



## Essex County, NJ

- 1 The Essex County Utilities Authority (Essex County, New Jersey), Solid Waste System Refunding Revenue Bonds (Secured by a County Deficiency Agreement with the County of Essex), Series 2016 (Bank-Qualified), \$7,145,000, Dated: December 15, 2016
- 2 The Essex County Utilities Authority (Essex County, New Jersey) 2.00% Water System Project Notes (Series 2016) (Secured by a County Deficiency Agreement with the County of Essex, New Jersey) (Bank-Qualified), \$4,500,000, Dated: November 3, 2016
- 3 County of Essex, New Jersey, Bond Anticipation Notes, Series 2016, \$58,550,000, Dated: September 15, 2016 **NAR**
- County of Essex, New Jersey, General Obligation Bonds, Series 2016, \$107,020,000 Consisting of: General Improvement Bonds, Series 2016A, \$24,520,000, County Vocational School Bonds, Series 2016B, \$80,000,000 (New Jersey School Bond Reserve Act, P.L. 1980, c. 72), County College Bonds, Series 2016C, \$1,250,000 and County College Bonds, Series 2016D, \$1,250,000 (County College Bond Act, P.L. 1971, c. 12), Dated: September 15, 2016
- 4 County of Essex, New Jersey, General Obligation Refunding Bonds, Series 2016, \$42,970,000 Consisting of: General Improvement Refunding Bonds, Series 2016A, \$23,920,000; County Vocational School Refunding Bonds, Series 2016B (New Jersey School Bond Reserve Act, P.L. 1980, c.72), \$6,900,000; County College Refunding Bonds, Series 2016C, \$8,140,000 and County College Refunding Bonds, Series 2016D (County College Bonds Act, P.L. 1971, c.12)(Non-Calleable), Series 2016D, \$4,010,000, Dated: May 12, 2016
- 5 County of Essex, New Jersey, Bond Anticipation Notes, Series 2016, \$25,000,000, Dated: March 24, 2016 **NAR**
- 6 County of Essex, New Jersey, General Obligation Bonds, Series 2015, \$78,560,000 Consisting of: General Improvement Bonds, Series 2015A, \$23,560,000 and County Vocational School Bonds, Series 2015B, \$55,000,000 (New Jersey School Bond Reserve Act, P.L. 1980, c. 72) and Bond Anticipation Notes, Series 2015, \$65,790,000, Dated: September 17, 2015
- 7 The Essex County Utilities Authority (Essex County, New Jersey) 3.00% Water System Project Notes (Series 2014) (Secured by a County Deficiency Agreement with the County of Essex, New Jersey) (Bank-Qualified), \$5,625,000, Dated: November 6, 2014
- 8 The Essex County Improvement Authority (Essex County, New Jersey) Project Consolidation Revenue Refunding Bonds, Series 2014 (Refunding Project)(County Guaranteed), \$58,255,000, Airport Refunding Revenue Bonds, Series 2014 (AMT)(County Guaranteed), \$1,880,000 Dated: September 30, 2014
- 9 County of Essex, New Jersey, General Obligation Bonds, Series 2014, \$27,500,000, consisting of: General Improvement Bonds, Series 2014A, \$20,400,000; County Vocational School Bonds, Series 2014B, \$2,100,000 (New Jersey School Bond Reserve Act, P.L. 1980, c. 72); County College Bonds, Series 2014C, \$2,500,000; County College Bonds, Series 2014D, \$2,500,000 (County College Bond Act, P.L. 1971, c.12) and Bond Anticipation Notes, Series 2014, \$66,745,000 Dated: September 23, 2014
- 10 County of Essex, New Jersey, General Obligation Refunding Bonds, Series 2014, \$16,200,000, Dated: May 29, 2014
- 11 The Essex County Improvement Authority (Essex County, New Jersey) Project Consolidation Revenue Bonds, Series 2013 (Refunding Project)(County Guaranteed) \$52,540,000, Dated: December 31, 2013
- 12 The Essex County Improvement Authority (Essex County, New Jersey) Project Consolidation Revenue Bonds, Series 2013, \$24,050,000, consisting of: General Improvement Refunding Bonds, Series 2013A, \$20,395,000; County College Refunding Bonds, Series 2013B, \$2,640,000; County Vocational School Refunding Bonds, Series 2013C, \$1,015,000 (New Jersey School Bond Reserve Act, P.L. 1980, c. 72) Dated: November 26, 2013
- 13 County of Essex, New Jersey, General Obligation Refunding Bonds, Series 2013, \$5,500,000 Consisting of: County Vocational School Bonds, Series 2013A (New Jersey School Bond Reserve Act, P.L. 1980, c.72), \$4,000,000; County College Bonds, Series 2013B, \$750,000 and County College Bonds, Series 2013C (County College Bonds Act, P.L.c.12), \$750,000 and Bond Anticipation Notes, Series 2013, \$70,580,000 Dated: September 25, 2013
- 14 The Essex County Improvement Authority (Essex County, New Jersey), County of Essex General Obligation Guaranteed Lease Revenue Refunding Bonds, Series 2012 (County Correctional Facility Project), \$10,510,000, Dated: October 30, 2012
- 15 County of Essex, New Jersey, General Obligation Bonds, Series 2012, \$2,500,000, Consisting of: County College Bonds, Series 2012A, \$1,250,000; County College Bonds, Series 2012B (County College Bond Act, P.L. 1971, c.12) \$1,250,000; Dated: September 27, 2012
- 16 County of Essex, New Jersey, General Obligation Refunding Bonds, Series 2011, \$13,835,000, consisting of: General Improvement Refunding Bonds, Series 2011A, \$2,360,000; County College Refunding Bonds, Series 2011B, \$10,495,000; County College Refunding Bonds, Series 2011C, \$980,000 (County College Bonds Act, P.L. 1971, c. 12) Dated: November 10, 2011
