

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

BLACKROCK APEX MUNICIPAL FUND INC
Form N-CSR
July 07, 2010
UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-CSR

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: 04/30/2010

Date of reporting period: 04/30/2010

Item 1 – Report to Stockholders

Annual Report

APRIL 30, 2010

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 Insured Fund, Inc. (MUS)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

BlackRock MuniVest Fund II, Inc. (MVT)

NOT FDIC INSURED
MAY LOSE VALUE
NO BANK GUARANTEE

Table of Contents

	Page
<u>Dear Shareholder</u>	3
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>	51
<u>Statements of Operations</u>	53
<u>Statements of Changes in Net Assets</u>	54
<u>Statements of Cash Flows</u>	58
<u>Financial Highlights</u>	59
<u>Notes to Financial Statements</u>	67
<u>Report of Independent Registered Public Accounting Firm</u>	76
<u>Important Tax Information</u>	78
<u>Automatic Dividend Reinvestment Plans</u>	79
<u>Officers and Directors</u>	80
<u>Additional Information</u>	83

Dear Shareholder

Although overall global economic and financial conditions have generally improved over the past year, the period ended with high levels of market volatility and diminishing investor confidence sparked by the sovereign debt crisis in Europe, concerns over the strength of the economic recovery and uncertainty surrounding the future of interest rate policies. Additionally, as the period drew to a close, the increasing likelihood of more stringent financial market regulations added to the overall sense of investment uncertainty. Despite the uneven nature of recent market conditions, we continue to believe that the Great Recession likely ended at some point last summer, thanks primarily to massive fiscal and monetary stimulus, and that the global economy remains in recovery mode.

Global equity markets bottomed in early 2009 and since that time have moved unevenly higher as investors were lured back into the markets by depressed valuations, desire for higher yields and improvements in corporate earnings prospects. There have been several corrections along the way and volatility levels have remained elevated – reflections of mixed economic data, lingering deflation issues (especially in Europe) and uncertainty surrounding financial regulations. On balance, however, improving corporate revenues and profits and a positive macro backdrop helped push stock prices higher over the last twelve and six months. From a geographic perspective, US equities have outpaced their international counterparts in recent months, as the domestic economic recovery has been more pronounced and as credit-related issues have held European markets down.

Within fixed income markets, yields have been moving unevenly as improving economic conditions have been acting to push Treasury yields higher (and prices correspondingly lower), while concerns over ongoing deflation threats have acted as a counterweight. As the period drew to a close, Treasury yields were falling as investors flocked to the safe haven asset class in the face of escalating uncertainty. Over the course of the last twelve and six months, however, Treasuries underperformed other areas of the bond market, particularly the high yield sector, which has been benefiting from increased investor demand. Meanwhile, municipal bonds slightly outperformed taxable sectors over both the six- and twelve-month periods thanks to continued high demand levels, but have continued to face the headwinds of ongoing state and local budget problems. As in the taxable arena, high yield municipals have been outperforming the rest of the market.

Regarding cash investments, yields on money market securities remain near all-time lows (producing returns only marginally above zero percent), with the Federal Open Market Committee reiterating that economic circumstances are likely to necessitate an accommodative interest rate stance for an extended period.

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

Total Returns as of April 30, 2010	6-month	12-month
US equities (S&P 500 Index)	15.66%	38.84%
Small cap US equities (Russell 2000 Index)	28.17	48.95
International equities (MSCI Europe, Australasia, Far East Index)	2.48	34.43
3-month Treasury bill (BofA Merrill Lynch 3-Month Treasury Bill Index)	0.04	0.15
US Treasury securities (BofA Merrill Lynch 10-Year US Treasury Index)	(0.54)	(1.32)
Taxable fixed income (Barclays Capital US Aggregate Bond Index)	2.54	8.30
Tax-exempt fixed income (Barclays Capital Municipal Bond Index)	3.68	8.85
High yield bonds (Barclays Capital US Corporate High Yield 2% Issuer Capped Index)	11.60	42.53

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

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

Global financial markets continue to show signs of improvement, but questions about the strength and sustainability of the recovery abound. 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 April 30, 2010

BlackRock Apex Municipal Fund, Inc.

Investment Objective

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

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

Performance

For the 12 months ended April 30, 2010, the Fund returned 22.73% based on market price and 27.99% 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 34.42% on a market price basis and 31.62% on a NAV basis. 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. Positive performance was derived primarily from sector allocation decisions and included concentrations in transportation, health care and corporate-related debt, which continue to benefit from the relative outperformance of these sectors. In light of positive returns in the municipal market, portfolio duration positioning has also proven beneficial, reflecting recent moves to modestly increase the portfolio's sensitivity to interest rate fluctuations. Negative factors included underweight positioning in the tax-backed, public utility and the county/city/special district/school district sectors, which staged a modest rebound late in the reporting period. In addition, the ongoing compression in credit spreads remains pronounced with respect to non-rated bonds, in which the Fund maintains below market weight exposure. More significantly, a majority of peers within the Lipper category employ a higher degree of leverage, which can enhance both returns and distribution yields.

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 April 30, 2010 (\$8.87) ¹	5.95%
Tax Equivalent Yield ²	9.15%
Current Monthly Distribution per Common Share ³	\$0.044
Current Annualized Distribution per Common Share ³	\$0.528
Leverage as of April 30, 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-CSR

- 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:

	4/30/10	4/30/09	Change	High	Low
Market Price	\$ 8.87	\$ 7.72	14.90%	\$ 9.29	\$ 7.46
Net Asset Value	\$ 9.19	\$ 7.67	19.82%	\$ 9.19	\$ 7.67

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

Sector Allocations

	4/30/10	4/30/09
Health	29%	22%
Corporate	20	24
County/City/Special District/School District	16	20
Transportation	11	11
Education	7	6
Tobacco	5	3
State	4	2
Utilities	4	6
Housing	4	6

Credit Quality Allocations⁵

	4/30/10	4/30/09
AAA/Aaa	7%	7%
AA/Aa	2	5
A	11	12
BBB/Baa	26	23
BB/Ba	8	10
B	7	5
CCC/Caa	4	3
Not Rated ⁶	35	35

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

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

⁶ The investment advisor has deemed certain of these securities to be of investment grade quality. As of April 30, 2010 and April 30, 2009, the market value of these securities was \$14,523,630 representing 8% and \$8,923,111 representing 6%, respectively, of the Fund's long-term investments.

4

ANNUAL REPORT

APRIL 30, 2010

Fund Summary as of April 30, 2010

BlackRock MuniAssets Fund, Inc.

Investment Objective

BlackRock MuniAssets Fund, Inc. (MUA) (the Fund) seeks to provide shareholders with 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 to the issuer, is exempt from federal income taxes.

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

Performance

For the 12 months ended April 30, 2010, the Fund returned 24.17% based on market price and 27.72% based on NAV. For the same period, the closed-end Lipper High Yield Municipal Debt Funds category posted an average return of 34.42% on a market price basis and 31.62% on a NAV basis. 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. Positive performance was derived primarily from sector allocation decisions and included concentrations in transportation, health care and corporate-related debt, which continue to benefit from the relative outperformance of these sectors. In light of positive returns in the municipal market, portfolio duration positioning has also proven beneficial, reflecting recent moves to modestly increase the portfolio's sensitivity to interest rate fluctuations. Negative factors included underweight positioning in the tax-backed, public utility and the county/city/special district/school district sectors, which staged a modest rebound late in the reporting period. In addition, the ongoing compression in credit spreads remains pronounced with respect to non-rated bonds, in which the Fund maintains below market weight exposure. More significantly, a majority of peers within the Lipper category employ a higher degree of leverage, which can enhance both returns and distribution yields.

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 April 30, 2010 (\$12.65) ¹	5.93%
Tax Equivalent Yield ²	9.12%
Current Monthly Distribution per Common Share ³	\$0.0625
Current Annualized Distribution per Common Share ³	\$0.7500
Leverage as of April 30, 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-CSR

- 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:

	4/30/10	4/30/09	Change	High	Low
Market Price	\$ 12.65	\$ 10.91	15.95%	\$ 12.78	\$ 10.64
Net Asset Value	\$ 12.63	\$ 10.59	19.26%	\$ 12.63	\$ 10.59

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

Sector Allocations

	4/30/10	4/30/09
Health	29%	25%
Corporate	24	26
County/City/Special District/School District	13	18
Transportation	11	12
Education	6	4
Tobacco	5	2
State	4	2
Utilities	4	7
Housing	4	4

Credit Quality Allocations⁵

	4/30/10	4/30/09
AAA/Aaa	6%	9%
AA/Aa	3	3
A	14	19
BBB/Baa	26	19
BB/Ba	8	9
B	7	5
CCC/Caa	4	3
CC/Ca		1
Not Rated ⁶	32	32

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

- 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 April 30, 2010 and April 30, 2009, the market value of these securities was \$15,867,930 representing 6% and \$12,884,659 representing 6%, respectively, of the Fund's long-term investments.

ANNUAL REPORT

APRIL 30, 2010

5

Fund Summary as of April 30, 2010

BlackRock MuniEnhanced Fund, Inc.

Investment Objective

BlackRock MuniEnhanced Fund, Inc. (MEN) (the Fund) seeks to provide shareholders with as high a level of current income exempt from federal income taxes as is consistent with its investment policies by investing primarily in a portfolio of long-term, investment grade municipal obligations, the interest on which, in the opinion of bond counsel to the issuer, is exempt from federal income taxes.

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

Performance

For the 12 months ended April 30, 2010, the Fund returned 29.59% based on market price and 18.76% based on NAV. For the same period, the closed-end Lipper Insured Municipal Debt Funds (Leveraged) category posted an average return of 24.79% on a market price basis and 15.40% on a NAV basis. 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. Among the factors that contributed to Fund performance during the reporting period were the Fund's constructive position toward the market during a period of declining yields; exposure to the long end of the yield curve during a period of curve flattening; a general tightening of credit spreads, which drove performance in the Fund's holdings of insured bonds with weaker underlying credits; and the Fund's concentration in the transportation and housing sectors, which outperformed during the period. Conversely, lower relative exposure to the public utility and education sectors detracted from Fund performance as both segments performed well. The Fund's holdings of zero-coupon bonds also detracted from performance as spreads in this sector generally underperformed relative to spreads on coupon 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	MEN
Initial Offering Date	March 2, 1989
Yield on Closing Market Price as of April 30, 2010 (\$10.81) ¹	6.33%
Tax Equivalent Yield ²	9.74%
Current Monthly Distribution per Common Share ³	\$0.057
Current Annualized Distribution per Common Share ³	\$0.684
Leverage as of April 30, 2010 ⁴	39%

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-CSR

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:

	4/30/10	4/30/09	Change	High	Low
Market Price	\$ 10.81	\$ 8.88	21.73%	\$ 10.85	\$ 8.59
Net Asset Value	\$ 10.90	\$ 9.77	11.57%	\$ 11.16	\$ 9.62

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

Sector Allocations

	4/30/10	4/30/09
County/City/Special District/School District	28%	29%
Transportation	24	23
State	19	21
Utilities	14	12
Health	7	4
Housing	3	4
Education	3	2
Corporate	2	4
Tobacco		1

Credit Quality Allocations⁵

	4/30/10	4/30/09
AAA/Aaa	46%	45%
AA/Aa	23	33
A	26	19
BBB/Baa	5	3

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

Fund Summary as of April 30, 2010

BlackRock MuniHoldings Fund, Inc.

Investment Objective

BlackRock MuniHoldings Fund, Inc. (MHD) (the Fund) seeks to provide shareholders with current income exempt from federal income taxes by investing primarily in a portfolio of long-term, investment grade municipal obligations the interest on which, in the opinion of bond counsel to the issuers, is exempt from federal income taxes.

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

Performance

For the 12 months ended April 30, 2010, the Fund returned 40.68% based on market price and 27.31% based on NAV. For the same period, the closed-end Lipper General Municipal Debt Funds (Leveraged) category posted an average return of 28.13% on a market price basis and 22.67% on a NAV basis. All returns reflect reinvestment of dividends and distributions. 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. Positive performance was attributable in part to sector allocation decisions and included concentrations in health care, housing, county/city/special district/school district and corporate-related debt, which all performed well. Increasing risk appetite has also proven beneficial given the portfolio's focus on lower-rated credits. Additionally, portfolio positioning with respect to a modestly long duration stance and an emphasis on longer-dated bonds was additive in an environment where yields on the long end of the curve fell substantially. Negative factors included underweight positioning in the tax-backed, public utilities and tobacco sectors, portions of which have performed well on a relative basis.

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 April 30, 2010 (\$15.70) ¹	6.57%
Tax Equivalent Yield ²	10.11%
Current Monthly Distribution per Common Share ³	\$0.086
Current Annualized Distribution per Common Share ³	\$1.032
Leverage as of April 30, 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-CSR

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:

	4/30/10	4/30/09	Change	High	Low
Market Price	\$ 15.70	\$ 11.97	31.16%	\$ 15.90	\$ 11.88
Net Asset Value	\$ 15.75	\$ 13.27	18.69%	\$ 15.84	\$ 13.27

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

Sector Allocations

	4/30/10	4/30/09
Health	23%	19%
Corporate	14	15
State	12	10
County/City/Special District/School District	11	13
Transportation	11	11
Utilities	11	10
Education	9	9
Housing	7	9
Tobacco	2	4

Credit Quality Allocations⁵

	4/30/10	4/30/09
AAA/Aaa	19%	29%
AA/Aa	32	21
A	23	24
BBB/Baa	11	10
BB/Ba	2	2
B	2	1
CCC/Caa	2	2
Not Rated ⁶	9	11

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

⁶

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

The investment advisor has deemed certain of these non-rated securities to be of investment grade quality. As of April 30, 2010 and April 30, 2009, the market value of these securities was \$2,973,600 representing 1% and \$6,532,075 representing 2%, respectively, of the Fund's long-term investments.

ANNUAL REPORT

APRIL 30, 2010

7

Fund Summary as of April 30, 2010

BlackRock MuniHoldings Fund II, Inc.

Investment Objective

BlackRock MuniHoldings Fund II, Inc. (MUH) (the Fund) seeks to provide shareholders with current income exempt from federal income taxes by investing primarily in a portfolio of long-term, investment grade municipal obligations the interest on which, in the opinion of bond counsel to the issuer, is exempt from federal income taxes.

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

Performance

For the 12 months ended April 30, 2010, the Fund returned 38.64% based on market price and 25.71% based on NAV. For the same period, the closed-end Lipper General Municipal Debt Funds (Leveraged) category posted an average return of 28.13% on a market price basis and 22.67% on a NAV basis. 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. Positive performance was attributable in part to sector allocation decisions and included concentrations in health care, housing, county/city/special district/school district and corporate-related debt, which all performed well. Increasing risk appetite has also proven beneficial given the portfolio's focus on lower-rated credits. Additionally, portfolio positioning with respect to a modestly long duration stance and an emphasis on longer-dated bonds was additive in an environment where yields on the long end of the curve fell substantially. Negative factors included underweight positioning in the tax-backed, public utilities and tobacco sectors, portions of which have performed well on a relative basis.

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 April 30, 2010 (\$14.68) ¹	6.58%
Tax Equivalent Yield ²	10.12%
Current Monthly Distribution per Common Share ³	\$0.0805
Current Annualized Distribution per Common Share ³	\$0.9660
Leverage as of April 30, 2010 ⁴	35%

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-CSR

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:

	4/30/10	4/30/09	Change	High	Low
Market Price	\$ 14.68	\$ 11.33	29.57%	\$ 14.69	\$ 11.27
Net Asset Value	\$ 14.65	\$ 12.47	17.48%	\$ 14.72	\$ 12.46

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

Sector Allocations

	4/30/10	4/30/09
Health	21%	18%
County/City/Special District/School District	15	16
Corporate	15	11
State	12	10
Education	10	11
Transportation	10	13
Utilities	8	9
Housing	7	8
Tobacco	2	4

Credit Quality Allocations⁵

	4/30/10	4/30/09
AAA/Aaa	18%	26%
AA/Aa	37	26
A	20	25
BBB/Baa	12	10
BB/Ba	2	1
B	1	2
CCC/Caa	2	1
Not Rated ⁶	8	9

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 April 30, 2010 and April 30, 2009, the market value of these securities was \$4,406,945 representing 2% and \$4,974,331 representing 2%, respectively, of

the Fund's long-term investments.

Fund Summary as of April 30, 2010

BlackRock MuniHoldings Insured Fund, Inc.**Investment Objective**

BlackRock MuniHoldings Insured Fund, Inc. (MUS) (the Fund) seeks to provide shareholders with current income exempt from federal income taxes by investing primarily in a portfolio of long-term, investment grade municipal obligations the interest on which, in the opinion of bond counsel to the issuers, is exempt from federal income taxes. Under normal circumstances, the Fund invests at least 80% of its total assets in municipal bonds that are covered by insurance.

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

Performance

For the 12 months ended April 30, 2010, the Fund returned 31.59% based on market price and 16.05% based on NAV. For the same period, the closed-end Lipper Insured Municipal Debt Funds (Leveraged) category posted an average return of 24.79% on a market price basis and 15.40% on a NAV basis. 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. Notable positions in health care and housing bonds enhanced the Fund's performance for the period. In both sectors, the maturity range of the Fund's holdings was 20 years and longer, and they subsequently benefited from the flattening of the yield curve during the past 12 months. Conversely, the Fund's insured holdings, with weak underlying credits, detracted from performance 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	MUS
Initial Offering Date	May 1, 1998
Yield on Closing Market Price as of April 30, 2010 (\$13.40) ¹	6.63%
Tax Equivalent Yield ²	10.20%
Current Monthly Distribution per Common Share ³	\$0.074
Current Annualized Distribution per Common Share ³	\$0.888
Leverage as of April 30, 2010 ⁴	41%

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-CSR

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:

	4/30/10	4/30/09	Change	High	Low
Market Price	\$ 13.40	\$ 10.87	23.28%	\$ 13.80	\$ 10.73
Net Asset Value	\$ 13.34	\$ 12.27	8.72%	\$ 13.81	\$ 11.98

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

Sector Allocations

	4/30/10	4/30/09
County/City/Special District/School District	33%	42%
Utilities	22	14
Transportation	16	17
State	13	12
Health	9	7
Housing	5	6
Corporate	2	2

Credit Quality Allocations⁵

	4/30/10	4/30/09
AAA/Aaa	58%	50%
AA/Aa	16	39
A	24	6
BBB/Baa	1	4
Not Rated ⁶	1	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 April 30, 2010 and April 30, 2009, the market value of these securities was \$2,342,435 representing 1% and \$3,333,138 representing 1%, respectively, of the Fund's long-term investments.

Fund Summary as of April 30, 2010

BlackRock Muni Intermediate Duration Fund, Inc.**Investment Objective**

BlackRock Muni Intermediate Duration Fund, Inc. (MUI) (the Fund) seeks to provide shareholders with high current income exempt from federal income taxes by investing primarily in a portfolio of municipal obligations, the interest on which, in the opinion of bond counsel to the issuer, is exempt from federal income taxes.

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

Performance

For the 12 months ended April 30, 2010, the Fund returned 27.29% based on market price and 19.85% based on NAV. For the same period, the closed-end Lipper Intermediate Municipal Debt Funds category posted an average return of 22.05% on a market price basis and 15.50% on a NAV basis. 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 Fund benefited from a tightening of credit spreads, specifically within the corporate high yield sector, which helped the Fund's lower-quality holdings outperform. In addition, we actively structured new-issue deals with discounted coupons at the longer end of the Fund's duration range. These holdings benefited from the outperformance of the new-issue market, the flattening of the yield curve and the reduced supply of tax-exempt issuance due to Build America Bonds (BAB) issuance. We also diversified the Fund's holdings to increase exposure to specialty-state paper, which outperformed as a result of increased demand by retail buyers. Finally, the Fund benefited from an above-average yield relative to its Lipper group peers. Conversely, the Fund's shorter maturity holdings, as well as its bonds with greater negative convexity, underperformed the market.

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 April 30, 2010 (\$14.13) ¹	5.56%
Tax Equivalent Yield ²	8.55%
Current Monthly Distribution per Common Share ³	\$0.0655
Current Annualized Distribution per Common Share ³	\$0.7860
Leverage as of April 30, 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-CSR

³ The Monthly Distribution per Common Share, declared on June 1, 2010, was increased to \$0.0680. 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 and 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:

	4/30/10	4/30/09	Change	High	Low
Market Price	\$ 14.13	\$ 11.77	20.05%	\$ 14.27	\$ 11.51
Net Asset Value	\$ 14.75	\$ 13.05	13.03%	\$ 14.79	\$ 13.01

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

Sector Allocations

	4/30/10	4/30/09
State	23%	23%
City/County/Special District/School District	21	25
Corporate	12	11
Health	12	10
Transportation	8	13
Utilities	8	7
Education	6	2
Tobacco	6	6
Housing	4	3

Credit Quality Allocations⁵

	4/30/10	4/30/09
AAA/Aaa	28%	36%
AA/Aa	25	30
A	23	11
BBB/Baa	11	12
BB/Ba	1	
B	2	1
CCC/Caa	3	1
Not Rated ⁶	7	9

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

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 April 30, 2010 and April 30, 2009, the market value of these securities was \$11,900,188 representing 1% and \$16,548,864 representing 2%, respectively, of the Fund's long-term investments.

10

ANNUAL REPORT

APRIL 30, 2010

Fund Summary as of April 30, 2010

BlackRock MuniVest Fund II, Inc.

Investment Objective

BlackRock MuniVest Fund II, Inc. (MVT) (the Fund) seeks 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 by investing primarily in a portfolio of long-term, investment grade municipal obligations, the interest on which, in the opinion of bond counsel to the issuers, is exempt from federal income taxes.

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

Performance

For the 12 months ended April 30, 2010, the Fund returned 37.99% based on market price and 29.75% based on NAV. For the same period, the closed-end Lipper General Municipal Debt Funds (Leveraged) category posted an average return of 28.13% on a market price basis and 22.67% on a NAV basis. 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. Positive performance was attributable in part to sector allocation decisions and included concentrations in health care, housing, development districts and corporate-related debt, which all performed well. Increasing risk appetite has also proven beneficial given the portfolio's focus on lower-rated credits. Additionally, portfolio positioning with respect to a modestly long duration stance and an emphasis on longer-dated bonds was additive in an environment where yields on the long end of the curve fell substantially. Negative factors included underweight positioning in the tax-backed, public utilities and education sectors, all of which have performed well on a relative basis.

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 April 30, 2010 (\$14.94) ¹	6.91%
Tax Equivalent Yield ²	10.63%
Current Monthly Distribution per Common Share ³	\$0.086
Current Annualized Distribution per Common Share ³	\$1.032
Leverage as of April 30, 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-CSR

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:

	4/30/10	4/30/09	Change	High	Low
Market Price	\$ 14.94	\$ 11.65	28.24%	\$ 14.94	\$ 11.54
Net Asset Value	\$ 14.41	\$ 11.95	20.59%	\$ 14.55	\$ 11.94

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

Sector Allocations

	4/30/10	4/30/09
Health	22%	18%
Corporate	18	16
State	14	14
Transportation	12	13
County/City/Special District/School District	10	13
Utilities	10	11
Education	6	6
Housing	5	5
Tobacco	3	4

Credit Quality Allocations⁵

	4/30/10	4/30/09
AAA/Aaa	18%	26%
AA/Aa	39	28
A	18	18
BBB/Baa	11	12
BB/Ba		1
B	3	2
CCC/Caa	1	
Not Rated ⁶	10	13

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

- 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 April 30, 2010 and April 30, 2009, the market value of these securities was \$5,505,082 representing 1% and \$10,825,769 representing 3%, respectively, of the Fund's long-term investments.

ANNUAL REPORT

APRIL 30, 2010

11

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. The Funds 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 April 30, 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	39%
MHD	36%
MUH	35%
MUS	41%
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 to the transaction or illiquidity of the derivative instrument. Each Fund's 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 a Fund to sell or purchase portfolio securities at inopportune times or for distressed values, may limit the amount of appreciation a Fund can realize on an investment or may cause a Fund to hold a security that it might otherwise sell. The Funds' investments in these instruments are discussed in detail in the Notes to Financial Statements.

Schedule of Investments April 30, 2010

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

Municipal Bonds	Par (000)	Value
Alabama 0.4%		
County of Jefferson Alabama, RB, Series A:		
5.25%, 1/01/13	\$ 435	\$ 412,328
5.25%, 1/01/17	365	330,931
		743,259
Alaska 1.1%		
Alaska Industrial Development & Export Authority, RB, Williams Lynxs Alaska Cargoport, AMT, 8.00%, 5/01/23		
	2,000	1,925,240
Arizona 4.1%		
Maricopa County IDA Arizona, RB, Series A:		
Arizona Charter Schools Project, 6.63%, 7/01/20	1,100	847,495
Sun King Apartments Project, 6.00%, 11/01/10	5	4,969
Phoenix IDA Arizona, Refunding RB, America West Airlines Inc. Project, AMT, 6.30%, 4/01/23	2,950	2,306,988
Pima County IDA, RB, Arizona Charter Schools Project, Series E, 7.25%, 7/01/31	960	963,571
Pima County IDA, Refunding IDRIB, Tucson Electric Power, 5.75%, 9/01/29	460	468,087
Salt Verde Financial Corp., RB, Senior, 5.00%, 12/01/32	1,950	1,768,533
University Medical Center Corp. Arizona, RB, 6.25%, 7/01/29	540	574,814
Yavapai County IDA Arizona, RB, Yavapai Regional Medical Center, Series A, 6.00%, 8/01/33	500	502,870
		7,437,327
California 4.2%		
California Statewide Communities Development Authority, Refunding RB:		
American Baptist Homes of the West, 6.25%, 10/01/39	885	879,053
Senior Living, Southern California, 7.00%, 11/15/29	400	429,628
Senior Living, Southern California, 7.25%, 11/15/41	1,440	1,561,651
City of Fontana California, Special Tax Bonds, Refunding, Community Facilities District No. 22-Sierra, Series H, 6.00%, 9/01/34	1,000	955,630
State of California, GO: 4.50%, 10/01/36	1,755	1,572,585
Various Purpose, 6.00%, 3/01/33	2,120	2,333,505

Municipal Bonds	Par (000)	Value
Colorado 2.8%		
Elk Valley Public Improvement Corp., RB, Public Improvement Fee, Series A, 7.30%, 9/01/22	\$ 2,800	\$ 2,737,896
Plaza Metropolitan District No. 1 Colorado, Tax Allocation Bonds, Tax Increment:		
Public Improvement Fee, 8.00%, 12/01/25	2,000	2,002,240
Subordinate Public Improvement Fee, 8.13%, 12/01/25	500	476,880
		<u>5,217,016</u>
Connecticut 2.3%		
Harbor Point Infrastructure Improvement District, Tax Allocation Bonds, Harbor Point Project, Series A, 7.88%, 4/01/39	1,610	1,686,298
Mohegan Tribe of Indians of Connecticut, RB, Public Improvement, Priority Distribution:		
6.25%, 1/01/31	1,785	1,434,890
5.25%, 1/01/33 (a)	1,500	1,072,530
		<u>4,193,718</u>
District of Columbia 2.3%		
District of Columbia, RB, Methodist Home District of Columbia, Series A:		
7.38%, 1/01/30	680	689,377
7.50%, 1/01/39	1,110	1,126,351
District of Columbia Tobacco Settlement Financing Corp., Refunding RB, Asset-Backed, 6.50%, 5/15/33	730	716,305
Metropolitan Washington Airports Authority, RB, CAB, 2nd Senior Lien, Series B (AGC), 6.75%, 10/01/39 (b)	9,770	1,691,871
		<u>4,223,904</u>
Florida 9.4%		
Capital Region Community Development District Florida, Special Assessment Bonds, Capital Improvement, Series A, 7.00%, 5/01/39	630	590,852
County of Miami-Dade Florida, Refunding RB, Miami International Airport, Series A-1, 5.38%, 10/01/41	360	364,136
Hillsborough County IDA, RB, AMT, National Gypsum Co.: Series A, 7.13%, 4/01/30	2,500	2,177,525
Series B, 7.13%, 4/01/30	1,560	1,358,776
Jacksonville Economic Development Commission, RB, Gerdau Ameristeel US Inc., AMT, 5.30%, 5/01/37	900	695,916
Jacksonville Economic Development Commission, Refunding RB, Florida Proton Therapy Institute, Series A, 6.00%, 9/01/17	840	856,876
Lee County IDA Florida, RB, Series A, Lee Charter Foundation, 5.38%, 6/15/37	1,810	1,385,247

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.
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
GNMA	Government National Mortgage Association
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
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

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
Florida (concluded)		
Main Street Community Development District, Special Assessment Bonds, Series B, 6.90%, 5/01/17	\$ 345	\$ 323,724
Midtown Miami Community Development District, Special Assessment Bonds, Series A:		
6.00%, 5/01/24	1,370	1,313,707
6.25%, 5/01/37	1,350	1,266,651
Santa Rosa Bay Bridge Authority, RB, 6.25%, 7/01/28	2,140	1,165,337
Sarasota County Health Facilities Authority, Refunding RB, Village On The Isle Project:		
5.50%, 1/01/27	590	536,003
5.50%, 1/01/32	550	487,652
Sumter Landing Community Development District Florida, RB, Sub-Series B, 5.70%, 10/01/38	1,615	1,264,222
Tampa Palms Open Space & Transportation Community Development District, RB, Capital Improvement, Richmond Place Project, 7.50%, 5/01/18	1,905	1,905,152
Tolomato Community Development District, Special Assessment Bonds, Special Assessment, 6.65%, 5/01/40	1,850	1,472,230
		<u>17,164,006</u>
Georgia 4.1%		
City of Atlanta Georgia, Tax Allocation Bonds, Princeton Lakes Project, 5.50%, 1/01/31	395	346,731
Clayton County Development Authority, RB, Delta Air Lines Inc. Project, Series A, 8.75%, 6/01/29	1,375	1,466,877
County of Clayton Georgia, Tax Allocation Bonds, Ellenwood Project, 7.50%, 7/01/33	1,640	1,558,836
DeKalb County Hospital Authority Georgia, RB, DeKalb Medical Center Inc. Project, 6.13%, 9/01/40 (c)	1,805	1,805,505
Gainesville & Hall County Development Authority, Refunding RB, Acts Retirement Life Community, Series A-2, 6.63%, 11/15/39	645	670,142
Rockdale County Development Authority, RB, Visy Paper Project, Series A, AMT, 6.13%, 1/01/34	1,680	1,549,330
Thomasville Hospital Authority, RB, Anticipation Certificates, John D. Archbold, 5.38%, 11/01/40 (c)	210	208,289
		<u>7,605,710</u>
Guam 1.9%		
Guam Government Waterworks Authority, Refunding RB, Water: 6.00%, 7/01/25	515	526,170

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

5.88%, 7/01/35	800	784,776
Territory of Guam, GO, Series A:		
6.00%, 11/15/19	250	258,803
6.75%, 11/15/29	440	467,966
7.00%, 11/15/39	455	485,867
Territory of Guam, RB, Section 30, Series A, 5.63%, 12/01/29		
	1,000	1,018,860

3,542,442

Illinois 5.6%

City of Chicago Illinois, Refunding RB, American Airlines Inc. Project, 5.50%, 12/01/30		
	2,860	2,124,694
Illinois Finance Authority, RB:		
Clare at Water Tower Project, Series A, 6.13%, 5/15/38 (d)(e)		
	2,050	817,806
Roosevelt University Project, 6.50%, 4/01/44		
	1,700	1,782,807
Rush University Medical Center Obligation Group, Series A, 7.25%, 11/01/30		
	2,000	2,277,400

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

Illinois (concluded)

Illinois Finance Authority, Refunding RB:		
Friendship Village of Schaumburg, 7.25%, 2/15/45	\$ 1,630	\$ 1,617,465
Primary Health Care Centers Program, 6.60%, 7/01/24	490	435,968
Village of Lincolnshire Illinois, Special Tax Bonds, Sedgebrook Project, 6.25%, 3/01/34	755	609,783
Village of Wheeling Illinois, Tax Allocation Bonds, North Milwaukee/Lake-Cook TIF Project, 6.00%, 1/01/25	750	684,383

10,350,306

Indiana 1.7%

Indiana Finance Authority, Refunding RB, Improvement, U.S. Steel Corp., 6.00%, 12/01/26 (c)		
	620	624,625
Indiana Health & Educational Facilities Financing Authority, Refunding RB, Community Foundation Northwest Indiana, 5.50%, 3/01/37		
	1,770	1,723,856
Vigo County Hospital Authority Indiana, RB, Union Hospital Inc. (a):		
5.70%, 9/01/37	440	382,167
5.75%, 9/01/42	545	466,716

3,197,364

Kentucky 0.7%

Kentucky Economic Development Finance Authority, Refunding RB, Owensboro Medical Health System:		
Series A, 6.38%, 6/01/40	645	663,060
Series B, 6.38%, 3/01/40	615	632,220

1,295,280

Louisiana 1.1%

2,000	2,056,640
-------	-----------

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

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

Maryland 1.2%

Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35	420	429,001
Maryland Health & Higher Educational Facilities Authority, RB, Washington Christian Academy, 5.50%, 7/01/38	410	176,308
Maryland State Energy Financing Administration, RB, Cogeneration, AES Warrior Run, AMT, 7.40%, 9/01/19	1,500	1,500,435
		2,105,744

Massachusetts 2.1%

Massachusetts Development Finance Agency, RB, First Mortgage, Overlook Communities, Series A, 6.25%, 7/01/34	1,845	1,584,597
Massachusetts Development Finance Agency, Refunding RB, Eastern Nazarene College, 5.63%, 4/01/19	1,070	975,519
Massachusetts Health & Educational Facilities Authority, RB, Jordan Hospital, Series E, 6.75%, 10/01/33	850	832,813
Massachusetts Health & Educational Facilities Authority, Refunding RB, Milton Hospital, Series C, 5.50%, 7/01/16	500	444,240
		3,837,169

Michigan 2.7%

Advanced Technology Academy, RB, 6.00%, 11/01/37	625	558,200
County of Wayne Michigan, GO, Building Improvement, Series A, 6.75%, 11/01/39	375	395,531
Monroe County Hospital Finance Authority, Refunding RB, Mercy Memorial Hospital Corp. Obligation, 5.50%, 6/01/35	1,260	1,037,975
Royal Oak Hospital Finance Authority Michigan, Refunding RB, William Beaumont Hospital, 8.25%, 9/01/39	2,575	3,039,350
		5,031,056

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 1.0%		
Kansas City IDA Missouri, RB, First Mortgage, Bishop Spencer, Series A, 6.50%, 1/01/35	\$ 1,000	\$ 887,200
Kirkwood IDA Missouri, RB, Aberdeen Heights, Series A, 8.25%, 5/15/39	945	940,814
		1,828,014
Multi-State 0.3%		
MuniMae TE Bond Subsidiary LLC, 7.50%, 6/30/49 (a)(f)(g)	672	623,477
Nevada 0.2%		
County of Clark Nevada, Special Assessment Bonds, Special Improvement District No. 142, Local Improvement, 6.38%, 8/01/23	380	359,339
New Hampshire 0.4%		
New Hampshire Health & Education Facilities Authority, RB, Catholic Medical Center, 5.00%, 7/01/36	835	709,825
New Jersey 6.8%		
New Jersey EDA, RB, Continental Airlines Inc. Project, AMT: 6.63%, 9/15/12	3,050	3,081,537
6.25%, 9/15/29	1,000	938,100
New Jersey EDA, Refunding RB, Newark Airport Marriott Hotel, 7.00%, 10/01/14	1,500	1,501,920
New Jersey Educational Facilities Authority, Refunding RB, University of Medicine & Dentistry, Series B: 7.13%, 12/01/23	670	774,078
7.50%, 12/01/32	1,065	1,219,755
New Jersey Health Care Facilities Financing Authority, RB, Pascack Valley Hospital Association, 6.63%, 7/01/36 (d)(e)	1,870	19
New Jersey Health Care Facilities Financing Authority, Refunding RB, St. Joseph's Healthcare System, 6.63%, 7/01/38	1,680	1,722,873
New Jersey Transportation Trust Fund Authority, RB, CAB, Transportation System, Series C (AMBAC), 5.05%, 12/15/35 (b)	2,760	591,827
Tobacco Settlement Financing Corp. New Jersey, Refunding RB, Series 1A: 4.50%, 6/01/23	2,050	1,958,037
5.00%, 6/01/41	860	594,681
		12,382,827

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

New York 6.1%

Brooklyn Arena Local Development Corp., RB, Barclays Center Project, 6.38%, 7/15/43	685	701,591
Chautauqua County Industrial Development Agency, RB, NRG Dunkirk Power Project, 5.88%, 4/01/42	1,710	1,738,506
Dutchess County Industrial Development Agency New York, RB, St. Francis Hospital, Series B, 7.50%, 3/01/29	1,000	993,870
Metropolitan Transportation Authority, RB, Series 2008-C, 6.50%, 11/15/28	2,000	2,322,580
New York City Industrial Development Agency, RB: American Airlines Inc., JFK International Airport, AMT, 8.00%, 8/01/28	720	750,146
British Airways Plc Project, AMT, 7.63%, 12/01/32 Series C, 6.80%, 6/01/28	1,730	1,710,555
Special Needs Facilities Pooled Program, Series C-1, 6.50%, 7/01/24	350	367,993
New York Liberty Development Corp., RB, National Sports Museum Project, Series A, 6.13%, 2/15/19 (d)(e)	830	771,178
New York State Dormitory Authority, RB, North Shore-Long Island Jewish Health System, Series A, 5.50%, 5/01/37	630	6
	1,000	1,024,960

Municipal Bonds	Par (000)	Value
New York (concluded)		
Yonkers Industrial Development Agency New York, RB, Sarah Lawrence College Project, Series A, 6.00%, 6/01/41	\$ 850	\$ 886,193
		11,267,578

North Carolina 1.8%

North Carolina Medical Care Commission, Refunding RB, First Mortgage, Deerfield, Series A, 6.13%, 11/01/38	3,230	3,206,324
--	-------	-----------

Ohio 1.8%

Buckeye Tobacco Settlement Financing Authority, RB, Asset-Backed, Senior Series A-2: 5.13%, 6/01/24	1,120	1,030,635
6.50%, 6/01/47	2,685	2,203,419
		3,234,054

