

BLACKROCK MUNIYIELD NEW JERSEY FUND, INC.
Form N-Q
December 23, 2014

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-Q

**QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED
MANAGEMENT INVESTMENT COMPANY**

Investment Company Act file number 811-06570

Name of Fund: BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock MuniYield
New Jersey Fund, Inc., 55 East 52nd Street, New York, NY 10055

Registrant's telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 07/31/2015

Date of reporting period: 10/31/2014

Item 1 – Schedule of Investments

Schedule of Investments October 31, 2014 (Unaudited) **BlackRock MuniYield New Jersey Fund, Inc. (MYJ)**
(Percentages shown are based on Net Assets)

| Municipal Bonds | Par (000) | Value |
|--|--------------|-------------|
| New Jersey — 128.6% | | |
| Corporate — 10.4% | | |
| County of Salem New Jersey Pollution Control Financing Authority, Refunding RB, Atlantic City Electric, Series A, 4.88%, 6/01/29 | \$4,550 | \$4,889,748 |
| Middlesex County Improvement Authority, RB, Senior Heldrich Center Hotel, Series A, 5.00%, 1/01/20 | 655 | 502,811 |
| New Jersey EDA, RB, Continental Airlines, Inc. Project, AMT: | | |
| Series A, 5.63%, 11/15/30 | 1,730 | 1,876,029 |
| Series B, 5.63%, 11/15/30 | 485 | 526,322 |
| New Jersey EDA, Refunding RB: | | |
| New Jersey American Water Co., Inc. Project, Series A, AMT, 5.70%, 10/01/39 | 7,900 | 8,943,353 |
| New Jersey American Water Co., Inc. Project, Series B, AMT, 5.60%, 11/01/34 | 2,430 | 2,754,697 |
| United Water of New Jersey, Inc., Series B (AMBAC), 4.50%, 11/01/25 | 4,500 | 4,958,550 |
| | | 24,451,510 |
| County/City/Special District/School District — 14.7% | | |
| Casino Reinvestment Development Authority, Refunding RB, 5.25%, 11/01/39 | 2,280 | 2,443,065 |
| City of Margate New Jersey, GO, Refunding, Improvement: | | |
| 5.00%, 1/15/26 | 1,200 | 1,352,712 |
| 5.00%, 1/15/27 | 845 | 949,062 |
| City of Perth Amboy New Jersey, GO, CAB, Refunding (AGM), 5.00%, 7/01/34 | 1,925 | 2,012,318 |
| City of Perth Amboy New Jersey, GO, Refunding, CAB (AGM), 5.00%, 7/01/33 | 1,575 | 1,651,372 |
| County of Essex New Jersey Improvement Authority, Refunding RB, Project Consolidation (NPFGC): | | |
| 5.50%, 10/01/28 | 2,700 | 3,507,219 |
| 5.50%, 10/01/29 | 5,085 | 6,654,943 |
| County of Gloucester New Jersey Improvement Authority, RB, County Guaranteed Loan—County Capital Program, 5.00%, 4/01/38 | 1,000 | 1,096,860 |
| | | |
| Municipal Bonds | Par (000) | Value |
| New Jersey (continued) | | |
| County/City/Special District/School District (concluded) | | |
| County of Hudson New Jersey, COP, Refunding, (NPFGC), 6.25%, 12/01/16 | \$1,500 | \$1,648,935 |
| County of Hudson New Jersey Improvement Authority, RB, Harrison Parking Facility Project, Series C (AGC), 5.38%, 1/01/44 | 4,800 | 5,200,128 |
| County of Union New Jersey Improvement Authority, LRB, Guaranteed Lease, Family Court Building Project, 5.00%, 5/01/42 | 1,650 | 1,858,362 |
| County of Union New Jersey Utilities Authority, Refunding RB, Series A: | | |
| Resources Recovery Facility, Covanta Union, Inc., AMT, 5.25%, 12/01/31 | 670 | 738,554 |
| Solid Waste System, County Deficiency Agreement, 5.00%, 6/15/41 | 4,115 | 4,545,964 |

