

PUTNAM MANAGED MUNICIPAL INCOME TRUST
Form N-CSR
December 29, 2015

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: (811-05740)

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

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

Name and address of agent for service: Robert T Burns, Vice President
One Post Office Square
Boston, Massachusetts 02109

Copy to: Bryan Chegwidden, Esq.
Ropes & Gray LLP
1211 Avenue of the Americas
New York, New York 10036

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

Date of fiscal year end: October 31, 2015

Date of reporting period: November 1, 2014 – October 31, 2015

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 Managed Municipal Income Trust

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Consider these risks before investing: Lower-rated bonds may offer higher yields in return for more risk. Bond investments are subject to interest-rate risk (the risk of bond prices falling if interest rates rise) and credit risk (the risk of an issuer defaulting on interest or principal payments). Interest-rate risk is greater for longer-term bonds, and credit risk is greater for below-investment-grade bonds. Unlike bonds, funds that invest in bonds have fees and

expenses. Bond prices may fall or fail to rise over time for several reasons, including general financial market conditions, changing market perceptions of the risk of default, changes in government intervention, and factors related to a specific issuer or industry. These factors may also lead to periods of high volatility and reduced liquidity in the bond markets. You can lose money by investing in the fund. The fund's shares trade on a stock exchange at market prices, which may be lower than the fund's net asset value.

Message from the Trustees

Dear Fellow Shareholder:

The stock market has bounced back strongly since the correction in August, and the U.S. economy has shown resilience. In fact, the U.S. Federal Reserve, citing recent improvements in employment and wage growth, has placed the possibility of interest-rate hikes firmly on the table.

One of the important takeaways from the recent rally, in our view, is that many investors have a reserve of confidence. Still, these are volatile and unpredictable times. While the Fed downplayed the impact of China's slowdown on U.S. economic growth, there are a number of risks and opportunities in today's market, including tepid growth in many overseas markets.

In this changing environment, Putnam's portfolio managers are persistently working to achieve gains and manage downside risk, relying on a proprietary global research framework to guide their investment decisions. The interview in the following pages provides an overview of your fund's performance for the reporting period ended October 31, 2015, as well as an outlook for the coming months.

With a new year at hand, it may be time to consult your financial advisor to ensure that your portfolio is aligned with your investment goals, time horizon, and tolerance for risk.

In closing, we would like to recognize Charles Curtis, who recently retired as a Putnam Trustee, for his 14 years of dedicated service. And, as always, thank you for investing with Putnam.

Data are 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 11-12 for additional performance information, including fund returns at market price. Index and Lipper results should be compared with fund performance at NAV. Fund results reflect the use of leverage, while index results are unlever-aged and Lipper results reflect varying use of, and methods for, leverage.

Interview with your fund's

portfolio manager

Paul, what was the market environment like for municipal bonds during the 12 - month reporting period ended October 31, 2015?

The market environment proved challenging for many asset classes, but municipal bonds performed well on an absolute and a relative basis — generally outperforming widely followed benchmarks for U.S. and international fixed-income markets. Expectations for the Federal Reserve's first interest-rate hike since June 2006 weighed on the markets throughout the reporting period. However, the Fed's intention to begin normalizing U.S. interest rates was complicated by a convergence of global factors — notably, overlapping economic slowdowns in Europe and China and low commodity prices. Historically low commodity prices were especially noteworthy, as falling oil prices have eased inflationary pressures on the U.S. economy — keeping inflation well below the Fed's 2% target for price stability. With a nod to those concerns, the central bank left its benchmark rate unchanged during the period.

Favorable supply/demand dynamics [technical] provided a solid tailwind for municipal bond prices. The supply of municipal bond issuance has been relatively heavy — 30% higher on a year-to-date basis through October 2015 compared with the same period in 2014. The bulk of new issuance had been earmarked for refinancing activity as municipal issuers took advantage of the low-interest-rate environment to replace their

This comparison shows your fund's performance in the context of broad market indexes for the 12 months ended 10/31/15. See pages 4 and 11–12 for additional fund performance information. Index descriptions can be found on page 13.