Pennsylvania 6.9%

Allegheny County Hospital Development Authority, Refunding RB, Health System, West Penn, Series A, 5.38%, 11/15/40	2,385	1,914,034
Bucks County IDA, RB, Ann's Choice Inc. Facility, Series A, 6.13%, 1/01/25	1,160	1,098,184
Cumberland County Municipal Authority, RB, Diakon Lutheran, 6.38%, 1/01/39	2,510	2,528,800
Lancaster County Hospital Authority, RB, Brethren Village Project, Series A: 6.25%, 7/01/26	475	474,468
6.50%, 7/01/40	410	397,839
Montgomery County IDA Pennsylvania, MRB, Whitemarsh Continuing Care, 6.25%, 2/01/35	1,700	1,260,176

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

Pennsylvania Higher Educational Facilities Authority, Refunding RB, Allegheny Delaware Valley Obligation, Series A (NPFGC), 5.88%, 11/15/21	470	453,400
Philadelphia Authority for Industrial Development, RB, AMT: Commercial Development, 7.75%, 12/01/17	3,000	3,003,270
Subordinate, Air Cargo, Series A, 7.50%, 1/01/25	1,600	1,524,768
		<hr/>
		12,654,939
Puerto Rico 1.2%		
Puerto Rico Public Buildings Authority, Refunding RB, Series Q, 5.63%, 7/01/39	985	1,005,784
Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.50%, 8/01/44	1,000	1,129,710
		<hr/>
		2,135,494
Rhode Island 0.8%		
Central Falls Detention Facility Corp., Refunding RB, 7.25%, 7/15/35	1,750	1,501,518
South Carolina 0.5%		
Connector 2000 Association Inc., RB, CAB, Senior Series B, 9.86%, 1/01/14 (b)(d)(e)	1,075	177,375
South Carolina Jobs, EDA, Refunding RB, Palmetto Health, 5.50%, 8/01/26	670	664,821
		<hr/>
		842,196
Tennessee 0.1%		
Shelby County Health Educational & Housing Facilities Board, RB, Village at Germantown, 6.25%, 12/01/34	245	209,012

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 10.1%		
Bexar County Health Facilities Development Corp., RB, Army Retirement Residence Project, 6.20%, 7/01/45	\$ 2,055	\$ 2,074,831
Brazos River Authority, Refunding RB, Texas Utility Co., Series, AMT, 7.70%, 4/01/33	2,530	1,506,615
Central Texas Regional Mobility Authority, RB:		
CAB, 7.48%, 1/01/28 (b)	1,000	282,670
CAB, 7.78%, 1/01/33 (b)	2,150	410,435
CAB, 7.79%, 1/01/34 (b)	4,000	708,200
Senior Lien, 5.75%, 1/01/25	450	454,612
City of Houston Texas, RB, Special Facilities, Continental Airlines, Series E, AMT, 6.75%, 7/01/21	1,865	1,858,566
Danbury Higher Education Authority Inc., RB, A.W. Brown Fellowship Charter, Series A (ACA), 5.13%, 8/15/36	1,000	1,133,290
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System B, 7.25%, 12/01/35	1,110	1,251,159
Matagorda County Navigation District No. 1 Texas, Refunding RB, Central Power & Light Co. Project, Series A, 6.30%, 11/01/29	850	920,142
North Texas Tollway Authority, RB, Toll, 2nd Tier, Series F, 6.13%, 1/01/31	1,650	1,759,791
Tarrant County Cultural Education Facilities Finance Corp., RB, Series A:		
CC Young Memorial Home, 8.00%, 2/15/38	710	702,218
Senior Living Center Project, 8.25%, 11/15/44	1,710	1,692,541
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien, Note Mobility, 6.88%, 12/31/39	1,605	1,676,776
Texas State Public Finance Authority, Refunding ERB, KIPP Inc., Series A (ACA), 5.00%, 2/15/28	2,250	2,068,065
		18,499,911
U.S. Virgin Islands 1.3%		
United States Virgin Islands, Refunding RB, Senior Secured, Hovensa Coker Project, AMT, 6.50%, 7/01/21	2,100	2,127,384
Virgin Islands Public Finance Authority, RB, Senior Lien, Capital Projects, Series A-1, 5.00%, 10/01/39	340	321,966
		2,449,350
Utah 1.2%		
County of Carbon Utah, Refunding RB, Laidlaw Environmental, Series A, AMT, 7.45%, 7/01/17	2,240	2,244,368
		2,330
Virginia 2.7%		
	2,330	2,206,627

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

Dulles Town Center Community Development Authority, Special Assessment Bonds, Dulles Town Center Project, 6.25%, 3/01/26		
Tobacco Settlement Financing Corp. Virginia, Refunding RB, Senior Series B1, 5.00%, 6/01/47	4,040	2,780,853
		4,987,480

Wisconsin 2.2%

Wisconsin Health & Educational Facilities Authority, RB: New Castle Place Project, Series A, 7.00%, 12/01/31	1,320	1,270,262
Wheaton Franciscan Healthcare, 5.25%, 8/15/34	2,540	2,303,805
Wisconsin Health & Educational Facilities Authority, Refunding RB, St. John's Communities Inc., Series A: 7.25%, 9/15/29	175	178,980
7.63%, 9/15/39	350	363,157
		4,116,204

Wyoming 1.3%

County of Sweetwater Wyoming, Refunding RB, FMC Corp. Project, AMT, 5.60%, 12/01/35	2,500	2,401,450
--	-------	-----------

Total Municipal Bonds 94.4%		173,311,593
------------------------------------	--	-------------

Municipal Bonds Transferred to Tender Option Bond Trusts (h)	Par (000)	Value
---	--------------	-------

District of Columbia 1.7%

District of Columbia Water & Sewer Authority, RB, Series A, 6.00%, 10/01/35	\$ 2,730	\$ 3,075,819
--	----------	--------------

Florida 3.3%

County of Miami-Dade Florida, RB, Miami International Airport, Series A, AMT (AGC), 5.25%, 10/01/33	6,130	6,113,326
--	-------	-----------

Virginia 3.1%

Virginia HDA, RB, Sub-Series H-1 (NPFGC), 5.38%, 7/01/36	5,710	5,753,624
---	-------	-----------

Total Municipal Bonds Transferred to Tender Option Bond Trusts 8.1%		14,942,769
--	--	------------

Total Long-Term Investments (Cost \$191,036,266) 102.5%		188,254,362
--	--	-------------

Short-Term Securities	Shares	
FII Institutional Tax-Exempt Fund, 0.25% (i)(j)	648,958	648,958

Total Short-Term Securities (Cost \$648,958) 0.4%		648,958
--	--	---------

Total Investments (Cost \$191,685,224*)	102.9%	188,903,320
Other Assets Less Liabilities	1.1%	2,009,210
Liability for Trust Certificates, Including Interest Expense and Fees Payable	(4.0)%	(7,290,410)
Net Assets	100.0%	\$ 183,622,120

* The cost and unrealized appreciation (depreciation) of investments as of April 30, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 183,704,275
Gross unrealized appreciation	\$ 9,676,376
Gross unrealized depreciation	(11,762,777)
Net unrealized depreciation	\$ (2,086,401)

- (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) When-issued security. Net unsettled when-issued transactions were as follows:

Counterparty	Value	Unrealized Appreciation
BB&T Capital Markets	\$ 208,289	\$ 313
Morgan Stanley Capital Services, Inc.	\$ 624,625	\$ 4,625
Raymond C. Forbes	\$ 1,805,505	\$ 31,226

- (d) Issuer filed for bankruptcy and/or is in default of interest payments.
- (e) Non-income producing security.
- (f) 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.
- (g) Variable rate security. Rate shown is as of report date.

See Notes to Financial Statements.

Schedule of Investments (concluded)

BlackRock Apex Municipal Fund, Inc. (APX)

- (h) 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.
- (i) Investments in companies considered to be an affiliate of the Fund during the year, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, were as follows:

Affiliate	Shares Held at April 30, 2009	Net Activity	Shares Held at April 30, 2010	Income
FFI Institutional Tax-Exempt Fund	100,006	548,952	648,958	\$ 2,997

- (j) 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 April 30, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Investments in Securities			
	Level 1	Level 2	Level 3	Total
Assets:				
Long-Term Investments ¹		\$ 188,254,362		\$ 188,254,362
Short-Term Securities	\$ 648,958			648,958
Total	\$ 648,958	\$ 188,254,362		\$ 188,903,320

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

See Notes to Financial Statements.

ANNUAL REPORT

APRIL 30, 2010

17

Schedule of Investments April 30, 2010

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

Municipal Bonds	Par (000)	Value
Alabama 0.4%		
County of Jefferson Alabama, RB, Series A:		
5.25%, 1/01/13	\$ 635	\$ 601,904
5.25%, 1/01/17	530	480,530
		1,082,434
Alaska 0.1%		
Alaska Industrial Development & Export Authority, RB, Williams Lynxs Alaska Cargoport, AMT, 7.80%, 5/01/14		
	395	389,462
Arizona 6.3%		
Coconino County Pollution Control Corp. Arizona, Refunding RB, Tucson Electric Power-Navajo, Series A, AMT, 7.13%, 10/01/32		
	3,000	3,001,380
Maricopa County IDA Arizona, RB, Arizona Charter Schools Project, Series A, 6.63%, 7/01/20		
	1,625	1,251,981
Phoenix IDA Arizona, Refunding RB, America West Airlines Inc. Project, AMT, 6.30%, 4/01/23		
	4,800	3,753,744
Pima County IDA, RB, Arizona Charter Schools Project, Series E, 7.25%, 7/01/31		
	1,375	1,380,115
Pima County IDA, Refunding IDR, Tucson Electric Power, 5.75%, 9/01/29		
	670	681,779
Pima County IDA, Refunding RB: Arizona Charter Schools Project, Series O, 5.25%, 7/01/31		
	500	398,950
Charter Schools II, Series A, 6.75%, 7/01/31		
	670	646,195
Salt Verde Financial Corp., RB, Senior: 5.00%, 12/01/32		
	2,840	2,575,709
5.00%, 12/01/37		
	1,850	1,640,487
Show Low Improvement District, Special Assessment Bonds, District No. 5, 6.38%, 1/01/15		
	745	745,477
University Medical Center Corp. Arizona, RB: 6.25%, 7/01/29		
	280	298,052
6.50%, 7/01/39		
	500	532,990
		16,906,859
California 4.4%		
California Health Facilities Financing Authority, RB, Cedars-Sinai Medical Center, 5.00%, 8/15/39		
	640	618,938
California Statewide Communities Development Authority, Refunding RB: American Baptist Homes of the West, 6.25%, 10/01/39		
	1,290	1,281,331
Senior Living, Southern California, 7.00%, 11/15/29		
	600	644,442

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

Senior Living, Southern California, 7.25%, 11/15/41	2,060	2,234,029
City of Fontana California, Special Tax Bonds, Refunding, Community Facilities District No. 22-Sierra, Series H, 6.00%, 9/01/34	1,320	1,261,432
State of California, GO: 4.50%, 10/01/36	2,555	2,289,433
Various Purpose, 6.00%, 3/01/33	3,075	3,384,683
		11,714,288

Colorado 2.6%

Elk Valley Public Improvement Corp., RB, Public Improvement Fee:		
Series A, 7.10%, 9/01/14	1,395	1,424,532
Series A, 7.30%, 9/01/22	2,095	2,048,533
Series B, 7.45%, 9/01/31	200	186,542
Plaza Metropolitan District No. 1 Colorado, Tax Allocation Bonds, Tax Increment:		
Public Improvement Fee, 8.00%, 12/01/25	2,850	2,853,192
Subordinate Public Improvement Fee, 8.13%, 12/01/25	525	500,724
		7,013,523

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	\$ 3,297,945
Harbor Point Infrastructure Improvement District, Tax Allocation Bonds, Harbor Point Project, Series A, 7.88%, 4/01/39	2,340	2,450,893
Mohegan Tribe of Indians of Connecticut, RB, Public Improvement, Priority Distribution, 6.25%, 1/01/31	2,610	2,098,075
		7,846,913

District of Columbia 2.2%

District of Columbia, RB, Methodist Home District of Columbia, Series A:		
7.38%, 1/01/30	985	998,583
7.50%, 1/01/39	1,615	1,638,789
District of Columbia Tobacco Settlement Financing Corp., Refunding RB, Asset-Backed, 6.50%, 5/15/33	1,055	1,035,208
Metropolitan Washington Airports Authority, RB, CAB, 2nd Senior Lien, Series B (AGC), 6.54%, 10/01/30 (a)	7,000	2,126,810
		5,799,390

Florida 9.0%

Capital Region Community Development District Florida, Special Assessment Bonds, Capital Improvement, Series A, 7.00%, 5/01/39	945	886,278
County of Miami-Dade Florida, Refunding RB, Miami International Airport, Series A-1, 5.38%, 10/01/41	705	713,100
	1,180	1,102,887

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

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	455,332
Hillsborough County IDA, RB: National Gypsum Co., Series A, AMT, 7.13%, 4/01/30	2,000	1,742,020
National Gypsum Co., Series B, AMT, 7.13%, 4/01/30	1,540	1,341,355
Tampa General Hospital Project, 5.00%, 10/01/36	2,670	2,492,071
Jacksonville Economic Development Commission, RB, Gerdau Ameristeel US Inc., AMT, 5.30%, 5/01/37	1,300	1,005,212
Jacksonville Economic Development Commission, Refunding RB, Florida Proton Therapy Institute, Series A, 6.00%, 9/01/17	850	867,077
Lee County IDA Florida, RB, Series A, Lee Charter Foundation, 5.38%, 6/15/37	2,620	2,005,165
Main Street Community Development District, Special Assessment Bonds, Series B, 6.90%, 5/01/17	500	469,165
Midtown Miami Community Development District, Special Assessment Bonds, Series A, 6.25%, 5/01/37	3,255	3,054,036
Santa Rosa Bay Bridge Authority, RB, 6.25%, 7/01/28	3,040	1,655,432
Sarasota County Health Facilities Authority, Refunding RB, Village On The Isle Project: 5.50%, 1/01/27	860	781,293
5.50%, 1/01/32	795	704,879
Sarasota County Public Hospital District, RB, Sarasota Memorial Hospital Project, Series A, 5.63%, 7/01/39	695	720,374
Sumter Landing Community Development District Florida, RB, Sub-Series B, 5.70%, 10/01/38	2,380	1,863,064
Tolomato Community Development District, Special Assessment Bonds, Special Assessment, 6.65%, 5/01/40	2,680	2,132,744
		23,991,484

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 4.2%		
City of Atlanta Georgia, Tax Allocation Bonds, Princeton Lakes Project, 5.50%, 1/01/31	\$ 640	\$ 561,792
Clayton County Development Authority, RB, Delta Air Lines Inc. Project, Series A, 8.75%, 6/01/29	1,990	2,122,972
County of Clayton Georgia, Tax Allocation Bonds, Ellenwood Project, 7.50%, 7/01/33	2,375	2,257,461
DeKalb County Hospital Authority Georgia, RB, DeKalb Medical Center Inc. Project, 6.13%, 9/01/40 (b)	2,625	2,625,735
Gainesville & Hall County Development Authority, Refunding RB, Acts Retirement Life Community, Series A-2: 6.38%, 11/15/29	700	727,076
6.63%, 11/15/39	235	244,160
Rockdale County Development Authority, RB, Visy Paper Project, Series A, AMT, 6.13%, 1/01/34	2,435	2,245,606
Thomasville Hospital Authority, RB, Anticipation Certificates, John D. Archbold, 5.38%, 11/01/40 (b)	300	297,555
		<u>11,082,357</u>
Guam 1.9%		
Guam Government Waterworks Authority, Refunding RB, Water: 6.00%, 7/01/25	750	766,267
5.88%, 7/01/35	1,150	1,128,115
Territory of Guam, GO, Series A: 6.00%, 11/15/19	365	377,852
6.75%, 11/15/29	635	675,361
7.00%, 11/15/39	660	704,774
Territory of Guam, RB, Section 30, Series A, 5.63%, 12/01/29	1,460	1,487,536
		<u>5,139,905</u>
Illinois 4.8%		
City of Chicago Illinois, Refunding RB, American Airlines Inc. Project, 5.50%, 12/01/30	4,140	3,075,606
Illinois Finance Authority, RB: Clare at Water Tower Project, Series A, 6.13%, 5/15/38 (c)(d)	2,950	1,176,843
Roosevelt University Project, 6.50%, 4/01/44	2,470	2,590,314
Rush University Medical Center Obligation Group, Series B, 7.25%, 11/01/30	1,170	1,332,279
Illinois Finance Authority, Refunding RB: Friendship Village of Schaumburg, 7.25%, 2/15/45	2,370	2,351,775
	685	609,465

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

Primary Health Care Centers Program, 6.60%,
7/01/24

Village of Lincolnshire Illinois, Special Tax Bonds, Sedgebrook Project, 6.25%, 3/01/34	1,070	864,196
Village of Wheeling Illinois, Tax Allocation Bonds, North Milwaukee/Lake-Cook TIF Project, 6.00%, 1/01/25	825	752,821
		<u>12,753,299</u>

Indiana 0.8%

Indiana Finance Authority, Refunding RB, Improvement, U.S. Steel Corp., 6.00%, 12/01/26 (b)	900	906,714
Vigo County Hospital Authority Indiana, RB, Union Hospital Inc.: 5.70%, 9/01/37	615	534,164
5.75%, 9/01/42	765	655,116
		<u>2,095,994</u>

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

Kentucky 0.7%

Kentucky Economic Development Finance Authority, Refunding RB, Owensboro Medical Health System: Series A, 6.38%, 6/01/40	\$ 935	\$ 961,180
Series B, 6.38%, 3/01/40	885	909,780
		<u>1,870,960</u>

Louisiana 1.2%

Louisiana Local Government Environmental Facilities & Community Development Authority, RB, Westlake Chemical Corp. Projects, 6.75%, 11/01/32	3,000	3,084,960
--	-------	-----------

Maryland 1.3%

Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35	615	628,179
Maryland EDC, Refunding RB, Health & Mental Hygiene Program, Series A, 7.75%, 3/01/25	1,480	1,495,570
Maryland Health & Higher Educational Facilities Authority, RB, Washington Christian Academy, 5.50%, 7/01/38	590	253,712
Maryland State Energy Financing Administration, RB, Cogeneration, AES Warrior Run, AMT, 7.40%, 9/01/19	1,080	1,080,313
		<u>3,457,774</u>

Massachusetts 0.6%

Massachusetts Development Finance Agency, Refunding RB, Eastern Nazarene College, 5.63%, 4/01/29	500	402,565
Massachusetts Health & Educational Facilities Authority, RB, Jordan Hospital, Series E, 6.75%, 10/01/33	1,150	1,126,747
		<u>1,529,312</u>

Michigan 2.7%

Advanced Technology Academy, RB, 6.00%, 11/01/37	900	803,808
	545	574,839

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

County of Wayne Michigan, GO, Building Improvement,
Series A, 6.75%, 11/01/39

Monroe County Hospital Finance Authority, Refunding RB,
Mercy Memorial Hospital Corp. Obligation, 5.50%,
6/01/35

1,740 1,433,395

Royal Oak Hospital Finance Authority Michigan, Refunding
RB, William Beaumont Hospital, 8.25%, 9/01/39

3,735 4,408,532

7,220,574

Minnesota 0.8%

City of Minneapolis Minnesota, Refunding RB, Fairview
Health Services, Series A, 6.75%, 11/15/32

1,785 1,992,078

Missouri 0.8%

Kansas City IDA Missouri, RB, First Mortgage, Bishop
Spencer, Series A, 6.50%, 1/01/35

1,000 887,200

Kirkwood IDA Missouri, RB, Aberdeen Heights, Series A,
8.25%, 5/15/39

1,370 1,363,931

2,251,131

Multi-State 0.3%

MuniMae TE Bond Subsidiary LLC, 7.50%,
6/30/49 (e)(f)(g)

960 890,681

Nevada 0.2%

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

610 576,834

New Hampshire 0.4%

New Hampshire Health & Education Facilities Authority,
RB, Catholic Medical Center, 5.00%, 7/01/36

1,165 990,355

See Notes to Financial Statements.

ANNUAL REPORT

APRIL 30, 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 7.3%		
New Jersey EDA, RB, Continental Airlines Inc. Project, AMT:		
6.25%, 9/15/19	\$ 2,000	\$ 1,921,780
6.40%, 9/15/23	1,000	959,630
6.25%, 9/15/29	3,330	3,123,873
9.00%, 6/01/33	1,250	1,315,862
New Jersey EDA, Refunding RB, Newark Airport Marriott Hotel, 7.00%, 10/01/14	2,500	2,503,200
New Jersey Educational Facilities Authority, Refunding RB, University of Medicine & Dentistry, Series B, 7.50%, 12/01/32	2,510	2,874,728
New Jersey Health Care Facilities Financing Authority, RB, Pascack Valley Hospital Association, 6.63%, 7/01/36 (c)(d)	2,000	20
New Jersey Health Care Facilities Financing Authority, Refunding RB, St. Joseph's Healthcare System, 6.63%, 7/01/38	2,410	2,471,503
New Jersey Transportation Trust Fund Authority, RB, CAB, Transportation System, Series C (AMBAC), 5.05%, 12/15/35 (a)	3,450	739,784
Tobacco Settlement Financing Corp. New Jersey, Refunding RB, Series 1A:		
4.50%, 6/01/23	2,950	2,817,663
5.00%, 6/01/41	1,250	864,363
		19,592,406
New York 6.0%		
Brooklyn Arena Local Development Corp., RB, Barclays Center Project, 6.38%, 7/15/43	1,000	1,024,220
Chautauqua County Industrial Development Agency, RB, NRG Dunkirk Power Project, 5.88%, 4/01/42	2,485	2,526,425
Dutchess County Industrial Development Agency New York, Refunding RB, St. Francis Hospital, Series A, 7.50%, 3/01/29	1,400	1,391,418
Metropolitan Transportation Authority, RB, Series 2008-C, 6.50%, 11/15/28	3,685	4,279,354
New York City Industrial Development Agency, RB: American Airlines Inc., JFK International Airport, AMT, 8.00%, 8/01/28	1,045	1,088,754
British Airways Plc Project, AMT, 7.63%, 12/01/32	2,400	2,373,024
Series C, 6.80%, 6/01/28	510	536,219
Special Needs Facilities Pooled Program, Series C-1, 6.63%, 7/01/29	1,515	1,358,546
New York Liberty Development Corp., RB, National Sports Museum Project, Series A, 6.13%, 2/15/19 (c)(d)	870	9
	1,240	1,292,799

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

Yonkers Industrial Development Agency New York, RB,
Sarah Lawrence College Project, Series A, 6.00%,
6/01/41

15,870,768

North Carolina 0.9%

North Carolina Medical Care Commission, Refunding RB,
First Mortgage, Deerfield, Series A, 6.13%, 11/01/38 2,335 2,317,884

Ohio 2.0%

Buckeye Tobacco Settlement Financing Authority, RB,
Asset-Backed, Senior Series A-2:
5.13%, 6/01/24 2,265 2,084,276
6.50%, 6/01/47 3,935 3,229,218

5,313,494

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

Pennsylvania 9.4%

Allegheny County Hospital Development Authority, Refunding RB, Health System, West Penn, Series A, 5.38%, 11/15/40	\$ 3,960	\$ 3,178,019
Bucks County IDA, RB, Ann's Choice Inc. Facility, Series A: 6.13%, 1/01/25	200	189,342
6.25%, 1/01/35	1,550	1,410,794
Cumberland County Municipal Authority, RB, Diakon Lutheran, 6.38%, 1/01/39	3,655	3,682,376
Lancaster County Hospital Authority, RB, Brethren Village Project, Series A: 6.25%, 7/01/26	685	684,233
6.50%, 7/01/40	590	572,501
Montgomery County IDA Pennsylvania, MRB, Whitemarsh Continuing Care, 6.13%, 2/01/28	2,330	1,870,524
Pennsylvania Economic Development Financing Authority, RB: National Gypsum Co., Series A, 6.25%, 11/01/27	3,250	2,594,572
Reliant Energy, Series B, 6.75%, 12/01/36	2,040	2,104,770
Pennsylvania Higher Educational Facilities Authority, Refunding RB, Allegheny Delaware Valley Obligation, Series A (NPFGC), 5.88%, 11/15/21	1,645	1,586,899
Philadelphia Authority for Industrial Development, RB, AMT: Commercial Development, 7.75%, 12/01/17	5,000	5,005,450
Subordinate, Air Cargo, Series A, 7.50%, 1/01/25	2,270	2,163,264

25,042,744

Puerto Rico 1.3%

Puerto Rico Public Buildings Authority, Refunding RB, Series Q, 5.63%, 7/01/39	1,650	1,684,815
Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.50%, 8/01/44	1,650	1,864,022

3,548,837

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

Rhode Island 0.8%

Central Falls Detention Facility Corp., Refunding RB, 7.25%, 7/15/35	2,495	2,140,735
---	-------	-----------

South Carolina 0.5%

Connector 2000 Association Inc., RB, CAB, Senior Series B, 0.00%, 1/01/14 (a)(c)(d)	1,485	245,025
South Carolina Jobs, EDA, Refunding RB, Palmetto Health, 5.50%, 8/01/26	975	967,463

1,212,488

Tennessee 0.6%

Knox County Health Educational & Housing Facilities Board Tennessee, Refunding RB, Covenant, Series A (AGM), 4.68%, 1/01/40 (a)	6,480	1,263,794
Shelby County Health Educational & Housing Facilities Board, RB, Village at Germantown, 6.25%, 12/01/34	355	302,854

1,566,648

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 8.9%		
Bexar County Health Facilities Development Corp., RB, Army Retirement Residence Project, 6.20%, 7/01/45	\$ 2,985	\$ 3,013,805
Brazos River Authority, Refunding RB, Texas Utility Co., Series, AMT, 7.70%, 4/01/33	2,550	1,518,525
Central Texas Regional Mobility Authority, RB:		
CAB, 7.56%, 1/01/29 (a)	2,000	525,380
CAB, 7.65%, 1/01/30 (a)	1,170	283,409
CAB, 7.71%, 1/01/31 (a)	2,000	447,180
CAB, 7.77%, 1/01/32 (a)	3,500	723,310
CAB, 7.78%, 1/01/33 (a)	1,540	293,986
Senior Lien, 5.75%, 1/01/25	650	656,663
City of Houston Texas, RB, Special Facilities, Continental Airlines, Series E, AMT, 6.75%, 7/01/21	2,685	2,675,737
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System B, 7.13%, 12/01/31	1,500	1,686,780
La Vernia Higher Education Finance Corp., RB, KIPP Inc., 6.38%, 8/15/44	860	887,253
Matagorda County Navigation District No. 1 Texas, Refunding RB, Central Power & Light Co. Project, Series A, 6.30%, 11/01/29	1,240	1,342,325
North Texas Tollway Authority, RB, Toll, 2nd Tier, Series F, 6.13%, 1/01/31	2,775	2,959,648
Tarrant County Cultural Education Facilities Finance Corp., RB, Series A:		
CC Young Memorial Home, 8.00%, 2/15/38	1,035	1,023,656
Senior Living Center Project, 8.25%, 11/15/44	2,490	2,464,577
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien, Note Mobility, 6.88%, 12/31/39	2,330	2,434,198
Texas State Public Finance Authority, Refunding ERB, KIPP Inc., Series A (ACA), 5.00%, 2/15/28	1,000	919,140
		<u>23,855,572</u>
U.S. Virgin Islands 1.3%		
United States Virgin Islands, Refunding RB, Senior Secured, Hovensa Coker Project, AMT, 6.50%, 7/01/21	3,000	3,039,120
Virgin Islands Public Finance Authority, RB, Senior Lien, Capital Projects, Series A-1, 5.00%, 10/01/39	500	473,480
		<u>3,512,600</u>
Utah 0.6%		
County of Carbon Utah, Refunding RB, Laidlaw Environmental, Series A, AMT, 7.45%, 7/01/17	1,660	1,663,237

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

Virginia 2.6%

Dulles Town Center Community Development Authority, Special Assessment Bonds, Dulles Town Center Project, 6.25%, 3/01/26	1,410	1,335,340
Fairfax County EDA, Refunding RB, Goodwin House Inc.: 5.13%, 10/01/37	750	724,792
5.13%, 10/01/42	450	430,475
Lexington IDA, Refunding MRB, Kendal at Lexington, Series A, 5.38%, 1/01/28	540	453,298
Tobacco Settlement Financing Corp. Virginia, Refunding RB, Senior Series B1, 5.00%, 6/01/47	5,875	4,043,939
		<u>6,987,844</u>

Municipal Bonds	Par (000)	Value
Wisconsin 2.2%		
Wisconsin Health & Educational Facilities Authority, RB: New Castle Place Project, Series A, 7.00%, 12/01/31	\$ 1,855	\$ 1,785,104
Wheaton Franciscan Healthcare, 5.25%, 8/15/34	3,695	3,351,402
Wisconsin Health & Educational Facilities Authority, Refunding RB, St. John's Communities Inc., Series A: 7.25%, 9/15/29	250	255,685
7.63%, 9/15/39	505	523,983
		<u>5,916,174</u>
Wyoming 1.3%		
County of Sweetwater Wyoming, Refunding RB, FMC Corp. Project, AMT, 5.60%, 12/01/35	3,600	3,458,088
Total Municipal Bonds 94.3%		<u>251,680,086</u>

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

District of Columbia 1.6%		
District of Columbia Water & Sewer Authority, RB, Series A, 6.00%, 10/01/35	3,951	4,450,360
Florida 3.3%		
County of Miami-Dade Florida, RB, Miami International Airport, Series A, AMT (AGC), 5.25%, 10/01/33	8,870	8,845,874
Virginia 3.3%		
Virginia HDA, RB, Sub-Series H-1 (NPFGC), 5.38%, 7/01/36	8,690	8,756,392
Total Municipal Bonds Transferred to Tender Option Bond Trusts 8.2%		<u>22,052,626</u>

273,732,712

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

Total Long-Term Investments
 (Cost \$278,348,530) 102.5%

Short-Term Securities

Shares

FFI Institutional Tax-Exempt Fund, 0.25% (i)(j)	149,925	149,925
---	---------	---------

Total Short-Term Securities
 (Cost \$149,925) 0.1%

149,925

Total Investments (Cost \$278,498,455*) 102.6%	273,882,637	
Other Assets Less Liabilities 1.4%		3,711,696
Liability for Trust Certificates, Including Interest Expense and Fees Payable (4.0)%		(10,763,093)

Net Assets 100.0%

\$ 266,831,240

See Notes to Financial Statements.

ANNUAL REPORT

APRIL 30, 2010

21

Schedule of Investments (concluded)

BlackRock MuniAssets Fund, Inc. (MUA)

- * The cost and unrealized appreciation (depreciation) of investments as of April 30, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 267,163,993
Gross unrealized appreciation	\$ 12,828,567
Gross unrealized depreciation	(16,865,569)
Net unrealized depreciation	\$ (4,037,002)

- (a) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.

- (b) When-issued security. Net unsettled when-issued transactions were as follows:

Counterparty	Value	Unrealized Appreciation
Raymond C. Forbes	\$ 2,625,735	\$ 45,412
Morgan Stanley Capital Services, Inc.	\$ 906,714	\$ 6,714
BB&T Capital Markets	\$ 297,555	\$ 447

- (c) Issuer filed for bankruptcy and/or is in default of interest payments.
- (d) Non-income producing security.
- (e) 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.
- (f) 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.
- (g) Variable rate security. Rate shown is as of report date.
- (h) 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.
- (i) Investments in companies considered to be an affiliate of the Fund during the year, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, were as follows:

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

Affiliate	Shares Held at April 30, 2009	Net Activity	Shares Held at April 30, 2010	Income
FFI Institutional Tax-Exempt Fund	2,001,534	(1,851,609)	149,925	\$ 4,762

(j) 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 April 30, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Investments in Securities			
	Level 1	Level 2	Level 3	Total
Assets:				
Long-Term Investments ¹		\$ 273,732,712		\$ 273,732,712
Short-Term Securities	\$ 149,925			149,925
Total	\$ 149,925	\$ 273,732,712		\$ 273,882,637

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

See Notes to Financial Statements.

Schedule of Investments April 30, 2010

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	\$ 2,368,218
4.75%, 1/01/25	2,200	1,739,760
		4,107,978
Alaska 0.4%		
Borough of Matanuska-Susitna Alaska, RB, Goose Creek Correctional Center (AGC), 6.00%, 9/01/28		
	1,200	1,379,328
Arizona 1.5%		
State of Arizona, COP, Department of Administration, Series A (AGM):		
5.00%, 10/01/27	3,250	3,330,860
5.25%, 10/01/28	1,000	1,037,580
5.00%, 10/01/29	400	405,384
		4,773,824
California 23.1%		
Alameda Corridor Transportation Authority, Refunding RB, CAB, Subordinate Lien, Series A (AMBAC) (a):		
5.64%, 10/01/24	10,185	8,227,443
5.57%, 10/01/25	6,000	4,810,980
Anaheim Public Financing Authority California, RB, Senior, Public Improvements Project, Series A (AGM), 6.00%, 9/01/24		
	5,000	5,697,300
Antelope Valley Community College District, GO, Election 2004, Series B (NPFGC), 5.25%, 8/01/39		
	600	617,436
Arcadia Unified School District California, GO, CAB, Election of 2006, Series A (AGM), 4.96%, 8/01/39 (b)		
	1,600	262,224
Cabrillo Community College District California, GO, CAB, Election of 2004, Series B (NPFGC), 5.18%, 8/01/37 (b)		
	2,400	419,208
California Health Facilities Financing Authority, Refunding RB, St. Joseph Health System, Series A, 5.75%, 7/01/39		
	550	571,797
California State University, RB, Systemwide, Series A (NPFGC), 5.00%, 11/01/35		
	1,600	1,609,296
Chino Valley Unified School District, GO, Election of 2002, Series C (NPFGC), 5.25%, 8/01/30		
	850	864,348
City of Redding California, COP, Refunding, Series A (AGM), 5.00%, 6/01/30		
	1,420	1,448,329
Fresno Unified School District California, GO, Election 2001, Series E (AGM), 5.00%, 8/01/30		
	900	918,324
	5,160	5,316,090

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

Los Angeles Department of Water & Power, RB, Series C (NPFGC), 5.00%, 7/01/29		
Metropolitan Water District of Southern California, RB, Series B-1 (NPFGC):		
5.00%, 10/01/29	2,965	3,057,834
5.00%, 10/01/36	1,655	1,690,367
Norco Redevelopment Agency California, Tax Allocation Bonds, Refunding, Project Area No. 1 (NPFGC), 5.13%, 3/01/30	5,000	4,740,250
Orange County Sanitation District, COP: (NPFGC), 5.00%, 2/01/33	7,455	7,579,648
Series B (AGM), 5.00%, 2/01/30	1,500	1,576,125
Series B (AGM), 5.00%, 2/01/31	900	943,515
Poway Redevelopment Agency California, Tax Allocation Bonds, Refunding, Paguay Redevelopment Project (AMBAC), 5.13%, 6/15/33	1,750	1,573,810
Sacramento Unified School District California, GO, Election of 2002 (NPFGC), 5.00%, 7/01/30	4,150	4,221,504
San Mateo County Community College District, GO, CAB, Election of 2001, Series C (NPFGC), 5.53%, 9/01/30 (b)	12,740	4,072,214
State of California, GO:		
5.13%, 6/01/27	20	20,067
5.13%, 6/01/31	60	60,094

Municipal Bonds	Par (000)	Value
California (concluded)		
Stockton Public Financing Authority California, RB, Parking & Capital Projects (NPFGC), 5.13%, 9/01/30	\$ 6,145	\$ 6,159,932
Ventura County Community College District, GO, Election of 2002, Series B (NPFGC), 5.00%, 8/01/30	2,325	2,381,963
West Basin Municipal Water District California, COP, Refunding, Series B (AGC), 5.00%, 8/01/30	5,035	5,140,433
		<u>73,980,531</u>

Colorado 0.7%		
Colorado Health Facilities Authority, RB, Covenant Retirement Communities, Series A (Radian):		
5.50%, 12/01/27	1,200	1,104,720
5.50%, 12/01/33	675	605,286
Colorado Housing & Finance Authority, Refunding RB, S/F Program, Senior Series A-2, AMT, 7.50%, 4/01/31	375	398,291
		<u>2,108,297</u>

District of Columbia 2.8%		
District of Columbia, RB, Series B-1 (NPFGC), 5.00%, 2/01/31	9,400	8,810,808

Florida 12.8%		
Broward County School Board Florida, COP, Series A (AGM), 5.25%, 7/01/33	1,600	1,651,344
City of Tallahassee Florida, RB (NPFGC), 5.00%, 10/01/32	4,000	4,079,320
Collier County School Board, COP (AGM), 5.00%, 2/15/23	3,000	3,095,280

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

County of Broward Florida, RB, Series A, 5.25%, 10/01/34	850	886,967
County of Duval Florida, COP, Master Lease Program (AGM), 5.00%, 7/01/33	3,000	3,008,760
County of Miami-Dade Florida, GO, Building Better Communities Program, Series B-1, 5.75%, 7/01/33	1,400	1,510,488
County of Miami-Dade Florida, RB, Water & Sewer System (AGM), 5.00%, 10/01/39	4,950	5,071,027
County of Miami-Dade Florida, Refunding RB, Miami International Airport, AMT (AGC), 5.00%, 10/01/40	9,900	9,424,602
County of Orange Florida, Refunding RB, Series B (NPFGC), 5.13%, 1/01/32	4,200	4,240,866
Hillsborough County Aviation Authority Florida, RB, Series A, AMT (AGC), 5.38%, 10/01/33	1,750	1,762,285
Miami-Dade County School Board, COP, Refunding, Series B (AGC):		
5.25%, 5/01/31	1,800	1,859,328
5.00%, 5/01/33	2,000	1,997,280
Sarasota County Public Hospital District, RB, Sarasota Memorial Hospital Project, Series A, 5.63%, 7/01/39	275	285,040
South Florida Water Management District, COP (AGC), 5.00%, 10/01/22	2,000	2,136,340
		41,008,927
<hr/>		
Georgia 4.0%		
Augusta-Richmond County Georgia, RB (AGM), 5.25%, 10/01/39	2,300	2,391,701
Gwinnett County Hospital Authority, Refunding RB, Gwinnett Hospital System, Series D (AGM), 5.50%, 7/01/41	825	838,596
Municipal Electric Authority of Georgia, Refunding RB, Series EE (AMBAC), 7.00%, 1/01/25	7,475	9,437,486
		12,667,783
<hr/>		

