Nuveen AMT-Free Municipal Credit Income Fund Form N-CSR January 08, 2018

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 811-09475

Nuveen AMT-Free Municipal Credit Income Fund (Exact name of registrant as specified in charter)

Nuveen Investments 333 West Wacker Drive Chicago, IL 60606 (Address of principal executive offices) (Zip code)

Gifford R. Zimmerman Nuveen Investments 333 West Wacker Drive Chicago, IL 60606 (Name and address of agent for service)

Registrant's telephone number, including area code: (312) 917-7700

Date of fiscal year end: October 31

Date of reporting period: October 31, 2017

Form N-CSR is to be used by management investment companies to file reports with the Commission not later than 10 days after the transmission to stockholders of any report that is required to be transmitted to stockholders under Rule 30e-1 under the Investment Company Act of 1940 (17 CFR 270.30e-1). The Commission may use the information provided on Form N-CSR in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-CSR, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-CSR unless the Form displays a currently valid Office of Management and Budget ("OMB") control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. ss. 3507.

ITEM 1. REPORTS TO STOCKHOLDERS.

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Chairman's Letter to Shareholders

# Dear Shareholders,

Asset prices have steadily climbed this year, propelled by a "Goldilocks" economic scenario that enabled markets to sidestep geopolitical tensions, natural disasters, terrorism events and political noise. The U.S. economy continued to run not too hot, not too cold, with steady growth and low levels of unemployment, inflation and interest rates. Corporate earnings have been healthy and recession risk appeared low. At the same time, growth across the rest of the world has improved as well, leading to upward revisions in global growth projections.

Yet, a global synchronized recovery also brings the prospect of higher inflation. Central banks have to manage the delicate balance between too-loose financial conditions, which risks economies overheating, and too-tight conditions, which could trigger recession. The nomination of Jerome Powell for Chairman of the U.S. Federal Reserve (Fed) is largely expected to maintain the course set by Chair Janet Yellen after her term expires in February 2018, and the much anticipated tax overhaul, passed at the end of December, may likely boost economic growth but could complicate the Fed's job of managing interest rates in the years ahead.

Meanwhile, politics will remain in the forefront. A budget showdown is expected in 2018, as Congress sets to debate the U.S. debt ceiling limit and spending related to the military, disaster relief, the Children's Health Insurance Program and immigration policy. In addition, the ongoing "Brexit" negotiations and the North American Free Trade Agreement (NAFTA) talks may impact key trade and political partnerships. Tensions with North Korea may continue to flare.

The magnitude of the market's bullishness this year has been somewhat surprising, but gains may not be so easy in the coming years. Nobody can predict market shifts, and that is why Nuveen encourages you to talk to your financial advisor to ensure your investment portfolio is appropriately diversified for your objectives, time horizon and risk tolerance. On behalf of the other members of the Nuveen Fund Board, we look forward to continuing to earn your trust in the months and years ahead.

Sincerely,

William J. Schneider Chairman of the Board December 22, 2017

Portfolio Managers' Comments

#### Nuveen AMT-Free Municipal Credit Income Fund (NVG) Nuveen Municipal Credit Income Fund (NZF) Nuveen Municipal High Income Opportunity Fund (NMZ)

These Funds feature portfolio management by Nuveen Asset Management, LLC, an affiliate of Nuveen, LLC. Portfolio managers John V. Miller, CFA, Paul L. Brennan, CFA, and Scott R. Romans, PhD discuss U.S. economic and market conditions, key investment strategies and the twelve-month performance of these three national Funds. Paul has managed NVG since 2006, Scott assumed portfolio management responsibility for NZF in 2016 and John has managed NMZ since its inception in 2003.

On September 24, 2017, the Nuveen Fund Board approved that the Nuveen Municipal High Income Opportunity Fund (NMZ), under its updated investment policies, invest up to 75% of its portfolio in municipal securities rated BBB and below, up from 50%. No more than 10% percent of the Fund's managed assets may be invested in municipal securities rated at or below B3/B-.

On March 14, 2017, the Nuveen Fund Board approved a change in the primary benchmark for NMZ from the S&P Municipal Bond High Yield Index to the S&P Municipal Yield Index. The primary benchmark was changed to better reflect the Fund's mandate in conjunction with how the Fund is being managed.

What factors affected the U.S. economy and the national municipal market during the twelve-month reporting period ended October 31, 2017?

The U.S. economy continued to expand at a below-trend pace in the reporting period overall but did mark two consecutive quarters of above 3% growth in the second and third quarters of 2017. The Bureau of Economic Analysis reported its "second" estimate of third-quarter gross domestic product (GDP) at an annualized rate of 3.3%, an increase from 3.1% in the second quarter, alleviating concerns that Hurricanes Harvey, Irma and Maria depressed the nation's output. GDP is the value of goods and services produced by the nation's economy less the value of the goods and services used up in production, adjusted for price changes. Despite some softening in shopping and dining out activity due to the hurricanes, consumer spending remained the main driver of demand in the economy. Business investment had been muted for most of the recovery but has accelerated in 2017, with the "hard" data now falling more in line with the highly optimistic business sentiment levels, or "soft" data, seen after President Trump won the election.