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older, higher-coupon bonds with lower-cost debt. Demand held up relatively well despite the heightened volatility. Thus, the generally positive technicals combined with the flight to quality that we saw during periods of market uncertainty helped to push interest rates lower and municipal bond prices higher during the period.

Municipal bond flows did turn modestly negative in the third quarter of 2015. We believe this development was more a result of broader market factors rather than fundamentals within the municipal bond market. Credit spreads [the difference in yield between higher- and lower-quality municipal bonds] narrowed a bit during the period, contributing to slightly better returns for lower-quality investments than for higher-quality investments.

How did Putnam Managed Municipal Income Trust perform in this environment?

The fund was well positioned for this environment, outperforming its benchmark, the Barclays Municipal Bond Index, and the average return of its Lipper peer group for the 12 months ended October 31, 2015.

The State of Illinois, Chicago, and Puerto Rico have been confronting fiscal challenges recently. What does this mean for the municipal bond market?

The overall fiscal health and creditworthiness of the municipal bond market remains

Credit qualities are shown as a percentage of the fund's net assets (common and preferred shares) as of 10/31/15. 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 (S&P) or, if unrated by S&P, by Fitch ratings, and then included in the closest equivalent Moody's rating

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based on analysis of these agencies' respective ratings criteria. Moody's ratings are used in recognition of its prominence among rating agencies and breadth of coverage of rated securities. Ratings may vary over time.

Cash and net other assets, if any, represent the market value weights of cash, derivatives, short-term securities, and other unclassified assets in the portfolio. The fund itself has not been rated by an independent rating agency.

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sound, in our opinion. High-profile outliers, such as Illinois, Chicago, and Puerto Rico have garnered much media attention, but we still expect overall defaults to remain low. According to Municipal Market Data [Thompson Reuters], the default rate stood at 0.10% through October 2015, a fraction of the \$3.7 trillion municipal bond market.

Illinois and Chicago are confronting significant pension-funding obligations. As a result of Illinois's weakening financial position during 2015 and concerns about a prolonged budget stalemate, Moody's Investors Service downgraded the state's credit rating from A3 to Baa1 on October 22. We believe Illinois is facing a growing structural imbalance, but as the fifth most-populous state, it is comparatively wealthy and economically diverse.

The credit agencies will be looking for state legislators to implement a realistic plan to fund long-term pension obligations and address a buildup of unpaid bills to achieve a sustainable, structurally balanced budget. This past May, Chicago's bond rating was

Top ten state allocations are shown as a percentage of the fund's net assets (common and preferred shares) as of 10/31/15. Investments in Puerto Rico represented 0.9% of the fund's net assets. Summary information may differ from the portfolio schedule included in the financial statements due to the differing treatment of interest accruals, the floating rate portion of tender option bonds, derivative securities, if any, and the use of different classifications of securities for presentation purposes. Holdings and allocations may vary over time.

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downgraded to below investment grade by Moody's, which cited a 2015 Illinois court ruling rejecting state pension reforms — ultimately driving up borrowing costs for the city. However, we believe investors should bear in mind that the various rating agencies have differing views about Chicago's credit quality. [Chicago still holds investment-grade ratings of A- from Kroll Bond Rating Agency and BBB+ from Standard & Poor's and Fitch Ratings.] Also, we would suggest that comparisons with Detroit, which filed the largest municipal bankruptcy in U.S. history in 2013, were overstated. In our opinion, the scale of Chicago's challenges is different, as are the economic and demographic profiles of the two cities. On a positive note, the city of Chicago passed its 2016 budget in late October, which included \$170 million in savings and reforms, along with \$588 million in increased property taxes.

Puerto Rico's bonds are widely held for their triple [federal, state, and local] tax-exempt status. After years of crippling government deficits, these bonds have traded at distressed levels for the past two years. This past June, the governor of Puerto Rico announced that the U.S. territory's outstanding debt was unpayable and called for the Commonwealth to be allowed to restructure. Puerto Rico subsequently defaulted on an August 1 debt payment, the first time in its history. In early September, the governor released a restructuring plan for

This chart shows how the fund's top weightings have changed over the past six months. Allocations are shown as a percentage of the fund's net assets (common and preferred shares). Current period summary information may

differ from the information in the portfolio schedule notes included in the financial statements due to the inclusion of derivative securities, any interest accruals, and the use of different classifications of securities for presentation purposes. Holdings and allocations may vary over time.