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 19.6%		
Chicago Board of Education Illinois, GO, Refunding, Series A: (AGM), 5.50%, 12/01/31	\$ 3,000	\$ 3,344,940
Chicago School Reform Board (NPFGC), 5.50%, 12/01/26	1,000	1,120,870
City of Chicago Illinois, ARB, General, 3rd Lien, Series B-2, AMT: (AGM), 5.75%, 1/01/23	5,670	5,887,445
(Syncora), 6.00%, 1/01/29	2,500	2,599,650
City of Chicago Illinois, GO, Refunding, Series A (AGM), 5.00%, 1/01/25	500	529,010
City of Chicago Illinois, RB, Series A (AGC), 5.00%, 1/01/38	2,000	2,042,000
City of Chicago Illinois, Refunding RB, General Airport, Third Lien, Series A, AMT (NPFGC), 5.75%, 1/01/21	9,000	9,241,110
County of Cook Illinois, GO, Capital Improvement, Series C (AMBAC), 5.50%, 11/15/12 (c)	2,460	2,741,399
Illinois Municipal Electric Agency, RB, Series A (NPFGC), 5.25%, 2/01/35	1,000	1,020,410
Illinois Sports Facilities Authority, RB, State Tax Supported (AMBAC), 5.58%, 6/15/30 (a)	20,120	20,327,437
Regional Transportation Authority, RB, Series A (AMBAC), 7.20%, 11/01/20	10,115	12,394,213
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/34	1,275	1,328,397
		62,576,881
Indiana 0.1%		
Indiana Municipal Power Agency, RB, Indiana Municipal Power Agency, Series B, 5.75%, 1/01/34	400	422,412
Iowa 1.9%		
Iowa Finance Authority, RB, Series A (AGC), 5.63%, 8/15/37	5,725	6,110,636
Louisiana 1.7%		
Louisiana Public Facilities Authority, Refunding RB, Christus Health, Series B (AGC), 6.50%, 7/01/30	1,250	1,404,813
Louisiana State Transportation Authority, RB, CAB, Senior Lien, Louisiana 1 Project, Series B (AMBAC), 5.31%, 12/01/27 (b)	1,085	432,242
Rapides Finance Authority Louisiana, RB, Cleco Power LLC Project, AMT (AMBAC), 4.70%, 11/01/36	2,250	1,947,015
State of Louisiana, RB, Series A (NPFGC), 5.00%, 5/01/35	1,740	1,761,489

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

5,545,559

Maryland 0.4%

Maryland Community Development Administration, Refunding RB, Residential, Series A, AMT, 5.75%, 9/01/39	1,225	1,273,853
---	-------	-----------

Massachusetts 4.0%

Massachusetts HFA, RB, AMT (AGM): Rental Mortgage, Series F, 5.25%, 1/01/46	5,300	5,291,096
S/F Housing, Series 128, 4.80%, 12/01/27	1,600	1,564,624
Massachusetts HFA, Refunding RB, Rental Housing, Series A, AMT (AGM), 5.15%, 7/01/26	3,000	3,044,430
Massachusetts Water Resources Authority, Refunding RB, General, Series A (NPFGC), 5.00%, 8/01/34	2,700	2,806,272

12,706,422

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

Michigan 5.0%

City of Detroit Michigan, RB, Second Lien, Series B: (AGM), 7.50%, 7/01/33	\$ 700	\$ 840,532
(AGM), 6.25%, 7/01/36	400	436,692
(AGM), 7.00%, 7/01/36	200	230,386
System (NPFGC), 5.00%, 7/01/36	3,600	3,502,440
City of Detroit Michigan, Refunding RB, Second Lien, Series E (BHAC), 5.75%, 7/01/31	2,500	2,650,100
Michigan Higher Education Student Loan Authority, Refunding RB, Student Loan, Series XVII-G, AMT (AMBAC), 5.20%, 9/01/20	1,500	1,508,070
Michigan Strategic Fund, RB, Detroit Edison Co. Project, Series C, AMT (Syncora), 5.45%, 12/15/32	4,300	4,090,590
Michigan Strategic Fund, Refunding RB, AMT (Syncora), Detroit Edison Co.:		
Pollution, Series C, 5.65%, 9/01/29	1,410	1,408,237
Project, Series A, 5.50%, 6/01/30	1,300	1,248,052

15,915,099

Minnesota 0.9%

City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series B (AGC), 6.50%, 11/15/38	2,500	2,804,200
---	-------	-----------

Nevada 5.2%

City of Carson City Nevada, RB, Carson-Tahoe Hospital Project, Series A (Radian), 5.50%, 9/01/33	3,100	2,858,975
City of Las Vegas Nevada, GO, Limited Tax, Performing Arts Center, 6.00%, 4/01/34	850	938,842
County of Clark Nevada, RB: Las Vegas-McCarran International Airport, Series A (AGC), 5.25%, 7/01/39	3,800	3,868,932
Southwest Gas Corp. Project, Series A, AMT (FGIC), 4.75%, 9/01/36	75	62,146
	1,300	1,176,526

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

Southwest Gas Corp. Project, Series D, AMT (NPFGC), 5.25%, 3/01/38		
Subordinate Lien, Series A-2 (NPFGC), 5.00%, 7/01/30	1,500	1,503,255
Subordinate Lien, Series A-2 (NPFGC), 5.00%, 7/01/36	3,200	3,181,280
System, Subordinate Lien, Series C (AGM), 5.00%, 7/01/26	1,475	1,523,100
Las Vegas Valley Water District, GO, Refunding, Series A (NPFGC), 5.00%, 6/01/24	1,600	1,672,928
		<hr/>
		16,785,984

New Jersey 9.2%

New Jersey EDA, RB:		
Cigarette Tax (Radian), 5.50%, 6/15/31	600	568,416
Cigarette Tax (Radian), 5.75%, 6/15/34	305	295,319
Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/31	9,325	9,442,588
Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/33	7,800	7,939,542
School Facilities Construction, Series O, 5.13%, 3/01/28	2,250	2,336,828
School Facilities Construction, Series Z (AGC), 6.00%, 12/15/34	2,000	2,263,220
New Jersey EDA, Refunding RB, School Facilities Construction, Series N-1: (AGM), 5.50%, 9/01/25	5,000	5,741,450
(NPFGC), 5.50%, 9/01/28	815	899,793
		<hr/>
		29,487,156

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 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	\$ 1,633,155
Metropolitan Transportation Authority, RB, Series 2008-C, 6.50%, 11/15/28	4,000	4,645,160
New York City Transitional Finance Authority, RB, Fiscal 2009, Series S-4, 5.50%, 1/15/34	2,750	3,008,308
New York State Dormitory Authority, ERB, Series B, 5.75%, 3/15/36	1,200	1,360,320
		<u>10,646,943</u>
Ohio 0.4%		
Ohio Higher Educational Facility Commission, Refunding RB, Summa Health System, 2010 Project (AGC), 5.25%, 11/15/40 (d)	1,250	1,224,075
Pennsylvania 1.2%		
Pennsylvania HFA, Refunding RB, Series 99A, AMT, 5.25%, 10/01/32	1,500	1,514,565
Pennsylvania Turnpike Commission, RB, CAB, Sub-Series E, 6.47%, 12/01/38 (a)	3,000	2,013,270
Philadelphia School District, GO, Series E, 6.00%, 9/01/38	400	429,220
		<u>3,957,055</u>
Puerto Rico 1.5%		
Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.38%, 8/01/39	3,200	3,593,056
Puerto Rico Sales Tax Financing Corp., Refunding RB, CAB, Series A (NPFGC), 5.71%, 8/01/41 (b)	8,500	1,342,575
		<u>4,935,631</u>
Rhode Island 3.3%		
Providence Public Building Authority Rhode Island, RB, Series A (AGM), 6.25%, 12/15/10 (c)	4,345	4,550,519
Rhode Island EDC, RB, Series B (FGIC), 6.50%, 7/01/10 (c)	3,355	3,422,905
Rhode Island Health & Educational Building Corp., Refunding RB, Public Schools Financing Program, Series E (AGC), 6.00%, 5/15/29	2,375	2,614,946

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

10,588,370

Tennessee 1.8%		
Knox County Health Educational & Housing Facilities Board Tennessee, Refunding RB, Covenant Health, Series A, 5.04%, 1/01/38 (b)	600	112,752
Metropolitan Government of Nashville & Davidson County Health & Educational Facilities Board, Refunding RB, Vanderbilt University, Series B, 5.50%, 10/01/29	5,000	5,650,700
		5,763,452

Texas 14.0%		
City of Houston Texas, Refunding RB, Combined, First Lien, Series A (AGC):		
6.00%, 11/15/35	2,100	2,409,120
5.38%, 11/15/38	1,350	1,463,009
Dallas-Fort Worth International Airport Facilities Improvement Corp., RB, Series A, AMT (NPFGC), 5.50%, 11/01/33	13,000	13,082,160
Lewisville ISD Texas, GO, Refunding, CAB, School Building (NPFGC), 4.67%, 8/15/24 (b)	4,475	2,213,066
Mansfield ISD Texas, GO, School Building (PSF-GTD), 5.00%, 2/15/33	1,725	1,817,167

Municipal Bonds	Par (000)	Value
Texas (concluded)		
Matagorda County Navigation District No. 1 Texas, Refunding RB, Central Power & Light Co. Project, AMT (NPFGC), 5.20%, 5/01/30	\$ 2,400	\$ 2,330,304
North Harris County Regional Water Authority, RB, Senior Lien (NPFGC), 5.13%, 12/15/35	2,895	2,950,266
North Texas Tollway Authority, RB (AGC), System, First Tier:		
Series K-1, 5.75%, 1/01/38	3,800	4,112,094
Series K-2, 6.00%, 1/01/38	4,015	4,455,245
North Texas Tollway Authority, Refunding RB, First Tier:		
Series A, 6.00%, 1/01/28	2,795	3,046,913
System (NPFGC), 5.75%, 1/01/40	1,600	1,674,512
Texas State Turnpike Authority, RB, First Tier, Series A (AMBAC), 5.50%, 8/15/39	5,150	5,196,916
		44,750,772

Utah 1.6%		
Utah Transit Authority, RB, Series A (AGM), 5.00%, 6/15/36	5,000	5,258,650

Washington 0.9%		
Washington Health Care Facilities Authority, Refunding RB, Providence Health, Series D (AGM), 5.25%, 10/01/33	2,800	2,902,900

Wisconsin 1.1%		
	1,375	1,401,097

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

Wisconsin Health & Educational Facilities Authority, RB, Ascension Health Senior Credit Group, 5.00%, 11/15/33		
Wisconsin Housing & EDA, Refunding RB, Series E, AMT, 5.50%, 9/01/38	1,910	2,028,974
		3,430,071
Total Municipal Bonds 123.7%		395,923,597

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

Arizona 0.4%		
Phoenix Civic Improvement Corp., RB, Junior Lien, Series A, 5.00%, 7/01/34	1,200	1,255,620
California 2.9%		
Anaheim Public Financing Authority California, RB, Electric System Distribution Facilities, Series A (AGM), 5.00%, 10/01/31	959	964,885
Los Angeles Community College District California, GO, Election of 2001, Series A (AGM), 5.00%, 8/01/32	2,500	2,559,350
San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33	404	424,060
San Diego County Water Authority, COP, Refunding, Series 2008-A (AGM), 5.00%, 5/01/33	2,810	2,897,840
Tamalpais Union High School District California, GO, Election of 2001 (AGM), 5.00%, 8/01/28	1,605	1,651,079
University of California, RB, Series O, 5.75%, 5/15/34	840	943,144
		9,440,358
Colorado 0.3%		
Colorado Health Facilities Authority, Refunding RB, Catholic Healthcare, Series A, 5.50%, 7/01/34	900	954,211
District of Columbia 1.0%		
District of Columbia, RB, Series A, 5.50%, 12/01/30	1,005	1,128,273
District of Columbia Water & Sewer Authority, RB, Series A, 6.00%, 10/01/35	1,770	1,994,212
		3,122,485

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 (e)	Par (000)	Value
Florida 5.9%		
City of Tallahassee Florida, RB (NPFGC), 5.00%, 10/01/37	\$ 7,500	\$ 7,587,750
Florida State Board of Education, GO, Series D, 5.00%, 6/01/37	1,349	1,407,692
Miami-Dade County School Board, COP, Refunding, Series B (AGC), 5.00%, 5/01/33	10,000	9,986,400
		<u>18,981,842</u>
Georgia 5.6%		
City of Atlanta Georgia, RB, General, Series B (AGM), 5.25%, 1/01/33	17,356	17,778,654
Illinois 0.6%		
Illinois State Toll Highway Authority, RB, Series B, 5.50%, 1/01/33	1,880	2,042,238
Louisiana 1.7%		
State of Louisiana, RB, Series A (AGM), 5.00%, 5/01/36	5,400	5,540,670
Massachusetts 3.5%		
Massachusetts School Building Authority, RB, Series A (AGM), 5.00%, 8/15/30	10,600	11,100,063
Nevada 3.5%		
City of Las Vegas Nevada, GO, Limited Tax, Performing Arts Center, 6.00%, 4/01/39	3,778	4,140,824
Clark County Water Reclamation District, GO, Series B: 5.50%, 7/01/29	4,499	4,936,114
5.75%, 7/01/34	1,829	2,028,571
		<u>11,105,509</u>
New Hampshire 2.3%		
New Hampshire Health & Education Facilities Authority, RB, Dartmouth-Hitchcock Obligation (AGM), 5.50%, 8/01/27	7,390	7,535,583
New York 1.9%		
New York City Municipal Water Finance Authority, RB, Fiscal 2009, Series A, 5.75%, 6/15/40	1,260	1,425,298
New York State Thruway Authority, RB, Series G (AGM), 5.00%, 1/01/32	3,100	3,182,088
Triborough Bridge & Tunnel Authority, RB, General, Series A-2, 5.25%, 11/15/34	1,300	1,398,072

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

6,005,458

Ohio 0.2%

State of Ohio, RB, Cleveland Clinic Health, Series B, 5.50%, 1/01/34	580	611,419
---	-----	---------

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

**Par
(000) Value**

South Carolina 2.7%

Charleston Educational Excellence Finance Corp., RB, Charleston County School (AGC):		
5.25%, 12/01/28	\$ 3,120	\$ 3,240,557
5.25%, 12/01/29	2,765	2,859,425
5.25%, 12/01/30	1,010	1,041,471
South Carolina State Public Service Authority, RB, Santee Cooper, Series A, 5.50%, 1/01/38	1,275	1,388,526
		<u>8,529,979</u>

Texas 0.7%

Clear Creek ISD Texas, GO, Refunding, School Building (PSF-GTD), 5.00%, 2/15/33	2,200	2,376,319
--	-------	-----------

Virginia 0.8%

Fairfax County IDA Virginia, Refunding RB, Health Care, Inova Health System, Series A, 5.50%, 5/15/35	350	370,440
Virginia HDA, RB, Sub-Series H-1 (NPFGC), 5.35%, 7/01/31	2,310	2,331,183
		<u>2,701,623</u>

Washington 1.3%

Central Puget Sound Regional Transit Authority, RB, Series A (AGM), 5.00%, 11/01/32	4,004	4,213,815
--	-------	-----------

Wisconsin 0.5%

Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community Health Inc., 5.25%, 4/01/39	1,430	1,464,392
--	-------	-----------

**Total Municipal Bonds Transferred to
Tender Option Bond Trusts 35.8%**

114,760,238

Total Long-Term Investments

(Cost \$501,696,145) 159.5%	510,683,835
------------------------------------	--------------------

Short-Term Securities

Shares

FFI Institutional Tax-Exempt Fund, 0.25% (f)(g)	7,207,423	7,207,423
---	-----------	-----------

Total Short-Term Securities		
(Cost \$7,207,423) 2.3%		7,207,423
Total Investments (Cost \$508,903,568*) 161.8%		517,891,258
Other Assets Less Liabilities 1.3%		4,247,936
Liability for Trust Certificates, Including		
Interest Expense and Fees Payable (18.6)%		(59,464,524)
Preferred Shares, at Redemption Value (44.5)%		(142,591,476)
Net Assets Applicable to Common Shares 100.0%		<u>\$ 320,083,194</u>

See Notes to Financial Statements.

Schedule of Investments (concluded)

BlackRock MuniEnhanced Fund, Inc. (MEN)

* The cost and unrealized appreciation (depreciation) of investments as of April 30, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 450,047,098
Gross unrealized appreciation	\$ 15,836,883
Gross unrealized depreciation	(7,387,319)
Net unrealized appreciation	\$ 8,449,564

- (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) When-issued security. Unsettled when-issued transactions were as follows:

Counterparty	Value	Unrealized Appreciation
JPMorgan Chase & Co.	\$ 1,224,075	\$ 5,625

- (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 year, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, were as follows:

Affiliate	Shares Held at April 30, 2009	Net Activity	Shares Held at April 30, 2010	Income
FFI Institutional Tax-Exempt Fund	3,302,493	3,904,930	7,207,423	\$20,949

- (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 April 30, 2010 in determining the fair valuation of the Fund's investments:

Investments in Securities				
Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Long-Term Investments ¹		\$ 510,683,835		\$ 510,683,835
Short-Term Securities	\$ 7,207,423			7,207,423
Total	\$ 7,207,423	\$ 510,683,835		\$ 517,891,258

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

See Notes to Financial Statements.

Schedule of Investments April 30, 2010

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

Municipal Bonds	Par (000)	Value
Alabama 2.6%		
Camden IDB Alabama, RB, Weyerhaeuser Co. Project, Series A, 6.13%, 12/01/13 (a)	\$ 1,750	\$ 2,042,880
County of Jefferson Alabama, RB, Series A, 5.00%, 1/01/24	4,550	3,715,075
		<u>5,757,955</u>
Arizona 4.7%		
County of Pinal Arizona, COP, 5.00%, 12/01/29	730	720,101
Maricopa County IDA Arizona, RB, Arizona Charter Schools Project, Series A, 6.75%, 7/01/29	2,200	1,512,192
Phoenix IDA Arizona, Refunding RB, America West Airlines Inc. Project, AMT, 6.30%, 4/01/23	2,215	1,732,197
Pima County IDA, Refunding IDR, Tucson Electric Power, 5.75%, 9/01/29	770	783,537
Salt River Project Agricultural Improvement & Power District, RB, Series A, 5.00%, 1/01/38	1,370	1,432,006
Salt Verde Financial Corp., RB, Senior: 5.00%, 12/01/32	2,000	1,813,880
5.00%, 12/01/37	2,360	2,092,730
Show Low Improvement District, Special Assessment Bonds, District No. 5, 6.38%, 1/01/15	305	305,195
		<u>10,391,838</u>
California 17.8%		
Agua Caliente Band of Cahuilla Indians, RB, 5.60%, 7/01/13 (b)	455	448,362
California Health Facilities Financing Authority, RB, Cedars-Sinai Medical Center, 5.00%, 8/15/39	1,020	986,432
California Health Facilities Financing Authority, Refunding RB, St. Joseph Health System, Series A, 5.75%, 7/01/39	1,530	1,590,634
California State Public Works Board, RB: Department of Corrections, Series C, 5.25%, 6/01/28	2,420	2,403,133
Various Capital Projects, Sub-Series I-1, 6.38%, 11/01/34	820	878,507
California Statewide Communities Development Authority, RB: Health Facility, Memorial Health Services, Series A, 6.00%, 10/01/23	3,870	4,037,764
John Muir Health, 5.13%, 7/01/39	1,510	1,464,322
Los Angeles Department of Airports, RB, Series A, 5.25%, 5/15/39	555	575,191
	4,115	4,193,020

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

Los Angeles Department of Airports, Refunding RB, Senior, Los Angeles International Airport, Series A, 5.00%, 5/15/40		
Montebello Unified School District California, GO, CAB (NPFGC) (c):		
5.62%, 8/01/22	2,405	1,203,342
5.61%, 8/01/23	2,455	1,147,467
San Diego Unified School District California, GO, CAB, Election of 2008, Series A, 6.06%, 7/01/29 (c)	3,475	1,260,661
San Francisco City & County Public Utilities Commission, RB, Series B, 5.00%, 11/01/39	6,600	6,837,402
State of California, GO, Various Purpose:		
5.00%, 6/01/32	1,755	1,755,965
6.50%, 4/01/33	8,370	9,489,655
Tustin Unified School District California, Special Tax Bonds, Senior Lien, Community Facilities District 97-1, Series A (AGM), 5.00%, 9/01/32	680	679,048
		38,950,905

Municipal Bonds	Par (000)	Value
Colorado 2.9%		
Colorado Educational & Cultural Facilities Authority, RB, Charter School, Colorado Springs, 5.50%, 7/01/40	\$ 1,455	\$ 1,435,896
Elk Valley Public Improvement Corp., RB, Public Improvement Fee, Series A, 7.35%, 9/01/31	2,645	2,441,917
Platte River Power Authority Colorado, RB, Series HH, 5.00%, 6/01/28	245	265,056
Plaza Metropolitan District No. 1 Colorado, Tax Allocation Bonds, Subordinate Public Improvement Fee, Tax Increment, 8.13%, 12/01/25	1,000	953,760
University of Colorado, RB, Series A, 5.38%, 6/01/38	1,250	1,332,700
		6,429,329

Connecticut 2.8%		
Connecticut State Development Authority, RB, AFCO Cargo BDL LLC Project, AMT, 8.00%, 4/01/30	2,735	2,584,493
Connecticut State Health & Educational Facility Authority, RB:		
Ascension Health Senior Credit, 5.00%, 11/15/40	955	981,243
Wesleyan University, 5.00%, 7/01/35 (d)	2,515	2,673,571
		6,239,307

District of Columbia 2.3%		
Metropolitan Washington Airports Authority, RB: CAB, Second Senior Lien, Series B (AGC), 7.10%, 10/01/35 (c)	13,485	3,008,099
First Senior Lien, Series A, 5.00%, 10/01/39	505	524,195
First Senior Lien, Series A, 5.25%, 10/01/44	1,470	1,536,826
		5,069,120

Florida 9.0%		
City of Clearwater Florida, RB, Series A, 5.25%, 12/01/39	1,195	1,240,529

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

County of Broward Florida, RB, Series A, 5.25%, 10/01/34	750	782,618
County of Miami-Dade Florida, RB: CAB, Sub-Series A (NPFGC), 5.24%, 10/01/37 (c)	2,340	375,734
Water & Sewer System, 5.00%, 10/01/34	3,935	4,008,466
County of Miami-Dade Florida, Refunding RB, Miami International Airport, Series A-1, 5.38%, 10/01/41	2,620	2,650,104
Greater Orlando Aviation Authority Florida, RB, Special Purpose, JetBlue Airways Corp., AMT, 6.50%, 11/15/36	2,095	1,937,938
Hillsborough County IDA, RB: H. Lee Moffitt Cancer Center Project, Series A, 5.25%, 7/01/37	3,190	2,992,603
National Gypsum Co., Series B, AMT, 7.13%, 4/01/30	1,900	1,654,919
Midtown Miami Community Development District, Special Assessment Bonds, Series B, 6.50%, 5/01/37	2,450	2,374,368
Palm Coast Park Community Development District, Special Assessment Bonds, 5.70%, 5/01/37	675	401,092
Preserve at Wilderness Lake Community Development District, Special Assessment Bonds, Series A, 5.90%, 5/01/34	1,535	1,312,763
		19,731,134

Georgia 2.5%

City of Atlanta Georgia, Tax Allocation Bonds, Refunding, Atlantic Station Project (AGC):		
5.25%, 12/01/20	90	96,347
5.25%, 12/01/21	1,780	1,892,425
5.25%, 12/01/22	345	363,544

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
Georgia (concluded)		
De Kalb Private Hospital Authority, Refunding RB, Children's Healthcare, 5.25%, 11/15/39	\$ 585	\$ 607,218
Metropolitan Atlanta Rapid Transit Authority, RB, Third Series, 5.00%, 7/01/39	2,410	2,536,573
		<u>5,496,107</u>
Guam 0.7%		
Territory of Guam, GO, Series A:		
6.00%, 11/15/19	440	455,492
6.75%, 11/15/29	630	670,043
7.00%, 11/15/39	430	459,171
		<u>1,584,706</u>
Illinois 2.9%		
City of Chicago Illinois, Special Assessment Bonds, Lake Shore East, 6.75%, 12/01/32		
	1,200	1,140,072
Illinois Finance Authority, Refunding RB, Central DuPage Health, Series B, 5.50%, 11/01/39	1,115	1,158,474
Illinois HDA, RB, Homeowner Mortgage, Sub-Series C2, AMT, 5.35%, 2/01/27	3,555	3,589,199
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/34	440	458,427
		<u>6,346,172</u>
Indiana 2.5%		
County of St. Joseph Indiana, Refunding RB, Notre Dame du Lac Project, 5.00%, 3/01/36		
	1,570	1,662,724
Indiana Finance Authority, RB, Sisters of St. Francis Health, 5.25%, 11/01/39	585	595,512
Indiana Finance Authority, Refunding RB, Parkview Health System, Series A, 5.75%, 5/01/31	2,300	2,365,044
Indiana Municipal Power Agency, RB, Indiana Municipal Power Agency, Series B, 6.00%, 1/01/39	775	837,411
		<u>5,460,691</u>
Kansas 1.2%		
Kansas Development Finance Authority, Refunding RB, Adventist Health, 5.75%, 11/15/38	2,465	2,634,740
Kentucky 1.3%		

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

Kentucky Economic Development Finance Authority, Refunding RB, Owensboro Medical Health System, Series A, 6.38%, 6/01/40	700	719,600
Louisville & Jefferson County Metropolitan Sewer District Kentucky, RB, Series A (NPFGC), 5.50%, 5/15/34	2,000	2,100,060
		<u>2,819,660</u>

Louisiana 1.9%

East Baton Rouge Sewerage Commission, RB, Series A, 5.25%, 2/01/39	570	597,246
Louisiana Local Government Environmental Facilities & Community Development Authority, RB, Westlake Chemical Corp. Projects, 6.75%, 11/01/32	3,500	3,599,120
		<u>4,196,366</u>

Maine 0.1%

Maine Health & Higher Educational Facilities Authority, RB, Series A, 5.00%, 7/01/39	210	214,322
---	-----	---------

Maryland 1.0%

Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35	300	306,429
Maryland State Energy Financing Administration, RB, Cogeneration, AES Warrior Run, AMT, 7.40%, 9/01/19	1,970	1,970,571
		<u>2,277,000</u>

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	\$ 1,214,163
Massachusetts HFA, RB, M/F Housing, Series A, AMT, 5.25%, 12/01/48	2,900	2,857,834
Massachusetts Health & Educational Facilities Authority, Refunding RB, Partners Healthcare, Series J1, 5.00%, 7/01/39	1,255	1,272,432
		<u>5,344,429</u>

Michigan 3.3%

City of Detroit Michigan, RB, Senior Lien, Series B (AGM), 7.50%, 7/01/33	635	762,483
Flint Hospital Building Authority Michigan, Refunding RB, Hurley Medical Center (ACA), 6.00%, 7/01/20	1,310	1,284,520
Michigan State Hospital Finance Authority, Refunding RB, Hospital, Henry Ford Health, 5.75%, 11/15/39	2,105	2,075,509
Michigan Strategic Fund, Refunding RB, Detroit Edison Co., Pollution, Series B, AMT, 5.65%, 9/01/29	3,000	3,002,400
		<u>7,124,912</u>

Minnesota 1.1%

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

City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series A, 6.75%, 11/15/32	2,135	2,382,681
--	-------	-----------

Mississippi 1.2%

Mississippi Development Bank Special Obligation, Refunding RB, Gulfport Water & Sewer System Project (AGM):		
5.25%, 7/01/17	1,000	1,121,030
5.25%, 7/01/19	785	866,075
University of Southern Mississippi, RB, Campus Facilities Improvements Project, 5.38%, 9/01/36	675	721,703
		<u>2,708,808</u>

New Hampshire 1.5%

New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth-Hitchcock, 6.00%, 8/01/38	3,035	3,218,132
--	-------	-----------

New Jersey 7.4%

New Jersey EDA, RB:		
Cigarette Tax, 5.75%, 6/15/29	5,385	5,286,670
Continental Airlines Inc. Project, AMT, 6.63%, 9/15/12	1,000	1,010,340
Continental Airlines Inc. Project, AMT, 6.25%, 9/15/29	2,950	2,767,395
New Jersey State Turnpike Authority, RB, Series C (AGM), 5.00%, 1/01/30	3,500	3,641,505
Tobacco Settlement Financing Corp. New Jersey, Refunding RB, Series 1A:		
4.50%, 6/01/23	2,730	2,607,532
5.00%, 6/01/41	1,450	1,002,661
		<u>16,316,103</u>

New York 5.2%

City of Troy New York, Refunding RB, Rensselaer Polytechnic, Series A, 5.13%, 9/01/40	950	970,206
Dutchess County Industrial Development Agency New York, Refunding RB, St. Francis Hospital, Series A, 7.50%, 3/01/29	1,100	1,093,257
Long Island Power Authority, Refunding RB, Series A, 5.75%, 4/01/39	1,450	1,586,358
Metropolitan Transportation Authority, Refunding RB, Series B, 5.00%, 11/15/34	1,740	1,821,989

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
New York (concluded)		
New York City Industrial Development Agency, RB: Continental Airlines Inc. Project, AMT, 8.00%, 11/01/12	\$ 420	\$ 417,064
Continental Airlines Inc. Project, AMT, 8.38%, 11/01/16	725	711,588
Series C, 6.80%, 6/01/28	535	562,504
New York State Dormitory Authority, ERB, Series F, 5.00%, 3/15/35	4,030	4,161,620
		11,324,586
North Carolina 1.3%		
City of Charlotte North Carolina, RB, Series B, 5.00%, 7/01/38	660	711,229
North Carolina Medical Care Commission, RB, Duke University Health System, Series A: 5.00%, 6/01/39	440	448,672
5.00%, 6/01/42	970	984,822
North Carolina Municipal Power Agency No. 1 Catawba, Refunding RB, Series A, 5.00%, 1/01/30	740	757,198
		2,901,921
Ohio 0.8%		
Buckeye Tobacco Settlement Financing Authority, RB, Asset-Backed, Senior Series A-2, 6.50%, 6/01/47	2,160	1,772,582
Pennsylvania 8.4%		
Allegheny County Hospital Development Authority, Refunding RB, Health System, West Penn, Series A, 5.38%, 11/15/40	1,510	1,211,820
Bucks County IDA, RB, Ann's Choice Inc. Facility, Series A, 6.25%, 1/01/35	1,700	1,547,323
Montgomery County Higher Education & Health Authority, Refunding RB, Abington Memorial Hospital, Series A, 5.13%, 6/01/33	820	820,845
Pennsylvania Economic Development Financing Authority, RB: American Water Co. Project, 6.20%, 4/01/39	2,520	2,724,044
Aqua Pennsylvania Inc. Project, 5.00%, 11/15/40	1,315	1,354,200
National Gypsum Co., Series B, AMT, 6.13%, 11/01/27	3,500	2,754,885
Pennsylvania Turnpike Commission, RB, Sub-Series B, 5.25%, 6/01/39	4,775	4,935,058
Philadelphia Authority for Industrial Development, RB:	1,105	1,051,065

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

Arbor House Inc. Project, Series E, 6.10%, 7/01/33		
Commercial Development, AMT, 7.75%, 12/01/17	725	725,790
Saligman House Project, Series C (HUD), 6.10%, 7/01/33	1,245	1,184,232
		18,309,262

Puerto Rico 3.8%

Commonwealth of Puerto Rico, GO, Refunding, Public Improvement, Series C, 6.00%, 7/01/39	2,070	2,180,124
Puerto Rico Industrial Medical & Environmental Pollution Control Facilities Financing Authority, RB, Special Facilities, American Airlines, Series A, 6.45%, 12/01/25	2,060	1,700,262
Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.50%, 8/01/44	3,860	4,360,681
		8,241,067

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

South Dakota 0.6%

South Dakota Health & Educational Facilities Authority, RB, Sanford Health, 5.00%, 11/01/40	\$ 1,245	\$ 1,233,446
--	----------	--------------

Tennessee 3.0%

Educational Funding of the South Inc., RB, Senior, Sub-Series B, AMT, 6.20%, 12/01/21	2,685	2,687,041
Hardeman County Correctional Facilities Corp. Tennessee, RB, 7.75%, 8/01/17	3,410	3,267,632
Rutherford County Health & Educational Facilities Board, RB, Ascension Health Senior Credit Group, 5.00%, 11/15/40	710	722,929
		6,677,602

Texas 12.4%

Brazos River Authority, Refunding RB, TXU Electric Co. Project, Series C, AMT, 5.75%, 5/01/36	2,660	2,585,786
Brazos River Harbor Navigation District, Refunding RB, Dow Chemical Co. Project, Series A7, AMT, 6.63%, 5/15/33	3,655	3,713,151
City of Houston Texas, RB, Senior Lien, Series A, 5.50%, 7/01/39	1,070	1,140,138
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, B, 7.25%, 12/01/35	1,910	2,152,895
La Vernia Higher Education Finance Corp., RB, KIPP Inc., 6.38%, 8/15/44	820	845,986
Matagorda County Hospital District Texas, RB (FHA), 5.00%, 2/15/35	4,500	4,381,155
North Texas Tollway Authority, RB, Toll, Second Tier, Series F, 6.13%, 1/01/31	4,190	4,468,803
San Antonio Energy Acquisition Public Facility Corp., RB, Gas Supply: 5.50%, 8/01/23	2,425	2,470,541
5.50%, 8/01/24	1,100	1,116,214

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

5.50%, 8/01/25	1,120	1,131,435
Texas Department of Housing & Community Affairs, RB, Series A, AMT (GNMA), 5.70%, 1/01/33	250	250,623
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien, Note Mobility, 6.88%, 12/31/39	2,695	2,815,520
		27,072,247
U.S. Virgin Islands 1.6%		
United States Virgin Islands, Refunding RB, Senior Secured, Hovensa Coker Project, AMT, 6.50%, 7/01/21	3,460	3,505,118
Utah 1.2%		
City of Riverton Utah, RB, IHC Health Services Inc., 5.00%, 8/15/41	2,525	2,568,001
Vermont 1.1%		
Vermont Educational & Health Buildings Financing Agency, RB, Developmental & Mental Health, Series A, 6.00%, 6/15/17	2,370	2,402,990
Virginia 2.4%		
Chesterfield County IDA, Refunding RB, Virginia Electric & Power Co., Series A, 5.88%, 6/01/17	1,150	1,186,674
Tobacco Settlement Financing Corp. Virginia, Refunding RB, Senior Series B1, 5.00%, 6/01/47	4,785	3,293,659
Virginia Small Business Financing Authority, Refunding RB, Sentara Healthcare, 5.00%, 11/01/40	670	683,748
		5,164,081

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
Washington 0.6%		
Seattle Housing Authority Washington, HRB, Replacement Housing Projects, 6.13%, 12/01/32	\$ 1,305	\$ 1,212,476
Wisconsin 4.5%		
State of Wisconsin, Refunding RB, Series A, 6.00%, 5/01/36	4,980	5,535,768
Wisconsin Health & Educational Facilities Authority, RB: Ascension Health Senior Credit Group, 5.00%, 11/15/33	1,710	1,742,456
New Castle Place Project, Series A, 7.00%, 12/01/31	825	793,914
SynergyHealth Inc., 6.00%, 11/15/32	1,755	1,805,860
		9,877,998
Wyoming 0.1%		
Wyoming Municipal Power Agency, RB, Series A, 5.00%, 1/01/42	210	208,335
Total Municipal Bonds 120.1%		263,166,129

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

California 4.8%		
Bay Area Toll Authority, Refunding RB, San Francisco Bay Area, Series F-1, 5.63%, 4/01/44	2,270	2,471,889
California Educational Facilities Authority, RB, University of Southern California, Series A, 5.25%, 10/01/18	1,845	1,978,430
Los Angeles Community College District California, GO, Election of 2001, Series A (AGM), 5.00%, 8/01/32	1,620	1,658,459
San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33	748	785,296
Sequoia Union High School District California, GO, Refunding, Election, Series B (AGM), 5.50%, 7/01/35	3,494	3,653,744
		10,547,818
Colorado 2.7%		
Colorado Health Facilities Authority, RB, Catholic Health (AGM):		

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

Series C-3, 5.10%, 10/01/41	2,580	2,596,822
Series C-7, 5.00%, 9/01/36	1,650	1,658,646
Colorado Health Facilities Authority, Refunding RB, Catholic Healthcare, Series A, 5.50%, 7/01/34	1,490	1,579,749
		<u>5,835,217</u>

Connecticut 3.1%

Connecticut State Health & Educational Facility Authority, RB, Yale University:		
Series T-1, 4.70%, 7/01/29	3,180	3,336,011
Series X-3, 4.85%, 7/01/37	3,270	3,408,026
		<u>6,744,037</u>

Georgia 1.1%

Private Colleges & Universities Authority, Refunding RB, Emory University, Series C, 5.00%, 9/01/38	2,259	2,370,572
--	-------	-----------

Massachusetts 2.4%

Massachusetts School Building Authority, RB, Series A (AGM), 5.00%, 8/15/30	4,994	5,229,807
--	-------	-----------

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

**Par
(000)**

Value

New Hampshire 0.7%

New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth College, 5.25%, 6/01/39	\$ 1,409	\$ 1,530,104
---	----------	--------------

New York 2.7%

New York City Municipal Water Finance Authority, RB, Series FF-2, 5.50%, 6/15/40	1,110	1,234,090
Sales Tax Asset Receivable Corp., RB, Series A (AMBAC), 5.25%, 10/15/27	4,240	4,725,781
		<u>5,959,871</u>

North Carolina 0.5%

North Carolina Capital Facilities Finance Agency, Refunding RB, Wake Forest University, 5.00%, 1/01/38	1,080	1,142,176
--	-------	-----------

Ohio 4.6%

State of Ohio, Refunding RB, Cleveland Clinic Health, Series A, 5.50%, 1/01/39	9,650	10,082,030
---	-------	------------

Tennessee 1.1%

Shelby County Health Educational & Housing Facilities Board, Refunding RB, St. Jude s Children s Research Hospital, 5.00%, 7/01/31	2,250	2,327,017
--	-------	-----------

Texas 2.2%

County of Harris Texas, RB, Senior Lien, Toll Road, Series A, 5.00%, 8/15/38	4,620	4,779,344
---	-------	-----------

Virginia 7.9%

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

University of Virginia, Refunding RB, General, 5.00%, 6/01/40	3,750	3,969,562
Virginia HDA, RB, Sub-Series H-1 (NPFGC): 5.35%, 7/01/31	2,370	2,391,733
5.38%, 7/01/36	10,940	11,023,582
		17,384,877

Washington 0.9%

Central Puget Sound Regional Transit Authority, RB, Series A (AGM), 5.00%, 11/01/32	1,860	1,956,978
--	-------	-----------

Wisconsin 1.8%

Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community Health Inc., 5.25%, 4/01/39	3,959	4,055,238
--	-------	-----------

Total Municipal Bonds Transferred to Tender Option Bond Trusts 36.5%		79,945,086
---	--	------------

Total Long-Term Investments (Cost \$336,165,825) 156.6%		343,111,215
--	--	-------------

Short-Term Securities

Shares

FFI Institutional Tax-Exempt Fund, 0.25% (f)(g)	3,354,654	3,354,654
---	-----------	-----------

Total Short-Term Securities (Cost \$3,354,654) 1.5%		3,354,654
--	--	-----------

Total Investments (Cost \$339,520,479*) 158.1%		346,465,869
Liabilities in Excess of Other Assets (1.1)%		(2,305,509)
Liability for Trust Certificates, Including Interest Expense and Fees Payable (18.8)%		(41,320,592)
Preferred Shares, at Redemption Value (38.2)%		(83,706,366)

Net Assets Applicable to Common Shares 100.0%		\$ 219,133,402
--	--	----------------

See Notes to Financial Statements.