#### This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy or sell securities, and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made based on an investor's objectives and circumstances and in consultation with his or her advisors.

Certain statements in this report are forward-looking statements. Discussions of specific investments are for illustration only and are not intended as recommendations of individual investments. The forward-looking statements and other views expressed herein are those of the portfolio managers as of the date of this report. Actual future results or occurrences may differ significantly from those anticipated in any forward-looking statements, and the views expressed herein are subject to change at any time, due to numerous market and other factors. The Funds disclaim any obligation to update publicly or revise any forward-looking statements or views expressed herein.

The ratings disclosed are the lowest rating given by one of the following national rating agencies: Standard & Poor's (S&P), Moody's Investors Service, Inc. (Moody's) or Fitch, Inc. (Fitch). Credit ratings are subject to change. AAA, AA, A and BBB are investment grade ratings, while BB, B, CCC, CC, C and D are below investment grade ratings.

Certain bonds backed by U.S. Government or agency securities are regarded as having an implied rating equal to the rating of such securities. Holdings designated N/R are not rated by these national rating agencies.

Bond insurance guarantees only the payment of principal and interest on the bond when due, and not the value of the bonds themselves, which will fluctuate with the bond market and the financial success of the issuer and the insurer. Insurance relates specifically to the bonds in the portfolio and not to the share prices of a Fund. No representation is made as to the insurers' ability to meet their commitments.

Refer to the Glossary of Terms Used in this Report for further definition of the terms used within this section.

## Portfolio Managers' Comments (continued)

Elsewhere in the economy, the labor market continued to tighten, with unemployment staying below 5% over the course of the reporting period. As reported by the Bureau of Labor Statistics, the unemployment rate fell to 4.1% in October 2017 from 4.8% in October 2016 and job gains averaged around 167,000 per month for the past twelve months. Higher energy prices, especially gasoline, helped drive a steady increase in inflation over this reporting period. The twelve-month change in the Consumer Price Index (CPI) increased 2.0% over the twelve-month reporting period ended October 31, 2017 on a seasonally adjusted basis, as reported by the Bureau of Labor Statistics. The core CPI (which excludes food and energy) increased 1.8% during the same period, slightly below the Federal Reserve's (Fed) unofficial longer term inflation objective of 2.0%. The housing market also continued to improve, with historically low mortgage rates and low inventory driving home prices higher. The S&P CoreLogic Case-Shiller U.S. National Home Price Index, which covers all nine U.S. census divisions, recorded a 6.2% annual gain in September 2017 (most recent data available at the time this report was prepared). The 10-City and 20-City Composites reported year-over-year increases of 5.7% and 6.2%, respectively.

With the U.S. economy delivering a sustainable, albeit muted, growth rate, the Fed's policy making committee raised its main benchmark interest rate in December 2016, March 2017 and June 2017. These moves were widely expected by the markets, as were the Fed's decisions to leave rates unchanged at the July, September and October/November 2017 meetings. (There was no August meeting.) The Fed also announced it would begin reducing its balance sheet in October 2017 by allowing a small amount of maturing Treasury and mortgage securities to roll off without reinvestment. The market expects the pace to remain moderate and predictable, with minimal market disruption. The Fed also signaled its intention to raise its target interest rate one more time in 2017.

While the markets remained comfortable with the course of monetary policy during this reporting period, the political environment was frequently a source of uncertainty. Markets were initially highly optimistic about pricing in the new administration's "pro-growth" fiscal agenda after Donald Trump won the election. However, several attempts at health care reform were unable to pass in Congress, which weakened the outlook for the remainder of President Trump's agenda. The hurricanes caused enormous devastation in Texas, Florida and Puerto Rico, which will require federal aid. The debt ceiling vote, expected to be a protracted showdown in Congress, turned out to be a non-event after the Republican president and Congressional Democrats reached a compromise in early September (although the debate will resume when the current extension expires in December 2017). As the reporting period ended, legislators were refocusing their efforts on tax reform and President Trump nominated Jerome Powell to replace Fed Chair Janet Yellen when her term ends in February 2018. Although both events were initially considered market friendly, the specifics of a tax reform bill, its implications for the economic and corporate landscapes, and whether it passes remain to be seen and could pose challenges to the Fed's ability to manage interest rates in the future (subsequent to the close of the reporting period, the tax bill was signed into law). Geopolitical risks also remained prominent throughout the reporting period, with the ongoing renegotiation of the North American Free Trade Agreement (NAFTA); the start of "Brexit" talks between the U.K. and European Union; closely watched elections in the Netherlands, France and Germany; and escalating tensions between the U.S. and North Korea.

