

PUTNAM MUNICIPAL OPPORTUNITIES TRUST  
Form N-CSR  
June 28, 2006

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  
One International Place  
Boston, Massachusetts 02110

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

Date of fiscal year end: April 30, 2006

Date of reporting period: May 1, 2005 - April 30, 2006

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:

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## What makes Putnam different?

In 1830, Massachusetts Supreme Judicial Court Justice Samuel Putnam established The Prudent Man Rule, a legal foundation for responsible money management.

THE PRUDENT MAN RULE

All that can be required of a trustee to invest is that he shall conduct himself faithfully and exercise a sound discretion. He is to observe how men of prudence, discretion, and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income, as well as the probable safety of the capital to be invested.

### A time-honored tradition in money management

Since 1937, our values have been rooted in a profound sense of responsibility for the money entrusted to us.

### A prudent approach to investing

We use a research-driven team approach to seek consistent, dependable, superior investment results over time, although there is no guarantee a fund will meet its objectives.

### Funds for every investment goal

We offer a broad range of mutual funds and other financial products so investors and their financial representatives can build diversified portfolios.

### A commitment to doing what's right for investors

We have stringent investor protections and provide a wealth of information about the Putnam funds.

### Industry-leading service

We help investors, along with their financial representatives, make informed investment decisions with confidence.

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# Putnam Municipal Opportunities Trust

## 4|30|06

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## *Message from the Trustees*

# Dear Fellow Shareholder

In recent months, we have witnessed the continuing vibrancy of the current economic expansion, now in its fifth year. U.S. businesses have seized opportunities available both at home and abroad to generate some of the most impressive profit margins in history, by some measures. During your fund's reporting period, common stocks have traded at higher levels to reflect improving corporate profits. However, the gains have not come without concerns in some quarters of the market about the risks facing the economy. These risks include high energy prices, inflation, and a potential pullback in consumer spending, as well as the potential adverse effects of the Federal Reserve's (the Fed's) series of interest-rate increases. Concerns about inflation, in particular, have been reflected in falling bond prices and rising bond yields, and worries about consumer spending have clouded the outlook for stocks.

You can be assured that the investment professionals managing your fund are closely monitoring the factors that are influencing the performance of the securities in which your fund invests. Moreover, Putnam Investments' management team, under the leadership of Chief Executive Officer Ed Haldeman, continues to focus on investment performance and remains committed to putting the interests of shareholders first.

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In the following pages, members of your fund's management team discuss the fund's performance and strategies for the fiscal period ended April 30, 2006, and provide their outlook for the months ahead. As always, we thank you for your support of the Putnam funds.

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## **Putnam Municipal Opportunities Trust: potential for high current income exempt from federal income tax**

One of the most significant challenges of fixed-income investing is taxes on income. Investing in municipal bonds through a fund such as Putnam Municipal Opportunities Trust can help address this challenge. 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 either 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, investment managers must do additional research to determine whether these bonds are prudent investments.

Evaluating a bond's credit risk is one area in which Putnam has particular expertise. Putnam's municipal bond research team analyzes each issue in depth and assigns non-rated bonds an agency-equivalent Putnam rating. This analysis helps the team identify bonds with attractive risk/return profiles among the large number of bonds not rated by agencies.

Once the fund has invested in a bond, the fund's management team continues to monitor developments that affect the overall bond market, the specific sector, and the issuer of the bond. Typically, higher-risk, lower-rated bonds are reviewed more frequently because of their greater potential risk.

## Municipal bonds may finance a range of projects in your community and thus play a key role in its development.

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The goal of the team's research and active management is to stay a step ahead of the industry and pinpoint opportunities to adjust the fund's holdings for the benefit of the fund and its shareholders.

*Capital gains, if any, are taxable for federal and, in most cases, state purposes. 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. Please consult with your tax advisor for more information. Mutual 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. Leverage can mean higher returns, but adds risk and may increase share price volatility.*

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

**More assets at work** While open-end funds must maintain a cash position to meet redemptions, closed-end funds have no such requirement 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.

**Market price vs. net asset value** Like an open-end fund's net asset value (NAV) per share, the NAV of a closed end fund share equals 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.

**Strategies for higher income** Closed-end funds have greater flexibility to use strategies such as "leverage" — for example, issuing preferred shares to raise capital, then seeking to invest it at higher rates to enhance return for common shareholders.

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**Putnam Municipal Opportunities Trust** is a leveraged fund that seeks to provide as high a level of current income free from federal income tax as Putnam Management believes is consistent with the preservation of capital. The fund invests in investment-grade and some below-investment grade municipal bonds.

