

PUTNAM MUNICIPAL OPPORTUNITIES TRUST
Form N-CSR
December 29, 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: (811-07626)

Exact name of registrant as specified in
charter: Putnam Municipal Opportunities Trust

Address of principal executive offices: One Post Office Square, Boston, Massachusetts 02109

Name and address of agent for service: Beth S. Mazor, Vice President
One Post Office Square
Boston, Massachusetts 02109

Copy to: John W. Gerstmayr, Esq.
Ropes & Gray LLP
800 Boylston Street
Boston, Massachusetts 02199-3600

Registrant's telephone number, including area code: (617) 292-1000

Date of fiscal year end: April 30, 2011

Date of reporting period May 1, 2010 □ October 31, 2010

Item 1. Report to Stockholders:

The following is a copy of the report transmitted to stockholders pursuant to Rule 30e-1 under the Investment Company Act of 1940:

Putnam Municipal Opportunities Trust

Semiannual report 10 | 31 | 10

Message from the Trustees	1
<hr/>	
About the fund	2
<hr/>	
Performance snapshot	4
<hr/>	
Interview with your fund's portfolio manager	5
<hr/>	
Your fund's performance	10
<hr/>	
Terms and definitions	12
<hr/>	
Trustee approval of management contract	12
<hr/>	
Other information for shareholders	16
<hr/>	
Financial statements	17
<hr/>	
Shareholder meeting results	40
<hr/>	

Message from the Trustees

Dear Fellow Shareholder:

Stock markets around the world rallied strongly over the past few months, riding a rising tide of strengthening investor confidence and slowly improving economic and corporate data. Indeed, U.S. stocks delivered their best September in 71 years, and continued to add to those gains in October. Bond markets also have generated positive results for much of 2010 and continue to be a source of refuge for risk-averse investors.

It is important to recognize, however, that we may see periods of heightened market volatility as markets and economies seek more solid ground. The slow pace of the U.S. economic recovery and ongoing European sovereign debt concerns have made markets more susceptible to disappointing news. We believe, however, that Putnam's research-intensive, actively managed investment approach is well suited for this environment.

In developments affecting oversight of your fund, Barbara M. Baumann has been elected to the Board of Trustees of the Putnam Funds, effective July 1, 2010. Ms. Baumann is president and owner of Cross Creek Energy Corporation of Denver, Colorado, a strategic consultant to domestic energy firms and direct investor in energy assets. We also want to thank Elizabeth T. Kennan, who has retired from the Board of Trustees, for her many years of dedicated and thoughtful leadership.

Lastly, we would like to take this opportunity to welcome new shareholders to the fund and to thank all of our investors for your continued confidence in Putnam.

About the fund

Potential for income exempt from federal income tax

Investing in municipal bonds through a fund such as Putnam Municipal Opportunities Trust can help address a significant challenge: taxes on your investment income. While the stated yields on municipal bonds are usually lower than those of taxable bonds, the income most of these bonds pay has the advantage of being exempt from federal tax.

Municipal bonds are typically issued by states and local municipalities to raise funds for building and maintaining public facilities. The bonds are backed by the issuing city or town, by revenues collected from usage fees, or by state tax revenues. Depending on the type of backing, the bonds will have varying degrees of credit risk, which is the risk that the issuer will not be able to repay the bond.

Many municipal bonds are not rated by independent rating agencies such as Standard & Poor's and Moody's. This is primarily because many issuers decide not to pursue a rating that might be below investment grade. As a result, portfolio managers must do additional research to determine whether these bonds are prudent investments.

Once the fund has invested in a bond, the portfolio managers continue to monitor developments that affect the overall bond market, the sector, and the issuer of the bond.

The goal of this in-depth research and active management is to stay a step ahead of the industry and pinpoint opportunities for investors.

Consider these risks before investing: Lower-rated bonds may offer higher yields in return for more risk. Funds that invest in bonds are subject to certain risks including interest-rate risk, credit risk, and inflation risk. As interest rates rise, the prices of bonds fall. Long-term bonds are more exposed to interest-rate risk than short-term bonds. Unlike bonds, bond funds have ongoing fees and expenses. The fund's shares trade on a stock exchange at market prices, which may be lower than the fund's net asset value.

How do closed-end funds differ from open-end funds?

More assets at work While open-end funds need to maintain a cash position to meet redemptions, closed-end funds are not subject to redemptions and can keep more of their assets invested in the market.

Traded like stocks Closed-end fund shares are traded on stock exchanges, and their market prices fluctuate in response to supply and demand, among other factors.

Net asset value vs. market price Like an open-end fund's net asset value (NAV) per share, the NAV of a closed-end fund share is equal to the current value of the fund's assets, minus its liabilities, divided by the number of shares outstanding. However, when buying or selling closed-end fund shares, the price you pay or receive is the market price. Market price reflects current market supply and demand and may be higher or lower than the NAV.

Data is historical. Past performance does not guarantee future results. More recent returns may be less or more than those shown. Investment return and net asset value will fluctuate, and you may have a gain or a loss when you sell your shares. Performance assumes reinvestment of distributions and does not account for taxes. Fund returns in the bar chart are at NAV. See pages 5 and 10-11 for additional performance information, including fund returns at market price. Index and Lipper results should be compared with fund performance at NAV. Lipper calculates performance differently than the closed-end funds it ranks, due to varying methods for determining a fund's monthly reinvestment NAV.

**** Returns for the six-month period are not annualized, but cumulative.***

4

Interview with your fund's portfolio manager

Thalia Meehan

How did the fund and the municipal bond market perform for the semiannual period, Thalia?

For the six months ended October 31, 2010, Putnam Municipal Opportunities Trust advanced 7.09% at net asset value, topping the 3.95% return for its benchmark, the Barclays Capital Municipal Bond Index. The fund also outperformed the 6.42% average return of its peers in the Lipper General Municipal Debt Funds category [leveraged closed-end].

What role did the fund's use of leverage play in the fund's performance?

Leverage generally involves borrowing funds and investing the proceeds with the expectation of producing a return that exceeds the cost of borrowing. Unlike open-end funds, closed-end funds are permitted to engage in investment leverage by issuing preferred shares. Your fund has used this form of investment leverage, which offers opportunities for increased investment yield, while also effectively amplifying the common shareholders' exposure to the effects of both investment losses and investment gains. To the extent your fund can invest the assets attributable to leverage in securities with greater return than the cost of leverage, the use of leverage should benefit your fund's common shareholders.

Due to Federal Reserve actions that have reduced short-term borrowing costs to historical lows, and due to generally favorable municipal bond market conditions over recent periods, preferred share leverage has been generally advantageous to your fund's common shareholders over recent periods. We will continue to monitor the overall impact of preferred share leverage on your fund's portfolio.

This comparison shows your fund's performance in the context of broad market indexes for the six months ended 10/31/10. See pages 4 and 10-11 for additional fund performance information. Index descriptions can be found on page 12.

5

What was the market environment like during the reporting period?

The past six months represented a continuation of the themes that have been present in the market throughout 2010. Investors continued to allocate money away from cash and other safe assets into longer-term and higher-risk investments, while strong demand from yield-hungry investors pushed bond prices higher in the more credit-sensitive sectors of the municipal bond market.

The period was not without patches of volatility, as investors expressed concerns over the growing European debt crisis and fears that it might derail the global economic recovery. Investors were also uncertain about the inevitable withdrawal of stimulus funds around the globe, and how this process would affect growth. Those concerns subsided somewhat by the summer, as the European debt markets stabilized and the Federal Reserve Board again suggested that its easing policies would continue for an extended period. On the whole, the past six months were fairly solid for municipal bonds after a choppy start to the calendar year.

What other factors influenced the municipal bond market during the period?

Build America Bonds or "BABs" continued to have a significant impact on the municipal bond market. The program began in early 2009 as part of the federal government's stimulus package and allows states and municipalities to issue bonds in the taxable market, providing them with access to a wider range of investors. The federal government in turn subsidizes a portion of the interest payments, currently 35%. As of October 31, nearly \$90 billion worth of BABs were issued in 2010.

Credit qualities are shown as a percentage of portfolio value as of 10/31/10. A bond rated Baa or higher (MIG3/VMIG3 or higher, for short-term debt) is considered investment grade. The chart reflects Moody's ratings; percentages may include bonds or derivatives not rated by Moody's but rated by Standard & Poor's or, if unrated by S&P, by Fitch, and then included in the closest equivalent Moody's rating. Ratings will vary over time. Credit qualities are included for portfolio securities and are not included for derivative instruments and cash. The fund itself has not been rated by an independent rating agency.

6

Overall, the plan has been successful in lowering financing costs for states, and has also benefited municipal bond investors by reducing the supply of tax-exempt bonds in the market, which has led to improved supply and demand dynamics. Congress is currently considering extending the program with a slightly lower subsidy, although, as of this writing, it's unclear whether such an extension will be acted upon by the lame-duck Congress.

We also think that the health-care reform legislation should be a modest positive for the tax-exempt bond market, because it contains a 3.8% tax on capital gains, unearned interest, and dividends for individuals with income over \$200,000 or households with income over \$250,000. Municipal bond income would not be subject to the tax, and any tax increase improves the attractiveness of tax-exempt funds. Ultimately, we believe investors' tax burden is likely to head higher, and that should make municipal bonds' tax-exempt income even more attractive.

Turning back to the fund, which market segments drove performance during the semiannual period?

The biggest driver of performance was the fund's overweight position in A- and BBB-rated securities. Early in 2009, municipal bonds across the board looked extremely undervalued by historical standards, with wider spreads occurring in the lower-rated

Top ten state allocations are shown as a percentage of the fund's portfolio value as of 10/31/10. Investments in Puerto Rico represented 4.7% of net assets. Holdings will vary over time.

7

segments of the market. We targeted those opportunities by increasing the fund's exposure to BBB-rated securities throughout 2009 and continued to do so more selectively in 2010. This generally helped performance during the period. As the market recovered, the fund's position in tobacco bonds rallied sharply, placing them among the top contributors in 2009. In 2010, we began reducing our exposure to tobacco bonds for two reasons: first, to lock in their strong performance, and second, because we felt their fundamentals had become somewhat less attractive. That said, tobacco bond spreads — which measure the sector's excess yield over similar U.S. Treasuries — are currently wider than average, and we believe certain opportunities still exist within the sector.

The fund's investments in California and Puerto Rico municipal bonds also helped fund performance, as those areas of the market performed well over the past several months. In general, however, we've been limiting the fund's exposure to general obligation [G.O.] bonds, particularly those issued by local municipalities such as cities and counties, as negative headlines and potential downgrades by ratings agencies could put pressure on bond prices. Instead, we've been finding better opportunities in revenue bonds, which are secured by cash flows tied to specific projects. The health-care and utilities sectors are two areas of the market where we are overweight, and, in general, our positions helped performance over the period.

What is your outlook for the municipal bond market?

While we believe the U.S. economy will continue recovering, growth could remain muted for some time. The volatility that returned to stock and bond markets this spring, aggravated by growing concerns over

This chart shows how the fund's top weightings have changed over the past six months. Weightings are shown as a percentage of net assets. Summary information may differ from the portfolio schedule included in the financial statements due to the inclusion of derivative securities and the exclusion of as-of trades, if any, and the use of different classifications of securities for presentation purposes. Holdings will vary over time. Sector concentrations listed after the portfolio schedule in the Financial Statements section of this shareholder report are exclusive of insured status and any interest accruals and may differ from the summary information above.

Data in the chart reflect a new calculation methodology placed in effect within the past six months.

8

sovereign debt problems in Europe, appears unlikely to dissipate soon in our view. U.S. unemployment remains persistently high, while consumer and business spending have been sporadic, which has diminished many states' tax revenues. However, we believe the real risk for most municipal bonds is not default risk, but "headline risk" posed by the ongoing media coverage of state budgetary woes. We believe the financial challenges faced by states like California are significant, but can be dealt with. It's important for investors to remember that most states pass

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

a balanced budget every year, and although it took a record-setting time to do so, California recently resolved its budget impasse for the current fiscal year.

Overall, supply/demand technicals are supportive of the market, but over the near term, we believe the market will be tested by a likely increase in supply given uncertainty surrounding the BABs extension. We believe investment opportunities continue to exist in certain areas of the market, such as the BBB-rated segment, and, as always, we are monitoring the market closely, and will seek to take advantage of new opportunities as they develop.

Thank you, Thalia, for your time and insights today.

The views expressed in this report are exclusively those of Putnam Management. They are not meant as investment advice.

Please note that the holdings discussed in this report may not have been held by the fund for the entire period. Portfolio composition is subject to review in accordance with the fund's investment strategy and may vary in the future. Current and future portfolio holdings are subject to risk.

Portfolio Manager **Thalia Meehan** is Team Leader of Tax Exempt Fixed Income at Putnam. She holds a B.A. from Williams College. A CFA charterholder, Thalia joined Putnam in 1989 and has been in the investment industry since 1983.

In addition to Thalia, your fund's portfolio managers are Paul Drury and Susan McCormack.

IN THE NEWS

The Federal Reserve's "QE2" has set sail In light of what has been a tepid economic recovery, in October the Fed announced a second round of monetary stimulus via quantitative easing — dubbed QE2 by the media — involving the purchase of an additional \$600 billion of U.S. Treasury bonds through the end of June 2011. The Fed has suggested in recent months that it is particularly concerned about the prospect of deflation, which has plagued the Japanese economy for the better part of the past decade. By purchasing Treasuries, the central bank could drive down already low yields by injecting about \$75 billion a month into the capital markets. The idea behind QE2 is that the money would then be reinvested, and the expected upward pressure on asset prices could create inflationary expectations sufficient to prevent deflation from becoming a problem.

9

Your fund's performance

This section shows your fund's performance, price, and distribution information for periods ended October 31, 2010, the end of the first half of its current fiscal year. In accordance with regulatory requirements for mutual funds, we also include performance as of the most recent calendar quarter-end. Performance should always be considered in light of a fund's investment strategy. Data represents past performance. Past performance does not guarantee future results. More recent returns may be less or more than those shown. Investment return, net asset value, and market price will fluctuate, and you may have a gain or a loss when you sell your shares.

Fund performance Total return for periods ended 10/31/10

Barclays Capital **Lipper General
Municipal Debt
Funds (leveraged)**

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

	NAV	Market price	Municipal Bond Index	closed-end) category average*
Annual average				
Life of fund (since 5/28/93)	6.14%	5.67%	5.71%	5.98%
10 years	84.26	82.55	72.25	85.84
Annual average	6.30	6.20	5.59	6.36
5 years	29.86	44.28	28.84	27.01
Annual average	5.36	7.61	5.20	4.87
3 years	18.00	31.08	18.39	15.93
Annual average	5.67	9.44	5.79	5.00
1 year	13.27	19.24	7.78	13.81
6 months	7.09	10.80	3.95	6.42

Performance assumes reinvestment of distributions and does not account for taxes.