ANNUAL REPORT

APRIL 30, 2010

31

Schedule of Investments (concluded)

BlackRock MuniHoldings Fund, Inc. (MHD)

* The cost and unrealized appreciation (depreciation) of investments as of April 30, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 297,394,222
Gross unrealized appreciation	\$ 13,244,578
Gross unrealized depreciation	(5,461,397)
Net unrealized appreciation	\$ 7,783,181

- (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) 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) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (d) When-issued security. Unsettled when-issued transactions were as follows:

Counterparty	Value	Unrealized Appreciation
Goldman Sachs Bank USA	\$ 2,673,571	\$ 15,467

- (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 year, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, were as follows:

Affiliate	Shares Held at April 30, 2009	Net Activity	Shares Held at April 30, 2010	Income
FFI Institutional Tax-Exempt Fund	1,910,337	1,444,317	3,354,654	\$ 13,016

(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 April 30, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Investments in Securities			
	Level 1	Level 2	Level 3	Total
Assets:				
Long-Term Investments ¹		\$ 343,111,215		\$ 343,111,215
Short-Term Securities	\$ 3,354,654			3,354,654
Total	\$ 3,354,654	\$ 343,111,215		\$ 346,465,869

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

See Notes to Financial Statements.

Schedule of Investments April 30, 2010

BlackRock MuniHoldings Fund II, Inc. (MUH)
(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	\$ 3,450	\$ 2,816,925
Arizona 4.6%		
Arizona Health Facilities Authority, RB, Catholic Healthcare West, Series A, 6.63%, 7/01/20	1,000	1,019,370
County of Pinal Arizona, COP, 5.00%, 12/01/29	430	424,169
Maricopa County IDA Arizona, RB, Arizona Charter Schools Project, Series A, 6.50%, 7/01/12	65	60,395
Phoenix IDA Arizona, Refunding RB, America West Airlines Inc. Project, AMT, 6.30%, 4/01/23	2,060	1,610,982
Pima County IDA, RB, Arizona Charter Schools Project, Series C, 6.75%, 7/01/31	955	921,069
Pima County IDA, Refunding IDRDB, Tucson Electric Power, 5.75%, 9/01/29	560	569,845
Salt River Project Agricultural Improvement & Power District, RB, Series A, 5.00%, 1/01/38	990	1,034,807
Salt Verde Financial Corp., RB, Senior, 5.00%, 12/01/37	1,385	1,228,149
Show Low Improvement District, Special Assessment Bonds, District No. 5, 6.38%, 1/01/15	605	605,387
		7,474,173
California 21.8%		
Benicia Unified School District, GO, CAB, Series A (NPFGC), 5.62%, 8/01/20 (a)	2,000	1,157,120
California Health Facilities Financing Authority, RB, Cedars-Sinai Medical Center, 5.00%, 8/15/39	730	705,976
California Health Facilities Financing Authority, Refunding RB, St. Joseph Health System, Series A, 5.75%, 7/01/39	1,110	1,153,989
California State Public Works Board, RB: Department of Corrections, Series C, 5.25%, 6/01/28	1,890	1,876,827
Various Capital Projects, Sub-Series I-1, 6.38%, 11/01/34	600	642,810
California Statewide Communities Development Authority, RB, John Muir Health, 5.13%, 7/01/39	1,090	1,057,028
Los Angeles Department of Airports, RB, Series A, 5.25%, 5/15/39	400	414,552
Los Angeles Department of Airports, Refunding RB, Senior, Los Angeles International Airport, Series A, 5.00%, 5/15/40	2,975	3,031,406
Poway Unified School District, Special Tax Bonds, Community Facilities District No. 6 Area, Series A,	1,750	1,673,560

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

6.13%, 9/01/33		
San Diego Unified School District California, GO, CAB, Election of 2008, Series A, 6.06%, 7/01/29 (a)	2,525	916,020
San Francisco City & County Public Utilities Commission, RB, Series B, 5.00%, 11/01/39	4,770	4,941,577
San Marino Unified School District California, GO, Series A (NPFGC) (a):		
5.51%, 7/01/17	1,820	1,384,146
5.55%, 7/01/18	1,945	1,380,580
5.60%, 7/01/19	2,070	1,384,478
State of California, GO, Various Purpose:		
6.00%, 3/01/33	1,265	1,392,398
6.50%, 4/01/33	7,325	8,304,865
Tustin Unified School District California, Special Tax Bonds, Senior Lien, Community Facilities District 97-1, Series A (AGM), 5.00%, 9/01/32	180	179,748
University of California, RB, Limited Project, Series B, 4.75%, 5/15/38	4,095	4,057,285
		35,654,365

Municipal Bonds	Par (000)	Value
Colorado 2.9%		
Colorado Educational & Cultural Facilities Authority, RB, Charter School, Colorado Springs, 5.50%, 7/01/40	\$ 1,055	\$ 1,041,148
Elk Valley Public Improvement Corp., RB, Public Improvement Fee, Series A, 7.10%, 9/01/14	1,100	1,123,287
Platte River Power Authority Colorado, RB, Series HH, 5.00%, 6/01/28	755	816,804
Plaza Metropolitan District No. 1 Colorado, Tax Allocation Bonds, Subordinate Public Improvement Fee, Tax Increment, 8.13%, 12/01/25	860	820,234
University of Colorado, RB, Series A, 5.38%, 6/01/38	920	980,867
		4,782,340
Connecticut 1.6%		
Connecticut State Health & Educational Facility Authority, RB:		
Ascension Health Senior Credit, 5.00%, 11/15/40	685	703,824
Wesleyan University, 5.00%, 7/01/35 (b)	1,875	1,993,219
		2,697,043
District of Columbia 2.1%		
Metropolitan Washington Airports Authority, RB: CAB, 2nd Senior Lien, Series B (AGC), 7.08%, 10/01/34 (a)	10,170	2,429,511
First Senior Lien, Series A, 5.00%, 10/01/39	255	264,693
First Senior Lien, Series A, 5.25%, 10/01/44	745	778,868
		3,473,072
Florida 7.7%		
	1,575	1,487,588

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

Ballantrae Community Development District, Special Assessment Bonds, 6.00%, 5/01/35		
City of Clearwater Florida, RB, Series A, 5.25%, 12/01/39	870	903,147
County of Broward Florida, RB, Series A, 5.25%, 10/01/34	545	568,702
County of Miami-Dade Florida, RB:		
CAB, Sub-Series A (NPFGC), 5.24%, 10/01/37 (a)	1,765	283,406
Water & Sewer System, 5.00%, 10/01/34	2,845	2,898,116
County of Miami-Dade Florida, Refunding RB, Miami International Airport, Series A-1, 5.38%, 10/01/41	330	333,792
Greater Orlando Aviation Authority Florida, RB, Special Purpose, JetBlue Airways Corp., AMT, 6.50%, 11/15/36	1,515	1,401,420
Hillsborough County IDA, RB:		
H. Lee Moffitt Cancer Center Project, Series A, 5.25%, 7/01/37	2,310	2,167,057
National Gypsum Co., Series B, AMT, 7.13%, 4/01/30	1,380	1,201,994
Palm Coast Park Community Development District, Special Assessment Bonds, 5.70%, 5/01/37	495	294,134
Preserve at Wilderness Lake Community Development District, Special Assessment Bonds, Series A, 5.90%, 5/01/34	1,195	1,021,988
		12,561,344

Georgia 1.8%

City of Atlanta Georgia, Tax Allocation Bonds, Refunding, Atlantic Station Project (AGC), 5.00%, 12/01/23	695	718,540
De Kalb Private Hospital Authority, Refunding RB, Children's Healthcare, 5.25%, 11/15/39	420	435,951
Metropolitan Atlanta Rapid Transit Authority, RB, Third Series, 5.00%, 7/01/39	1,740	1,831,385
		2,985,876

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
Guam 0.7%		
Territory of Guam, GO, Series A:		
6.00%, 11/15/19	\$ 320	\$ 331,267
6.75%, 11/15/29	455	483,920
7.00%, 11/15/39	275	293,656
		1,108,843
Idaho 1.2%		
Power County Industrial Development Corp., RB, FMC Corp. Project, AMT, 6.45%, 8/01/32		
	2,000	2,011,660
Illinois 1.3%		
City of Chicago Illinois, Special Assessment Bonds, Lake Shore East, 6.75%, 12/01/32		
	1,000	950,060
Illinois Finance Authority, Refunding RB, Central DuPage Health, Series B, 5.50%, 11/01/39		
	800	831,192
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/34		
	315	328,192
		2,109,444
Indiana 2.4%		
County of St. Joseph Indiana, Refunding RB, Notre Dame du Lac Project, 5.00%, 3/01/36		
	1,135	1,202,033
Indiana Finance Authority, RB, Sisters of St. Francis Health, 5.25%, 11/01/39		
	420	427,547
Indiana Finance Authority, Refunding RB, Parkview Health System, Series A, 5.75%, 5/01/31		
	1,660	1,706,945
Indiana Municipal Power Agency, RB, Indiana Municipal Power Agency, Series B, 6.00%, 1/01/39		
	565	610,500
		3,947,025
Kansas 1.2%		
Kansas Development Finance Authority, Refunding RB, Adventist Health, 5.75%, 11/15/38		
	1,785	1,907,915
Kentucky 0.3%		
Kentucky Economic Development Finance Authority, Refunding RB, Owensboro Medical Health System, Series A, 6.38%, 6/01/40		
	510	524,280
Louisiana 1.8%		
East Baton Rouge Sewerage Commission, RB, Series A, 5.25%, 2/01/39		
	420	440,076

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

Louisiana Local Government Environmental Facilities & Community Development Authority, RB, Westlake Chemical Corp. Projects, 6.75%, 11/01/32	2,500	2,570,800
		<u>3,010,876</u>

Maine 0.1%

Maine Health & Higher Educational Facilities Authority, RB, Series A, 5.00%, 7/01/39	150	153,087
--	-----	---------

Maryland 0.6%

Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35	220	224,715
Maryland State Energy Financing Administration, RB, Cogeneration, AES Warrior Run, AMT, 7.40%, 9/01/19	750	750,217
		<u>974,932</u>

Massachusetts 4.4%

Massachusetts Development Finance Agency, RB, Neville Communities, Series A (GNMA): 5.75%, 6/20/22	600	649,866
6.00%, 6/20/44	1,500	1,587,330
Massachusetts Development Finance Agency, Refunding RB, Boston University, Series P, 5.45%, 5/15/59	845	880,659

Municipal Bonds	Par (000)	Value
Massachusetts (concluded)		
Massachusetts HFA, RB, M/F Housing, Series A, AMT, 5.25%, 12/01/48	\$ 2,100	\$ 2,069,466
Massachusetts HFA, Refunding HRB, Series F, AMT, 5.70%, 6/01/40	1,115	1,132,327
Massachusetts Health & Educational Facilities Authority, Refunding RB, Partners Healthcare, Series J1, 5.00%, 7/01/39	910	922,640
		<u>7,242,288</u>

Michigan 3.7%

City of Detroit Michigan, RB, Senior Lien, Series B (AGM), 7.50%, 7/01/33	460	552,350
Flint Hospital Building Authority Michigan, Refunding RB, Hurley Medical Center (ACA), 6.00%, 7/01/20	1,030	1,009,966
Michigan State Hospital Finance Authority, Refunding RB, Hospital, Henry Ford Health, 5.75%, 11/15/39	1,520	1,498,705
Michigan Strategic Fund, Refunding RB, Detroit Edison Co., Pollution, Series C, AMT (Syncora), 5.65%, 9/01/29	2,935	2,931,331
		<u>5,992,352</u>

Minnesota 1.0%

City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series A, 6.75%, 11/15/32	1,540	1,718,655
--	-------	-----------

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

Mississippi 0.9%

Mississippi Business Finance Corp., Refunding RB, System Energy Resource Inc. Project, 5.88%, 4/01/22	1,500	1,493,310
---	-------	-----------

Missouri 0.5%

Kansas City IDA Missouri, RB, First Mortgage, Bishop Spencer, Series A, 6.50%, 1/01/35	1,000	887,200
---	-------	---------

New Hampshire 1.0%

New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth-Hitchcock, 6.00%, 8/01/38	1,530	1,622,320
--	-------	-----------

New Jersey 6.7%

New Jersey EDA, RB: Cigarette Tax, 5.75%, 6/15/29	3,050	2,994,307
Cigarette Tax, 5.50%, 6/15/31	1,890	1,790,510
Continental Airlines Inc. Project, AMT, 6.63%, 9/15/12	2,000	2,020,680
New Jersey State Turnpike Authority, RB, Series C (AGM), 5.00%, 1/01/30	2,500	2,601,075
Tobacco Settlement Financing Corp. New Jersey, Refunding RB, Series 1A: 4.50%, 6/01/23	950	907,383
5.00%, 6/01/41	1,050	726,065

11,040,020

New York 7.4%

City of Troy New York, Refunding RB, Rensselaer Polytechnic, Series A, 5.13%, 9/01/40	685	699,570
Dutchess County Industrial Development Agency New York, Refunding RB, St. Francis Hospital, Series A, 7.50%, 3/01/29	885	879,575
Long Island Power Authority, Refunding RB, Series A, 5.75%, 4/01/39	1,050	1,148,742
Metropolitan Transportation Authority, Refunding RB, Series B, 5.00%, 11/15/34	1,270	1,329,842
New York City Industrial Development Agency, RB: Continental Airlines Inc. Project, AMT, 8.00%, 11/01/12	525	521,330
Continental Airlines Inc. Project, AMT, 8.38%, 11/01/16	525	515,288
Series C, 6.80%, 6/01/28	415	436,335

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
New York (concluded)		
New York City Transitional Finance Authority, RB, Fiscal 2009, Series S-3, 5.25%, 1/15/39	\$ 3,300	\$ 3,503,346
New York State Dormitory Authority, ERB, Series F, 5.00%, 3/15/35	2,910	3,005,041
		12,039,069
North Carolina 0.9%		
City of Charlotte North Carolina, RB, Series B, 5.00%, 7/01/38	475	511,870
North Carolina Medical Care Commission, RB, Duke University Health System, Series A: 5.00%, 6/01/39	315	321,209
5.00%, 6/01/42	705	715,772
		1,548,851
Ohio 0.8%		
Buckeye Tobacco Settlement Financing Authority, RB, Asset-Backed, Senior Series A-2, 6.50%, 6/01/47	1,565	1,284,302
Pennsylvania 6.6%		
Allegheny County Hospital Development Authority, Refunding RB, Health System, West Penn, Series A, 5.38%, 11/15/40	1,095	878,770
Montgomery County Higher Education & Health Authority, Refunding RB, Abington Memorial Hospital, Series A, 5.13%, 6/01/33	590	590,608
Pennsylvania Economic Development Financing Authority, RB: American Water Co. Project, 6.20%, 4/01/39	1,830	1,978,175
Aqua Pennsylvania Inc. Project, 5.00%, 11/15/40	950	978,319
National Gypsum Co., Series A, AMT, 6.25%, 11/01/27	2,750	2,195,407
Pennsylvania Turnpike Commission, RB, Sub-Series B, 5.25%, 6/01/39	3,455	3,570,812
Philadelphia Authority for Industrial Development, RB, Commercial Development, AMT, 7.75%, 12/01/17	540	540,589
		10,732,680
Puerto Rico 5.0%		
Commonwealth of Puerto Rico, GO, Refunding, Public Improvement, Series C, 6.00%, 7/01/39	1,490	1,569,268
	1,550	1,279,323

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

Puerto Rico Industrial Medical & Environmental Pollution Control Facilities Financing Authority, RB, Special Facilities, American Airlines, Series A, 6.45%, 12/01/25		
Puerto Rico Sales Tax Financing Corp., RB: CAB, Series A, 6.40%, 8/01/35 (a)	10,000	2,124,100
First Sub-Series A, 6.50%, 8/01/44	2,790	3,151,891
		8,124,582
Tennessee 1.6%		
Hardeman County Correctional Facilities Corp. Tennessee, RB, Series B, 7.38%, 8/01/17		
	2,200	2,091,826
Rutherford County Health & Educational Facilities Board, RB, Ascension Health Senior Credit Group, 5.00%, 11/15/40		
	510	519,287
		2,611,113
Texas 9.5%		
Brazos River Authority, Refunding RB, TXU Electric Co. Project, Series C, AMT, 5.75%, 5/01/36		
	1,680	1,633,128
Brazos River Harbor Navigation District, Refunding RB, Dow Chemical Co. Project, Series A7, AMT, 6.63%, 5/15/33		
	2,500	2,539,775
Municipal Bonds	Par (000)	Value
Texas (concluded)		
City of Houston Texas, RB, Senior Lien, Series A, 5.50%, 7/01/39	\$ 775	\$ 825,801
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, B, 7.25%, 12/01/35	1,380	1,555,495
La Vernia Higher Education Finance Corp., RB, KIPP Inc., 6.38%, 8/15/44	590	608,697
Matagorda County Hospital District Texas, RB (FHA), 5.00%, 2/15/35	3,265	3,178,771
North Texas Tollway Authority, RB, Toll, 2nd Tier, Series F, 6.13%, 1/01/31	3,020	3,220,951
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien, Note Mobility, 6.88%, 12/31/39	1,940	2,026,757
		15,589,375
U.S. Virgin Islands 1.7%		
United States Virgin Islands, Refunding RB, Senior Secured, Hovensa Coker Project, AMT, 6.50%, 7/01/21		
	2,680	2,714,947
Utah 0.9%		
City of Riverton Utah, RB, IHC Health Services Inc., 5.00%, 8/15/41		
	1,400	1,423,842
Vermont 0.6%		
Vermont Educational & Health Buildings Financing Agency, RB, Developmental & Mental Health, Series A,		
	1,000	947,270

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

6.50%, 6/15/32

Virginia 4.0%		
Chesterfield County IDA, Refunding RB, Virginia Electric & Power Co., Series A, 5.88%, 6/01/17	425	438,554
Tobacco Settlement Financing Corp. Virginia, Refunding RB, Senior Series B1, 5.00%, 6/01/47	3,570	2,457,338
Virginia HDA, RB, Series D, AMT, 6.00%, 4/01/24	3,200	3,209,664
Virginia Small Business Financing Authority, Refunding RB, Sentara Healthcare, 5.00%, 11/01/40	485	494,952
		6,600,508

Washington 0.5%		
Seattle Housing Authority Washington, HRB, Replacement Housing Projects, 6.13%, 12/01/32	945	877,999

Wisconsin 4.9%		
State of Wisconsin, Refunding RB, Series A, 6.00%, 5/01/36	3,620	4,023,992
Wisconsin Health & Educational Facilities Authority, RB: Ascension Health Senior Credit Group, 5.00%, 11/15/33	1,235	1,258,440
SynergyHealth Inc., 6.00%, 11/15/32	1,360	1,399,413
Wisconsin Housing & EDA, Refunding RB, Series C, AMT, 4.88%, 3/01/36	1,370	1,295,842
		7,977,687

Total Municipal Bonds 116.4%		190,661,570
-------------------------------------	--	-------------

Municipal Bonds Transferred to Tender Option Bond Trusts (c)

California 6.6%		
Bay Area Toll Authority, Refunding RB, San Francisco Bay Area, Series F-1, 5.63%, 4/01/44	1,640	1,785,858
California Educational Facilities Authority, RB, University of Southern California, Series A, 5.25%, 10/01/18	1,335	1,431,547
Los Angeles Community College District California, GO, Election of 2001, Series A (AGM), 5.00%, 8/01/32	1,170	1,197,776

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
California (concluded)		
San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33	\$ 553	\$ 581,119
Sequoia Union High School District California, GO, Refunding, Election, Series B (AGM), 5.50%, 7/01/35	5,519	5,770,720
		<u>10,767,020</u>
Colorado 2.6%		
Colorado Health Facilities Authority, RB, Catholic Health (AGM):		
Series C-3, 5.10%, 10/01/41	1,870	1,882,193
Series C-7, 5.00%, 9/01/36	1,200	1,206,288
Colorado Health Facilities Authority, Refunding RB, Catholic Healthcare, Series A, 5.50%, 7/01/34	1,080	1,145,053
		<u>4,233,534</u>
Connecticut 3.0%		
Connecticut State Health & Educational Facility Authority, RB, Yale University:		
Series T-1, 4.70%, 7/01/29	2,300	2,412,838
Series X-3, 4.85%, 7/01/37	2,370	2,470,038
		<u>4,882,876</u>
Georgia 1.1%		
Private Colleges & Universities Authority, Refunding RB, Emory University, Series C, 5.00%, 9/01/38	1,649	1,730,727
Massachusetts 1.9%		
Massachusetts School Building Authority, RB, Series A (AGM), 5.00%, 8/15/30	2,999	3,141,025
New Hampshire 0.7%		
New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth College, 5.25%, 6/01/39	1,019	1,106,884
New York 2.7%		
New York City Municipal Water Finance Authority, RB, Series FF-2, 5.50%, 6/15/40	810	900,552
Sales Tax Asset Receivable Corp., RB, Series A (AMBAC), 5.25%, 10/15/27	3,200	3,566,627

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

		4,467,179
North Carolina 0.5%		
North Carolina Capital Facilities Finance Agency, Refunding RB, Wake Forest University, 5.00%, 1/01/38	800	846,056
Ohio 4.4%		
State of Ohio, Refunding RB, Cleveland Clinic Health, Series A, 5.50%, 1/01/39	6,980	7,292,495
Tennessee 1.6%		
Shelby County Health Educational & Housing Facilities Board, Refunding RB, St. Jude s Children s Research Hospital, 5.00%, 7/01/31	2,500	2,585,575
Texas 2.1%		
County of Harris Texas, RB, Senior Lien, Toll Road, Series A, 5.00%, 8/15/38	3,360	3,475,886
Virginia 7.7%		
University of Virginia, Refunding RB, General, 5.00%, 6/01/40	2,730	2,889,842
Virginia HDA, RB, Sub-Series H-1 (NPFGC): 5.35%, 7/01/31	1,725	1,740,818
5.38%, 7/01/36	7,900	7,960,356
		12,591,016
Washington 0.9%		
Central Puget Sound Regional Transit Authority, RB, Series A (AGM), 5.00%, 11/01/32	1,365	1,436,169
Municipal Bonds Transferred to Tender Option Bond Trusts (c)	Par (000)	Value
Wisconsin 1.8%		
Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community Health Inc., 5.25%, 4/01/39	\$ 2,859	\$ 2,928,783
Total Municipal Bonds Transferred to Tender Option Bond Trusts 37.6%		61,485,225
Total Long-Term Investments (Cost \$245,353,975) 154.0%		252,146,795
Short-Term Securities		
	Shares	
FFI Institutional Tax-Exempt Fund, 0.25% (d)(e)	607,735	607,735

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

Total Short-Term Securities (Cost \$607,735) 0.4%	607,735
Total Investments (Cost \$245,961,710*) 154.4%	252,754,530
Liabilities in Excess of Other Assets (1.2)%	(1,932,789)
Liability for Trust Certificates, Including	
Interest Expense and Fees Payable (19.6)%	(32,045,568)
Preferred Shares, at Redemption Value (33.6)%	(55,054,350)
Net Assets Applicable to Common Shares 100.0%	\$ 163,721,823

* The cost and unrealized appreciation (depreciation) of investments as of April 30, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 213,239,936
Gross unrealized appreciation	\$ 10,905,972
Gross unrealized depreciation	(3,411,172)
Net unrealized appreciation	\$ 7,494,800

(a) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.

(b) When-issued security. Unsettled when-issued transactions were as follows:

Counterparty	Value	Unrealized Appreciation
Goldman Sachs Bank USA	\$ 1,993,219	\$ 11,531

(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, were as follows:

Affiliate	Shares Held at April 30, 2009	Net Activity	Shares Held at April 30, 2010	Income
FFI Institutional Tax-Exempt Fund	112,826	494,909	607,735	\$ 8,405

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

See Notes to Financial Statements.

36 ANNUAL REPORT APRIL 30, 2010

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 April 30, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Investments in Securities			Total
	Level 1	Level 2	Level 3	
Assets:				
Long-Term Investments ¹		\$ 252,146,795		\$ 252,146,795
Short-Term Securities	\$ 607,735			607,735
Total	\$ 607,735	\$ 252,146,795		\$ 252,754,530

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

See Notes to Financial Statements.

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

Schedule of Investments April 30, 2010

BlackRock MuniHoldings Insured 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	\$ 2,529,541
County of Jefferson Alabama, RB, Series A, 5.50%, 1/01/22	2,170	1,868,739
		<u>4,398,280</u>
Arizona 0.5%		
State of Arizona, COP, Department of Administration, Series A (AGM):		
5.25%, 10/01/28	715	741,870
5.00%, 10/01/29	185	187,490
		<u>929,360</u>
Arkansas 3.7%		
Arkansas Development Finance Authority, Refunding RB, FHA Insured Mortgage Loan, Series C (NPFGC), 5.35%, 12/01/35	6,220	6,280,894
California 14.1%		
California State Public Works Board, RB, Department of General Services, Capital East End Complex, Series A (AMBAC), 5.00%, 12/01/27	2,000	1,942,960
Central Unified School District, GO, Election of 2008, Series A (AGC), 5.63%, 8/01/33	1,325	1,420,109
City of Vista California, COP, Refunding, Community Projects (NPFGC), 5.00%, 5/01/37	3,600	3,367,512
County of Sacramento California, RB, Senior Series A (AGC), 5.50%, 7/01/41	2,100	2,202,564
East Side Union High School District-Santa Clara County California, GO, Election of 2002, Series B (NPFGC), 5.00%, 8/01/27	1,800	1,817,604
Modesto Schools Infrastructure Financing Agency, Special Tax Bonds (AMBAC), 5.50%, 9/01/36	2,565	2,342,435
Oceanside Unified School District California, GO, Series A (AGC), 5.25%, 8/01/33	1,825	1,879,020
San Pablo Joint Powers Financing Authority California, Tax Allocation Bonds, Refunding, CAB (NPFGC) (a):		
5.66%, 12/01/24	2,635	1,097,003
5.66%, 12/01/25	2,355	917,555
5.66%, 12/01/26	2,355	852,651
Santa Ana Unified School District, GO (NPFGC), 5.00%, 8/01/32	2,875	2,877,817
West Contra Costa Unified School District California, GO, Election of 2000, Series C (NPFGC),	3,480	3,540,378

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

5.00%, 8/01/21		24,257,608
Colorado 1.2%		
Colorado Health Facilities Authority, RB, Hospital, NCMC Inc. Project, Series B (AGM), 6.00%, 5/15/26	1,900	2,109,760
District of Columbia 0.2%		
District of Columbia, RB, Deed Tax, Housing Production Trust Fund, Series A (NPFGC), 5.00%, 6/01/32	400	401,404
Florida 14.4%		
City of Orlando Florida, RB, Senior, 6th Cent Contract Payments, Series A (AGC), 5.25%, 11/01/38	2,000	2,009,840
County of Miami-Dade Florida, RB: CAB, Sub-Series A (NPFGC), 5.24%, 10/01/37 (a)	1,625	260,926
Miami International Airport, Series A, AMT (AGM), 5.50%, 10/01/41	3,900	3,944,304
Water & Sewer System, (AGM), 5.00%, 10/01/39	6,640	6,802,348
County of Miami-Dade Florida, Refunding RB, Water & Sewer System (AGM), 5.00%, 10/01/29	1,565	1,611,074
	Par (000)	Value
Municipal Bonds		
Florida (concluded)		
Jacksonville Port Authority, RB, AMT (AGC), 6.00%, 11/01/38	\$ 2,215	\$ 2,270,685
Orange County School Board, COP, Series A (AGC), 5.50%, 8/01/34	7,395	7,879,890
		24,779,067
Georgia 5.1%		
Augusta-Richmond County Georgia, RB (AGM), 5.25%, 10/01/39	3,495	3,634,345
Gwinnett County Hospital Authority, Refunding RB, Gwinnett Hospital System, Series D (AGM), 5.50%, 7/01/41	2,075	2,109,196
Metropolitan Atlanta Rapid Transit Authority, RB, Third Indenture, Series B (AGM), 5.00%, 7/01/34	2,940	3,080,444
		8,823,985
Illinois 12.7%		
Chicago Board of Education Illinois, GO, Refunding, Chicago School Reform Board, Series A (NPFGC), 5.50%, 12/01/26	1,200	1,345,044
Chicago Transit Authority, RB, Federal Transit Administration Section 5309, Series A (AGC), 6.00%, 6/01/26	2,000	2,294,440
City of Chicago Illinois, GO, Refunding, Projects, Series A (AGM):		
5.00%, 1/01/28	1,405	1,480,912
5.00%, 1/01/29	2,180	2,281,980
5.00%, 1/01/30	870	905,827
City of Chicago Illinois, RB (AGM):		
General, Third Lien, Series C, 5.25%, 1/01/35	1,255	1,299,176
Series A, 5.00%, 1/01/33	8,000	8,162,880

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

City of Chicago Illinois, Refunding RB, Second Lien (NPFGC), 5.50%, 1/01/30	1,310	1,445,258
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/28	2,500	2,656,225
		21,871,742
Indiana 4.4%		
Indiana Municipal Power Agency, RB, Series A (NPFGC), 5.00%, 1/01/42	6,000	6,016,440
Indianapolis Local Public Improvement Bond Bank, Refunding RB, Waterworks Project, Series A (AGC), 5.50%, 1/01/38	1,430	1,543,342
		7,559,782
Iowa 1.1%		
Iowa Finance Authority, Refunding RB, Iowa Health System (AGC), 5.25%, 2/15/29	1,770	1,825,171
Kentucky 0.8%		
Kentucky Economic Development Finance Authority, RB, Louisville Arena, Sub-Series A-1 (AGC), 6.00%, 12/01/38	320	347,030
Kentucky State Property & Buildings Commission, Refunding RB, Project No. 93 (AGC), 5.25%, 2/01/29	1,000	1,079,980
		1,427,010
Louisiana 1.3%		
Louisiana State Citizens Property Insurance Corp., RB, Series C-3 (AGC), 6.13%, 6/01/25	2,055	2,280,495
Maine 1.0%		
City of Portland Maine, RB, General (AGM), 5.25%, 1/01/35	1,680	1,722,134

See Notes to Financial Statements.

Schedule of Investments (continued)

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

Municipal Bonds	Par (000)	Value
Massachusetts 3.6%		
Massachusetts Bay Transportation Authority, Refunding RB, Senior Series A, 5.00%, 7/01/10 (b)	\$ 3,375	\$ 3,401,831
Massachusetts HFA, RB, Rental Mortgage, Series C, AMT (AGM), 5.50%, 7/01/32	2,440	2,461,106
Massachusetts HFA, Refunding RB, Housing Development, Series A, AMT (NPFGC), 5.15%, 6/01/11	315	315,523
		<u>6,178,460</u>
Michigan 14.8%		
City of Detroit Michigan, RB, Second Lien, Series B: (AGM), 7.50%, 7/01/33	1,000	1,200,760
(NPFGC), 5.50%, 7/01/29	2,410	2,425,520
City of Detroit Michigan, Refunding RB, Second Lien: Series C (BHAC), 5.75%, 7/01/27	1,580	1,708,043
Series C-1 (AGM), 7.00%, 7/01/27	4,810	5,602,640
Series C-2 (BHAC), 5.25%, 7/01/29	1,910	1,945,411
Series E (BHAC), 5.75%, 7/01/31	3,240	3,434,530
Michigan State Building Authority, Refunding RB, Facilities Program, Series I (AGC): 5.25%, 10/15/24	875	933,695
5.25%, 10/15/25	455	482,123
Michigan Strategic Fund, Refunding RB, AMT, Detroit Edison Co. (Syncora): Pollution, Series B, 5.65%, 9/01/29	1,500	1,498,125
Pollution, Series C, 5.65%, 9/01/29	2,050	2,047,438
Project, Series A, 5.50%, 6/01/30	2,000	1,920,080
Royal Oak Hospital Finance Authority Michigan, Refunding RB, William Beaumont Hospital, 8.25%, 9/01/39	1,910	2,254,430
		<u>25,452,795</u>
Minnesota 0.9%		
City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series B (AGC), 6.50%, 11/15/38	1,325	1,486,226
Missouri 3.3%		
Mehlville School District No. R-9 Missouri, COP, Series A (AGM) (b): 5.50%, 3/01/11	1,565	1,632,279
5.50%, 3/01/11	1,770	1,846,092
5.50%, 3/01/11	955	996,056
5.50%, 3/01/11	1,220	1,272,448

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

5,746,875

Nevada 3.1%

County of Clark Nevada, RB:

Las Vegas-McCarran International Airport, Series A (AGC), 5.25%, 7/01/39	3,510	3,573,671
Las Vegas-McCarran, Series A-1, AMT (AGM), 5.00%, 7/01/23	1,750	1,720,075

5,293,746

New Jersey 7.5%

New Jersey EDA, RB, Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/33	6,700	6,819,863
New Jersey Health Care Facilities Financing Authority, RB, Virtua Health (AGC), 5.50%, 7/01/38	2,100	2,227,050
New Jersey Transportation Trust Fund Authority, RB, Transportation System, Series A (AGC), 5.63%, 12/15/28	3,500	3,903,130

12,950,043

Municipal Bonds

**Par
(000)**

Value

New York 6.1%

City of New York New York, GO, Series E (AGM), 5.00%, 11/01/17	\$ 4,000	\$ 4,366,840
New York City Transitional Finance Authority, RB, Fiscal 2009, Series S-3, 5.25%, 1/15/39	1,400	1,486,268
Sales Tax Asset Receivable Corp., RB, Series A (AMBAC), 5.25%, 10/15/27	4,095	4,563,796

10,416,904

Oregon 0.4%

Medford Hospital Facilities Authority, RB, Asante Health System, Series A (AGC), 5.00%, 8/15/40	710	712,102
---	-----	---------

Puerto Rico 1.4%

Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.38%, 8/01/39	2,115	2,374,785
---	-------	-----------

Texas 17.8%

City of Dallas Texas, Refunding RB (AGC), 5.25%, 8/15/38	1,250	1,288,837
City of Houston Texas, Refunding RB, Combined, First Lien, Series A (AGC), 6.00%, 11/15/35	4,000	4,588,800
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, B, 7.25%, 12/01/35	600	676,302
Lower Colorado River Authority, Refunding RB, LCRA Transmission Services Project (AGC), 5.50%, 5/15/36	2,610	2,764,277
Lubbock Cooper ISD Texas, GO, School Building (AGC), 5.75%, 2/15/42	775	830,684
North Texas Tollway Authority, Refunding RB, System, First Tier, (NPFGC):		

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

5.75%, 1/01/40	6,710	7,022,485
Series A, 5.63%, 1/01/33	6,585	6,890,939
Series B, 5.75%, 1/01/40	6,275	6,567,227
		30,629,551
Utah 1.5%		
City of Riverton Utah, RB, IHC Health Services Inc., 5.00%, 8/15/41	2,485	2,527,320
Virginia 1.0%		
Virginia Public School Authority, RB, School Financing, 6.50%, 12/01/35	1,500	1,733,595
Washington 2.5%		
Chelan County Public Utility District No. 1, RB, Chelan Hydro System, Series A, AMT (AMBAC), 5.45%, 7/01/37	2,310	2,283,989
Snohomish County Public Utility District No. 1 Washington, RB (AGM), 5.50%, 12/01/22	1,810	1,945,497
		4,229,486
Total Municipal Bonds 127.0%		218,398,580

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

California 2.7%		
City of San Jose California, GO, Libraries, Parks, and Public Safety Project (NPFGC), 5.00%, 9/01/30	1,258	1,299,371
Sequoia Union High School District California, GO, Refunding, Election, Series B (AGM), 5.50%, 7/01/35	3,149	3,293,074
		4,592,445

See Notes to Financial Statements.

