18%	1.19%	1.18%	1.19%
Net investment income ⁴	6.87% ⁵	7.41%	7.84% ⁵	7.07%	6.97%	7.04%	7.38%

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Dividends to Preferred Shareholders	0.14% ⁵	0.16%	1.07% ⁵	1.79%	1.82%	1.55%	0.98%
Net investment income to Common Shareholders	6.73% ⁵	7.25%	6.77% ⁵	5.28%	5.15%	5.49%	6.41%

Supplemental Data

Net assets applicable to Common Shareholders, end of period (000)	\$ 170,434	\$ 163,722	\$ 139,377	\$ 152,633	\$ 165,185	\$ 165,565	\$ 167,588
Preferred Shares outstanding at \$25,000 liquidation preference, end of period (000)	\$ 55,050	\$ 55,050	\$ 61,000	\$ 61,000	\$ 87,000	\$ 87,000	\$ 87,000
Portfolio turnover	8%	41%	19%	28%	15%	49%	38%
Asset coverage per Preferred Share at \$25,000 liquidation preference, end of period	\$ 102,401	\$ 99,353	\$ 81,123	\$ 87,562	\$ 72,478	\$ 72,555	\$ 73,163

¹ Based on average shares outstanding.

² Total investment returns based on market price, which can be significantly greater or lesser than the net asset value, may result in substantially different returns. Where applicable, total investment returns exclude the effects of any sales charges and include the reinvestment of dividends and distributions.

³ Aggregate total investment return.

⁴ Do not reflect the effect of dividends to Preferred Shareholders.

⁵ Annualized.

⁶ Interest expense and fees relate to tender option bond trusts. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.

See Notes to Financial Statements.

Financial Highlights

BlackRock MuniHoldings Quality Fund, Inc. (MUS)

	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30,				
		2010	2009	2008	2007	2006
Per Share Operating Performance						
Net asset value, beginning of period	\$ 13.34	\$ 12.27	\$ 13.31	\$ 14.10	\$ 13.80	\$ 14.44
Net investment income ¹	0.44	0.94	0.93	1.05	0.93	0.97
Net realized and unrealized gain (loss)	0.40	0.97	(1.20)	(0.87)	0.36	(0.50)
Dividends to Preferred Shareholders from net investment income	(0.01)	(0.03)	(0.19)	(0.38)	(0.36)	(0.28)
Net increase (decrease) from investment operations	0.83	1.88	(0.46)	(0.20)	0.93	0.19
Dividends to Common Shareholders from net investment income	(0.44)	(0.81)	(0.58)	(0.59)	(0.63)	(0.83)
Net asset value, end of period	\$ 13.73	\$ 13.34	\$ 12.27	\$ 13.31	\$ 14.10	\$ 13.80
Market price, end of period	\$ 14.09	\$ 13.40	\$ 10.87	\$ 11.97	\$ 13.13	\$ 13.10
Total Investment Return²						
Based on net asset value	6.32% ³	16.05%	(2.52)%	(0.95)%	7.29%	1.46%
Based on market price	8.62% ³	31.59%	(3.97)%	(4.34)%	5.25%	1.51%
Ratios to Average Net Assets Applicable to Common Shareholders						
Total expenses ⁴	1.30% ⁵	1.36%	1.88%	1.64%	1.67%	1.65%
Total expenses after fees waived ⁴	1.22% ⁵	1.20%	1.65%	1.51%	1.56%	1.54%
Total expenses after fees waived and excluding interest expense and fees ^{4,6}	1.08% ⁵	1.04%	1.17%	1.27%	1.23%	1.24%
Net investment income ⁴	6.59% ⁵	7.23%	7.69%	7.72%	6.62%	6.87%

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Dividends to Preferred Shareholders	0.21% ⁵	0.24%	1.61%	2.80%	2.59%	2.00%
Net investment income to Common Shareholders	6.38% ⁵	6.99%	6.08%	4.92%	4.03%	4.87%

Supplemental Data

Net assets applicable to Common Shareholders, end of period (000)	\$ 177,613	\$ 171,977	\$ 158,061	\$ 171,510	\$ 181,640	\$ 177,790
Preferred Shares outstanding at \$25,000 liquidation preference, end of period (000)	\$ 87,000	\$ 87,000	\$ 94,200	\$ 134,000	\$ 134,000	\$ 134,000
Portfolio turnover	10%	22%	35%	57%	29%	59%
Asset coverage per Preferred Share at \$25,000 liquidation preference, end of period	\$ 76,052	\$ 74,420	\$ 66,951	\$ 57,008	\$ 58,903	\$ 58,181

¹ Based on average shares outstanding.

² Total investment returns based on market price, which can be significantly greater or lesser than the net asset value, may result in substantially different returns. Where applicable, total investment returns exclude the effects of any sales charges and include the reinvestment of dividends and distributions.

³ Aggregate total investment return.

⁴ Do not reflect the effect of dividends to Preferred Shareholders.

⁵ Annualized.

⁶ Interest expense and fees relate to tender option bond trusts. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.

See Notes to Financial Statements.

Financial Highlights

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30, 2010	Period June 1, 2008 to April 30, 2009	Year Ended May 31,			
				2008	2007	2006	2005
Per Share Operating Performance							
Net asset value, beginning of period	\$ 14.75	\$ 13.05	\$ 14.45	\$ 15.10	\$ 15.07	\$ 15.51	\$ 14.52
Net investment income ¹	0.49	1.02	0.89	1.04	1.03	1.04	1.02
Net realized and unrealized gain (loss)	0.60	1.57	(1.42)	(0.63)	0.18	(0.15)	1.15
Dividends and distributions to Preferred Shareholders from:							
Net investment income	(0.06)	(0.11)	(0.23)	(0.33)	(0.28)	(0.21)	(0.11)
Net realized gain					(0.04)	(0.04)	(0.02)
Net increase (decrease) from investment operations	1.03	2.48	(0.76)	0.08	0.89	0.64	2.04
Dividends and distributions to Common Shareholders from:							
Net investment income	(0.41)	(0.78)	(0.64)	(0.73)	(0.74)	(0.84)	(0.86)
Net realized gain					(0.12)	(0.23)	(0.19)
Total dividends and distributions to Common Shareholders	(0.41)	(0.78)	(0.64)	(0.73)	(0.86)	(1.07)	(1.05)
Capital charges with respect to issuance of Preferred Shares						(0.01)	
Net asset value, end of period	\$ 15.37	\$ 14.75	\$ 13.05	\$ 14.45	\$ 15.10	\$ 15.07	\$ 15.51
Market price, end of period	\$ 15.32	\$ 14.13	\$ 11.77	\$ 13.70	\$ 14.85	\$ 14.52	\$ 13.94
Total Investment Return²							
Based on net asset value	7.11% ³	19.85%	(4.56)% ³	0.86%	6.14%	4.71%	15.36%
Based on market price	11.45% ³	27.29%	(9.21)% ³	(2.76)%	8.34%	12.25%	14.93%

**Ratios to Average Net Assets
Applicable to Common
Shareholders**

Total expenses ⁴	1.16% ⁵	1.20%	1.44% ⁵	1.30%	1.31%	1.24%	1.07%
Total expenses after fees waived and paid indirectly ⁴	1.12% ⁵	1.10%	1.25% ⁵	1.07%	1.07%	1.00%	0.85%
Total expenses after fees waived and paid indirectly and excluding interest expense and fees ^{4,6}	1.03% ⁵	1.01%	1.02% ⁵	0.90%	0.87%	0.87%	0.84%
Net investment income ⁴	6.53% ⁵	7.22%	7.46% ⁵	6.97%	6.71%	6.82%	6.77%
Dividends to Preferred Shareholders	0.74% ⁵	0.81%	1.94% ⁵	2.23%	1.80%	1.36%	0.74%
Net investment income to Common Shareholders	5.79% ⁵	6.41%	5.52% ⁵	4.74%	4.91%	5.46%	6.03%

Supplemental Data

Net assets applicable to Common Shareholders, end of period (000)	\$ 584,761	\$ 561,140	\$ 496,247	\$ 549,415	\$ 574,225	\$ 573,034	\$ 589,802
Preferred Shares outstanding at \$25,000 liquidation preference, end of period (000)	\$ 287,175	\$ 287,175	\$ 287,175	\$ 320,000	\$ 320,000	\$ 320,000	\$ 285,000
Portfolio turnover	10%	29%	13%	14%	12%	49%	54%
Asset coverage per Preferred Share at \$25,000 liquidation preference, end of period	\$ 75,912	\$ 73,857	\$ 68,207	\$ 67,941	\$ 69,875	\$ 69,781	\$ 73,743

¹ Based on average shares outstanding.

² Total investment returns based on market price, which can be significantly greater or lesser than the net asset value, may result in substantially different returns. Where applicable, total investment returns exclude the effects of any sales charges and include the reinvestment of dividends and distributions.

³ Aggregate total investment return.

⁴ Do not reflect the effect of dividends to Preferred Shareholders.

⁵ Annualized.