Index and Lipper results should be compared to fund performance at net asset value. Lipper calculates performance differently than the closed-end funds it ranks, due to varying methods for determining a fund's monthly reinvestment NAV.

* Over the 6-month, 1-year, 3-year, 5-year, 10-year, and life-of-fund periods ended 10/31/10, there were 63, 63, 60, 59, 42, and 33 funds, respectively, in this Lipper category.

10

Fund price and distribution information For the six-month period ended 10/31/10

Distributions

Number	6
Income ¹	\$0.3978
Capital gains ²	□
Total	\$0.3978

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Distributions □ Preferred shares	Series B (3,417 shares)	Series C (3,737 shares)
Income ¹	\$53.24	\$52.82
Capital gains ²	□	□
Total	\$53.24	\$52.82
Share value	NAV	Market price
4/30/10	\$11.99	\$11.43
10/31/10	12.42	12.25
Current yield (end of period)		
Current dividend rate ³	6.41%	6.49%
Taxable equivalent ⁴	9.86%	9.98%

The classification of distributions, if any, is an estimate. Final distribution information will appear on your year-end tax forms.

¹ For some investors, investment income may be subject to the federal alternative minimum tax. Income from federally exempt funds may be subject to state and local taxes.

² Capital gains, if any, are taxable for federal and, in most cases, state purposes.

³ Most recent distribution, excluding capital gains, annualized and divided by NAV or market price at end of period.

⁴ Assumes maximum 35% federal tax rate for 2010. Results for investors subject to lower tax rates would not be as advantageous.

Fund performance as of most recent calendar quarter

Total return for periods ended 9/30/10

	NAV	Market price
Annual average		
Life of fund (since 5/28/93)	6.18%	5.67%
10 years	86.69	82.64

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Annual average	6.44	6.21
<hr/>		
5 years	28.64	39.58
Annual average	5.17	6.90
<hr/>		
3 years	18.71	29.23
Annual average	5.88	8.92
<hr/>		
1 year	10.22	14.32
<hr/>		
6 months	9.38	10.17
<hr/>		

11

Terms and definitions

Important terms

Total return shows how the value of the fund's shares changed over time, assuming you held the shares through the entire period and reinvested all distributions in the fund.

Net asset value (NAV) is the value of all your fund's assets, minus any liabilities and the net assets allocated to any outstanding preferred shares, divided by the number of outstanding common shares.

Market price is the current trading price of one share of the fund. Market prices are set by transactions between buyers and sellers on exchanges such as the New York Stock Exchange.

Current yield is the annual rate of return earned from dividends or interest of an investment. Current yield is expressed as a percentage of the price of a security, fund share, or principal investment.

Comparative indexes

Barclays Capital Aggregate Bond Index is an unmanaged index of U.S. investment-grade fixed-income securities.

Barclays Capital Municipal Bond Index is an unmanaged index of long-term fixed-rate investment-grade tax-exempt bonds.

BofA (Bank of America) Merrill Lynch U.S. 3-Month Treasury Bill Index is an unmanaged index that seeks to measure the performance of U.S. Treasury bills available in the marketplace.

S&P 500 Index is an unmanaged index of common stock performance.

Indexes assume reinvestment of all distributions and do not account for fees. Securities and performance of a fund and an index will differ. You cannot invest directly in an index.

Lipper is a third-party industry-ranking entity that ranks mutual funds. Its rankings do not reflect sales charges. Lipper rankings are based on total return at net asset value relative to other funds that have similar current investment styles or objectives as determined by Lipper. Lipper may change a fund's category assignment at its discretion. Lipper category averages reflect performance trends for funds within a category.

Trustee approval of management contract

General conclusions

The Board of Trustees of the Putnam funds oversees the management of each fund and, as required by law, determines annually whether to approve the continuance of your fund's management contract with Putnam Investment Management ("Putnam Management") and the sub-management contract with respect to your fund between Putnam Management and its affiliate, Putnam Investments Limited ("PIL").

In this regard, the Board of Trustees, with the assistance of its Contract Committee consisting solely of Trustees who are not "interested persons" (as this term is defined in the Investment Company Act of 1940, as amended) of the Putnam funds (the "Independent Trustees"), requests and evaluates all information it deems reasonably necessary under the circumstances. Over the course of several months ending in June 2010, the Contract Committee met on a number of occasions with representatives of Putnam Management and in executive

12

session to consider the information provided by Putnam Management and other information developed with the assistance of the Board's independent counsel and independent staff. The Contract Committee reviewed and discussed key aspects of this information with all of the Independent Trustees. At the Trustees' June 11, 2010 meeting, the Contract Committee recommended, and the Independent Trustees approved, the continuance of your fund's management and sub-management contracts, effective July 1, 2010. (Because PIL is an affiliate of Putnam Management and Putnam Management remains fully responsible for all services provided by PIL, the Trustees have not evaluated PIL as a separate entity, and all subsequent references to Putnam Management below should be deemed to include reference to PIL as necessary or appropriate in the context.)

The Independent Trustees' approval was based on the following conclusions:

That the fee schedule in effect for your fund represented reasonable compensation in light of the nature and quality of the services being provided to the fund, the fees paid by competitive funds, and the costs incurred by Putnam Management in providing such services, and

That the fee schedule represented an appropriate sharing between fund shareholders and Putnam Management of such economies of scale as may exist in the management of the fund at current asset levels.

These conclusions were based on a comprehensive consideration of all information provided to the Trustees and were not the result of any single factor. Some of the factors that figured particularly in the Trustees' deliberations and how the Trustees considered these factors are described below, although individual Trustees may have evaluated the information presented differently, giving different weights to various factors. It is also important to recognize that the fee arrangements for your fund and the other Putnam funds are the result of many years of review and discussion between the Independent Trustees and Putnam Management, that certain aspects of the arrangements may receive greater scrutiny in some years than others, and that the Trustees' conclusions may be based, in part, on their consideration of fee arrangements in prior years.

Management fee schedules and categories; total expenses

The Trustees reviewed the management fee schedules in effect for all Putnam funds, including fee levels and breakpoints. In reviewing management fees, the Trustees generally focus their attention on material changes in circumstances — for example, changes in assets under management or investment style, changes in Putnam Management's operating costs, or changes in competitive practices in the mutual fund industry — that suggest that consideration of fee changes might be warranted. The Trustees concluded that the circumstances did not warrant

changes to the management fee structure of your fund.

The Trustees reviewed comparative fee and expense information for a custom group of competitive funds selected by Lipper Inc. This comparative information included your fund's percentile ranking for effective management fees and total expenses, which provides a general indication of your fund's relative standing. In the custom peer group, your fund ranked in the 1st quintile in effective management fees (determined for your fund and the other funds in the custom peer group based on fund asset size and the applicable contractual management fee schedule) and in the 2nd quintile in total expenses as of December 31, 2009 (the first quintile representing the least expensive funds and the fifth quintile the most expensive funds).

Your fund currently has the benefit of breakpoints in its management fee that provide

13

shareholders with significant economies of scale in the form of reduced fee levels as the fund's assets under management increase. In recent years, the Trustees have examined the operation of the existing breakpoint structure during periods of both growth and decline in asset levels. The Trustees concluded that the fee schedule in effect for your fund represented an appropriate sharing of economies of scale at that time.

In connection with their review of the management fees and total expenses of the Putnam funds, the Trustees also reviewed the costs of the services provided and the profits realized by Putnam Management and its affiliates from their contractual relationships with the funds. This information included trends in revenues, expenses and profitability of Putnam Management and its affiliates relating to the investment management, investor servicing and distribution services provided to the funds. In this regard, the Trustees also reviewed an analysis of Putnam Management's revenues, expenses and profitability, allocated on a fund-by-fund basis, with respect to the funds' management, distribution, and investor servicing contracts. For each fund, the analysis presented information about revenues, expenses and profitability for each of the agreements separately and for the agreements taken together on a combined basis. The Trustees concluded that, at current asset levels, the fee schedules currently in place represented an appropriate sharing of economies of scale at that time.

The information examined by the Trustees as part of their annual contract review for the Putnam funds has included for many years information regarding fees charged by Putnam Management and its affiliates to institutional clients such as defined benefit pension plans, college endowments, and the like. This information included comparisons of such fees with fees charged to the funds, as well as an assessment of the differences in the services provided to these two types of clients. The Trustees observed, in this regard, that the differences in fee rates between institutional clients and mutual funds are by no means uniform when examined by individual asset sectors, suggesting that differences in the pricing of investment management services to these types of clients may reflect historical competitive forces operating in separate market places. The Trustees considered the fact that fee rates across different asset classes are typically higher on average for mutual funds than for institutional clients, as well as the differences between the services that Putnam Management provides to the Putnam funds and those that it provides to its institutional clients, and did not rely on these comparisons to any significant extent in concluding that the management fees paid by your fund are reasonable.

Investment performance

The quality of the investment process provided by Putnam Management represented a major factor in the Trustees' evaluation of the quality of services provided by Putnam Management under your fund's management contract. The Trustees were assisted in their review of the Putnam funds' investment process and performance by the work of the Investment Oversight Coordinating Committee of the Trustees and the Investment Oversight Committees of the Trustees, which met on a regular basis with the funds' portfolio teams throughout the year. The Trustees concluded that Putnam Management generally provides a high-quality investment process — based on the experience and skills of the individuals assigned to the management of fund portfolios, the resources made available to them, and in general Putnam Management's ability to attract and retain high-quality personnel — but also recognized that this does not guarantee favorable investment results for every fund in every time period. The Trustees considered the investment performance of

14

each fund over multiple time periods and considered information comparing each fund's performance with various benchmarks and with the performance of competitive funds.

The Committee noted the substantial improvement in the performance of most Putnam funds during 2009. The Committee also noted the disappointing investment performance of a number of the funds for periods ended December 31, 2009 and considered information provided by Putnam Management regarding the factors contributing to the underperformance and actions being taken to improve performance. The Trustees indicated their intention to continue to monitor performance trends to assess the effectiveness of these efforts and to evaluate whether additional changes to address areas of underperformance are warranted.

In the case of your fund, the Trustees considered that your fund's common share cumulative total return performance at net asset value was in the following quartiles of its Lipper Inc. peer group (Lipper General Municipal Debt Funds (Leveraged)) for the one-year, three-year and five-year periods ended December 31, 2009 (the first quartile representing the best-performing funds and the fourth quartile the worst-performing funds):

One-year period	2nd
<hr/>	
Three-year period	3rd
<hr/>	
Five-year period	3rd
<hr/>	

Over the one-year, three-year and five-year periods ended December 31, 2009, there were 57, 57 and 56 funds, respectively, in your fund's Lipper peer group. (When considering performance information, shareholders should be mindful that past performance is not a guarantee of future results.)

Brokerage and soft-dollar allocations; investor servicing

The Trustees considered various potential benefits that Putnam Management may receive in connection with the services it provides under the management contract with your fund. These include benefits related to brokerage and soft-dollar allocations, whereby a portion of the commissions paid by a fund for brokerage may be used to acquire research services that are expected to be useful to Putnam Management in managing the assets of the fund and of other clients. The Trustees considered a change made, at Putnam Management's request, to the Putnam funds' brokerage allocation policies commencing in 2010, which increased the permitted soft dollar allocation to third-party services over what had been authorized in previous years. The Trustees noted that a portion of available soft dollars continues to be allocated to the payment of fund expenses. The Trustees indicated their continued intent to monitor regulatory developments in this area with the assistance of their Brokerage Committee and also indicated their continued intent to monitor the potential benefits associated with fund brokerage and soft-dollar allocations and trends in industry practices to ensure that the principle of seeking best price and execution remains paramount in the portfolio trading process.

Putnam Management may also receive benefits from payments that the funds make to Putnam Management's affiliates for investor services. In conjunction with the annual review of your fund's management contract, the Trustees reviewed your fund's investor servicing agreement with Putnam Fiduciary Trust Company ("PFTC"), an affiliate of Putnam Management. The Trustees concluded that the fees payable by the funds to PFTC for such services are reasonable in relation to the nature and quality of such services.

Other information for shareholders

Important notice regarding share repurchase program

In September 2010, the Trustees of your fund approved the renewal of a share repurchase program that had been in effect since 2005. This renewal will allow your fund to repurchase, in the 12 months beginning October 8, 2010, up to 10% of the fund's common shares outstanding as of October 7, 2010.

Important notice regarding delivery of shareholder documents

In accordance with SEC regulations, Putnam sends a single copy of annual and semiannual shareholder reports, prospectuses, and proxy statements to Putnam shareholders who share the same address, unless a shareholder requests otherwise. If you prefer to receive your own copy of these documents, please call Putnam at 1-800-225-1581, and Putnam will begin sending individual copies within 30 days.

Proxy voting

Putnam is committed to managing our mutual funds in the best interests of our shareholders. The Putnam funds' proxy voting guidelines and procedures, as well as information regarding how your fund voted proxies relating to portfolio securities during the 12-month period ended June 30, 2010, are available in the Individual Investors section of putnam.com, and on the SEC's Web site, www.sec.gov. If you have questions about finding forms on the SEC's Web site, you may call the SEC at 1-800-SEC-0330. You may also obtain the Putnam funds' proxy voting guidelines and procedures at no charge by calling Putnam's Shareholder Services at 1-800-225-1581.

Fund portfolio holdings

The fund will file a complete schedule of its portfolio holdings with the SEC for the first and third quarters of each fiscal year on Form N-Q. Shareholders may obtain the fund's Forms N-Q on the SEC's Web site at www.sec.gov. In addition, the fund's Forms N-Q may be reviewed and copied at the SEC's Public Reference Room in Washington, D.C. You may call the SEC at 1-800-SEC-0330 for information about the SEC's Web site or the operation of the Public Reference Room.

Trustee and employee fund ownership

Putnam employees and members of the Board of Trustees place their faith, confidence, and, most importantly, investment dollars in Putnam mutual funds. As of October 31, 2010, Putnam employees had approximately \$324,000,000 and the Trustees had approximately \$68,000,000 invested in Putnam mutual funds. These amounts include investments by the Trustees' and employees' immediate family members as well as investments through retirement and deferred compensation plans.

16

Financial statements

A guide to financial statements

These sections of the report, as well as the accompanying Notes, constitute the fund's financial statements.

The fund's portfolio lists all the fund's investments and their values as of the last day of the reporting period. Holdings are organized by asset type and industry sector, country, or state to show areas of concentration and diversification.

Statement of assets and liabilities shows how the fund's net assets and share price are determined. All investment and non-investment assets are added together. Any unpaid expenses and other liabilities are

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

subtracted from this total. The result is divided by the number of shares to determine the net asset value per share. (For funds with preferred shares, the amount subtracted from total assets includes the liquidation preference of preferred shares.)