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The fund may be appropriate for investors seeking tax-free income who are willing to accept the risks associated with the use of leverage.

### Highlights

\* For the fiscal year ended April 30, 2006, Putnam Municipal Opportunities Trust returned 3.56% at net asset value and 5.61% at market price.

\* The fund's benchmark, the Lehman Municipal Bond Index, returned 2.15% ..

\* The average return for the fund's Lipper category, General Municipal Debt Funds (leveraged closed-end), was 3.86% .

\* In June 2005, the fund's monthly dividend was reduced. See page 11 for details.

\* Additional fund performance, comparative performance, and Lipper data can be found in the performance section beginning on page 13.

### Performance

It is important to note that a fund's performance at market price may differ from its results at NAV. Although market price performance generally reflects investment results, it may also be influenced by several other factors, including changes in investor perceptions of the fund or its investment advisor, market conditions, fluctuations in supply and demand for the fund's shares, and changes in fund distributions.

Total return for periods ended 4/30/06

Since the fund's inception (5/28/93), average annual return is 6.39% at NAV and 5.09% at market price.

	Average annual return		Cumulative return	
	NAV	Market price	NAV	Market price
10 years	6.49%	5.39%	87.62%	68.98%
5 years	6.82	3.87	39.08	20.93
3 years	6.58	4.60	21.07	14.45
1 year	3.56	5.61	3.56	5.61

*Data is historical. 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. Performance assumes reinvestment of distributions and does not account for taxes.*

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## *Report from the fund managers*

# The year in review

Your fund's use of leverage and overall credit quality, coupled with appreciation from several individual holdings, helped it outperform its benchmark during the year, based on its results at NAV. However in comparison to its peers, the fund's overall portfolio quality was higher and its focus on intermediate-maturity bonds heavier, which caused it to slightly lag the average return of funds in its Lipper category. Rising interest rates depressed the price of longer-term bonds, as we had expected, but at a more gradual pace than anticipated, while rates on intermediate-term bonds rose more steeply. Nonetheless, given current market conditions, we believe it is prudent to keep the fund's sensitivity to changing interest rates moderate and its portfolio higher in quality.

## Market overview

Continuing indications of solid economic growth, and the desire to curb the potential inflation that frequently accompanies such growth, prompted the Fed to increase the federal funds rate eight times during the fund's fiscal year, lifting this benchmark rate for overnight loans between banks from 2.75% to 4.75%. Bond yields rose across the maturity spectrum. Short-term rates rose faster than long-term rates, leading to a convergence of shorter- and longer-term rates. As rates converged, the yield curve — a graphical representation of yields for bonds of comparable quality plotted from the shortest to the longest maturity — flattened dramatically.

During the period, tax-exempt bonds generally outperformed comparable Treasury bonds, as prices of tax-exempt bonds declined less than Treasury prices across all maturities. Municipal bonds typically perform better than Treasuries when interest rates are rising. However, the degree to which they outperformed Treasuries during the early months of 2006 was greater than expected.

The strong economy and rising corporate earnings contributed to the strong performance of lower-rated bonds. Among uninsured bonds in general and especially bonds rated Baa and below, yield spreads tightened,

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driven by strong interest among buyers in search of higher yields. Based on favorable legal rulings, prices of tobacco settlement bonds outperformed. Likewise, airline-related industrial development bonds (IDBs) performed exceptionally well over the period.

## Strategy overview

Given our expectation for rising interest rates, we maintained a short (defensive) portfolio duration relative to the fund's peer group, a strategy that contributed positively to results for the period as rates rose. Duration is a measure of a fund's sensitivity to changes in interest rates. Having a shorter-duration portfolio may help protect principal when interest rates rise, but it can reduce appreciation potential when rates fall.

The fund's yield curve positioning, or the maturity profile of its holdings, detracted from performance during the period. In order to keep the fund's duration short, we limited exposure to longer-maturity bonds, favoring intermediate-maturity securities instead. However, as the yield curve flattened and the yield differences between shorter- and longer-term bonds converged, bonds with longer maturities outperformed their shorter-maturity counterparts.

Because your fund concentrates on investment-grade bonds, its underweight position in the lowest-rated bonds during the period, compared to other funds in its peer group, detracted

## Market sector performance

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These indexes provide an overview of performance in different market sectors for the 12 months ended 4/30/06.