Monmouth County Improvement Authority, Refunding RB, Government

Loan (AMBAC):

| | | |
|---|-------|------------|
| 5.00%, 12/01/15 | 5 | 5,018 |
| 5.00%, 12/01/16 | 5 | 5,016 |
| New Jersey EDA, RB, Private Activity Bond, The Goethals Bridge Replacement Project, AMT (AGM), 5.00%, 1/01/31 | 1,000 | 1,108,440 |
| | | 34,777,968 |

Education — 25.6%

New Jersey EDA, RB:

| | | |
|--|-------|-----------|
| MSU Student Housing Project Provide, 5.75%, 6/01/31 | 1,000 | 1,106,240 |
| MSU Student Housing Project Provide, 5.88%, 6/01/42 | 1,500 | 1,656,795 |
| Series A, 6.20%, 10/01/44 | 235 | 238,285 |
| Series A, 6.30%, 10/01/49 | 375 | 380,715 |
| The Team Academy Charter School Project, 6.00%, 10/01/33 | 2,835 | 3,226,995 |
| New Jersey EDA, Refunding RB, Series A (a): | | |
| 5.88%, 8/01/44 | 780 | 792,067 |
| 6.00%, 8/01/49 | 555 | 563,247 |

Schedule of Investments (continued) **BlackRock MuniYield New Jersey Fund, Inc. (MYJ)**
(Percentages shown are based on Net Assets)

| Municipal Bonds | Par (000) | Value |
|---|--------------|-------------|
| New Jersey (continued) | | |
| Education (continued) | | |
| New Jersey Educational Facilities Authority, RB: | | |
| Higher Educational Capital Improvement Fund, Series A, 5.00%, 9/01/32 | \$3,925 | \$4,342,228 |
| Montclair State University, Series J, 5.25%, 7/01/38 | 1,140 | 1,269,059 |
| New Jersey Educational Facilities Authority, Refunding RB: | | |
| College of New Jersey, Series D (AGM), 5.00%, 7/01/35 | 6,115 | 6,762,701 |
| Georgian Court University, Series D, 5.25%, 7/01/37 | 1,000 | 1,071,770 |
| Kean University, Series A, 5.50%, 9/01/36 | 4,500 | 5,151,285 |
| Montclair State University, Series A, 5.00%, 7/01/44 | 6,790 | 7,756,556 |
| New Jersey Institute of Technology, Series H, 5.00%, 7/01/31 | 1,250 | 1,405,700 |
| Ramapo College, Series B, 5.00%, 7/01/42 | 340 | 373,058 |
| Rider University, Series A, 5.00%, 7/01/32 | 1,000 | 1,086,600 |
| Rowan University, Series B (AGC), 5.00%, 7/01/24 | 1,800 | 2,017,350 |
| Seton Hall University, Series D, 5.00%, 7/01/38 | 395 | 439,414 |
| University of Medicine & Dentistry, Series B, 7.13%, 6/01/19 (b) | 1,300 | 1,651,247 |
| University of Medicine & Dentistry, Series B, 7.50%, 6/01/19 (b) | 1,625 | 2,091,245 |
| New Jersey Higher Education Student Assistance Authority, Refunding RB: | | |
| Series 1, AMT, 5.75%, 12/01/29 | 4,045 | 4,578,940 |
| Series 1A, 5.00%, 12/01/25 | 865 | 915,032 |
| Series 1A, 5.00%, 12/01/26 | 545 | 575,438 |
| Series 1A, 5.25%, 12/01/32 | 900 | 984,132 |
| New Jersey Institute of Technology, RB, Series A, 5.00%, 7/01/42 | 3,040 | 3,387,411 |
| | | |
| Municipal Bonds | Par (000) | Value |
| New Jersey (continued) | | |
| Education (concluded) | | |
| Rutgers - The State University of New Jersey, Refunding RB, Series L, 5.00%, 5/01/43 | \$5,870 | \$6,618,308 |
| | | 60,441,818 |
| Health — 12.4% | | |
| Camden County Improvement Authority, Refunding RB, 5.00%, 2/15/34 (c) | 590 | 650,776 |
| New Jersey EDA, Refunding RB, 1st Mortgage, Winchester, Series A: 5.75%, 11/01/24 | 2,330 | 2,330,722 |
| 5.80%, 11/01/31 | 1,000 | 1,000,310 |
| New Jersey Health Care Facilities Financing Authority, RB: | | |
| Children's Specialized Hospital, Series A, 5.50%, 7/01/36 | 1,540 | 1,567,520 |
| Hunterdon Medical Center, Series A, 5.13%, 7/01/35 | 1,950 | 2,017,762 |
| Meridian Health System Obligated Group, Series I (AGC), 5.00%, 7/01/38 | 945 | 1,007,417 |
| Robert Wood Johnson University Hospital, Series A, 5.50%, 7/01/43 | 1,420 | 1,651,417 |