⁶ Interest expense and fees relate to tender option bond trusts. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

65

Financial Highlights

BlackRock MuniVest Fund II, Inc. (MVT)

	Six Months Ended October 31, 2010 (Unaudited)	Year Ended April 30, 2010	Period November 1, 2008 to April 30, 2009	Year Ended October 31,				
				2008	2007	2006	2005	
Per Share Operating Performance								
Net asset value, beginning of period	\$ 14.41	\$ 11.95	\$ 10.95	\$ 14.49	\$ 15.35	\$ 15.13	\$ 15.21	
Net investment income ¹	0.57	1.18	0.53	1.12	1.16	1.16	1.19	
Net realized and unrealized gain (loss)	0.50	2.32	0.95	(3.49)	(0.84)	0.35	0.04	
Dividends to Preferred Shareholders from net investment income	(0.02)	(0.05)	(0.05)	(0.32)	(0.32)	(0.29)	(0.18)	
Net increase (decrease) from investment operations	1.05	3.45	1.43	(2.69)		1.22	1.05	
Dividends to Common Shareholders from net investment income	(0.52)	(0.99)	(0.43)	(0.85)	(0.86)	(1.00)	(1.10)	
Capital charge with respect to issuance of Preferred Shares								(0.03)
Net asset value, end of period	\$ 14.94	\$ 14.41	\$ 11.95	\$ 10.95	\$ 14.49	\$ 15.35	\$ 15.13	
Market price, end of period	\$ 15.38	\$ 14.94	\$ 11.65	\$ 9.75	\$ 13.91	\$ 16.29	\$ 15.40	
Total Investment Return²								
Based on net asset value	7.40% ³	29.75%	13.71% ³	(19.33)%	(0.02)%	8.36%	6.88%	
Based on market price	6.64% ³	37.99%	24.49% ³	(25.18)%	(9.56)%	12.98%	9.21%	
Ratios to Average Net Assets Applicable to Common Shareholders								
Total expenses ⁴	1.20% ⁵	1.25%	1.51% ⁵	1.67%	1.67%	1.61%	1.35%	
Total expenses after fees waived and excluding interest expense and fees ^{4,6}	1.05% ⁵	1.10%	1.26% ⁵	1.16%	1.12%	1.11%	1.07%	

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Net investment income ⁴	7.80% ⁵	8.72%	9.77% ⁵	8.03%	7.74%	7.70%	7.76%
Dividends to Preferred Shareholders	0.31% ⁵	0.36%	0.95% ⁵	2.31%	2.11%	1.90%	1.14%
Net investment income to Common Shareholders	7.49% ⁵	8.36%	8.82% ⁵	5.72%	5.63%	5.80%	6.62%

Supplemental Data

Net assets applicable to Common Shareholders, end of period (000)	\$ 307,454	\$ 295,465	\$ 243,583	\$ 223,210	\$ 293,836	\$ 309,975	\$ 303,701
Preferred Shares outstanding at \$25,000 liquidation preference, end of period (000)	\$ 140,000	\$ 140,000	\$ 150,800	\$ 150,800	\$ 175,000	\$ 175,000	\$ 175,000
Portfolio turnover	8%	30%	9%	49%	43%	60%	64%
Asset coverage per Preferred Share at \$25,000 liquidation preference, end of period	\$ 79,905	\$ 77,767	\$ 65,388	\$ 62,019	\$ 67,004	\$ 69,307	\$ 68,389

¹ Based on average shares outstanding.

² Total investment returns based on market price, which can be significantly greater or lesser than the net asset value, may result in substantially different returns. Where applicable, total investment returns exclude the effects of any sales charges and include the reinvestment of dividends and distributions.

³ Aggregate total investment return.

⁴ Do not reflect the effect of dividends to Preferred Shareholders.

⁵ Annualized.

⁶ Interest expense and fees relate to tender option bond trusts. See Note 1 of the Notes to Financial Statements for details of municipal bonds transferred to tender option bond trusts.

See Notes to Financial Statements.

Notes to Financial Statements (Unaudited)

1. Organization and Significant Accounting Policies:

BlackRock Apex Municipal Fund, Inc. (APX), BlackRock MuniAssets Fund, Inc. (MUA), BlackRock MuniEnhanced Fund, Inc. (MEN), BlackRock MuniHoldings Fund, Inc. (MHD), BlackRock MuniHoldings Fund II, Inc. (MUH), BlackRock MuniHoldings Quality Fund, Inc. (formerly BlackRock MuniHoldings Insured Fund, Inc.) (MUS), BlackRock Muni Intermediate Duration Fund, Inc. (MUI) and BlackRock MuniVest Fund II, Inc. (MVT) (collectively, the Funds) are registered under the Investment Company Act of 1940, as amended (the 1940 Act), as non-diversified, closed-end management investment companies. The Funds are organized as Maryland corporations. The Funds financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (US GAAP), which may require management to make estimates and assumptions that affect the reported amounts and disclosures in the financial statements. Actual results could differ from those estimates. The Funds determine and make available for publication the net asset values of their Common Shares on a daily basis.

The following is a summary of significant accounting policies followed by the Funds:

Reorganizations: On September 2, 2010, the Board of Directors (the Board) of APX and MUA approved the reorganization of APX into MUA with MUA being the surviving Fund (the Reorganization) and changes to certain investment guidelines on APX and MUA. On December 17, 2010, shareholders of MUA approved the Reorganization and changes to certain investment policies of the Fund, and shareholders of APX approved changes to certain investment policies. APX s shareholder vote with regard to the Reorganization was adjourned to allow additional time to further solicit votes. Subject to approval from APX shareholders and customary closing conditions being satisfied, it is currently expected the Reorganization would be completed in the first quarter of 2011.

Valuation: The Funds fair value their financial instruments at market value using independent dealers or pricing services under policies approved by the Board. Municipal investments (including commitments to purchase such investments on a when-issued basis) are valued on the basis of prices provided by dealers or pricing services. In determining the value of a particular investment, pricing services may use certain information with respect to transactions in such investments, quotations from dealers, pricing matrixes, market transactions in comparable investments and information with respect to various relationships between investments. Financial futures contracts traded on exchanges are valued at their last sale price. Short-term securities with remaining maturities of 60 days or less may be valued at amortized cost, which approximates fair value. Investments in open-end investment companies are valued at net asset value each business day.

In the event that application of these methods of valuation results in a price for an investment which is deemed not to be representative of the market value of such investment or is not available, the investment will be valued in accordance with a policy approved by the Board as reflecting fair value (Fair Value Assets). When determining the price for Fair Value Assets, the investment advisor and/or the sub-advisor seeks to determine the price that each Fund might reasonably expect to receive from the current sale of that asset in an arm s-length transaction. Fair value determinations shall be based upon all available factors that the investment advisor and/or sub-advisor deems relevant. The pricing of all Fair Value Assets is subsequently reported to the Board or a committee thereof.

Forward Commitments and When-Issued Delayed Delivery Securities: The Funds may purchase securities on a when-issued basis and may purchase or sell securities on a forward commitment basis. Settlement of such transactions normally occurs within a month or more after the purchase or sale commitment is made. The Funds may purchase securities under such conditions with the intention of actually acquiring them, but may enter into a separate agreement to sell the securities before the settlement date. Since the value of securities purchased may fluctuate prior to settlement, the Funds may be required to pay more at settlement than the security is worth. In addition, the purchaser is not entitled to any of the interest earned prior to settlement. When purchasing a security on a delayed delivery basis, the Funds assume the rights and risks of ownership of the security, including the risk of price and yield fluctuations. In the event of default by the counter-party, the Funds maximum amount of loss is the unrealized appreciation of unsettled when-issued transactions, which is shown on the Schedules of Investments, if any.

Municipal Bonds Transferred to Tender Option Bond Trusts: The Funds leverage their assets through the use of tender option bond trusts (TOBs). A TOB is established by a third party sponsor forming a special purpose entity, into which one or more funds, or an agent on behalf of the funds, transfers municipal bonds. Other funds managed by the investment advisor may also contribute municipal bonds to a TOB into which a Fund has contributed bonds. A TOB typically issues two classes of beneficial interests: short-term floating rate certificates, which are sold to third party investors, and residual certificates (TOB Residuals), which are generally issued to the participating funds that made the transfer. The TOB Residuals held by a Fund include the right of a Fund (1) to cause the holders of a proportional share of the short-term floating rate certificates to tender their certificates at par, including during instances of a rise in short-term interest rates, and (2) to transfer, within seven days, a corresponding share of the municipal bonds from the TOB to a Fund. The TOB may also be terminated without the consent of a Fund

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

upon the occurrence of certain events as defined in the TOB agreements. Such termination events may include the bankruptcy or default of the municipal bond, a substantial downgrade in credit quality of the municipal bond, the inability of the TOB to obtain quarterly or annual renewal of the liquidity support agreement, a substantial decline in market value of the municipal bond or the inability to remarket the short-term floating rate certificates to third party investors. During the six months ended October 31, 2010, no TOBs have been terminated without the consent of the Funds.