Statement of operations shows the fund's net investment gain or loss. This is done by first adding up all the fund's earnings — from dividends and interest income — and subtracting its operating expenses to determine net investment income (or loss). Then, any net gain or loss the fund realized on the sales of its holdings — as well as any unrealized gains or losses over the period — is added to or subtracted from the net investment result to determine the fund's net gain or loss for the fiscal period.

Statement of changes in net assets shows how the fund's net assets were affected by the fund's net investment gain or loss, by distributions to shareholders, and by changes in the number of the fund's shares. It lists distributions and their sources (net investment income or realized capital gains) over the current reporting period and the most recent fiscal year-end. The distributions listed here may not match the sources listed in the Statement of operations because the distributions are determined on a tax basis and may be paid in a different period from the one in which they were earned. Dividend sources are estimated at the time of declaration. Actual results may vary. Any non-taxable return of capital cannot be determined until final tax calculations are completed after the end of the fund's fiscal year.

Financial highlights provide an overview of the fund's investment results, per-share distributions, expense ratios, net investment income ratios, and portfolio turnover in one summary table, reflecting the five most recent reporting periods. In a semiannual report, the highlights table also includes the current reporting period.

17

The fund's portfolio 10/31/10 (Unaudited)

Key to holding's abbreviations

AGM Assured Guaranty Municipal Corporation

AGO Assured Guaranty, Ltd.

AMBAC AMBAC Indemnity Corporation

COP Certificates of Participation

FGIC Financial Guaranty Insurance Company

FNMA Coll. Federal National Mortgage

Association Collateralized

FRB Floating Rate Bonds

FRN Floating Rate Notes

G.O. Bonds General Obligation Bonds

GNMA Coll. Government National Mortgage

Association Collateralized

NATL National Public Finance Guarantee Corp.

SGI Syncora Guarantee, Inc.

U.S. Govt. Coll. U.S. Government Collateralized

VRDN Variable Rate Demand Notes

MUNICIPAL BONDS AND NOTES (139.9%)*	Rating**	Principal amount	Value
-------------------------------------	----------	------------------	-------

Alabama (0.4%)

Selma, Indl. Dev. Board Rev. Bonds (Gulf Opportunity
Zone Intl. Paper Co.), Ser. A, 5.8s, 5/1/34

	BBB	\$750,000	\$786,818
--	-----	-----------	-----------

Sylacauga, Hlth. Care Auth. Rev. Bonds (Coosa
Valley Med. Ctr.), Ser. A, 6s, 8/1/25

	B/P	1,200,000	1,112,400
--	-----	-----------	-----------

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

			1,899,218
Arizona (3.2%)			
Casa Grande, Indl. Dev. Auth. Rev. Bonds (Casa Grande Regl. Med. Ctr.), Ser. A, 7 5/8s, 12/1/29	B+/P	3,300,000	3,345,474
Cochise Cnty., Indl. Dev. Auth. Rev. Bonds (Sierra Vista Cmnty. Hosp.), Ser. A, 6 3/4s, 12/1/26	BBB+/P	425,000	425,387
Coconino Cnty., Poll. Control Rev. Bonds (Tucson Elec. Pwr. Co. □ Navajo), Ser. A, 5 1/8s, 10/1/32	Baa3	1,500,000	1,501,530
Glendale, Indl. Dev. Auth. Rev. Bonds (Midwestern U.), 5 1/8s, 5/15/40	A□	2,125,000	2,144,911
Marana, Impt. Dist. Special Assmt. Bonds (Tangerine Farms Road), 4.6s, 1/1/26	A2	1,969,000	1,911,937
Maricopa Cnty., Poll. Control Rev. Bonds (El Paso Elec. Co.), Ser. A, 7 1/4s, 2/1/40	Baa2	2,400,000	2,798,016
Phoenix, Civic Impt. Corp. Arpt. Rev. Bonds, Ser. A, 5s, 7/1/40	A1	1,000,000	1,029,280
Pima Cnty., Indl. Dev. Auth. Rev. Bonds (Tucson Elec. Pwr. Co.), 5 3/4s, 9/1/29	Baa3	800,000	834,032
(Horizon Cmnty. Learning Ctr.), 5.05s, 6/1/25	BBB	1,550,000	1,405,370
Tempe, Indl. Dev. Auth. Lease Rev. Bonds (ASU Foundation), AMBAC, 5s, 7/1/28	AA/P	500,000	504,925
U. Med. Ctr. Corp. AZ Hosp. Rev. Bonds, 6 1/2s, 7/1/39	Baa1	1,000,000	1,102,840
			17,003,702
California (24.1%)			
ABC Unified School Dist. G.O. Bonds, Ser. B, FGIC, zero %, 8/1/20	Aa2	1,500,000	950,250
Burbank, Unified School Dist. G.O. Bonds			

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

(Election of 1997), Ser. C, FGIC, zero %, 8/1/23	AA□	1,000,000	514,060
<hr/>			
CA Edl. Fac. Auth. Rev. Bonds			
(Claremont Graduate U.), Ser. A, 5s, 3/1/42	A3	2,000,000	2,004,160
(U. of the Pacific), 5s, 11/1/21	A2	1,500,000	1,617,255
(Loyola-Marymount U.), NATL, zero %, 10/1/21	A2	1,300,000	744,848

18

MUNICIPAL BONDS AND NOTES (139.9%)* cont.	Rating**	Principal amount	Value
<hr/>			
California cont.			
CA Hlth. Fac. Fin. Auth. Rev. Bonds			
(Sutter Hlth.), Ser. A, NATL, 5 3/8s, 8/15/30	Aa3	\$2,500,000	\$2,502,600
AMBAC, 5.293s, 7/1/17	A2	2,400,000	2,405,112
<hr/>			
CA Hsg. Fin. Agcy. Rev. Bonds (Home Mtge.)			
Ser. E, 4.8s, 8/1/37	A	5,000,000	4,168,150
Ser. K, 4 5/8s, 8/1/26	A	10,000,000	9,084,400
<hr/>			
CA Muni. Fin. Auth. COP (Cmnty. Hosp. Central CA), 5 1/4s, 2/1/37	Baa2	1,800,000	1,732,878
<hr/>			
CA Muni. Fin. Auth. Rev. Bonds (Eisenhower Med. Ctr.), Ser. A, 5 3/4s, 7/1/40	Baa1	1,000,000	1,029,790
<hr/>			
CA Poll. Control Fin. Auth. Rev. Bonds			
(San Jose Wtr. Co.), 5.1s, 6/1/40	A	3,500,000	3,620,505
(Pacific Gas & Electric Corp.), Class D, FGIC, 4 3/4s, 12/1/23	A3	2,500,000	2,512,525
<hr/>			
CA Poll. Control Fin. Auth. Solid Waste Disp. FRB (Waste Management, Inc.), Ser. C, 5 1/8s, 11/1/23	A□2	850,000	881,102
<hr/>			
CA Poll. Control Fin. Auth. Wtr. Fac. Rev. Bonds (American Wtr. Cap. Corp.), 5 1/4s, 8/1/40	BBB+	1,000,000	1,023,670

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

CA State G.O. Bonds			
6 1/2s, 4/1/33	A1	12,000,000	14,040,240
5 1/2s, 3/1/40	A1	7,450,000	7,906,983
5s, 10/1/29	A1	4,000,000	4,124,600
CA State Pub. Wks. Board Rev. Bonds			
Ser. I-1, 6 1/8s, 11/1/29	A2	1,000,000	1,090,530
Ser. A-1, 6s, 3/1/35	A2	1,600,000	1,704,480
CA Statewide Cmnty. Dev. Auth. COP (The Internext Group), 5 3/8s, 4/1/30			
	BBB	5,250,000	5,117,018
CA Statewide Cmnty., Dev. Auth. Rev. Bonds			
(Irvine LLC-UCI East Campus), 6s, 5/15/40	Baa2	2,000,000	2,093,560
(Sutter Hlth.), Ser. A, 5s, 11/15/43	Aa3	2,485,000	2,441,562
Cathedral City, Impt. Board Act of 1915 Special Assmt. Bonds (Cove Impt. Dist.), Ser. 04-02, 5.05s, 9/2/35			
	BBB[P]	775,000	669,763
Chula Vista COP, NATL, 5s, 8/1/32			
	A1	4,000,000	3,830,920
Chula Vista, Indl. Dev. Rev. Bonds (San Diego Gas), Ser. B, 5s, 12/1/27			
	Aa3	1,915,000	1,982,983
Foothill/Eastern Corridor Agcy. Rev. Bonds, Ser. A, zero %, 1/1/28 (Escrowed to maturity)			
	Aaa	20,000,000	10,482,800
Golden State Tobacco Securitization Corp. Rev. Bonds			
Ser. 03 A-1, 6 1/4s, 6/1/33 (Prerefunded)	Aaa	810,000	894,929
Ser. A-1, 5s, 6/1/33	BBB	1,050,000	852,044
Ser. S-B, zero %, 6/1/47	BB	6,000,000	187,680
M-S-R Energy Auth. Rev. Bonds, Ser. B, 6 1/2s, 11/1/39			
	A	3,000,000	3,525,180
Metro. Wtr. Dist. Rev. Bonds (Southern CA Wtr. Wks.), 5 3/4s, 8/10/18			
	Aa1	6,000,000	7,175,700
Orange Cnty., Cmnty. Fac. Dist. Special Tax Rev. Bonds (Ladera Ranch No. 02-1), Ser. A,			

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

5.55s, 8/15/33	BBB□/P	900,000	874,989
----------------	--------	---------	---------

19

MUNICIPAL BONDS AND NOTES (139.9%)* cont.	Rating**	Principal amount	Value
California cont.			
Rancho Mirage, Joint Powers Fin. Auth. Rev. Bonds (Eisenhower Med. Ctr.), Ser. A, 5s, 7/1/47	Baa1	\$1,000,000	\$908,360
Redwood City, Elementary School Dist. G.O. Bonds, FGIC, NATL, zero %, 8/1/21	A+	1,990,000	1,130,837
Rocklin, Unified School Dist. G.O. Bonds, FGIC, NATL, zero %, 8/1/27	Aa2	2,000,000	801,020
Sacramento Cnty., Arpt. Syst. Rev. Bonds, 5s, 7/1/40	A2	1,350,000	1,375,826
Sacramento, Special Tax Rev. Bonds (North Natomas Cmnty. Fac.), Ser. 97-01			
5s, 9/1/20	BB+/P	1,195,000	1,169,511
5s, 9/1/29	BB+/P	1,180,000	1,092,998
5s, 9/1/18	BB+/P	1,030,000	1,026,632
San Bernardino Cnty., COP (Med. Ctr. Fin.), Ser. A, NATL, 6 1/2s, 8/1/17	A	5,000,000	5,393,150
San Diego Cnty., Regl. Arpt. Auth. Rev. Bonds, Ser. A, 5s, 7/1/40	A2	3,750,000	3,836,325
San Diego, Unified School Dist. G.O. Bonds (Election of 2008), Ser. C			
zero %, 7/1/40	Aa1	5,000,000	803,400
zero %, 7/1/38	Aa1	5,000,000	913,700
San Juan, Unified School Dist. G.O. Bonds, AGM, zero %, 8/1/19	AA+	1,000,000	698,850

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Sunnyvale, Cmnty. Fac. Dist. Special Tax Rev. Bonds, 7.65s, 8/1/21	B+/P	615,000	619,563
---	------	---------	---------

Tuolumne Wind Project Auth. Rev. Bonds (Tuolumne Co.), Ser. A, 5 7/8s, 1/1/29	A1	1,585,000	1,772,536
--	----	-----------	-----------

Turlock, Dist. Ser. A, 5s, 1/1/40	A1	3,000,000	3,077,430
-----------------------------------	----	-----------	-----------

128,407,404

Colorado (1.6%)

CO Hlth. Fac. Auth. Rev. Bonds (Christian Living Cmnty.), Ser. A, 5 3/4s, 1/1/26 (Evangelical Lutheran), 5s, 6/1/29	BBB/P A3	325,000 850,000	314,132 852,015
---	-------------	--------------------	--------------------

CO Hsg. & Fin. Auth. Rev. Bonds (Single Family Mtge.), Ser. A-3, Class III, 5 1/4s, 5/1/33	A1	2,890,000	2,979,619
---	----	-----------	-----------

CO Pub. Hwy. Auth. Rev. Bonds (E-470 Pub. Hwy.), Ser. C1, NATL, 5 1/2s, 9/1/24	A	1,250,000	1,273,200
---	---	-----------	-----------

CO Springs, Hosp. Rev. Bonds, 6 3/8s, 12/15/30	A3	3,280,000	3,319,262
--	----	-----------	-----------

8,738,228

Delaware (0.5%)

DE St. Econ. Dev. Auth. Rev. Bonds (Delmarva Pwr.), 5.4s, 2/1/31	BBB+	1,100,000	1,157,805
---	------	-----------	-----------

DE State Hsg. Auth. Rev. Bonds (Single Family Mtge.), Ser. B, zero %, 1/1/40	A3	11,015,000	1,671,747
---	----	------------	-----------

2,829,552

District of Columbia (1.2%)

DC Wtr. & Swr. Auth. Pub. Util. Rev. Bonds, FGIC, NATL, 5s, 10/1/28	Aa3	3,000,000	3,128,490
--	-----	-----------	-----------

Metro. Washington, Arpt. Auth. Dulles Toll Rd. Rev. Bonds (First Sr. Lien), Ser. A, 5s, 10/1/39 (Metrorail), Ser. A, zero %, 10/1/37	A2 Baa1	2,000,000 5,700,000	2,060,820 1,040,706
---	------------	------------------------	------------------------

6,230,016

20

MUNICIPAL BONDS AND NOTES (139.9%)* cont.	Rating**	Principal amount	Value
Florida (5.6%)			
Brevard Cnty., Hlth. Care Fac. Auth. Rev. Bonds (Health First, Inc.), 7s, 4/1/39	A3	\$3,000,000	\$3,372,630
Escambia Cnty., Env. Impt. Rev. Bonds (Intl. Paper Co.), Ser. A, 5s, 8/1/26	BBB	2,500,000	2,459,675
Escambia Cnty., Hlth. Fac. Auth. Rev. Bonds (Baptist Hosp., Inc.), Ser. A, 5 3/4s, 8/15/29	Baa1	2,500,000	2,608,075
FL State Muni. Pwr. Agcy. Rev. Bonds, Ser. A, 5s, 10/1/31	A1	1,700,000	1,758,276
Halifax, Hosp. Med. Ctr. Rev. Bonds, Ser. A, 5 3/8s, 6/1/46	A□	4,200,000	4,204,830
Lakeland, Retirement Cmnty. Rev. Bonds (1st Mtge. □ Carpenters), 6 3/8s, 1/1/43	BBB□/F	340,000	326,312
Lee Cnty., Rev. Bonds, SGI, 5s, 10/1/25	Aa2	2,500,000	2,611,625
Marco Island, Util. Sys. Rev. Bonds, Ser. A, 5s, 10/1/40	A2	1,500,000	1,526,925
Miami Beach, Hlth. Fac. Auth. Hosp. Rev. Bonds (Mount Sinai Med. Ctr.) Ser. A, 6.8s, 11/15/31	Ba1	1,000,000	1,014,880
5 3/8s, 11/15/28	BB+/F	1,000,000	947,480
Miami-Dade Cnty., Aviation Rev. Bonds (Miami Intl. Arpt.), Ser. A-1, 5 3/8s, 10/1/41	A2	3,000,000	3,086,940