- 17 The Essex County Improvement Authority (Essex County, New Jersey) County of Essex General Obligation Guaranteed Lease Revenue Refunding Bonds, Series 2011 (New Jersey Performing Arts Center Project), \$2,570,000; County of Essex General Obligation Guaranteed Lease Revenue Refunding Bonds, Series 2011 (County Recreational Facilities - Riverbank Park Project), \$2,695,000; County of Essex General Obligation Guaranteed Lease Revenue Refunding Bonds, Series 2011 (County Social Services Facilities Project), \$3,825,000, Dated: April 13, 2011
- County of Essex, New Jersey, General Obligation Bonds, Series 2010, \$80,203,000, consisting of: General Improvement Bonds, Series 2010A (Tax-Exempt), \$60,250,000; County Vocational School Bonds, Series 2010B, \$3,200,000, (New Jersey School Bond Reserve Act, P.L. 1980, c.72) (Tax-Exempt); County College Bonds, Series 2010C (Tax-Exempt), \$15,576,500; County College Bonds, Series 2010D (County College Bonds Act, P.L. 1971, c.12) (Tax-Exempt), \$1,176,500; and General Obligation School Bonds, Series 2010, \$46,150,000, consisting of: General Improvement Bonds, Series 2010E, \$37,550,000 (Federally Taxable - Build America Bonds - Direct Pay to Issuer) and County College Bonds, Series 2010F, \$8,600,000 (Federally Taxable - Build America Bonds - Direct Pay to Issuer) Dated: June 23, 2010
- 18 The Essex County Utilities Authority (Essex County, New Jersey) Solid Waste System Refunding Revenue Bonds, Series 2009 (Secured by a County Deficiency Agreement with the County of Essex) \$52,240,000, Dated: May 21, 2009
- 19 The Essex County Improvement Authority (Essex County, New Jersey) Parking Facility Revenue Refunding Bonds, Series 2009 (County Guaranteed) \$7,040,000, Dated: February 10, 2009 **(NAR)**
- 20 County of Essex, New Jersey, General Obligation Refunding Bonds, Series C of 2008 (Federally Taxable), \$32,635,000 Dated: October 7, 2008
- 21 County of Essex, New Jersey General Obligation Bonds, Series 2008, \$18,000,000 Consisting of: County College Bonds, Series 2008A, \$9,000,000, County College Bond, Series 2008B, \$9,000,000 (County College Bonds Act, P.L. 1971, c.12), Dated: June, 26, 2008
- 22 The Essex County Improvement Authority (Essex County, New Jersey) Airport Revenue and Refunding Bonds, Series 2007 (AMT) County Guaranteed) \$8,590,000, Dated: October 11, 2007 **(NOR)**
- 23 County of Essex New Jersey Vocational School Bonds, Series 2007 (New Jersey School Bond Reserve Act, P.L. 1980, c.72), \$10,732,320 Dated: August 21, 2007
- 24 The Essex County Improvement Authority (Essex County, New Jersey) Project Consolidation Revenue Bonds, Series 2007 (Refunding Project) \$235,845,000, Dated: March 29, 2007
- 25 The Essex County Improvement Authority (Essex County, New Jersey) Project Consolidation Revenue Bonds, Series 2006 (Refunding Project) (Forward Delivery) \$41,865,000, Dated: September 7, 2006
- 26 The Essex County Utilities Authority (Essex County, New Jersey), \$26,920,000, Solid Waste System Refunding Revenue Bonds, Tax-Exempt Series 2006A, \$14,890,000 Solid Waste System Refunding Revenue Bonds, Taxable Series 2006B \$12,030,000(Both Series Secured by a County Deficiency Agreement with the County of Essex), Dated: March 23, 2006
- 27 The Essex County Improvement Authority (Essex County, New Jersey) General Obligation Guaranteed Lease Revenue Refunding Bonds, Series 2005 (Sportsplex Project) \$14,420,000, Consisting of Series 2005A Bonds (Tax Exempt) \$2,485,000 and Series 2005B (Taxable) \$11,935,000, Dated: September 13, 2005
- 28 The Essex County Improvement Authority (Essex County, New Jersey) Project Consolidation Revenue Bonds, Series 2005 (Refunding Project) \$11,515,000, Dated: August 24, 2005
- 29 County of Essex, New Jersey, General Obligation Bonds, Series 2005A, \$83,510,000, Dated: May 1, 2005
- 30 County of Essex, New Jersey, General Obligation Bonds, Series 2004, \$88,300,000, consisting of: General Improvement Bonds, Series 2004A, \$67,200,000; County College Bonds, Series 2004B, \$14,500,000; County College Bonds, Series 2004C, (County College Bonds Act, P.L. 1971, c.12), \$4,000,000 and County Vocational School Bonds, Series 2004D (New Jersey School Bond Reserve Act, P.L. 1980, c.72), \$2,600,000, Dated: November 3, 2004
- 31 The Essex County Improvement Authority (Essex County, New Jersey) Project Consolidation Revenue Bonds, Series 2004 (Refunding Project) (County Guaranteed), \$188,565,000, The Essex County Improvement Authority (Essex County, New Jersey) Airport Refunding Revenue Bonds, Series 2004 (AMT) (County Guaranteed) \$3,285,000, Dated: October 5, 2004
- 32 County of Essex, New Jersey, General Obligation Pension Refunding Bonds (Early Retirement Incentive), Series 2003, (Federally Taxable), \$54,665,000, Dated: June 25, 2003
- 33 The Essex County Improvement Authority (Essex County, New Jersey) Parking Facility Revenue Refunding Bonds, Series 1998 (NON-AMT), \$9,225,000, Airport Revenue Bonds, Series 1998 (AMT), \$1,000,000, Dated: August 1, 1998
- 34 The Essex County Improvement Authority (Essex County, New Jersey) General Obligation Lease Revenue Bonds, Series 1997A-H (Sportsplex Project), \$22,000,000 consisting of County of Essex General Obligation Guaranteed Lease Revenue Bonds, Series 1997A-D, \$11,000,000 and City of Newark General Obligation Guaranteed Lease Revenue Bonds, Series 1997E-H, \$11,000,000 Dated: July 1, 1997
- 35 The Essex County Improvement Authority (Essex County, New Jersey), County of Essex, Guaranteed Revenue Bonds, Series 1995, (Garden State Cancer Center Project), \$3,600,000, Dated: June 15, 1995 **(NAR)**