The cash received by the TOB from the sale of the short-term floating rate certificates, less transaction expenses, is paid to a Fund, which typically invests the cash in additional municipal bonds. Each Fund's transfer of the municipal bonds to a TOB is accounted for as a secured borrowing, therefore the municipal bonds deposited into a TOB are presented in the Funds' Schedules of Investments and the proceeds from the issuance of the short-term floating rate certificates are shown as trust certificates in the Statements of Assets and Liabilities.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

67

Notes to Financial Statements (continued)

Interest income, including amortization and accretion of premiums and discounts, from the underlying municipal bonds is recorded by the Funds on an accrual basis. Interest expense incurred on the secured borrowing and other expenses related to remarketing, administration and trustee services to a TOB are shown as interest expense and fees in the Statements of Operations. The short-term floating rate certificates have interest rates that generally reset weekly and their holders have the option to tender certificates to the TOB for redemption at par at each reset date. At October 31, 2010, the aggregate value of the underlying municipal bonds transferred to TOBs, the related liability for trust certificates and the range of interest rates on the liability for trust certificates were as follows:

	Underlying Municipal Bonds Transferred to TOBs	Liability for Trust Certificates	Range of Interest Rates	
APX	\$ 15,157,401	\$ 7,285,446	0.28%	0.40%
MUA	\$ 22,367,905	\$ 10,755,646	0.28%	0.40%
MEN	\$ 121,863,362	\$ 61,582,907	0.27%	0.38%
MHD	\$ 85,164,892	\$ 43,487,622	0.27%	0.33%
MUH	\$ 65,323,483	\$ 33,617,184	0.27%	0.33%
MUS	\$ 61,834,800	\$ 31,815,414	0.28%	0.43%
MUI	\$ 125,892,787	\$ 66,608,812	0.28%	0.38%
MVT	\$ 122,163,527	\$ 62,229,913	0.27%	0.37%

For the six months ended October 31, 2010, the Funds' average trust certificates outstanding and the daily weighted average interest rate, including fees, were as follows:

	Average Trust Certificates Outstanding	Daily Weighted Average Interest Rate
APX	\$ 7,285,446	0.92%
MUA	\$ 10,755,646	0.92%
MEN	\$ 61,445,281	0.75%
MHD	\$ 43,269,861	0.76%
MUH	\$ 33,455,917	0.75%
MUS	\$ 31,820,909	0.76%
MUI	\$ 62,348,264	0.79%
MVT	\$ 62,216,318	0.74%

Should short-term interest rates rise, the Funds' investments in TOBs may adversely affect the Funds' net investment income and dividends to Common Shareholders. Also, fluctuations in the market value of municipal bonds deposited into the TOB may adversely affect the Funds' net asset values per share.

Zero-Coupon Bonds: The Funds may invest in zero-coupon bonds, which are normally issued at a significant discount from face value and do not provide for periodic interest payments. Zero-coupon bonds may experience greater volatility in market value than similar maturity debt obligations which provide for regular interest payments.

Segregation and Collateralization: In cases in which the 1940 Act and the interpretive positions of the Securities and Exchange Commission (SEC) require that the Funds either deliver collateral or segregate assets in connection with certain investments (e.g., financial futures contracts) the Funds will, consistent with SEC rules and/or certain interpretive letters issued by the

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

SEC, segregate collateral or designate on their books and records cash or other liquid securities having a market value at least equal to the amount that would otherwise be required to be physically segregated. Furthermore, based on requirements and agreements with certain exchanges and third party broker-dealers, each party has requirements to deliver/deposit securities as collateral for certain investments.

Investment Transactions and Investment Income: For financial reporting purposes, investment transactions are recorded on the dates the transactions are entered into (the trade dates). Realized gains and losses on investment transactions are determined on the identified cost basis. Dividend income is recorded on the ex-dividend dates. Interest income, including amortization and accretion of premiums and discounts on debt securities, is recognized on the accrual basis. Consent fees are compensation for agreeing to changes in the terms of debt instruments and are included in interest income in the Statements of Operations.

Dividends and Distributions: Dividends from net investment income are declared and paid monthly. Distributions of capital gains are recorded on the ex-dividend dates. The amount and timing of dividends and distributions are determined in accordance with federal income tax regulations, which may differ from US GAAP. Dividends and distributions to Preferred Shareholders are accrued and determined as described in Note 7.

Income Taxes: It is each Fund's policy to comply with the requirements of the Internal Revenue Code of 1986, as amended, 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.

Each Fund files US federal and various state and local tax returns. No income tax returns are currently under examination. The statute of limitations on the Funds' US federal tax returns remains open for each of the four periods ended as follows:

	Year Ended	Period	Year Ended	Year Ended
APX	April 30, 2010	July 1, 2008 to April 30, 2009	June 30, 2008	June 30, 2007
MUA	April 30, 2010	June 1, 2008 to April 30, 2009	May 31, 2008	May 31, 2007
MEN	April 30, 2010	February 1, 2009 to April 30, 2009	January 31, 2009	January 31, 2008
MHD	April 30, 2010	April 30, 2009	April 30, 2008	April 30, 2007
MUH	April 30, 2010	August 1, 2008 to April 30, 2009	July 31, 2008	July 31, 2007
MUS	April 30, 2010	April 30, 2009	April 30, 2008	April 30, 2007
MUI	April 30, 2010	June 1, 2008 to April 30, 2009	May 31, 2008	May 31, 2008
MVT	April 30, 2010	November 1, 2008 to April 30, 2009	October 31, 2008	October 31, 2007

The statutes of limitations on the Funds' state and local tax returns may remain open for an additional year depending upon the jurisdiction. There are no uncertain tax positions that require recognition of a tax liability.

Notes to Financial Statements (continued)

Deferred Compensation and BlackRock Closed-End Share Equivalent Investment Plan: Under the deferred compensation plan approved by each Fund's Board, non-interested Directors (Independent Directors) may defer a portion of their annual complex-wide compensation. Deferred amounts earn an approximate return as though equivalent dollar amounts had been invested in common shares of certain other BlackRock Closed-End Funds selected by the Independent Directors. This has approximately the same economic effect for the Independent Directors as if the Independent Directors had invested the deferred amounts directly in certain other BlackRock Closed-End Funds.

The deferred compensation plan is not funded and obligations thereunder represent general unsecured claims against the general assets of each Fund. Each Fund may, however, elect to invest in common shares of certain other BlackRock Closed-End Funds selected by the Independent Directors in order to match its deferred compensation obligations. Investments to cover each Fund's deferred compensation liability, if any, are included in other assets in the Statements of Assets and Liabilities. Dividends and distributions from the BlackRock Closed-End Fund investments under the plan are included in income affiliated in the Statements of Operations.

Other: Expenses directly related to a Fund are charged to that Fund. Other operating expenses shared by several funds are pro rated among those funds on the basis of relative net assets or other appropriate methods. The Funds have an arrangement with the custodian whereby fees may be reduced by credits earned on uninvested cash balances, which if applicable are shown as fees paid indirectly in the Statements of Operations. The custodian imposes fees on overdrawn cash balances, which can be offset by accumulated credits earned or may result in additional custody charges.

2. Derivative Financial Instruments:

The Funds engage in various portfolio investment strategies using derivative contracts both to increase the returns of the Funds and to economically hedge, or protect, their exposure to certain risks such as interest rate risk. These contracts may be transacted on an exchange.

Losses may arise if the value of the contract decreases due to an unfavorable change in the market rates or values of the underlying instrument or if the counterparty does not perform under the contract. Counterparty risk related to exchange-traded financial futures contracts is minimal because of the protection against defaults provided by the exchange on which these contracts trade.

Financial Futures Contracts: The Funds purchase or sell financial futures contracts and options on financial futures contracts to gain exposure to, or economically hedge against, changes in interest rates (interest rate risk). Financial futures contracts are contracts for delayed delivery of securities or currencies at a specific future date and at a specific price or yield. Pursuant to the contract, the Funds agree 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 margin variation and are recognized by the Funds as unrealized gains or losses. When the contract is closed, the Funds record 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. The use of financial futures transactions involves the risk of an imperfect correlation in the movements in the price of financial futures contracts, interest rates and the underlying assets.

Derivative Instruments Categorized by Risk Exposure:

The Effect of Derivative Instruments on the Statements of Operations
Six Months Ended October 31, 2010*

Net Realized Gain (Loss) from

	APX	MUA	MEN	MHD	MUH	MUS	MVT
Interest rate contracts:							
Financial futures contracts	\$ 4,454	\$ 6,998	\$ (170,354)	\$ 5,726	\$ 4,453	\$ 8,271	\$ (213,064)

For the six months ended October 31, 2010, the average quarterly balance of outstanding derivative financial instruments was as follows:

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

	APX	MUA	MEN	MHD	MUH	MUS	MVT
Financial futures contracts:							
Average number of contracts sold	4	6	43	5	4	7	77
Average notional value of contracts sold							
	\$ 426,445	\$ 670,129	\$ 5,172,172	\$ 548,287	\$ 426,445	\$ 791,970	\$ 9,220,097

* As of October 31, 2010, there were no financial futures contracts outstanding.

Notes to Financial Statements (continued)

3. Investment Advisory Agreement and Other Transactions with Affiliates:

The PNC Financial Services Group, Inc. (PNC), Bank of America Corporation (BAC) and Barclays Bank PLC (Barclays) are the largest stockholders of BlackRock, Inc. (BlackRock). Due to the ownership structure, PNC is an affiliate of the Funds for 1940 Act purposes, but BAC and Barclays are not.

Each Fund entered into an Investment Advisory Agreement with BlackRock Advisors, LLC (the Manager), the Funds' investment advisor, an indirect, wholly owned subsidiary of BlackRock, to provide investment advisory and administration services. The Manager is responsible for the management of each Fund's portfolio and provides the necessary personnel, facilities, equipment and certain other services necessary to the operations of each Fund. For such services, each Fund pays the Manager a monthly fee at the following annual rates of each Fund's average daily net assets as follows:

APX	0.65%
MUA	0.55%
MEN	0.50%
MHD	0.55%
MUH	0.55%
MUS	0.55%
MUI	0.55%
MVT	0.50%

Average daily net assets is the average daily value of each Fund's total assets minus the sum of its accrued liabilities.

The Manager contractually agreed to waive a portion of the investment advisory fees or other expenses on MUI as a percentage of its average daily net assets as follows: 0.10% through July 31, 2009, 0.05% through July 31, 2010 and 0.00% thereafter. For the six months ended October 31, 2010, the waiver was \$112,432 which is included in fees waived by advisor in the Statements of Operations.