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Miami-Dade Cnty., Expressway Auth. Toll Syst. Rev. Bonds, Ser. A, 5s, 7/1/40	A	1,000,000	1,022,240
Reunion West, Cmnty. Dev. Dist. Special Assmt. Bonds, 1.919s, 5/1/36 (In default) ☐	D/P	1,915,000	1,046,069
South Bay, Cmnty. Dev. Dist. Rev. Bonds, Ser. B-1, 5 1/8s, 11/1/11 (In default) ☐	D/P	2,025,000	668,250
South Broward, Hosp. Dist. Rev. Bonds, NATL, 4 3/4s, 5/1/28	Aa3	1,500,000	1,543,035
Tolomato, Cmnty. Dev. Dist. Special Assmt. Bonds, (Split Pine Cmnty. Dev. Dist.), Ser. A, 5 1/4s, 5/1/39	B☐/P	1,480,000	1,007,436
5.4s, 5/1/37	BB☐/P	475,000	382,038
			29,586,716
Georgia (2.8%)			
Atlanta, Wtr. & Waste Wtr. Rev. Bonds, Ser. A, 6 1/4s, 11/1/39	A1	4,500,000	5,098,590
Effingham Cnty., Indl. Dev. Auth. Rev. Bonds (Georgia-Pacific Corp.), 6 1/2s, 6/1/31	Ba3	900,000	910,530
Gainesville & Hall Cnty., Hosp. Auth. Rev. Bonds (Northeast GA Hlth. Care), Ser. B, 5 1/4s, 2/15/45	A+	7,500,000	7,676,475
Marietta, Dev. Auth. Rev. Bonds (U. Fac. ☐ Life U., Inc.), 7s, 6/15/39	Ba3	1,400,000	1,410,500
			15,096,095
Hawaii (☐%)			
HI State Hsg. Fin. & Dev. Corp. Rev. Bonds, Ser. A, FNMA Coll., 5 3/4s, 7/1/30	Aaa	150,000	150,039
			150,039

MUNICIPAL BONDS AND NOTES (139.9%)* cont.	Rating**	Principal amount	Value
Illinois (5.4%)			
Chicago, Waste Wtr. Transmission Rev. Bonds, Ser. A, NATL, zero %, 1/1/24	Aa2	\$1,600,000	\$857,040
IL Fin. Auth. Rev. Bonds			
(Alexian), Ser. A, AGM, 5 1/4s, 1/1/22	Aa3	3,775,000	4,051,104
(Elmhurst Memorial), Ser. A, 5 5/8s, 1/1/37	Baa1	3,000,000	2,925,570
(IL Rush U. Med. Ctr.), Ser. D, 6 5/8s, 11/1/39	A3	1,490,000	1,626,827
(IL Rush U. Med Ctr.), Ser. C, 6 5/8s, 11/1/39	A3	1,425,000	1,555,858
(Silver Cross Hosp. & Med. Ctr.), 7s, 8/15/44	BBB	2,500,000	2,808,175
Kendall & Kane Cntys., Cmnty. United School Dist.			
G.O. Bonds (No. 115 Yorkville), FGIC, zero %, 1/1/21	Aa3	1,075,000	667,188
Lake Cnty., Cmnty. Construction School Dist. G.O.			
Bonds (No. 073 Hawthorn), NATL, FGIC			
zero %, 12/1/21	AA+	1,805,000	1,145,146
zero %, 12/1/21 (Escrowed to maturity)	AA+	145,000	103,239
zero %, 12/1/20	AA+	1,495,000	1,002,009
zero %, 12/1/20 (Escrowed to maturity)	AA+	155,000	115,847
Metro. Pier & Exposition Auth. Dedicated State Tax			
Rev. Bonds (McCormick)			
Ser. B, AGM, zero %, 6/15/43	AAA	6,500,000	881,595
Ser. A, NATL, zero %, 12/15/30	AAA	22,500,000	7,012,575
Metropolitan Pier & Exposition Auth. Rev. Bonds			
(McCormack Place Expansion Project), NATL,			
5s, 12/15/28	AAA	1,770,000	1,824,658
Southern IL U. Rev. Bonds (Hsg. & Auxiliary),			
Ser. A, NATL			
zero %, 4/1/25	A2	1,870,000	882,416
zero %, 4/1/21	A2	1,880,000	1,164,980

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

28,624,227

Indiana (3.6%)

IN Bk. Special Program Gas Rev. Bonds, Ser. A			
5 1/4s, 10/15/21	Aa3	180,000	195,626
5 1/4s, 10/15/18	Aa3	2,000,000	2,211,780
<hr/>			
IN State Fin. Auth. Rev. Bonds			
(U.S. Steel Corp.), 6s, 12/1/26	Ba2	500,000	536,050
(Duke Energy Ind.), Ser. C, 4.95s, 10/1/40	A2	4,000,000	4,139,680
<hr/>			
IN State Fin. Auth. Edl. Fac. VRDN, Ser. A-1,			
0.27s, 2/1/37	VMIG1	5,100,000	5,100,000
<hr/>			
Indianapolis, Arpt. Auth. Rev. Bonds (Federal Express Corp.), 5.1s, 1/15/17			
	Baa2	2,500,000	2,697,950
<hr/>			
Jasper Cnty., Indl. Poll. Control Rev. Bonds			
AMBAC, 5.7s, 7/1/17	Baa2	1,375,000	1,529,110
NATL, 5.6s, 11/1/16	A	1,550,000	1,717,571
<hr/>			
U. Southern IN Rev. Bonds (Student Fee), Ser. J,			
AGO, 5 3/4s, 10/1/28	AA+	1,000,000	1,129,260

19,257,027

Iowa (0.9%)

IA Fin. Auth. Hlth. Care Fac. Rev. Bonds (Care Initiatives), 9 1/4s, 7/1/25 (Prerefunded 7/1/11)			
	AAA	3,430,000	3,697,712
<hr/>			
IA State Higher Ed. Loan Auth. Rev. Bonds			
5s, 10/1/22	BB/F	605,000	573,722
(Wartburg), Ser. A, 5s, 10/1/21	BB/F	605,000	578,961

4,850,395

22

MUNICIPAL BONDS AND NOTES (139.9%)* cont.	Rating**	Principal amount	Value
--	-----------------	-------------------------	--------------

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Kentucky (0.1%)

KY Econ. Dev. Fin. Auth. Hlth. Syst. Rev. Bonds (Norton Hlth. Care), Ser. A, 6 5/8s, 10/1/28	A□/F	\$405,000	\$409,730
---	------	-----------	-----------

Louisville/Jefferson Cnty., Metro. Govt. College Rev. Bonds (Bellarmine U.), Ser. A, 6s, 5/1/38	Baa2	290,000	301,513
--	------	---------	---------

711,243

Maine (0.4%)

Rumford, Solid Waste Disp. Rev. Bonds (Boise Cascade Corp.), 6 7/8s, 10/1/26	B2	1,950,000	1,963,826
---	----	-----------	-----------

1,963,826

Maryland (0.3%)

MD Econ. Dev. Corp. Poll. Control Rev. Bonds (Potomac Electric Power Co.), 6.2s, 9/1/22	A	650,000	771,147
--	---	---------	---------

MD State Hlth. & Higher Edl. Fac. Auth. Rev. Bonds (WA Cnty. Hosp.), 5 3/4s, 1/1/38	BBB□	550,000	563,888
--	------	---------	---------

MD State Indl. Dev. Fin. Auth. Rev. Bonds (Synagro-Baltimore), Ser. A, 5 1/2s, 12/1/15	BBB+/F	500,000	523,840
---	--------	---------	---------

1,858,875

Massachusetts (6.1%)

MA State Dept. Trans. Rev. Bonds (Metro Hwy. Syst.), Ser. B, 5s, 1/1/37	A	2,500,000	2,566,400
--	---	-----------	-----------

MA State Dev. Fin. Agcy. Rev. Bonds (Sabis Intl.), Ser. A, 8s, 4/15/39	BBB	575,000	653,718
(Carleton-Willard Village), 5 5/8s, 12/1/30	A□	750,000	772,800
(Linden Ponds, Inc.), Ser. A, 5 1/2s, 11/15/22	BB/P	1,360,000	1,106,686
(Emerson College), Ser. A, 5s, 1/1/40	A□	4,000,000	4,070,360

MA State Dev. Fin. Agcy. Solid Waste Disp. FRB (Dominion Energy Brayton), 5s, 2/1/36	A□	1,000,000	988,610
---	----	-----------	---------

MA State Dev. Fin. Agcy. Solid Waste Disp. Mandatory Put Bonds (5/1/19) (Dominion Energy Brayton), Ser. 1, 5 3/4s, 12/1/42	A□	1,500,000	1,636,680
---	----	-----------	-----------

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

MA State Hlth. & Edl. Fac. Auth. Rev. Bonds			
(Baystate Med. Ctr.), Ser. I, 5 3/4s, 7/1/36	A+	1,500,000	1,651,245
(Berkshire Hlth. Syst.), Ser. E, 6 1/4s, 10/1/31	BBB+	1,300,000	1,323,517
(Care Group), Ser. B-2, NATL, 5 3/8s, 2/1/26	A	700,000	734,027
(Civic Investments/HPHC), Ser. A, 9s, 12/15/15			
(Prerefunded 12/15/12)	AAA/P	1,885,000	2,141,209
(Hlth. Care Syst.-Covenant Hlth.), 6s, 7/1/31	A/F	3,790,000	3,871,182
(Jordan Hosp.), Ser. E, 6 3/4s, 10/1/33	BB□	1,500,000	1,509,690
(Northeastern U.), Ser. A, 5s, 10/1/35	A2	3,250,000	3,378,668
(Quincy Med. Ctr.), Ser. A, 6 1/4s, 1/15/28	BB□/P	2,095,000	1,987,066
(UMass Memorial), Ser. C, 6 1/2s, 7/1/21	Baa1	1,875,000	1,908,731

MA State Port Auth. Rev. Bonds, U.S. Govt. Coll.,			
13s, 7/1/13 (Prerefunded 12/3/10)	Aaa	1,600,000	1,932,816

32,233,405

Michigan (4.7%)

Detroit, G.O. Bonds			
Ser. A-1, AMBAC, 5 1/4s, 4/1/24	BB	1,435,000	1,228,791
Ser. A, FGIC, 5s, 7/1/30	Aa3	4,505,000	4,536,220
(Cap. Impt.), Ser. A-1, 5s, 4/1/15	BB	1,300,000	1,265,368

Detroit, City School Dist. G.O. Bonds, Ser. A, AGM,			
6s, 5/1/29	AA+	1,000,000	1,125,880

Detroit, Wtr. Supply Syst. Rev. Bonds, Ser. B, AGM,			
6 1/4s, 7/1/36	AA+	1,425,000	1,555,131

23

MUNICIPAL BONDS AND NOTES (139.9%)* cont.	Rating**	Principal amount	Value
--	-----------------	-------------------------	--------------

Michigan cont.

Flint, Hosp. Bldg. Auth. Rev. Bonds (Hurley Med. Ctr.),			
7 1/2s, 7/1/39	Ba1	\$1,000,000	\$1,052,470

MI Higher Ed. Fac. Auth. Rev. Bonds (Kalamazoo

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

College), 5 1/2s, 12/1/18	A1	500,000	522,825
<hr/>			
MI State Hosp. Fin. Auth. Rev. Bonds			
Ser. A, 6 1/8s, 6/1/39	A1	2,500,000	2,734,250
(Henry Ford Hlth.), 5 3/4s, 11/15/39	A1	2,000,000	2,100,500
(Henry Ford Hlth.), Ser. A, 5 1/4s, 11/15/46	A1	4,500,000	4,499,910
(Sparrow Hosp.), 5s, 11/15/31	A1	1,350,000	1,336,109
<hr/>			
MI State Strategic Fund Mandatory Put Bonds			
(6/2/14) (Dow Chemical), Ser. A-1, 6 3/4s, 12/1/28	A ⁺ 3	100,000	112,421
<hr/>			
MI State Strategic Fund, Ltd. Rev. Bonds			
(Worthington Armstrong Venture), U.S. Govt. Coll.,			
5 3/4s, 10/1/22 (Escrowed to maturity)	AAA/P	1,650,000	1,966,371
<hr/>			
MI Tobacco Settlement Fin. Auth. Rev. Bonds, Ser. A,			
6s, 6/1/34	BBB	575,000	509,036
<hr/>			
Monroe Cnty., Hosp. Fin. Auth. Rev. Bonds (Mercy			
Memorial Hosp. Corp.), 5 3/8s, 6/1/26	Baa3	750,000	702,945
<hr/>			
			25,248,227
<hr/>			
Minnesota (1.1%)			
MN State Hsg. Fin. Agcy. Rev. Bonds (Single Fam.			
Mtge.), 6.05s, 7/1/31	Aa1	295,000	306,473
<hr/>			
North Oaks, Sr. Hsg. Rev. Bonds (Presbyterian			
Homes North Oaks), 6 1/8s, 10/1/39	BB/P	995,000	1,006,373
<hr/>			
St. Paul, Hsg. & Redev. Auth. Hlth. Care Fac.			
Rev. Bonds (HealthPartners Oblig. Group),			
5 1/4s, 5/15/36	A3	3,500,000	3,408,720
<hr/>			
St. Paul, Hsg. & Redev. Auth. Hosp. Rev. Bonds			
(Healtheast), 6s, 11/15/35	Ba1	1,150,000	1,132,405
<hr/>			
			5,853,971
<hr/>			
Mississippi (1.8%)			
Bus. Fin. Corp. Gulf Opportunity Zone Rev. Bonds,			
Ser. A, 5s, 5/1/37	BBB+	2,250,000	2,304,900
<hr/>			

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

MS Bus. Fin. Corp. Poll. Control Rev. Bonds

(Syst. Energy Resources, Inc.)