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the Commonwealth. Though light on details, the need to close a shortfall of more than an estimated \$13 billion over the next five years has been well documented. We currently expect negotiations between the various Puerto Rico issuers and individual creditors to continue.

What were your strategies to mitigate risk in this climate?

We kept the fund's duration positioning, or interest-rate sensitivity, below the median of its Lipper peer group. We accomplished this posture in part by holding a slightly higher cash position to help shelter the portfolio from price pressures while also providing some liquidity to act swiftly should timely investment opportunities present themselves.

The portfolio retained its overweight exposure to municipal bonds rated Baa relative to the benchmark throughout the period, which was beneficial. We continued to emphasize essential service revenue bonds, which are typically issued by state and local government entities to finance specific revenue-generating projects, and underweighted local general obligation [G.O.] bonds relative to the benchmark. G.O. bonds rely on the taxing power of the issuer and the health of the local economy to make payments from property taxes or sales and income taxes.

We also maintained our underweight exposure to issuers in Puerto Rico relative to the fund's Lipper peer group, given the Commonwealth's weak credit fundamentals. However, the fund's investments in bonds issued by the Commonwealth of Puerto Rico Sales Tax Financing Corp. [COFINA] detracted from results following the governor's comments this past June that the U.S. island territory was struggling to meet its \$72 billion debt burden and that he would seek a moratorium with creditors. At the sector level, we favored essential service utilities, continuing-care retirement communities, airlines, and higher education bonds relative to the fund's Lipper peers. Overall, this positioning contributed positively to performance.

Our shorter-duration positioning slightly benefited performance relative to our Lipper peers, as interest rates moved a bit higher during the 12-month reporting period. An underweight position in high-yield bonds versus the fund's Lipper peers also was a headwind for performance, as demand for these bonds helped push prices higher.

What should municipal bond investors keep in mind in the coming months?

At their September meeting, Fed policy-makers delayed raising the key short-term interest rate, citing weaker macroeconomic conditions abroad and the heightened market volatility brought on by the People's Bank of China's unexpected devaluation of the Chinese yuan in August. While Fed officials left short-term interest rates near zero at this meeting, Fed Chair Janet Yellen signaled her confidence in the U.S. economy in a late September speech that outlined a case for raising rates by the end of the year. The Fed kept rates unchanged at their October meeting as well. But officials suggested that they had become less concerned about financial market volatility and international economic growth, adding that they would assess whether it was time to raise rates at their next meeting in December.

With the 2016 campaign season in full swing and the presidential candidates better defining their policy agendas, some candidates have discussed individual and corporate tax reform and the elimination of some loopholes and tax deductions. We would caution municipal bond investors from overreacting to discussions about changes to the tax code until after the 2016 election when we will better know if reform is to become a bona fide priority. As we have seen in previous instances, headlines about isolated municipal

credits can lead to investor overreaction and temporary price dislocation. Such price action often results in investment opportunities for Putnam's Tax Exempt team.

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

The views expressed in this report are exclusively those of Putnam Management and are subject to change. 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. Statements in the Q&A concerning the fund's performance or portfolio composition relative to those of the fund's Lipper peer group may reference information produced by Lipper Inc. or through a third party.

Portfolio Manager **Paul M. Drury** has a B.A. from Suffolk University. Paul has been in the investment industry since he joined Putnam in 1989.

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

IN THE NEWS

A robust employment picture bolstered the prospects for the U.S. Federal Reserve to raise interest rates. In a November release, the Labor Department estimated that, in October, 271,000 nonfarm jobs were added to the U.S. economy and that the unemployment rate hit a 7 1/2 -year low of 5.0%. This is a rate that many central bank officials regard as full employment in the sense that, with most job seekers employed, employers might bid up wages to fill new positions. Average hourly earnings have been rising, showing a 0.4% gain in October and a 2.5% gain over the past year. The Fed has held benchmark overnight rates in a 0%–0.25% range since December 2008 as the economy has recovered from the financial crisis. Many polls of economists predict that Fed policymakers will nudge up the federal funds rate by a quarter-point, placing it in the 0.25%–0.50% range by year's end. Some investors are concerned that tighter monetary policy will dampen economic growth, but the Fed has communicated to markets that the pace of rate increases is likely to be gradual.