The Manager voluntarily agreed to waive its investment advisory fees by the amount of investment advisory fees each Fund pays to the Manager indirectly through its investment in affiliated money market funds, however the Manager does not waive its investment advisory fees by the amount of investment advisory fees paid through each Fund's investment in other affiliated investment companies, if any. These amounts are shown as, or included in, fees waived by advisor in the Statements of Operations. For the six months ended October 31, 2010, the amounts waived were as follows:

APX	\$ 238
MUA	\$ 294
MEN	\$ 1,423
MHD	\$ 540
MUH	\$ 200
MUS	\$ 2,144
MUI	\$ 1,491
MVT	\$ 686

The Manager, for MUS, voluntarily agreed to waive its advisory fee on the proceeds of the Preferred Shares and TOBs that exceed 35% of net assets applicable to Common Shareholders. This amount is included in fees waived by advisor in the Statements of Operations. For the six months ended October 31, 2010 the waiver was \$66,975.

The Manager entered into a sub-advisory agreement with BlackRock Investment Management, LLC (BIM), an affiliate of the Manager. The Manager pays BIM for services it provides, a monthly fee that is a percentage of the investment advisory fees paid by each Fund to the Manager.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

For the six months ended October 31, 2010, the Funds reimbursed the manager for certain accounting services, which are included in accounting services in the Statements of Operations. The reimbursements were as follows:

APX	\$ 1,734
MUA	\$ 2,744
MEN	\$ 4,861
MHD	\$ 3,264
MUH	\$ 2,447
MUS	\$ 2,836
MUI	\$ 8,922
MVT	\$ 4,988

Certain officers and/or directors of the Funds are officers and/or directors of BlackRock or its affiliates. The Funds reimburse the Manager for compensation paid to the Funds Chief Compliance Officer.

4. Investments

Purchases and sales of investments, excluding short-term securities, for the six months ended October 31, 2010, were as follows:

	Purchases	Sales
APX	\$ 17,009,196	\$ 21,431,635
MUA	\$ 25,253,958	\$ 32,479,161
MEN	\$ 25,705,501	\$ 22,265,952
MHD	\$ 27,556,710	\$ 32,294,430
MUH	\$ 19,968,107	\$ 25,956,765
MUS	\$ 27,532,708	\$ 29,094,918
MUI	\$ 93,398,681	\$ 97,615,384
MVT	\$ 37,377,240	\$ 51,048,815

Notes to Financial Statements (continued)

5. Capital Loss Carryforward:

As of April 30, 2010, the Funds had capital loss carryforwards available to offset future realized capital gains through the indicated expiration dates:

Expires April 30,	APX	MUA	MEN	MUH	MUS	MUI	MVT
2011	\$ 2,163,492	\$ 7,452,325		\$ 189,408			
2012	1,659,281	5,486,273	\$ 364,714				
2013	35,292	3,762,613					
2015	3,072,949	5,065,527				\$ 334,473	
2016		527,784	2,508,309		\$ 623,720	611,323	\$ 4,929,816
2017	373,543	1,575,568	3,540,378		5,373,343	321,623	
2018	2,070,050		1,225,298		6,614,798	3,730,704	
Total	\$ 9,374,607	\$ 23,870,090	\$ 7,638,699	\$ 189,408	\$ 12,611,861	\$ 4,998,123	\$ 4,929,816

6. Concentration, Market and Credit Risk:

MEN, MUH and MUI invest a substantial amount of their assets in issuers located in a single state or limited number of states. Please see the Schedules of Investments for concentration in specific states.

Many municipalities insure repayment of their bonds, which may reduce the potential for loss due to credit risk. The market value of these bonds may fluctuate for other reasons, including market perception of the value of such insurance, and there is no guarantee that the insurer will meet its obligation.

In the normal course of business, the Funds invest in securities and enter into transactions where risks exist due to fluctuations in the market (market risk) or failure of the issuer of a security to meet all its obligations (issuer credit risk). The value of securities held by the Funds may decline in response to certain events, including those directly involving the issuers whose securities are owned by the Funds; conditions affecting the general economy; overall market changes; local, regional or global political, social or economic instability; and currency and interest rate and price fluctuations. Similar to issuer credit risk, the Funds may be exposed to counterparty credit risk, or the risk that an entity with which the Funds have unsettled or open transactions may fail to or be unable to perform on its commitments. The Funds manage counterparty credit risk by entering into transactions only with counterparties that they believe have the financial resources to honor their obligations and by monitoring the financial stability of those counterparties. Financial assets, which potentially expose the Funds to market, issuer and counterparty credit risks, consist principally of financial instruments and receivables due from counterparties. The extent of the Funds' exposure to market, issuer and counterparty credit risks with respect to these financial assets is generally approximated by their value recorded in the Funds' Statements of Assets and Liabilities, less any collateral held by the Funds.

As of October 31, 2010, APX and MUA invested a significant portion of their assets in the Health and Corporate sectors. MEN invested a significant portion of its assets in the County/City/Special District/School District and Transportation sectors. MHD, MUH and MVT invested a significant portion of their assets in the Health sector. MUS invested a significant portion of its assets in the County/City/Special District/School District, Utilities and Transportation sectors. MUI invested a significant portion of its assets in the State and County/City/Special District/School District sectors. Changes in economic conditions affecting the County/City/Special District/School District, Health, State, Transportation and Utilities sectors would have a greater impact on the Funds and could affect the value, income and/or liquidity of positions in such securities.

7. Capital Share Transactions:

Each Fund, except APX, is authorized to issue 200 million shares (150 million for APX), all of which were initially classified as Common Shares. The par value for each Fund's Common Shares is \$0.10. The par value for each Fund's Preferred Shares is \$0.10 except MEN Series A, B and C, which is \$0.025, and MVT Series A, B and C, which is \$0.05. The Board is authorized, however, to reclassify any unissued shares

without approval of Common Shareholders.

Common Shares

For the periods shown, shares issued and outstanding increased by the following amounts as a result of dividend and distribution reinvestment:

	Six Months Ended October 31, 2010	Year Ended April 30, 2010
APX	9,368	49,557
MUA	52,762	163,187
MEN	39,726	
MHD	28,467	3,195
MUH	25,137	
MUS	40,983	7,093
MVT	73,485	121,196

Shares issued and outstanding remained constant for MUI for the six months ended October 31, 2010 and the year ended April 30, 2010 for MEN, MUH and MUI.

Preferred Shares

The Preferred Shares are redeemable at the option of each Fund, in whole or in part, on any dividend payment date at their liquidation preference per share plus any accumulated and unpaid dividends whether or not declared. The Preferred Shares are also subject to mandatory redemption at their liquidation preference plus any accumulated and unpaid dividends, whether or not declared, if certain requirements relating to the composition of the assets and liabilities of a Fund, as set forth in each Fund's Articles of Supplementary (the "Governing Instrument") are not satisfied.

Notes to Financial Statements (continued)

From time to time in the future, each Fund may effect repurchases of its Preferred Shares at prices below their liquidation preference as agreed upon by the Fund and seller. Each Fund also may redeem its Preferred Shares from time to time as provided in the applicable Governing Instrument. Each Fund intends to effect such redemptions and/or repurchases to the extent necessary to maintain applicable asset coverage requirements or for such other reasons as the Board may determine.

The holders of Preferred Shares have voting rights equal to the holders of Common Shares (one vote per share) and will vote together with holders of Common Shares (one vote per share) as a single class. However, the holders of Preferred Shares, voting as a separate class, are also entitled to elect two Directors for each Fund. In addition, the 1940 Act requires that along with approval by shareholders that might otherwise be required, the approval of the holders of a majority of any outstanding Preferred Shares, voting separately as a class would be required to (a) adopt any plan of reorganization that would adversely affect the Preferred Shares, (b) change a Fund's sub-classification as a closed-end investment company or change its fundamental investment restrictions or (c) change its business so as to cease to be an investment company.

MEN, MHD, MUH, MUS, MUI, and MVT had the following series of Preferred Shares outstanding, effective yields and reset frequency as of October 31, 2010:

	Series	Preferred Shares	Effective Yield	Reset Frequency Days
MEN	A ¹	1,525	0.43%	28
	B ¹	1,525	0.38%	28
	C ¹	1,525	0.44%	7
	D ²	1,128	1.49%	7
MHD	A ¹	1,473	0.44%	7
	B ¹	1,473	0.43%	7
	C ²	402	1.50%	7
MUH	A ¹	1,101	0.44%	7
	B ¹	1,101	0.44%	7
MUS	A ¹	1,740	0.44%	7
	B ¹	1,740	0.44%	7
MUI	M7 ²	1,795	1.50%	7
	T7 ²	2,423	1.50%	7
	W7 ²	1,795	1.49%	7
	TH7 ²	2,423	1.50%	7
	F7 ²	1,795	1.50%	7
	TH28 ²	1,256	1.50%	28
MVT	A ¹	1,440	0.44%	28
	B ¹	1,440	0.43%	28
	C ¹	1,440	0.43%	7
	D ²	1,280	1.50%	7

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

The maximum applicable rate on this series of Preferred Shares is the higher of 110% of the AA commercial paper rate or 110% of 90% of the Kenny S&P 30-day High Grade Index rate divided by 1.00 minus the marginal tax rate.

- ² The maximum applicable rate on this series of Preferred Shares is the higher of 110% plus or times (i) the Telerate/BAA LIBOR or (ii) 90% of Kenny S&P 30-day High Grade Index rate divided by 1.00 minus the marginal tax rate.

