Nuveen AMT-Free Municipal Value Fund Form N-Q September 28, 2018

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number 811-22253

Nuveen AMT-Free Municipal Value Fund

(Exact name of registrant as specified in charter)

Nuveen Investments

333 West Wacker Drive, Chicago, Illinois 60606

(Address of principal executive offices) (Zip code)

Gifford R. Zimmerman

Vice President and Secretary

333 West Wacker Drive, Chicago, Illinois 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: July 31, 2018

Form N-Q is to be used by management investment companies, other than small business investment companies registered on Form N-5 (§§ 239.24 and 274.5 of this chapter), to file reports with the Commission, not later than 60 days after the close of the first and third fiscal quarters, pursuant to rule 30b1-5 under the Investment Company Act of 1940 (17 CFR 270.30b1-5). The Commission may use the information provided on Form N-Q in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-Q, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-Q 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 the 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. § 3507.

Item 1. Schedule of Investments

| NUW | | | | |
|-------------|---|------------------|----------|-------------------|
| | T-Free Municipal Value Fund | | | |
| | Investments July 31, 2018 | | | |
| (Unaudited) | | | | |
| Principal | | | | |
| Amount | Description (1) | Optional Call | Ratings | Value |
| (000) | | Provisions (2) | (3) | |
| | LONG-TERM INVESTMENTS - 101.0% | | | |
| | MUNICIPAL BONDS - 101.0% | | | |
| | Alaska – 0.2% | | | |
| | Northern Tobacco Securitization Corporation, Alaska, Tobacco | | | |
| | Settlement Asset-Backed Bonds, Series 2006A: | | | |
| \$ 140 | 4.625%, 6/01/23 | 9/18 at 100.00 | Ba2 | \$140,175 |
| 350 | 5.000%, 6/01/46 | 9/18 at 100.00 | B3 | 352,033 |
| 490 | Total Alaska | | | 492,208 |
| | Arizona – 3.1% | | | |
| 4.000 | Maricopa County Pollution Control Corporation, Arizona, | • 400 00 | 5 | 4 4 0 0 4 6 0 |
| 4,000 | Pollution Control Revenue Bonds, El Paso Electric Company, | 2/19 at 100.00 | Baa1 | 4,103,160 |
| | Refunding Series 2009A, 7.250%, 2/01/40 | | | |
| 3,045 | Salt Verde Financial Corporation, Arizona, Senior Gas Revenue Bonds, Citigroup Energy Inc. Prepay Contract Obligations, Series | No Opt. Call | BBB+ | 3,620,749 |
| 3,043 | 2007, 5.000%, 12/01/37 | No Opt. Can | рррт | 3,020,749 |
| 7,045 | Total Arizona | | | 7,723,909 |
| 7,043 | California – 12.8% | | | 1,123,707 |
| | Alameda Corridor Transportation Authority, California, Revenue | | | |
| 1,790 | Bonds, Refunding Second Subordinate Lien Series 2016B, | 10/26 at 100.00 | BBB+ | 2,002,061 |
| , | 5.000%, 10/01/37 | | | |
| | Anaheim Public Financing Authority, California, Lease Revenue | | | |
| 1,730 | Bonds, Public Improvement Project, Series 1997C, 0.000%, | No Opt. Call | AA | 1,120,227 |
| | 9/01/30 – AGM Insured | | | |
| | California State Public Works Board, Lease Revenue Bonds, | | | |
| 2,500 | Department of General Services Buildings 8 & 9, Series 2009A, | 4/19 at 100.00 | Aaa | 2,583,350 |
| | 6.250%, 4/01/34 (Pre-refunded 4/01/19) | | | |
| 5 00 | California State, General Obligation Bonds, Tender Option Bond | TENO 100 00 | | 61 6 5 0 5 |
| 500 | Trust 2016-XG0039, 17.070%, 3/01/40 – AGM Insured, 144A (| 1B/)20 at 100.00 | Aa3 | 616,705 |
| | (4) | | | |
| 540 | Golden State Tobacco Securitization Corporation, California, Tobacco Settlement Asset-Backed Bonds, Series 2018A-1, | 6/22 at 100 00 | NI/D | 554,915 |
| 540 | 5.000%, 6/01/47 | 6/22 at 100.00 | IN/K | 334,913 |
| | M-S-R Energy Authority, California, Gas Revenue Bonds, | | | |
| 450 | Citigroup Prepay Contracts, Series 2009A, 6.500%, 11/01/39 | No Opt. Call | A | 636,737 |
| | Palomar Pomerado Health, California, General Obligation Bonds, | | | |
| 10,200 | Series 2009A, 0.000%, 8/01/38 – AGC Insured (5) | 8/29 at 100.00 | BB+ | 12,600,876 |
| | Poway Unified School District, San Diego County, California, | | | |
| 1,030 | General Obligation Bonds, School Facilities Improvement District | No Opt. Call | AA- | 548,660 |
| , | 2007-1, Series 2011A, 0.000%, 8/01/35 | 1 | | , |
| 2.500 | San Diego County Regional Airport Authority, California, Airport | 7/27 at 100.00 | ٨ | 2 054 050 |
| 2,500 | Revenue Bonds, Subordinate Series 2017A, 5.000%, 7/01/47 | 1121 at 100.00 | A | 2,854,850 |
| 12,955 | San Ysidro School District, San Diego County, California, General | No Opt. Call | AA | 6,674,546 |
| | Obligation Bonds, 1997 Election Series 2012G, 0.000%, 8/01/35 | _ | | |