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Your fund's performance

This section shows your fund's performance, price, and distribution information for periods ended October 31, 2015, the end of its most recent fiscal year. In accordance with regulatory requirements for mutual funds, we also include performance information as of the most recent calendar quarter-end. Performance should always be considered in light of a fund's investment strategy. Data represent 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 and comparative index results for periods ended 10/31/15

	NAV	Market price	Barclays Municipal Bond Index	Lipper High Yield Municipal Debt Funds (closed-end) category average*
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Annual average

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(life of fund) (2/24/89)	6.65%	6.09%	6.15%	5.91%
10 years	78.24	93.40	58.91	82.57
Annual average	5.95	6.82	4.74	6.18
5 years	42.38	30.26	23.34	45.57
Annual average	7.32	5.43	4.28	7.78
3 years	17.12	5.20	9.00	17.03
Annual average	5.41	1.70	2.91	5.37
1 year	6.00	8.11	2.87	5.30

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

Index and Lipper results should be compared with fund performance at net asset value. Fund results reflect the use of leverage, while index results are unleveraged and Lipper results reflect varying use of, and methods for, leverage.

* Over the 1-year, 3-year, 5-year, 10-year, and life-of-fund periods ended 10/31/15, there were 11, 11, 11, 11, and 6 funds, respectively, in this Lipper category.

Performance includes the deduction of management fees and administrative expenses.

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Fund price and distribution information For the 12-month period ended 10/31/15

Distributions — common shares

Number	12
Income 1	\$0.4356
Capital gains 2	—
Total	\$0.4356

	Series A (245 shares)	Series C (1,980 shares)
Distributions — preferred shares		
Income 1	\$162.78	\$78.94
Capital gains 2	—	—

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Total	\$162.78	\$78.94
Share value — common shares	NAV	Market price
10/31/14	\$7.94	\$7.17
10/31/15	7.97	7.30
Current dividend rate (end of period)	NAV	Market price
Current dividend rate ³	5.47%	5.97%
Taxable equivalent ⁴	9.66	10.55

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, including any return of capital and excluding capital gains, annualized and divided by NAV or market price at end of period.

⁴ Assumes maximum 43.40% federal tax rate for 2015. 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 9/30/15

	NAV	Market price
Annual average (life of fund) (2/24/89)	6.63%	6.01%
10 years	75.78	80.56
Annual average	5.80	6.09
5 years	41.84	26.54
Annual average	7.24	4.82
3 years	16.99	2.05
Annual average	5.37	0.68
1 year	6.27	7.24

See the discussion following the fund performance table on page 11 for information about the calculation of fund performance.

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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, divided by the number of outstanding 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.

Fixed-income terms

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

Yield curve is a graph that plots the yields of bonds with equal credit quality against their differing maturity dates, ranging from shortest to longest. It is used as a benchmark for other debt, such as mortgage or bank lending rates.

Comparative indexes

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

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

BofA 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.

Other information for shareholders

Important notice regarding share repurchase program

In September 2015, the Trustees of your fund approved the renewal of a share repurchase program that has been in effect since 2005. This renewal allows your fund to repurchase, in the 12 months beginning October 8, 2015, up to 10% of the fund's common shares outstanding as of October 7, 2015.

Important notice regarding delivery of shareholder documents

In accordance with Securities and Exchange Commission (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, 2015, are available in the Individual Investors section of putnam.com, and on the SEC's website, www.sec.gov. If you have questions about finding forms on the SEC's website, 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 Form N-Q on the SEC's website at www.sec.gov. In addition, the fund's Form 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 website 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, 2015, Putnam employees had approximately \$502,000,000 and the Trustees had approximately \$138,000,000 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.

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Important notice regarding Putnam's privacy policy

In order to conduct business with our shareholders, we must obtain certain personal information such as account holders' names, addresses, Social Security numbers, and dates of birth. Using this information, we are able to maintain accurate records of accounts and transactions.