Dividends on seven-day and 28-day Preferred Shares are cumulative at a rate which is reset every seven or 28 days, respectively, based on the results of an auction. If the Preferred Shares fail to clear the auction on an auction date, each Fund is required to pay the maximum applicable rate on the Preferred Shares to holders of such shares for successive dividend periods until such time as the shares are successfully auctioned. The maximum applicable rate on the Preferred Shares is as footnoted in the preceding table above. The low, high and average dividend rates on the Preferred Shares for each Fund for the period were as follows:

	Series	Low	High	Average
MEN	A	0.37%	0.50%	0.41%
	B	0.38%	0.49%	0.37%
	C	0.35%	0.49%	0.42%
	D	1.43%	1.53%	1.48%
MHD	A	0.35%	0.47%	0.42%
	B	0.35%	0.47%	0.42%
	C	1.43%	1.54%	1.48%
MUH	A	0.35%	0.47%	0.42%
	B	0.35%	0.47%	0.42%
MUS	A	0.35%	0.47%	0.42%
	B	0.35%	0.49%	0.42%
MUI	M7	1.43%	1.53%	1.48%
	T7	1.43%	1.53%	1.49%
	W7	1.45%	1.53%	1.49%
	TH7	1.43%	1.53%	1.48%
	F7	1.43%	1.53%	1.48%
	TH28	1.43%	1.52%	1.48%
MVT	A	0.38%	0.46%	0.43%
	B	0.38%	0.47%	0.41%
	C	0.38%	0.47%	0.42%
	D	1.43%	1.53%	1.45%

Since February 13, 2008, the Preferred Shares of the Funds failed to clear any of their auctions. As a result, the Preferred Shares dividend rates were reset to the maximum applicable rate, which ranged from 0.35% to 1.54% for the six months ended October 31, 2010. A failed auction is not an event of default for the Funds but it has a negative impact on the liquidity of Preferred Shares. A failed auction occurs when there are more sellers of a Fund's auction rate preferred shares than buyers. A successful auction for the Funds' Preferred Shares may not occur for some time, if ever, and even if liquidity does resume, Preferred Shareholders may not have the ability to sell the Preferred Shares at their liquidation preference.

The Funds may not declare dividends or make other distributions on Common Shares or purchase any such shares if, at the time of the declaration, distribution or purchase, asset coverage with respect to the outstanding Preferred Shares is less than 200%.

The Funds pay commissions of 0.25% on the aggregate principal amount of all shares that successfully clear their auctions and 0.15% on the aggregate principal amount of all shares that fail to clear their auctions. Certain broker dealers have individually agreed to reduce commissions for failed auctions.

Notes to Financial Statements (concluded)

During the year ended April 30, 2010, MEN, MHD, MUH, MUS and MVT announced the following redemptions of Preferred Shares at a price of \$25,000 per share plus any accrued and unpaid dividends through the redemption date:

	Series	Redemption Date	Shares Redeemed	Aggregate Principal
MEN	A	7/14/09	174	\$ 4,350,000
	B	7/21/09	174	\$ 4,350,000
	C	6/30/09	174	\$ 4,350,000
	D	7/06/09	129	\$ 3,225,000
MHD	A	7/08/09	145	\$ 3,625,000
	B	7/06/09	145	\$ 3,625,000
	C	7/07/09	39	\$ 975,000
MUH	A	7/08/09	119	\$ 2,975,000
	B	7/06/09	119	\$ 2,975,000
MUS	A	7/06/09	144	\$ 3,600,000
	B	7/07/09	144	\$ 3,600,000
MVT	A	7/30/09	111	\$ 2,775,000
	B	7/09/09	111	\$ 2,775,000
	C	7/09/09	111	\$ 2,775,000
	D	7/07/09	99	\$ 2,475,000

The Funds financed the Preferred Share redemptions with cash received from TOB transactions.

Preferred Shares issued and outstanding remained constant for the six months ended October 31, 2010 for all funds and the year ended April 30, 2010 for MUI.

8. Restatement Information:

Subsequent to the initial issuance of the May 31, 2006 financial statements for MUI and July 31, 2006 for MUH, the Funds determined that the criteria for sale accounting in FAS 140 had not been met for certain transfers of municipal bonds related to investments in TOB Residuals, and that these transfers should have been accounted for as secured borrowings rather than as sales. As a result, certain financial highlights for the year ended May 31, 2005 for MUI and July 31, 2005 for MUH have been restated to give effect to recording the transfers of the municipal bonds as secured borrowings, including recording interest on the bonds as interest income and interest on the secured borrowings as interest expense.

**MUH Financial Highlights
For the Year Ended July 31, 2005**

	Previously Reported	Restated
Total expenses, net of reimbursement*	1.19%	1.27%
Total expenses*	1.19%	1.27%
Portfolio turnover	45.11%	38%

MUI Financial Highlights For the Year Ended May 31, 2005	Previously Reported	Restated
Total expenses, net of waiver*	0.84%	0.85%
Portfolio turnover	54.55%	54%

* Do not reflect the effect of dividends to Preferred Shareholders.

9. Subsequent Events:

Management's evaluation of the impact of all subsequent events on the Funds' financial statements was completed through the date the financial statements were issued and the following items were noted:

Each Fund paid a net investment income dividend on December 1, 2010 to Common Shareholders of record on November 15, 2010 as follows:

	Common Dividend Per Share
APX	\$ 0.0440
MUA	\$ 0.0625
MEN	\$ 0.0570
MHD	\$ 0.0890
MUH	\$ 0.0805
MUS	\$ 0.0740
MUI	\$ 0.0715
MVT	\$ 0.0885

Each Fund paid a net investment income dividend on December 31, 2010 to Common Shareholders of record on December 15, 2010 as follows:

	Common Dividend Per Share
APX	\$ 0.0440
MUA	\$ 0.0625
MEN	\$ 0.0570
MHD	\$ 0.0905
MUH	\$ 0.0805
MUS	\$ 0.0740
MUI	\$ 0.0715
MVT	\$ 0.0885

The dividends declared on Preferred Shares for the period November 1, 2010 to November 30, 2010 were as follows:

Series	Dividends Declared
--------	-----------------------

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

MEN	A	\$ 13,366
	B	\$ 11,944
	C	\$ 12,942
	D	\$ 34,298
MHD	A	\$ 6,715
	B	\$ 6,647
	C	\$ 3,695
MUH	A	\$ 9,431
	B	\$ 7,100
MUS	A	\$ 14,945
	B	\$ 14,770
MUI	M7	\$ 54,238
	T7	\$ 73,387
	W7	\$ 54,365
	TH7	\$ 73,432
	TH28	\$ 38,625
	F7	\$ 54,238
MVT	A	\$ 12,878
	B	\$ 12,682
	C	\$ 12,250
	D	\$ 38,593

Disclosure of Investment Advisory Agreements and Sub-Advisory Agreements

The Board of Directors (each, a Board, and, collectively, the Boards, and the members of which are referred to as Board Members) of each of BlackRock Apex Municipal Fund, Inc. (APX), BlackRock Muni Intermediate Duration Fund, Inc. (MUI), BlackRock MuniAssets Fund, Inc. (MUA), BlackRock MuniEnhanced Fund, Inc. (MEN), BlackRock MuniHoldings Fund, Inc. (MHD), BlackRock MuniHoldings Fund II, Inc. (MUH), BlackRock MuniHoldings Quality Fund, Inc. (MUS) and BlackRock MuniVest Fund II, Inc. (MVT, and together with APX, MUI, MUA, MEN, MHD, MUH, and MUS, each a Fund and, collectively, the Funds) met on April 8, 2010 and May 13-14, 2010 to consider the approval of each Fund's investment advisory agreement (collectively, the Advisory Agreements) with BlackRock Advisors, LLC (the Manager), each Fund's investment advisor. The Boards also considered the approval of the sub-advisory agreement (collectively, the Sub-Advisory Agreements) between the Manager and BlackRock Investment Management, LLC (the Sub-Advisor), with respect to each Fund. The Manager and the Sub-Advisor are referred to herein as BlackRock. The Advisory Agreements and the Sub-Advisory Agreements are referred to herein as the Agreements.

Activities and Composition of the Board

The Board of each Fund consists of ten individuals, eight of whom are not interested persons of the Funds as defined in the Investment Company Act of 1940 (the 1940 Act) (the Independent Board Members). The Board Members are responsible for the oversight of the operations of each Fund and perform the various duties imposed on the directors of investment companies by the 1940 Act. The Independent Board Members have retained independent legal counsel to assist them in connection with their duties. The Chairman of each Board is an Independent Board Member. Each Board has established five standing committees: an Audit Committee, a Governance and Nominating Committee, a Compliance Committee, a Performance Oversight Committee and an Executive Committee, each of which is composed of Independent Board Members (except for the Executive Committee, which also has one interested Board Member) and is chaired by an Independent Board Member. The Board of each of MVT, MUI, MEN, MHD, MUH, and MUS also has two *ad hoc* committees, the Joint Product Pricing Committee, which consists of Independent Board Members and the directors/trustees of the boards of certain other BlackRock-managed funds, who are not interested persons of their respective funds, and the Ad Hoc Committee on Auction Market Preferred Shares. The Board of each of APX and MUA has one *ad hoc* committee, the Joint Product Pricing Committee.

The Agreements

Pursuant to the 1940 Act, the Boards are required to consider the continuation of the Agreements on an annual basis. In connection with this process, the Boards assessed, among other things, the nature, scope and quality of the services provided to the Funds by the personnel of BlackRock and its affiliates, including investment management, administrative and shareholder services, oversight of fund accounting and custody, marketing services and assistance in meeting applicable legal and regulatory requirements.