| 5,185 | AGM Insured San Ysidro School District, San Diego County, California, General Obligation Bonds, Refunding Series 2015, 0.000%, 8/01/44 Victor Elementary School District, San Bernardino County, | No Opt. Call | AA | 1,468,288 |
|-------------|--|--------------|-----|------------|
| 700 | California, General Obligation Bonds, Series 2002A, 0.000%, 8/01/24 – FGIC Insured | No Opt. Call | Aa3 | 599,893 |
| 40,080 1 | Total California | | | 32,261,108 |

| | n AMT-Free Municipal Value Fund (continued) io of Investments July 31, 2018 | | | |
|--------------|--|---------------------------------|---------------------|-------------|
| Principal | illou) | | | |
| Amount (000) | Description (1) | Optional Call Provisions (2) | Ratings (3) | Value |
| | Colorado – 5.6% | | | |
| | Denver Convention Center Hotel Authority, Colorado, Revenue | | | |
| | Bonds, Convention Center Hotel, Refunding Senior Lien Series | | | |
| | 2016: | | | |
| \$ 1,000 | 5.000%, 12/01/30 | 12/26 at 100.00 | | \$1,127,880 |
| 1,500 | 5.000%, 12/01/36 | 12/26 at 100.00 | Baa2 | 1,654,455 |
| 5,885 | E-470 Public Highway Authority, Colorado, Toll Revenue Bonds, Series 2004A, 0.000%, 9/01/34 – NPFG Insured | No Opt. Call | A | 3,227,863 |
| 3,605 | E-470 Public Highway Authority, Colorado, Toll Revenue Bonds, Series 2004B, 0.000%, 9/01/27 – NPFG Insured | 9/20 at 67.94 | A | 2,324,252 |
| | Park Creek Metropolitan District, Colorado, Senior Limited | | | |
| 4,000 | Property Tax Supported Revenue Bonds, Refunding Series 2009, | 12/19 at 100.00 | AA (6) | 4,250,880 |
| | 6.375%, 12/01/37 (Pre-refunded 12/01/19) — AGC Insured | | | |
| 1 000 | Public Authority for Colorado Energy, Natural Gas Purchase | No Ont Call | Α. | 1 270 270 |
| 1,000 | Revenue Bonds, Colorado Springs Utilities, Series 2008, 6.500%, 11/15/38 | No Opt. Call | A+ | 1,379,370 |
| 16,990 | Total Colorado | | | 13,964,700 |
| 10,770 | Florida – 7.9% | | | 13,704,700 |
| | Gainesville, Florida, Utilities System Revenue Bonds, Series | | | |
| 500 | 2017A, 5.000%, 10/01/37 | 10/27 at 100.00 | AA- | 579,585 |
| 1.605 | Lakeland, Florida, Hospital System Revenue Bonds, Lakeland | 11/24 -4 100 00 | 4.2 | 1 751 055 |
| 1,605 | Regional Health, Series 2015, 5.000%, 11/15/45 | 11/24 at 100.00 | A2 | 1,751,055 |
| | Miami Beach Redevelopment Agency, Florida, Tax Increment | | | |
| 535 | Revenue Bonds, City Center/Historic Convention Village, Series | 2/24 at 100.00 | AA | 598,633 |
| | 2015A, 5.000%, 2/01/44 – AGM Insured | | | |
| | Miami-Dade County, Florida, Aviation Revenue Bonds, Miami | | | |
| 9,500 | International Airport, Series 2009A, 5.500%, 10/01/41 | 10/19 at 100.00 | A (6) | 9,894,915 |
| | (Pre-refunded 10/01/19) (UB) (4) | | | |
| 3,325 | Miami-Dade County, Florida, Water and Sewer System Revenue | 10/25 at 100.00 | Aa3 | 3,803,667 |
| | Bonds, Refunding Series 2017B, 5.000%, 10/01/31 Putnam County Development Authority, Florida, Pollution | | | |
| 510 | Control Revenue Bonds, Seminole Electric Cooperative, Inc. | 5/28 at 100.00 | Δ_ | 572,689 |
| 310 | Project, Refunding Series 2018B, 5.000%, 3/15/42 | 3/20 at 100.00 | <i>1</i> 1 – | 372,007 |
| | Tolomato Community Development District, Florida, Special | | | |
| 865 | Assessment Bonds, Convertible, Capital Appreciation, Series | 5/19 at 100.00 | N/R | 830,089 |
| | 2012A-3, 0.000%, 5/01/40 (5) | | | , |
| | Tolomato Community Development District, Florida, Special | | | |
| 375 | Assessment Bonds, Convertible, Capital Appreciation, Series | 5/22 at 100.00 | N/R | 302,239 |
| | 2012A-4, 0.000%, 5/01/40 (5) | | | |
| | Tolomato Community Development District, Florida, Special | | | |
| 525 | Assessment Bonds, Hope Note, Series 2007-3, 6.450%, 5/01/23 | 10/18 at 100.00 | N/R | 5 |
| 4.0 | $\begin{array}{c} (7) \\ \end{array}$ | 40440 400 | | 10.00- |
| 40 | Tolomato Community Development District, Florida, Special | 10/18 at 100.00 | N/R | 40,005 |
| | Assessment Bonds, Non Performing Parcel Series 2007-1 RMKT, | | | |