It is our policy to protect the confidentiality of our shareholder information, whether or not a shareholder currently owns shares of our funds. In particular, it is our policy 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 must share account information with outside vendors who provide services to us, such as mailings and proxy solicitations. In these 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. Finally, it is our policy to share account information with your financial representative, if you've listed one on your Putnam account.

Summary of Putnam Closed-End Funds' Amended and Restated Dividend Reinvestment Plans

Putnam High Income Securities Fund, Putnam Managed Municipal Income Trust, Putnam Master Intermediate Income Trust, Putnam Municipal Opportunities Trust and Putnam Premier Income Trust (each, a "Fund" and collectively, the "Funds") each offer **dividend reinvestment plan** (each, a "Plan" and collectively, the "Plans"). If you participate in a Plan, all income dividends and capital gain distributions are **automatically reinvested** in Fund shares by the Fund's agent, Putnam Investor Services, Inc. (the "Agent"). If you are not participating in a Plan, every month you will receive all dividends and other distributions in cash, paid by check and mailed directly to you.

Upon a purchase (or, where applicable, upon registration of transfer on the shareholder records of a Fund) of shares of a Fund by a registered shareholder, each such shareholder **will be deemed to have elected to participate** in that Fund's Plan. Each such shareholder will have all distributions by a Fund automatically reinvested in additional shares, unless such shareholder elects to terminate participation in a Plan by instructing the Agent to pay future distributions in cash. Shareholders who were not participants in a Plan as of January 31, 2010, will continue to receive distributions in cash but may enroll in a Plan at any time by contacting the Agent.

If you participate in a Fund's Plan, the Agent will automatically reinvest subsequent distributions, and the Agent will send you a confirmation in the mail telling you how many additional shares were issued to your account.

To change your enrollment status or to request additional information about the Plans, you may contact the Agent either in writing, at P.O. Box 8383, Boston, MA 02266-8383, or by telephone at 1-800-225-1581 during normal East Coast business hours.

How you acquire additional shares through a Plan If the market price per share for your Fund's shares (plus estimated brokerage commissions) is greater than or equal to their net asset value per share on the payment date for a distribution, you will be issued shares of the Fund at a value equal to the higher of the net asset value per share on that date or 95% of the market price per share on that date.

If the market price per share for your Fund's shares (plus estimated brokerage commissions) is less than their net asset value per share on the payment date for a distribution, the Agent will buy Fund shares for participating accounts in the open market. The Agent will aggregate open-market purchases on behalf of all participants, and the average price (including brokerage commissions) of all shares purchased by the Agent will be the price per share allocable to each participant. The Agent will generally complete these open-market purchases within five business days following the payment date. If, before the Agent has completed open-market purchases, the market price per share (plus estimated brokerage commissions) rises to exceed the net asset value per share on the payment date, then the purchase price may exceed the net asset value per share, potentially resulting in the acquisition of fewer shares than if the distribution had been paid in newly issued shares.

How to withdraw from a Plan Participants may withdraw from a Fund's Plan at any time by notifying the Agent, either in writing or by telephone. Such withdrawal will be effective immediately if notice is received by the Agent with sufficient time prior to any distribution record date; otherwise, such withdrawal will be effective with respect to any subsequent

distribution following notice of withdrawal. There is no penalty for withdrawing from or not participating in a Plan.

Plan administration The Agent will credit all shares acquired for a participant under a Plan to the account in which the participant's common shares are held. Each participant will be sent reasonably promptly a confirmation by the Agent of each acquisition made for his or her account.

About brokerage fees Each participant pays a proportionate share of any brokerage commissions incurred if the Agent purchases additional shares on the open market, in accordance with the Plans. There are no brokerage charges applied to shares issued directly by the Funds under the Plans.

About taxes and Plan amendments Reinvesting dividend and capital gain distributions in shares of the Funds does not relieve you of tax obligations, which are the same as if you had received cash distributions. The Agent supplies tax information to you and to the IRS annually. Each Fund reserves the right to amend or terminate its Plan upon 30 days' written notice. However, the Agent may assign its rights, and delegate its duties, to a successor agent with the prior consent of a Fund and without prior notice to Plan participants.