Series 2016Waste, 2016GO, 2016GO Ref, 2015A-B, 2014Water, 2014A-D, 2014GO Ref, 2013ABC, 2013BC, 2013, 2012, 2012AB, 2011ABC, 2010A-F, 2009, 2008, 2008C, 2007Voc, 2007Con, 2006, 2006Ref, 2005AB, 2005 Cons, 2005A GO, 2004A-D, 2004, 2003, 1998, 1997

### Financial Information and Budget Highlights

Fiscal Year Ended December 31, 2015

#### The 2017 Budget

The 2017 Budget, which includes a \$6.32 million increase in taxes, was adopted by the Board of Chosen Freeholders on April 19, 2017. The 2017 Budget continues the hiring freeze instituted in 2009. These policies affect all County Departments and Constitutional Offices.

Property Valuations

Series 2016Waste, 2016Water, 2016GO, 2016GO Ref, 2015A,B, 2014Water, 2014A-D, 2014GO Ref, 2013ABC, 2013BC, 2013, 2012, 2012AB, 2011ABC, 2011, 2010A-F, 2009, 2008, 2008C, 2007 VOC, 2007CON, 2006, 2006 Ref, 2005AB, 2005Cons, 2005A GO, 2004A-D, 2004, 2003, 1998, 1997

Net Assessed Valuations by Classifications of Real Property	
Fiscal Years Ended December 31,	
Type of Real Property	2016
Residential	54,525,748,617
Apartment	3,743,608,450
Commercial	12,722,107,558
Industrial	3,082,228,150
Farm	3,413,400
Vacant Land	1,032,553,280
Sub-Total	75,109,659,455
Exempt	19,886,061,172
Total of Real Property	94,995,720,627

Series 2016Waste, 2016Water, 2016GO, 2016GO Ref, 2015A,B, 2014Water, 2014A-D, 2014GO Ref, 2013ABC, 2013BC, 2013, 2012, 2012AB, 2011ABC, 2011, 2010A-F, 2009, 2008, 2008C, 2007 VOC, 2007CON, 2006, 2006 Ref, 2005AB, 2005Cons, 2005A GO, 2004A-D, 2004, 2003, 1998, 1997

Net Assessed and Equalized Valuations of Real and Personal Tangible Property	
Fiscal Years Ended December 31,	
Net Assessed Valuations:	2016
Real Property	75,109,659,455
Personal Tangible Property	167,151,822
Total Net Assessed Valuation	75,276,811,277
Percent Increase (Decrease) Over Previous Year	-1.64%
Equalized Valuation	83,791,332,909
Percent Increase (Decrease) Over Previous Year	1.30%

Tax Information

Series 2016Waste, 2016Water, 2016GO, 2016GO Ref, 2015A,B, 2014Water, 2014A-D, 2014GO Ref, 2013ABC, 2013BC, 2013, 2012, 2012AB, 2011ABC, 2011, 2010A-F, 2009, 2008, 2008C, 2007 VOC, 2007CON, 2006, 2006 Ref, 2005AB, 2005Cons, 2005A GO, 2004A-D, 2004, 2003, 1998, 1997

Tax Rates, Tax Apportionments and Tax Collections				
Year	Tax Rate	Tax Apportionment	Tax Collection	Percent
2016	5.069	421,101,000.00	421,101,000.00	100.00%

Series 2014Water, 2014A-D, 2014GO Ref, 2013ABC, 2013BC, 2013, 2012, 2012AB, 2011ABC, 2011, 2010A-F, 2009, 2008, 2008C, 2007 VOC, 2007CON, 2006, 2006 Ref, 2005AB, 2005Cons, 2005A GO, 2004A-D, 2004, 2003, 1998, 1997

Added and Omitted Tax Levies			
Year	Added Taxes	Omitted Taxes	Total
2016	2,116,113.14	277,969.08	2,394,082.22

Series 2016Waste, 2016Water, 2016GO, 2016GO Ref, 2015A,B, 2014Water, 2014A-D, 2014GO Ref, 2013ABC, 2013BC, 2013, 2012, 2012AB, 2011ABC, 2011, 2010A-F, 2009, 2008, 2008C, 2007 VOC, 2007CON, 2006, 2006 Ref, 2005AB, 2005Cons, 2005A GO, 2004A-D, 2004, 2003, 1998, 1997

Comparison of Tax Levy to Annual Debt Service Requirements			
Year	Tax Levy	Debt Service Requirements	Percent of Debt Service to Tax Levy
2015	413,249,000.00	99,742,826.00	24.14%
2016	421,101,000.00	105,878,138.00	25.14%

Series 2016Waste, 2016Water, 2016GO, 2016GO Ref, 2015A,B, 2014Water, 2014A-D, 2014GO Ref, 2013ABC, 2013BC, 2013, 2012, 2012AB, 2011ABC, 2011, 2010A-F, 2009, 2008, 2008C, 2007 VOC, 2007CON, 2006, 2006 Ref, 2005AB, 2005Cons, 2005A GO, 2004A-D, 2004, 2003, 1998, 1997