| | 6.450%, 5/01/23 | | | |
|--------|--|-----------------|--------|------------|
| 1,315 | Tolomato Community Development District, Florida, Special Assessment Bonds, Refunding Series 2015-1, 0.000%, 5/01/40 (7) | 10/18 at 81.98 | N/R | 1,047,319 |
| 805 | Tolomato Community Development District, Florida, Special Assessment Bonds, Refunding Series 2015-2, 0.000%, 5/01/40 (7) | 10/18 at 67.45 | N/R | 527,492 |
| 880 | Tolomato Community Development District, Florida, Special Assessment Bonds, Refunding Series 2015-3, 6.610%, 5/01/40 (7) | 10/18 at 100.00 | N/R | 9 |
| 20,780 | Total Florida | | | 19,947,702 |
| | Georgia – 2.9% | | | |
| 400 | Atlanta, Georgia, Tax Allocation Bonds, Beltline Project Series 2008A Remarketed, 7.500%, 1/01/31 (Pre-refunded 1/01/19) | 1/19 at 100.00 | A2 (6) | 410,180 |
| 2 | | | | |

| Principal Amount (000) | Description (1) | Optional Call Provisions (2) | Ratings (3) | Value |
|------------------------------|---|---------------------------------|----------------|-----------------------------------|
| , | Georgia (continued) | | | |
| \$ 1,000 | Clayton County Development Authority, Georgia, Special Facilities Revenue Bonds, Delta Air Lines, Inc. Project, Series 2009A, 8.750%, 6/01/29 | 6/20 at 100.00 | Baa3 | \$1,108,430 |
| 2,000 | Gainesville and Hall County Hospital Authority, Georgia, Revenue Anticipation Certificates, Northeast Georgia Health Services Inc., Series 2017B, 5.500%, 2/15/42 | 2/27 at 100.00 | AA | 2,357,560 |
| 2,000 | Municipal Electric Authority of Georgia, Project One Revenue Bonds, Subordinate Lien Series 2015A, 5.000%, 1/01/35 | 1/25 at 100.00 | A | 2,187,780 |
| 1,000 | Private Colleges and Universities Authority, Georgia, Revenue Bonds, Emory University, Refunding Series 2016A, 5.000%, 10/01/46 | 10/26 at 100.00 | AA+ | 1,141,500 |
| 6,400 | Total Georgia | | | 7,205,450 |
| 2,000 | Illinois – 12.3% Chicago Board of Education, Illinois, Dedicated Capital Improvement Tax Revenue Bonds, Series 2016, 6.000%, 4/01/46 Chicago, Illinois, General Obligation Bonds, City Colleges, Series 1999: | 4/27 at 100.00 | A | 2,340,620 |
| 470 | 0.000%, 1/01/33 – FGIC Insured | No Opt. Call | BBB+ | 248,169 |
| 3,000 | 0.000%, 1/01/37 – FGIC Insured | No Opt. Call | BBB- | 1,286,820 |
| 2,000 | Cook County, Illinois, Sales Tax Revenue Bonds, Series 2017, 5.000%, 11/15/38 | 11/27 at 100.00 | AAA | 2,264,800 |
| 5,035 | Illinois Finance Authority, Revenue Bonds, Northwestern Memorial Hospital, Series 2009A, 6.000%, 8/15/39 (Pre-refunded 8/15/19) | 8/19 at 100.00 | AA+ (6) | 5,268,121 |
| 3,500 | Illinois Finance Authority, Revenue Bonds, OSF Healthcare System, Series 2009A, 7.125%, 11/15/37 (Pre-refunded 5/15/19) | 5/19 at 100.00 | A2 (6) | 3,652,880 |
| 5,000 | Illinois Finance Authority, Revenue Bonds, Rush University Medical Center Obligated Group, Series 2009A, 7.250%, 11/01/38 (Pre-refunded 11/01/18) | 11/18 at 100.00 | Aaa | 5,073,000 |
| 3,500 | Illinois Finance Authority, State of Illinois Clean Water Initiative Revolving Fund Revenue Bonds, Series 2017, 5.000%, 7/01/37 | 1/27 at 100.00 | AAA | 3,972,465 |
| 525 | Illinois State, General Obligation Bonds, October Series 2016, 5.000%, 2/01/29 | 2/27 at 100.00 | BBB- | 561,335 |
| 11,420 | Metropolitan Pier and Exposition Authority, Illinois, Revenue Bonds, McCormick Place Expansion Project, Series 2002A, 0.000%, 12/15/37 — NPFG Insured | No Opt. Call | Baa2 | 4,679,117 |
| 615 | University of Illinois, Health Services Facilities System Revenue Bonds, Series 2013, 6.000%, 10/01/42 Will County Community Unit School District 201U, | 10/23 at 100.00 | A- | 693,523 |
| | Crete-Monee, Illinois, General Obligation Bonds, Capital Appreciation Series 2004: | | | |
| 300 745 38,110 | 0.000%, 11/01/23 - NPFG Insured (ETM) 0.000%, 11/01/23 - NPFG Insured Total Illinois Indiana - 3.4% | No Opt. Call No Opt. Call | Baa2 (6) A+ |)263,196 641,534 30,945,580 |