5.9s, 5/1/22	BBB	3,000,000	3,010,560
5 7/8s, 4/1/22	BBB	2,330,000	2,338,458

Warren Cnty., Gulf Opportunity Zone (Intl. Paper Co.),

Ser. A, 6 1/2s, 9/1/32	BBB	2,000,000	2,173,300
------------------------	-----	-----------	-----------

9,827,218

Missouri (2.2%)

MO State Hlth. & Edl. Fac. Auth. Rev. Bonds

Ser. 2003A (St. Luke's Health), 5 1/2s, 11/15/28 ^T	AAA	10,000,000	11,008,145
---	-----	------------	------------

MO State Hlth. & Edl. Fac. Auth. VRDN

(Washington U. (The)), Ser. C, 0.27s, 9/1/30	VMIG1	300,000	300,000
--	-------	---------	---------

MO State Hsg. Dev. Comm. Mtge. Rev. Bonds

(Single Fam. Homeowner Loan), Ser. C-1, GNMA

Coll., FNMA Coll., 7.15s, 3/1/32	AAA	340,000	363,178
----------------------------------	-----	---------	---------

11,671,323

Montana (0.3%)

MT Fac. Fin. Auth. VRDN (Sisters of Charity), Ser. A,

0.28s, 12/1/25	VMIG1	1,600,000	1,600,000
----------------	-------	-----------	-----------

1,600,000

24

MUNICIPAL BONDS AND NOTES (139.9%)* cont.

Rating**

Principal amount

Value

Nebraska (0.8%)

Central Plains, Energy Rev. Bonds (NE Gas No. 1),

Ser. A, 5 1/4s, 12/1/18	BB+	\$3,000,000	\$3,180,030
-------------------------	-----	-------------	-------------

Lancaster Cnty., Hosp. Auth. Rev. Bonds (Immanuel

Oblig. Group), 5 5/8s, 1/1/40	A ⁺ /F	925,000	962,870
-------------------------------	-------------------	---------	---------

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

4,142,900

Nevada (9.0%)

Clark Cnty., Ltd. Tax Bond, 5s, 6/1/33 ^T	AA+	32,285,000	33,330,203
---	-----	------------	------------

Clark Cnty., Arpt. Rev. Bonds, Ser. A-2, FGIC, 5 1/8s, 7/1/26	Aa3	5,105,000	5,266,931
--	-----	-----------	-----------

Clark Cnty., Impt. Dist. Special Assmt. Bonds (Summerlin No. 151), 5s, 8/1/25	BB□/P	2,080,000	1,626,810
--	-------	-----------	-----------

Clark Cnty., Indl. Dev. Rev. Bonds (Southwest Gas Corp.), Ser. A, AMBAC 6.1s, 12/1/38	Baa2	3,000,000	3,022,800
5 1/4s, 7/1/34	Baa2	3,000,000	2,979,690

Henderson G.O. Bonds (Ltd. Tax -Swr.), FGIC, 5s, 6/1/29	Aa1	1,000,000	1,034,590
--	-----	-----------	-----------

Henderson, Local Impt. Dist. Special Assmt. Bonds (No. T-17), 5s, 9/1/25	BB+/P	610,000	482,248
---	-------	---------	---------

47,743,272

New Jersey (6.2%)

NJ Econ. Dev. Auth. Rev. Bonds (Cedar Crest Village, Inc.), Ser. A, U.S. Govt. Coll., 7 1/4s, 11/15/31 (Prerefunded 11/15/11)	AAA/F	1,300,000	1,405,248
(First Mtge. Presbyterian Home), Ser. A, 6 3/8s, 11/1/31	BB/P	1,000,000	887,730
(Cigarette Tax), 5 3/4s, 6/15/29	BBB	5,000,000	4,975,350
(Cigarette Tax), 5 1/2s, 6/15/24	BBB	2,800,000	2,802,380

NJ Econ. Dev. Auth. Wtr. Fac. Rev. Bonds (American Wtr. Co.), Ser. A, 5.7s, 10/1/39	A2	3,900,000	4,017,819
(NJ Amern Wtr. Co.), Ser. B, 5.6s, 11/1/34	A2	500,000	520,920

NJ Hlth. Care Fac. Fin. Auth. Rev. Bonds (St. Joseph Hlth. Care Syst.), 6 5/8s, 7/1/38	BBB□	2,750,000	2,900,618
(St. Peter's U. Hosp.), 5 3/4s, 7/1/37	Baa3	2,500,000	2,543,125
(Holy Name Hosp.), 5s, 7/1/36	Baa2	5,000,000	4,593,750

NJ State Edl. Fac. Auth. Rev. Bonds

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

(Fairleigh Dickinson), Ser. C, 6s, 7/1/20	BBB□/F	1,500,000	1,606,935
(Georgian Court U.), Ser. D, 5 1/4s, 7/1/37	Baa1	1,000,000	1,029,350
<hr/>			
NJ State Trans. Trust Fund Auth. Rev. Bonds			
(Trans. Syst.), Ser. A, zero %, 12/15/30	Aa3	13,000,000	4,347,330
<hr/>			
Tobacco Settlement Fin. Corp. Rev. Bonds, Ser. 1A,			
5s, 6/1/29	BBB	1,350,000	1,143,638
<hr/>			
			32,774,193

New York (5.7%)

Broome Cnty., Indl. Dev. Agcy. Continuing Care Retirement Rev. Bonds (Good Shepard Village), Ser. A, 6 7/8s, 7/1/40			
	B/P	320,000	314,595
<hr/>			
NY City, Indl. Dev. Agcy. Rev. Bonds			
(Liberty-7 World Trade Ctr.), Ser. A, 6 1/4s, 3/1/15	BB/P	1,400,000	1,414,924
(Brooklyn Navy Yard Cogen. Partners), Ser. G, 5 3/4s, 10/1/36	Ba3	2,000,000	1,647,420
<hr/>			

25

MUNICIPAL BONDS AND NOTES (139.9%)* cont.	Rating**	Principal amount	Value
<hr/>			
New York cont.			
NY City, Indl. Dev. Agcy. Special Arpt. Fac. Rev. Bonds (Airis JFK I, LLC), Ser. A, 5 1/2s, 7/1/28			
	BBB□	\$2,100,000	\$1,949,745
<hr/>			
NY City, Indl. Dev. Agcy. Special Fac. FRB (American Airlines □ JFK Intl. Arpt.), 7 5/8s, 8/1/25			
	B□	3,000,000	3,185,160
<hr/>			
NY City, Indl. Dev. Agcy. Special Fac. Rev. Bonds (British Airways PLC), 5 1/4s, 12/1/32			
	BB□	700,000	583,828
<hr/>			
NY Cntys., Tobacco Trust III Rev. Bonds (Tobacco Settlement), 6s, 6/1/43			
	BBB	1,500,000	1,428,015
<hr/>			

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

NY State Dorm. Auth. Non-State Supported Debt			
Rev. Bonds (Orange Regl. Med. Ctr.), 6 1/4s, 12/1/37	Ba1	2,300,000	2,353,958
NY State Energy Research & Dev. Auth. Gas Fac.			
Rev. Bonds (Brooklyn Union Gas), 6.952s, 7/1/26	A3	6,000,000	6,000,420
Port Auth. NY & NJ Special Oblig. Rev. Bonds			
(JFK Intl. Air Term. □ 6), NATL, 5.9s, 12/1/17	A	6,000,000	6,018,600
Seneca Cnty., Indl. Dev. Agcy. Solid Waste Disp.			
Mandatory Put Bonds (10/1/13) (Seneca Meadows, Inc.), 6 5/8s, 10/1/35	BB□	670,000	679,487
Suffolk Cnty., Indl. Dev. Agcy. Cont. Care Retirement			
Rev. Bonds (Peconic Landing), Ser. A, 8s, 10/1/30	BB□/P	1,300,000	1,327,247
Troy, Cap. Res. Corp. Rev. Bonds (Rensselaer Polytechnic), Ser. A, 5 1/8s, 9/1/40			
	A	3,385,000	3,518,606
			30,422,005
North Carolina (1.3%)			
NC Eastern Muni. Pwr. Agcy. Syst. Rev. Bonds, Ser. C, 6 3/4s, 1/1/24	A□	1,000,000	1,228,130
NC Med. Care Cmnty. Hlth. Care Fac. Rev. Bonds			
(Deerfield), Ser. A, 6s, 11/1/33	BBB+/F	805,000	820,327
(First Mtge. □ Presbyterian Homes), 5 3/8s, 10/1/22	BB/P	1,000,000	1,027,690
NC State Muni. Pwr. Agcy. Rev. Bonds (No. 1, Catawba Elec.), Ser. A, 5s, 1/1/30			
	A2	800,000	844,920
U. of NC Syst. Pool Rev. Bonds, Ser. C, 5 1/2s, 10/1/34			
	A2	3,000,000	3,190,920
			7,111,987
North Dakota (0.9%)			
ND State Hsg. Fin. Agcy. Rev. Bonds (Hsg. Fin.), Ser. B, 4.8s, 7/1/37	Aa1	4,730,000	4,597,986
			4,597,986

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Ohio (8.6%)

American Muni. Pwr. Ohio, Inc. Rev. Bonds,

5 1/4s, 2/15/33 ^T (Prairie State Energy Campus), Ser. A,	AAA	10,000,000	10,612,230
5 1/4s, 2/15/43	A1	1,000,000	1,044,170

Buckeye, Tobacco Settlement Fin. Auth. Rev. Bonds,
Ser. A-2

5 7/8s, 6/1/47	BBB	5,250,000	4,007,745
5 3/4s, 6/1/34	BBB	14,300,000	11,417,691
5 1/8s, 6/1/24	BBB	2,055,000	1,790,809

Erie Cnty., OH Hosp. Fac. Rev. Bonds (Firelands
Regl. Med. Ctr.), Ser. A, 5 1/4s, 8/15/46

A ⁺	2,500,000	2,413,825
----------------	-----------	-----------

Hickory Chase, Cmnty. Auth. Infrastructure Impt.
Rev. Bonds (Hickory Chase), 7s, 12/1/38

BB ⁺ /P	700,000	492,037
--------------------	---------	---------

26

MUNICIPAL BONDS AND NOTES (139.9%)* cont.	Rating**	Principal amount	Value
Ohio cont.			
Lake Cnty., Hosp. Fac. Rev. Bonds (Lake Hosp. Syst.), Ser. C, 6s, 8/15/43	Baa1	\$3,100,000	\$3,322,797
OH State Air Quality Dev. Auth. FRB (Columbus Southern Pwr. Co.), Ser. B, 5.8s, 12/1/38	A3	2,000,000	2,148,740
OH State Higher Ed. Fac. Comm. Rev. Bonds (John Carroll U.), 5 1/4s, 11/15/33	A2	500,000	511,510
(U. Hosp. Hlth. Syst.), Ser. 09-A, 6 3/4s, 1/15/39	A2	3,000,000	3,213,960
Scioto Cnty., Hosp. Rev. Bonds (Southern Med. Ctr.), 5 1/2s, 2/15/28	A2	4,660,000	4,846,540
			45,822,054

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Oregon (0.9%)

Keizer, Special Assmt. Bonds (Keizer Station), Ser. A,

5.2s, 6/1/31 A1 2,275,000 2,332,148

Multnomah Cnty., Hosp. Fac. Auth. Rev. Bonds

(Terwilliger Plaza), Ser. A, 5 1/4s, 12/1/26 BB/P 1,040,000 1,003,829

OR Hlth. Sciences U. Rev. Bonds, Ser. A,

5 3/4s, 7/1/39 A2 1,250,000 1,370,074

4,706,051

Pennsylvania (5.1%)

Allegheny Cnty., Hosp. Dev. Auth. Rev. Bonds

(Hlth. Syst.-West PA), Ser. A, 5 3/8s, 11/15/40 BB 1,500,000 1,157,715

Bucks Cnty., Indl. Dev. Auth. Rev. Bonds (USX Corp.),

5.6s, 3/1/33 Baa1 2,025,000 2,030,974

Bucks Cnty., Indl. Dev. Auth. Retirement Cmnty.

Rev. Bonds (Ann's Choice, Inc.), Ser. A

5.4s, 1/1/15 BB/P 1,060,000 1,078,688

5.3s, 1/1/14 BB/P 710,000 729,887

Cumberland Cnty., Muni. Auth. Rev. Bonds

(Presbyterian Homes), Ser. A, 5s, 1/1/17 BBB+ 1,320,000 1,339,891

Delaware River Port Auth. PA & NJ Rev. Bonds,

Ser. D, 5s, 1/1/40 A3 1,200,000 1,240,020

Erie, Higher Ed. Bldg. Auth. Rev. Bonds

(Mercyhurst College), 5 1/2s, 3/15/38 BBB 725,000 757,879

Franklin Cnty., Indl. Dev. Auth. Rev. Bonds

(Chambersburg Hosp.), 5 3/8s, 7/1/42 A2 1,000,000 1,023,770

Lancaster, Higher Ed. Auth. College Rev. Bonds

(Franklin & Marshall College), 5s, 4/15/29 AA 1,000,000 1,052,010

Northampton Cnty., Hosp. Auth. Rev. Bonds (Saint

Luke's Hosp. Bethlehem), Ser. A, 5 1/2s, 8/15/40 A3 1,250,000 1,274,450

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

PA State Higher Edl. Fac. Auth. Rev. Bonds (Philadelphia U.), 5s, 6/1/22	Baa2	860,000	884,218
(Philadelphia U.), 5s, 6/1/30	Baa2	2,250,000	2,205,877
(Saint Joseph's U.), Ser. A, 5s, 11/1/40	A	3,000,000	3,071,100
(Widener U.), 5 3/8s, 7/15/29	BBB+	750,000	764,355
PA State Tpk. Comm. Oil Franchise Tax Rev. Bonds, Ser. C, zero %, 12/1/39	AA	19,000,000	3,911,530
Philadelphia, Arpt. Rev. Bonds, Ser. D, 5 1/4s, 6/15/25	A+	2,750,000	2,825,074
Philadelphia, Hosp. & Higher Ed. Fac. Auth. Rev. Bonds (Hosp.-Graduate Hlth. Sys.), Ser. A, 6 1/4s, 7/1/13 (In default)	D/P	1,462,206	439

27

MUNICIPAL BONDS AND NOTES (139.9%)* cont.	Rating**	Principal amount	Value
Pennsylvania cont.			
Pittsburgh & Allegheny Cnty., Passports & Exhib. Auth. Hotel Rev. Bonds, AGM, 5s, 2/1/35	AA+	\$1,225,000	\$1,254,339
Susquehanna, Area Regl. Arpt. Syst. Auth. Rev. Bonds, Ser. A, 6 1/2s, 1/1/38	Baa3	550,000	559,686
			27,161,902
Puerto Rico (6.3%)			
Cmnwlth. of PR, G.O. Bonds			
Ser. B, 6s, 7/1/39	A3	5,000,000	5,465,200
Ser. C, 6s, 7/1/39	A3	2,500,000	2,741,925
Ser. A, 5s, 7/1/16	A3	5,000,000	5,440,800
Cmnwlth. of PR, Aqueduct & Swr. Auth. Rev. Bonds, Ser. A, 6s, 7/1/38	Baa1	4,125,000	4,474,634