If your shares are held in a broker or nominee name If your shares are held in the name of a broker or nominee offering a dividend reinvestment service, consult your broker or nominee to ensure that an appropriate election is made on your behalf. If the broker or nominee holding your shares does not provide a reinvestment service, you may need to register your shares in your own name in order to participate in a Plan.

In the case of record shareholders such as banks, brokers or nominees that hold shares for others who are the beneficial owners of such shares, the Agent will administer the Plan on the basis of the number of shares certified by the record shareholder as representing the total amount registered in such shareholder's name and held for the account of beneficial owners who are to participate in the Plan.

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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 with Putnam Investment Management, LLC ("Putnam Management") and the sub-management contract with respect to your fund between Putnam Management and its affiliate, Putnam Investments Limited ("PIL"). The Board, with the assistance of its Contract Committee, requests and evaluates all information it deems reasonably necessary under the circumstances in connection with its annual contract review. The Contract Committee consists solely of Trustees who are not "interested persons" (as this term is defined in the Investment Company Act of 1940, as amended (the "1940 Act")) of The Putnam Funds ("Independent Trustees").

At the outset of the review process, members of the Board's independent staff and independent legal counsel met with representatives of Putnam Management to review the annual contract review materials furnished to the Contract Committee during the course of the previous year's review and to discuss possible changes in these materials that might be necessary or desirable for the coming year. Following these discussions and in consultation with the Contract Committee, the Independent Trustees' independent legal counsel requested that Putnam Management and its affiliates furnish specified information, together with any additional information that Putnam Management considered relevant, to the Contract Committee. Over the course of several months ending in June 2015, the Contract Committee met on a number of occasions with representatives of Putnam Management, and separately in executive session, to consider the information that Putnam Management provided, as well as supplemental information provided in response to additional requests made by the Contract Committee. Throughout this process, the Contract Committee was assisted by the members of the Board's independent staff and by independent legal counsel for The Putnam Funds and the Independent Trustees.

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In May 2015, the Contract Committee met in executive session to discuss and consider its recommendations with respect to the continuance of the contracts. At the Trustees' June 19, 2015 meeting, the Contract Committee met in executive session with the other Independent Trustees to review a summary of the key financial, performance and other data that the Contract Committee considered in the course of its review. The Contract Committee then presented its written report, which summarized the key factors that the Committee had considered and set forth its recommendations. The Contract Committee then recommended, and the Independent Trustees approved, the continuance of your fund's management and sub-management contracts, effective July 1, 2015. (Because PIL is an affiliate of Putnam Management and Putnam Management remains fully responsible for all services provided by PIL, the Trustees have not attempted to evaluate 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 services to the fund; and

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- That the fee schedule in effect for your fund 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 management 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 some 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 previous years.

Management fee schedules and total expenses

The Trustees reviewed the management fee schedules in effect for all Putnam funds, including fee levels and breakpoints. The Trustees also reviewed the total expenses of each Putnam fund, recognizing that in most cases management fees represented the major, but not the sole, determinant of total costs to shareholders.

In reviewing fees and expenses, the Trustees generally focus their attention on material changes in circumstances — for example, changes in assets under management, changes in a fund's investment style, changes in Putnam Management's operating costs or profitability, 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.

Under its management contract, your fund has the benefit of breakpoints in its management fee schedule that provide shareholders with economies of scale in the form of reduced fee levels as the fund's assets under management increase. The Trustees noted, however, that because your fund is a closed-end management investment company, it has relatively stable levels of assets under management and is not expected to be affected significantly by breakpoints in its management fee schedule. The Trustees concluded that the fee schedule in effect for your fund represented an appropriate sharing of economies of scale between fund shareholders and Putnam Management.

The Trustees reviewed comparative fee and expense information for a custom group of competitive funds selected by Lipper Inc. ("Lipper"). 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 first 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 second quintile in total expenses as of December 31, 2014 (the first quintile representing the least expensive funds and the fifth quintile the most expensive funds). The fee and expense data reported by Lipper as of December 31, 2014 reflected the most recent fiscal year-end data available in Lipper's database at that time.