Schedule of Investments (concluded)

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

Municipal Bonds Transferred to Tender Option Bond Trusts (c)	Par (000)	Value
Colorado 3.3%		
Colorado Health Facilities Authority, RB, Catholic Health, Series C-3 (AGM), 5.10%, 10/01/41	\$ 5,610	\$ 5,646,577
District of Columbia 0.7%		
District of Columbia Water & Sewer Authority, RB, Series A, 6.00%, 10/01/35	1,040	1,171,740
Florida 8.4%		
City of St. Petersburg Florida, Refunding RB (NPFGC), 5.00%, 10/01/35	4,302	4,324,093
County of Miami-Dade Florida, GO, Building Better Communities Program, Series B-1, 6.00%, 7/01/38	7,500	8,326,350
Lee County Housing Finance Authority, RB, Multi-County Program, Series A-2, AMT (GNMA), 6.00%, 9/01/40	1,590	1,721,716
		<u>14,372,159</u>
Georgia 2.4%		
Augusta-Richmond County Georgia, RB (AGM), 5.25%, 10/01/34	4,000	4,172,560
Illinois 1.5%		
City of Chicago Illinois, Refunding RB, Second Lien (AGM), 5.25%, 11/01/33	2,509	2,655,529
Kentucky 0.9%		
Kentucky State Property & Building Commission, Refunding RB, Project No. 93 (AGC), 5.25%, 2/01/27	1,406	1,519,255
Massachusetts 4.9%		
Massachusetts School Building Authority, RB, Series A (AGM), 5.00%, 8/15/30	8,008	8,386,537
Nevada 5.7%		
Clark County Water Reclamation District, GO: Limited Tax, 6.00%, 7/01/38	5,000	5,598,250
Series B, 5.50%, 7/01/29	3,749	4,113,429
		<u>9,711,679</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	2,474,690

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

Virginia 0.9%		
Virginia HDA, RB, Sub-Series H-1 (NPFGC), 5.35%, 7/01/31	1,500	1,513,755
Washington 2.5%		
City of Bellevue Washington, GO, Refunding (NPFGC), 5.50%, 12/01/39	4,002	4,374,478
Total Municipal Bonds Transferred to Tender Option Bond Trusts 35.3%		60,591,404
Total Long-Term Investments (Cost \$271,246,767) 162.3%		278,989,984
Short-Term Securities		
	Shares	
FII Institutional Tax-Exempt Fund, 0.25% (d)(e)	8,653,666	8,653,666
Total Short-Term Securities (Cost \$8,653,666) 5.0%		8,653,666
Total Investments (Cost \$279,900,433*) 167.3%		287,643,650
Other Assets Less Liabilities 1.9%		3,320,477
Liability for Trust Certificates, Including Interest Expense and Fees Payable (18.6)%		(31,981,744)
Preferred Shares, at Redemption Value (50.6)%		(87,005,179)
Net Assets Applicable to Common Shares 100.0%		\$ 171,977,204

* The cost and unrealized appreciation (depreciation) of investments as of April 30, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 247,898,349
Gross unrealized appreciation	\$ 9,673,939
Gross unrealized depreciation	(1,884,052)
Net unrealized appreciation	\$ 7,789,887

- (a) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (b) 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.
- (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.

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

- (d) Investments in companies considered to be an affiliate of the Fund during the year, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, were as follows:

Affiliate	Shares Held at April 30, 2009	Net Activity	Shares Held at April 30, 2010	Income
FFI Institutional Tax-Exempt Fund	15,326,703	(6,673,037)	8,653,666	\$ 28,477

- (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 April 30, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Investments in Securities			
	Level 1	Level 2	Level 3	Total
Assets:				
Long-Term Investments ¹		\$ 278,989,984		\$ 278,989,984
Short-Term Securities	\$ 8,653,666			8,653,666
Total	\$ 8,653,666	\$ 278,989,984		\$ 287,643,650

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

See Notes to Financial Statements.

Schedule of Investments April 30, 2010

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

Municipal Bonds	Par (000)	Value
Alabama 2.7%		
Birmingham Special Care Facilities Financing Authority, RB, Children s Hospital (AGC), 6.00%, 6/01/34	\$ 4,615	\$ 5,015,167
County of Jefferson Alabama, RB, Series A: 5.50%, 1/01/21	5,500	4,791,655
5.25%, 1/01/23	6,500	5,434,975
		15,241,797
Arizona 4.6%		
City of Tucson Arizona, COP (AGC): 4.25%, 7/01/21	1,870	1,904,071
4.25%, 7/01/22	1,895	1,911,392
4.50%, 7/01/24	2,120	2,143,723
City of Tucson Arizona, COP, Refunding (AGC), 4.00%, 7/01/20	2,325	2,345,367
Maricopa County IDA Arizona, RB, Arizona Charter Schools Project, Series A, 6.63%, 7/01/20	2,820	2,172,669
Pima County IDA, RB: Arizona Charter Schools Project, Series C, 6.70%, 7/01/21	975	975,029
Charter Schools, Series K, 6.38%, 7/01/13 (a)	820	949,068
Charter Schools, Series K, 6.38%, 7/01/31	930	857,079
Pima County IDA, Refunding RB, Tucson Electric Power Co., San Juan, Series A, 4.95%, 10/01/20	2,325	2,349,436
Salt River Project Agricultural Improvement & Power District, RB, Series A, 5.00%, 1/01/25	4,000	4,366,600
State of Arizona, COP, Department of Administration, Series A (AGM), 4.25%, 10/01/23	2,750	2,707,072
Vistancia Community Facilities District Arizona, GO, 5.00%, 7/15/14	3,135	3,247,766
		25,929,272
California 16.8%		
Antelope Valley Healthcare District California, RB, Series A, 5.25%, 9/01/17 (b)	8,000	7,894,160
California HFA, RB, Home Mortgage, Series K, AMT, 4.55%, 8/01/21	4,200	3,816,834
California HFA, Refunding RB, Home Mortgage, Series M, AMT, 4.55%, 8/01/21	7,210	6,552,232
California Pollution Control Financing Authority, RB, AMT: Republic Services Inc. Project, Series B, 5.25%, 6/01/23	605	612,520
Waste Management Inc. Project, Series A-2, 5.40%, 4/01/25	1,240	1,254,954
	9,035	8,824,304

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

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	10,301,600
California Statewide Communities Development Authority, RB, Health Facility, Memorial Health Services, Series A, 6.00%, 10/01/23	2,500	2,608,375
City of Sacramento California, Special Tax Bonds, North Natomas Community Facilities, Series 4-C: 5.60%, 9/01/20	585	578,986
5.75%, 9/01/22	1,715	1,696,958
5.90%, 9/01/23	500	499,495
6.00%, 9/01/28	2,990	2,969,997
Golden State Tobacco Securitization Corp. California, Refunding RB, Asset-Backed, Senior Series A-1, 5.00%, 6/01/15	5,000	5,126,050
Los Angeles Regional Airports Improvement Corp., California, Refunding RB, Facilities, LAXFUEL Corp., LA International, AMT (AMBAC), 5.50%, 1/01/32	1,435	1,390,745
Rowland Unified School District California, GO, Election of 2000, Series B (AGM), 5.25%, 8/01/27	1,515	1,561,859
	Par (000)	Value
Municipal Bonds		
California (concluded)		
State of California, GO: 5.50%, 4/01/14 (a)	\$ 14,795	\$ 17,146,517
5.50%, 4/01/28	15	15,430
(NPFGC), 5.25%, 2/01/27	5,000	5,058,250
Various Purpose, 5.25%, 10/01/21	2,550	2,761,191
Various Purpose, 6.00%, 11/01/39	10,000	10,931,000
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	2,606,346
		94,207,803
Colorado 2.0%		
Elk Valley Public Improvement Corp., RB, Public Improvement Fee, Series A, 7.10%, 9/01/14	700	714,819
Montrose Memorial Hospital, RB, 6.38%, 12/01/23	2,250	2,291,535
Plaza Metropolitan District No. 1 Colorado, Tax Allocation Bonds, Public Improvement Fee, Tax Increment, 7.50%, 12/01/15	7,500	7,418,850
Southlands Metropolitan District No. 1, GO, 6.75%, 12/01/14 (a)	930	1,082,362
		11,507,566
Connecticut 0.2%		
Connecticut State Development Authority, RB, Learjet Inc. Project, AMT, 7.95%, 4/01/26 (b)	1,160	1,252,719
Florida 5.4%		
County of Miami-Dade Florida, RB, Miami International Airport, AMT (NPFGC), 5.75%, 10/01/19	5,500	5,644,925
County of Miami-Dade Florida, Refunding RB, Series C (BHAC), 5.00%, 10/01/23	8,000	8,684,160

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

Harbor Bay Community Development District Florida, Special Assessment Bonds, 6.75%, 5/01/34	2,770	1,915,455
Highlands County Health Facilities Authority, Refunding RB, Adventist Health, Series G, 5.13%, 11/15/16 (a)	35	40,673
Midtown Miami Community Development District, Special Assessment Bonds:		
Series A, 6.00%, 5/01/24	3,190	3,058,923
Series B, 6.50%, 5/01/37	1,925	1,865,575
Panther Trace II Community Development District, Special Assessment Bonds, Special Assessment, 5.13%, 11/01/13	2,005	1,634,336
Portofino Shores Community Development District, Special Assessment Bonds, Series A, 6.40%, 5/01/34	1,085	1,056,497
South Lake County Hospital District, RB, South Lake Hospital Inc., 6.63%, 10/01/23	2,390	2,466,623
Sterling Hill Community Development District, Special Assessment Bonds, Refunding, Series B, 5.50%, 11/01/10	160	139,200
University of Florida Research Foundation Inc., RB (AMBAC), 5.13%, 9/01/33	4,000	3,600,160
		30,106,527
Georgia 0.8%		
Fulton County Development Authority, Refunding RB, Robert Woodruff, Series B, 5.25%, 3/15/24	4,000	4,268,560
Guam 0.8%		
Territory of Guam, GO, Series A, 6.00%, 11/15/19	1,530	1,583,871
Territory of Guam, RB, Section 30, Series A, 5.38%, 12/01/24	2,620	2,654,139
		4,238,010

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 0.1%		
University of Idaho, RB, General, Series B, 5.00%, 4/01/32	\$ 400	\$ 415,196
Illinois 8.1%		
City of Chicago Illinois, ARB, General, 3rd Lien, Series B-2, AMT: (AGM), 5.75%, 1/01/23	8,130	8,441,785
(Syncora), 6.00%, 1/01/29	7,510	7,809,349
City of Chicago Illinois, Refunding ARB, General, 3rd Lien, Series A-2, AMT (AGM), 5.75%, 1/01/19	2,550	2,690,939
Du Page & Will Counties Community School District No. 204 Indian, GO, School Building, Series A (NPFGC), 5.25%, 12/30/22	8,650	9,521,141
Du Page County Forest Preservation District Illinois, GO, Refunding, Series A, 3.50%, 11/01/24	3,000	2,891,580
Illinois Finance Authority, RB, Community Rehabilitation Providers Facilities, Series A, 6.63%, 7/01/12 (a)	6,930	6,964,165
Village of Hodgkins Illinois, RB, MBM Project, AMT, 5.90%, 11/01/17	6,000	6,003,180
Village of Wheeling Illinois, Tax Allocation Bonds, North Milwaukee/Lake-Cook TIF Project, 6.00%, 1/01/25	1,560	1,423,516
		45,745,655
Indiana 0.4%		
County of Jasper Indiana, Refunding RB, Northern Indiana Public Service Co., Series C (NPFGC), 5.85%, 4/01/19 (b)	2,000	2,173,660
Kansas 0.9%		
City of Dodge City Kansas, RB (AGC), 4.00%, 6/01/24	2,245	2,248,682
Kansas Development Finance Authority, Refunding RB: Adventist Health, 5.00%, 11/15/23	1,500	1,577,850
Adventist/Sunbelt, Series D, 5.00%, 11/15/24	1,000	1,031,660
		4,858,192
Kentucky 3.1%		
Kentucky Economic Development Finance Authority, Refunding RB, Owensboro Medical Health System, Series A, 5.25%, 6/01/23	8,650	8,433,923
Kentucky State Property & Buildings Commission, Refunding RB, Project No. 93 (AGC), 5.25%, 2/01/24	8,000	8,792,640
		17,226,563

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

Louisiana 2.7%

Louisiana Public Facilities Authority, RB (NPFGC): Nineteenth Judicial District Court, 5.50%, 6/01/41	2,000	2,062,560
University of New Orleans Research & Technology, 5.25%, 3/01/26	6,965	7,176,179
New Orleans Aviation Board Louisiana, Refunding RB, Restructuring GARB, Series A-2 (AGC), 6.00%, 1/01/23	850	966,118
Port of New Orleans Louisiana, Refunding RB, Continental Grain Co. Project, 6.50%, 1/01/17	5,000	4,986,100
		15,190,957

Maine 0.3%

Portland New Public Housing Authority Maine, Refunding RB, Senior Living, Series A, 6.00%, 2/01/34	1,965	1,883,315
---	-------	-----------

Maryland 0.4%

Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20	1,750	1,764,332
Maryland Industrial Development Financing Authority, RB, Our Lady of Good Counsel School, Series A, 6.00%, 5/01/35	500	474,025
		2,238,357

Municipal Bonds	Par (000)	Value
Massachusetts 0.5%		
Massachusetts Development Finance Agency, RB, Ogden Haverhill Project, Series B, AMT: 5.35%, 12/01/15	\$ 1,210	\$ 1,125,772
5.50%, 12/01/19	2,000	1,865,720
		2,991,492

Michigan 3.9%

City of Detroit Michigan, Refunding RB, Second Lien, Series C (BHAC), 5.75%, 7/01/26	4,235	4,587,225
Michigan State Hospital Finance Authority, Refunding RB: Hospital, Henry Ford Health, 5.25%, 11/15/24	4,900	4,811,947
Hospital, Oakwood Obligation Group, Series A, 6.00%, 4/01/22	4,795	4,913,053
Wayne County Airport Authority, RB, Detroit Metropolitan Wayne County Airport, AMT (AGC), 4.75%, 12/01/18	7,665	7,485,179
		21,797,404

Minnesota 1.4%

City of St. Cloud Minnesota, RB, CentraCare Health System, Series A, 4.25%, 5/01/21	2,300	2,229,160
Minneapolis & St. Paul Housing & Redevelopment Authority, RB, HealthPartners Obligation Group Project: 6.00%, 12/01/19	1,000	1,031,450

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

6.00%, 12/01/21	2,545	2,605,673
Minnesota State Municipal Power Agency, RB, Series A, 5.25%, 10/01/24	2,000	2,080,560
		<u>7,946,843</u>

Mississippi 1.7%

Mississippi Business Finance Corp., Refunding RB, System Energy Resource Inc. Project:		
5.88%, 4/01/22	5,000	4,977,700
5.90%, 5/01/22	2,910	2,905,053
Mississippi Hospital Equipment & Facilities Authority, Refunding RB, Baptist Memorial Healthcare, Series B2, 4.50%, 9/01/23	1,500	1,522,785
		<u>9,405,538</u>

Missouri 1.6%

Missouri State Health & Educational Facilities Authority, RB, SSM Health Care, Series B, 4.25%, 6/01/25 (c)	9,125	8,847,600
--	-------	-----------

Nebraska 1.5%

Douglas County Hospital Authority No. 2, RB, Health Facilities, Immanuel Obligation Group, 5.50%, 1/01/30	500	498,175
Douglas County School District No. 17 Nebraska, GO, Refunding (c):		
2.00%, 6/15/24	4,390	3,381,134
2.00%, 6/15/25	4,480	3,338,630
Lancaster County Hospital Authority No. 1, RB, Immanuel Obligation Group, 5.50%, 1/01/30	1,000	999,920
		<u>8,217,859</u>

Nevada 1.2%

County of Clark Nevada, Special Assessment Bonds, Special Improvement District No. 142, Local Improvement, 6.38%, 8/01/23	2,130	2,014,192
County of Humboldt Nevada, Refunding RB, Idaho Power Co. Project, 5.15%, 12/01/24	4,300	4,473,806
		<u>6,487,998</u>

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
New Jersey 12.1%		
Garden State Preservation Trust, RB, Election 2005, Series A (AGM):		
5.80%, 11/01/21	\$ 3,635	\$ 4,233,539
5.80%, 11/01/23	5,050	5,893,350
New Jersey EDA, RB:		
Cigarette Tax, 5.75%, 6/15/29	9,810	9,630,869
Continental Airlines Inc. Project, AMT, 6.63%, 9/15/12	5,540	5,597,284
Motor Vehicle Surcharge, Series A, (NPFGC), 5.25%, 7/01/33	17,900	18,220,231
New Jersey EDA, Refunding RB:		
School Facilities Construction, Series AA, 4.25%, 12/15/24	5,000	4,951,450
Series B, American Water, AMT (AMBAC), 5.13%, 4/01/22	5,000	5,000,550
New Jersey Higher Education Assistance Authority, Refunding RB, Series 1A, 4.75%, 12/01/21	2,400	2,490,528
New Jersey State Housing & Mortgage Finance Agency, RB, S/F Housing, Series X, AMT, 5.10%, 10/01/23	4,500	4,619,970
New Jersey Transportation Trust Fund Authority, RB, CAB, Transportation System, Series C (AMBAC), 5.70%, 12/15/25 (d)	9,450	3,999,712
South Jersey Port Corp., RB, Marine Terminal, Series O-1 (AGC), 4.63%, 1/01/23	1,375	1,439,928
University of Medicine & Dentistry of New Jersey, RB, Series A (AMBAC):		
5.50%, 12/01/23	1,000	1,012,910
5.50%, 12/01/27	1,000	1,009,050
		68,099,371
New Mexico 1.9%		
New Mexico Finance Authority, RB, Senior Lien, Series A (NPFGC), 5.13%, 6/15/18	9,520	10,594,998
New York 25.9%		
City of New York New York, GO:		
Series D1, 5.13%, 12/01/26	4,615	4,948,572
Sub-Series I-1, 5.50%, 4/01/21	5,000	5,733,500
Dutchess County Industrial Development Agency New York, RB, St. Francis Hospital, Series B, 7.25%, 3/01/19	895	905,239
Long Island Power Authority, Refunding RB, Series A, 5.50%, 4/01/24	1,475	1,618,665
Metropolitan Transportation Authority, RB, Transportation, Series A, 5.00%, 11/15/25	1,980	2,084,782

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

Metropolitan Transportation Authority, Refunding RB:		
Series A, 5.13%, 1/01/29	8,000	8,173,120
Series B, 5.25%, 11/15/25	4,000	4,386,640
New York City Industrial Development Agency, RB:		
Continental Airlines Inc. Project, AMT, 8.38%, 11/01/16	3,500	3,435,250
Special Needs Facilities Pooled Program, Series C-1, 6.80%, 7/01/19	2,055	2,019,099
New York City Industrial Development Agency, Refunding RB, New York Stock Exchange Project, Series A, 4.25%, 5/01/24	2,740	2,722,848
New York City Transitional Finance Authority, RB:		
Fiscal 2007, Series S-1, (NPFGC), 5.00%, 7/15/24	500	534,565
Fiscal 2009, Series S-3, 5.00%, 1/15/23	3,560	3,843,590
New York State Dormitory Authority, LRB, Municipal Health Facilities, Sub-Series 2-4, 5.00%, 1/15/27	6,900	7,181,451

Municipal Bonds	Par (000)	Value
New York (concluded)		
New York State Dormitory Authority, RB:		
Mental Health Services Facilities Improvement, Series A, (AGM), 5.00%, 2/15/22	\$ 4,000	\$ 4,293,680
Mount Sinai School of Medicine, Series A, (NPFGC), 5.15%, 7/01/24	1,000	1,029,810
North Shore-Long Island Jewish Health System, Series A, 5.50%, 5/01/30	1,495	1,546,458
University of Rochester, Series A, 4.00%, 7/01/24	1,515	1,532,347
University of Rochester, Series C, 4.00%, 7/01/24	625	632,644
New York State Dormitory Authority, Refunding RB:		
Consolidated Service Contract, Series A, 4.00%, 7/01/25	2,345	2,282,388
North Shore-Long Island Jewish Health System, Series E, 5.00%, 5/01/22	650	671,411
North Shore-Long Island Jewish Health System, Series E, 5.00%, 5/01/23	2,160	2,218,298
Yeshiva University, 4.00%, 9/01/23	2,860	2,897,066
Yeshiva University, 4.25%, 9/01/24	2,750	2,806,650
New York State Energy Research & Development Authority, RB, Lilco Project, Series A (NPFGC), 5.15%, 3/01/16	2,310	2,318,200
New York State Environmental Facilities Corp., RB, Environment, Series A (FGIC), 5.25%, 12/15/14 (a)	7,380	8,640,799
New York State Thruway Authority, Refunding RB, Local Highway & Bridge, 5.50%, 4/01/17	60	64,435
New York State Urban Development Corp., Refunding RB, Service Contract, Series B, 5.00%, 1/01/21	8,000	8,650,880
Port Authority of New York & New Jersey, Refunding RB:		
Consolidated, 152nd Series, AMT, 5.00%, 11/01/23	2,500	2,566,325
Consolidated, 153rd Series, 5.00%, 7/15/24	2,010	2,209,693
Sales Tax Asset Receivable Corp., RB, Series A (NPFGC), 5.00%, 10/15/20	9,070	10,101,440
Tobacco Settlement Financing Corp. New York, RB:		
Asset-Backed, Series A-1, (AMBAC), 5.25%, 6/01/22	6,510	6,923,580
Asset-Backed, Series B-1C, 5.50%, 6/01/21	7,000	7,523,110
Asset-Backed, Series B-1C, 5.50%, 6/01/22	10,000	10,778,700
Series C-1, (FGIC), 5.50%, 6/01/20	9,750	10,574,265
	4,250	4,444,140

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

Trust for Cultural Resources, RB, Carnegie Hall, Series A, 5.00%, 12/01/29		
United Nations Development Corp. New York, Refunding RB, Series A, 4.25%, 7/01/24	2,985	2,991,597

145,285,237

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	2,230,415
North Carolina Eastern Municipal Power Agency, Refunding RB, Series B, 5.00%, 1/01/26	1,925	1,997,553

4,227,968

Northern Mariana Islands 0.8%

Commonwealth of the Northern Mariana Islands, GO, Series A: 6.75%, 10/01/33	250	229,410
6.75%, 10/01/33 (a)	3,900	4,542,486

4,771,896

Ohio 0.5%

Ohio Air Quality Development Authority, RB, Ohio Valley Electric Corp., 5.63%, 10/01/19	2,635	2,793,969
--	-------	-----------

Oregon 0.4%

Oregon State Facilities Authority, RB, Willamette University Project, Series A, 4.00%, 10/01/24 (c)	2,325	2,279,965
--	-------	-----------

See Notes to Financial Statements.

ANNUAL REPORT

APRIL 30, 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
Pennsylvania 8.6%		
City of Philadelphia Pennsylvania, RB, Series A, AMT (AGM), 5.00%, 6/15/20	\$ 2,895	\$ 2,974,612
City of Philadelphia Pennsylvania, Refunding RB (AGM): 1975 General Ordinance, 17th Series, 5.38%, 7/01/22	7,490	7,939,700
Series B, AMT, 5.00%, 6/15/19	3,905	4,045,580
City of Pittsburgh Pennsylvania, GO, Refunding, Series B (AGM), 5.25%, 9/01/17	9,630	10,477,055
City of Pittsburgh Pennsylvania, GO, Series C (AGM), 5.25%, 9/01/18	6,430	6,924,017
Montgomery County IDA Pennsylvania, MRB, Whitemarsh Continuing Care, 6.00%, 2/01/21	3,500	3,032,785
Pennsylvania Economic Development Financing Authority, RB, National Gypsum Co., Series A, AMT, 6.25%, 11/01/27	7,710	6,155,124
South Fork Municipal Authority, RB, Conemaugh Valley Memorial, Series A (AGC), 6.00%, 7/01/26 (c)	6,225	6,762,591
		48,311,464
Puerto Rico 14.7%		
Commonwealth of Puerto Rico, GO, Refunding, Public Improvement, Series A (NPFGC), 5.50%, 7/01/21	3,290	3,503,192
Puerto Rico Aqueduct & Sewer Authority, RB, Senior Lien, Series A (AGC), 5.00%, 7/01/25	3,215	3,343,761
Puerto Rico Electric Power Authority, RB: Series NN, 5.50%, 7/01/13 (a)	17,935	20,416,307
Series TT, 5.00%, 7/01/27	8,500	8,616,960
Series WW, 5.50%, 7/01/38	3,000	3,081,150
Puerto Rico Highway & Transportation Authority, RB: Series Y (AGM), 6.25%, 7/01/21	3,000	3,346,800
Subordinate (FGIC), 5.75%, 7/01/21	4,375	4,500,038
Puerto Rico Housing Finance Authority, Refunding RB, Subordinate, Capital Fund Modernization, 5.13%, 12/01/27	13,900	13,875,397
Puerto Rico Industrial Medical & Environmental Pollution Control Facilities Financing Authority, RB, Special Facilities, American Airlines, Series A, 6.45%, 12/01/25	5,390	4,448,744
Puerto Rico Public Buildings Authority, RB, Government Facilities, Series I, 5.50%, 7/01/14 (a)	8,000	9,228,880
Puerto Rico Public Buildings Authority, Refunding RB, Government Facilities: Series D, 5.25%, 7/01/27	3,930	3,938,489
Series M-3 (NPFGC), 6.00%, 7/01/28	1,900	1,998,667
Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 5.75%, 8/01/37	2,000	2,120,500

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

82,418,885

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	2,593,750
--	-------	-----------

South Dakota 0.4%

Educational Enhancement Funding Corp., RB, Series B, 6.50%, 6/01/32	2,200	2,201,650
--	-------	-----------

Tennessee 2.5%

Chattanooga-Hamilton County Hospital Authority Tennessee, Refunding RB, Erlanger Health (AGM), 5.00%, 10/01/22	1,620	1,667,142
Johnson City Health & Educational Facilities Board, RB, Appalachian Christian Village Project, Series A, 6.00%, 2/15/19	1,660	1,651,999

Municipal Bonds

**Par
(000)**

Value

Tennessee (concluded)

Memphis-Shelby County Sports Authority Inc., Refunding RB, Memphis Arena Project: Series A, 5.00%, 11/01/23	\$ 2,695	\$ 2,784,151
Series A, 5.25%, 11/01/26	2,055	2,116,999
Series B, 5.00%, 11/01/22	1,000	1,037,920
Shelby County Health Educational & Housing Facilities Board, RB, Germantown Village, Series A: 6.75%, 12/01/18	3,550	3,361,885
7.00%, 12/01/23	1,450	1,344,600

13,964,696

Texas 5.6%

Brazos River Authority, Refunding RB, TXU Electric Co. Project, Series C, AMT, 5.75%, 5/01/36 (b)	7,000	6,804,700
Dallas-Fort Worth International Airport Facilities Improvement Corp., RB, Series 2001-A-1, AMT, 6.15%, 1/01/16	4,000	4,000,760
Dallas-Fort Worth International Airport Facilities Improvement Corp., Refunding RB, Series A, Sub-Series 2, AMT, 9.00%, 5/01/29	3,000	3,023,850
Gulf Coast IDA, RB, Citgo Petroleum Corp. Project, AMT, 7.50%, 5/01/25	2,440	2,508,417
Gulf Coast Waste Disposal Authority, Refunding RB, Series A, AMT, 6.10%, 8/01/24	2,000	2,000,940
Houston Health Facilities Development Corp., RB, Buckingham Senior Living Community, Series A, 7.00%, 2/15/14 (a)	1,500	1,800,015
Red River Education Financing Corp., Refunding RB, Higher Education, Texas Christian University, 4.25%, 3/15/26	2,500	2,507,900
Sabine River Authority Texas, Refunding RB, TXU Electric Co. Project, Series B, AMT, 5.75%, 5/01/30 (b)	5,000	4,866,200
Texas State Affordable Housing Corp., RB, Professional Educators Program, Series B, AMT (GNMA), 5.95%,	3,963	4,140,067

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

12/01/39

31,652,849

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	1,884,254
Virgin Islands Public Finance Authority, RB, Senior Secured, Hovensa Refinery, AMT, 6.13%, 7/01/22	6,750	6,798,803
		8,683,057

Vermont 0.5%

Vermont Educational & Health Buildings Financing Agency, RB, Hospital, Fletcher Allen Health, Series A (AMBAC), 6.00%, 12/01/23	3,000	3,029,550
---	-------	-----------

Virginia 2.7%

James City County EDA, Refunding RB, First Mortgage, Williamsburg Lodge, Series A: 5.75%, 3/01/17	3,285	3,342,192
6.00%, 3/01/23	1,150	1,159,407
Tobacco Settlement Financing Corp. Virginia, RB, Asset-Backed, 5.63%, 6/01/15 (a)	7,800	9,093,786
Virginia Public School Authority, Refunding RB, School Financing, Series C, 3.50%, 8/01/25	1,750	1,703,030
		15,298,415

See Notes to Financial Statements.

Schedule of Investments (concluded)

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	\$ 4,133,120
Wisconsin 0.4%		
Wisconsin Housing & EDA, RB, Series C, AMT, 4.85%, 9/01/26	2,000	2,000,800
Total Municipal Bonds 141.6%		794,520,523
Municipal Bonds Transferred to Tender Option Bond Trusts (e)		
California 5.0%		
City of San Jose California, GO, Libraries, Parks, and Public Safety Project (NPFGC), 5.00%, 9/01/30	3,101	3,202,021
Peralta Community College District, GO, Election of 2000, Series D (AGM), 5.00%, 8/01/30	10,140	10,388,430
Sequoia Union High School District California, GO, Refunding, Election, Series B (AGM), 5.50%, 7/01/35	9,028	9,440,146
Tamalpais Union High School District California, GO, Election of 2001 (AGM), 5.00%, 8/01/28	4,875	5,014,961
		28,045,558
Illinois 2.4%		
McHenry County Conservation District Illinois, GO (AGM), 5.13%, 2/01/27	12,695	13,517,264
Massachusetts 1.6%		
Massachusetts School Building Authority, RB, Series A (AGM), 5.00%, 8/15/30	8,338	8,732,049
New Jersey 2.1%		
New Jersey Transportation Trust Fund Authority, RB, Transportation System, Series D (AGM), 5.00%, 6/15/19	11,120	11,910,521
New York 5.7%		
City of New York New York, GO, Sub-Series B-1, 5.25%, 9/01/22	8,250	9,167,813
	10,000	10,415,000

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

New York State Urban Development Corp., RB, State Personal Income Tax, State Facilities, Series A-1 (NPFGC), 5.25%, 3/15/34		
Sales Tax Asset Receivable Corp., RB, Series A (AMBAC), 5.25%, 10/15/27	11,101	12,371,738
		<u>31,954,551</u>

Washington 1.9%

Snohomish County School District No. 15-Edmonds Washington, GO (NPFGC), 5.00%, 12/01/19	10,000	10,939,400
---	--------	------------

Total Municipal Bonds Transferred to Tender Option Bond Trusts 18.7%

105,099,343

Total Long-Term Investments

(Cost \$880,296,838) 160.3% 899,619,866

Short-Term Securities

Shares

FBI Institutional Tax-Exempt Fund, 0.25% (f)(g)	17,541,876	17,541,876
---	------------	------------

Total Short-Term Securities

(Cost \$17,541,876) 3.1% 17,541,876

Total Investments (Cost \$897,838,714*) 163.4%		917,161,742
Liabilities in Excess of Other Assets (2.0)%		(11,359,735)
Liability for Trust Certificates, Including Interest Expense and Fees Payable (10.2)%		(57,405,111)
Preferred Shares, at Redemption Value (51.2)%		(287,257,042)

Net Assets Applicable to Common Shares 100.0% \$ 561,139,854

* The cost and unrealized appreciation (depreciation) of investments as of April 30, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 839,914,913
Gross unrealized appreciation	\$ 30,910,275
Gross unrealized depreciation	(11,012,260)
Net unrealized appreciation	\$ 19,898,015

- (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.

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

(c) When-issued security. Net unsettled when-issued transactions were as follows:

Counterparty	Value	Unrealized Appreciation
Citigroup Global Markets, Inc.	\$ 8,847,600	\$ 18,798
Merrill Lynch & Co.	\$ 9,042,556	\$ 102,686
Prager Sealy Co.	\$ 6,719,764	\$ 115,300

- (d) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (e) Securities represent bonds transferred to a tender option bond trust in exchange for which the Fund acquired residual interest certificates. These securities serve as collateral in a financing transaction. 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 year, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, were as follows:

Affiliate	Shares Held at April 30, 2009	Net Activity	Shares Held at April 30, 2010	Income
FFI Institutional Tax-Exempt Fund	403,856	17,138,020	17,541,876	\$ 24,613

(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 April 30, 2010 in determining the fair valuation of the Fund's investments:

Investments in Securities				
Valuation Inputs	Level 1	Level 2	Level 3	Total

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

Assets:			
Long-Term Investments ¹		\$ 899,619,866	\$ 899,619,866
Short-Term Securities	\$ 17,541,876		17,541,876
Total	\$ 17,541,876	\$ 899,619,866	\$ 917,161,742

¹ See above schedule of investments for values in each state or political subdivision.

See Notes to Financial Statements.

ANNUAL REPORT

APRIL 30, 2010

45

Schedule of Investments April 30, 2010

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	\$ 2,960,965
Arizona 2.1%		
Maricopa County IDA Arizona, RB, Arizona Charter Schools Project, Series A, 6.75%, 7/01/29	1,000	687,360
Pima County IDA, RB, Arizona Charter Schools Project, Series C, 6.75%, 7/01/31	1,940	1,871,072
Pima County IDA, Refunding IDRB, Tucson Electric Power, 5.75%, 9/01/29	1,110	1,129,514
Pima County IDA, Refunding RB, Charter Schools II, Series A, 6.75%, 7/01/21	485	485,291
Salt River Project Agricultural Improvement & Power District, RB, Series A, 5.00%, 1/01/38	1,980	2,069,614
		<u>6,242,851</u>
California 14.3%		
California Health Facilities Financing Authority, Refunding RB, St. Joseph Health System, Series A, 5.75%, 7/01/39	2,200	2,287,186
California State Public Works Board, RB, Various Capital Projects, Sub-Series I-1, 6.38%, 11/01/34	1,185	1,269,550
City of Chula Vista California, RB, San Diego Gas & Electric, Series B, AMT, 5.00%, 12/01/27	2,500	2,448,350
Los Angeles Department of Airports, RB, Series A, 5.25%, 5/15/39	800	829,104
Los Angeles Department of Airports, Refunding RB, Senior, Los Angeles International Airport, Series A, 5.00%, 5/15/40	5,930	6,042,433
San Francisco City & County Public Utilities Commission, RB, Series B, 5.00%, 11/01/39	9,475	9,815,815
State of California, GO, Various Purpose: 6.00%, 3/01/33	2,525	2,779,293
6.50%, 4/01/33	14,925	16,921,517
		<u>42,393,248</u>
Colorado 3.2%		
Colorado Health Facilities Authority, RB, Catholic Health Initiatives, Series D, 6.25%, 10/01/33	1,060	1,173,113
Colorado Housing & Finance Authority, Refunding RB, S/F Program, Senior Series A-2, AMT, 7.50%, 4/01/31	105	111,522
Elk Valley Public Improvement Corp., RB, Public Improvement Fee: Series A, 7.35%, 9/01/31	3,025	2,792,740

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

Series B, 7.45%, 9/01/31	400	373,084
Plaza Metropolitan District No. 1 Colorado, Tax Allocation Bonds:		
Public Improvement Fee, Tax Increment, 8.00%, 12/01/25	3,300	3,303,696
Subordinate Public Improvement Fee, Tax Increment, 8.13%, 12/01/25	820	782,083
University of Colorado, RB, Series A, 5.75%, 6/01/28	750	847,920
		9,384,158

Connecticut 3.1%

Connecticut Housing Finance Authority, RB, Sub-Series C-1, 4.85%, 11/15/34	2,430	2,447,642
Connecticut State Health & Educational Facility Authority, RB:		
Ascension Health Senior Credit, 5.00%, 11/15/40	1,375	1,412,785
Wesleyan University, 5.00%, 7/01/35 (a)	3,385	3,598,424
Mohegan Tribe of Indians of Connecticut, RB, Public Improvement, Priority Distribution, 6.25%, 1/01/31	2,000	1,607,720
		9,066,571

Municipal Bonds	Par (000)	Value
District of Columbia 2.0%		
Metropolitan Washington Airports Authority, RB: CAB, Second Senior Lien, Series B (AGC), 7.05%, 10/01/33 (b)	\$ 6,590	\$ 1,684,602
CAB, Second Senior Lien, Series B (AGC), 7.08%, 10/01/34 (b)	4,830	1,153,839
CAB, Second Senior Lien, Series B (AGC), 7.10%, 10/01/35 (b)	6,515	1,453,301
First Senior Lien, Series A, 5.25%, 10/01/44	1,500	1,568,190
		5,859,932

Florida 8.5%

County of Miami-Dade Florida, RB, Water & Sewer System, 5.00%, 10/01/34	5,680	5,786,046
County of Miami-Dade Florida, Refunding RB, Miami International Airport:		
AMT (AGC), 5.00%, 10/01/40	9,235	8,791,535
Series A-1, 5.38%, 10/01/41	1,165	1,178,386
Fiddlers Creek Community Development District No. 2, Special Assessment Bonds (c)(d):		
Series A, 6.38%, 5/01/35	2,350	987,000
Series B, 5.75%, 5/01/13	400	168,000
Hillsborough County IDA, RB:		
H. Lee Moffitt Cancer Center Project, Series A, 5.25%, 7/01/37	3,500	3,283,420
National Gypsum Co., Series B, AMT, 7.13%, 4/01/30	2,720	2,369,147
Midtown Miami Community Development District, Special Assessment Bonds, Series A, 6.25%, 5/01/37	915	858,508
Palm Coast Park Community Development District, Special Assessment Bonds, 5.70%, 5/01/37	1,225	727,907

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

Preserve at Wilderness Lake Community Development District, RB, Series A, 7.10%, 5/01/33	875	877,100
		25,027,049

Georgia 5.1%

De Kalb Private Hospital Authority, Refunding RB, Children s Healthcare, 5.25%, 11/15/39	845	877,093
Fulton County Residential Care Facilities for the Elderly Authority, Refunding RB, Canterbury Court Project, Series A, 6.13%, 2/15/26	2,000	1,852,420
Gainesville Redevelopment Authority, Refunding RB, Riverside Military Academy, 5.13%, 3/01/37	600	370,854
Metropolitan Atlanta Rapid Transit Authority, RB, Third Series, 5.00%, 7/01/39	3,465	3,646,982
Municipal Electric Authority of Georgia, RB, Series W: 6.60%, 1/01/18	5,560	6,427,249
6.60%, 1/01/18 (e)	380	435,016
Municipal Electric Authority of Georgia, Refunding RB, Series X, 6.50%, 1/01/20	1,250	1,477,800
		15,087,414

Guam 0.8%

Territory of Guam, GO, Series A: 6.00%, 11/15/19	630	652,182
6.75%, 11/15/29	895	951,886
7.00%, 11/15/39	615	656,722
		2,260,790