| 5,000 | Indiana Finance Authority, Hospital Revenue Bonds, Deaconess Hospital Obligated Group, Series 2009A, 6.750%, 3/01/39 (Pre-refunded 3/01/19) | 3/19 at 100.00 | A+ (6) | 5,153,750 |
|------------|---|----------------|--------|-----------|
| 2,000 | Indiana Municipal Power Agency, Power Supply System Revenue Bonds, Series 2009B, 6.000%, 1/01/39 (Pre-refunded 1/01/19) | 1/19 at 100.00 | A1 (6) | 2,038,560 |
| 1,500 | Indianapolis Local Public Improvement Bond Bank, Indiana, Series 1999E, 0.000%, 2/01/25 – AMBAC Insured | No Opt. Call | AA | 1,263,360 |
| 8,500 3 | Total Indiana | | | 8,455,670 |
| | | | | |

| | n AMT-Free Municipal Value Fund (continued) lio of Investments July 31, 2018 dited) | | | |
|--------------|--|---------------------------------|-------------|-------------|
| Principal | uncu) | | | |
| Amount (000) | Description (1) | Optional Call Provisions (2) | Ratings (3) | Value |
| , | Iowa – 1.9% | | | |
| | Iowa Finance Authority, Iowa, Midwestern Disaster Area Revenue | | | |
| \$ 1,545 | Bonds, Iowa Fertilizer Company Project, Series 2013, 5.500%, 12/01/22 | 12/18 at 100.00 | B- | \$1,557,808 |
| 3,075 | Iowa Tobacco Settlement Authority, Asset Backed Settlement Revenue Bonds, Series 2005C, 5.375%, 6/01/38 | 10/18 at 100.00 | B2 | 3,108,271 |
| 4,620 | Total Iowa | | | 4,666,079 |
| | Kentucky – 1.3% | | | |
| | Kenton County Airport Board, Kentucky, Airport Revenue Bonds, | | | |
| 1,150 | Cincinnati/Northern Kentucky International Airport, Series 2016, 5.000%, 1/01/29 | 1/26 at 100.00 | A+ | 1,285,631 |
| | Kentucky Economic Development Finance Authority, Revenue | | | |
| 1,750 | Bonds, Next Generation Kentucky Information Highway Project, Senior Series 2015A, 5.000%, 1/01/45 | 7/25 at 100.00 | Baa2 | 1,866,147 |
| 2,900 | Total Kentucky | | | 3,151,778 |
| 2,700 | Maine – 1.4% | | | 3,131,776 |
| | Maine Health and Higher Educational Facilities Authority, | | | |
| | Revenue Bonds, Bowdoin College, Tender Option Bond Trust | | | |
| 3,335 | 2016-XL0014, 11.867%, 7/01/39 (Pre-refunded 7/01/19), 144A | 7/19 at 100.00 | Aa2 | 3,616,207 |
| | (IF) (4) | | | |
| | Maryland – 3.7% | | | |
| | Baltimore, Maryland, Convention Center Hotel Revenue Bonds, | | | |
| | Refunding Series 2017: | | | |
| 1,000 | 5.000%, 9/01/32 | 9/27 at 100.00 | BBB- | 1,138,310 |
| 2,250 | 5.000%, 9/01/34 | 9/27 at 100.00 | BBB- | 2,517,975 |
| | Maryland Health and Higher Educational Facilities Authority, | | | |
| 5,000 | Revenue Bonds, MedStar Health Issue, Series 2017A, 5.000%, | 5/27 at 100.00 | A | 5,570,800 |
| | 5/15/45 | | | |
| 8,250 | Total Maryland | | | 9,227,085 |
| | Massachusetts – 0.4% | | | |
| | Massachusetts Water Pollution Abatement Trust, Pooled Loan | | | |
| 1,000 | Program Bonds, Tender Option Bond Trust 2015-XF2186, | 8/19 at 100.00 | AAA | 1,091,990 |
| | 11.926%, 8/01/38, 144A (IF) (4) | | | |
| | Minnesota – 0.5% | | | |
| 1,145 | Rochester, Minnesota, Electric Utility Revenue Bonds, Refunding | 12/26 at 100.00 | Aa3 | 1,299,999 |
| -, | Series 2017A, 5.000%, 12/01/47 | | | -,, |
| | Nebraska – 0.2% | | | |
| 500 | Central Plains Energy Project, Nebraska, Gas Project 3 Revenue | 9/22 at 100.00 | A | 547,180 |
| | Bonds, Series 2012, 5.000%, 9/01/42 | | | , |
| | Nevada – 3.2% | | | |
| 5 415 | Las Vegas Redevelopment Agency, Nevada, Tax Increment | C/10 + 100 00 | BBB+ | 5 710 0CC |
| 5,415 | Revenue Bonds, Series 2009A, 8.000%, 6/15/30 (Pre-refunded | 6/19 at 100.00 | (6) | 5,713,366 |
| 2.000 | 6/15/19) | 10/04 -+ 100 00 | . , | 0.057.060 |
| 2,000 | | 12/24 at 100.00 | AA+ | 2,257,260 |

| | Las Vegas Valley Water District, Nevada, General Obligation Bonds, Refunding Series 2015, 5.000%, 6/01/39 | |
|-------|--|-----------|
| 7 415 | | 7.070.626 |
| 7,415 | Total Nevada | 7,970,626 |
| | New Jersey – 4.9% | |
| | New Jersey Economic Development Authority, School Facilities | |
| 935 | Construction Bonds, Series 2005N-1, 5.500%, 9/01/27 - FGIC No Opt. Call A- | 1,096,044 |
| | Insured | |
| 4 | | |
| | | |