After a sell-off in response to the U.S. presidential election in November 2016, the municipal bond market rallied for the remainder of the reporting period. Donald Trump's unexpected win launched a wave of speculation that his legislative agenda would drive interest rates and inflation higher as well as introduce tax reforms that might be unfavorable to municipal bonds. A sharp rise in interest rates after the election fueled a reversal in municipal bond fund flow, with the largest outflows from the high yield municipal segment. Volatility intensified as mutual fund managers rushed to sell positions to help meet investor redemptions. At the same time, new issuance spiked in October 2016, further contributing to excess supply and exacerbating falling prices and credit spread widening.

Conditions began to stabilize after the municipal market bottomed on December 1, 2016. Although interest rates ended the reporting period slightly higher, municipal bond relative valuations had returned to their pre-election levels,

as economic conditions remained steady, much of Trump's agenda has yet to be passed and the initial tax reform proposals circulating in Congress did not modify the current municipal bond tax exemption. Fundamental credit conditions continued to be favorable overall, while the ongoing high-profile difficulties in Puerto Rico, Illinois and New Jersey were contained.

The balance of municipal bond supply and demand remained advantageous for prices. In the reporting period overall, municipal bond issuance nationwide totaled \$372.4 billion, a 15.5% drop from the issuance for the twelve-month reporting period ended October 31, 2016. The robust pace of issuance seen since the low volume depths of 2011 began to moderate in 2017 as interest rates have risen and are expected to move higher. Despite the increase, the overall level of interest rates still remained low, encouraging issuers to continue to actively refund their outstanding debt. In these transactions the issuers are issuing new bonds and taking the bond proceeds and redeeming (calling) old bonds. These refunding transactions have ranged from 40%-60% of total issuance over the past few years. Thus, the net issuance (all bonds issued less bonds redeemed) is actually much lower than the gross issuance. In fact, the total municipal bonds outstanding has actually declined in four of the past seven calendar years. So, while gross issuance volume has been strong the net has not, and this was an overall positive technical factor on municipal bond investment performance in recent years. However, the pace of refinancing has slowed somewhat in 2017.

Demand remained robust and continued to outstrip supply. Low global interest rates have continued to drive investors toward higher yielding assets, including U.S. municipal bonds. The Fed's clearly stated intentions have met with market approval, which kept market volatility low, and fiscal policy expectations have moderated since the post-election frenzy, improving investor confidence. As a result, municipal bond fund inflows have steadily increased in 2017 so far.

What key strategies were used to manage these Funds during the twelve-month reporting period ended October 31, 2017?

While the first two months of the reporting period saw widening credit spreads along with rising yields and falling prices (as prices and yields move in opposite directions), the municipal market recovered over the following ten months. Interest rates moderated, credit spreads narrowed and liquidity improved, which helped the broad municipal market post a modest gain for the reporting period overall. During this time, we continued to take a bottom-up approach to discovering sectors that appeared undervalued as well as individual credits that we believed had the potential to perform well over the long term.

Our trading activity continued to focus on pursuing the Funds' investment objectives. Generally speaking, throughout this reporting period, the Funds maintained their overall positioning strategies in terms of duration and yield curve positioning, credit quality exposures and sector allocations.

NVG and NZF were active buyers throughout the reporting period, adding bonds from both the new issue and secondary markets across a range of sectors and increasing exposure to bonds rated BBB and lower. Early in the reporting period, both Funds executed numerous trades to take advantage of the prevailing market conditions that provided attractive opportunities for tax loss swapping. This strategy involves selling bonds that were bought when interest rates were lower and using the proceeds to buy other bonds (typically at higher yield levels) to capitalize on the tax loss (which can be used to offset future taxable gains) and boost the Funds' income distribution capabilities. The opportunity for tax loss swapping waned as the municipal market rallied and credit spreads tightened.

Purchases in NVG included several lower rated or non-rated tax-supported credits, including land-secured bonds (which are bonds secured by real estate values) issued in areas where household formation and/or commercial activity were accelerating, such as Florida, Colorado and Texas. NVG also bought bonds issued for the American Dream Meadowlands Project, a new mega-mall shopping and entertainment complex currently under construction in New Jersey, which we believed were undervalued by the marketplace and subsequently performed well during the reporting period. NVG's exposure to both state and local general obligation (GO) bonds slightly increased over this reporting period, with additional purchases in Chicago Board of Education, Chicago and Illinois-related credits. We also bought lower rated and below investment grade charter school credits, tobacco securitization bonds and long-term care bonds for NVG. NZF added to positions across many of the same sectors as NVG, including credits issued for airports, hospitals, tollroads, land-secured, charter schools, tobacco securitization, Chicago Board of Education, Chicago and Illinois-related credits. Chicago and

Illinois-related sectors. Later in the reporting period, NZF focused on buying higher grade bonds, including those issued for the water

#### Portfolio Managers' Comments (continued)

sewer, GO and sales tax sectors. We consider these bonds to be short-term placeholders, which help keep the Fund fully invested, continue to earn coupon income in the meantime and can be sold easily if interest rates rise.