From time to time throughout the year, the Boards, acting directly and through their committees, considered at each of their meetings factors that are relevant to their annual consideration of the renewal of the Agreements, including the services and support provided by BlackRock to the Funds and their shareholders. Among the matters the Boards considered were: (a) investment performance for one-, three- and five-year periods, as applicable, against peer funds, and applicable benchmarks, if any, as well as senior management's and portfolio managers' analysis of the reasons for any over performance or underperformance against a Fund's peers and/or benchmark, as applicable; (b) fees, including advisory and other amounts paid to BlackRock and its affiliates by each Fund for services such as call center and fund accounting; (c) each Fund's operating expenses; (d) the resources devoted to and compliance reports relating to each Fund's investment objective, policies and restrictions; (e) each Fund's compliance with its Code of Ethics and compliance policies and procedures; (f) the nature, cost and character of non-investment management services provided by BlackRock and its affiliates; (g) BlackRock's and other service providers' internal controls; (h) BlackRock's implementation of the proxy voting policies approved by the Boards; (i) execution quality of portfolio transactions; (j) BlackRock's implementation of each Fund's valuation and liquidity procedures; (k) an analysis of contractual and actual management fees for products with similar investment objectives across the open-end fund, closed-end fund and institutional account product channels, as applicable; and; (l) periodic updates on BlackRock's business.

Disclosure of Investment Advisory Agreements and Sub-Advisory Agreements (continued)
Board Considerations in Approving the Agreements

The Approval Process: Prior to the April 8, 2010 meeting, the Boards requested and each received materials specifically relating to the Agreements. The Boards are engaged in a process with BlackRock to periodically review the nature and scope of the information provided to better assist their deliberations. The materials provided in connection with the April meeting included: (a) information independently compiled and prepared by Lipper, Inc. (Lipper) on Fund fees and expenses, and the investment performance of each Fund as compared with a peer group of funds as determined by Lipper, and in the case of APX, MUI, MUA, MHD, MUH and MVT, a customized peer group selected by BlackRock (collectively, Peers); (b) information on the profitability of the Agreements to BlackRock and a discussion of fall-out benefits to BlackRock and its affiliates and significant shareholders; (c) a general analysis provided by BlackRock concerning investment advisory fees charged to other clients, such as institutional clients and open-end funds, under similar investment mandates; (d) the impact of economies of scale; (e) a summary of aggregate amounts paid by each Fund to BlackRock; and (f) if applicable, a comparison of management fees to similar BlackRock closed-end funds, as classified by Lipper.

At an in-person meeting held on April 8, 2010, the Boards reviewed materials relating to their consideration of the Agreements. As a result of the discussions that occurred during the April 8, 2010 meeting, the Boards presented BlackRock with questions and requests for additional information and BlackRock responded to these requests with additional written information in advance of the May 13 14, 2010 Board meeting.

At an in-person meeting held on May 13 14, 2010, each Board, including its Independent Board Members, unanimously approved the continuation of the Advisory Agreement between the Manager and its respective Fund and the Sub-Advisory Agreement between the Manager and the Sub-Advisor with respect to its respective Fund, each for a one-year term ending June 30, 2011. In approving the continuation of the Agreements, the Boards considered: (a) the nature, extent and quality of the services provided by BlackRock; (b) the investment performance of each Fund and BlackRock; (c) the advisory fee and the cost of the services and profits to be realized by BlackRock and its affiliates from their relationship with each Fund; (d) economies of scale; and (e) other factors deemed relevant by the Board Members.

The Boards also considered other matters they deemed important to the approval process, such as services related to the valuation and pricing of each Fund s portfolio holdings, direct and indirect benefits to BlackRock and its affiliates and significant shareholders from their relationship with each Fund and advice from independent legal counsel with respect to the review process and materials submitted for the Boards review. The Boards noted the willingness of BlackRock personnel to engage in open, candid discussions with the Boards. The Boards did not identify any particular information as controlling, and each Board Member may have attributed different weights to the various items considered.

A. Nature, Extent and Quality of the Services Provided by BlackRock: The Boards, including the Independent Board Members, reviewed the nature, extent and quality of services provided by BlackRock, including the investment advisory services and the resulting performance of each Fund. Throughout the year, the Boards compared each Fund s performance to the performance of a comparable group of closed-end funds, and the performance of a relevant benchmark, if any. The Boards met with BlackRock s senior management personnel responsible for investment operations, including the senior investment officers. The Boards also reviewed the materials provided by each Fund s portfolio management team discussing each Fund s performance and each Fund s investment objective, strategies and outlook.

The Boards considered, among other factors, the number, education and experience of BlackRock s investment personnel generally and each Fund s portfolio management team, investments by portfolio managers in the funds they manage, BlackRock s portfolio trading capabilities, BlackRock s use of technology, BlackRock s commitment to compliance, BlackRock s credit analysis capabilities, BlackRock s risk analysis capabilities and BlackRock s approach to training and retaining portfolio managers and other research, advisory and management personnel. The Boards also reviewed a general description of BlackRock s compensation structure with respect to each Fund s portfolio management team and BlackRock s ability to attract and retain high-quality talent.

In addition to advisory services, the Boards considered the quality of the administrative and non-investment advisory services provided to each Fund. BlackRock and its affiliates and significant shareholders provide each Fund with certain administrative and other services (in addition to any such services provided to each Fund by third parties) and officers and other personnel as are necessary for the operations of each Fund. In addition to investment advisory services, BlackRock and its affiliates provide each Fund with other services, including: (i) preparing disclosure documents, such as the prospectus and the statement of additional information in connection with the initial public offering and periodic shareholder reports; (ii) preparing communications with analysts to support secondary market trading of each Fund; (iii) assisting with daily accounting and pricing; (iv) preparing periodic filings with regulators and stock exchanges; (v) overseeing and coordinating the activities of other service providers; (vi) organizing Board meetings and preparing the materials for such Board meetings; (vii) providing legal and compliance support; and (viii) performing other administrative functions necessary for the operation of each Fund, such as tax reporting,

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

fulfilling regulatory filing requirements, and call center services. The Boards reviewed the structure and duties of BlackRock's fund administration, accounting, legal and compliance departments and considered BlackRock's policies and procedures for assuring compliance with applicable laws and regulations.

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

75

Disclosure of Investment Advisory Agreements and Sub-Advisory Agreements (continued)

B. The Investment Performance of the Funds and BlackRock: The Boards, including the Independent Board Members, also reviewed and considered the performance history of each Fund. In preparation for the April 8, 2010 meeting, the Boards were provided with reports, independently prepared by Lipper, which included a comprehensive analysis of each Fund's performance. The Boards also reviewed a narrative and statistical analysis of the Lipper data that was prepared by BlackRock, which analyzed various factors that affect Lipper's rankings. In connection with their reviews, the Boards received and reviewed information regarding the investment performance of each Fund as compared to a representative group of similar funds as determined by Lipper and to all funds in each Fund's applicable Lipper category, and in the case of APX, MUI, MUA, MHD, MUH and MVT, a customized peer group selected by BlackRock. The Boards were provided with a description of the methodology used by Lipper to select peer funds. The Boards regularly review the performance of each Fund throughout the year.

The Boards of APX, MUI, MUA, MHD, MUH and MVT noted that, in general, each of their respective Funds performed better than their respective Peers in that each Fund's performance was at or above the median of its Customized Lipper Peer Group Composite in each of the one-, three- and five-year periods reported.

The Board of MEN noted that, in general, MEN performed better than its Peers in that MEN's performance was at or above the median of its Lipper Performance Composite in each of the one-, three- and five-year periods reported.

The Board of MUS noted that MUS performed below the median of its Lipper Performance Composite in the three- and five-year periods reported, but that MUS performed better than or equal to the median of its Lipper Performance Composite in the one-year period reported. The Board of MUS and BlackRock reviewed the reasons for MUS's underperformance during the three- and five-year periods compared with its Peers. The Board of MUS was informed that, among other things, MUS's performance was hindered by its short duration posture during a period when interest rates were decreasing.

The Board of MUS and BlackRock discussed BlackRock's strategy for improving MUS's performance and BlackRock's commitment to providing the resources necessary to assist MUS's portfolio managers and to improve MUS's performance.

The Boards noted that BlackRock has made changes to the organization of the overall fixed income group management structure designed to result in a strengthened leadership team with clearer accountability.

C. Consideration of the Advisory Fees and the Cost of the Services and Profits to be Realized by BlackRock and its Affiliates from their Relationship with the Funds: The Boards, including the Independent Board Members, reviewed each Fund's contractual advisory fee rate compared with the other funds in its Lipper category. The Boards also compared each Fund's total expenses, as well as actual management fees, to those of other funds in its Lipper category. The Boards considered the services provided and the fees charged by BlackRock to other types of clients with similar investment mandates, including separately managed institutional accounts.

The Boards received and reviewed statements relating to BlackRock's financial condition and profitability with respect to the services it provided each Fund. The Boards were also provided with a profitability analysis that detailed the revenues earned and the expenses incurred by BlackRock for services provided to each Fund. The Boards reviewed BlackRock's profitability with respect to each Fund and other funds the Boards currently oversee for the year ended December 31, 2009 compared to available aggregate profitability data provided for the year ended December 31, 2008. The Boards reviewed BlackRock's profitability with respect to other fund complexes managed by the Manager and/or its affiliates. The Boards reviewed BlackRock's assumptions and methodology of allocating expenses in the profitability analysis, noting the inherent limitations in allocating costs among various advisory products. The Boards recognized that profitability may be affected by numerous factors including, among other things, fee waivers and expense reimbursements by the Manager, the types of funds managed, expense allocations and business mix, and the difficulty of comparing profitability as a result of those factors.