| Principal | | 0 / 10 " | n d | |
|--------------|---|---------------------------------|-------------|-------------|
| Amount (000) | Description (1) | Optional Call Provisions (2) | Ratings (3) | Value |
| | New Jersey (continued) | | | |
| \$ 1,000 | New Jersey Economic Development Authority, School Facilities Construction Financing Program Bonds, Refunding Series 2011GG, 5.000%, 9/01/22 | 3/21 at 100.00 | A- | \$1,057,970 |
| 1,250 | New Jersey Economic Development Authority, School Facility Construction Bonds, Series 2005K, 5.500%, 12/15/19 – AMBA Insured | A N o Opt. Call | A- | 1,310,513 |
| | New Jersey Educational Facilities Authority, Revenue Bonds, University of Medicine and Dentistry of New Jersey, Refunding Series 2009B: | | | |
| 2,135 | 7.125%, 12/01/23 (Pre-refunded 6/01/19) | 6/19 at 100.00 | N/R (6) | 2,234,982 |
| 3,000 | 7.500%, 12/01/32 (Pre-refunded 6/01/19) | 6/19 at 100.00 | N/R (6) | 3,149,730 |
| | New Jersey Transportation Trust Fund Authority, Transportation | | | |
| 5,020 | System Bonds, Capital Appreciation Series 2010A, 0.000%, 12/15/31 | No Opt. Call | A- | 2,834,945 |
| 255 | New Jersey Transportation Trust Fund Authority, Transportation System Bonds, Series 2015AA, 5.250%, 6/15/41 | 6/25 at 100.00 | BBB+ | 275,558 |
| 355 | Tobacco Settlement Financing Corporation, New Jersey, Tobacco Settlement Asset-Backed Bonds, Series 2018B, 5.000%, 6/01/46 | 6/28 at 100.00 | BBB | 381,213 |
| 13,950 | Total New Jersey | | | 12,340,955 |
| 13,730 | New York - 4.8% | | | 12,5 10,755 |
| 3,000 | Liberty Development Corporation, New York, Goldman Sachs Headquarters Revenue Bonds Series 2007, 5.500%, 10/01/37 Long Island Power Authority, New York, Electric System General Revenue Bonds, Series 2017: | No Opt. Call | A | 3,822,720 |
| 2,500 | 5.000%, 9/01/42 | 9/27 at 100.00 | A- | 2,835,250 |
| 1,500 | 5.000%, 9/01/47 | | A- | 1,694,865 |
| 1,450 | New York City Municipal Water Finance Authority, New York, Water and Sewer System Revenue Bonds, Second Generation | | AA+ | 1,494,587 |
| | Resolution, Series 2009EE-2, 5.250%, 6/15/40 | | | |
| 1,500 | New York Liberty Development Corporation, New York, Liberty Revenue Bonds, 4 World Trade Center Project, Series 2011, 5.750%, 11/15/51 | 11/21 at 100.00 | A+ | 1,670,895 |
| 430 | Port Authority of New York and New Jersey, Special Project Bonds, JFK International Air Terminal LLC Project, Eighth | 12/20 at 100.00 | BBB | 469,272 |
| 10,380 | Series 2010, 6.000%, 12/01/42 Total New York | | | 11,987,589 |
| 10,300 | North Carolina – 1.2% | | | 11,707,507 |
| | North Carolina Capital Facilities Finance Agency, Revenue | | | |
| 2,000 | Bonds, Duke University Project, Refunding Series 2016B, 5.000%, 10/01/44 | 10/26 at 100.00 | AA+ | 2,292,340 |
| | North Carolina Turnpike Authority, Triangle Expressway System | | | |
| 700 | Revenue Bonds, Refunding Senior Lien Series 2017, 5.000%, 1/01/32 | 1/27 at 100.00 | BBB | 792,281 |
| 2,700 | Total North Carolina Ohio – 5.2% | | | 3,084,621 |

| 3,500 | American Municipal Power Ohio Inc., Prairie State Energy Campus Project Revenue Bonds, Series 2009A, 5.750%, 2/15/39 (Pre-refunded 2/15/19) — AGC Insured | 2/19 at 100.00 | AA (6) | 3,582,355 |
|-------|---|----------------|--------|-----------|
| | Buckeye Tobacco Settlement Financing Authority, Ohio, | | | |
| | Tobacco Settlement Asset-Backed Revenue Bonds, Senior Lien, | | | |
| | Series 2007A-2: | | | |
| 2,115 | 5.875%, 6/01/30 | 9/18 at 100.00 | Caa1 | 2,125,575 |
| 5,910 | 6.500%, 6/01/47 | 9/18 at 100.00 | B- | 6,087,241 |
| 5 | | | | |
| | | | | |