Current Fund Revenue Sources per Annual Adopted Budget				
Year	Budget Requirement	Revenue Surplus Appropriated	Miscellaneous Revenues	Amount to be Raised by Taxation
2016	769,140,000.00	12,000,000.00	336,639,000.00	421,101,000.00
2017	697,750,000.00	20,000,000.00	250,332,000.00	427,418,000.00

Series 2016Waste, 2016Water, 2016GO, 2016GO Ref, 2015A,B, 2014Water, 2014A-D, 2014GO Ref, 2013ABC, 2013BC, 2013, 2012, 2012AB, 2011ABC, 2011, 2010A-F, 2009, 2008, 2008C, 2007 VOC, 2007CON, 2006, 2006 Ref, 2005AB, 2005Cons, 2005A GO, 2004A-D, 2004, 2003, 1998, 1997

Current Fund Balances and Amounts Utilized in Succeeding Years Budget			
Year	Balance as of 31-Dec	Utilized in Budget of Succeeding Year Amount	Percent
2016	97,189,777.00	20,000,000.00	20.57%
2017		20,000,000.00	

## Debt Information

Series 2016Waste, 2016Water, 2016GO, 2016GO Ref, 2015A,B, 2014Water, 2014A-D, 2014GO Ref, 2013ABC, 2013BC, 2013, 2012, 2012AB, 2011ABC, 2010A-F, 2009, 2008, 2008C, 2007Voc, 2007CON, 2006, 2006Ref, 2005AB, 2005 Cons, 2005A GO, 2004A-D, 2004, 2003, 1998, 1997

### Debt Information

Fiscal Year Ended December 31, 2016

#### General Information

The County's debt incurring power is limited by State statute to 2.00% of the State average equalized valuation, determined annually by the State, of all taxable property within the County. See the sub caption "Statutory Debt and Borrowing Power" below. Unless the New Jersey Local Finance Board allows otherwise, the County's general purpose bonds must be issued in serial form, with the first principal payment to occur within one year after the date of issuance and the final maturity not to exceed the useful life of the capital improvement. General purpose bonds must be sold on a competitive bid basis. Refunding bonds may be sold on a negotiated basis without the approval of the New Jersey Local Finance Board provided that the following conditions are met: (1) the present value savings is at least three percent, (2) The new debt service shall be structured such that no annual debt service payment is more than it was under the original debt service schedule, (3) the final maturity of the refunding bond does not extend past the maturity date of the refunded debt, and (4) the debt savings are substantially level across the life of the refunding. Notes may be sold on a competitive or on a negotiated, or private sale, basis for a period of one year, and may be renewed annually but generally not to exceed the first day of the fifth month following the close of the tenth fiscal year next following the date of original issuance of such notes.

Laws creating certain authorities authorize a local governmental unit, such as the County to enter into a service contract or deficiency agreement to, in effect, guarantee debt service payments on debt issued by the authority (a "deficiency agreement"). Neither the debt of the authority nor payments pursuant to the deficiency agreement are included in a local governmental unit's statutory gross debt. In addition, laws creating certain authorities authorize a local governmental unit, such as the County, to directly guarantee debt service payments on debt issued by the authority. The principal amount of such directly guaranteed debt is included in the local governmental unit's statutory gross debt but is deducted for purposes of calculating net debt if the authority was, in effect, self-sustaining during the preceding fiscal year. Furthermore, laws creating certain authorities authorize a local governmental unit, such as the County, to enter into multi-year lease agreements with the authority. Annual lease payments pursuant to any such agreement are not included in the local governmental unit's statutory gross debt.

#### Statutory Debt and Borrowing Power

The following tables set forth information, as of December 31, 2016, on the amounts of the County's outstanding debt and outstanding net debt, outstanding debt guaranteed by the County or issued for County purposes, statutory debt, and statutory borrowing power. After the dates noted, the debt information and statistics noted on the following pages may vary from the figures shown because of either a reduction or an increase in the amounts of debt for each of the political entities noted.