Outside of the one-for-one tax loss bond swaps, elevated call activity provided most of the proceeds for NVG's and NZF's buying activity. In addition, NVG sold some pre-refunded bonds and higher rated hospital bonds during the reporting period, while NZF trimmed some insured Puerto Rico GOs.

For NMZ, cash for new purchases was generated mainly from call activity in the portfolio, as well as some inflows from an equity shelf program (in which new shares of the Fund are offered on the secondary market) and the reinvestment of shareholder income distributions. We reinvested these proceeds across many of the longstanding investment themes in the portfolio, including the education sector and land-secured bonds. Two notable purchases in the second half of the reporting period were issues for the American Dream Meadowlands Project (which was also added to NVG) and Chicago Board of Education (and were also bought by NVG and NZF).

As of October 31, 2017, the Funds continued to use inverse floating rate securities. We employ inverse floaters for a variety of reasons, including duration management and income and total return enhancement. As part of our duration management strategies, NVG continued to invest in forward interest rates swaps to help reduce price volatility risk due to movements in U.S. interest rates relative to the Fund's benchmark. The interest rate swaps had a positive impact on performance during this reporting period.

How did the Funds perform during the twelve-month reporting period ended October 31, 2017?

The tables in each Fund's Performance Overview and Holding Summaries section of this report provide the Funds' total returns for the one-year, five-year and ten-year periods ended October 31, 2017. Each Fund's total returns at net asset value (NAV) are compared with the performance of a corresponding market index.

For the twelve months ended October 31, 2017, the total returns at NAV for all three of these Funds exceeded the return for the national S&P Municipal Bond Index. NVG and NZF outperformed the return for the secondary benchmark (composed of 60% S&P Municipal Bond Investment Grade Index and 40% S&P Municipal Bond High Yield Index), and NMZ beat the return on the S&P Municipal Yield Index.

Credit ratings allocation was the main driver of NVG and NZF's relative outperformance in this reporting period. Lower quality bonds led high quality bonds over the reporting period, which was especially beneficial to NVG's overweight to credits rated BBB and lower and NZF's overweight allocations to bonds rated BBB and lower and overweight to non-rated bonds. The two Funds were also underweight the highest grade bonds (AAA and AA rated), which was advantageous to relative performance.

Yield curve and duration positioning contributed positively to NVG's and NZF's relative returns but to a lesser extent than credit ratings positioning. Both Funds maintained longer durations than the benchmark indexes and heavier weightings in the longest duration segments (including meaningful exposure to zero coupon bonds in NVG and NZF), which were unfavorable earlier in the reporting period when the yield curve steepened and caused longer bonds to underperform shorter bonds. However, a reversal of those trends later in the reporting period was beneficial to the Funds' duration positioning, which helped overcome the earlier underperformance.

Sector allocation was not a major factor influencing the performance of NVG and NZF in this reporting period. Generally, the Funds held a bias toward sectors that performed well, which were those with predominantly lower rated credits, and were underweight in higher quality segments of the market. Tobacco, industrial development revenue (IDR), health care and transportation were among the better-performing sectors, while pre-refunded bonds, water and

sewer, and tax-backed sectors lagged. Additionally, the Funds' exposures to Chicago and Illinois-related bonds were meaningful contributors in this reporting period, driven by the state's budget approval and a meaningful improvement in the Chicago Public School's (CPS) financial outlook. In addition, the use of regulatory leverage was an important factor affecting performance of the three Funds. Leverage is discussed in more detail later in the Fund Leverage section of this report.

The performance of NMZ, which is primarily compared to the S&P Municipal Yield Index, was largely driven by individual credits that delivered strong gains in this reporting period. Like NVG and NZF, NMZ benefited strongly from its holdings in Chicago Board of Education credits and Chicago GOs. In July 2017, the State of Illinois passed education funding reform that helped alleviate the underfunding of CPS relative to other school districts in the state. A stabilizing picture for CPS, in turn, bodes well for the City of Chicago's financial condition. These events helped Chicago Board of Education and Chicago GO bonds outperform the broad market during this reporting period. NMZ's position in the American Dreams Meadowlands Project also contributed strongly to performance as the bonds appreciated in the reporting period. We bought the issue when it was out of favor due to investors' concerns about the recent decline in shopping malls. However, we believe the project's entertainment and amusement facilities, as well as the strength of the developers, the tenants that have pre-leased and the financing package, support an attractive long-term growth opportunity.