| Portfo | n AMT-Free Municipal Value Fund (continued) lio of Investments July 31, 2018 | | | |
|------------------------------|---|---------------------------------|-------------|------------|
| (Unau | unea) | | | |
| Principal Amount (000) | Description (1) | Optional Call Provisions (2) | Ratings (3) | Value |
| (000) | Ohio (continued) | | | |
| | Franklin County, Ohio, Revenue Bonds, Trinity Health Credit | | | \$ |
| \$ 1,305 | Group, Series 2017OH, 4.000%, 12/01/46 | 6/27 at 100.00 | AA- | 1,326,337 |
| 12,830 | Total Ohio | | | 13,121,508 |
| 12,030 | Oklahoma – 0.1% | | | 13,121,300 |
| | | | | |
| 255 | Oklahoma Development Finance Authority, Health System | 0/20 -4 100 00 | DD : | 200 220 |
| 255 | Revenue Bonds, OU Medicine Project, Series 2018B, 5.250%, 8/15/43 | 8/28 at 100.00 | BB+ | 288,339 |
| | Rhode Island – 1.2% | | | |
| | Rhode Island Health and Educational Building Corporation, | | | |
| 3,000 | Hospital Financing Revenue Bonds, Lifespan Obligated Group | 5/19 at 100.00 | Aaa | 3,129,330 |
| | Issue, Series 2009A, 7.000%, 5/15/39 (Pre-refunded 5/15/19) | | | |
| | South Carolina – 1.5% | | | |
| | Piedmont Municipal Power Agency, South Carolina, Electric | | | |
| 5,435 | Revenue Bonds, Series 2004A-2, 0.000%, 1/01/29 – AMBAC | No Opt. Call | AA | 3,814,066 |
| | Insured | | | |
| | Tennessee – 0.3% | | | |
| | Metropolitan Government of Nashville-Davidson County, | | | |
| 605 | Tennessee, Water and Sewerage Revenue Bonds, Green Series | 7/27 at 100.00 | AA | 696,458 |
| | 2017A, 5.000%, 7/01/42 | | | |
| | Texas - 10.6% | | | |
| | Austin Community College District Public Facility Corporation, | | | |
| 1,000 | Texas, Lease Revenue Bonds, Highland Campus - Building 3000 | 8/27 at 100.00 | AA | 1,128,920 |
| | Project, Series 2018A, 5.000%, 8/01/42 | | | |
| 2 000 | Austin, Texas, Electric Utility System Revenue Bonds, Refunding | 11/06 + 100 00 | | 2 200 040 |
| 2,000 | Series 2017, 5.000%, 11/15/35 | 11/26 at 100.00 | AA | 2,300,940 |
| | Grand Parkway Transportation Corporation, Texas, System Toll | | | |
| 1,855 | Revenue Bonds, First Tier Series 2013A, 5.500%, 4/01/53 | 10/23 at 100.00 | A- | 2,072,424 |
| | Houston, Texas, Hotel Occupancy Tax and Special Revenue | | | |
| | Bonds, Convention and Entertainment Project, Series 2001B: | | | |
| 3,000 | 0.000%, 9/01/32 - AMBAC Insured | No Opt. Call | A2 | 1,729,530 |
| 7,935 | 0.000%, 9/01/33 - AMBAC Insured | No Opt. Call | A2 | 4,366,710 |
| ,,,,,, | Katy Independent School District, Harris, Fort Bend and Waller | Tio opii cum | | .,200,710 |
| 7,500 | Counties, Texas, General Obligation Bonds, School Building | 2/27 at 100.00 | AAA | 7,780,200 |
| 7,500 | Series 2017, 4.000%, 2/15/47 | 2/2/ 40 100.00 | 1 11 11 1 | 7,700,200 |
| | Katy Independent School District, Harris, Fort Bend and Waller | | | |
| 2,500 | Counties, Texas, General Obligation Bonds, Series 2017, 4.000%, | 2/27 at 100 00 | ΔΔΔ | 2,593,400 |
| 2,300 | 2/15/47 (UB) (4) | 2/27 at 100.00 | 7 17 17 1 | 2,373,400 |
| | North Texas Tollway Authority, System Revenue Bonds, | | | |
| 915 | · · · · · · · · · · · · · · · · · · · | 1/25 at 100.00 | A | 1,008,678 |
| | Refunding First Tier, Series 2015B, 5.000%, 1/01/45 Torrent County Cultural Education Facilities Finance Corporation | | | |
| 250 | Tarrant County Cultural Education Facilities Finance Corporation, | 9/26 of 100 00 | A A | 270 505 |
| 250 | Texas, Revenue Bonds, Texas Health Resources System, Series | 8/26 at 100.00 | AA | 279,595 |
| 1 500 | 2016A, 5.000%, 2/15/41 | 10/00 -4 100 00 | DDD | 1 610 105 |
| 1,500 | | 12/22 at 100.00 | DDD | 1,618,125 |

Texas Municipal Gas Acquisition and Supply Corporation III, Gas Supply Revenue Bonds, Series 2012, 5.000%, 12/15/32