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Cmnwlth. of PR, Elec. Pwr. Auth. Rev. Bonds, Ser. XX, 5 1/4s, 7/1/40	A3	3,000,000	3,129,120
Cmnwlth. of PR, Hwy. & Trans. Auth. Rev. Bonds, Ser. AA-2, 5.3s, 7/1/35	A2	875,000	884,161
Cmnwlth. of PR, Infrastructure Fin. Auth. Special Tax Bonds, Ser. C, AMBAC, 5 1/2s, 7/1/26	A3	1,000,000	1,066,140
Cmnwlth. of PR, Pub. Bldg. Auth. Mandatory Put Bonds (7/1/17) (Govt. Fac.), Ser. M-2, 5 3/4s, 7/1/34	A3	1,750,000	1,929,585
Cmnwlth. of PR, Sales Tax Fin. Corp. Rev. Bonds, Ser. A, zero %, 8/1/30	A1	27,000,000	8,338,950
			33,470,515
Rhode Island (0%)			
Tobacco Settlement Fin. Corp. Rev. Bonds, Ser. A, 6 1/4s, 6/1/42	BBB	200,000	199,168
			199,168
South Carolina (2.4%)			
Georgetown Cnty., Env. Impt. Rev. Bonds (Intl. Paper Co.), Ser. A, 5.7s, 4/1/14	BBB	1,000,000	1,112,650
Orangeburg Cnty., Solid Waste Disp. Fac. Rev. Bonds (SC Elec. & Gas), AMBAC, 5.7s, 11/1/24	A	2,500,000	2,507,500
SC Hosp. Auth. Rev. Bonds (Med. U.), Ser. A, 6 1/2s, 8/15/32 (Prerefunded 8/15/12)	AAA	2,000,000	2,214,660
SC Jobs Econ. Dev. Auth. Hosp. Fac. Rev. Bonds (Palmetto Hlth.) Ser. A, 7 3/8s, 12/15/21 (Prerefunded 12/15/10)	AAA/P	1,300,000	1,336,699
Ser. C, 6s, 8/1/20 (Prerefunded 8/1/13)	Baa1	2,445,000	2,776,517
Ser. C, 6s, 8/1/20 (Prerefunded 8/1/13)	Baa1	305,000	346,355
SC Trans. Infrastructure Bk. Rev. Bonds, Ser. A, AMBAC, 5s, 10/1/27	Aa3	2,460,000	2,613,135

12,907,516

South Dakota (0.6%)

SD Edl. Enhancement Funding Corp. SD Tobacco

Rev. Bonds, Ser. B, 6 1/2s, 6/1/32	BBB	2,450,000	2,496,231
------------------------------------	-----	-----------	-----------

SD Hsg. Dev. Auth. Rev. Bonds (Home Ownership),

Ser. C, 5 3/8s, 5/1/18	AAA	945,000	945,973
------------------------	-----	---------	---------

3,442,204

28

MUNICIPAL BONDS AND NOTES (139.9%)* cont.

Rating**

Principal amount

Value

Tennessee (1.1%)

Johnson City, Hlth. & Edl. Fac. Board Hosp.

Rev. Bonds

(Mountain States Hlth. Alliance), Ser. A, 7 1/2s,

7/1/25 (Prerefunded 7/1/12)	Baa1	\$2,000,000	\$2,224,100
-----------------------------	------	-------------	-------------

(Mountain States Hlth. Alliance), 6s, 7/1/38	Baa1	3,450,000	3,617,187
--	------	-----------	-----------

5,841,287

Texas (15.2%)

Abilene, Hlth. Fac. Dev. Corp. Retirement Fac.

(Sears Methodist Retirement), 6s, 11/15/29	B+/P	1,050,000	883,281
--	------	-----------	---------

Alliance, Arpt. Auth. Rev. Bonds (Federal

Express Corp.), 4.85s, 4/1/21	Baa2	3,250,000	3,314,902
-------------------------------	------	-----------	-----------

Brazoria Cnty., Brazos River Harbor Naval Dist. Env.

FRN (Dow Chemical Co.), Ser. A-4, 5.95s, 5/15/33	BBB□	400,000	414,708
--	------	---------	---------

Brazos River, Auth. Poll. Control Rev. Bonds

(TXU Energy Co., LLC)

Ser. D-1, 8 1/4s, 5/1/33	Ca	500,000	200,215
--------------------------	----	---------	---------

5s, 3/1/41	CCC	500,000	175,000
------------	-----	---------	---------

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Brazos, Harbor Indl. Dev. Corp. Env. Fac.

Mandatory Put Bonds (5/1/28) (Dow Chemical),

5.9s, 5/1/38	BBB□	2,850,000	2,956,418
--------------	------	-----------	-----------

Dallas Cnty., Util. & Reclamation Dist. G.O. Bonds,

Ser. B, AMBAC, 5 3/8s, 2/15/29	A3	4,000,000	4,062,480
--------------------------------	----	-----------	-----------

Dallas, Area Rapid Transit Rev. Bonds Sr. Lien,

5s, 12/1/33 ^T	AA+	30,000,000	32,111,722
--------------------------	-----	------------	------------

Gulf Coast, Waste Disp. Auth. Rev. Bonds

(Valero Energy Corp.), 6.65s, 4/1/32	Baa2	1,000,000	1,011,690
--------------------------------------	------	-----------	-----------

Ser. A, 6.1s, 8/1/24	BBB	550,000	558,558
----------------------	-----	---------	---------

Lower CO River Auth. Rev. Bonds, 5 3/4s, 5/15/37

Lower CO River Auth. Rev. Bonds, 5 3/4s, 5/15/37	A1	2,400,000	2,521,751
--	----	-----------	-----------

Matagorda Cnty., Poll. Control Rev. Bonds (Dist.

No. 1), Ser. A, AMBAC, 4.4s, 5/1/30	Baa2	1,500,000	1,394,025
-------------------------------------	------	-----------	-----------

Mission, Econ. Dev. Corp. Solid Waste Disp. Rev.

Bonds (Allied Waste N.A. Inc.), Ser. A, 5.2s, 4/1/18	BBB	1,200,000	1,210,332
--	-----	-----------	-----------

North TX, Thruway Auth. Rev. Bonds

Ser. D, AGO, zero %, 1/1/28	AA+	7,800,000	3,308,760
-----------------------------	-----	-----------	-----------

Ser. A, 6s, 1/1/25	A2	1,300,000	1,448,446
--------------------	----	-----------	-----------

(Toll 2nd Tier), Ser. F, 5 3/4s, 1/1/38	A3	2,000,000	2,095,340
---	----	-----------	-----------

North TX, Thruway Auth. stepped-coupon Rev.

Bonds, zero %, (6.5s, 1/1/15) 2043 □□	A2	4,000,000	3,360,760
---------------------------------------	----	-----------	-----------

Sam Rayburn Muni. Pwr. Agcy. Rev. Bonds,

6s, 10/1/21	Baa2	2,350,000	2,420,712
-------------	------	-----------	-----------

San Antonio Wtr. Rev. Bonds, Ser. A, AGM,

5s, 5/15/32	Aa1	2,000,000	2,069,240
-------------	-----	-----------	-----------

Tarrant Cnty., Cultural Ed. Fac. Fin. Corp. VRDN

(TX Hlth. Resources), Ser. G, 0.27s, 11/15/33	VMIG1	3,000,000	3,000,000
---	-------	-----------	-----------

Tarrant Cnty., Cultural Ed. Fac. Fin. Corp.

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Retirement Fac. Rev. Bonds (Buckner Retirement Svcs., Inc.), 5 1/4s, 11/15/37	A \square	1,100,000	1,067,527
TX Muni. Gas Acquisition & Supply Corp. I Rev. Bonds, Ser. A, 5s, 12/15/15	A2	3,000,000	3,193,110
TX State Tpk. Auth. Rev. Bonds (Central Texas Tpk. Syst.), Ser. A, AMBAC, 5 1/2s, 8/15/39	Baa1	8,000,000	8,157,040
			80,936,017

29

MUNICIPAL BONDS AND NOTES (139.9%)* cont.	Rating**	Principal amount	Value
Utah (0.4%)			
Salt Lake City, Hosp. Rev. Bonds, AMBAC, 6 3/4s, 5/15/20 (Escrowed to maturity)	AAA/P	\$1,900,000	\$1,905,320
			1,905,320
Virginia (1.1%)			
Henrico Cnty., Econ. Dev. Auth. Res. Care Fac. Rev. Bonds (United Methodist), Ser. A, 6.7s, 6/1/27	BB+/P	735,000	741,600
Prince William Cnty., Indl. Dev. Auth. Hosp. Rev. Bonds (Potomac Hosp. Corp.), 5.35s, 10/1/36	Baa1	2,500,000	2,523,500
WA Cnty., Indl. Dev. Auth. Hosp. Fac. Rev. Bonds (Mountain States Hlth. Alliance), Ser. C, 7 3/4s, 7/1/38	Baa1	2,100,000	2,435,580
			5,700,680
Washington (1.9%)			
Chelan Cnty. Dev. Corp. Rev. Bonds (Alcoa), 5.85s, 12/1/31	Baa3	2,000,000	2,001,420
Tobacco Settlement Auth. of WA Rev. Bonds 6 5/8s, 6/1/32	BBB	900,000	909,990

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

6 1/2s, 6/1/26	BBB	4,840,000	4,994,443
<hr/>			
WA State Hlth. Care Fac. Auth. Rev. Bonds (Kadlec Med. Ctr.), 5 1/2s, 12/1/39	Baa2	2,000,000	1,965,720
<hr/>			
			9,871,573
West Virginia (1.2%)			
Harrison Cnty., Cmnty. Solid Waste Disp. Rev. Bonds (Allegheny Energy), Ser. D, 5 1/2s, 10/15/37	BBB	3,450,000	3,374,031
<hr/>			
Princeton, Hosp. Rev. Bonds (Cmnty. Hosp. Assn., Inc.), 6.1s, 5/1/29	BB	2,025,000	1,928,104
<hr/>			
WV State Hosp. Fin. Auth. Rev. Bonds (Thomas Hlth. Syst.), 6 3/4s, 10/1/43	B/P	935,000	948,632
<hr/>			
			6,250,767
Wisconsin (4.1%)			
Badger, Tobacco Settlement Asset Securitization Corp. Rev. Bonds			
7s, 6/1/28 (Prerefunded 6/1/12)	Aaa	7,000,000	7,702,380
6 3/8s, 6/1/32 (Prerefunded 6/1/12)	Aaa	8,600,000	9,378,730
<hr/>			
WI State Rev. Bonds, Ser. A, 6s, 5/1/27	Aa3	2,500,000	2,939,750
<hr/>			
WI State Hlth. & Edl. Fac. Auth. Rev. Bonds (Prohealth Care, Inc.), 6 5/8s, 2/15/39	A1	1,500,000	1,658,160
<hr/>			
			21,679,020
Wyoming (0.8%)			
Campbell Cnty., Solid Waste Fac. Rev. Bonds (Basin Elec. Pwr. Co-op), Ser. A, 5 3/4s, 7/15/39	A1	2,000,000	2,187,220
<hr/>			
WY Muni. Pwr. Agcy. Pwr. Supply Rev. Bonds			
Ser. A, 5 1/2s, 1/1/33	A2	950,000	1,023,815
(Pwr. Supply), Ser. A, 5 1/2s, 1/1/28	A2	1,000,000	1,105,650
<hr/>			
			4,316,685

TOTAL INVESTMENTS

Total investments (cost \$712,447,424)

\$744,643,809

30

Notes to the fund's portfolio

Unless noted otherwise, the notes to the fund's portfolio are for the close of the fund's reporting period, which ran from May 1, 2010 through October 31, 2010 (the reporting period).

* Percentages indicated are based on net assets of \$532,394,966.

** The Moody's, Standard & Poor's or Fitch ratings indicated are believed to be the most recent ratings available at the close of the reporting period for the securities listed. Ratings are generally ascribed to securities at the time of issuance. While the agencies may from time to time revise such ratings, they undertake no obligation to do so, and the ratings do not necessarily represent what the agencies would ascribe to these securities at the close of the reporting period. Securities rated by Putnam are indicated by /P. Securities rated by Fitch are indicated by /F. The rating of an insured security represents what is believed to be the most recent rating of the insurer's claims-paying ability available at the close of the reporting period and does not reflect any subsequent changes.

Non-income-producing security.

The interest rate and date shown parenthetically represent the new interest rate to be paid and the date the fund will begin accruing interest at this rate.

T Underlying security in a tender option bond transaction. The security has been segregated as collateral for financing transactions.

Debt obligations are considered secured unless otherwise indicated.

144A after the name of an issuer represents securities exempt from registration under Rule 144A under the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration, normally to qualified institutional buyers.

The rates shown on ARP, FRB, FRN, Mandatory Put Bonds and VRDN are the current interest rates at the close of the reporting period.

The dates shown parenthetically on Mandatory Put Bonds represent the next mandatory put dates.

The dates shown parenthetically on prerefunded bonds represent the next prerefunding dates.

The dates shown on debt obligations are the original maturity dates.

The fund had the following sector concentrations greater than 10% at the close of the reporting period (as a percentage of net assets):

Health care	31.6%
Utilities	23.5
Local government	10.8
State government	10.7

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Accounting Standards Codification ASC 820 *Fair Value Measurements and Disclosures* (ASC 820) establishes a three-level hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of the fund's investments. The three levels are defined as follows:

Level 1 □ Valuations based on quoted prices for identical securities in active markets.

Level 2 □ Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3 □ Valuations based on inputs that are unobservable and significant to the fair value measurement.

The following is a summary of the inputs used to value the fund's net assets as of the close of the reporting period:

Valuation inputs			
Investments in securities:	Level 1	Level 2	Level 3
Municipal bonds and notes	\$□	\$744,643,809	\$□
Totals by level	\$□	\$744,643,809	\$□

The accompanying notes are an integral part of these financial statements.