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| | | |
|--|-------|-----------|
| Virtua Health, Series A (AGC), 5.50%, 7/01/38 | 2,500 | 2,784,000 |
| New Jersey Health Care Facilities Financing Authority, Refunding RB: | | |
| AHS Hospital Corp., 6.00%, 7/01/41 | 2,435 | 2,882,991 |
| Kennedy Health System, 5.00%, 7/01/31 | 750 | 832,493 |
| Meridian Health System Obligated Group, 5.00%, 7/01/25 | 1,000 | 1,144,510 |
| Meridian Health System Obligated Group, 5.00%, 7/01/26 | 830 | 943,835 |
| Robert Wood Johnson University Hospital, 5.00%, 7/01/31 | 1,000 | 1,091,020 |
| South Jersey Hospital, 5.00%, 7/01/36 | 385 | 392,812 |
| St. Barnabas Health Care System, Series A, 5.00%, 7/01/29 | 4,150 | 4,362,397 |

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Schedule of Investments (continued) **BlackRock MuniYield New Jersey Fund, Inc. (MYJ)**
(Percentages shown are based on Net Assets)

| Municipal Bonds | Par (000) | Value |
|---|--------------|-------------|
| New Jersey (continued) | | |
| Health (concluded) | | |
| New Jersey Health Care Facilities Financing Authority, Refunding RB (concluded): | | |
| St. Barnabas Health Care System, Series A, 5.63%, 7/01/32 | \$1,090 | \$1,253,860 |
| St. Barnabas Health Care System, Series A, 5.63%, 7/01/37 | 3,030 | 3,438,656 |
| | | 29,352,498 |
| Housing — 3.5% | | |
| New Jersey Housing & Mortgage Finance Agency, RB: | | |
| M/F Housing, Series A, 4.75%, 11/01/29 | 2,305 | 2,440,442 |
| S/F Housing, Series AA, 6.50%, 10/01/38 | 430 | 447,097 |
| S/F Housing, Series CC, 5.00%, 10/01/34 | 1,875 | 1,989,112 |
| S/F Housing, Series U, AMT, 4.95%, 10/01/32 | 385 | 394,671 |
| S/F Housing, Series U, AMT, 5.00%, 10/01/37 | 515 | 522,813 |
| S/F Housing, Series X, AMT, 5.05%, 4/01/18 | 295 | 318,432 |
| Newark Housing Authority, RB, South Ward Police Facility (AGC), 6.75%, 12/01/38 | 1,750 | 2,071,545 |
| | | 8,184,112 |
| State — 23.7% | | |
| Garden State Preservation Trust, RB (AGM): | | |
| CAB, Series B, 0.00%, 11/01/23 (d) | 1,460 | 1,184,177 |
| CAB, Series B, 0.00%, 11/01/28 (d) | 4,540 | 3,033,900 |
| Election of 2005, Series A, 5.80%, 11/01/15 (b) | 2,500 | 2,639,875 |
| New Jersey EDA, RB: | | |
| (AGC), School Facilities Construction, 5.50%, 12/15/18 (b) | 2,345 | 2,772,118 |
| (AGC), School Facilities Construction, 5.50%, 12/15/34 | 1,320 | 1,496,141 |
| Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/25 | 2,000 | 2,423,400 |
| Municipal Bonds | | |
| | Par (000) | Value |
| New Jersey (continued) | | |
| State (continued) | | |
| New Jersey EDA, RB (concluded): | | |
| Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/33 | \$9,090 | \$9,264,073 |
| School Facilities Construction, Series CC-2, 5.00%, 12/15/31 | 1,700 | 1,862,673 |
| School Facilities Construction, Series CC-2, 5.00%, 12/15/32 | 1,300 | 1,420,887 |
| School Facilities Construction, Series L (AGM), 5.00%, 3/01/15 (b) | 1,300 | 1,320,800 |
| School Facilities Construction, Series P, 5.00%, 9/01/15 (e) | 3,000 | 3,120,870 |
| School Facilities Construction, Series P, 5.25%, 9/01/15 (b) | 2,710 | 2,824,823 |