Idaho 0.0%

Idaho Housing & Finance Association, Refunding RB, S/F Mortgage, Senior Series E-2, AMT, 6.90%, 1/01/27	45	45,079
---	----	--------

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 9.7%		
City of Chicago Illinois, RB, Series C, AMT (GNMA), 7.00%, 3/01/32	\$ 145	\$ 149,008
City of Chicago Illinois, Special Assessment Bonds, Lake Shore East, 6.75%, 12/01/32	800	760,048
City of Chicago Illinois, Tax Allocation Bonds, Kingsbury Redevelopment Project, Series A, 6.57%, 2/15/13	900	899,811
Illinois Finance Authority, RB: Advocate Health Care Network, Series D, 6.50%, 11/01/38	5,000	5,558,200
Community Rehabilitation Providers Facilities, Series A, 6.50%, 7/01/22	1,000	1,004,940
Illinois Finance Authority, Refunding RB: Central DuPage Health, Series B, 5.50%, 11/01/39	1,610	1,672,774
Friendship Village Schaumburg, Series A, 5.63%, 2/15/37	250	199,218
Regional Transportation Authority, RB: Series A (AMBAC), 7.20%, 11/01/20	1,500	1,837,995
Series A (NPFGC), 6.70%, 11/01/21	7,000	8,481,270
Series C (NPFGC), 7.75%, 6/01/20	2,500	3,208,450
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/34	630	656,384
Village of Hodgkins Illinois, RB, MBM Project, AMT, 6.00%, 11/01/23	2,800	2,801,484
Village of Wheeling Illinois, Tax Allocation Bonds, North Milwaukee/Lake-Cook TIF Project, 6.00%, 1/01/25	1,550	1,414,390
		28,643,972
Indiana 6.9%		
Indiana Finance Authority, RB, Sisters of St. Francis Health, 5.25%, 11/01/39	840	855,095
Indiana Finance Authority, Refunding RB: Duke Energy Indiana Inc., Series C, 4.95%, 10/01/40	2,780	2,748,002
Parkview Health System, Series A, 5.75%, 5/01/31	3,295	3,388,182
Indiana Health & Educational Facilities Financing Authority, RB, Clarian Health Obligation, Series A, 5.25%, 2/15/40	500	480,330
Indiana Transportation Finance Authority, RB, Series A: 7.25%, 6/01/15	320	331,725
6.80%, 12/01/16	3,775	4,316,524
Indianapolis Local Public Improvement Bond Bank, Refunding RB, Series D, 6.75%, 2/01/14	7,450	8,163,859
		20,283,717

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

Kentucky 0.3%

Kentucky Economic Development Finance Authority, Refunding RB, Owensboro Medical Health System, Series A, 6.38%, 6/01/40	1,010	1,038,280
--	-------	-----------

Louisiana 4.1%

Port of New Orleans Louisiana, Refunding RB, Continental Grain Co. Project, 6.50%, 1/01/17	8,500	8,476,370
Sabine River Authority Louisiana, Refunding RB, International Paper Co. Project, 6.20%, 2/01/25	3,600	3,642,120
		12,118,490

Maryland 1.7%

County of Montgomery Maryland, GO, West Germantown Development District, Senior Series A (Radian), 6.70%, 7/01/27	1,190	1,222,059
Maryland Community Development Administration, Refunding RB, Residential, Series D, AMT, 4.90%, 9/01/42	1,500	1,441,140

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

Maryland (concluded)

Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35	\$ 435	\$ 444,322
Maryland Health & Higher Educational Facilities Authority, RB: King Farm Presbyterian Community, Series B, 5.00%, 1/01/17	875	802,130
University of Maryland Medical System, Series B (NPFGC), 7.00%, 7/01/22	1,000	1,168,330
		5,077,981

Massachusetts 4.2%

Massachusetts HFA, HRB, Series A, AMT, 5.20%, 12/01/37	3,000	3,010,440
Massachusetts HFA, RB, S/F, Series 130, AMT, 5.00%, 12/01/32	2,720	2,694,432
Massachusetts HFA, Refunding HRB, AMT: Series D, 4.85%, 6/01/40	2,770	2,603,218
Series F, 5.70%, 6/01/40	2,230	2,264,654
Massachusetts Health & Educational Facilities Authority, Refunding RB, Partners Healthcare, Series J1, 5.00%, 7/01/39	1,805	1,830,072
		12,402,816

Michigan 6.5%

City of Detroit Michigan, RB, Senior Lien, Series B (AGM), 7.50%, 7/01/33	910	1,092,692
Flint Hospital Building Authority Michigan, Refunding RB, Hurley Medical Center (ACA), 6.00%, 7/01/20	2,890	2,833,790
Michigan State Hospital Finance Authority, Refunding RB:	7,050	6,430,375

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

Henry Ford Health System, Series A, 5.25%, 11/15/46		
McLaren Health Care, 5.75%, 5/15/38	8,560	8,764,327
		<u>19,121,184</u>

Mississippi 4.0%

County of Lowndes Mississippi, Refunding RB, Weyerhaeuser Co. Project, Series A, 6.80%, 4/01/22	3,000	3,202,080
Mississippi Business Finance Corp., Refunding RB, System Energy Resource Inc. Project: 5.88%, 4/01/22	2,500	2,488,850
5.90%, 5/01/22	5,000	4,991,500
University of Southern Mississippi, RB, Campus Facilities Improvements Project, 5.38%, 9/01/36	1,065	1,138,687
		<u>11,821,117</u>

Nevada 0.2%

County of Clark Nevada, Special Assessment Bonds, Special Improvement District No. 142, Local Improvement, 6.38%, 8/01/23	580	548,465
---	-----	---------

New Jersey 3.3%

New Jersey EDA, RB: Cigarette Tax, 5.50%, 6/15/24	3,335	3,302,517
Continental Airlines Inc. Project, AMT, 6.25%, 9/15/29	3,000	2,814,300
New Jersey Health Care Facilities Financing Authority, RB, Pascack Valley Hospital Association, 6.63%, 7/01/36 (c)(d)	1,680	17
New Jersey State Housing & Mortgage Finance Agency, RB, Series AA, 6.38%, 10/01/28	1,245	1,374,455
Tobacco Settlement Financing Corp. New Jersey, Refunding RB, Series 1A, 4.50%, 6/01/23	2,500	2,387,850
		<u>9,879,139</u>

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 York 9.6%		
Metropolitan Transportation Authority, RB, Series 2008C, 6.50%, 11/15/28	\$ 9,405	\$ 10,921,933
New York City Industrial Development Agency, RB:		
British Airways Plc Project, AMT, 7.63%, 12/01/32	1,920	1,898,419
Series C, 6.80%, 6/01/28	690	725,473
Special Needs Facilities Pooled Program, Series C-1, 6.50%, 7/01/17	890	867,083
New York City Transitional Finance Authority, RB, Fiscal 2009, Series S-3, 5.25%, 1/15/39	6,700	7,112,854
New York State Dormitory Authority, ERB, Series F, 5.00%, 3/15/35	5,790	5,979,101
Westchester County Industrial Development Agency New York, RB, Special Needs Facilities Pooled Program, Series E-1, 6.50%, 7/01/17	1,000	974,250
		28,479,113
North Carolina 2.0%		
City of Charlotte North Carolina, RB, Series B, 5.00%, 7/01/38	950	1,023,739
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	1,203,203
North Carolina Medical Care Commission, RB, Duke University Health System, Series A: 5.00%, 6/01/39	630	642,417
5.00%, 6/01/42	1,400	1,421,392
North Carolina Medical Care Commission, Refunding RB, Carolina Village Project, 6.00%, 4/01/38	2,000	1,691,800
		5,982,551
Ohio 3.5%		
Buckeye Tobacco Settlement Financing Authority, RB, Asset-Backed, Senior Series A-2, 6.50%, 6/01/47	12,500	10,258,000
Pennsylvania 4.5%		
Bucks County IDA, RB, Ann's Choice Inc. Facility, Series A, 6.13%, 1/01/25	880	833,105
Lancaster County Hospital Authority, RB, Brethren Village Project, Series A, 6.50%, 7/01/40	2,000	1,940,680
Montgomery County IDA Pennsylvania, MRB, Whitemarsh Continuing Care: 6.13%, 2/01/28	470	377,316
6.25%, 2/01/35	1,090	807,995

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

Pennsylvania Economic Development Financing Authority, RB:		
Aqua Pennsylvania Inc. Project, 5.00%, 11/15/40	1,890	1,946,341
National Gypsum Co., Series B, AMT, 6.13%, 11/01/27	2,000	1,574,220
Pennsylvania Turnpike Commission, RB, Sub-Series B, 5.25%, 6/01/39	4,415	4,562,991
Philadelphia Authority for Industrial Development, RB, Commercial Development, AMT, 7.75%, 12/01/17	1,265	1,266,379
		<u>13,309,027</u>

Puerto Rico 2.7%		
Commonwealth of Puerto Rico, GO, Refunding, Public Improvement, Series C, 6.00%, 7/01/39	2,990	3,149,068
Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.50%, 8/01/44	4,255	4,806,916
		<u>7,955,984</u>

Municipal Bonds	Par (000)	Value
Tennessee 0.7%		
Johnson City Health & Educational Facilities Board, RB, Appalachian Christian Village Project, Series A, 6.00%, 2/15/24	\$ 1,000	\$ 964,490
Rutherford County Health & Educational Facilities Board, RB, Ascension Health Senior Credit Group, 5.00%, 11/15/40	1,025	1,043,665
		<u>2,008,155</u>

Texas 10.3%		
Brazos River Authority, Refunding RB, AMT:		
TXU Electric Co. Project, Series C, 5.75%, 5/01/36	2,740	2,663,554
Texas Utility Co., Series, 7.70%, 4/01/33	1,500	893,250
Brazos River Harbor Navigation District, Refunding RB, Dow Chemical Co. Project, Series A7, AMT, 6.63%, 5/15/33	5,800	5,892,278
City of Houston Texas, RB, Special Facilities, Continental Airlines, Series E, AMT, 6.75%, 7/01/21	4,820	4,803,371
Guadalupe-Blanco River Authority, RB, E.I. du Pont de Nemours & Co. Project, AMT, 6.40%, 4/01/26	2,250	2,251,688
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, B, 7.25%, 12/01/35	2,000	2,254,340
North Texas Tollway Authority, Refunding RB, First Tier, Series A, 6.25%, 1/01/39	7,000	7,733,250
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien, Note Mobility, 6.88%, 12/31/39	3,875	4,048,290
		<u>30,540,021</u>

U.S. Virgin Islands 2.1%		
United States Virgin Islands, Refunding RB, Senior Secured, Hovensa Coker Project, AMT,	6,000	6,078,240

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

6.50%, 7/01/21		
Utah 1.0%		
City of Riverton Utah, RB, IHC Health Services Inc., 5.00%, 8/15/41	2,780	2,827,343
Virginia 2.1%		
Fairfax County EDA, Refunding RB, Goodwin House Inc.:		
5.13%, 10/01/37	1,000	966,390
5.13%, 10/01/42	3,440	3,290,738
Tobacco Settlement Financing Corp. Virginia, Refunding RB, Senior Series B1, 5.00%, 6/01/47	2,905	1,999,599
		<u>6,256,727</u>
Washington 3.5%		
Energy Northwest, Refunding RB, Series B, 7.13%, 7/01/16	5,000	6,255,800
Washington Health Care Facilities Authority, Refunding RB, Catholic Health Initiatives, Series D, 6.38%, 10/01/36	3,700	4,077,992
		<u>10,333,792</u>
Wisconsin 6.0%		
State of Wisconsin, Refunding RB, Series A, 6.00%, 5/01/36	7,100	7,892,360
Wisconsin Health & Educational Facilities Authority, RB:		
Ascension Health Senior Credit Group, 5.00%, 11/15/33	2,465	2,511,786
SynergyHealth Inc., 6.00%, 11/15/32	2,215	2,279,191
Wisconsin Housing & EDA, Refunding RB, AMT:		
Series A, 5.63%, 3/01/31	2,505	2,593,752
Series C, 4.88%, 3/01/36	2,720	2,572,766
		<u>17,849,855</u>
Total Municipal Bonds 129.0%		<u>381,142,026</u>

See Notes to Financial Statements.

Schedule of Investments (continued)

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

Municipal Bonds Transferred to Tender Option Bond Trusts (f)	Par (000)	Value
California 3.3%		
Bay Area Toll Authority, Refunding RB, San Francisco Bay Area, Series F-1, 5.63%, 4/01/44	\$ 3,271	\$ 3,560,827
California Educational Facilities Authority, RB, University of Southern California, Series A, 5.25%, 10/01/18	2,610	2,798,755
Los Angeles Community College District California, GO, Election of 2001, Series A (AGM), 5.00%, 8/01/32	2,290	2,344,365
San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33	1,077	1,130,826
		<u>9,834,773</u>
Colorado 0.8%		
Colorado Health Facilities Authority, Refunding RB, Catholic Healthcare, Series A, 5.50%, 7/01/34	2,129	2,258,299
Connecticut 2.2%		
Connecticut State Health & Educational Facility Authority, RB, Yale University, Series Z-3, 5.05%, 7/01/42	6,000	6,343,020
Illinois 1.6%		
City of Chicago Illinois, Refunding RB, Second Lien (AGM), 5.25%, 11/01/33	1,320	1,396,533
Illinois State Toll Highway Authority, RB, Series B, 5.50%, 1/01/33	2,999	3,258,889
		<u>4,655,422</u>
Maryland 0.8%		
Maryland State Transportation Authority, RB, Transportation Facility Project (AGM), 5.00%, 7/01/41	2,290	2,418,698
Massachusetts 3.6%		
Massachusetts School Building Authority, RB, Series A (AGM), 5.00%, 8/15/30	10,000	10,472,100
New Hampshire 0.7%		
New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth College, 5.25%, 6/01/39	2,009	2,181,212
New York 2.8%		
New York City Municipal Water Finance Authority, RB: Series DD, 5.00%, 6/15/37	6,299	6,589,646
Series FF-2, 5.50%, 6/15/40	1,575	1,751,073

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

		8,340,719
North Carolina 2.2%		
North Carolina Capital Facilities Finance Agency, Refunding RB, Duke University Project, Series A, 5.00%, 10/01/41	6,239	6,488,836
Ohio 5.7%		
Ohio Higher Educational Facility Commission, Refunding RB, Hospital, Cleveland Clinic Health, Series A, 5.25%, 1/01/33	2,400	2,485,584
State of Ohio, Refunding RB, Cleveland Clinic Health, Series A, 5.50%, 1/01/39	13,840	14,459,617
		16,945,201
South Carolina 1.8%		
South Carolina State Public Service Authority, RB, Santee Cooper, Series A, 5.50%, 1/01/38	4,995	5,439,755
Texas 6.6%		
Harris County Health Facilities Development Corp., Refunding RB, School Health Care System, Series B, 5.75%, 7/01/27 (e)	10,000	12,253,000
Texas Department of Housing & Community Affairs, MRB, Series B, AMT (GNMA), 5.25%, 9/01/32	4,352	4,396,071
Texas State University Systems, Refunding RB (AGM), 5.00%, 3/15/30	2,743	2,840,624
		19,489,695
Municipal Bonds Transferred to Tender Option Bond Trusts (f)	Par (000)	Value
Washington 5.9%		
Central Puget Sound Regional Transit Authority, RB, Series A: 5.00%, 11/01/34	\$ 5,000	\$ 5,228,950
5.00%, 11/01/36	4,000	4,183,160
(AGM), 5.00%, 11/01/32	7,693	8,096,207
		17,508,317
Wisconsin 0.9%		
Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community Health Inc., 5.25%, 4/01/39	2,499	2,560,125
Total Municipal Bonds Transferred to Tender Option Bond Trusts 38.9%		114,936,172
Total Long-Term Investments (Cost \$478,121,505) 167.9%		496,078,198

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

Short-Term Securities	Shares	
FFI Institutional Tax-Exempt Fund, 0.25% (g)(h)	552,231	552,231
Total Short-Term Securities (Cost \$552,231) 0.2%		552,231
Total Investments (Cost \$478,673,736*) 168.1%		496,630,429
Liabilities in Excess of Other Assets (0.8)%		(2,491,867)
Liability for Trust Certificates, Including		
Interest Expense and Fees Payable (19.9)%		(58,645,469)
Preferred Shares, at Redemption Value (47.4)%		(140,027,753)
Net Assets Applicable to Common Shares 100.0%		\$ 295,465,340

* The cost and unrealized appreciation (depreciation) of investments as of April 30, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 419,909,388
Gross unrealized appreciation	\$ 29,509,255
Gross unrealized depreciation	(11,383,729)
Net unrealized appreciation	\$ 18,125,526

(a) When-issued security. Unsettled when-issued transactions were as follows:

Counterparty	Value	Unrealized Appreciation
Goldman Sachs Bank USA	\$ 3,598,424	\$ 20,818

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

Affiliate	Shares Held at April 30, 2009	Net Activity	Shares Held at April 30, 2010	Income
FFI Institutional Tax-Exempt Fund		552,231	552,231	\$ 8,720

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

See Notes to Financial Statements.

Schedule of Investments (concluded)

BlackRock MuniVest Fund II, Inc. (MVT)

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 April 30, 2010 in determining the fair valuation of the Fund's investments:

Valuation Inputs	Investments in Securities			Total
	Level 1	Level 2	Level 3	
Assets:				
Long-Term Investments ¹		\$ 496,078,198		\$ 496,078,198
Short-Term Securities	\$ 552,231			552,231
Total	\$ 552,231	\$ 496,078,198		\$ 496,630,429

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

See Notes to Financial Statements.

Statements of Assets and Liabilities

April 30, 2010	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 Insured Fund, Inc. (MUS)	BlackRock Muni Intermediate Duration Fund, Inc. (MUI)	BlackRock MuniVest Fund II, Inc. (MVT)
Assets								
Investments at value unaffiliated ¹	\$ 188,254,362	\$ 273,732,712	\$ 510,683,835	\$ 343,111,215	\$ 252,146,795	\$ 278,989,984	\$ 899,619,866	\$ 496,078,198
Investments at value affiliated ²	648,958	149,925	7,207,423	3,354,654	607,735	8,653,666	17,541,876	552,231
Cash	115,496							
Interest receivable	3,816,134	5,361,012	7,396,043	5,853,910	4,065,705	4,225,986	13,964,064	8,785,740
Investments sold receivable	1,684,909	3,590,647		90,000	55,000	200,056	2,014,613	346,927
Paydown receivable	9,408	13,440						
Income receivable affiliated							327	
Prepaid expenses	16,684	21,259	41,393	22,162	24,559	20,167	74,081	39,047
Other assets							86,366	
Total assets	194,545,951	282,868,995	525,328,694	352,431,941	256,899,794	292,089,859	933,301,193	505,802,143
Accrued Liabilities								
Bank overdraft							56,017	
Investments purchased payable	2,602,255	3,777,431	1,218,450	6,851,260	5,009,501		24,373,136	9,602,018
Income dividends payable Common Shares	879,176	1,320,236	1,674,083	1,196,794	899,449	954,104	2,491,288	1,763,557
Investment advisory fees payable	107,797	132,566	227,243	164,372	119,837	117,500	393,921	214,741
Interest expense and fees payable	4,964	7,447	69,928	32,126	25,774	26,330	56,297	49,954
Other affiliates payable	1,163	1,689	3,231	2,106	1,533	1,795	5,588	3,043
Officers and Directors fees payable	499	433	733	479	352	595	88,087	1,007
Other accrued expenses payable	42,531	42,307	65,760	56,570	47,381	51,738	91,149	79,215
Total accrued liabilities	3,638,385	5,282,109	3,259,428	8,303,707	6,103,827	1,152,062	27,555,483	11,713,535
Other Liabilities								
Trust certificates ³	7,285,446	10,755,646	59,394,596	41,288,466	32,019,794	31,955,414	57,348,814	58,595,515
Total Liabilities	10,923,831	16,037,755	62,654,024	49,592,173	38,123,621	33,107,476	84,904,297	70,309,050

Preferred Shares at Redemption Value

\$25,000 per share liquidation preference, plus unpaid dividends ^{4,5}	142,591,476	83,706,366	55,054,350	87,005,179	287,257,042	140,027,753
---	-------------	------------	------------	------------	-------------	-------------

Net Assets Applicable to Common Shareholders

\$ 183,622,120	\$ 266,831,240	\$ 320,083,194	\$ 219,133,402	\$ 163,721,823	\$ 171,977,204	\$ 561,139,854	\$ 295,465,340
----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------

¹ Investments at cost unaffiliated

\$ 191,036,266	\$ 278,348,530	\$ 501,696,145	\$ 336,165,825	\$ 245,353,975	\$ 271,246,767	\$ 880,296,838	\$ 478,121,505
----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------

² Investments at cost affiliated

\$ 648,958	\$ 149,925	\$ 7,207,423	\$ 3,354,654	\$ 607,735	\$ 8,653,666	\$ 17,541,876	\$ 552,231
------------	------------	--------------	--------------	------------	--------------	---------------	------------

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	4,320
----------------------------	-------

Par value \$0.10 per share	1,128	3,348	2,202	3,480	11,487	1,280
----------------------------	-------	-------	-------	-------	--------	-------

⁵ Preferred Shares authorized

7,480	5,000	3,480	5,360	12,800	7,000
-------	-------	-------	-------	--------	-------

See Notes to Financial Statements.

Statements of Assets and Liabilities (concluded)

April 30, 2010	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 Insured Fund, Inc. (MUS)	BlackRock Muni Intermediate Duration Fund, Inc. (MUI)	BlackRock MuniVest Fund II, Inc. (MVT)
Net Assets Applicable to Common Shareholders Consist of								
Paid-in capital ^{6,7}	\$ 194,462,599	\$ 295,792,977	\$ 314,556,353	\$ 207,234,061	\$ 153,564,327	\$ 173,657,513	\$ 540,501,506	\$ 280,239,101
Undistributed net investment income	1,404,894	825,801	5,467,206	3,774,667	3,333,318	3,457,495	9,085,845	5,098,804
Accumulated net realized gain (loss)	(9,463,469)	(25,171,720)	(8,928,055)	1,179,284	31,358	(12,881,021)	(7,770,525)	(7,829,258)
Net unrealized appreciation/depreciation	(2,781,904)	(4,615,818)	8,987,690	6,945,390	6,792,820	7,743,217	19,323,028	17,956,693
Net Assets Applicable to Common Shareholders	\$ 183,622,120	\$ 266,831,240	\$ 320,083,194	\$ 219,133,402	\$ 163,721,823	\$ 171,977,204	\$ 561,139,854	\$ 295,465,340
Net Asset Value Applicable to Common Shareholders								
Net asset value per share	\$ 9.19	\$ 12.63	\$ 10.90	\$ 15.75	\$ 14.65	\$ 13.34	\$ 14.75	\$ 14.41
⁶ Common shares outstanding, \$0.10 par value	19,981,270	21,123,770	29,369,874	13,916,205	11,173,277	12,893,293	38,034,934	20,506,477
⁷ Common Shares authorized	150 Million	200 Million	200 Million	200 Million	200 Million	200 Million	200 Million	200 Million

See Notes to Financial Statements.

Statements of Operations

Year Ended April 30, 2010	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 Insured Fund, Inc. (MUS)	BlackRock Muni Intermediate Duration Fund, Inc. (MUI)	BlackRock MuniVest Fund II, Inc. (MVT)
Investment Income								
Interest	\$ 12,891,160	\$ 18,606,658	\$ 25,783,574	\$ 18,343,903	\$ 13,344,126	\$ 14,025,306	\$ 44,770,058	\$ 27,524,162
Income affiliated	2,997	4,762	20,949	13,016	8,405	28,477	30,641	8,720
Total income	12,894,157	18,611,420	25,804,523	18,356,919	13,352,531	14,053,783	44,800,699	27,532,882
Expenses								
Investment advisory	1,167,661	1,436,373	2,569,625	1,816,643	1,325,091	1,583,094	4,857,791	2,389,853
Accounting services	47,367	75,115	131,590	87,643	69,845	76,855	216,437	142,216
Transfer agent	37,125	37,795	62,125	47,235	37,073	37,179	90,358	58,528
Professional	35,212	35,920	54,812	63,418	57,081	63,836	90,339	64,451
Officer and Directors	20,754	29,863	37,290	24,728	18,564	20,299	89,673	33,372
Custodian	11,876	15,202	26,774	18,104	14,253	14,977	42,521	24,295
Printing	10,636	15,144	27,219	17,692	19,047	15,301	39,503	24,944
Registration	9,504	9,221	10,074	9,330	9,178	9,330	12,969	9,558
Commissions for Preferred Shares			219,185	129,948	84,752	133,156	437,803	212,798
Miscellaneous	42,767	34,024	89,038	70,582	64,107	66,591	124,411	91,094
Total expenses excluding interest expense and fees	1,382,902	1,688,657	3,227,732	2,285,323	1,698,991	2,020,618	6,001,805	3,051,109
Interest expense and fees ¹	71,622	105,788	482,899	292,976	227,314	254,595	474,692	410,606
Total expenses	1,454,524	1,794,445	3,710,631	2,578,299	1,926,305	2,275,213	6,476,497	3,461,715
Less fees waived by advisor	(1,115)	(1,650)	(9,932)	(6,077)	(4,160)	(278,115)	(558,934)	(3,780)
Total expenses after fees waived	1,453,409	1,792,795	3,700,699	2,572,222	1,922,145	1,997,098	5,917,563	3,457,935
Net investment income	11,440,748	16,818,625	22,103,824	15,784,697	11,430,386	12,056,685	38,883,136	24,074,947
Realized and Unrealized Gain (Loss)								
Net realized gain (loss) from:								
Investments	(502,612)	(319,985)	(2,621,626)	1,021,229	842,124	(277,980)	702,083	1,415,843
Financial futures contracts	(116,233)	(185,318)	106,827	(37,628)	6,150	10,952	33,850	224,015
	(618,845)	(505,303)	(2,514,799)	983,601	848,274	(267,028)	735,933	1,639,858

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

Net change in unrealized appreciation/depreciation on investments	30,737,544	43,885,403	33,008,361	32,294,227	22,414,189	12,924,699	59,229,788	45,862,257
---	------------	------------	------------	------------	------------	------------	------------	------------

Total realized and unrealized gain	30,118,699	43,380,100	30,493,562	33,277,828	23,262,463	12,657,671	59,965,721	47,502,115
------------------------------------	------------	------------	------------	------------	------------	------------	------------	------------

Dividends and Distributions to Preferred Shareholders From

Net investment income			(972,174)	(478,200)	(252,975)	(395,183)	(4,345,317)	(992,540)
Net realized gain				(21,023)				

Total Dividends and Distributions to Preferred Shareholders			(972,174)	(499,223)	(252,975)	(395,183)	(4,345,317)	(992,540)
--	--	--	-----------	-----------	-----------	-----------	-------------	-----------

Net Increase in Net Assets Applicable to Common Shareholders Resulting from Operations	\$ 41,559,447	\$ 60,198,725	\$ 51,625,212	\$ 48,563,302	\$ 34,439,874	\$ 24,319,173	\$ 94,503,540	\$ 70,584,522
---	---------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------

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)		
	Year Ended April 30, 2010	Period July 1, 2008 to April 30, 2009	Year Ended June 30, 2008	Year Ended April 30, 2010	Period June 1, 2008 to April 30, 2009	Year Ended May 31, 2008
Increase (Decrease) in Net Assets:						
Operations						
Net investment income	\$ 11,440,748	\$ 9,485,633	\$ 10,673,792	\$ 16,818,625	\$ 15,102,071	\$ 16,146,294
Net realized gain (loss)	(618,845)	(1,901,804)	116,440	(505,303)	(1,025,903)	(1,507,632)
Net change in unrealized appreciation/depreciation	30,737,544	(27,472,314)	(15,493,679)	43,885,403	(44,649,301)	(19,985,195)
Net increase (decrease) in net assets resulting from operations	41, 559,447	(19,888,485)	(4,703,447)	60,198,725	(30,573,133)	(5,346,533)
Dividends and Distributions to Shareholders From						
Net investment income	(11,310,084)	(9,259,509)	(11,460,645)	(17,164,842)	(15,527,663)	(17,002,831)
Net realized gain						(65,858)
Decrease in net assets resulting from dividends and distributions to shareholders	(11,310,084)	(9,259,509)	(11,460,645)	(17,164,842)	(15,527,663)	(17,068,689)
Capital Share Transactions						
Reinvestment of dividends and distributions	412,211	452,841	993,437	1,897,902	1,086,978	1,961,372
Net Assets Applicable to Common Shareholders						
Total increase (decrease) in net assets	30,661,574	(28,695,153)	(15,170,655)	44,931,785	(45,013,818)	(20,453,850)
Beginning of period	152,960,546	181,655,699	196,826,354	221,899,455	266,913,273	287,367,123
End of period	\$ 183,622,120	\$ 152,960,546	\$ 181,655,699	\$ 266,831,240	\$ 221,899,455	\$ 266,913,273

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

Undistributed net investment income	\$ 1,404,894	\$ 1,296,579	\$ 1,093,688	\$ 825,801	\$ 1,210,315	\$ 1,666,151
--	--------------	--------------	--------------	------------	--------------	--------------

See Notes to Financial Statements.

Statements of Changes in Net Assets (continued)

	BlackRock MuniEnhanced Fund, Inc. (MEN)			BlackRock MuniHoldings Fund, Inc. (MHD)	
	Year Ended April 30, 2010	Period February 1, 2009 to April 30, 2009	Year Ended January 31, 2009	Year Ended April 30,	
Increase (Decrease) in Net Assets Applicable to Common Shareholders:				2010	2009
Operations					
Net investment income	\$ 22,103,824	\$ 5,158,666	\$ 21,647,889	\$ 15,784,697	\$ 14,953,226
Net realized gain (loss)	(2,514,799)	(964,506)	(5,890,560)	983,601	796,686
Net change in unrealized appreciation/depreciation	33,008,361	18,357,213	(54,032,922)	32,294,227	(27,850,295)
Dividends and distributions to Preferred Shareholders from:					
Net investment income	(972,174)	(373,520)	(5,591,529)	(478,200)	(2,473,001)
Net realized gain				(21,023)	(75,129)
Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations	51,625,212	22,177,853	(43,867,122)	48,563,302	(14,648,513)
Dividends and Distributions to Common Shareholders From					
Net investment income	(18,620,500)	(3,788,714)	(15,154,855)	(13,840,853)	(11,874,169)
Net realized gain				(323,547)	(221,635)
Decrease in net assets resulting from dividends and distributions to Common Shareholders	(18,620,500)	(3,788,714)	(15,154,855)	(14,164,400)	(12,095,804)
Capital Share Transactions					
Reinvestment of dividends and distributions				49,523	
Net Assets Applicable to Common Shareholders					
Total increase (decrease) in net assets applicable to Common Shareholders	33,004,712	18,389,139	(59,021,977)	34,448,425	(26,744,317)
Beginning of period	287,078,482	268,689,343	327,711,320	184,684,977	211,429,294
End of period	\$ 320,083,194	\$ 287,078,482	\$ 268,689,343	\$ 219,133,402	\$ 184,684,977

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

Undistributed net investment income	\$ 5,467,206	\$ 2,930,536	\$ 2,372,225	\$ 3,774,667	\$ 2,334,885
-------------------------------------	--------------	--------------	--------------	--------------	--------------

See Notes to Financial Statements.

ANNUAL REPORT

APRIL 30, 2010

55

Statements of Changes in Net Assets (continued)

Increase (Decrease) in Net Assets Applicable to Common Shareholders:	BlackRock MuniHoldings Fund II, Inc. (MUH)			BlackRock MuniHoldings Insured Fund, Inc. (MUS)	
	Year Ended April 30, 2010	Period August 1, 2008 to April 30, 2009	Year Ended July 31, 2008	Year Ended April 30,	
				2010	2009
Operations					
Net investment income	\$ 11,430,386	\$ 7,995,205	\$ 11,633,362	\$ 12,056,685	\$ 11,945,370
Net realized gain (loss)	848,274	(653,515)	1,066,947	(267,028)	(8,311,813)
Net change in unrealized appreciation/depreciation	22,414,189	(12,946,433)	(13,811,243)	12,924,699	(7,075,567)
Dividends to Preferred Shareholders from net investment income	(252,975)	(1,093,524)	(2,964,352)	(395,183)	(2,507,663)
Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations	34,439,874	(6,698,267)	(4,075,286)	24,319,173	(5,949,673)
Dividends to Common Shareholders From					
Net investment income	(10,095,056)	(6,557,719)	(8,477,052)	(10,496,334)	(7,499,768)
Capital Share Transactions					
Reinvestment of dividends				93,344	
Net Assets Applicable to Common Shareholders					
Total increase (decrease) in net assets applicable to Common Shareholders	24,344,818	(13,255,986)	(12,552,338)	13,916,183	(13,449,441)
Beginning of period	139,377,005	152,632,991	165,185,329	158,061,021	171,510,462
End of period	\$ 163,721,823	\$ 139,377,005	\$ 152,632,991	\$ 171,977,204	\$ 158,061,021
Undistributed net investment income	\$ 3,333,318	\$ 2,284,534	\$ 1,985,174	\$ 3,457,495	\$ 2,284,843

See Notes to Financial Statements.

56 ANNUAL REPORT APRIL 30, 2010

Statements of Changes in Net Assets (concluded)

Increase (Decrease) in Net Assets Applicable to Common Shareholders:	BlackRock Muni Intermediate Duration Fund, Inc. (MUI)			BlackRock MuniVest Fund II, Inc. (MVT)		
	Year Ended April 30, 2010	Period June 1, 2008 to April 30, 2009	Year Ended May 31, 2008	Year Ended April 30, 2010	Period November 1, 2008 to April 30, 2009	Year Ended October 31, 2008
Operations						
Net investment income	\$ 38,883,136	\$ 33,913,505	\$ 39,370,266	\$ 24,074,947	\$ 10,876,904	\$ 22,771,036
Net realized gain (loss)	735,933	(6,621,611)	(994,843)	1,639,858	700,399	(5,886,789)
Net change in unrealized appreciation/depreciation	59,229,788	(47,262,844)	(22,744,454)	45,862,257	18,630,931	(65,016,525)
Dividends to Preferred Shareholders from net investment income	(4,345,317)	(8,817,093)	(12,598,505)	(992,540)	(1,057,535)	(6,547,531)
Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations	94,503,540	(28,788,043)	3,032,464	70,584,522	29,150,699	(54,679,809)
Dividends to Common Shareholders From						
Net investment income	(29,610,196)	(24,380,887)	(27,841,571)	(20,330,657)	(8,777,352)	(17,375,256)
Capital Share Transactions						
Reinvestment of dividends				1,628,414		1,428,596
Net Assets Applicable to Common Shareholders						
Total increase (decrease) in net assets applicable to Common Shareholders	64,893,344	(53,168,930)	(24,809,107)	51,882,279	20,373,347	(70,626,469)
Beginning of period	496,246,510	549,415,440	574,224,547	243,583,061	223,209,714	293,836,183
End of period	\$ 561,139,854	\$ 496,246,510	\$ 549,415,440	\$ 295,465,340	\$ 243,583,061	\$ 223,209,714

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

Undistributed net investment income	\$ 9,085,845	\$ 4,159,528	\$ 3,452,820	\$ 5,098,804	\$ 2,348,021	\$ 1,127,498
-------------------------------------	--------------	--------------	--------------	--------------	--------------	--------------

See Notes to Financial Statements.

ANNUAL REPORT

APRIL 30, 2010

57

Statements of Cash Flows

Year Ended April 30, 2010	BlackRock MuniEnhanced Fund, Inc. (MEN)	BlackRock MuniHoldings Fund, Inc. (MHD)	BlackRock MuniHoldings Fund II, Inc. (MUH)	BlackRock MuniHoldings Insured Fund, Inc. (MUS)	BlackRock MuniVest Fund II, Inc. (MVT)
Cash Provided by Operating Activities					
Net increase in net assets resulting from operations, excluding dividends and distributions to Preferred Shareholders	\$ 52,597,386	\$ 49,062,525	\$ 34,692,849	\$ 24,714,356	\$ 71,577,062
Adjustments to reconcile net increase in net assets resulting from operations to net cash provided by operating activities:					
(Increase) decrease in interest receivable	409,532	(267,330)	(346,963)	(405,202)	(137,528)
Increase in prepaid expenses	(8,588)	(3,827)	(5,005)	(4,795)	(4,363)
Decrease in other assets				1,310	
Increase in investment advisory fees payable	28,231	28,167	20,001	17,273	36,957
Decrease in interest expense and fees payable	(84,278)	(91,596)	(75,691)	(76,564)	(86,037)
Increase in other affiliates payable	1,197	402	297	55	551
Decrease in other accrued expenses payable	(63,062)	(5,899)	(19,469)	(6,703)	(14,771)
Increase in Officers and Directors fees payable	157	120	91	263	360
Net realized and unrealized gain	(30,386,735)	(33,315,841)	(23,256,604)	(12,646,721)	(47,278,080)
Amortization of premium and discount on investments	(1,268,256)	232,104	(222,156)	521,328	91,070
Proceeds from sales of long-term investments	115,521,029	131,637,075	95,357,817	59,976,050	140,845,699
Purchases of long-term investments	(120,956,902)	(135,956,842)	(98,798,337)	(71,659,983)	(149,116,764)
Net proceeds from sales (purchases) of short-term securities	6,095,070	(1,444,317)	(494,909)	11,673,037	(552,231)
Cash provided by operating activities	\$ 21,884,781	\$ 9,874,741	\$ 6,851,921	\$ 12,103,704	\$ 15,361,925

Cash Used for Financing Activities

Payments on redemption of Preferred Shares	(16,275,000)	(8,225,000)	(5,950,000)	(7,200,000)	(10,800,000)
Cash receipts from trust certificates	23,667,366	16,880,510	12,246,721	8,385,972	21,689,285
Cash payments for trust certificates	(10,124,307)	(5,880,000)	(4,365,000)	(2,820,000)	(7,860,211)
Cash dividends and distributions paid to Common Shareholders	(18,209,322)	(13,905,906)	(9,899,523)	(10,073,867)	(18,386,041)
Cash dividends and distributions paid to Preferred Shareholders	(980,703)	(502,406)	(252,596)	(400,224)	(999,406)
Decrease in bank overdraft				4,415	
Cash used for financing activities	(21,921,966)	(11,632,802)	(8,220,398)	(12,103,704)	(16,356,373)

Cash

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

Net decrease in cash	(37,185)	(1,758,061)	(1,368,477)	(994,448)
Cash at beginning of year	37,185	1,758,061	1,368,477	994,448

Cash at end of year

Cash Flow Information

Cash paid during the year for interest	\$ 567,177	\$ 384,572	\$ 303,005	\$ 331,159	\$ 496,643
--	------------	------------	------------	------------	------------

Noncash Financing Activities

Capital shares issued in reinvestment of dividends and distributions paid to shareholders	\$ 49,523	\$ 93,344	\$ 1,628,414
---	-----------	-----------	--------------

See Notes to Financial Statements.