31

Statement of assets and liabilities 10/31/10 (Unaudited)

ASSETS

Investment in securities, at value, (Note 1):	
Unaffiliated issuers (identified cost \$712,447,424)	\$744,643,809
Cash	361,907
Interest and other receivables	11,216,866
Receivable for investments sold	5,367,891
Total assets	761,590,473

LIABILITIES

Preferred share remarketing agent fees	203,690
--	---------

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Distributions payable to shareholders	2,840,326
Distributions payable to preferred shareholders (Note 1)	9,476
Payable for investments purchased	4,792,825
Payable for compensation of Manager (Note 2) (Notes 2 and 5)	994,201
Payable for investor servicing fees (Note 2)	22,249
Payable for custodian fees (Note 2)	6,498
Payable for Trustee compensation and expenses (Note 2)	190,708
Payable for administrative services (Note 2)	2,157
Payable for floating rate notes issued (Note 1)	41,224,008
Other accrued expenses	59,369
Total liabilities	50,345,507
Series B remarketed preferred shares: (3,417 shares authorized and issued at \$25,000 per share) (Note 4)	85,425,000
Series C remarketed preferred shares: (3,737 shares authorized and issued at \$25,000 per share) (Note 4)	93,425,000
Net assets	\$532,394,966
REPRESENTED BY	
Paid-in capital □ common shares (Unlimited shares authorized) (Notes 1 and 5)	\$546,829,783
Undistributed net investment income (Note 1)	1,247,875
Accumulated net realized loss on investments (Note 1)	(47,879,077)
Net unrealized appreciation of investments	32,196,385

Total ☐ **Representing net assets applicable to common shares outstanding** **\$532,394,966**

COMPUTATION OF NET ASSET VALUE

Net asset value per common share (\$532,394,966 divided by 42,871,374 shares) \$12.42

The accompanying notes are an integral part of these financial statements.

32

Statement of operations Six months ended 10/31/10 (Unaudited)

INTEREST INCOME **\$20,293,604**

EXPENSES

Compensation of Manager (Note 2) \$1,950,470

Investor servicing fees (Note 2) 131,096

Custodian fees (Note 2) 6,485

Trustee compensation and expenses (Note 2) 17,635

Administrative services (Note 2) 9,981

Interest and fee expense (Note 1) 151,891

Legal 431,148

Preferred share remarketing agent fees 228,531

Other 137,670

Total expenses **3,064,907**

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Expense reduction (Note 2) (454)

Net expenses 3,064,453

Net investment income 17,229,151

Net realized loss on investments (Notes 1 and 3) (393,092)

Net unrealized appreciation of investments during the period 18,899,448

Net gain on investments 18,506,356

Net increase in net assets resulting from operations \$35,735,507

DISTRIBUTIONS TO SERIES B AND C REMARKETED PREFERRED SHAREHOLDERS (NOTE 1):

From ordinary income

Taxable net investment income (379,334)

Net increase in net assets resulting from operations (applicable to common shareholders) \$35,356,173

The accompanying notes are an integral part of these financial statements.

33

Statement of changes in net assets

INCREASE IN NET ASSETS **Six months ended 10/31/10*** **Year ended 4/30/10**

Operations:

Net investment income \$17,229,151 \$34,840,534

Net realized loss on investments (393,092) (3,063,682)

Net unrealized appreciation of investments 18,899,448 67,796,780

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Net increase in net assets resulting from operations	35,735,507	99,573,632
---	-------------------	-------------------

DISTRIBUTIONS TO SERIES B AND C REMARKETED PREFERRED SHAREHOLDERS (NOTE 1):

From ordinary income

Taxable net investment income	(379,334)	(35,420)
-------------------------------	-----------	----------

From tax exempt net investment income	□	(768,199)
---------------------------------------	---	-----------

Net increase in net assets resulting from operations (applicable to common shareholders)	35,356,173	98,770,013
---	-------------------	-------------------

DISTRIBUTIONS TO COMMON SHAREHOLDERS (NOTE 1):

From ordinary income

Taxable net investment income	□	(178,731)
-------------------------------	---	-----------

From tax exempt net investment income	(17,054,233)	(33,179,485)
---------------------------------------	--------------	--------------

Total increase in net assets	18,301,940	65,411,797
-------------------------------------	-------------------	-------------------

NET ASSETS

Beginning of period	514,093,026	448,681,229
---------------------	-------------	-------------

End of period (including undistributed net investment income of \$1,247,875 and \$1,452,291, respectively)	\$532,394,966	\$514,093,026
--	----------------------	----------------------

NUMBER OF FUND SHARES

Common shares outstanding at beginning and end of period	42,871,374	42,871,374
---	-------------------	-------------------

Remarketed preferred shares outstanding at beginning and end of period	7,154	7,154
---	--------------	--------------

* Unaudited

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

The accompanying notes are an integral part of these financial statements.

34

Financial highlights (For a common share outstanding throughout the period)

PER-SHARE OPERATING PERFORMANCE

	Six months ended**			Year ended		
	10/31/10	4/30/10	4/30/09	4/30/08	4/30/07	4/30/06
Net asset value, beginning of period (common shares)	\$11.99	\$10.47	\$12.41	\$13.19	\$12.85	\$13.15
<i>Investment operations:</i>						
Net investment income ^a	.40	.81	.88 ^e	.93 ^e	.89	.86
Net realized and unrealized gain (loss) on investments	.44	1.51	(1.96)	(.88)	.23	(.30)
Total from investment operations	.84	2.32	(1.08)	.05	1.12	.56
<i>Distributions to preferred shareholders:</i>						
From net investment income	(.01)	(.02)	(.19)	(.33)	(.28)	(.21)
Total from investment operations (applicable to common shareholders)	.83	2.30	(1.27)	(.28)	.84	.35
<i>Distributions to common shareholders:</i>						
From net investment income	(.40)	(.78)	(.68)	(.57)	(.57)	(.68)
Total distributions	(.40)	(.78)	(.68)	(.57)	(.57)	(.68)
Increase from shares repurchased	□	□	.01	.07	.07	.03
Net asset value, end of period (common shares)	\$12.42	\$11.99	\$10.47	\$12.41	\$13.19	\$12.85

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Market price, end of period						
(common shares)	\$12.25	\$11.43	\$9.73	\$11.13	\$12.20	\$11.68
Total return at market price (%)						
(common shares) ^b	10.80 [*]	26.10	(6.32)	(4.09)	9.64	5.61
RATIOS AND SUPPLEMENTAL DATA						
Net assets, end of period						
(common shares)(in thousands)	\$532,395	\$514,093	\$448,681	\$537,428	\$200,176	\$203,548
Ratio of expenses to average net assets (excluding interest expense) (%) ^{c,d}	.55 [*]	1.02	1.25 ^e	1.44 ^e	1.28	1.37
Ratio of expenses to average net assets (including interest expense) (%) ^{c,d}	.58 ^f	1.08 ^f	1.38 ^e	1.44 ^e	1.28	1.37
Ratio of net investment income to average net assets (%) ^d	3.21 [*]	6.91	6.31 ^e	4.86 ^e	4.61	4.92
Portfolio turnover (%)	7.76 [*]	22.97	31.32	44.85	12.60	10.74

* Not annualized.

** Unaudited.

^a Per share net investment income has been determined on the basis of the weighted average number of shares outstanding during the period.

^b Total return assumes dividend reinvestment.

^c Includes amounts paid through expense offset arrangements (Note 2).

^d Ratios reflect net assets available to common shares only: net investment income ratio also reflects reduction for dividend payments to preferred shareholders.

^e Reflects waiver of certain fund expenses in connection with the fund's remarketed preferred shares during the period. As a result of such waivers, the expenses of the fund for the period ended April 30, 2009 and April 30, 2008 reflect a reduction of 0.03% and less than 0.01% of average net assets, respectively (Note 2).

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

^f Includes interest and fee expense associated with borrowings which amounted to 0.03%, 0.06% and 0.13% of average net assets for the periods ended October 31, 2010, April 30, 2010 and April 30, 2009, respectively (Note 1).

The accompanying notes are an integral part of these financial statements.

35

Notes to financial statements 10/31/10 (Unaudited)

Note 1: Significant accounting policies

Putnam Municipal Opportunities Trust (the fund) is registered under the Investment Company Act of 1940, as amended, as a non-diversified, closed-end management investment company. The fund's investment objective is to seek as high a level of current income exempt from federal income tax as Putnam Investment Management, LLC (Putnam Management), the fund's manager, a wholly-owned subsidiary of Putnam Investments, LLC believes is consistent with the preservation of capital. The fund intends to achieve its objective by investing in a portfolio of investment grade and some below investment-grade municipal bonds selected by Putnam Management.

In the normal course of business, the fund enters into contracts that may include agreements to indemnify another party under given circumstances. The fund's maximum exposure under these arrangements is unknown as this would involve future claims that may be, but have not yet been, made against the fund. However, the fund's management team expects the risk of material loss to be remote.

The following is a summary of significant accounting policies consistently followed by the fund in the preparation of its financial statements. The preparation of financial statements is in conformity with accounting principles generally accepted in the United States of America and requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities in the financial statements and the reported amounts of increases and decreases in net assets from operations. Actual results could differ from those estimates. Subsequent events after the Statement of assets and liabilities date through the date that the financial statements were issued have been evaluated in the preparation of the financial statements. Unless otherwise noted, the "reporting period" represents the period from May 1, 2010 through October 31, 2010.

A) Security valuation Tax-exempt bonds and notes are generally valued on the basis of valuations provided by an independent pricing service approved by the Trustees. Such services use information with respect to transactions in bonds, quotations from bond dealers, market transactions in comparable securities and various relationships between securities in determining value. These securities will generally be categorized as Level 2. Certain investments, including certain restricted and illiquid securities and derivatives are also valued at fair value following procedures approved by the Trustees. Such valuations and procedures are reviewed periodically by the Trustees. These valuations consider such factors as significant market or specific security events such as interest rate or credit quality changes, various relationships with other securities, discount rates, U.S. Treasury, U.S. swap and credit yields, index levels, convexity exposures and recovery rates. These securities are classified as Level 2 or as Level 3 depending on the priority of the significant inputs. The fair value of securities is generally determined as the amount that the fund could reasonably expect to realize from an orderly disposition of such securities over a reasonable period of time. By its nature, a fair value price is a good faith estimate of the value of a security in a current sale and does not reflect an actual market price, which may be different by a material amount.

B) Security transactions and related investment income Security transactions are recorded on the trade date (the date the order to buy or sell is executed). Gains or losses on securities sold are determined on the identified cost basis. Interest income is recorded on the accrual basis. All premiums/discounts are amortized/accreted on a yield-to-maturity basis. The premium in excess of the call price, if any, is amortized to the call date; thereafter, any remaining premium is amortized to maturity.

C) Tender option bond transactions The fund may participate in transactions whereby a fixed-rate bond is transferred to a tender option bond trust (TOB trust) sponsored by a broker. The TOB trust funds the purchase of the fixed rate bonds by issuing floating-rate bonds to third parties and allowing the fund to retain the residual interest in the TOB trust's assets and cash flows, which are in the form of inverse floating rate bonds. The inverse floating rate bonds held by the fund give the fund the right to (1) cause the holders of the floating rate bonds to tender their notes at par, and (2) to have the fixed-rate bond held by the TOB trust transferred to the fund, causing the TOB trust to collapse. The fund accounts for the transfer of the fixed-rate bond to the TOB trust as a secured borrowing by including the fixed-rate bond in the fund's portfolio and including the floating rate bond as a liability in the Statement of assets and liabilities. At the close of the reporting period, the fund's investments with a value of \$87,062,300 were held by the TOB trust and served as collateral for \$41,224,008 in floating-rate bonds outstanding. For the reporting period ended, the fund incurred interest expense of \$59,756 for these investments based on an average interest rate of 0.29%.

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

D) Federal taxes It is the policy of the fund to distribute all of its income within the prescribed time period and otherwise comply with the provisions of the Internal Revenue Code of 1986, as amended (the Code), applicable

36

to regulated investment companies. It is also the intention of the fund to distribute an amount sufficient to avoid imposition of any excise tax under Section 4982 of the Code. The fund is subject to the provisions of Accounting Standards Codification ASC 740 *Income Taxes* (ASC 740). ASC 740 sets forth a minimum threshold for financial statement recognition of the benefit of a tax position taken or expected to be taken in a tax return. The fund did not have a liability to record for any unrecognized tax benefits in the accompanying financial statements. No provision has been made for federal taxes on income, capital gains or unrealized appreciation on securities held nor for excise tax on income and capital gains. Each of the fund's federal tax returns for the prior three fiscal years remains subject to examination by the Internal Revenue Service.

At April 30, 2010, the fund had a capital loss carryover of \$46,588,946 available to the extent allowed by the Code to offset future net capital gain, if any. The amounts of the carryovers and the expiration dates are:

Loss carryover	Expiration
\$10,138,476	April 30, 2011
9,779,755	April 30, 2012
2,388,286	April 30, 2013
897,370	April 30, 2014
1,545,945	April 30, 2015
884,324	April 30, 2016
16,106,777	April 30, 2017
4,848,013	April 30, 2018

Pursuant to federal income tax regulations applicable to regulated investment companies, the fund has elected to defer to its fiscal year ending April 30, 2011 \$1,329,377 of losses recognized during the period November 1, 2009 to April 30, 2010.

The aggregate identified cost on a tax basis is \$712,473,899, resulting in gross unrealized appreciation and depreciation of \$43,428,890 and \$11,258,980, respectively, or net unrealized appreciation of \$32,169,910.

E) Distributions to shareholders Distributions to common and preferred shareholders from net investment income are recorded by the fund on the ex-dividend date. Distributions from capital gains, if any, are recorded on the ex-dividend date and paid at least annually. Dividends on remarketed preferred shares become payable when, as and if declared by the Trustees. Each dividend period for the remarketed preferred shares is generally a 7-day period. The applicable dividend rate for the remarketed preferred shares on October 31, 2010 was 0.442% for Series B, and 0.426% for Series C.

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

During the reporting period, the fund has experienced unsuccessful remarketings of its remarketed preferred shares. As a result, dividends to the remarketed preferred shares have been paid at the "maximum dividend rate," pursuant to the fund's by-laws, which, based on the current credit quality of the remarketed preferred shares, equals 110% of the higher of the 30-day "AA" composite commercial paper rate and the taxable equivalent of the short-term municipal bond rate.

The amount and character of income and gains to be distributed are determined in accordance with income tax regulations, which may differ from generally accepted accounting principles. Dividend sources are estimated at the time of declaration. Actual results may vary. Any non-taxable return of capital cannot be determined until final tax calculations are completed after the end of the fund's fiscal year. Reclassifications are made to the fund's capital accounts to reflect income and gains available for distribution (or available capital loss carryovers) under income tax regulations.

F) Determination of net asset value Net asset value of the common shares is determined by dividing the value of all assets of the fund, less all liabilities and the liquidation preference of any outstanding remarketed preferred shares, by the total number of common shares outstanding as of period end.

Note 2: Management fee, administrative services and other transactions

The fund pays Putnam Management for management and investment advisory services quarterly based on the average net assets of the fund, including assets attributable to preferred shares. Such fee is based on the lesser of (i) an annual rate of 0.550% of the average net assets attributable to common and preferred shares outstanding or (ii) the following annual rates expressed as a percentage of the fund's average net assets attributable to common

37

and preferred shares outstanding: 0.650% of the first \$500 million and 0.550% of the next \$500 million, with additional breakpoints at higher asset levels.