The Boards noted that, in general, individual fund or product line profitability of other advisors is not publicly available. Nevertheless, to the extent such information was available, the Boards considered BlackRock's overall operating margin, in general, compared to the operating margin for leading investment management firms whose operations include advising closed-end funds, among other product types. That data indicates that operating margins for BlackRock with respect to its registered funds are generally consistent with margins earned by similarly situated publicly traded competitors. In addition, the Boards considered, among other things, certain third party data comparing BlackRock's operating margin with that of other publicly traded asset management firms. That third party data indicates that larger asset bases do not, in themselves, translate to higher profit margins.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

In addition, the Boards considered the cost of the services provided to each Fund by BlackRock, and BlackRock's and its affiliates' profits relating to the management and distribution of each Fund and the other funds advised by BlackRock and its affiliates. As part of their analysis, the Boards reviewed BlackRock's methodology in allocating its costs to the management of each Fund. The Boards also considered whether BlackRock has the financial resources necessary to attract and retain high-quality investment management personnel to perform its obligations under the Agreements and to continue to provide the high quality of services that is expected by the Boards.

Disclosure of Investment Advisory Agreements and Sub-Advisory Agreements (concluded)

Each Board noted that its respective Fund's contractual management fee rate was lower than or equal to the median contractual management fee rate paid by the Fund's Peers, in each case, before taking into account any expense reimbursements or fee waivers.

D. Economies of Scale: The Boards, including the Independent Board Members, considered the extent to which economies of scale might be realized as the assets of each Fund increase. The Boards also considered the extent to which each Fund benefits from such economies and whether there should be changes in the advisory fee rate or structure in order to enable each Fund to participate in these economies of scale, for example through the use of breakpoints in the advisory fee based upon the asset level of each Fund.

The Boards noted that most closed-end fund complexes do not have fund level breakpoints because closed-end funds generally do not experience substantial growth after the initial public offering and each fund is managed independently consistent with its own investment objectives. The Boards noted that only one closed-end fund in the Fund Complex has breakpoints in its fee structure. Information provided by Lipper also revealed that only one closed-end fund complex with total closed-end fund nets assets exceeding \$10 billion, as of December 31, 2009, used a complex level breakpoint structure.

E. Other Factors Deemed Relevant by the Board Members: The Boards, including the Independent Board Members, also took into account other ancillary or fall-out benefits that BlackRock or its affiliates and significant shareholders may derive from their respective relationships with the Funds, both tangible and intangible, such as BlackRock's ability to leverage its investment professionals who manage other portfolios, an increase in BlackRock's profile in the investment advisory community, and the engagement of BlackRock's affiliates and significant shareholders as service providers to the Funds, including for administrative and distribution services. The Boards also considered BlackRock's overall operations and its efforts to expand the scale of, and improve the quality of, its operations. The Boards also noted that BlackRock may use and benefit from third party research obtained by soft dollars generated by certain mutual fund transactions to assist in managing all or a number of its other client accounts. The Boards further noted that BlackRock completed the acquisition of a complex of exchange-traded funds (ETFs) on December 1, 2009, and that BlackRock's funds may invest in such ETFs without any offset against the management fees payable by the funds to BlackRock.

In connection with its consideration of the Agreements, the Boards also received information regarding BlackRock's brokerage and soft dollar practices. The Boards received reports from BlackRock which included information on brokerage commissions and trade execution practices throughout the year.

The Boards noted the competitive nature of the closed-end fund marketplace, and that shareholders are able to sell their respective Fund shares in the secondary market if they believe that the Fund's fees and expenses are too high or if they are dissatisfied with the performance of the Fund.

Conclusion

Each Board, including its Independent Board Members, unanimously approved the continuation of the Advisory Agreement between the Manager and its respective Fund for a one-year term ending June 30, 2011 and the Sub-Advisory Agreement between the Manager and the Sub-Advisor, with respect to its respective Fund, for a one-year term ending June 30, 2011. As part of its approval, each Board considered the discussions of BlackRock's fee structure, as it applies to its respective Fund, being conducted by the *ad hoc* Joint Product Pricing Committee. Based upon its evaluation of all of the aforementioned factors in their totality, each Board, including its Independent Board Members, was satisfied that the terms of the Agreements were fair and reasonable and in the best interest of its respective Fund and its shareholders. In arriving at a decision to approve the Agreements, none of the Boards identified any single factor or group of factors as all-important or controlling, but considered all factors together, and different Board Members may have attributed different weights to the various factors considered. The Independent Board Members were also assisted by the advice of independent legal counsel in making this determination. The contractual fee arrangements for each Fund reflect the results of several years of review by the Board Members and predecessor Board Members, and discussions between such Board Members (and predecessor Board Members) and BlackRock. Certain aspects of the arrangements may be the subject of more attention in some years than in others, and the Board Members' conclusions may be based in part on their consideration of these arrangements in prior years.

Officers and Directors

Richard E. Cavanagh, Chairman of the Board and Director
Karen P. Robards, Vice Chair of the Board, Chair of the Audit Committee and Director
Richard S. Davis, Director
Frank J. Fabozzi, Director and Member of the Audit Committee
Kathleen F. Feldstein, Director
James T. Flynn, Director and Member of the Audit Committee
Henry Gabbay, Director
Jerold B. Harris, Director
R. Glenn Hubbard, Director
W. Carl Kester, Director and Member of the Audit Committee
Anne Ackerley, President and Chief Executive Officer
Brendan Kyne, Vice President
Neal Andrews, Chief Financial Officer
Jay Fife, Treasurer
Brian Kindelan, Chief Compliance Officer
Howard Surloff, Secretary

Investment Advisor

BlackRock Advisors, LLC
Wilmington, DE 19809

Sub-Advisor

BlackRock Investment Management, LLC
Plainsboro, NJ 08536

Custodians

The Bank of New York Mellon¹
New York, NY 10286

State Street Bank and Trust Company²
Boston, MA 02101

Transfer Agents

Common Shares:

BNY Mellon Shareowner Services¹
Jersey City, NJ 07310

Computershare Trust Company, N.A.²
Providence, RI 02940

Auction Agent

Preferred Shares:

The Bank of New York Mellon
New York, NY 10286

Accounting Agent

State Street Bank and Trust Company
Princeton, NJ 08540

Independent Registered Public Accounting Firm

Deloitte & Touche LLP
Princeton, NJ 08540

Legal Counsel

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

Skadden, Arps, Slate, Meagher & Flom LLP
New York, NY 10036

Address of the Funds
100 Bellevue Parkway
Wilmington, DE 19809

¹ For APX, MUA, MHD, MUH, MUS and MVT.

² For MEN and MUI.

78

SEMI-ANNUAL REPORT

OCTOBER 31, 2010

Additional Information

Proxy Results

The Annual Meeting of Shareholders was held on September 2, 2010 for shareholders of record on July 6, 2010, to elect director nominees for each Fund. There were no broker non-votes with regard to any non-routine matters for any of the Funds. Due to a lack of quorum of Preferred Shares, action on the proposal regarding the Preferred Shares nominees election for MUH, MUS, MUI and MVT was subsequently adjourned to October 5, 2010; and action on the proposal regarding Preferred Shares nominees election for MUI was additionally adjourned to November 2, 2010.

Below are the results with respect to each nominee, who will continue to serve as Director for each of the Funds:

	Richard E. Cavanagh			Kathleen F. Feldstein			Henry Gabbay		
	Votes For	Votes Withheld	Abstain	Votes For	Votes Withheld	Abstain	Votes For	Votes Withheld	Abstain
APX	17,389,641	579,660	0	17,402,626	566,675	0	17,403,092	566,209	0
MUA	19,110,585	605,168	0	19,104,810	610,943	0	19,112,279	603,474	0

	Jerrold B. Harris		
	Votes For	Votes Withheld	Abstain
APX	17,393,820	575,481	0
MUA	19,126,404	589,349	0

For the Funds listed above, Directors whose term of office continued after the Annual Meeting of Shareholders because they were not up for election are Richard S. Davis, Frank J. Fabozzi, James T. Flynn, R. Glenn Hubbard, W. Carl Kester and Karen P. Robards.

Below are the results with respect to each nominee, who will continue to serve as Director for each of the Funds:

	Richard E. Cavanagh			Richard S. Davis			Frank J. Fabozzi²		
	Votes For	Votes Withheld	Abstain	Votes For	Votes Withheld	Abstain	Votes For	Votes Withheld	Abstain
MEN	24,985,842	864,768	0	24,851,085	999,525	0	1,558	437	0
MHD	11,955,268	270,563	0	11,870,890	354,941	0	969	479	0
MUH	9,619,191	152,566	0	9,538,255	233,502	0	600	15	354
MUS	9,765,954	490,683	0	9,749,677	506,960	0	903	67	403
MUI ¹	35,413,968	754,469	0	35,375,112	793,325	0	1,983	330	0
MVT	17,486,254	793,261	0	17,516,541	762,974	0	1,190	249	454

	Kathleen F. Feldstein	James T. Flynn	Henry Gabbay
	Votes	Votes	Votes

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

	Votes For	Withheld	Abstain	Votes For	Withheld	Abstain	Votes For	Withheld	Abstain
MEN	24,921,133	929,477	0	24,910,803	939,807	0	24,980,584	870,026	0
MHD	11,944,853	280,978	0	11,929,071	296,760	0	11,955,268	270,563	0
MUH	9,630,665	141,092	0	9,619,591	152,166	0	9,619,591	152,166	0
MUS	9,725,140	531,497	0	9,708,149	548,488	0	9,761,342	495,295	0
MUI	35,349,200	819,237	0	35,333,587	834,850	0	35,406,447	761,990	0
MVT	17,546,291	733,224	0	17,492,008	787,507	0	17,456,527	822,988	0

	Jerrold B. Harris			R. Glenn Hubbard			W. Carl Kester ²		
	Votes For	Votes Withheld	Abstain	Votes For	Votes Withheld	Abstain	Votes For	Votes Withheld	Abstain
MEN	24,928,511	922,099	0	24,978,023	872,587	0	1,558	437	0
MHD	11,932,978	292,853	0	11,933,612	292,219	0	969	479	0
MUH	9,619,591	152,166	0	9,618,106	153,651	0	600	15	354
MUS	9,711,365	545,272	0	9,758,033	498,604	0	903	67	403
MUI ¹	35,384,449	783,988	0	35,322,859	845,578	0	1,983	330	0
MVT	17,515,731	763,784	0	17,475,859	803,656	0	1,190	249	454

	Karen P. Robards		
	Votes For	Votes Withheld	Abstain
MEN	24,992,578	858,032	0
MHD	11,958,406	267,425	0
MUH	9,629,515	142,242	0
MUS	9,741,203	515,434	0
MUI	35,414,253	754,184	0
MVT	17,573,472	706,043	0

¹ Due to the lack of a quorum of Preferred Shares, MUI was unable to act on the election of the two directors reserved for election solely by the Preferred Shareholders for the Fund. Accordingly, Frank J. Fabozzi and W. Carl Kester will remain in office and continue to serve as directors for the Fund.