In connection with their review of fund management fees and total expenses, 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

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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 in place represented reasonable compensation for the services being provided and represented an appropriate sharing of such economies of scale as may exist in the management of the Putnam funds 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 those fees with fees charged to the Putnam funds, as well as an assessment of the differences in the services provided to these different types of clients. The Trustees observed 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 markets. The Trustees considered the fact that in many cases fee rates across different asset classes 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 its institutional clients. The Trustees 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 committees of the Trustees, which meet on a regular basis with the funds' portfolio teams and with the Chief Investment Officer and other senior members of Putnam Management's Investment Division 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 that 2014 was a year of strong competitive performance for many of the Putnam funds, with generally strong results for the U.S. equity, money market and global asset allocation funds, but relatively mixed results for the international and global equity and fixed income funds. They noted that the longer-term performance of the Putnam funds continued to be strong, exemplified by the fact that the Putnam funds were recognized by Barron's as the sixth-best performing mutual fund complex for the five-year period ended December 31, 2014. They also noted, however, the disappointing investment performance of some funds for periods ended

December 31, 2014 and considered information provided by Putnam Management regarding the factors contributing to the underperformance and actions being taken to improve the performance of these particular funds. The Trustees indicated their intention to continue to monitor performance trends to assess the effectiveness of these efforts and to evaluate whether additional actions to address areas of underperformance are warranted.

For purposes of evaluating investment performance, the Trustees generally focus on competitive industry rankings for the one-year, three-year and five-year periods. For a number of Putnam funds with relatively unique investment mandates for which meaningful competitive performance rankings are not considered to be available, the Trustees evaluated performance based on comparisons of fund returns with the returns of selected investment benchmarks. In the case of your fund, the Trustees considered that its common share cumulative total return performance at net asset value was in the following quartiles of its Lipper peer group (Lipper High Yield Municipal Debt Funds (closed-end)) for the one-year, three-year and five-year periods ended December 31, 2014 (the first quartile representing the best-performing funds and the fourth quartile the worst-performing funds):

One-year period	3rd
Three-year period	3rd
Five-year period	3rd

Over the one-year, three-year and five-year periods ended December 31, 2014, there were 11, 11 and 11 funds, respectively, in your fund's Lipper peer group. The Trustees did not find any evidence that would suggest a need for concern regarding the investment process for your fund. (When considering performance information, shareholders should be mindful that past performance is not a guarantee of future results.)

The Trustees also considered Putnam Management's continued efforts to support fund performance through initiatives including structuring compensation for portfolio managers and research analysts to enhance accountability for fund performance, emphasizing accountability in the portfolio management process, and affirming its commitment to a fundamental-driven approach to investing. The Trustees noted further that Putnam Management continued to strengthen its fundamental research capabilities by adding new investment personnel.

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 allocation and the use of soft dollars, 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. Subject to policies established by the Trustees, soft dollars generated by these means are used primarily to acquire brokerage and research services that enhance Putnam Management's investment capabilities and supplement Putnam Management's internal research efforts. However, the Trustees noted that a portion of available soft dollars continues to be used to pay fund expenses. The Trustees indicated their continued intent to monitor regulatory and industry developments in this area with the assistance of their Brokerage Committee and also indicated their continued intent to monitor the allocation of the Putnam funds' brokerage in order 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 and sub-management contracts, the Trustees reviewed your fund's investor servicing agreement with Putnam Investor Services, Inc. ("PSERV") which is an affiliate of Putnam Management. The Trustees concluded that the fees payable by the funds to PSERV for such services are reasonable in relation to the nature and quality of such services, the fees paid by competitive funds, and the costs incurred by PSERV in providing such services.

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 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 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 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 highlights table also includes the current reporting period.

Report of Independent Registered Public Accounting Firm

The Board of Trustees and Shareholders
Putnam Managed Municipal Income Trust:

We have audited the accompanying statement of assets and liabilities of Putnam Managed Municipal Income Trust (the fund), including the fund's portfolio, as of October 31, 2015, and the related statement of operations for the year then ended, the statements of changes in net assets for each of the years in the two-year period then ended, and the financial highlights for each of the years in the five-year period then ended. These financial statements and financial highlights are the responsibility of the fund's management. Our responsibility is to express an opinion on these financial statements and financial highlights based on our audits.