Financial Highlights

BlackRock Apex Municipal Fund, Inc. (APX)

	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	\$ 7.67	\$ 9.14	\$ 9.95	\$ 9.90	\$ 9.82	\$ 9.13
Net investment income ¹	0.57	0.48	0.54	0.58	0.58	0.58
Net realized and unrealized gain (loss)	1.51	(1.48)	(0.77)	0.06	0.08	0.69
Net increase (decrease) from investment operations	2.08	(1.00)	(0.23)	0.64	0.66	1.27
Dividends from net investment income	(0.56)	(0.47)	(0.58)	(0.59)	(0.58)	(0.58)
Net asset value, end of period	\$ 9.19	\$ 7.67	\$ 9.14	\$ 9.95	\$ 9.90	\$ 9.82
Market price, end of period	\$ 8.87	\$ 7.72	\$ 9.28	\$ 10.23	\$ 10.25	\$ 9.48

Total Investment Return²

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

Ratios to Average Net Assets

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

Supplemental Data

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

Net assets, end of period (000)	\$ 183,622	\$ 152,961	\$ 181,656	\$ 196,826	\$ 194,646	\$ 192,475
Portfolio turnover	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 sales charges and include the reinvestment of dividends and distributions.

³ Aggregate total investment return.

⁴ 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.

⁵ Annualized.

See Notes to Financial Statements.

ANNUAL REPORT

APRIL 30, 2010

59

Financial Highlights

BlackRock MuniAssets Fund, Inc. (MUA)

	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	\$ 10.59	\$ 12.79	\$ 13.87	\$ 13.65	\$ 13.40	\$ 12.36
Net investment income ¹	0.80	0.72	0.78	0.82	0.81	0.81
Net realized and unrealized gain (loss)	2.06	(2.18)	(1.04)	0.24	0.27	1.04
Net increase (decrease) from investment operations	2.86	(1.46)	(0.26)	1.06	1.08	1.85
Dividends and distributions from:						
Net investment income	(0.82)	(0.74)	(0.82)	(0.84)	(0.83)	(0.81)
Net realized gain			(0.00) ²			
Total dividends and distributions	(0.82)	(0.74)	(0.82)	(0.84)	(0.83)	(0.81)
Net asset value, end of period	\$ 12.63	\$ 10.59	\$ 12.79	\$ 13.87	\$ 13.65	\$ 13.40
Market price, end of period	\$ 12.65	\$ 10.91	\$ 13.35	\$ 15.29	\$ 14.13	\$ 13.27
Total Investment Return³						
Based on net asset value	27.72%	(11.29)% ⁴	(1.90)%	7.72%	8.31%	15.65%
Based on market price	24.17%	(12.45)% ⁴	(7.12)%	14.71%	13.22%	24.39%
Ratios to Average Net Assets						
Total expenses	0.72%	0.77% ⁶	0.70%	0.68%	0.68%	0.67%
Total expenses after fees waived and paid indirectly	0.72%	0.76% ⁶	0.69%	0.68%	0.68%	0.67%
Total expenses after fees waived and paid indirectly and excluding interest expense and fees ⁵	0.67%	0.70% ⁶	0.66%	0.68%	0.68%	0.67%

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

Net investment income	6.72%	7.13% ⁶	5.81%	5.91%	5.97%	6.30%
-----------------------	-------	--------------------	-------	-------	-------	-------

Supplemental Data

Net assets, end of period (000)	\$ 266,831	\$ 221,899	\$ 266,913	\$ 287,367	\$ 280,793	\$ 273,382
Portfolio turnover	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 sales charges and include the reinvestment of dividends and distributions.

⁴ Aggregate total investment return.

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.

⁶ Annualized.

See Notes to Financial Statements.

Financial Highlights

BlackRock MuniEnhanced Fund, Inc. (MEN)

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

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

Net investment income ⁴	7.17%	7.72% ⁶	7.43%	6.85%	6.57%	6.63%
Dividends to Preferred Shareholders	0.32%	0.56% ⁶	1.92%	2.08%	1.88%	1.34%
Net investment income to Common Shareholders	6.85%	7.16% ⁶	5.51%	4.77%	4.69%	5.29%

Supplemental Data

Net assets applicable to Common Shareholders, end of period (000)	\$ 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	\$ 158,850	\$ 158,850	\$ 187,000	\$ 187,000	\$ 187,000
Portfolio turnover	23%	6%	24%	18%	31%	22%
Asset coverage per Preferred Share at \$25,000 liquidation preference, end of period	\$ 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 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 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.

⁶ Annualized.

See Notes to Financial Statements.

Financial Highlights

BlackRock MuniHoldings Fund, Inc. (MHD)

	Year Ended April 30,				
	2010	2009	2008	2007	2006
Per Share Operating Performance					
Net asset value, beginning of year	\$ 13.27	\$ 15.20	\$ 16.51	\$ 16.14	\$ 16.31
Net investment income ¹	1.13	1.07	1.16	1.17	1.16
Net realized and unrealized gain (loss)	2.39	(1.94)	(1.20)	0.42	(0.00) ²
Dividends and distributions to Preferred Shareholders from:					
Net investment income	(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	3.49	(1.06)	(0.38)	1.27	0.93
Dividends and distributions to Common Shareholders from:					
Net investment income	(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	(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 year	\$ 15.75	\$ 13.27	\$ 15.20	\$ 16.51	\$ 16.14
Market price, end of year	\$ 15.70	\$ 11.97	\$ 14.77	\$ 16.49	\$ 16.20
Total Investment Return³					
Based on net asset value	27.31%	(6.24)%	(2.08)%	8.06%	5.69%
Based on market price	40.68%	(12.97)%	(4.74)%	7.52%	7.34%
Ratios to Average Net Assets Applicable to Common Shareholders					
Total expenses ⁴	1.25%	1.65%	1.56%	1.54%	1.30%
Total expenses after fees waived and paid indirectly ⁴	1.25%	1.64%	1.56%	1.54%	1.30%
	1.11%	1.25%	1.20%	1.17%	1.15%

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

Total expenses after fees waived and paid indirectly and excluding interest expense and fees^{4,5}

Net investment income ⁴	7.67%	7.98%	7.27%	7.14%	7.15%
Dividends to Preferred Shareholders	0.24%	1.32%	1.96%	1.93%	1.45%
Net investment income to Common Shareholders	7.43%	6.66%	5.31%	5.20%	5.70%

Supplemental Data

Net assets applicable to Common Shareholders, end of year (000)	\$ 219,133	\$ 184,685	\$ 211,429	\$ 229,376	\$ 223,658
Preferred Shares outstanding at \$25,000 liquidation preference, end of year (000)	\$ 83,700	\$ 91,925	\$ 125,000	\$ 125,000	\$ 125,000
Portfolio turnover	41%	19%	30%	20%	45%
Asset coverage per Preferred Share at \$25,000 liquidation preference, end of year	\$ 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 sales charges and include the reinvestment of dividends and distributions.

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

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.

Financial Highlights

BlackRock MuniHoldings Fund II, Inc. (MUH)

	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	\$ 12.47	\$ 13.66	\$ 14.78	\$ 14.82	\$ 15.03	\$ 13.98
Net investment income ¹	1.02	0.72	1.04	1.05	1.04	1.08
Net realized and unrealized gain (loss)	2.08	(1.22)	(1.14)	(0.05)	(0.11)	1.15
Dividends to Preferred Shareholders from net investment income	(0.02)	(0.10)	(0.26)	(0.27)	(0.23)	(0.14)
Net increase (decrease) from investment operations	3.08	(0.60)	(0.36)	0.73	0.70	2.09
Dividends to Common Shareholders from net investment income	(0.90)	(0.59)	(0.76)	(0.77)	(0.91)	(1.04)
Net asset value, end of period	\$ 14.65	\$ 12.47	\$ 13.66	\$ 14.78	\$ 14.82	\$ 15.03
Market price, end of period	\$ 14.68	\$ 11.33	\$ 13.01	\$ 13.99	\$ 14.12	\$ 15.25
Total Investment Return²						
Based on net asset value	25.71%	(3.55)% ³	(2.30)%	5.08%	4.89%	15.46%
Based on market price	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	1.25%	1.60% ⁶	1.55%	1.63%	1.44%	1.27%
Total expenses after fees waived ⁴	1.25%	1.60% ⁶	1.55%	1.63%	1.44%	1.27%
Total expenses after fees waived and excluding interest expense and fees ^{4,5}	1.10%	1.22% ⁶	1.18%	1.19%	1.18%	1.19%
Net investment income ⁴	7.41%	7.84% ⁶	7.07%	6.97%	7.04%	7.38%

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

Dividends to Preferred Shareholders	0.16%	1.07% ⁶	1.79%	1.82%	1.55%	0.98%
Net investment income to Common Shareholders	7.25%	6.77% ⁶	5.28%	5.15%	5.49%	6.41%

Supplemental Data

Net assets applicable to Common Shareholders, end of period (000)	\$ 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	\$ 61,000	\$ 61,000	\$ 87,000	\$ 87,000	\$ 87,000
Portfolio turnover	41%	19%	28%	15%	49%	38%
Asset coverage per Preferred Share at \$25,000 liquidation preference, end of period	\$ 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 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 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.

⁶ Annualized.

See Notes to Financial Statements.

Financial Highlights

BlackRock MuniHoldings Insured Fund, Inc. (MUS)

	Year Ended April 30,				
	2010	2009	2008	2007	2006
Per Share Operating Performance					
Net asset value, beginning of year	\$ 12.27	\$ 13.31	\$ 14.10	\$ 13.80	\$ 14.44
Net investment income ¹	0.94	0.93	1.05	0.93	0.97
Net realized and unrealized gain (loss)	0.97	(1.20)	(0.87)	0.36	(0.50)
Dividends to Preferred Shareholders from net investment income	(0.03)	(0.19)	(0.38)	(0.36)	(0.28)
Net increase (decrease) from investment operations	1.88	(0.46)	(0.20)	0.93	0.19
Dividends to Common Shareholders from net investment income	(0.81)	(0.58)	(0.59)	(0.63)	(0.83)
Net asset value, end of year	\$ 13.34	\$ 12.27	\$ 13.31	\$ 14.10	\$ 13.80
Market price, end of year	\$ 13.40	\$ 10.87	\$ 11.97	\$ 13.13	\$ 13.10
Total Investment Return²					
Based on net asset value	16.05%	(2.52)%	(0.95)%	7.29%	1.46%
Based on market price	31.59%	(3.97)%	(4.34)%	5.25%	1.51%
Ratios to Average Net Assets Applicable to Common Shareholders					
Total expenses ³	1.36%	1.88%	1.64%	1.67%	1.65%
Total expenses after fees waived ³	1.20%	1.65%	1.51%	1.56%	1.54%
Total expenses after fees waived and excluding interest expense and fees ^{3,4}	1.04%	1.17%	1.27%	1.23%	1.24%
Net investment income ³	7.23%	7.69%	7.72%	6.62%	6.87%
Dividends to Preferred Shareholders	0.24%	1.61%	2.80%	2.59%	2.00%

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

Net investment income to Common Shareholders	6.99%	6.08%	4.92%	4.03%	4.87%
--	-------	-------	-------	-------	-------

Supplemental Data

Net assets applicable to Common Shareholders, end of year (000)	\$ 171,977	\$ 158,061	\$ 171,510	\$ 181,640	\$ 177,790
Preferred Shares outstanding at \$25,000 liquidation preference, end of year (000)	\$ 87,000	\$ 94,200	\$ 134,000	\$ 134,000	\$ 134,000
Portfolio turnover	22%	35%	57%	29%	59%
Asset coverage per Preferred Share at \$25,000 liquidation preference, end of year	\$ 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 sales charges and include the reinvestment of dividends and distributions.

³ Do not reflect the effect of dividends to Preferred Shareholders.

⁴ 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)

	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	\$ 13.05	\$ 14.45	\$ 15.10	\$ 15.07	\$ 15.51	\$ 14.52
Net investment income ¹	1.02	0.89	1.04	1.03	1.04	1.02
Net realized and unrealized gain (loss)	1.57	(1.42)	(0.63)	0.18	(0.15)	1.15
Dividends and distributions to Preferred Shareholders from:						
Net investment income	(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	2.48	(0.76)	0.08	0.89	0.64	2.04
Dividends and distributions to Common Shareholders from:						
Net investment income	(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	(0.78)	(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	\$ 14.75	\$ 13.05	\$ 14.45	\$ 15.10	\$ 15.07	\$ 15.51
Market price, end of period	\$ 14.13	\$ 11.77	\$ 13.70	\$ 14.85	\$ 14.52	\$ 13.94
Total Investment Return²						
Based on net asset value	19.85%	(4.56)% ³	0.86%	6.14%	4.71%	15.36%
Based on market price	27.29%	(9.21)% ³	(2.76)%	8.34%	12.25%	14.93%

Ratios to Average Net Assets Applicable to Common Shareholders

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

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

Supplemental Data

Net assets applicable to Common Shareholders, end of period (000)	\$ 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	\$ 320,000	\$ 320,000	\$ 320,000	\$ 285,000
Portfolio turnover	29%	13%	14%	12%	49%	54%
Asset coverage per Preferred Share at \$25,000 liquidation preference, end of period	\$ 73,857	\$ 68,207	\$ 67,941 ₇	\$ 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 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 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.

⁶ Annualized.

See Notes to Financial Statements.

Financial Highlights

BlackRock MuniVest Fund II, Inc. (MVT)

	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	\$ 11.95	\$ 10.95	\$ 14.49	\$ 15.35	\$ 15.13	\$ 15.21
Net investment income ¹	1.18	0.53	1.12	1.16	1.16	1.19
Net realized and unrealized gain (loss)	2.32	0.95	(3.49)	(0.84)	0.35	0.04
Dividends to Preferred Shareholders from net investment income	(0.05)	(0.05)	(0.32)	(0.32)	(0.29)	(0.18)
Net increase (decrease) from investment operations	3.45	1.43	(2.69)		1.22	1.05
Dividends to Common Shareholders from net investment income	(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	\$ 14.41	\$ 11.95	\$ 10.95	\$ 14.49	\$ 15.35	\$ 15.13
Market price, end of period	\$ 14.94	\$ 11.65	\$ 9.75	\$ 13.91	\$ 16.29	\$ 15.40
Total Investment Return²						
Based on net asset value	29.75%	13.71% ³	(19.33)%	(0.02)%	8.36%	6.88%
Based on market price	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	1.25%	1.51% ⁶	1.67%	1.67%	1.61%	1.35%
Total expenses after fees waived and excluding interest expense and fees ^{4,5}	1.10%	1.26% ⁶	1.16%	1.12%	1.11%	1.07%

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

Net investment income ⁴	8.72%	9.77% ⁶	8.03%	7.74%	7.70%	7.76%
Dividends to Preferred Shareholders	0.36%	0.95% ⁶	2.31%	2.11%	1.90%	1.14%
Net investment income to Common Shareholders	8.36%	8.82% ⁶	5.72%	5.63%	5.80%	6.62%

Supplemental Data

Net assets applicable to Common Shareholders, end of period (000)	\$ 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	\$ 150,800	\$ 150,800	\$ 175,000	\$ 175,000	\$ 175,000
Portfolio turnover	30%	9%	49%	43%	60%	64%
Asset coverage per Preferred Share at \$25,000 liquidation preference, end of period	\$ 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 sales charges and include the reinvestment of dividends and distributions.

³ Aggregate total investment return.

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

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.

⁶ Annualized.

See Notes to Financial Statements.

Notes to Financial Statements

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 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 the use of management accruals and estimates. Actual results may differ from these estimates. The Funds determine and make available for publication the net asset value of their Common Shares on a daily basis.

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

Valuation: The Funds' policy is to fair value their financial instruments at market value, using independent dealers or pricing services selected under the supervision of the Board of Directors (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 by a method 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 counterparty, the Funds' maximum amount of loss is the unrealized gain of the commitment, 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 the Fund (1) to cause the holders of a proportional share of the short-term floating rate certificates to tender their certificates at par, and (2) to transfer, within seven days, a corresponding share of the municipal bonds from the TOB to the Fund. The TOB may also be terminated without the consent of the Fund 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.

The cash received by the TOB from the sale of the short-term floating rate certificates, less transaction expenses, is paid to the 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.

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

Interest income 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 reported as expense and fees of the Funds. 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 April 30, 2010, the aggregate value of the underlying municipal bonds transferred to TOBs, the related liability for trust

ANNUAL REPORT

APRIL 30, 2010

67

Notes to Financial Statements (continued)

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	\$ 14,942,769	\$ 7,285,446	0.27%	0.44%
MUA	\$ 22,052,626	\$ 10,755,646	0.27%	0.44%
MEN	\$ 114,760,238	\$ 59,394,596	0.23%	0.70%
MHD	\$ 79,945,086	\$ 41,288,466	0.21%	0.40%
MUH	\$ 61,485,225	\$ 32,019,794	0.21%	0.40%
MUS	\$ 60,591,404	\$ 31,955,414	0.24%	0.49%
MUI	\$ 105,099,343	\$ 57,348,814	0.22%	0.55%
MVT	\$ 114,936,172	\$ 58,595,515	0.21%	0.43%

For the year ended April 30, 2010, the Funds' average trust certificates outstanding and the daily weighted average interest rates, including fees, were as follows:

	Average Trust Certificates Outstanding	Daily Weighted Average Interest Rates
APX	\$ 7,285,446	0.98%
MUA	\$ 10,755,646	0.98%
MEN	\$ 58,638,432	0.82%
MHD	\$ 38,497,328	0.76%
MUH	\$ 30,039,695	0.75%
MUS	\$ 32,075,306	0.79%
MUI	\$ 55,981,395	0.84%
MVT	\$ 58,606,188	0.70%

Should short-term interest rates rise, the Funds' investments in TOBs may adversely affect the Funds' investment income and distributions 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), each Fund will, consistent with SEC rules and/or certain interpretive letters issued by the SEC, segregate collateral or designate on its 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.

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

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. Interest income, including amortization of premium and accretion of discount on debt securities, is recognized on the accrual basis.

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, 2007
MVT	April 30, 2010	November 1, 2008 to April 30, 2009	October 31, 2008	October 31, 2007

The statutes of limitations on each of the Fund's 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.

Recent Accounting Standard: In January 2010, the Financial Accounting Standards Board issued amended guidance to improve disclosure about fair value measurements which will require additional disclosures about transfers into and out of Levels 1 and 2 and separate disclosures about purchases, sales, issuances and settlements in the reconciliation for fair value measurements using significant unobservable inputs (Level 3). It also clarifies existing disclosure requirements relating to the levels of disaggregation for fair value measurement and inputs and valuation techniques used to measure fair value. The amended guidance is effective for financial statements for fiscal years beginning after December 15, 2009, and interim periods within those fiscal years, except for disclosures about purchases, sales, issuances and settlements in the rollforward of activity in Level 3 fair

Notes to Financial Statements (continued)

value measurements, which are effective for fiscal years beginning after December 15, 2010 and for interim periods within those fiscal years. The impact of this guidance on the Funds' financial statements and disclosures is currently being assessed.

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 other certain 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 other certain 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 other certain 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 may engage in various portfolio investment strategies both to increase the returns of the Funds and to economically hedge, or protect, their exposure to certain risks such as credit risk, equity risk, interest rate risk and foreign currency exchange rate risk. Losses may arise if the value of the contract decreases due to an unfavorable change in the price of the underlying instrument or if the counterparty does not perform under the contract. To the extent amounts due to the Funds from their counterparties are not fully collateralized contractually or otherwise, the Funds bear the risk of loss from counterparty non-performance. See Note 1 Segregation and Collateralization for information with respect to collateral practices. In addition, each Fund manages counterparty risk by entering into agreements only with counterparties that it believes have the financial resources to honor their obligations and by monitoring the financial stability of those counterparties. Counterparty risk related to exchange-traded financial futures contracts is minimal because of the protection against defaults provided by the exchanges on which they trade.

Financial Futures Contracts: The Funds may purchase or sell 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 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
Year Ended April 30, 2010*

Net Realized Gain (Loss) From								
APX	MUA	MEN	MHD	MUH	MUS	MUI	MVT	

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

Interest rate contracts:

Financial futures contracts \$ (116,233) \$ (185,318) \$ 106,827 \$ (37,628) \$ 6,150 \$ 10,952 \$ 33,850 \$ 224,015

For the year ended April 30, 2010, the average quarterly balance of outstanding derivative financial instruments was as follows:

	APX	MUA	MEN	MHD	MUH	MUS	MUI	MVT
Financial futures contracts:								
Average number of contracts purchased	57	76	5	66	65	3	9	41
Average number of contracts sold			28	18	14			25
Average notional value of contracts purchased	\$ 6,655,465	\$ 8,897,385	\$ 517,510	\$ 7,774,177	\$ 7,567,635	\$ 316,256	\$ 977,519	\$ 4,708,160
Average notional value of contracts sold			\$ 3,295,217	\$ 2,172,472	\$ 1,636,472			\$ 2,975,992

* As of April 30, 2010, there were no financial futures contracts outstanding.

ANNUAL REPORT

APRIL 30, 2010

69

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 (including any assets attributable to the proceeds from the issuance of Preferred Shares) minus the sum of accrued liabilities 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%

The Manager has 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 year ended April 30, 2010, the waiver was \$548,132, which is included in fees waived by advisor in the Statements of Operations for MUI.

The Manager has voluntarily agreed to waive its advisory fee on the proceeds of the Preferred Shares and TOBs that exceed 35% of MUS average daily net assets. For the year ended April 30, 2010 the waiver was \$265,045, which is included in fees waived by advisor in the Statements of Operations.

The Manager has voluntarily agreed to waive its advisory fees by the amount of investment advisory fees the Funds pay to the Manager indirectly through their investment in affiliated money market funds, however the Manager does not waive its advisory fees by the amount of investment advisory fees paid through their investments in other affiliated investment companies, if any. This amount is included in fees waived by advisor in the Statements of Operations. For the year ended April 30, 2010, the amounts waived were as follows:

APX	\$ 1,115
MUA	\$ 1,650
MEN	\$ 9,932
MHD	\$ 6,077
MUH	\$ 4,160
MUS	\$ 13,070
MUI	\$ 10,802
MVT	\$ 3,780

The Manager has entered into a separate 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-CSR

For the year ended April 30, 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	\$ 3,513
MUA	\$ 5,240
MEN	\$ 10,500
MHD	\$ 6,742
MUH	\$ 4,929
MUS	\$ 5,678
MUI	\$ 17,276
MVT	\$ 9,712

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 year ended April 30, 2010, were as follows:

	Purchases	Sales
APX	\$ 81,692,636	\$ 81,411,034
MUA	\$ 116,375,763	\$ 113,445,135
MEN	\$ 121,526,558	\$ 115,394,584
MHD	\$ 134,079,969	\$ 131,559,651
MUH	\$ 97,450,043	\$ 95,372,817
MUS	\$ 67,513,197	\$ 59,398,608
MUI	\$ 269,874,942	\$ 252,543,731
MVT	\$ 157,636,220	\$ 139,603,083

Notes to Financial Statements (continued)

5. Income Tax Information:

Reclassifications: Accounting principles generally accepted in the United States of America require that certain components of net assets be adjusted to reflect permanent differences between financial and tax reporting. These reclassifications have no effect on net assets or net asset values per share. The following permanent differences as of April 30, 2010 attributable to amortization methods on fixed income securities, the expiration of capital loss carryforwards and securities in default were reclassified to the following accounts:

	APX	MUA	MEN	MHD
Paid-in capital	\$ (2,075,987)	\$ (1,831,271)	\$ (1,955,204)	
Undistributed net investment income	\$ (22,349)	\$ (38,297)	\$ 25,520	\$ (25,862)
Accumulated net realized gain (loss)	\$ 2,098,336	\$ 1,869,568	\$ 1,929,684	\$ 25,862

	MUH	MUS	MUI	MVT
Paid-in capital	\$ (623,516)			
Undistributed net investment income	\$ (33,571)	\$ 7,484	\$ (1,306)	\$ (967)
Accumulated net realized gain (loss)	\$ 657,087	\$ (7,484)	\$ 1,306	\$ 967

The tax character of distributions paid during the periods shown were as follows:

	APX	MUA	MEN	MHD
Tax-exempt income:				
Current Period	\$ 11,040,029	\$ 16,841,125	\$ 19,592,674	\$ 14,314,693
Prior Period	9,259,509	15,527,663	4,162,234	14,319,988
Two Periods Prior	11,460,645	17,002,831	20,746,384	16,178,174
Ordinary income:				
Current Period	270,055	323,717		4,360
Prior Period				27,182
Two Periods Prior		65,858		100,708
Long-term capital gains:				
Current Period				344,570
Prior Period				296,764
Two Periods Prior				1,534,274
Total distributions				
Current Period	\$ 11,310,084	\$ 17,164,842	\$ 19,592,674	\$ 14,663,623
Prior Period	\$ 9,259,509	\$ 15,527,663	\$ 4,162,234	\$ 14,643,934
Two Periods Prior	\$ 11,460,645	\$ 17,068,689	\$ 20,746,384	\$ 17,813,156

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

	MUH	MUS	MUI	MVT
Tax-exempt income:				
Current Period	\$ 10,348,031	\$ 10,891,517	\$ 33,955,513	\$ 21,323,197
Prior Period	7,352,534	10,007,431	33,025,061	9,682,717
Two Periods Prior	11,399,342	12,555,586	40,440,076	23,845,376
Ordinary income:				
Current Period				
Prior Period	298,709		172,919	152,170
Two Periods Prior	42,062			77,411
Total distributions				
Current Period	\$ 10,348,031	\$ 10,891,517	\$ 33,955,513	\$ 21,323,197
Prior Period	\$ 7,651,243	\$ 10,007,431	\$ 33,197,980	\$ 9,834,887
Two Periods Prior	\$ 11,441,404	\$ 12,555,586	\$ 40,440,076	\$ 23,922,787

ANNUAL REPORT

APRIL 30, 2010

71

Notes to Financial Statements (continued)

As of April 30, 2010, the tax components of accumulated net earnings (losses) were as follows:

	APX	MUA	MEN	MHD
Undistributed tax-exempt income	\$ 551,049		\$ 5,554,850	\$ 3,339,850
Undistributed ordinary income	114,372	\$ 217,062	3,858	295,887
Undistributed long-term net capital gains				480,423
Capital loss carryforwards	(9,374,607)	(23,870,090)	(7,638,699)	
Net unrealized gains/losses*	(2,131,293)	(5,308,709)	7,606,832	7,783,181
Total	\$ (10,840,479)	\$ (28,961,737)	\$ 5,526,841	\$ 11,899,341

	MUH	MUS	MUI	MVT
Undistributed tax-exempt income	\$ 2,851,161	\$ 3,470,637	\$ 8,395,143	\$ 4,645,246
Undistributed ordinary income	945	1,290	9,150	71
Undistributed long-term net capital gains				
Capital loss carryforwards	(189,408)	(12,611,861)	(4,998,123)	(4,929,816)
Net unrealized gains/losses*	7,494,798	7,459,625	17,232,178	15,510,738
Total	\$ 10,157,496	\$ (1,680,309)	\$ 20,638,348	\$ 15,226,239

* The differences between book-basis and tax-basis net unrealized gains/losses were attributable primarily to the tax deferral of losses on wash sales and straddles, amortization methods for premiums and discounts on fixed income securities, the accrual of income on securities in default, the deferral of post-October capital losses for tax purposes, the timing and recognition of partnership income, the treatment of residual interests in tender option bond trusts, and the deferral of compensation to directors.

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. Market and Credit Risk:

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

MEN and MUH 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 (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 interest rate and price fluctuations. Similar to credit risk, the Funds may be exposed to counterparty risk, or the risk that an entity with which the Funds have unsettled or open transactions may default. The Funds manage counterparty 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 credit and counterparty risks, consist principally of investments and cash due from counterparties. The extent of the Funds' exposure to credit and counterparty 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.

Notes to Financial Statements (continued)

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. Each 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:

	Year Ended April 30, 2010	Year Ended April 30, 2009	Prior Year Ended*
APX	49,557	53,658	103,837
MUA	163,187	95,859	146,172
MHD	3,195		
MUS	7,093		
MVT	121,196		104,666

* The prior year ended for APX is June 30, 2008, for MUA is May 31, 2008 and for MVT is October 31, 2008.

Shares issued and outstanding remained constant for MEN, MUH and MUI for the year ended April 30, 2010, the period ended April 30, 2009, the year ended January 31, 2009 for MEN, the year ended July 31, 2008 for MUH and the year ended May 31, 2008 for 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 Supplementary (the "Governing Instrument") are not satisfied.

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 April 30, 2010:

	Series	Preferred Shares	Effective Yield	Reset Frequency Days
MEN	A ¹	1,525	0.50%	28
	B ¹	1,525	0.49%	28
	C ¹	1,525	0.49%	7
	D ²	1,128	1.53%	7
MHD	A ¹	1,473	0.47%	7
	B ¹	1,473	0.47%	7
	C ²	402	1.54%	7
MUH	A ¹	1,101	0.47%	7
	B ¹	1,101	0.49%	7
MUS	A ¹	1,740	0.47%	7
	B ¹	1,740	0.49%	7
MUI	M7 ²	1,795	1.54%	7
	T7 ²	2,423	1.53%	7
	W7 ²	1,795	1.53%	7
	TH7 ²	2,423	1.53%	7
	F7 ²	1,795	1.53%	7
	TH28 ²	1,256	1.43%	28
MVT	A ¹	1,440	0.38%	28
	B ¹	1,440	0.47%	28
	C ¹	1,440	0.47%	7
	D ²	1,280	1.54%	7

¹ 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 the Kenny S&P 30-day High Grade Index rate divided by 1.00 minus the marginal tax rate.

Notes to Financial Statements (continued)

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 year ended April 30, 2010 were as follows:

	Series	Low	High	Average
MEN	A	0.34%	0.73%	0.52%
	B	0.31%	0.79%	0.45%
	C	0.24%	0.79%	0.45%
	D	1.32%	1.79%	1.50%
MHD	A	0.26%	0.79%	0.45%
	B	0.24%	0.76%	0.44%
	C	1.32%	1.82%	1.51%
MUH	A	0.26%	0.79%	0.45%
	B	0.24%	0.76%	0.44%
MUS	A	0.24%	0.76%	0.44%
	B	0.24%	0.79%	0.45%
MUI	M7	1.32%	1.82%	1.50%
	T7	1.34%	1.82%	1.51%
	W7	1.34%	1.82%	1.51%
	TH7	1.32%	1.79%	1.50%
	F7	1.32%	1.79%	1.50%
	TH28	1.34%	1.75%	1.51%
MVT	A	0.26%	0.72%	0.45%
	B	0.32%	0.75%	0.46%
	C	0.26%	0.79%	0.45%
	D	1.32%	1.82%	1.51%

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 0.24% to 1.82% for the year ended April 30, 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, holders of the Preferred Shares 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.

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

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

Preferred Shares issued and outstanding remained constant for the year ended April 30, 2010 for MUI.

During the year ended April 30, 2009, MEN, MHD, MUH, MUS, MUI 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	6/17/08	301	\$ 7,525,000
	B	6/24/08	301	\$ 7,525,000
	C	6/17/08	301	\$ 7,525,000
	D	6/27/08	223	\$ 5,575,000
MHD	A	6/25/08	582	\$ 14,550,000
	B	6/27/08	582	\$ 14,550,000
	C	6/24/08	159	\$ 3,975,000
MUH	A	6/25/08	520	\$ 13,000,000
	B	6/23/08	520	\$ 13,000,000
MUS	A	6/27/08	796	\$ 19,900,000
	B	6/24/08	796	\$ 19,900,000
MUI	M7	6/24/08	205	\$ 5,125,000
	T7	6/25/08	277	\$ 6,925,000
	W7	6/26/08	205	\$ 5,125,000
	TH7	6/27/08	277	\$ 6,925,000

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

	F7	6/23/08	205	\$ 5,125,000
	TH28	7/07/08	144	\$ 3,600,000
MVT	A	7/03/08	249	\$ 6,225,000
	B	7/10/08	249	\$ 6,225,000
	C	6/26/08	249	\$ 6,225,000
	D	6/24/08	221	\$ 5,525,000

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

Notes to Financial Statements (concluded)

Preferred Shares issued and outstanding remained constant for the year ended January 31, 2009 for MEN, the year ended July 31, 2008 for MUH, the year ended May 31, 2008 for MUI and the year ended October 31, 2008 for MVT.

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 under US GAAP 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 June 1, 2010 to Common Shareholders of record on May 14, 2010 as follows:

	Common Dividend Per Share
APX	\$0.0440
MUA	\$0.0625
MEN	\$0.0570
MHD	\$0.0860
MUH	\$0.0805
MUS	\$0.0740
MUI	\$0.0655

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

MVT

\$0.0860

The dividends declared on Preferred Shares for the period May 1, 2010 to May 31, 2010 were as follows:

	Series	Dividends Declared
MEN	A	\$ 14,569
	B	\$ 14,533
	C	\$ 13,526
	D	\$ 33,604
MHD	A	\$ 13,171
	B	\$ 12,864
	C	\$ 12,025
MUH	A	\$ 9,845
	B	\$ 9,743
MUS	A	\$ 15,196
	B	\$ 15,433
MUI	M7	\$ 53,693
	T7	\$ 72,641
	W7	\$ 53,751
	TH7	\$ 72,183
	TH28	\$ 36,324
	F7	\$ 53,659
MVT	A	\$ 11,671
	B	\$ 13,217
	C	\$ 12,817
	D	\$ 38,288

On June 1, 2010, MUI declared a dividend to Common Shareholders of record on June 15, 2010 of \$0.0680 per share.

Report of Independent Registered Public Accounting Firm

To the Shareholders and Boards of Directors of:

BlackRock Apex Municipal Fund, Inc.

BlackRock MuniAssets Fund, Inc.

BlackRock MuniEnhanced Fund, Inc.

BlackRock MuniHoldings Fund, Inc.

BlackRock MuniHoldings Fund II, Inc.

BlackRock MuniHoldings Insured Fund, Inc.

BlackRock Muni Intermediate Duration Fund, Inc.

BlackRock MuniVest Fund II, Inc.

(collectively, the Funds)

We have audited the accompanying statement of assets and liabilities of BlackRock Apex Municipal Fund, Inc., including the schedule of investments, as of April 30, 2010, and the related statement of operations for the year then ended, the statements of changes in net assets for the year then ended, the period July 1, 2008 to April 30, 2009 and the year ended June 30, 2008, and the financial highlights for each of the periods presented. We have also audited the accompanying statement of assets and liabilities of BlackRock MuniAssets Fund, Inc., including the schedule of investments, as of April 30, 2010, and the related statement of operations for the year then ended, the statements of changes in net assets for the year then ended, the period June 1, 2008 to April 30, 2009 and the year ended May 31, 2008, and the financial highlights for each of the periods presented. We have also audited the accompanying statement of assets and liabilities of BlackRock MuniEnhanced Fund, Inc., including the schedule of investments, as of April 30, 2010, and the related statements of operations and cash flows for the year then ended, the statements of changes in net assets for the year then ended, the period February 1, 2009 to April 30, 2009 and the year ended January 31, 2009, and the financial highlights for each of the periods presented. We have also audited the accompanying statements of assets and liabilities of BlackRock MuniHoldings Fund, Inc. and BlackRock MuniHoldings Insured Fund, Inc., including the schedules of investments, as of April 30, 2010, and the related statements of operations and cash flows for the year then ended, the statements of changes in net assets for each of the two years in the period then ended, and the financial highlights for each of the five years in the period then ended. We have also audited the accompanying statement of assets and liabilities of BlackRock MuniHoldings Fund II, Inc., including the schedule of investments, as of April 30, 2010, and the related statements of operations and cash flows for the year then ended, the statements of changes in net assets for the year then ended, the period August 1, 2008 to April 30, 2009 and the year ended July 31, 2008, and the financial highlights for the year then ended, the period August 1, 2008 to April 30, 2009 and for each of the three years in the period ended July 31, 2008. We have also audited the accompanying statement of assets and liabilities of BlackRock Muni Intermediate Duration Fund, Inc., including the schedule of investments, as of April 30, 2010, and the related statement of operations for the year then ended, the statements of changes in net assets for the year then ended, the period June 1, 2008 to April 30, 2009 and the year ended May 31, 2008, and the financial highlights for the year then ended, the period June 1, 2008 to April 30, 2009 and for each of the three years in the period ended May 31, 2008. We have also audited the accompanying statement of assets and liabilities of BlackRock MuniVest Fund II, Inc., including the schedule of investments, as of April 30, 2010, and the related statements of operations and cash flows for the year then ended, the statements of changes in net assets for the year then ended, the period November 1, 2008 to April 30, 2009 and the year ended October 31, 2008, and the financial highlights for each of the periods presented. These financial statements and financial highlights are the responsibility of the Funds' management. Our responsibility is to express an opinion on these financial statements and financial highlights based on our audits. The financial highlights for BlackRock MuniHoldings Fund II, Inc. for the year ended July 31, 2005 (before the restatement described in Note 8) were audited by other auditors whose report, dated September 12, 2005, expressed a qualified opinion on those financial highlights because of the errors described in Note 8. The financial highlights for BlackRock Muni Intermediate Duration Fund, Inc. for the year ended May 31, 2005 (before the restatement described in Note 8) were audited by other auditors whose report, dated July 13, 2005, expressed a qualified opinion on the financial highlights because of the errors described in Note 8.