| Principal | | Optional Call | Ratings | |
|------------------|---|----------------|---------------------|-------------|
| Amount (000) | Description (1) | Provisions (2) | (3) | Value |
| (000) | Texas (continued) | | | |
| | Wylie Independent School District, Collin County, Texas, | | | |
| | General Obligation Bonds, School Building Series 2010: | | | |
| \$ 2,000 | 0.000%, 8/15/33 | No Opt. Call | AAA | \$968,100 |
| 1,945 | 0.000%, 8/15/38 | No Opt. Call | AAA | 703,545 |
| 32,400 | Total Texas | | | 26,550,167 |
| | Utah – 0.6% | | | |
| 1,405 | Salt Lake City, Utah, Airport Revenue Bonds, International | 7/27 at 100.00 | A+ | 1,603,260 |
| | Airport Series 2017B, 5.000%, 7/01/42 Virginia – 1.8% | | | |
| | Chesapeake Bay Bridge and Tunnel District, Virginia, General | | | |
| 1,160 | Resolution Revenue Bonds, First Tier Series 2016, 5.000%, | 7/26 at 100.00 | BBB | 1,286,359 |
| -, | 7/01/51 | | | -,, |
| | Chesapeake, Virginia, Transportation System Senior Toll Road | | | |
| 1,400 | Revenue Bonds, Capital Appreciation Series 2012B, 0.000%, | 7/28 at 100.00 | BBB | 1,205,890 |
| | 7/15/40 (5) | | | |
| • • • • | Washington County Industrial Development Authority, Virginia, | | | |
| 2,000 | Hospital Revenue Bonds, Mountain States Health Alliance, | 1/19 at 100.00 | A (6) | 2,052,520 |
| 4 560 | Series 2009C, 7.750%, 7/01/38 (Pre-refunded 1/01/19) | | | 1 511 760 |
| 4,560 | Total Virginia Washington – 1.1% | | | 4,544,769 |
| | Chelan County Public Utility District 1, Washington, Columbia | | | |
| 3,330 | River-Rock Island Hydro-Electric System Revenue Refunding | No Opt. Call | AA+ | 2,343,588 |
| , | Bonds, Series 1997A, 0.000%, 6/01/29 - NPFG Insured | | | , |
| 440 | Washington Health Care Facilities Authority, Revenue Bonds, | 8/27 at 100.00 | BBB | 483,586 |
| | Virginia Mason Medical Center, Series 2017, 5.000%, 8/15/37 | 6/2/ at 100.00 | ррр | |
| 3,770 | Total Washington | | | 2,827,174 |
| | West Virginia – 2.1% | | | |
| 1.500 | West Virginia Hospital Finance Authority, Hospital Revenue | 6/22 at 100 00 | ٨ | 1 649 090 |
| 1,500 | Bonds, West Virginia United Health System Obligated Group, Refunding & Improvement Series 2013A, 5.500%, 6/01/44 | 6/23 at 100.00 | A | 1,648,980 |
| | West Virginia State, General Obligation Bonds, State Road | | | |
| 3,000 | Competitive Series 2018B, 5.000%, 6/01/33 | 6/28 at 100.00 | Aa2 | 3,521,370 |
| 4,500 | Total West Virginia | | | 5,170,350 |
| | Wisconsin – 4.8% | | | |
| 1,000 | Wisconsin Health and Educational Facilities Authority, Revenue | 2/22 at 100.00 | Α_ | 1,074,960 |
| 1,000 | Bonds, Marshfield Clinic, Series 2012B, 5.000%, 2/15/27 | 2/22 at 100.00 | <i>1</i> 1 - | 1,074,700 |
| 1.605 | Wisconsin Health and Educational Facilities Authority, Revenue | 2/10 - 100 00 | N/D (6) | 1.640.262 |
| 1,605 | Bonds, ProHealth Care, Inc. Obligated Group, Series 2009, | 2/19 at 100.00 | N/R (6) | 1,649,362 |
| | 6.625%, 2/15/39 (Pre-refunded 2/15/19) Wisconsin State, General Fund Annual Appropriation Revenue | | | |
| 9,000 | Bonds, Refunding Series 2009A, 6.000%, 5/01/36 (Pre-refunded | 5/19 at 100 00 | Aa2 (6) | 9 305 730 |
| <i>></i> ,000 | 5/01/19) | 5/17 at 100.00 | 1102 (0) | 7,505,750 |
| 11,605 | Total Wisconsin | | | 12,030,052 |
| • | | | | |
| \$ 274,955 | Total Long-Term Investments (cost \$234,123,536) | | | 253,755,909 |
| | | | | |

| Portf | een AMT-Free Municipal Value Fund (continued) folio of Investments July 31, 2018 fudited) | | | |
|--------------|---|----------------|---------|-------------------|
| Principal | | Optional Call | Ratings | s |
| Amount (000) | Description (1) | Provisions (2) |) (3) | Value |
| | SHORT-TERM INVESTMENTS - 0.5% | | | |
| | MUNICIPAL BONDS - 0.5% | | | |
| | New York - 0.5% | | | |
| | New York City Municipal Water Finance Authority, New York, | | | |
| \$ 1,250 | Water and Sewer System Second General Resolution Revenue | 10/18 at | AA+ | \$ 1,250,000 |
| | Bonds, Fiscal 2014 Adjustable Rate Series AA-2, Variable Rate | 100.00 | | |
| | Demand Obligations, 1.500%, 6/15/50 (8) | | | |
| \$ 1,250 | Total Short-Term Investments (cost \$1,250,000) | | | 1,250,000 |
| | Total Investments (cost \$235,373,536) - 101.5% | | | 255,005,909 |
| | Floating Rate Obligations – (3.6)% | | | (9,125,000) |
| | Other Assets Less Liabilities – 2.1% | | | 5,401,970 |
| | Net Assets – 100% | | | \$ 251,282,879 |

Fair Value Measurements

Fair value is defined as the price that would be received upon selling an investment or transferring a liability in an orderly transaction to an independent buyer in the principal or most advantageous market for the investment. A three-tier hierarchy is used to maximize the use of observable market data and minimize the use of unobservable inputs and to establish classification of fair value measurements for disclosure purposes. Observable inputs reflect the assumptions market participants would use in pricing the asset or liability. Observable inputs are based on market data obtained from sources independent of the reporting entity. Unobservable inputs reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability. Unobservable inputs are based on the best information available in the circumstances. The following is a summary of the three-tiered hierarchy of valuation input levels.

- Level 1 Inputs are unadjusted and prices are determined using quoted prices in active markets for identical securities.
- Level 2 Prices are determined using other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).
- Level 3 Prices are determined using significant unobservable inputs (including management's assumptions in determining the fair value of investments).