Series 2013, 2011, 2009, 2007CON, 2006, 2004

### Outstanding Debt and Outstanding Net Debt

Fiscal Year Ended December 31, 2016

Purpose	Interest Rate	Dated Date	Final Maturity Date	Amount Outstanding
County Bonds Outstanding chapter 12				
ECC Series 2004C	3.50-4.00	11/3/2004	10/1/2019	1,005,000.00
ECC Series 2008B	3.5-5.00	6/26/2008	3/1/2023	1,260,000.00
ECC Series 2010D Refunding	5	6/23/2010	8/1/2025	310,000.00
ECC Series 2011C Refunding	4	11/10/2011	6/1/2017	160,000.00
ECC Series 2012B	2.00-4.00	9/19/2012	9/1/2022	750,000.00
ECC Series 2013C	3.00-3.25	9/25/2013	9/25/2013	525,000.00
ECC Series 2014D	1.5-3.00	9/23/2014	9/1/2024	2,000,000.00
ECC Series 2016 1D	5	9/15/2016	9/1/2026	1,250,000.00
ECC Series 2016D	5	5/12/2016	3/1/2025	4,010,000.00
				11,270,000.00
County College Bonds, Series 2008A				
County College Bonds, Series 2010C	3.50-5.00	6/26/2008	3/1/2023	1,260,000.00
County College Bonds, Series 2010E	5	6/10/2010	8/1/2025	5,495,000.00
County College Bonds, Series 2010F	5.90-6.15	6/10/2010	8/1/2025	8,600,000.00
County College Refunding Bonds, series 2011B	4	11/10/2011	6/1/2017	45,000.00
County College Bond, 2012A	2.00-4.00	9/19/2012	9/1/2022	750,000.00
County College Refunding Bonds, Series 2013B	4	11/26/2013	10/1/2017	1,345,000.00
County College Bonds, Series 2013B	3.00-3.25	9/25/2013	9/1/2023	525,000.00
County College Bonds, Series 2014C	1.50-3.00	9/23/2013	9/1/2024	2,000,000.00
County College Bonds, Series 2016C	5	9/15/2016	9/1/2026	1,250,000.00
County College Bonds, Series 2016C	5	5/12/2016	3/1/2025	8,140,000.00
				29,410,000.00
County College:				
G.O. Refunding Series 2005A	5	6/26/2005	6/1/2016	0.00
G.O. Bonds, Series 2010A	5	6/10/2010	8/1/2025	17,880,000.00
Build America Bonds Series 2010E	5.9-6.15	6/10/2010	8/1/2025	37,550,000.00
General Improvement Refunding Bonds, Series 2013A	4.00-5.00	11/26/2013	10/1/2019	15,595,000.00
General Improvement Refunding Bonds, Series 2014	4	5/29/2014	5/1/2022	14,170,000.00
General Improvement Bonds, Series 2014A	1.50-3.00	9/23/2014	9/1/2029	18,240,000.00
General Improvement Bonds, Series 2015 1A	2.00-3.00	9/2/2015	9/1/2027	21,950,000.00
General Improvement Bonds, Series 2016 1A	4.00/-5.00	9/1/2016	9/1/1935	24,520,000.00
General Improvement Bonds, Series 2016 1A	4.00/-5.00	5/12/2016	3/1/2025	23,920,000.00
				173,825,000.00
Vocational School:				
County Vocational Bonds, Series 2007	4.125-5.00	8/14/2007	12/15/2022	1,065,000.00
County Vocational Bonds, Series 2010B	5	6/10/2010	8/1/2025	845,000.00
County Vocational Bonds, Series 2013A	3.00-4.00	9/25/2013	9/1/2028	3,345,000.00
County Vocational Bonds, Series 2013C	2	11/26/2013	10/1/2020	820,000.00
County Vocational Bonds, Series 2014B	1.50-3.00	9/23/2014	9/1/2029	1,880,000.00
County Vocational School Bonds, Series 2015	2.00-4.00	9/1/2015	9/1/2045	53,600,000.00
County Vocational Bonds, Series 2016 1B	2.00-3.00	9/1/2016	9/1/2046	80,000,000.00
County Vocational Bonds, Series 2016B	3.00/-5.00	4/13/2016	4/13/2025	6,900,000.00
TOTAL				148,455,000.00
Essex County Improvement Authority Pooled				
Governmental Loan Program:				
General Improvement Series 2010	Variable	6/3/2010	7/1/2025	2,565,000
General Improvement Series 2014 1-A	Variable	6/1/2014	6/1/2019	1,599,000
General Improvement Series 2015A	Variable	6/24/2015	6/1/2025	3,150,000
General Improvement Series 2016AA	Variable	6/1/2017	12/1/2022	5,185,000
				12,499,000
Green Trust Loan:				
DEP Loan (Verona Dam)	2	10/23/2009	4/23/2028	340,482.34
DEP Loan (Diamond Mill Pond Project)	2	7/30/2013	4-29/2033	388,901.39
				729,383.73
Employee Retirement Service:				
G O Refunding Bonds, Series 1989 A		1/15/1989	8/15/2019	3,500,000
Series 2003 G.O. Pension Refunding (Ta	4.75	6/25/2003	4/1/2033	52,585,000
Series 2008C (Taxable)	6	10/7/2008	12/1/2017	3,880,000
				59,965,000.00
Total Net Outstanding County Debt				436,153,383.73

Series 2013, 2011, 2009, 2007CON, 2006, 2004

# **Outstanding Debt Guaranteed by the County or Issued for County Purposes**

Fiscal Year Ended December 31, 2016

Issue Name

Under Lease or Deficiency Agreements

	Interest Rate	Dated Date	Final Maturity Date	Amount Outstanding
2004A	5.5	9/2/2004	10/1/2030	\$93,240,000.00
2005 (Relunding Project)	4.00-4.375	8/15/2005	12/15/2027	\$7,235,000.00
Series 2005 (Sportsplex Project)	4.00-5.10	9/13/2005	10/1/2029	\$2,465,000.00
2006 (Relunding Project)	5.25	9/7/2006	12/15/2024	\$22,865,000.00
2007 (Relunding Project)	5.00-5.25	3/29/2007	12/15/2023	\$222,855,000.00
Bonds, Series 2011 (Social Services)	3.00-5.00	4/13/2011	10/1/2027	\$2,895,000.00
Bonds, Series 2011 (NJPAAC)	3	4/13/2011	10/1/2018	\$740,000.00
Bonds, Series 2011 (Roverbank)	3.00-4.00	4/13/2011	10/1/2018	\$900,000.00
Bonds, Series 2012 (Correctional)	4	10/30/2012	10/1/2017	\$3,605,000.00
2013	3.00-5.00	12/31/2013	12/15/2020	\$26,170,000.00
Bonds, Series 2014	1.50-5.00	9/18/2014	10/01/2022	\$43,115,000.00
<b>Total Bonds and Notes Payable by the County Under Lease or Deficiency Agreements (A)</b>				<b>\$426,085,000.00</b>
Bonds Payable Under Deficiency Agreement and Guaranteed by the County				
Series 2009 (County-Guaranteed)	4.00-5.00	2/10/2009	10/1/2022	3,610,000
<b>Total Bonds Payable Under Deficiency Agreement and Guaranteed by the County (B)</b>				<b>3,610,000</b>
Total Bonds and Notes Payable by the County Under Lease or Deficiency Agreements (Total (A)+(B))				<b>429,695,000</b>
Bonds Guaranteed by the County and Payable from Other Sources				
2007 (AMT) (County-Guaranteed)	4.00-4.50	10/11/2007	11/1/2032	5,980,000
2014 (AMT) (County Guaranteed)	2.00-3.00	9/18/2014	9/1/2021	1,385,000
				<b>7,365,000</b>
<b>Total ECIA ((A)+(B)+(C))</b>				<b>437,060,000</b>
The Essex County Utilities Authority				
Bonds, Series 2006A and 2006B	4.00-5.58	3/23/2006	10/1/2022	13,310,000
Bonds, Series 2009	2.50-5.00	5/21/2009	4/1/2022	31,510,000
Water System Project Notes (Series 2014)	3	11/6/2014	11/4/2016	4,500,000
Total ECUA				<b>49,320,000</b>