At the sector level, NMZ's heavier weightings in the land-secured, health care and IDR sectors added to performance. An IDR credit issued for Cook County Recovery Zone for Navistar International Corporation was a standout performer for the Fund in this reporting period, as Navistar's partnership with Volkswagen and a restructuring of its debt were well received by the market. Elsewhere, Puerto Rico bonds strongly underperformed in this reporting period, but the Fund did not hold any of the Commonwealth's bonds, which was favorable to relative performance. However, a smaller weighting versus the benchmark index in tobacco securitization bonds detracted from performance. We remain comfortable with the Fund's lower allocation to tobacco bonds because we consider the high yield benchmark's weight to be too high for NMZ given our current assessment of the sector.

## An Update Involving Puerto Rico

As noted in the Funds' previous shareholder reports, we continue to monitor situations in the broader municipal market for any impact on the Funds' holdings and performance: Puerto Rico's ongoing debt restructuring is one such case. Puerto Rico began warning investors in 2014 the island's debt burden might prove to be unsustainable and the Commonwealth pursued various strategies to deal with this burden.

In June 2016, President Obama signed the Puerto Rico Oversight, Management and Economic Stability Act (PROMESA) into law. The legislation established an independent Financial Oversight and Management Board charged with restructuring Puerto Rico's financial operations and encouraging economic development. In addition to creating an oversight board, PROMESA also provides a legal framework and court-supervised debt restructuring process that enables Puerto Rico to adjust its debt obligations. In March 2017, the oversight board certified a ten-year fiscal plan projecting revenues, expenditures and a primary fiscal surplus available for debt service over the plan's horizon. The fiscal plan was considered quite detrimental to creditors, identifying available resources to pay only about 24% of debt service due over the ten-year term. In May 2017, the oversight board initiated a bankruptcy-like process for the general government, general obligation debt, the Puerto Rico Sales Tax Financing Corporation (COFINA), the Highways and Transportation Authority (HTA), and the Employee Retirement System. Officials have indicated more public corporations could follow. As of October 2017, Puerto Rico has defaulted on many of its debt obligations, including General Obligation bonds.

In mid-September 2017, Puerto Rico was severely impacted by two hurricanes within the span of just two weeks causing massive destruction. Rebuilding is expected to take months and some parts of Puerto Rico may need years to fully recover. Puerto Rico's Oversight Board has said it will approve budgetary adjustments up to an amount of \$1 billion to fund emergency relief efforts. Though it's too early to accurately assess the long-term economic impact of the storms, recovering from the tragic damage caused by the hurricanes will likely prolong the restructuring process that was already underway under PROMESA.

In terms of Puerto Rico holdings, shareholders should note that, as of the end of this reporting period, NVG and NZF had limited exposure, which was either insured or investment grade, to Puerto Rico debt, 0.38% and 0.11%,

respectively, and NMZ did not hold any Puerto Rico bonds. The Puerto Rico credits offered higher yields, added diversification and triple exemption (i.e., exemption from most federal, state and local taxes). Puerto Rico general obligation debt is currently in default and rated Caa3/D/D by Moody's, S&P and Fitch, respectively, with negative outlooks.

## Portfolio Managers' Comments (continued)

Note About Investment Valuations

The municipal securities held by the Funds are valued by the Funds' pricing service using a range of market-based inputs and assumptions. A different municipal pricing service might incorporate different assumptions and inputs into its valuation methodology, potentially resulting in different values for the same securities. Thus, the current net asset value of a Fund's shares might be impacted, higher or lower, if the Fund were to use a different pricing service, or if its pricing service were to materially change its valuation methodology. On October 4, 2016, the Fund's then-current municipal bond pricing service was acquired by the parent company of another pricing service, and the combination of the valuation methodologies used by the two organizations took place on October 16, 2017. The change of valuation methodologies due to that combination had little or no impact on the net asset value of each Fund's shares.

## Fund Leverage

#### IMPACT OF THE FUNDS' LEVERAGE STRATEGIES ON PERFORMANCE

One important factor impacting the returns of the Funds relative to their comparative benchmarks was the Funds' use of leverage through their issuance of preferred shares and/or investments in inverse floating rate securities, which represent leveraged investments in underlying bonds. The Funds use leverage because our research has shown that, over time, leveraging provides opportunities for additional income, particularly in the recent market environment where short-term market rates are at or near historical lows, meaning that the short-term rates the Fund has been paying on its leveraging instruments have been much lower than the interest the Fund has been earning on its portfolio of long-term bonds that it has bought with the proceeds of that leverage. However, use of leverage also can expose the Fund to additional price volatility. When a Fund uses leverage, the Fund will experience a greater increase in its net asset value if the municipal bonds acquired through the use of leverage increase in value, but it will also experience a correspondingly larger decline in its net asset value if the bonds acquired through leverage decline in value, which will make the Fund's net asset value more volatile, and its total return performance more variable over time. In addition, income in levered funds will typically decrease in comparison to unlevered funds when short-term interest rates increase and increase when short-term interest rates decrease. Leverage had a positive impact on the performance of these Funds over this reporting period.