### Bonds

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Lehman Municipal Bond Index (tax-exempt bonds)	2.15%
Lehman Aggregate Bond Index (broad bond market)	0.71%
Lehman Government Bond Index (U.S. Treasury and agency securities)	0.25%
JP Morgan Global High Yield Index (global high-yield corporate bonds)	8.88%

### Equities

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S&P 500 Index (broad stock market)	15.42%
Russell 1000 Growth Index (large-company growth stocks)	15.18%
Russell 1000 Value Index (small-company value stocks)	18.30%

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from relative results as securities in this area of the market rallied. As we analyzed lower-rated bonds, we concluded that better relative value existed in bonds rated Baa and higher at this point in the credit cycle, when the narrowing of credit spreads □ or the reduced premium investors stand to receive by investing in lower-rated issues □ appears to be unsupported by credit fundamentals.

We added to the fund's callable bond holdings during the period. Despite this action, however, the fund remained underweight in callable bonds relative to its benchmark, which detracted from results as these bonds generally outperformed over the period. Callable bonds benefited from investor perception that bonds are less likely to be called in a rising-rate environment.

## Your fund's holdings

As the U.S. economy grew during the fiscal year, investors became more comfortable with the risks involved in pursuing higher current income. The resulting demand drove up the prices of lower-quality bonds and caused the spread (or difference in yield) between higher- and lower-quality bonds to narrow. The income advantage typically associated with lower-rated bonds consequently diminished. We gradually raised the fund's overall credit quality and broadened the fund's diversification.

Our emphasis on **tobacco settlement bonds** has been successful. These bonds

### Comparison of the fund's maturity and duration

This chart compares changes in the fund's average effective maturity (a weighted average of the holdings' maturities) and its average effective duration (a measure of its sensitivity to interest-rate changes).

*Average effective duration and average effective maturity take into account put and call features, where applicable, and reflect prepayments for mortgage-backed securities. Duration is usually shorter than maturity because it reflects interest payments on a bond prior to its maturity.*

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generally carry investment-grade ratings. The interest they pay is secured by tobacco companies' settlement obligations to the states, and they generally offer higher yields than bonds of comparable quality. An improving litigation environment has led to higher prices for these bonds and the fund benefited as a result. We also think tobacco settlement bonds provide valuable diversification, since their performance is not as closely tied to the direction of economic growth as are other, more economically sensitive holdings. The fund owns tobacco settlement bonds issued in several states, including California, New Jersey, New York, Rhode Island, South Carolina, Washington, and Wisconsin.

Several of the bonds we selected rose in value as a result of the strong U.S. economy. One of the fund's best performers was issued in **West Virginia** for **Princeton Hospital**. As the hospital gained in financial strength, Standard & Poor's upgraded its outlook for the facility to positive in December of 2005. Moody's Investors Service followed suit in February of 2006, raising its overall outlook for the medical facility from negative to stable. The outlook improvements gave investors more confidence in the bonds, and increased demand drove prices up.

Improving profitability also led to the pre-refunding of two of the fund's holdings, with positive results for the fund. Pre-refunding occurs when an issuer

### **Credit quality overview**

Credit qualities shown as a percentage of portfolio value as of 4/30/06. A bond rated Baa or higher is considered investment grade. The chart reflects Moody's ratings; percentages may include bonds not rated by Moody's but considered by Putnam Management to be of comparable quality. Ratings will vary over time.

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refinances an older, higher-coupon bond by issuing new bonds at current, lower interest rates. The proceeds are then invested in a secure investment — usually U.S. Treasury securities — that matures at the older bond's first call date, effectively raising the bond's perceived rating and shortening its maturity. **New York's Triborough Bridge and Tunnel Authority** pre-refunded some bonds in July 2005, and some **South Carolina Economic Development Authority Palmetto Health** bonds were pre-refunded in December of 2005. The market price of these issues rose; and their maturities are now shorter by 20 years, in the case of the Triborough bonds, and seven years for the Palmetto issues.

The fund has a relatively modest exposure to airline-related IDBs, which rebounded during the latter half of the fiscal year. Rising passenger counts and a recent drop in fuel prices helped improve airlines' balance sheets and many investors rushed to buy the bonds. Your fund's long-term airline-related holdings — bonds issued in New York for **British Airways** and in Texas for **American Airlines** — participated in the rally, but other funds with larger positions benefited to a greater degree. Although we believe airlines are showing signs of stabilization and we are watching the situation carefully, we prefer to wait for more attractive opportunities before increasing the fund's exposure.