The inputs or methodologies used for valuing securities are not an indication of the risks associated with investing in those securities. The following is a summary of the Fund's fair value measurements as of the end of the reporting period:

| | Level 1 | Level 2 | Level 3 | Total | | | |
|-------------------------|---------|---------------|---------|---------------|--|--|--|
| Long-Term Investments: | | | | | | | |
| Municipal Bonds | \$ — | \$253,755,909 |)\$ — | \$253,755,909 | | | |
| Short-Term Investments: | | | | | | | |
| Municipal Bonds | _ | 1,250,000 | _ | 1,250,000 | | | |
| Total | \$ — | \$255,005,909 |)\$ — | \$255,005,909 | | | |
| 8 | | | | | | | |

Income Tax Information

The following information is presented on an income tax basis. Differences between amounts for financial statement and federal income tax purposes are primarily due to timing differences in recognizing taxable market discount, timing differences in recognizing certain gains and losses on investment transactions and the treatment of investments in inverse floating rate securities reflected as financing transactions, if any. To the extent that differences arise that are permanent in nature, such amounts are reclassified within the capital accounts on the Statement of Assets and Liabilities presented in the annual report, based on their federal tax basis treatment; temporary differences do not require reclassification. Temporary and permanent differences do not impact the net asset value of the Fund. The table below presents the cost and unrealized appreciation (depreciation) of the Fund's investment portfolio, as determined on a federal income tax basis, as of July 31, 2018.

Tax cost of investments \$225,495,528

Gross unrealized:

Appreciation \$21,010,244 Depreciation (624,844) Net unrealized appreciation (depreciation) of investments \$20,385,400

- (1) All percentages shown in the Portfolio of Investments are based on net assets.
- Optional Call Provisions: Dates (month and year) and prices of the earliest optional call or redemption. There
- (2) may be other call provisions at varying prices at later dates. Certain mortgage-backed securities may be subject to periodic principal paydowns.
 - For financial reporting purposes, the ratings disclosed are the highest of Standard & Poor's Group ("Standard & Poor's"), Moody's Investors Service, Inc. ("Moody's") or Fitch, Inc. ("Fitch") rating. This treatment of split-rated
- (3) securities may differ from that used for other purposes, such as for Fund investment policies. Ratings below BBB by Standard & Poor's, Baa by Moody's or BBB by Fitch are considered to be below investment grade. Holdings designated N/R are not rated by any of these national rating agencies.
- (4) Investment, or portion of investment, has been pledged to collateralize the net payment obligations for investments in inverse floating rate transactions.
- (5) Step-up coupon bond, a bond with a coupon that increases ("steps up"), usually at regular intervals, while the bond is outstanding. The rate shown is the coupon as of the end of the reporting period.
- (6) Backed by an escrow or trust containing sufficient U.S. Government or U.S. Government agency securities, which ensure the timely payment of principal and interest.

 As of, or subsequent to, the end of the reporting period, this security is non-income producing. Non-income

producing, in the case of a fixed-income security, generally denotes that the issuer has (1) defaulted on the

- (7) payment of principal or interest, (2) is under the protection of the Federal Bankruptcy Court or (3) the Fund's Adviser has concluded that the issue is not likely to meet its future interest payment obligations and has ceased accruing additional income on the Fund's records.
- as a short-term investment. The rate disclosed, as well as the reference rate and spread, where applicable, is that in effect as of the end of the reporting period. This rate changes periodically based on market conditions or a specified market index.

Investment has maturity of greater than one year, but has variable rate and/or demand features which qualify it

Investment is exempt from registration under Rule 144A of the Securities Act of 1933, as amended. These 144A investments may only be resold in transactions exempt from registration, which are normally those transactions with qualified institutional buyers.

ETM Escrowed to maturity.

- Inverse floating rate security issued by a tender option bond ("TOB") trust, the interest rate on which varies inversely with the Securities Industry Financial Markets Association (SIFMA) short-term rate, which resets weekly, or a similar short-term rate, and is reduced by the expenses related to the TOB trust.
- UB Underlying bond of an inverse floating rate trust reflected as a financing transaction.

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Item 2. Controls and Procedures.

- a. The registrant s principal executive and principal financial officers, or persons performing similar functions, have concluded that the registrant s disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the 1940 Act) (17 CFR 270.30a-3(c))) are effective, as of a date within 90 days of the filing date of this report that includes the disclosure required by this paragraph, based on their evaluation of the controls and procedures required by Rule 30a-3(b) under the 1940 Act (17 CFR 270.30a-3(b)) and Rule 13a-15(b) or 15d-15(b) under the Securities Exchange Act of 1934 (17 CFR 240.13a-15(b) or 240.15d-15(b)).
- b. There were no changes in the registrant s internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act (17 CFR 270.30a-3(d)) that occurred during the registrant s last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant s internal control over financial reporting.

Item 3. Exhibits.

File as exhibits as part of this Form a separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the 1940 Act (17 CFR 270.30a-2(a)), exactly as set forth below: See EX-99 CERT attached hereto.

SIGNATURES

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

(Registrant) Nuveen AMT-Free Municipal Value Fund

By (Signature and Title) /s/ Gifford R. Zimmerman

Gifford R. Zimmerman Vice President and Secretary

Date: September 28, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By (Signature and Title) /s/ Cedric H. Antosiewicz

Cedric H. Antosiewicz

Chief Administrative Officer (principal executive

officer)

Date: September 28, 2018

By (Signature and Title) /s/ Stephen D. Foy

Stephen D. Foy

Vice President and Controller (principal financial

officer)

Date: September 28, 2018