Putnam Investments Limited (PIL), an affiliate of Putnam Management, is authorized by the Trustees to manage a separate portion of the assets of the fund as determined by Putnam Management from time to time. Putnam Management pays a quarterly sub-management fee to PIL for its services at an annual rate of 0.40% of the average net assets of the portion of the fund managed by PIL.

If dividends payable on remarketed preferred shares during any dividend payment period plus any expenses attributable to remarketed preferred shares for that period exceed the fund's gross income attributable to the proceeds of the remarketed preferred shares during that period, then the fee payable to Putnam Management for that period will be reduced by the amount of the excess (but not more than the effective management and administrative service fees rate under the contracts multiplied by the liquidation preference of the remarketed preferred shares outstanding during the period).

The fund reimburses Putnam Management an allocated amount for the compensation and related expenses of certain officers of the fund and their staff who provide administrative services to the fund. The aggregate amount of all such reimbursements is determined annually by the Trustees.

Custodial functions for the fund's assets are provided by State Street Bank and Trust Company (State Street). Custody fees are based on the fund's asset level, the number of its security holdings and transaction volumes.

Putnam Investor Services, a division of Putnam Fiduciary Trust Company (PFTC), which is an affiliate of Putnam Management, provides investor servicing agent functions to the fund. Putnam Investor Services was paid a monthly fee for investor servicing at an annual rate of 0.05% of the fund's average net assets. The amounts incurred for investor servicing agent functions provided by PFTC during the reporting period are included in Investor servicing fees in the Statement of operations.

The fund has entered into expense offset arrangements with PFTC and State Street whereby PFTC's and State Street's fees are reduced by credits allowed on cash balances. For the reporting period, the fund's expenses were reduced by \$454 under the expense offset arrangements.

Each independent Trustee of the fund receives an annual Trustee fee, of which \$373, as a quarterly retainer, has been allocated to the fund, and an additional fee for each Trustees meeting attended. Trustees also are reimbursed for expenses they incur relating to their services as Trustees.

The fund has adopted a Trustee Fee Deferral Plan (the Deferral Plan) which allows the Trustees to defer the receipt of all or a portion of Trustees fees payable on or after July 1, 1995. The deferred fees remain invested in certain Putnam funds until distribution in accordance with the Deferral Plan.

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

The fund has adopted an unfunded noncontributory defined benefit pension plan (the Pension Plan) covering all Trustees of the fund who have served as a Trustee for at least five years and were first elected prior to 2004. Benefits under the Pension Plan are equal to 50% of the Trustee's average annual attendance and retainer fees for the three years ended December 31, 2005. The retirement benefit is payable during a Trustee's lifetime, beginning the year following retirement, for the number of years of service through December 31, 2006. Pension expense for the fund is included in Trustee compensation and expenses in the Statement of operations. Accrued pension liability is included in Payable for Trustee compensation and expenses in the Statement of assets and liabilities. The Trustees have terminated the Pension Plan with respect to any Trustee first elected after 2003.

Note 3: Purchases and sales of securities

During the reporting period, cost of purchases and proceeds from sales of investment securities other than short-term investments aggregated \$56,768,404 and \$66,246,511, respectively. There were no purchases or proceeds from sales of long-term U.S. government securities.

Note 4: Preferred shares

The Series B and C Remarketed Preferred shares are redeemable at the option of the fund on any dividend payment date at a redemption price of \$25,000 per share, plus an amount equal to any dividends accumulated on a daily basis but unpaid through the redemption date (whether or not such dividends have been declared) and, in certain circumstances, a call premium.

It is anticipated that dividends paid to holders of remarketed preferred shares will be considered tax-exempt dividends under the Internal Revenue Code of 1986. To the extent that the fund earns taxable income and capital gains by the conclusion of a fiscal year, it may be required to apportion to the holders of the remarketed preferred

38

shares throughout that year additional dividends as necessary to result in an after-tax equivalent to the applicable dividend rate for the period.

Under the Investment Company Act of 1940, the fund is required to maintain asset coverage of at least 200% with respect to the remarketed preferred shares. Additionally, the fund's bylaws impose more stringent asset coverage requirements and restrictions relating to the rating of the remarketed preferred shares by the shares' rating agencies. Should these requirements not be met, or should dividends accrued on the remarketed preferred shares not be paid, the fund may be restricted in its ability to declare dividends to common shareholders or may be required to redeem certain of the remarketed preferred shares. At October 31, 2010, no such restrictions have been placed on the fund.

Note 5: Share repurchased

In September 2010, the Trustees approved the renewal of the repurchase program to allow the fund to repurchase up to 10% of its outstanding common shares over the 12-month period ending October 7, 2011 (based on shares outstanding as of October 7, 2010). Prior to this renewal, the Trustees had approved a repurchase program to allow the fund to repurchase up to 10% of its outstanding common shares over the 12-month period ending October 7, 2010 (based on shares outstanding as of October 7, 2009) and prior to that, to allow the fund to repurchase up to 10% of its outstanding common shares over the 12-month period ending October 7, 2009 (based on shares outstanding as of October 5, 2008). Repurchases are made when the fund's shares are trading at less than net asset value and in accordance with procedures approved by the fund's Trustees. For the reporting period, the fund has not repurchased any common shares.

Note 6: Share ownership

At period end, to the funds knowledge, a shareholder owned of record, beneficially, or on behalf of other accounts, 15.25% of the fund's outstanding common shares.

Note 7: Regulatory matters and litigation

In late 2003 and 2004, Putnam Management settled charges brought by the Securities and Exchange Commission (the SEC) and the Massachusetts Securities Division in connection with excessive short-term trading in Putnam funds. Distribution of payments from Putnam Management to certain open-end Putnam funds and their shareholders is expected to be completed in the next several months. These allegations and related matters have served as the general basis for certain lawsuits, including purported class action lawsuits against Putnam Management and, in a limited number of cases, some Putnam funds. Putnam Management believes that these lawsuits will have no material adverse effect on the funds or on Putnam Management's ability to provide investment management services. In addition, Putnam Management has agreed to bear any costs incurred by the Putnam funds

as a result of these matters.

Note 8: Market and credit risk

In the normal course of business, the fund trades financial instruments and enters into financial transactions where risk of potential loss exists due to changes in the market (market risk) or failure of the contracting party to the transaction to perform (credit risk). The fund may be exposed to additional credit risk that an institution or other entity with which the fund has unsettled or open transactions will default.

39

Shareholder meeting results (Unaudited)

April 8, 2010 meeting

Fixing the number of Trustees at 14 and electing nominees for Trustees

The nominees for Trustee for election by the common and preferred shareholders, voting as a single class, received the following votes. The twelve nominees who received the most "Votes for" were elected:

	Votes for	Votes withheld
Ravi Akhoury*	17,560,156	1,438,073
Jameson A. Baxter*	17,586,776	1,411,453
Charles B. Curtis*	17,597,191	1,401,038
Robert J. Darretta*	17,588,276	1,409,953
Myra R. Drucker*	17,590,398	1,407,831
Paul L. Joskow*	17,598,257	1,399,972
Elizabeth T. Kennan*□	17,566,320	1,431,909
Kenneth R. Leibler*	17,589,564	1,408,665
George Putnam, III*	17,584,976	1,413,253
Robert L. Reynolds*	17,603,718	1,394,511
W. Thomas Stephens*	17,591,723	1,406,506

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

Richard B. Worley*	17,598,862	1,399,367
--------------------	------------	-----------

* Denotes nominee who was elected as a Trustee at the meeting.

□ Dr. Kennan retired from the Board of Trustees of the Putnam funds effective June 30, 2010.

Karpus Management, Inc.'s Nominees:

	Votes for	Votes withheld
Walter S. Baer	11,496,196	1,004,625
Donald Chapman	11,500,787	1,000,034
Richard W. Cohen	6,053,133	0
Phillip Goldstein	6,053,133	0
Robert Hoyt	11,494,812	1,006,009
Jeffrey P. Lessard	11,492,572	1,008,249
Brad Orvieto	11,494,997	1,005,824
Arthur Charles Regan	11,489,799	1,011,022

Due to the lack of a quorum of preferred shares, preferred shareholders did not transact business as a separate class with respect to the two nominees, John A. Hill and Robert E. Patterson, for election solely by the preferred shareholders.

Shareholder proposal recommending that the Trustees consider converting the fund to an open-end format

The fund's common and preferred shareholders voted together as a single class on a shareholder proposal requesting that the Board of Trustees promptly consider converting the Fund from a closed-end fund format. The proposal was defeated as follows:

Votes for	Votes against	Abstentions
14,226,749	16,549,467	722,827

All tabulations are rounded to the nearest whole number.

Fund information

About Putnam Investments

Founded over 70 years ago, Putnam Investments was built around the concept that a balance between risk and reward is the hallmark of a well-rounded financial program. We manage over 100 funds across income, value, blend, growth, asset allocation, absolute return, and global sector categories.

Investment Manager

Putnam Investment
Management, LLC
One Post Office Square
Boston, MA 02109

Robert E. Patterson
George Putnam, III
Robert L. Reynolds
W. Thomas Stephens
Richard B. Worley

Mark C. Trenchard
*Vice President and
BSA Compliance Officer*

Investment Sub-Manager

Putnam Investments Limited
55 St James Street
London, England SW1A 1LD

Officers

Robert L. Reynolds
President

Francis J. McNamara, III
*Vice President and
Chief Legal Officer*

James P. Pappas
Vice President

Marketing Services

Putnam Retail Management
One Post Office Square
Boston, MA 02109

Jonathan S. Horwitz
*Executive Vice President,
Principal Executive
Officer, Treasurer and
Compliance Liaison*

Judith Cohen
*Vice President, Clerk and
Assistant Treasurer*

Custodian

State Street Bank
and Trust Company

Steven D. Krichmar
*Vice President and
Principal Financial Officer*

Michael Higgins
*Vice President, Senior Associate
Treasurer and Assistant Clerk*

Legal Counsel

Ropes & Gray LLP

Janet C. Smith
*Vice President, Assistant
Treasurer and Principal
Accounting Officer*

Nancy E. Florek
*Vice President, Assistant Clerk,
Assistant Treasurer and
Proxy Manager*

Trustees

John A. Hill, *Chairman*
Jameson A. Baxter,
Vice Chairman
Ravi Akhoury
Barbara M. Baumann
Charles B. Curtis
Robert J. Darretta
Myra R. Drucker

Beth S. Mazor
Vice President

Susan G. Malloy
*Vice President and
Assistant Treasurer*

Robert R. Leveille
*Vice President and
Chief Compliance Officer*

Paul L. Joskow

Kenneth R. Leibler

Call 1-800-225-1581 Monday through Friday between 8:00 a.m. and 8:00 p.m. Eastern Time, or visit our Web site (putnam.com) anytime for up-to-date information about the fund's NAV.

Item 2. Code of Ethics:

Not Applicable

Item 3. Audit Committee Financial Expert:

Not Applicable

Item 4. Principal Accountant Fees and Services:

Not Applicable

Item 5. Audit Committee

Not Applicable

Item 6. Schedule of Investments:

The registrant's schedule of investments in unaffiliated issuers is included in the report to shareholders in Item 1 above.

Item 7. Disclosure of Proxy Voting Policies and Procedures For Closed-End Management Investment Companies:

Not applicable

Item 8. Portfolio Managers of Closed-End Management Investment Companies

(a) Not applicable

(b) There have been no changes to the list of the registrant's identified portfolio managers included in the registrant's report on Form N-CSR for the most recent completed fiscal year.

Item 9. Purchases of Equity Securities by Closed-End Management Investment Companies and Affiliated Purchasers:

Registrant Purchase of Equity Securities

	Total Number of Shares	Maximum Number (or Approximate
--	---------------------------	--------------------------------------

Edgar Filing: PUTNAM MUNICIPAL OPPORTUNITIES TRUST - Form N-CSR

<u>Period</u>	<u>Total Number of Shares Purchased</u>	<u>Average Price Paid per Share</u>	<u>Purchased as Part of Publicly Announced Plans or Programs*</u>	<u>Dollar Value) of Shares that May Yet Be Purchased under the Plans or Programs**</u>
May 1 - May 31, 2010	-	-	-	4,287,137
June 1 - June 30, 2010	-	-	-	4,287,137
July 1 - July 31, 2010	-	-	-	4,287,137
August 1 - August 31, 2010	-	-	-	4,287,137
<hr/>				
September 1 - September 30, 2010	-	-	-	4,287,137
October 1 - October 7, 2010	-	-	-	4,287,137
October 8 - October 31, 2010	-	-	-	4,287,137

* In October 2005, the Board of Trustees of the Putnam Funds initiated the closed-end fund share repurchase program, which, as subsequently amended, authorized the repurchase of up to 10% of the fund's outstanding common shares over the two-years ending October 5, 2007. The Trustees subsequently renewed the program on four occasions, to permit the repurchase of an additional 10% of the fund's outstanding common shares over each of the twelve-month periods beginning on October 8, 2007, October 8, 2008, October 8, 2009 and October 8, 2010. The October 8, 2008 - October 7, 2009 program, which was announced in September 2008, allowed repurchases up to a total of 4,287,137 shares of the fund. The October 8, 2009 - October 7, 2010 program, which was announced in September 2009, allows repurchases up to a total of 4,287,137 shares of the fund. The October 8, 2010 - October 7, 2011 program, which was announced in September 2010, allows repurchases up to a total of 4,287,137 shares of the fund.

**Information prior to October 7, 2010 is based on the total number of shares eligible for repurchase under the program, as amended through September 2009. Information from October 8, 2010 forward is based on the total number of shares eligible for repurchase under the program, as amended through September 2010.

Item 10. Submission of Matters to a Vote of Security Holders:

Not applicable

Item 11. Controls and Procedures:

(a) The registrant's principal executive officer and principal financial officer have concluded, based on their evaluation of the effectiveness of the design and operation of the registrant's disclosure controls and procedures as of a date within 90 days of the filing date of this report, that the design and operation of such procedures are generally effective to provide reasonable assurance that information required to be disclosed by the registrant in this report is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms.

(b) Changes in internal control over financial reporting: Not applicable

Item 12. Exhibits:

(a)(1) Not applicable

(a)(2) Separate certifications for the principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the Investment Company Act of 1940, as amended, are filed herewith.

(b) The certifications required by Rule 30a-2(b) under the Investment Company Act of 1940, as amended, are filed herewith.

SIGNATURES

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.

SIGNATURES

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.

Putnam Municipal Opportunities Trust

By (Signature and Title):

/s/ Janet C. Smith

Janet C. Smith
Principal Accounting Officer

Date: December 29, 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 (Signature and Title):

/s/ Jonathan S. Horwitz

Jonathan S. Horwitz
Principal Executive Officer

Date: December 29, 2010

By (Signature and Title):

/s/ Steven D. Krichmar

Steven D. Krichmar
Principal Financial Officer

Date: December 29, 2010