We conducted our audits in accordance with the standards of the Public Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and financial highlights are free of material misstatement. The Funds are not required to have, nor were we engaged to perform, an audit of their internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Funds' internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. Our procedures included confirmation of securities owned as of April 30, 2010, by correspondence with the custodians and brokers; where replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

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

In our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of BlackRock Apex Municipal Fund, Inc. as of April 30, 2010, the results of its operations for the year then ended, the changes in its net assets for the year then ended, the period July 1, 2008 to April 30, 2009 and the year ended June 30, 2008, and the financial highlights for each of the periods presented, in conformity with accounting principles generally accepted in the United States of America. Additionally, in our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of BlackRock MuniAssets Fund, Inc. as of April 30, 2010, the results of its operations for the year then ended, the changes in its net assets for the year then ended, the period June 1, 2008 to April 30, 2009 and the year ended May 31, 2008, and the financial highlights for each of the periods presented, in conformity with accounting principles generally accepted in the United States of America. Additionally, in our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of BlackRock MuniEnhanced Fund, Inc. as of April 30, 2010, the results of its operations and its cash flows for the year then ended, the changes in its net assets for

Report of Independent Registered Public Accounting Firm (concluded)

the year then ended, the period February 1, 2009 to April 30, 2009 and the year ended January 31, 2009, and the financial highlights for each of the periods presented, in conformity with accounting principles generally accepted in the United States of America. Additionally, in our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial positions of BlackRock MuniHoldings Fund, Inc. and BlackRock MuniHoldings Insured Fund, Inc. as of April 30, 2010, the results of their operations and their cash flows for the year then ended, the changes in their net assets for each of the two years in the period then ended, and the financial highlights for each of the five years in the period then ended, in conformity with accounting principles generally accepted in the United States of America. Additionally, in our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of BlackRock MuniHoldings Fund II, Inc. as of April 30, 2010, the results of its operations and its cash flows for the year then ended, the changes in its net assets for the year then ended, the period August 1, 2008 to April 30, 2009 and the year ended July 31, 2008, and the financial highlights for the year then ended, the period August 1, 2008 to April 30, 2009 and for each of the three years in the period ended July 31, 2008, in conformity with accounting principles generally accepted in the United States of America. Additionally, in our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of BlackRock Muni Intermediate Duration Fund, Inc. as of April 30, 2010, the results of its operations for the year then ended, the changes in its net assets for the year then ended, the period June 1, 2008 to April 30, 2009 and for the year ended May 31, 2008, and the financial highlights for the year then ended, the period June 1, 2008 to April 30, 2009 and for each of the three years in the period ended May 31, 2008, in conformity with accounting principles generally accepted in the United States of America. Additionally, in our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of BlackRock MuniVest Fund II, Inc. as of April 30, 2010, the results of its operations and its cash flows for the year then ended, the changes in its net assets for the year then ended, the period November 1, 2008 to April 30, 2009 and the year ended October 31, 2008, and the financial highlights for each of the periods presented, in conformity with accounting principles generally accepted in the United States of America.

We also have audited the adjustments, applied by management, to restate certain financial highlights for the year ended July 31, 2005 for BlackRock MuniHoldings Fund II, Inc. and for the year ended May 31, 2005 for BlackRock Muni Intermediate Duration Fund, Inc. to correct the errors described in Note 8. These adjustments are the responsibility of the Funds' management. The audit procedures that we performed with respect to the adjustments included such tests as we considered necessary in the circumstances and were designed to obtain reasonable assurance about whether the adjustments are appropriate and have been properly applied, in all material respects, to the restated financial highlights for the year ended July 31, 2005 for BlackRock MuniHoldings Fund II, Inc. and for the year ended May 31, 2005 for BlackRock Muni Intermediate Duration Fund, Inc. We did not perform any audit procedures designed to assess whether any additional adjustments to such financial highlights might be necessary in order for such financial highlights to be presented in conformity with generally accepted accounting principles. In our opinion, the adjustments to the financial highlights for the year ended July 31, 2005 for BlackRock MuniHoldings Fund II, Inc. and for the year ended May 31, 2005 for BlackRock Muni Intermediate Duration Fund, Inc. described in Note 8 are appropriate and have been properly applied, in all material respects. However, we were not engaged to audit, review, or apply any procedures to such financial highlights other than with respect to the adjustments described in Note 8 and, accordingly, we do not express an opinion or any other form of assurance on such financial highlights.

Deloitte & Touche LLP
Princeton, New Jersey

June 28, 2010

Important Tax Information

All of the net investment income distributions paid by APX, MUA, MEN, MHD, MUH, MUS, MUI and MVT during the taxable year ended April 30, 2010 qualify as tax-exempt interest dividends for Federal income tax purposes.

The following table summarizes the taxable per share distributions paid by the following Funds during the taxable year ended April 30, 2010.

	Payable Date	Ordinary Income	Long-Term Capital Gains
Common Shareholders:			
APX	12/31/09	\$ 0.013525	
MUA	12/31/09	\$ 0.015370	
MHD	12/31/09	\$ 0.000294	\$ 0.023255
Preferred Shareholders:			
MHD Series A:	12/2/09	\$ 0.05	\$ 3.32
	12/9/09	\$ 0.02	\$ 2.04
MHD Series B:	11/27/09	\$ 0.05	\$ 3.32
	12/4/09	\$ 0.02	\$ 2.23
MHD Series C:	12/1/09	\$ 0.14	\$ 11.03
	12/8/09	\$ 0.02	\$ 1.29

Automatic Dividend Reinvestment Plans

Pursuant to each Fund's Dividend Reinvestment Plan (the Plan), common shareholders are automatically enrolled to have all distributions of dividends and capital gains reinvested by BNY Mellon Shareowner Services for APX, MUA, MHD, MUH, MUS and MVT and Computershare Trust Company, N.A. for MEN and MUI (individually, the Plan Agent or together, the Plan Agents) in the respective Fund's shares pursuant to the Plan. Shareholders who do not participate in the Plan will receive all distributions in cash paid by check and mailed directly to the shareholders of record (or if the shares are held in street or other nominee name, then to the nominee) by the Plan Agent, which serves as agent for the shareholders in administering the Plan.

After the Funds declare a dividend or determine to make a capital gain distribution, the Plan Agent will acquire shares for the participants accounts, depending upon the following circumstances, either (i) through receipt of unissued but authorized shares from the Fund (newly issued shares) or (ii) by purchase of outstanding shares on the open market, on the Fund's primary exchange or elsewhere (open-market purchases). If, on the dividend payment date, the net asset value per share (NAV) is equal to or less than the market price per share plus estimated brokerage commissions (such condition often referred to as a market premium), the Plan Agent will invest the dividend amount in newly issued shares on behalf of the participants. The number of newly issued shares to be credited to each participant's account will be determined by dividing the dollar amount of the dividend by the NAV on the date the shares are issued. However, if the NAV is less than 95% of the market price on the payment date, the dollar amount of the dividend will be divided by 95% of the market price on the payment date. If, on the dividend payment date, the NAV is greater than the market value per share plus estimated brokerage commissions (such condition often referred to as a market discount), the Plan Agent will invest the dividend amount in shares acquired on behalf of the participants in open-market purchases. If the Plan Agents are unable to invest the full dividend amount in open market purchases, or if the market discount shifts to a market premium during the purchase period, the Plan Agents will invest any un-invested portion in newly issued shares.

Participation in the Plan is completely voluntary and may be terminated or resumed at any time without penalty by notice if received and processed by the Plan Administrator prior to the dividend record date; otherwise such termination or resumption will be effective with respect to any subsequently declared dividend or other distribution.

The Plan Agent's fees for the handling of the reinvestment of dividends and distributions will be paid by each Fund. However, each participant will pay a pro rata share of brokerage commissions incurred with respect to the Plan Agent's open market purchases in connection with the reinvestment of dividends and distributions. The automatic reinvestment of dividends and distributions will not relieve participants of any federal income tax that may be payable on such dividends or distributions.

Each Fund reserves the right to amend or terminate the Plan. There is no direct service charge to participants in the Plan; however, each Fund reserves the right to amend the Plan to include a service charge payable by the participants. Participants that request a sale of shares through Computershare Trust Company, N.A. are subject to a \$2.50 sales fee and a \$0.15 per share sold brokerage commission. Participants that request a sale of shares through BNY Mellon Shareowner Services are subject to a \$0.02 per share sold brokerage commission. All correspondence concerning the Plan should be directed to the respective Plan Agent: BNY Mellon Shareowner Services, P.O. Box 358035, Pittsburgh, PA 15252-8035, Telephone: (866) 216-0242 for shareholders of APX, MUA, MHD, MUH, MUS and MVT or Computershare Trust Company, N.A., P.O. Box 43078, Providence, RI 02940-3078, Telephone: (800) 699-1BFM or overnight correspondence should be directed to the Plan Agent at 250 Royall Street, Canton, MA 02021 for shareholders of MEN and MUI.

Officers and Directors

Name, Address and Year of Birth	Position(s) Held with Funds	Length of Time Served as a Director ²	Principal Occupation(s) During Past Five Years	Number of BlackRock-Advised Registered Investment Companies (RICs) Consisting of Investment Portfolios (Portfolios) Overseen	Public Directorships
Non-Interested Directors¹					
Richard E. Cavanagh 55 East 52nd Street New York, NY 10055 1946	Chairman of the Board and Director	Since 2007	Trustee, Aircraft Finance Trust from 1999 to 2009; Director, The Guardian Life Insurance Company of America since 1998; Trustee, Educational Testing Service from 1997 to 2009 and Chairman thereof from 2005 to 2009; Senior Advisor since 2008 and Director since 1996, The Fremont Group since 2008 and Director thereof since 1996; Adjunct Lecturer, Harvard University since 2007; Formerly President and Chief Executive Officer of The Conference Board, Inc. (global business research organization) from 1995 to 2007.	99 RICs consisting of 97 Portfolios	Arch Chemical (chemical and allied products)
Karen P. Robards 55 East 52nd Street New York, NY 10055 1950	Vice Chair of the Board, Chair of the Audit Committee and Director	Since 2007	Partner of Robards & Company, LLC (financial advisory firm) since 1987; Co-founder and Director of the Cooke Center for Learning and Development (a not-for-profit organization) since 1987; Formerly Director of Enable Medical Corp. from 1996 to 2005; Formerly an investment banker at Morgan Stanley from 1976 to 1987.	99 RICs consisting of 97 Portfolios	AtriCure, Inc. (medical devices); Care Investment Trust, Inc. (health care real estate investment trust)
Frank J. Fabozzi 55 East 52nd Street New York, NY 10055 1948	Director and Member of the Audit Committee	Since 2007	Consultant/Editor of The Journal of Portfolio Management since 2006; Professor in the Practice of Finance and Becton Fellow, Yale University, School of Management, since 2006; Formerly Adjunct Professor of Finance and Becton Fellow, Yale University from 1994 to 2006.	99 RICs consisting of 97 Portfolios	None
Kathleen F. Feldstein 55 East 52nd Street New York, NY 10055 1941	Director	Since 2007	President of Economics Studies, Inc. (private economic consulting firm) since 1987; Chair, Board of Trustees, McLean Hospital from 2000 to 2008 and Trustee Emeritus thereof since	99 RICs consisting of 97 Portfolios	The McClatchy Company (publishing); Bell South (telecommunications); Knight Ridder

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

2008; Member of the Board of Partners Community Healthcare, Inc. from 2005 to 2009; Member of the Corporation of Partners HealthCare since 1995; Trustee, Museum of Fine Arts, Boston since 1992; Member of the Visiting Committee to the Harvard University Art Museum since 2003; Director, Catholic Charities of Boston since 2009. (publishing)

James T. Flynn 55 East 52nd Street New York, NY 10055 1939	Director and Member of the Audit Committee	Since 2007	Formerly Chief Financial Officer of JPMorgan & Co., Inc. from 1990 to 1995.	99 RICs consisting of 97 Portfolios	None
Jerrold B. Harris 55 East 52nd Street New York, NY 10055 1942	Director	Since 2007	Trustee, Ursinus College since 2000; Director, Troemner LLC (scientific equipment) since 2000. Director of Delta Waterfowl Foundation since 2001; President and Chief Executive Officer, VWR Scientific Products Corporation from 1990 to 1999.	99 RICs consisting of 97 Portfolios	BlackRock Kelso Capital Corp. (business develop- ment company)

Officers and Directors (continued)

Name, Address and Year of Birth	Position(s) Held with Funds	Length of Time Served as a Director ²	Principal Occupation(s) During Past Five Years	Number of BlackRock-Advised Registered Investment Companies (RICs) Consisting of Investment Portfolios (Portfolios) Overseen	Public Directorships
Non-Interested Directors¹ (concluded)					
R. Glenn Hubbard 55 East 52nd Street New York, NY 10055 1958	Director	Since 2007	Dean of Columbia Business School since 2004; Columbia faculty member since 1988; Formerly Co-Director of Columbia Business School's Entrepreneurship Program from 1997 to 2004; Formerly Chairman of the U.S. Council of Economic Advisers under the President of the United States from 2001 to 2003; Chairman, Economic Policy Committee of the OECD from 2001 to 2003.	99 RICs consisting of 97 Portfolios	ADP (data and information services); KKR Financial Corporation (finance); Metropolitan Life Insurance Company (insurance)
W. Carl Kester 55 East 52nd Street New York, NY 10055 1951	Director and Member of the Audit Committee	Since 2007	George Fisher Baker Jr. Professor of Business Administration, Harvard Business School; Deputy Dean for Academic Affairs since 2006; Unit Head, Finance, Harvard Business School from 2005 to 2006; Senior Associate Dean and Chairman of the MBA Program of Harvard Business School from 1999 to 2005; Member of the faculty of Harvard Business School since 1981; Independent Consultant since 1978.	99 RICs consisting of 97 Portfolios	None

¹ Directors serve until their resignation, removal or death, or until December 31 of the year in which they turn 72.

² Date shown is the earliest date a person has served for the Funds covered by this annual report. Following the combination of Merrill Lynch Investment Managers, L.P. (MLIM) and BlackRock, Inc. (BlackRock) in September 2006, the various legacy MLIM and legacy BlackRock Fund boards were realigned and consolidated into three new Fund boards in 2007. As a result, although the chart shows directors as joining the Funds' board in 2007, each director first became a member of the board of directors of other legacy MLIM or legacy BlackRock Funds as follows: Richard E. Cavanagh, 1994; Frank J. Fabozzi, 1988; Kathleen F. Feldstein, 2005; James T. Flynn, 1996; Jerrold B. Harris, 1999; R. Glenn Hubbard, 2004; W. Carl Kester, 1995; and Karen P. Robards, 1998.

Interested Directors³

<p>Richard S. Davis 55 East 52nd Street New York, NY 10055 1945</p>	<p>Director</p>	<p>Since 2007</p>	<p>Managing Director, BlackRock, Inc. since 2005; Formerly Chief Executive Officer, State Street Research & Management Company from 2000 to 2005; Formerly Chairman of the Board of Trustees, State Street Research Mutual Funds from 2000 to 2005.</p>	<p>169 RICs consisting of 298 Portfolios</p>	<p>None</p>
<p>Henry Gabbay 55 East 52nd Street New York, NY 10055 1947</p>	<p>Director</p>	<p>Since 2007</p>	<p>Formerly Consultant, BlackRock, Inc. from 2007 to 2008; Formerly Managing Director, BlackRock, Inc. from 1989 to 2007; Formerly Chief Administrative Officer, BlackRock Advisors, LLC from 1998 to 2007; Formerly President of BlackRock Funds and BlackRock Bond Allocation Target Shares from 2005 to 2007; Formerly Treasurer of certain closed-end Funds in the BlackRock fund complex from 1989 to 2006.</p>	<p>169 RICs consisting of 298 Portfolios.</p>	<p>None</p>

³ Mr. Davis is an interested person, as defined in the Investment Company Act of 1940, of the Funds based on his position with BlackRock, Inc. and its affiliates. Mr. Gabbay is an interested person of the Funds based on his former positions with BlackRock, Inc. and its affiliates as well as his ownership of BlackRock, Inc. and The PNC Financial Services Group, Inc. securities. Directors serve until their resignation, removal or death, or until December 31 of the year in which they turn 72.

Officers and Directors (concluded)

Name, Address and Year of Birth	Position(s) Held with Funds	Length of Time Served	Principal Occupation(s) During Past Five Years
Funds Officers¹			
Anne Ackerley 55 East 52nd Street New York, NY 10055 1962	President and Chief Executive Officer	Since 2009 ²	Managing Director of BlackRock, Inc. since 2000; Vice President of the BlackRock-advised Funds from 2007 to 2009; Chief Operating Officer of BlackRock's Global Client Group (GCG) since 2009; Chief Operating Officer of BlackRock's U.S. Retail Group from 2006 to 2009; Head of BlackRock's Mutual Fund Group from 2000 to 2006.
Brendan Kyne 55 East 52nd Street New York, NY 10055 1977	Vice President	Since 2009	Managing Director of BlackRock, Inc. since 2010; Director of BlackRock, Inc. from 2008 to 2009; Head of Product Development and Management for BlackRock's U.S. Retail Group since 2009, Co-head thereof from 2007 to 2009; Vice President of BlackRock, Inc. from 2005 to 2008.
Neal Andrews 55 East 52nd Street New York, NY 10055 1966	Chief Financial Officer	Since 2007	Managing Director of BlackRock, Inc. since 2006; Senior Vice President and Line of Business Head of Fund Accounting and Administration at PNC Global Investment Servicing (U.S.) Inc. from 1992 to 2006.
Jay Fife 55 East 52nd Street New York, NY 10055 1970	Treasurer	Since 2007	Managing Director of BlackRock, Inc. since 2007 and Director in 2006; Assistant Treasurer of the Merrill Lynch Investment Managers, L.P. (MLIM) and Fund Asset Management, L.P.-advised funds from 2005 to 2006; Director of MLIM Fund Services Group from 2001 to 2006.
Brian P. Kindelan 55 East 52nd Street New York, NY 10055 1959	Chief Compliance Officer	Since 2007	Chief Compliance Officer of the BlackRock-advised funds since 2007; Managing Director and Senior Counsel of BlackRock, Inc. since 2005.
Howard Surloff 55 East 52nd Street New York, NY 10055 1965	Secretary	Since 2007	Managing Director of BlackRock, Inc. and General Counsel of U.S. Funds at BlackRock, Inc. since 2006; General Counsel (U.S.) of Goldman Sachs Asset Management, L.P. from 1993 to 2006.

¹ Officers of the Funds serve at the pleasure of the Board of Directors.

² Ms. Ackerley has been President and Chief Executive Officer since 2009 and was Vice President from 2007 to 2009.

Investment Advisor
BlackRock Advisors, LLC

Wilmington, DE 19809

Sub-Advisor

BlackRock Investment
Management, LLC
Plainsboro, NJ 08536

Custodians

State Street Bank and
Trust Company³
Boston, MA 02101

The Bank of New York Mellon⁴
New York, NY 10286

Transfer Agent

Common Shares:
Computershare Trust Company, N.A.³
Providence, RI 02940

BNY Mellon Shareowner Services⁴
Jersey City, NJ 07310

Auction Agent

Preferred Shares:
The Bank of New York Mellon
New York, NY 10289

Accounting Agent

State Street Bank and
Trust Company
Princeton, NJ 08540

Independent Registered Public Accounting Firm

Deloitte & Touche LLP
Princeton, NJ 08540

Legal Counsel

Skadden, Arps, Slate,
Meagher & Flom LLP
New York, NY 10036

Address of the Funds

100 Bellevue Parkway
Wilmington, DE 19809

³ For MEN and MUI.

⁴ For APX, MUA, MHD, MUH, MUS and MVT.

Effective January 1, 2010, Kent Dixon, a
Director of the Funds, retired.

Effective March 31, 2010, G. Nicholas
Beckwith, III, a Director of the Funds, resigned.

The Funds Board extends its best wishes to both
Mr. Dixon and Mr. Beckwith.

Additional Information

Fund Certification

The Funds are listed for trading on the New York Stock Exchange (NYSE) and have filed with the NYSE their annual chief executive officer certification regarding compliance with the NYSE 's listing standards. Each Fund filed with the Securities and Exchange Commission (SEC) the certification of their chief executive officer and chief financial officer required by section 302 of the Sarbanes-Oxley Act.

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.

Additional Information (continued)

General Information

The Funds do not make available copies of their Statements of Additional Information because the Funds' shares are not continuously offered, which means that the Statement of Additional Information of each Fund has not been updated after completion of the respective Fund's offerings and the information contained in each Fund's Statement of Additional Information may have become outdated.

During the period, there were no material changes in the Funds' investment objectives or policies or to the Funds' charters or by-laws that were not approved by the shareholders or in the principal risk factors associated with investment in the Funds. There have been no changes in the persons who are primarily responsible for the day-to-day management of the Funds' portfolio.

Quarterly performance, semi-annual and annual reports and other information regarding the Funds may be found on BlackRock's website, which can be accessed at <http://www.blackrock.com>. This reference to BlackRock's website is intended to allow investors public access to information regarding the Funds and does not, and is not intended to, incorporate BlackRock's website into this report.

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 househanded 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 (the "SEC") for the first and third quarters of each fiscal year on Form N-Q. The Funds' Forms N-Q are available on the Commission'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. The Funds' Forms N-Q may also be obtained upon request and without charge by calling (800) 441-7762.

Availability of Proxy Voting Policies and Procedures

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 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 www.blackrock.com or by calling (800) 441-7762 and (2) on the SEC's website at <http://www.sec.gov>.

Additional Information (continued)

Section 19(a) Notices

The amounts and sources of distributions reported are only estimates and are not being provided for tax reporting purposes. The actual amounts and sources for tax reporting purposes will depend upon each Fund's investment experience during the year and may be subject to changes based on the tax regulations. Each Fund will send you a Form 1099-DIV each calendar year that will tell you how to report these distributions for federal income tax purposes.

	Total Fiscal Year-to-Date Cumulative Distributions by Character				% of Fiscal Year-to-Date Cumulative Distributions by Character			
	Net Investment Income	Net Realized Capital Gains	Return of Capital	Total Per Common Share	Net Investment Income	Net Realized Capital Gains	Return of Capital	Total Per Common Share
April 30, 2010								
APX	\$ 0.566525			\$ 0.566525	100%	0%	0%	100%
MUA*	\$ 0.791796		\$ 0.023574	\$ 0.815370	97%	0%	3%	100%
MHD	\$ 0.994794	\$ 0.023255		\$ 1.018049	98%	2%	0%	100%

* The Fund estimates that it has distributed more than the amount of earned income and net realized gains; therefore, a portion of the distribution may be a return of capital. A return of capital may occur, for example, when some or all of the shareholder's investment in a Fund is returned to the shareholder. A return of capital does not necessarily reflect a Fund's investment performance and should not be confused with yield or income.

Additional Information (concluded)

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.

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

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.

#CEMUN18-4/10

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

- Item 2 – Code of Ethics – The registrant (or the “Fund”) has adopted a code of ethics, as of the end of the period covered by this report, applicable to the registrant’s principal executive officer, principal financial officer and principal accounting officer, or persons performing similar functions. During the period covered by this report, there have been no amendments to or waivers granted under the code of ethics. A copy of the code of ethics is available without charge at www.blackrock.com.
- Item 3 – Audit Committee Financial Expert – The registrant’s board of directors or trustees, as applicable (the “board of directors”) has determined that (i) the registrant has the following audit committee financial experts serving on its audit committee and (ii) each audit committee financial expert is independent:
- Kent Dixon (retired effective December 31, 2009)
- Frank J. Fabozzi
- James T. Flynn
- W. Carl Kester
- Karen P. Robards

The registrant’s board of directors has determined that W. Carl Kester and Karen P. Robards qualify as financial experts pursuant to Item 3(c)(4) of Form N-CSR.

Prof. Kester has a thorough understanding of generally accepted accounting principles, financial statements and internal control over financial reporting as well as audit committee functions. Prof. Kester has been involved in providing valuation and other financial consulting services to corporate clients since 1978. Prof. Kester’s financial consulting services present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the registrant’s financial statements.

Ms. Robards has a thorough understanding of generally accepted accounting principles, financial statements and internal control over financial reporting as well as audit committee functions. Ms. Robards has been President of Robards & Company, a financial advisory firm, since 1987. Ms. Robards was formerly an investment banker for more than 10 years where she was responsible for evaluating and assessing the performance of companies based on their financial results. Ms. Robards has over 30 years of experience analyzing financial statements. She also is a member of the audit committee of one publicly held company and a non-profit organization.

Under applicable securities laws, a person determined to be an audit committee financial expert will not be deemed an “expert” for any purpose, including without limitation for the purposes of Section 11 of the Securities Act of 1933, as a result of being designated or identified as an audit committee financial expert. The designation or identification as an audit committee financial expert does not impose on such person any duties, obligations, or liabilities greater than the duties, obligations, and liabilities imposed on such person as a member of the audit committee and board of directors in the absence of such designation or identification.

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

Item 4 – Principal Accountant Fees and Services

Entity Name	(a) Audit Fees		(b) Audit-Related Fees ¹		(c) Tax Fees ²		(d) All Other Fees ³	
	Current Fiscal Year End	Previous Fiscal Year End	Current Fiscal Year End	Previous Fiscal Year End	Current Fiscal Year End	Previous Fiscal Year End	Current Fiscal Year End	Previous Fiscal Year End
BlackRock Apex Municipal Fund, Inc.	\$27,900	\$27,900	\$0	\$0	\$6,100	\$6,100	\$0	\$1,028

1 The nature of the services include assurance and related services reasonably related to the performance of the audit of financial statements not included in Audit Fees.

2 The nature of the services include tax compliance, tax advice and tax planning.

3 The nature of the services include a review of compliance procedures and attestation thereto.

(e)(1) Audit Committee Pre-Approval Policies and Procedures:

The registrant’s audit committee (the “Committee”) has adopted policies and procedures with regard to the pre-approval of services. Audit, audit-related and tax compliance services provided to the registrant on an annual basis require specific pre-approval by the Committee. The Committee also must approve other non-audit services provided to the registrant and those non-audit services provided to the registrant’s affiliated service providers that relate directly to the operations and the financial reporting of the registrant. Certain of these non-audit services that the Committee believes are a) consistent with the SEC’s auditor independence rules and b) routine and recurring services that will not impair the independence of the independent accountants may be approved by the Committee without consideration on a specific case-by-case basis (“general pre-approval”). The term of any general pre-approval is 12 months from the date of the pre-approval, unless the Committee provides for a different period. Tax or other non-audit services provided to the registrant which have a direct impact on the operation or financial reporting of the registrant will only be deemed pre-approved provided that any individual project does not exceed \$10,000 attributable to the registrant or \$50,000 for all of the registrants the Committee oversees. For this purpose, multiple projects will be aggregated to determine if they exceed the previously mentioned cost levels.

Any proposed services exceeding the pre-approved cost levels will require specific pre-approval by the Committee, as will any other services not subject to general pre-approval (e.g., unanticipated but permissible services). The Committee is informed of each service approved subject to general pre-approval at the next regularly scheduled in-person board meeting. At this meeting, an analysis of such services is presented to the Committee for ratification. The Committee may delegate to one or more of its members the authority to approve the provision of and fees for any specific engagement of permitted non-audit services, including services exceeding pre-approved cost levels.

(e)(2) None of the services described in each of Items 4(b) through (d) were approved by the audit committee pursuant to paragraph (c)(7)(i)(C) of Rule 2-01 of Regulation S-X.

(f) Not Applicable

(g) Affiliates’ Aggregate Non-Audit Fees:

Entity Name	Current Fiscal Year End	Previous Fiscal Year End
BlackRock Apex Municipal Fund, Inc.	\$16,877	\$414,628

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

(h) The registrant's audit committee has considered and determined that the provision of non-audit services that were rendered to the registrant's investment adviser (not including any non-affiliated sub-adviser whose role is primarily portfolio management and is subcontracted with or overseen by the registrant's investment adviser), and any entity controlling, controlled by, or under common control with the investment adviser that provides ongoing services to the registrant that were not pre-approved pursuant to paragraph (c)(7)(ii) of Rule 2-01 of Regulation S-X is compatible with maintaining the principal accountant's independence.

Regulation S-X Rule 2-01(c)(7)(ii) – \$10,777, 0%

Item 5 – Audit Committee of Listed Registrants – The following individuals are members of the registrant's separately-designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934 (15 U.S.C. 78c(a)(58)(A)):

Kent Dixon (retired effective December 31, 2009)

Frank J. Fabozzi

James T. Flynn

W. Carl Kester

Karen P. Robards

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 – The board of directors has delegated the voting of proxies for the Fund securities to the Fund's investment adviser ("Investment Adviser") pursuant to the Investment Adviser's proxy voting guidelines. Under these guidelines, the Investment Adviser will vote proxies related to Fund securities in the best interests of the Fund and its stockholders. From time to time, a vote may present a conflict between the interests of the Fund's stockholders, on the one hand, and those of the Investment Adviser, or any affiliated person of the Fund or the Investment Adviser, on the other. In such event, provided that the Investment Adviser's Equity Investment Policy Oversight Committee, or a sub-committee thereof (the "Oversight Committee") is aware of the real or potential conflict or material non-routine matter and if the Oversight Committee does not reasonably believe it is able to follow its general voting guidelines (or if the particular proxy matter is not addressed in the guidelines) and vote impartially, the Oversight Committee may retain an independent fiduciary to advise the Oversight Committee on how to vote or to cast votes on behalf of the Investment Adviser's clients. If the Investment Adviser determines not to retain an independent fiduciary, or does not desire to follow the advice of such independent fiduciary, the Oversight Committee shall determine how to vote the proxy after consulting with the Investment Adviser's Portfolio Management Group and/or the Investment Adviser's Legal and Compliance Department and concluding that the vote cast is in its client's best interest notwithstanding the conflict. A copy of the Fund's Proxy Voting Policy and Procedures are attached as Exhibit 99.PROXYPOL. Information on how the Fund voted proxies relating to portfolio securities during the most recent 12-month period

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

ended June 30 is available without charge, (i) at www.blackrock.com and (ii) on the SEC's website at <http://www.sec.gov>.

Item 8 – Portfolio Managers of Closed-End Management Investment Companies – as of April 30, 2010.

- (a)(1) The registrant is managed by a team of investment professionals comprised of Theodore R. Jaeckel, Jr., CFA, Managing Director at BlackRock and Walter O'Connor, Managing Director at BlackRock. Each is a member of BlackRock's municipal tax-exempt management group. Each is jointly responsible for the day-to-day management of the registrant's portfolio, which includes setting the registrant's overall investment strategy, overseeing the management of the registrant and/or selection of its investments. Messrs. Jaeckel and O'Connor have been members of the registrant's portfolio management team since 1997 and 2006, respectively.

Portfolio Manager	Biography
Theodore R. Jaeckel, Jr.	Managing Director at BlackRock, Inc. since 2006; Managing Director of Merrill Lynch Investment Managers, L.P. ("MLIM") from 2005 to 2006; Director of MLIM from 1997 to 2005.
Walter O'Connor	Managing Director of BlackRock, Inc. since 2006; Managing Director of MLIM from 2003 to 2006; Director of MLIM from 1998 to 2003.

- (a)(2) As of April 30, 2010:

(i) Name of Portfolio Manager	(ii) Number of Other Accounts Managed and Assets by Account Type Other			(iii) Number of Other Accounts and Assets for Which Advisory Fee is Performance-Based Other		
	Registered	Other Pooled	Other	Registered	Other Pooled	
	Investment	Investment		Investment	Investment	Accounts
	Companies	Vehicles	Accounts	Companies	Vehicles	Accounts
Theodore R. Jaeckel, Jr.	72 \$19.25 Billion	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
Walter O'Connor	72 \$19.25 Billion	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0

- (iv) Potential Material Conflicts of Interest

BlackRock and its affiliates (collectively, herein "BlackRock") has built a professional working environment, firm-wide compliance culture and compliance procedures and systems designed to protect against potential incentives that may favor one account over another. BlackRock has adopted policies and procedures that address the allocation of investment opportunities, execution of portfolio transactions, personal trading by employees and other potential conflicts of interest that are designed to ensure that all client accounts are treated equitably over time. Nevertheless, BlackRock furnishes investment management and advisory services to numerous clients in addition to the Fund, and BlackRock may, consistent with applicable law, make investment recommendations to other clients or accounts (including accounts which are hedge funds or have performance or higher fees paid to BlackRock, or in which portfolio managers have a personal interest in the receipt of such fees), which may be the same as or different from those made to the Fund. In addition, BlackRock, its affiliates and significant shareholders and any officer, director, stockholder or employee may or

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

may not have an interest in the securities whose purchase and sale BlackRock recommends to the Fund. BlackRock, or any of its affiliates or significant shareholders, or any officer, director, stockholder, employee or any member of their families may take different actions than those recommended to the Fund by BlackRock with respect to the same securities. Moreover, BlackRock may refrain from rendering any advice or services concerning securities of companies of which any of BlackRock's (or its affiliates' or significant shareholders') officers, directors or employees are directors or officers, or companies as to which BlackRock or any of its affiliates or significant shareholders or the officers, directors and employees of any of them has any substantial economic interest or possesses material non-public information. Each portfolio manager also may manage accounts whose investment strategies may at times be opposed to the strategy utilized for a fund. In this connection, it should be noted that a portfolio manager may currently manage certain accounts that are subject to performance fees. In addition, a portfolio manager may assist in managing certain hedge funds and may be entitled to receive a portion of any incentive fees earned on such funds and a portion of such incentive fees may be voluntarily or involuntarily deferred. Additional portfolio managers may in the future manage other such accounts or funds and may be entitled to receive incentive fees.

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

(a)(3) As of April 30, 2010:

Portfolio Manager Compensation Overview

BlackRock's financial arrangements with its portfolio managers, its competitive compensation and its career path emphasis at all levels reflect the value senior management places on key resources. Compensation may include a variety of components and may vary from year to year based on a number of factors. The principal components of compensation include a base salary, a performance-based discretionary bonus, participation in various benefits programs and one or more of the incentive compensation programs established by BlackRock such as its Long-Term Retention and Incentive Plan.

Base compensation. Generally, portfolio managers receive base compensation based on their seniority and/or their position with the firm. Senior portfolio managers who perform additional management functions within the portfolio management group or within BlackRock may receive additional compensation for serving in these other capacities.

Discretionary Incentive Compensation

Discretionary incentive compensation is a function of several components: the performance of BlackRock, Inc., the performance of the portfolio manager's group within BlackRock, the

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

investment performance, including risk-adjusted returns, of the firm's assets under management or supervision by that portfolio manager relative to predetermined benchmarks, and the individual's seniority, role within the portfolio management team, teamwork and contribution to the overall performance of these portfolios and BlackRock. In most cases, including for the portfolio managers of the Fund, these benchmarks are the same as the benchmark or benchmarks against which the performance of the Fund or other accounts managed by the portfolio managers are measured. BlackRock's Chief Investment Officers determine the benchmarks against which the performance of funds and other accounts managed by each portfolio manager is compared and the period of time over which performance is evaluated. With respect to the portfolio managers, such benchmarks for the Fund include a combination of market-based indices (e.g. Barclays Capital Municipal Bond Index), certain customized indices and certain fund industry peer groups.

BlackRock's Chief Investment Officers make a subjective determination with respect to the portfolio managers' compensation based on the performance of the funds and other accounts managed by each portfolio manager relative to the various benchmarks noted above. Performance is measured on both a pre-tax and after-tax basis over various time periods including 1, 3, 5 and 10-year periods, as applicable.

Distribution of Discretionary Incentive Compensation

Discretionary incentive compensation is distributed to portfolio managers in a combination of cash and BlackRock, Inc. restricted stock units which vest ratably over a number of years. The BlackRock, Inc. restricted stock units, if properly vested, will be settled in BlackRock, Inc. common stock. Typically, the cash bonus, when combined with base salary, represents more than 60% of total compensation for the portfolio managers. Paying a portion of annual bonuses in stock puts compensation earned by a portfolio manager for a given year "at risk" based on BlackRock's ability to sustain and improve its performance over future periods.

Long-Term Retention and Incentive Plan ("LTIP") – From time to time long-term incentive equity awards are granted to certain key employees to aid in retention, align their interests with long-term shareholder interests and motivate performance. Equity awards are generally granted in the form of BlackRock, Inc. restricted stock units that, once vested, settle in BlackRock, Inc. common stock. Messrs. Jaeckel and O'Connor have each received awards under the LTIP.

Deferred Compensation Program – A portion of the compensation paid to eligible BlackRock employees may be voluntarily deferred into an account that tracks the performance of certain of the firm's investment products. Each participant in the deferred compensation program is permitted to allocate his deferred amounts among the various investment options. Messrs. Jaeckel and O'Connor have each participated in the deferred compensation program.

Other compensation benefits. In addition to base compensation and discretionary incentive compensation, portfolio managers may be eligible to receive or participate in one or more of the following:

Incentive Savings Plans – BlackRock, Inc. has created a variety of incentive savings plans in which BlackRock employees are eligible to participate, including a 401(k) plan, the BlackRock Retirement Savings Plan (RSP), and the BlackRock Employee Stock Purchase Plan (ESPP). The employer contribution components of the RSP include a company match equal to 50%

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

of the first 6% of eligible pay contributed to the plan capped at \$4,000 per year, and a company retirement contribution equal to 3-5% of eligible compensation. The RSP offers a range of investment options, including registered investment companies managed by the firm. BlackRock contributions follow the investment direction set by participants for their own contributions or, absent employee investment direction, are invested into a balanced portfolio. The ESPP allows for investment in BlackRock common stock at a 5% discount on the fair market value of the stock on the purchase date. Annual participation in the ESPP is limited to the purchase of 1,000 shares or a dollar value of \$25,000. Each portfolio manager is eligible to participate in these plans.

(a)(4) *Beneficial Ownership of Securities* – April 30, 2010.

Portfolio Manager	Dollar Range of Equity Securities Beneficially Owned
Theodore R. Jaeckel, Jr.	None
Walter O'Connor	None

Item 9 – Purchases of Equity Securities by Closed-End Management Investment Company and Affiliated Purchasers – Not Applicable due to no such purchases during the period covered by this report.

Item 10 – Submission of Matters to a Vote of Security Holders – The registrant’s Nominating and Governance Committee will consider nominees to the board of directors recommended by shareholders when a vacancy becomes available. Shareholders who wish to recommend a nominee should send nominations that include biographical information and set forth the qualifications of the proposed nominee to the registrant’s Secretary. There have been no material changes to these procedures.

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 13(a)-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 – See Item 2

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-CSR

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

BlackRock Apex Municipal Fund, Inc.

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

Date: June 28, 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: June 28, 2010

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

Date: June 28, 2010