To help broaden the fund's diversification, we have been focusing on single-family housing bonds, where rising interest rates and declining mortgage prepayments make the sector seem attractive. We recently purchased single-family mortgage revenue bonds issued by **Michigan State Housing Development Authority**.



*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.*

## Of special interest

### **Fund's dividend reduced**

A few older holdings were sold or were called during the fiscal year, requiring us to reinvest assets at current, lower interest rates. Furthermore, given the narrowing of the yield spread between higher- and lower-rated municipal bonds, the opportunities for finding relatively high-yielding investments have become more limited, especially in light of our commitment to focusing on sound, creditworthy investments. To reflect the reduction in earnings, the dividend was reduced in June 2005 from \$0.0644 to \$0.0562 per share.

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### **The outlook for your fund**

The following commentary reflects anticipated developments that could affect your fund over the next six months, as well as your management team's plans for responding to them.

We believe that the Fed's tightening cycle is nearing an end but that rates will continue to rise over the near term. We currently plan to maintain the fund's defensive duration because we believe that the municipal bond market may be susceptible to weaker returns in the coming months. One reason for this belief is the market's unusually strong performance versus taxable equivalents in early 2006.

We believe that the extended rally among lower-rated, higher-yielding bonds is in its final stages. Therefore, we remain cautious with respect to securities at the lower end of the credit spectrum.

We continue to have a positive view of defensive sectors such as single-family housing bonds, which have performed well in recent months. In addition, we remain positive on callable bonds. Our view on tobacco settlement bonds remains positive as we believe that they represent good investment opportunities relative to the inherent risks associated with the sector.

As always, we will continue to search for the most attractive opportunities among tax-exempt securities and work to balance the pursuit of current income with prudent risk management.

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

*Lower-rated bonds may offer higher yields in return for more risk. Capital gains, if any, are taxable for federal and, in most cases, state purposes. 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. Mutual 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 uses leverage, which involves risk and may increase the volatility of the fund's net asset value. The fund's shares trade on a stock exchange at market prices, which may be higher or lower than the fund's net asset value.*

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### **Your fund's performance**

This section shows your fund's performance for periods ended April 30, 2006, the end of its fiscal year. In accordance with regulatory requirements for mutual funds, we also include performance for 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

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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 4/30/06

	NAV	Market price	Lehman Municipal Bond Index	Lipper General Municipal Debt Funds (leveraged closed-end) category average*
Annual average Life of fund (since 5/28/93)	6.39%	5.09%	5.81%	6.32%
10 years	87.62	68.98	77.30	91.05
Annual average	6.49	5.39	5.89	6.68
5 years	39.08	20.93	30.07	42.73
Annual average	6.82	3.87	5.40	7.34
3 years	21.07	14.45	12.04	21.25
Annual average	6.58	4.60	3.86	6.60
1 year	3.56	5.61	2.15	3.86

*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 calculations for reinvested dividends may differ from actual performance.*

*\* Over the 1-, 3-, 5-, and 10-year periods ended 4/30/06, there were 56, 55, 45, and 39 funds, respectively, in this Lipper category.*

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### Fund price and distribution information

For the 12-month period ended 4/30/06

Distributions □ common shares

Number	12
Income <sup>1</sup>	\$0.6849

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Capital gains <sup>2</sup>	□		
Total	\$0.6849		
Distributions □ preferred shares	Series A (800 shares)	Series B (1,620 shares)	Series C (1,620 shares)
Income <sup>1</sup>	\$1,408.63	\$699.47	\$697.98
Capital gains <sup>2</sup>	□	□	□
Total	\$1,408.63	\$699.47	\$697.98
Share value:	NAV		Market price
4/30/05	\$13.15		\$11.72
4/30/06	12.85		11.68
Current yield (end of period)			
Current dividend rate <sup>3</sup>	5.25%		5.77%
Taxable equivalent <sup>4</sup>	8.08		8.88

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 2006. Results for investors subject to lower tax rates would not be as advantageous.

### Fund performance for most recent calendar quarter

Total return for periods ended 3/31/06

	NAV	Market price
Annual average		
Life of fund (since 5/28/93)	6.45%	5.14%
10 years	87.77	73.52
Annual average	6.50	5.67

5 years	37.50	22.92
Annual average	6.58	4.21
3 years	23.04	18.34
Annual average	7.16	5.77
1 year	6.04	8.35

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## Your fund's management

Your fund is managed by the members of the Putnam Tax Exempt Fixed-Income Team. David Hamlin is the Portfolio Leader, and Paul Drury, Susan McCormack, and James St. John are Portfolio Members of your fund. The Portfolio Leader and Portfolio Members coordinate the team's management of the fund.