We conducted our audits 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 and financial highlights are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our procedures included confirmation of securities owned as of October 31, 2015, by correspondence with the custodian and brokers or by other appropriate auditing procedures. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of Putnam Managed Municipal Income Trust as of October 31, 2015, the results of its operations for the year then ended, the changes in its net assets for each of the years in the two-year period then ended, and the financial highlights for each of the years in the five-year period then ended, in conformity with U.S. generally accepted accounting principles.

Boston, Massachusetts
December 10, 2015

The fund's portfolio 10/31/15

Key to holding's abbreviations

ABAG Association Of Bay Area Governments
AGM Assured Guaranty Municipal Corporation
AMBAC AMBAC Indemnity Corporation
COP Certificates of Participation
FGIC Financial Guaranty Insurance Company
FHLMC Coll. Federal Home Loan Mortgage Corporation Collateralized

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, which are

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FNMA Coll. Federal National Mortgage Association Collateralized

floating-rate securities with long-term maturities that carry coupons that reset and are payable upon demand either daily, weekly or monthly. The rate shown is the current interest rate at the close of the reporting period.

FRB Floating Rate Bonds: the rate shown is the current interest rate at the close of the reporting period

MUNICIPAL BONDS AND NOTES (127.3%)*	Rating**	Principal amount	Value
Alabama (1.3%)			
Cullman Cnty., Hlth. Care Auth. Rev. Bonds (Cullman Regl. Med. Ctr.), Ser. A, 6 3/4s, 2/1/29	Ba1	\$1,100,000	\$1,186,515
Jefferson Cnty., Swr. Rev. Bonds Ser. D, 6 1/2s, 10/1/53	BBB-	500,000	572,180
zero %, 10/1/46	BBB-	3,950,000	2,715,033
Selma, Indl. Dev. Board Rev. Bonds (Gulf Opportunity Zone Intl. Paper Co.), Ser. A, 6 1/4s, 11/1/33	BBB	1,000,000	1,136,730
			5,610,458
American Samoa (0.1%)			
Econ. Dev. Auth. Rev. Bonds, Ser. A, 6 5/8s, 9/1/35	Ba3	500,000	500,470
			500,470
Arizona (4.8%)			
Casa Grande, Indl. Dev. Auth. Rev. Bonds (Casa Grande Regl. Med. Ctr.) Ser. A, 7 5/8s, 12/1/29 (escrow) F	D/P	1,800,000	5,380
7 1/4s, 12/1/19 (escrow) F	D/P	1,000,000	2,989
Coconino Cnty., Poll. Control Rev. Bonds (Tucson Elec. Pwr. Co. — Navajo), Ser. A, 5 1/8s, 10/1/32	A3	2,000,000	2,203,700
Maricopa Cnty., Poll. Control Rev. Bonds (El Paso Elec. Co.), Ser. A, 7 1/4s, 2/1/40	Baa1	2,200,000	2,499,046
Navajo Cnty., Poll. Control Corp. Mandatory Put Bonds (6/1/16) (AZ Pub. Svc. Co. Cholla Pwr. Plant), Ser. E, 5 3/4s, 6/1/34	A2	1,950,000	2,002,163
Phoenix, Indl. Dev. Auth. Ed. Rev. Bonds			

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(Great Hearts Academies), 6s, 7/1/32	BB/F	200,000	211,552
(Choice Academies, Inc.), 5 5/8s, 9/1/42	BB+	315,000	323,310
(Choice Academies, Inc.), 5 3/8s, 9/1/32	BB+	675,000	697,707
(Great Hearts Academies), 5s, 7/1/44	BB+	1,700,000	1,720,145
(BASIS School, Inc.), 5s, 7/1/35	BB	900,000	909,567
(Choice Academies, Inc.), 4 7/8s, 9/1/22	BB+	905,000	963,517

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MUNICIPAL BONDS AND NOTES (127.3%)* cont.	Rating**	Principal amount	Value
Arizona cont.			
Pima Cnty., Indl. Dev. Auth. Rev. Bonds (Horizon Cmnty. Learning Ctr.), 5.05s, 6/1/25	BBB	\$1,140,000	\$1,140,787
Salt Verde, Fin. Corp. Gas Rev. Bonds 5 1/2s, 12/1/29	A-	2,000,000&n	