Series 2013, 2011, 2009, 2007CON, 2006, 2004

## **Statutory Debt**

Fiscal Year Ended December 31, 2016

	Gross Debt	Deductible Debt	Net Debt
General Purpose:	\$173,825,000	\$80,880,000.00	\$92,945,000.00
Bonds Issued	40,680,000	11,270,000.00	29,410,000.00
G.O. County College Bonds	59,965,000	52,585,000.00	7,380,000.00
ERS Bonds	148,455,000		148,455,000.00
Vocational School Bonds	729,384		729,384.00
Green Trust Loans	12,499,000		12,499,000.00
Total	<b>436,153,384</b>		
Bond Anticipation Notes Issued	58,550,000		58,550,000.00
Debt Authorized but Unissued	63,697,306		63,697,306.00
County Guaranteed Debt:			
Essex County Improvement Authority	437,060,000.00	437,060,000.00	
Essex County Utilities Authority	49,320,000.00	49,320,000.00	
Total Gross Statutory Debt	<b>\$1,044,780,690</b>		
Total Statutory Deductions		\$631,115,000.00	
Total Net Statutory Debt			<b>413,665,690.00</b>

Series 2013, 2011, 2009, 2007CON, 2006, 2004

**Statutory Borrowing Power**

Fiscal Year Ended December 31, 2016

Three Year Average Equalized	\$81,977,548,744.00
Statutory Borrowing Power	1,639,550,974.88
Statutory Net Debt	413,665,689.13
Remaining Statutory Borrowing Power	1,149,820,285.75
Ratio:	
Statutory Net Debt to State Equalized Valuation	0.49%
Statutory Net Debt Per Capita	624.68

Series 2016Waste, 2016Water, 2016GO, 2016GO Ref, 2015A,B, 2014Water, 2014A-D, 2014GO Ref, 2013ABC, 2013BC, 2013, 2012, 2012AB, 2011ABC, 2011, 2010A-F, 2008, 2008C, 2007 Voc, 2007CON, 2006Ref, 2005AB, 2005Con, 2005A GO, 2004A-D, 2004, 2003, 1998, 1997

**Schedule of Debt Service Requirements on the County's Tax Supported Debt**

Fiscal Year Ended December 31,

Period Ending	Principal	Net Outstanding County Debt Interest	Debt Service	Principal	Essex County Improvement Authority Interest	Debt Service	Total Debt Service	Maturing
12/31/2016								
12/31/2017	\$32,874,723.21	\$18,676,971.96	\$51,551,695.17	\$36,050,000.00	\$22,101,410.02	\$58,151,410.02	109,703,105.19	
12/31/2018	31,610,662.34	17,444,124.82	49,054,787.16	39,445,000.00	20,461,467.52	59,906,467.52	108,961,254.68	
12/31/2019	32,376,620.36	16,109,666.82	48,486,287.18	41,745,000.00	18,539,630.02	60,284,630.02	108,770,917.20	24.70%
12/31/2020	23,214,597.62	14,291,939.56	37,506,537.18	53,750,000.00	16,411,405.02	70,161,405.02	107,667,942.20	
12/31/2021	23,355,594.54	13,157,486.40	36,513,080.94	57,705,000.00	13,636,248.76	71,341,248.76	107,854,329.70	
12/31/2022	23,056,611.49	12,208,969.43	35,265,580.92	61,715,000.00	10,646,755.00	72,361,755.00	107,627,335.92	
12/31/2023	36,027,648.89	10,997,732.07	47,025,380.96	50,180,000.00	7,447,683.00	57,627,683.00	104,653,063.96	
12/31/2024	33,573,707.12	9,776,153.82	43,349,860.94	17,485,000.00	4,880,945.00	22,365,945.00	65,715,805.94	68.55%
12/31/2025	33,534,786.63	7,905,605.31	41,440,390.94	13,060,000.00	3,844,990.00	17,004,990.00	58,445,381.94	
12/31/2026	12,015,887.85	5,992,746.84	18,008,634.69	12,680,000.00	3,242,352.50	15,922,352.50	33,930,987.19	
12/31/2027-2046	154,512,543.68	45,335,847.32	199,848,391.00	46,775,000.00	6,347,630.00	53,122,630.00	252,971,021.00	100.00%
Totals	\$436,153,383.73	\$171,897,244.35	\$608,050,627.08	\$430,590,000.00	\$127,660,516.84	\$558,250,516.84	\$1,166,301,144.92	

Series 2014Rev Ref

**The most current annual debt statement of the County**

Fiscal Year Ended December 31, 2016

See separate filing
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Series 2011

**Retirement Benefits**

Fiscal Year Ended December 31,

System	2016
PERS	17,229,299.00
PPRS	20,816,201.00
Social Security	16,640,000.00
Non-Contributory	260,000.00
Total	54,945,500.00

Series 2011

**PROPOSED SIX-YEAR CAPITAL IMPROVEMENT PROGRAM**

Fiscal Year Ended December 31, 2016

Year	Annual Funding Requirement
2016	20,000,000.00
2017	20,000,000.00
2018	20,000,000.00
2019	20,000,000.00
2020	20,000,000.00
2021	20,000,000.00