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| | | |
|--|-------|-----------|
| School Facilities Construction, Series UU, 5.00%, 6/15/40 | 1,070 | 1,155,600 |
| School Facilities Construction, Series Y, 5.00%, 9/01/33 | 880 | 973,606 |
| New Jersey EDA, Refunding RB: | | |
| Lions Gate Project, 5.00%, 1/01/34 | 500 | 513,660 |
| Cigarette Tax, 5.00%, 6/15/26 | 440 | 493,755 |
| Cigarette Tax, 5.00%, 6/15/28 | 720 | 798,797 |
| Cigarette Tax, 5.00%, 6/15/29 | 1,760 | 1,946,384 |
| Lions Gate Project, 5.25%, 1/01/44 | 315 | 325,036 |
| School Facilities Construction, Series AA, 5.50%, 12/15/29 | 3,000 | 3,337,800 |
| School Facilities Construction, Series AA, 5.25%, 12/15/33 | 1,000 | 1,093,240 |
| School Facilities Construction, Series GG, 5.25%, 9/01/27 | 3,000 | 3,371,250 |
| School Facilities Construction, Series RR, 5.00%, 6/15/33 | 4,500 | 4,905,090 |
| New Jersey Health Care Facilities Financing Authority, RB, Hospital Asset Transformation Program, Series A, 5.25%, 10/01/38 | 2,300 | 2,452,996 |

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Schedule of Investments (continued) **BlackRock MuniYield New Jersey Fund, Inc. (MYJ)**
(Percentages shown are based on Net Assets)

| Municipal Bonds | Par (000) | Value |
|--|--------------|-------------|
| New Jersey (continued) | | |
| State (concluded) | | |
| State of New Jersey, COP, Equipment Lease Purchase, Series A, 5.25%, 6/15/28 | \$1,100 | \$1,236,180 |
| | | 55,967,131 |
| Transportation — 37.0% | | |
| Delaware River Port Authority of Pennsylvania & New Jersey, RB: | | |
| 5.00%, 1/01/40 | 2,620 | 2,956,460 |
| Series D, 5.00%, 1/01/40 | 1,535 | 1,696,620 |
| New Jersey EDA, RB, Private Activity Bond, The Goethals Bridge Replacement Project, AMT, 5.38%, 1/01/43 | 8,420 | 9,314,288 |
| New Jersey State Turnpike Authority, RB: | | |
| Growth & Income Securities, Series B (AMBAC), 0.00%, 1/01/35 (f) | 4,870 | 5,069,524 |
| Series A, 5.00%, 1/01/38 | 7,000 | 7,759,920 |
| Series E, 5.25%, 1/01/40 | 2,525 | 2,820,324 |
| New Jersey State Turnpike Authority, Refunding RB, Series A, 5.00%, 1/01/35 | 1,000 | 1,113,740 |
| New Jersey Transportation Trust Fund Authority, RB: | | |
| CAB, Transportation System, Series C (AMBAC), 0.00%, 12/15/35 (d) | 4,140 | 1,520,125 |
| Transportation Program, Series AA, 5.25%, 6/15/33 | 5,935 | 6,655,094 |
| Transportation Program, Series AA, 5.50%, 6/15/39 | 5,520 | 6,269,340 |
| Transportation System, 6.00%, 12/15/38 | 1,950 | 2,273,680 |
| Transportation System, Series A, 6.00%, 6/15/35 | 6,030 | 7,368,178 |
| Transportation System, Series A, 5.88%, 12/15/38 | 3,650 | 4,240,971 |
| Transportation System, Series A, 5.50%, 6/15/41 | 5,500 | 6,141,520 |
| Transportation System, Series A (AGC), 5.63%, 12/15/28 | 1,250 | 1,462,450 |
| Transportation System, Series A (AGC), 5.50%, 12/15/38 | 1,000 | 1,146,650 |
| Port Authority of New York & New Jersey, ARB: | | |
| Consolidated, 169th Series, AMT, 5.00%, 10/15/41 | 250 | 273,038 |
| Consolidated, 93rd Series, 6.13%, 6/01/94 | 5,000 | 5,926,250 |