For a complete listing of the members of the Putnam Tax Exempt Fixed-Income Team, including those who are not Portfolio Leaders or Portfolio Members of your fund, visit Putnam's Individual Investor Web site at [www.putnam.com](http://www.putnam.com).

## Fund ownership by the Portfolio Leader and Portfolio Members

The table below shows how much the fund's current Portfolio Leader and Portfolio Members have invested in the fund (in dollar ranges). Information shown is as of April 30, 2006, and April 30, 2005.

	Year	\$0	\$1 - \$10,000	\$10,001 - \$50,000	\$50,001 - \$100,000	\$100,001 - \$500,000	\$500,001 - \$1,000,000	\$1,000,001 and over
David Hamlin	2006	*						
<i>Portfolio Leader</i>	2005	*						
Paul Drury	2006	*						
<i>Portfolio Member</i>	2005	*						
Susan McCormack	2006	*						
<i>Portfolio Member</i>	2005	*						
James St. John	2006	*						
<i>Portfolio Member</i>	2005	*						

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### Fund manager compensation

The total 2005 fund manager compensation that is attributable to your fund is approximately \$150,000. This amount includes a portion of 2005 compensation paid by Putnam Management to the fund managers listed in this section for their portfolio management responsibilities, calculated based on the fund assets they manage taken as a percentage of the total assets they manage. The compensation amount also includes a portion of the 2005 compensation paid to the Chief Investment Officer of the team and the Group Chief Investment Officer of the fund's broader investment category for their oversight responsibilities, calculated based on the fund assets they oversee taken as a percentage of the total assets they oversee. This amount does not include compensation of other personnel involved in research, trading, administration, systems, compliance, or fund operations; nor does it include non-compensation costs. These percentages are determined as of the fund's fiscal period-end. For personnel who joined Putnam Management during or after 2005, the calculation reflects annualized 2005 compensation or an estimate of 2006 compensation, as applicable.

### Other Putnam funds managed by the Portfolio Leader and Portfolio Members

David Hamlin is the Portfolio Leader and Paul Drury, Susan McCormack, and James St. John are Portfolio Members for Putnam's tax-exempt funds for the following states: Arizona, California, Florida, Massachusetts, Michigan, Minnesota, New Jersey, New York, Ohio, and Pennsylvania. The same group also manages Putnam AMT-Free Insured Municipal Fund, Putnam California Investment Grade Municipal Trust, Putnam High Yield Municipal Trust, Putnam Investment Grade Municipal Trust, Putnam Managed Municipal Income Trust, Putnam Municipal Bond Fund, Putnam New York Investment Grade Municipal Trust, Putnam Tax Exempt Income Fund, Putnam Tax-Free Health Care Fund, and Putnam Tax-Free High Yield Fund.

David Hamlin, Paul Drury, Susan McCormack, and James St. John may also manage other accounts and variable trust funds advised by Putnam Management or an affiliate.

### Changes in your fund's Portfolio Leader and Portfolio Members

Your fund's Portfolio Leader and Portfolio Members did not change during the year ended April 30, 2006.

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### Fund ownership by Putnam's Executive Board

The table below shows how much the members of Putnam's Executive Board have invested in the fund (in dollar ranges). Information shown is as of April 30, 2006, and April 30, 2005.

	Year	\$0	\$1 - \$10,000	\$10,001 - \$50,000	\$50,001 - \$100,000	\$100,001 and over
Philippe Bibi	2006	*				
<i>Chief Technology Officer</i>	2005	*				
Joshua Brooks	2006	*				
<i>Deputy Head of Investments</i>	2005	*				
William Connolly	2006	*				
<i>Head of Retail Management</i>	N/A					

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Kevin Cronin	2006	*
<i>Head of Investments</i>	2005	*
Charles Haldeman, Jr.	2006	*
<i>President and CEO</i>	2005	*
Amrit Kanwal	2006	*
<i>Chief Financial Officer</i>	2005	*
Steven Krichmar	2006	*
<i>Chief of Operations</i>	2005	*
Francis McNamara, III	2006	*
<i>General Counsel</i>	2005	*
Richard Robie, III	2006	*
<i>Chief Administrative Officer</i>	2005	*
Edward Shadek	2006	*
<i>Deputy Head of Investments</i>	2005	*
Sandra Whiston	2006	*
<i>Head of Institutional Management</i>	N/A	

N/A indicates the individual was not a member of Putnam's Executive Board as of 4/30/05.