² Voted on by the holders of Preferred Shares only.

Additional Information (continued)

Dividend Policy

The Funds' dividend policy is to distribute all or a portion of their net investment income to their shareholders on a monthly basis. In order to provide shareholders with a more stable level of dividend distributions, the Funds 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 Funds for any particular month may be more or less than the amount of net investment income earned by the Funds during such month. The Funds' current accumulated but undistributed net investment income, if any, is disclosed in the Statements of Assets and Liabilities, which comprises part of the financial information included in this report.

General Information

On June 10, 2010, the Manager announced that the directors of MUI had received a demand letter sent on behalf of certain of MUI Common Shareholders. The demand letter alleged that the Manager and MUI's officers and Board of Directors (the "Board") breached their fiduciary duties owed to MUI and its Common Shareholders by redeeming at par certain of MUI's Preferred Shares, and demanded that the Board take action to remedy those alleged breaches. In response to the demand letter, the Board established a Demand Review Committee (the "Committee") of the independent Directors to investigate the claims made in the demand letter with the assistance of independent counsel. Based upon its investigation, the Committee recommended that the Board reject the demand specified in the letter. After reviewing the findings of the Committee, the Board unanimously adopted the Committee's recommendation and unanimously voted to reject the demand.

Electronic Delivery

Electronic copies of most financial reports are available on the Funds' web-sites or shareholders can sign up for e-mail notifications of quarterly statements, annual and semi-annual reports by enrolling in the Funds' electronic delivery program.

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

Please contact your financial advisor to enroll. Please note that not all investment advisors, banks or brokerages may offer this service.

Householding

The Funds will mail only one copy of shareholder documents, including annual and semi-annual reports and proxy statements, to shareholders with multiple accounts at the same address. This practice is commonly called "householding" and is intended to reduce expenses and eliminate duplicate mailings of shareholder documents. Mailings of your shareholder documents may be householded indefinitely unless you instruct us otherwise. If you do not want the mailing of these documents to be combined with those for other members of your household, please call (800) 441-7762.

Availability of Quarterly Portfolio Schedule of Investments

The Funds file their 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 Funds' Forms N-Q are available on the SEC's website at <http://www.sec.gov> and 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 (800) SEC-0330. Each Fund's Forms N-Q may also be obtained upon request and without charge by calling (800) 441-7762.

Availability of Proxy Voting Policies and Procedures

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

A description of the policies and procedures that the Funds use to determine how to vote proxies relating to portfolio securities is available (1) without charge, upon request, by calling (800) 441-7762; (2) at <http://www.blackrock.com>; and (3) on the SEC's website at <http://www.sec.gov>.

Availability of Proxy Voting Record

Information about how the Funds voted proxies relating to securities held in the Funds' portfolios during the most recent 12-month period ended June 30 is available upon request and without charge (1) at <http://www.blackrock.com> or by calling (800) 441-7762 and (2) on the SEC's website at <http://www.sec.gov>.

Availability of Fund Updates

BlackRock will update performance and certain other data for the Funds on a monthly basis on its website in the Closed-end Funds' section of <http://www.blackrock.com>. Investors and others are advised to periodically check the website for updated performance information and the release of other material information about the Funds.

Additional Information (continued)

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 non-public 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 non-public 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 websites.

BlackRock does not sell or disclose to non-affiliated third parties any non-public personal information about its Clients, except as permitted by law or as is necessary to respond to regulatory requests or to service Client accounts. These non-affiliated 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 non-public 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 non-public personal information of its Clients, including procedures relating to the proper storage and disposal of such information.

Additional Information (concluded)

Board Approval

On September 1, 2010, the Board of Directors (the **Boards**) of MEN and MUS (the **Funds**) approved changes to certain investment policies of the Funds.

Historically, under normal market conditions, each Fund has been required to invest at least 80% of its assets in municipal bonds either (i) insured under an insurance policy purchased by the Fund or (ii) insured under an insurance policy obtained by the issuer of the municipal bond or any other party. In September 2008, the Funds adopted an amended investment policy of purchasing only municipal bonds insured by insurance providers with claims-paying abilities rated investment grade at the time of investment (the **Insurance Investment Policy**).

Following the onset of the credit and liquidity crises, the claims-paying ability rating of most of the municipal bond insurance providers has been lowered by the rating agencies. These downgrades have called into question the long-term viability of the municipal bond insurance market, which has the potential to severely limit the ability of BlackRock Advisors, LLC, the Funds' investment advisor (the **Manager**), to manage the Funds under the Insurance Investment Policy.

As a result, on September 1, 2010, the Manager recommended, and the Board approved, the removal of the Insurance Investment Policy. As a result of this investment policy change, the Funds will not be required to dispose of assets currently held within the Funds. The Funds will maintain, and have no current intention to amend, their investment policy of, under normal market conditions, generally investing in municipal obligations rated investment grade at the time of investment.

As each Fund increases the amount of its assets that are invested in municipal obligations that are not insured, each Fund's shareholders will be exposed to the risk of the failure of such securities' issuers to pay interest and repay principal and will not have the benefit of protection provided under municipal bond insurance policies. As a result, shareholders will be more dependent on the analytical ability of the Manager to evaluate the credit quality of issuers of municipal obligations in which each Fund invests. The Board believes that the amended investment policy is in the best interests of each Fund and its shareholders because it believes that the potential benefits from increased flexibility outweigh the potential increase in risk from the lack of insurance policies provided by weakened insurance providers. Of course, the new investment policy cannot assure that each Fund will achieve its investment objective.

As disclosed in each Fund's prospectus, each Fund is required to provide shareholders 60 days notice of a change to the Insurance Investment Policy. Accordingly, a notice describing the changes discussed above was mailed to shareholders of record as of September 1, 2010. The new investment policy took effect on November 9, 2010.

After the amended policy takes effect, the Manager anticipates that it will gradually reposition each Fund's portfolio over time, and that during such period, each Fund may continue to hold a substantial portion of its assets in insured municipal bonds. At this time, it is uncertain how long it may take to reposition each Fund's portfolio once the amended policy takes effect, and the Funds may continue to be subject to risks associated with investing a substantial portion of their assets in insured municipal bonds until the repositioning is complete. No action is required by shareholders of the Funds in connection with this change.

On November 9, 2010, in connection with this change in non-fundamental policy, MUS changed its name from BlackRock MuniHoldings Insured Fund, Inc. to BlackRock MuniHoldings Quality Fund, Inc. The Fund will continue to trade on the New York Stock Exchange under its current ticker symbol.

The approved changes will not alter any Fund's investment objective.

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

This report is transmitted to shareholders only. It is not a prospectus. Past performance results shown in this report should not be considered a representation of future performance. Certain of the Funds have leveraged their Common Shares, which creates risks for Common Shareholders, including the likelihood of greater volatility of net asset value and market price of the Common Shares, and the risk that fluctuations in the short-term dividend rates of the Preferred Shares, currently set at the maximum reset rate as a result of failed auctions, may affect the yield to Common Shareholders. Statements and other information herein are as dated and are subject to change.

#CEMUN18-10/10

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

- 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 Investments
(a) The registrant's Schedule of Investments is included as part of the Report to Stockholders filed under Item 1 of this form.
(b) Not Applicable due to no such divestments during the semi-annual period covered since the previous Form N-CSR filing.
- Item 7 Disclosure of Proxy Voting Policies and Procedures for Closed-End Management Investment Companies Not Applicable to this semi-annual report
- Item 8 Portfolio Managers of Closed-End Management Investment Companies Not Applicable to this semi-annual report
- Item 9 Purchases of Equity Securities by Closed-End Management Investment Company and Affiliated Purchasers Not Applicable
- Item 10 Submission of Matters to a Vote of Security Holders On September 17, 2010, the Board of Directors of the Fund amended and restated in its entirety the bylaws of the Fund (the "Amended and Restated Bylaws"). The Amended and Restated Bylaws were deemed effective as of September 17, 2010 and set forth, among other things, the processes and procedures that shareholders of the Fund must follow, and specifies additional information that shareholders of the Fund must provide, when proposing director nominations at any annual meeting or special meeting in lieu of an annual meeting or other business to be considered at an annual meeting or special meeting.
- Item 11 Controls and Procedures
- 11(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 13a-15(b) under the Securities Exchange Act of 1934, as amended.
- 11(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 second fiscal quarter of the period covered by this report that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.
- 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
-

Edgar Filing: BLACKROCK APEX MUNICIPAL FUND INC - Form N-CSRS

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 (principal executive officer) of
BlackRock Apex Municipal Fund, Inc.

Date: December 22, 2010

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: December 22, 2010

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

Date: December 22, 2010