| Municipal Bonds | Par (000) | Value |
|--|--------------|-------------|
| New Jersey (concluded) | | |
| Transportation (concluded) | | |
| Port Authority of New York & New Jersey, ARB (concluded): | | |
| JFK International Air Terminal, Series 8, 6.00%, 12/01/42 | \$2,700 | \$3,129,381 |
| Port Authority of New York & New Jersey, Refunding ARB, Consolidated: | | |
| 152nd Series, AMT, 5.75%, 11/01/30 | 3,300 | 3,735,468 |

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| | | |
|---|-------|--------------------|
| 152nd Series, AMT, 5.25%, 11/01/35 | 240 | 265,445 |
| 166th Series, 5.25%, 7/15/36 | 4,000 | 4,581,480 |
| 172nd Series, AMT, 5.00%, 10/01/34 | 1,500 | 1,669,635 |
| | | 87,389,581 |
| Utility — 1.3% | | |
| Rahway Valley Sewerage Authority, RB, CAB, Series A (NPFGC), 0.00%, 9/01/31 (d) | 6,000 | 3,136,680 |
| Total Municipal Bonds — 128.6% | | 303,701,298 |

Municipal Bonds Transferred to

Tender Option Bond Trusts (g)

New Jersey — 29.5%

County/City/Special District/School District — 6.0%

County of Union New Jersey Utilities Authority, Refunding LRB, Resource Recovery Facility, Covanta Union, Inc., Series A, AMT, 5.25%, 12/01/31

12,820 14,131,742

Education — 1.0%

Rutgers - The State University of New Jersey, RB, Series F, 5.00%, 5/01/39

2,009 2,259,475

State — 7.2%

Garden State Preservation Trust, RB, Election of 2005, Series A (AGM), 5.75%, 11/01/28

5,460 7,107,282

New Jersey EDA, RB, School Facilities Construction (AGC):

6.00%, 12/15/34

1,185 1,421,188

6.00%, 12/15/34

2,415 2,802,692

Schedule of Investments (continued) **BlackRock MuniYield New Jersey Fund, Inc. (MYJ)**
(Percentages shown are based on Net Assets)

| Municipal Bonds Transferred to | Par (000) | Value |
|---|--------------|--------------------|
| Tender Option Bond Trusts (g) | | |
| New Jersey (concluded) | | |
| State (concluded) | | |
| New Jersey EDA, Refunding RB, 5.00%, 3/01/29 (h) | \$5,230 | \$5,732,753 |
| | | 17,063,915 |
| Transportation — 15.3% | | |
| New Jersey State Turnpike Authority, RB, Series A, 5.00%, 1/01/38 (h) | 8,820 | 9,777,499 |
| New Jersey Transportation Trust Fund Authority, RB, Transportation System: | | |
| Series A (AMBAC), 5.00%, 12/15/32 | 4,100 | 4,507,786 |
| Series B, 5.25%, 6/15/36 (h) | 5,001 | 5,535,954 |
| Port Authority of New York & New Jersey, RB, Consolidated, 169th Series, AMT, 5.00%, 10/15/41 | 11,250 | 12,286,687 |
| Port Authority of New York & New Jersey, Refunding RB, Consolidated, 152nd Series, AMT, 5.25%, 11/01/35 | 3,764 | 4,162,716 |
| | | 36,270,642 |
| Total Municipal Bonds Transferred to | | 69,725,774 |
| Tender Option Bond Trusts — 29.5% | | |
| Total Long-Term Investments (Cost — \$342,570,975) — 158.1% | | 373,427,072 |

Shares Value
Short-Term
Securities
 BIF
 New
 Jersey
 Municipal
 Money
 Fund,
 0.00%
 (i)(j)