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## 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 and the American Stock Exchange.

### **Comparative indexes**

JP Morgan Global High Yield Index is an unmanaged index of global high-yield fixed-income securities.

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

Lehman Government Bond Index is an unmanaged index of U.S. Treasury and agency securities. Lehman Municipal Bond Index is an unmanaged index of long-term fixed-rate investment-grade tax-exempt bonds.

Russell 1000 Growth Index is an unmanaged index of those companies in the large-cap Russell 1000 Index chosen for their growth orientation.

Russell 1000 Value Index is an unmanaged index of those companies in the large-cap Russell 1000 Index chosen for their value orientation.

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.

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## **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 and administrative services contract with Putnam Management. In this regard, the Board of Trustees, with the assistance of its Contract Committee consisting solely of Trustees who are not "interested persons" (as such 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 beginning in March and ending in June 2005, the Contract Committee met five times 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. Upon completion of this review, the Contract Committee recommended and the Independent Trustees approved the continuance of your fund's management contract and administrative services contract, effective July 1, 2005.

This approval was based on the following conclusions:

\* That the fee schedule currently in effect for your fund (which includes fees paid under the administrative services contract), subject to certain changes noted below, represents 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 such fee schedule represents 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 such arrangements may receive greater scrutiny in some years than others, and that the Trustees' conclusions may be based, in part, on their consideration of these same arrangements in prior years.

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## **Model fee schedules and categories; total expenses**

The Trustees' review of the management fees and total expenses of the Putnam funds focused on three major themes:

\* Consistency. The Trustees, working in cooperation with Putnam Management, have developed and implemented a series of model fee schedules for the Putnam funds designed to ensure that each fund's management fee is consistent with the fees for similar funds in the Putnam family of funds and compares favorably with fees paid by competitive funds sponsored by other investment advisors. Under this approach, each Putnam fund is assigned to one of several fee categories based on a combination of factors, including competitive fees and perceived difficulty of management, and a common fee schedule is implemented for all funds in a given fee category. The Trustees reviewed the model fee schedules then in effect for the Putnam funds, including fee levels and breakpoints, and the assignment of each fund to a particular fee category under this structure. (Breakpoints refer to reductions in fee rates that apply to additional assets once specified asset levels are reached.)

Since their inception, Putnam's closed-end funds have generally had management fees that are higher than those of Putnam's open-end funds pursuing comparable investment strategies. These differences ranged from five to 20 basis points. The Trustees have reexamined this matter and recommended that these differences be conformed to a uniform five basis points. At a meeting on January 13, 2006, the Trustees approved an amended management and administrative services contract for your fund to memorialize the arrangements agreed to in June 2005. Under the new fee schedule, the fund pays a quarterly management fee to Putnam Management at the lower of the following rates:

(a) 0.35% of the fund's average net assets  
(including assets attributable to both common and preferred shares)

or

(b) 0.45% of the first \$500 million of the fund's average net assets  
(including assets attributable to both common and preferred shares);  
0.35% of the next \$500 million;  
0.30% of the next \$500 million;  
0.25% of the next \$5 billion;  
0.225% of the next \$5 billion;  
0.205% of the next \$5 billion;  
0.19% of the next \$5 billion; and  
0.18% thereafter.

Your fund's separate administrative services contract provides for quarterly payment of fees to Putnam Management at the annual rate of 0.20% of the fund's average net assets (including assets attributable to both common and preferred shares).



Based on net asset levels as of June 2005, the new fee schedule for your fund will result in lower combined management and administrative services fees paid by common shareholders. The Trustees approved the new fee schedules for the funds effective as of January 1, 2006, in order to provide Putnam Management an opportunity to accommodate the impact on revenues in its budget process for the coming year.

\* **Competitiveness.** The Trustees also reviewed comparative fee and expense information for competitive funds, which indicated that, in a custom peer group of competitive funds selected by Lipper Inc., your fund ranked in the 57th percentile in management fees and in the 64th percentile in total expenses as of December 31, 2004 (the first percentile being the least expensive funds and the 100th percentile being the most expensive funds). The Trustees expressed their intention to monitor this information closely to ensure that fees and expenses of the Putnam funds continue to meet evolving competitive standards.