As of October 31, 2017, the Funds' percentages of leverage are as shown in the accompanying table.

## NVG NZF NMZ

Effective Leverage\* 37.20% 36.16% 37.42% Regulatory Leverage\* 33.23% 34.74% 9.25%

Effective Leverage is a Fund's effective economic leverage, and includes both regulatory leverage and the leverage effects of certain derivative and other investments in a Fund's portfolio that increase the Fund's investment exposure. Currently, the leverage effects of Tender Option Bond (TOB) inverse floater holdings are included in effective leverage values, in addition to any regulatory leverage. Regulatory leverage consists of preferred shares issued or \* borrowings of a Fund. Both of these are part of a Fund's capital structure. A Fund, however, may from time to time borrow on a typically transient basis in connection with its day-to-day operations, primarily in connection with the need to settle portfolio trades. Such incidental borrowings are excluded from the calculation of a Fund's effective leverage ratio. Regulatory leverage is subject to asset coverage limits set forth in the Investment Company Act of 1940.

### Fund Leverage (continued)

#### THE FUNDS' REGULATORY LEVERAGE

As of October 31, 2017, the Funds have issued and outstanding preferred shares as shown in the accompanying table.

	Variable Rate Preferred * Shares Issued at Liquidation	Variable Rate Remarketed <sup>6</sup> Preferred Shares Issued at at Liquidation	**
	Preference	Preference	Total
NVG	\$599,400,000	\$1,052,600,000	\$1,652,000,000
NZF	\$486,000,000	\$727,000,000	\$1,213,000,000
NMZ	\$87,000,000	\$—	\$87,000,000

Preferred shares of the Fund featuring a floating rate dividend based on a predetermined formula or spread to an
\* index rate. Includes the following preferred shares iMTP, VMTP, MFP-VRM and VRDP in Special Rate Mode, where applicable. See Notes to Financial Statements, Note 4 – Fund Shares, Preferred Shares for further details.

Preferred shares of the Fund featuring floating rate dividends set by a remarketing agent via a regular remarketing. \*\*Includes the following preferred shares VRDP not in special rate mode, MFP-VRRM and MFP-VRDM, where applicable. See Notes to Financial Statements, Note 4 – Fund Shares, Preferred Shares for further details. Refer to Notes to Financial Statements, Note 4 – Fund Shares, Preferred Shares and Note 10 – Subsequent Events, Preferred Shares for further details on preferred shares and each Funds' respective transactions.

#### **Common Share Information**

#### COMMON SHARE DISTRIBUTION INFORMATION

The following information regarding the Funds' distributions is current as of October 31, 2017. Each Fund's distribution levels may vary over time based on each Fund's investment activity and portfolio investments value changes.

During the current reporting period, each Fund's distributions to common shareholders were as shown in the accompanying table.

	Per Common Share Amounts		
Monthly Distributions (Ex-Dividend Date)	NVG	NZF	NMZ
November 2016	\$0.0760	\$0.0760	\$0.0695
December	0.0725	0.0740	0.0675
January	0.0725	0.0740	0.0675
February	0.0725	0.0740	0.0675
March	0.0725	0.0740	0.0675
April	0.0725	0.0740	0.0675
May	0.0725	0.0740	0.0675
June	0.0725	0.0740	0.0675
July	0.0725	0.0740	0.0675
August	0.0725	0.0740	0.0675
September	0.0725	0.0740	0.0650
October 2017	0.0725	0.0740	0.0650
Total Monthly Per Share Distributions	\$0.8735	\$0.8900	\$0.8070
Ordinary Income Distribution*	\$0.0011	\$0.0020	\$0.0053
<b>Total Distributions from Net Investment Income</b>	\$0.8746	\$0.8920	\$0.8123
<b>Total Distributions from Long-Term Capital Gains*</b>	\$0.0292	\$0.0018	\$—
Total Distributions	\$0.9038	\$0.8938	\$0.8123
Yields			
Market Yield**	5.74 %	6 5.92 9	% 5.76 %
Taxable-Equivalent Yield**	7.97 %	% 8.22 %	% 8.00 %

\* Distribution paid in December 2016.