242,311 \$242,311

**Total
Short-Term
Securities** 242,311
(Cost —
\$242,311) —
0.1%

**Total
Investments**
(Cost — 373,669,383
\$342,813,286)
— 158.2%

**Other
Assets**
Less 4,293,512
Liabilities
— 1.9%
**Liability
for TOB
Trust
Certificates,
Including** (39,565,974)
**Interest
Expense
and Fees
Payable —**
(16.8%)
**VRDP
Shares, at
Liquidation(102,200,000)**
Value —
(43.3%)

**Net
Assets
Applicable
to** \$236,196,921
**Common
Shares —**
100.0%

* As of October
31, 2014,
gross
unrealized
appreciation
and

depreciation
 based on cost
 for federal
 income tax
 purposes were
 as follows:

Tax
 cost \$303,937,869

Gross
 unrecalized
 appreciation \$31,237,836

Gross
 unrecalized
 depreciation (4,159,841)

Net
 unrecalized
 appreciation \$30,177,995

**Notes to Schedule of
 Investments**

Security
 exempt from
 registration
 pursuant to
 Rule 144A
 under the
 Securities
 Act of 1933,
 as amended.

- (a) These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (b) U.S. government securities,

held in escrow, are used to pay interest on this security, as well as to retire the bond in full at the date indicated, typically at a premium to par.

When-issued security.

- (c) Unsettled when-issued transactions were as follows:

| Counterparty | Value | Unrealized (Depreciation) |
|---------------------|------------|------------------------------|
| Goldman Sachs & Co. | \$ 650,776 | \$ (9,546) |

(d) Zero-coupon bond.

(e) Security is collateralized by municipal or U.S. Treasury obligations.

(f) Represents a step-up bond that pays an initial coupon rate for the first period and then a higher coupon rate for the following periods. Rate shown is as of report date.

(g) Represent bonds transferred to a TOB. In exchange for which the Fund received cash and residual interest certificates. These bonds serve as collateral in a financing transaction.

Schedule of Investments (continued) **BlackRock MuniYield New Jersey Fund, Inc. (MYJ)**

All or a portion of security is subject to a recourse agreement, which may require the Fund to pay the liquidity provider in the event there is a shortfall between the TOB trust certificates and proceeds received from the sale of the (h) security contributed to the TOB trust. In the case of a shortfall, the aggregate maximum potential amount the Fund could ultimately be required to pay under the agreement, which expires from June 15, 2019 to September 1, 2020 is \$14,350,925. Represents the current yield as of report date. (i) (j)

Investments
in issuers
considered to
be an affiliate
of the Fund
during the
period ended
October 31,
2014, for
purposes of
Section
2(a)(3) of the
Investment
Company Act
of 1940, as
amended,
were as
follows:

| Affiliate | Shares Held at July 31, 2014 | Net Activity | Shares Held at October 31, 2014 | Income |
|-------------------------------------|---------------------------------------|-----------------|---------------------------------------|--------|
| BIF New Jersey Municipal Money Fund | 2,287,613 | (2,045,302) | 242,311 | — |

Portfolio Abbreviations

| | |
|-------|---|
| AGC | Assured Guarantee Corp. |
| AGM | Assured Guaranty Municipal Corp. |
| AMBAC | American Municipal Bond Assurance Corp. |
| AMT | Alternative Minimum Tax (subject to) |

| | |
|-------|--|
| ARB | Airport Revenue Bonds |
| CAB | Capital Appreciation Bonds |
| COP | Certificates of Participation Economic |
| EDA | Development Authority General |
| GO | Obligation Bonds Lease |
| LRB | Revenue Bonds |
| M/F | Multi-Family National Public |
| NPFGC | Finance Guarantee Corp. |
| RB | Revenue Bonds |
| S/F | Single-Family |

Financial futures contracts outstanding as of October 31, 2014 were as follows:

| Contracts Sold | Issue | Exchange | Expiration | Notional Value | Unrealized Appreciation |
|----------------|----------------------------|------------------------|---------------|----------------|-------------------------|
| (256) | 10-Year U.S. Treasury Note | Chicago Board of Trade | December 2014 | \$32,348,000 | \$101,770 |

For Fund compliance purposes, the Fund's sector classifications refer to any one or more of the sector sub-classifications used by one or more widely recognized market indexes or rating group indexes, and/or as defined by the investment advisor. These definitions may not apply for purposes of this report, which may combine such sector sub-classifications for reporting ease.