\* **Economies of scale.** The Trustees concluded that the fee schedule currently in effect for your fund, which as of January 1, 2006, reflects the changes noted above, represents an appropriate sharing of economies of scale at current asset levels. The Trustees examined the existing breakpoint structure of the Putnam funds' management fees in light of competitive industry practices. The Trustees considered various possible modifications to the Putnam funds' current breakpoint structure, but ultimately concluded that the current breakpoint structure continues to serve the interests of fund shareholders. Accordingly, the Trustees continue to believe that the fee schedules currently in effect for the funds, taking into account the changes noted above, represent an appropriate sharing of economies of scale at current asset levels.

In connection with their review of the management and administrative services fees and total expenses of the Putnam funds, the Trustees also reviewed the costs of the services to be provided and profits to be realized by Putnam Management and its affiliates from the relationship with the funds. This information included trends in revenues, expenses and profitability of Putnam Management and its affiliates relating to the investment management and distribution services provided to the funds. In this regard, the Trustees also reviewed an analysis of Putnam Management's revenues, expenses and profitability with respect to the funds' management contracts, allocated on a fund-by-fund basis.

## **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 funds' investment process and performance by the work of the Investment Oversight Committees of the Trustees, which meet on a regular monthly basis with the funds' portfolio teams throughout the year. The Trustees concluded that Putnam Management generally provides a high-quality investment process — as measured by the experience and skills of the individuals assigned to the

management of fund portfolios, the resources made available to such personnel, and in general the ability of Putnam Management to attract and retain high-quality personnel — but also recognize that this does not guarantee favorable investment results for every fund in every time period. The Trustees considered the investment performance of each fund over multiple time periods and considered information comparing the fund's performance with various benchmarks and with the performance of competitive funds. The Trustees noted the satisfactory investment performance of many Putnam funds. They also noted the disappointing investment performance of certain funds in recent years and continued to discuss with senior management of Putnam Management the factors contributing to such underperformance and actions being taken to improve performance. The Trustees recognized that, in recent years, Putnam Management has made significant changes in its investment personnel and processes and in the fund product line to address areas of underperformance. The Trustees indicated their intention to continue to monitor performance trends to assess the effectiveness of these changes and to evaluate whether additional remedial changes 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 percentiles of its Lipper Inc. peer group (Lipper General

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Municipal Debt Funds (leveraged closed-end)) (compared using tax-adjusted performance to recognize the different federal income tax treatment for capital gains distributions and exempt-interest distributions) for the one-, three- and five-year periods ended December 31, 2004 (the first percentile being the best-performing funds and the 100th percentile being the worst-performing funds):

One-year period	Three-year period	Five-year period
36th	56th	57th

(Because of the passage of time, these performance results may differ from the performance results for more recent periods shown elsewhere in this report. Over the one-, three-, and five-year periods ended December 31, 2004, there were 65, 56, and 51 funds, respectively, in your fund's Lipper peer group.\* Past performance is no guarantee of future performance.)

As a general matter, the Trustees believe that cooperative efforts between the Trustees and Putnam Management represent the most effective way to address investment performance problems. The Trustees believe that investors in the Putnam funds have, in effect, placed their trust in the Putnam organization, under the oversight of the funds' Trustees, to make appropriate decisions regarding the management of the funds. Based on the responsiveness of Putnam Management in the recent past to Trustee concerns about investment performance, the Trustees believe that it is preferable to seek change within Putnam Management to address performance shortcomings. In the Trustees' view, the alternative of terminating a management contract and

*\* The percentile rankings for your fund's common share annualized total return performance in the Lipper General Municipal Debt Funds (leveraged closed-end) category for the one-, five-, and ten-year periods ended March 31, 2006, were 70%, 66%, and 61%, respectively. Over the one-, five-, and ten-year periods ended March 31, 2006, the fund ranked 43rd out of 61, 31st out of 46, and 25th out of 40 funds, respectively. Note that this more recent information was not available when the Trustees approved the continuance of your fund's management contract.*

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engaging a new investment advisor for an underperforming fund would entail significant disruptions and would not provide any greater assurance of improved investment performance.

### **Brokerage and soft-dollar allocations; other benefits**

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 principally benefits related to brokerage and soft-dollar allocations, whereby a portion of the commissions paid by a fund for brokerage is earmarked to pay for research services that may be utilized by a fund's investment advisor, subject to the obligation to seek best execution. The Trustees believe that soft-dollar credits and other potential benefits associated with the allocation of fund brokerage, which pertains mainly to funds investing in equity securities, represent assets of the funds that should be used for the benefit of fund shareholders. This area has been marked by significant change in recent years. In July 2003, acting upon the Contract Committee's recommendation, the Trustees directed that allocations of brokerage to reward firms that sell fund shares be discontinued no later than December 31, 2003. In addition, commencing in 2004, the allocation of brokerage commissions by Putnam Management to acquire research services from third-party service providers has been significantly reduced, and continues at a modest level only to acquire research that is customarily not available for cash. The Trustees will continue to monitor the allocation of the funds' brokerage to ensure that the principle of "best price and execution" remains paramount in the portfolio trading process.