Market Yield is based on the Fund's current annualized monthly dividend divided by the Fund's current market price as of the end of the reporting period. Taxable-Equivalent Yield represents the yield that must be earned on a fully \*\* taxable investment in order to equal the yield of the Fund on an after-tax basis. It is based on a federal income tax

rate of 28.0%. When comparing a Fund to investments that generate qualified dividend income, the

Taxable-Equivalent Yield would be lower.

Each Fund in this report seeks to pay regular monthly dividends out of its net investment income at a rate that reflects its past and projected net income performance. To permit each Fund to maintain a more stable monthly dividend, the Fund may pay dividends at a rate that may be more or less than the amount of net income actually earned by the Fund during the period. If a Fund has cumulatively earned more than it has paid in dividends, it will hold the excess in

reserve as undistributed net investment income (UNII) as part of the Fund's net asset value. Conversely, if a Fund has cumulatively paid in dividends more than it has earned, the excess will constitute a negative UNII that will likewise be reflected in the Fund's net asset value. Each Fund will, over time, pay all its net investment income as dividends to shareholders.

As of October 31, 2017, all the Funds had positive UNII balances for both tax and financial reporting purposes.

#### **Common Share Information** (continued)

All monthly dividends paid by each Fund during the current reporting period were paid from net investment income. If a portion of the Fund's monthly distributions was sourced from or comprised of elements other than net investment income, including capital gains and/or a return of capital, shareholders would have received a notice to that effect. For financial reporting purposes, the composition and per share amounts of each Fund's dividends for the reporting period are presented in this report's Statement of Changes in Net Assets and Financial Highlights, respectively. For income tax purposes, distribution information for each Fund as of its most recent tax year end is presented in Note 6 — Income Tax Information within the Notes to Financial Statements of this report.

#### COMMON SHARE EQUITY SHELF PROGRAM

During the current reporting period, NMZ was authorized by the Securities and Exchange Commission to issue additional common shares through an equity shelf program (Shelf Offering). Under this program, NMZ, subject to market conditions, may raise additional capital from time to time in varying amounts and offering methods at a net price at or above the Fund's NAV per common share. During the current fiscal period, the Fund was authorized to issue additional common shares under one or more shelf offerings. The total amount of common shares under these Shelf Offerings, are as shown in the accompanying table.

#### NMZ

Additional authorized common shares 21,200,000 During the current reporting period, NMZ sold common shares through its Shelf Offering at a weighted average premium to its NAV per common share as shown in the accompanying table.

NMZCommon shares sold through Shelf Offering5,696,100Weighted average premium to NAV per common share sold1.30 %Refer to Notes to Financial Statements, Note 4 – Fund Shares, Common Shares Equity Shelf Programs and Offering<br/>Costs for further details of Shelf Offerings and the Fund's transactions.

#### COMMON SHARE REPURCHASES

During August 2017, the Funds' Board of Trustees reauthorized an open-market share repurchase program, allowing each Fund to repurchase an aggregate of up to approximately 10% of its outstanding shares.

As of October 31, 2017, and since the inception of the Funds' repurchase programs, the Funds have cumulatively repurchased and retired their outstanding common shares as shown in the accompanying table.

NVGNZFNMZCommon shares cumulatively repurchased and retired202,50047,5000Common shares authorized for repurchase20,255,00014,215,0006,235,000During the current reporting period, the Funds did not repurchase any of their outstanding common shares.NMZ

#### OTHER COMMON SHARE INFORMATION

As of October 31, 2017, and during the current reporting period, the Funds' common share prices were trading at a premium/(discount) to their common share NAVs as shown in the accompanying table.

	NVG	NZF	NMZ
Common share NAV	\$16.39	\$16.03	\$13.47
Common share price	\$15.17	\$15.01	\$13.53
Premium/(Discount) to NAV	(7.44)%	6 (6.36)	% 0.45 %
12-month average premium/(discount) to NAV	(6.60)%	6 (6.04)	% 0.77 %

## **Risk Considerations**

Fund shares are not guaranteed or endorsed by any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation.

## Nuveen AMT-Free Municipal Credit Income Fund (NVG)

Investing in closed-end funds involves risk; principal loss is possible. There is no guarantee the Fund's investment objectives will be achieved. Closed-end fund shares may frequently trade at a discount or premium to their net asset value. **Debt or fixed income securities** such as those held by the Fund, are subject to market risk, credit risk, interest rate risk, derivatives risk, liquidity risk, and income risk. As interest rates rise, bond prices fall. **Lower credit debt** securities may be more likely to fail to make timely interest or principal payments. **Leverage** increases return volatility and magnifies the Fund's potential return and its risks; there is no guarantee a fund's leverage strategy will be successful. These and other risk considerations such as **inverse floater risk** and **tax risk** are described in more detail on the Fund's web page at www.nuveen.com/NVG.