Schedule of Investments (continued) **BlackRock MuniYield New Jersey Fund, Inc. (MYJ)**

Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a disclosure hierarchy consisting of three broad levels for financial reporting purposes. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3. The inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the fair value hierarchy classification is determined based on the lowest level input that is significant to the fair value measurement in its entirety. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investment and derivative financial instrument and is not necessarily an indication of the risks associated with investing in those securities. The three levels of the fair value hierarchy are as follows:

Level 1 — unadjusted quoted prices in active markets/exchanges for identical assets or liabilities that the Fund has the ability to access

Level 2 — other observable inputs (including, but not limited to, quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 — unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund's own assumptions used in determining the fair value of investments and derivative financial instruments)

Changes in valuation techniques may result in transfers into or out of an assigned level within the disclosure hierarchy. In accordance with the Fund's policy, transfers between different levels of the fair value disclosure hierarchy are deemed to have occurred as of the beginning of the reporting period. For information about the Fund's policy regarding valuation of investments and derivative financial instruments, please refer to the Fund's most recent financial statements as contained in its annual report.

The following tables summarize the Fund's investments and derivative financial instruments categorized in the disclosure hierarchy as of October 31, 2014:

| | Level 1 | Level 2 | Level 3 | Total |
|------------------------------------|-----------|---------------|---------|---------------|
| Assets: | | | | |
| Investments: | | | | |
| Long-Term Investments ¹ | — | \$373,427,072 | — | \$373,427,027 |
| Short-Term Investments | \$242,311 | — | — | 242,311 |
| Total | \$242,311 | \$373,427,072 | — | \$373,669,383 |

¹See above Schedule of Investments for values in each sector.

| | Level 1 | Level 2 | Level 3 | Total |
|---|-----------|---------|---------|-----------|
| Derivative Financial Instruments ² | | | | |
| Assets: | | | | |
| Interest rate contracts | \$101,770 | — | — | \$101,770 |

²Derivative financial instruments are financial futures contracts, which are valued at the unrealized appreciation/depreciation on the instrument.

Schedule of Investments (concluded) **BlackRock MuniYield New Jersey Fund, Inc. (MYJ)**

The Fund may hold assets and/or liabilities in which the fair value approximates the carrying amount for financial reporting purposes. As of October 31, 2014, such assets and/or liabilities are categorized within the disclosure hierarchy as follows:

| | Level 1 | Level 2 | Level 3 | Total |
|--|-----------|-----------------|---------|-----------------|
| Assets: | | | | |
| Cash pledged for financial futures contracts | \$314,000 | — | — | \$314,000 |
| Liabilities: | | | | |
| TOB trust certificates | — | \$(39,553,519) | — | \$(39,553,519) |
| VRDP Shares | — | (102,200,000) | — | (102,200,000) |
| Total | \$314,000 | \$(141,753,519) | — | \$(141,439,519) |

There were no transfers between levels during the period ended October 31, 2014.

Item 2 – Controls and Procedures

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 2(a) Investment Company Act of 1940, as amended (the 1940 Act)) are effective as of a date within 90 days of the filing of this report based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended.

There were no changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) 2(b) under the 1940 Act) 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

Certifications – Attached hereto

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.

BlackRock MuniYield New Jersey Fund, Inc.

By: /s/ John M. Perlowski
John M. Perlowski
Chief Executive Officer (principal executive officer) of
BlackRock MuniYield New Jersey Fund, Inc.

Date: December 23, 2014

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: /s/ John M. Perlowski
John M. Perlowski
Chief Executive Officer (principal executive officer) of
BlackRock MuniYield New Jersey Fund, Inc.

Date: December 23, 2014

By: /s/ Neal J. Andrews
Neal J. Andrews
Chief Financial Officer (principal financial officer) of
BlackRock MuniYield New Jersey Fund, Inc.

Date: December 23, 2014