The Trustees' annual review of your fund's management and administrative services contracts also included the review of your fund's custodian and investor servicing agreements, which provide benefits to Putnam Fiduciary Trust Company, an affiliate of Putnam Management.

### **Comparison of retail and institutional fee schedules**

The information examined by the Trustees as part of their annual contract review 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, etc. This information included comparison of such fees with fees charged to the funds, as well as a detailed 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 the 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 reflect to a substantial degree historical competitive forces operating in separate market places. The Trustees considered the fact that fee rates across all asset sectors are 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 institutional clients of the firm, but have not relied on such comparisons to any significant extent in concluding that the management fees paid by your fund are reasonable.

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## **Other information for shareholders**

### **Important notice regarding share repurchase program**

In October 2005, the Trustees of your fund authorized Putnam Investments to implement a repurchase program on behalf of your fund, which would allow your fund to repurchase up to 5% of its outstanding shares over the 12 months ending October 6, 2006. In March 2006, the Trustees approved an increase in this repurchase program to allow the fund to repurchase a total of up to 10% of its outstanding shares over the same period.

### **Putnam's policy on confidentiality**

In order to conduct business with our shareholders, we must obtain certain personal information such as account holders' addresses, telephone numbers, Social Security numbers, and the names of their financial advisors. We use this information to assign an account number and to help us maintain accurate records of transactions and account balances. It is our policy to protect the confidentiality of your information, whether or not you currently own shares of our funds, and in particular, not to sell information about you or your accounts to outside marketing firms. We have safeguards in place designed to prevent unauthorized access to our computer systems and procedures to protect personal information from unauthorized use. Under certain circumstances, we share this information with outside vendors who provide services to us, such as mailing and proxy solicitation. In those cases, the service providers enter into confidentiality agreements with us, and we provide only the information necessary to process transactions and perform other services related to your account. We may also share this information with our Putnam affiliates to service your account or provide you with information about other Putnam products or services. It is also our policy to share account information with your financial advisor, if you've listed one on your Putnam account. If you would like clarification about our confidentiality policies or have any questions or concerns, please don't hesitate to contact us at 1-800-225-1581, Monday through Friday, 8:30 a.m. to 7:00 p.m., or Saturdays from 9:00 a.m. to 5:00 p.m. Eastern Time.

### **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, 2005, are available on the Putnam Individual Investor Web site, [www.putnam.com/individual](http://www.putnam.com/individual), and on the SEC's Web site, [www.sec.gov](http://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.

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### **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](http://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.

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## Financial statements

### A guide to financial statements

These sections of the report, as well as the accompanying Notes, preceded by the Report of Independent Registered Public Accounting Firm, constitute the fund's financial statements.

The fund's portfolidists 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 noninvestment assets are added together. Any unpaid expenses and other liabilities are subtracted from this total. The result is divided by the number of shares to determine the net asset value per share, which is calculated separately for each class of shares. (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 year.

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.

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 highlight table also includes the current reporting period.

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## Report of Independent Registered Public Accounting Firm

To the Trustees and Shareholders  
of Putnam Municipal Opportunities Trust:

In our opinion, the accompanying statement of assets and liabilities, including the fund's portfolio, and the related statements of operations and of changes in net assets and the financial highlights present fairly, in all material respects, the financial position of Putnam Municipal Opportunities Trust at April 30, 2006, and the results of its operations, the changes in its net assets and the financial highlights for each of the periods indicated, in conformity with accounting principles generally accepted in the United States of America. These financial statements and financial highlights (hereafter referred to as "financial statements") are the responsibility of the fund's management; our responsibility is to express an opinion on these financial statements based on our audits. We

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conducted our audits of these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits, which included confirmation of investments owned at April 30, 2006, by correspondence with the custodian and brokers, provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP

Boston, Massachusetts

June 12, 2006

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### **The fund's portfolio** 6/30/06

#### **Key to abbreviations**

AMBAC AMBAC Indemnity Corporation

COP Certificate of Participation

FGIC Financial Guaranty Insurance Company

FHA Insd. Federal Housing

GNMA Coll. Government National Mortgage

Association Collateralized

G.O. Bonds General Obligation Bonds