Series 2011

**Capital Budget Appropriations, Funding Sources and Amounts**

	Six Year Estimated Total Cost	2017 Budget Appropriation Fund	2017 Capital Improvement Fund	Det Authorized	Future Years Funding
Project	\$800,000	\$0	\$0	\$0	\$800,000
Hospital Center Complex, Rehabilitation	\$800,000	0	0	0	1,250,000
Inter-County Movable Bridges	1,250,000	0	0	0	5,500,000
Hazardous Material Chemical Control	5,500,000	0	25,000	475,000	6,020,500
County Bridge/Culvert Improvements	6,020,500	0	77,000	1,573,000	5,974,500
Traffic Signal Improvements	5,974,500	0	38,000	762,000	17,800,000
Various County Building Improvements	21,650,000	3,850,000	185,000	3,665,000	6,250,000
H.O.R./Court House Improvements	6,250,000	0	0	0	13,000,000
Jail/Jail Annex Rehabilitation	13,000,000	0	0	0	5,300,000
Highway Rehabilitation	9,300,000	4,000,000	195,000	3,805,000	4,200,000
Highway Safety	4,200,000	400,000	0	0	10,590,000
Parks Rehabilitation	19,990,000	9,400,000	448,000	8,952,000	8,315,000
Capital Equipment	8,315,000	0	0	0	1,250,000
Handicapped Access Improvements	1,250,000	0	0	0	3,750,000
Transportation Improvements	3,750,000	0	0	0	1,250,000
Youth House Facility Improvements	1,250,000	0	0	0	8,750,000
County College/Vo-Tech School Improvements	11,500,000	2,750,000	72,000	2,678,000	\$100,000,000
Total All Projects	\$120,000,000	\$20,000,000	900,000	\$19,100,000	

Series 2011

**Residential Housing Units by Building Permits**

Fiscal Year Ended December 31,

	Total Units	Total Cost
2016	2403	242842

Series 2011

**Demographic Statistics**

Fiscal Year Ended December 31, 2016

**Population Trend**

	<b>2016</b>
County	796,914
State	8,944,469

**Population Density**

	<b>Square Miles</b>	<b>2016</b>
County		6091.27
State		1017.4

**Population Characteristics By Age**

	<b>0-4 Years</b>	<b>5-13 Years</b>	<b>14-24 Years</b>	<b>Population By Age Groups</b>				<b>65+ Years</b>	<b>85+ Years</b>	<b>Total</b>
County	53,634	53,787	190,984	206,236	193,879	83,768		14,626		796,914
State	532,519	553,996	1,729,026	2,322,025	2,493,400	1,118,543		194,960		8,944,469

Series 2011

**Trend of Employment and Unemployment**

<b>Year</b>		<b>Labor Force</b>	<b>Employment</b>	<b>Unemployment</b>	<b>Rate</b>
2016	County	378,427.00	355,346.00	8,296,000.00	6.1
	State	4,538,105.00	4,320,996.00	23,081.00	4.7
	U.S.	157,130,000.00	148,834,000.00	8,296,000.00	5.3

Series 2011

**LARGEST EMPLOYERS**

Fiscal Year Ended December 31, 2016

<b>Employer</b>	<b>Business</b>	<b>Location</b>	<b>Approximate Employment</b>
St. Barnabas Health Care System	Acute Care Hospital	Livingston	21,000
Rutgers University-Newark Campus	University	Newark	15,500
Verizon	Communications	Newark	15,000
New Jersey Transit	Transportation	Newark	11,500
Public Service Electric & Gas	Diversified energy	Newark	10,000
Prudential Ins. Co. of America	Insurance	Newark, Roseland	8,743
Montclair State University	University	Montclair	7,525
Newark Board of Education	Board of Education	Newark	7,050
Gateway Group One	Security Customer care	Newark	6,250
Automatic Data Processing	Computer Software	Roseland	5,649
City of Newark	Government	Newark	4,000

Series 2011

**MAJOR REAL PROPERTY TAXPAYERS**

Fiscal Year Ended December 31, 2016

<b>Taxpayer</b>	<b>Business</b>	<b>Location</b>	<b>Assessed Valuation</b>
Short Hills Assoc. LLC	Mail	Millburn	\$930,819,000
Prudential Financial, Co of America	Insurance	Roseland	175,271,300
Livingston Mall Corp	Mall	Livingston	132,000,000
Anheuser Busch Inc.	Brewery	Newark	125,000,000
Prudential Financial, Inc.	Office Building	Roseland	115,950,400
Prudential Financial, Inc	Office Building	Newark	108,535,600
NJBTC Co.	Office Building	Newark	102,454,900
PB Nutcliff Master, LLC	Pharmaceutical	Nutley	98,463,900
2 Gateway Center Partners, LLC	Office Building	Newark	92,750,000
80 Park Place SPE, LLC	Office Building	Newark	114,581,600

Total Assessed Valuation of Major Taxpayers  
Assessed Valuation of Real Property in the County

1,995,826,700.00  
578,162,538,965.00

Series 2011

**DIRECT, OVERLAPPING AND UNDERLYING DEBT ISSUED AND OUTSTANDING**

Fiscal Year Ended December 31, 2016

	<b>Debt Outstanding</b>		<b>Debt Per Capita</b>		<b>Debt as % of Equalized Value</b>	
	<b>Gross</b>	<b>Net</b>	<b>Gross</b>	<b>Net</b>	<b>Gross</b>	<b>Net</b>
Direct Debt						
General Purpose	\$517,720,680.00	\$460,320,690.00				
County College	40,680,000.00	29,410,000.00				
Subtotal Direct Debt	558,400,680.00	489,730,690.00	\$700.70	\$614.53	0.68%	0.59%
Overlapping Debt:						
ECIA:						
Payable by the County Under Lease or Deficiency Agreement and Guaranteed by the County	430,590,000.00	430,590,000.00				
Payable from other sources	7,365,000.00	0.00				
ECUA	49,515,000.00	0.00				
Subtotal Overlapping Debt	487,470,000.00	430,590,000.00				
Subtotal Direct and Overlapping Debt	1,045,870,690.00	920,320,690.00	\$1,312.40	\$1,154.85	1.27%	1.12%
Underlying Debt:						
Municipal	1,156,667,182.00	1,156,667,182.00				
School	631,150,915.00					
Self-supporting:						
Municipal Utility	418,853,286.00					
Commissions:						
PVSC	115,593,061.00					
North Jersey	15,626,886.00					
Subtotal Underlying Debt	2,337,891,330.00	1,156,667,182.00				
Total Direct, Overlapping and Underlying Debt	3,383,762,020.00	2,076,987,872.00	\$4,246.08	\$2,606.28	4.12%	2.53%