## Nuveen Municipal Credit Income Fund (NZF)

Investing in closed-end funds involves risk; principal loss is possible. There is no guarantee the Fund's investment objectives will be achieved. Closed-end fund shares may frequently trade at a discount or premium to their net asset value. **Debt or fixed income securities** such as those held by the Fund, are subject to market risk, credit risk, interest rate risk, derivatives risk, liquidity risk, and income risk. As interest rates rise, bond prices fall. **Lower credit debt** securities may be more likely to fail to make timely interest or principal payments. **Leverage** increases return volatility and magnifies the Fund's potential return and its risks; there is no guarantee a fund's leverage strategy will be successful. These and other risk considerations such as **inverse floater risk** and **tax risk** are described in more detail on the Fund's web page at www.nuveen.com/NZF.

# Nuveen Municipal High Income Opportunity Fund (NMZ)

Investing in closed-end funds involves risk; principal loss is possible. There is no guarantee the Fund's investment objectives will be achieved. Closed-end fund shares may frequently trade at a discount or premium to their net asset value. **Debt or fixed income securities** such as those held by the Fund, are subject to market risk, credit risk, interest rate risk, derivatives risk, liquidity risk, and income risk. As interest rates rise, bond prices fall. **Lower credit debt** securities may be more likely to fail to make timely interest or principal payments. **Leverage** increases return volatility and magnifies the Fund's potential return and its risks; there is no guarantee a fund's leverage strategy will be successful. These and other risk considerations such as **inverse floater risk** and **tax risk** are described in more detail on the Fund's web page at www.nuveen.com/NMZ.

NVG

### Nuveen AMT-Free Municipal Credit Income Fund

#### Performance Overview and Holding Summaries as of October 31, 2017

Refer to the Glossary of Terms Used in this Report for further definition of the terms used within this section.

Average Annual Total Returns as of October 31, 2017

	Average Annual	
	1-Year 5-Year 10-Year	
NVG at Common Share NAV	4.25% 5.55% 6.47%	
NVG at Common Share Price	7.10% 5.18% 7.16%	
S&P Municipal Bond Index	1.80% 3.04% 4.43%	
NVG Custom Blended Fund Performance Benchmark	1.21% 3.29% 4.55%	

Past performance is not predictive of future results. Current performance may be higher or lower than the data shown. Returns do not reflect the deduction of taxes that shareholders may have to pay on Fund distributions or upon the sale of Fund shares. Returns at NAV are net of Fund expenses, and assume reinvestment of distributions. Comparative index return information is provided for the Fund's shares at NAV only. Indexes are not available for direct investment.

This data relates to the securities held in the Fund's portfolio of investments as of the end of the reporting period. It should not be construed as a measure of performance for the Fund itself. Holdings are subject to change.

The ratings disclosed are the lowest rating given by one of the following national rating agencies: Standard & Poor's Group, Moody's Investors Service, Inc. or Fitch, Inc. Credit ratings are subject to change. AAA, AA, A and BBB are investment grade ratings; BB, B, CCC, CC, C and D are below-investment grade ratings. Certain bonds backed by U.S. Government or agency securities are regarded as having an implied rating equal to the rating of such securities. Holdings designated N/R are not rated by these national rating agencies.

Fund Allocation	
(% of net assets)	
Long-Term Municipal Bonds 152	2.4%
Corporate Bonds 0.0	1%
Short-Term Municipal Bonds 0.8	%
Other Assets Less Liabilities 2.2	%
Net Assets Plus Floating Rate Obligations, VMTP Shares, net of deferred offering costs & VRDP	5.4%
Shares, net of deferred offering costs	5.4 /0
Floating Rate Obligations (5.8)	8)%
VMTP Shares, net of deferred offering costs (7.2)	2)%
VRDP Shares, net of deferred offering costs (42	2.4)%
Net Assets 100	0%

#### **Portfolio Credit Quality**

#### (% of total investment exposure)

AAA/U.S. Guaranteed	12.7%
AA	13.3%
А	26.9%
BBB	20.4%
BB or Lower	19.5%
N/R (not rated)	7.2%
Total	100%

#### **Portfolio Composition**

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(% of total investments)	
Health Care	19.4%
Tax Obligation/Limited	17.9%
Transportation	13.2%
U.S. Guaranteed	9.6%
Tax Obligation/General	9.2%
Education and Civic Organizations	8.6%
Consumer Staples	7.3%
Utilities	7.1%
Other	7.7%
Total	100%

States and Territories	
(% of total municipal bonds)	
Illinois	16.3%
California	11.4%
Texas	7.8%
Ohio	6.3%
Colorado	6.1%
New Jersey	4.6%
Florida	4.4%
Pennsylvania	4.0%
New York	3.1%
Indiana	2.6%
Georgia	2.5%
Wisconsin	2.4%
Iowa	2.1%
Michigan	1.9%
Arizona	1.9%
Kentucky	1.8%
South Carolina	