Series 2011  
**SELECTED ECONOMIC AND DEBT INFORMATION ON MUNICIPALITIES IN ESSEX COUNTY**  
Fiscal Year Ended December 31, 2016

<u>Municipality</u>	<u>Population</u>	<u>Household Income</u>	<u>Unemployment Rate</u>	<u>Net Valuation</u>	<u>Tax Levy</u>	<u>Gross Debt</u>	<u>Municipal Debt</u>	<u>Self Liquidating Debt</u>	<u>Outstanding Debt</u> <u>Net Direct Debt</u>	<u>School</u>	<u>County</u>	<u>Commissions</u>
Belleville	17,000.00	48,576.00	4.8	2,813,266,909	360,276.380	28,838,928	25,988,928	2,850,000	24,756,713		10,344,487	6,464,455
Bloomfield	48,000.00	53,289.00	4.8	4,258,122,509	476,724.900	118,782,153	86,805,871	7,331,282	66,690,871	24,645,000	16,913,890	7,441,730
												1,639,145
Caldwell	7,800.00	100,884.00	5.6	1,111,963,138	128,315,500	32,317,407	10,746,055	12,637,540	8,931,811	10,451,917	3,984,315	
Cedar Grove	12,000.00	78,863.00	5.6	2,330,425,358	200,076,400	46,484,000	10,852,000	8,468,000	10,852,000	25,926,000	8,738,210	257,984
E. Orange	65,000.00	36,978.00	6.7	2,729,633,486	1,090,129,460	122,233,384	58,830,420	63,412,965	58,830,420	0	13,348,162	
Essex Falls	2,100.00	148,173.00	5.6	764,401,837	108,553,400	18,882,881	3,084,790	2,268,181	3,004,501	13,530,000	2,854,275	
Fairfield	7,100.00	97,361.00	5.6	3,041,679,929	199,744,300	19,376,016	9,150,594	2,879,850	9,560,613	7,345,572	10,559,680	
Glen Ridge	7,700.00	160,511.00	5.6	1,565,063,528	113,610,610	13,010,107	5,196,825	4,283,283	5,196,825	3,530,000	5,432,991	1,549,716
												172,680
Irvington	61,000.00	38,165.00	6.9	2,050,716,539	294,974,552	106,926,688	73,329,979	0	70,674,979	33,596,709	10,422,734	
Livingston	27,000.00	137,665.00	3	7,714,930,277	1,160,028,900	224,468,325	97,395,476	31,552,000	80,933,409	95,520,849	27,738,463	
Maplewood	24,000.00	116,014.00	5.6	3,495,750,869	812,834,900	67,433,732	44,047,377	997,000	35,992,240	22,389,355	13,537,773	
Milburn	20,000.00	130,848.00	5.6	9,504,080,275	514,449,100	80,373,743	21,021,743	7,125,000	21,021,743	52,227,000	32,554,108	
Montclair	39,000.00	73,647.00	3.6	6,895,922,065	972,402,400	178,082,793	70,942,697	30,020,982	72,870,022	82,598,080	25,043,221	8,567,272
Newark	280,000.00	30,366.00	7.6	13,772,275,770	11,256,046,500	666,608,725	413,457,524	188,363,205	278,685,489	66,788,000	62,515,946	1,151,201
N. Caldwell	6,800.00	117,395.00		1,729,088,755	173,837,500	26,965,575	9,098,127	637,448	9,098,127	17,230,000	6,148,371	78,941,383
												11,760,828
Nutley	27,000.00	85,035.00	4.1	3,604,380,885	200,664,599	59,593,799	15,811,516	3,262,283	14,713,847	40,865,000	14,477,253	6,598,540
												685,048
Orange	33,000.00	44,645.00	7.2	1,451,813,628	449,381,572	43,202,410	14,529,606	28,350,884	15,427,377	321,921	5,582,660	6,029,967
Roseland	5,800.00	82,499.00	5.6	1,818,332,621	57,807,880	25,068,023	14,146,400	1,025,550	14,146,400	9,896,074	7,080,934	
S. Orange	17,000.00	123,373.00	5.6	2,624,997,635	669,595,300	94,303,545	48,680,545	6,660,000	48,696,210	38,963,000	9,912,260	
Verona	14,000.00	100,366.00	5.6	2,319,650,956	267,963,400	79,738,400	32,141,468	5,516,933	38,080,000	32,141,468	8,403,186	
W. Caldwell	11,000.00	83,396.00	5.6	3,303,581,422	134,599,564	47,481,478	21,207,390	7,210,899	21,132,390	18,763,189	8,770,230	
W. Orange	45,000.00	90,251.00	4.2	5,983,356,520	589,344,255	106,631,722	72,109,941	0	72,209,941	34,421,781	23,329,175	
Total or Average	777,300.00	1,978,900.00		83,791,332,900	19,886,061,172	2,206,503,838	1,156,565,182	418,853,285	982,495,928	631,150,915	328,290,324	131,219,949