New York City Municipal Water Finance Authority

Revenue Bonds
New Issue Report

Ratings

New Issue

Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2013 Series CC	AA+

Outstanding Debt

Water and Sewer System First General Resolution Revenue Bonds	AA+
Water and Sewer System Second General Resolution Revenue Bonds	AA+
Extendable Municipal Commercial Paper Notes, Series Seven	F1+
Extendable Municipal Commercial Paper Notes, Series Eight	F1+

Rating Outlook

Stable

Related Research

2013 Water and Sewer Medians (December 2012)

2013 Outlook: Water and Sewer Sector (December 2012)

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New Issue Details

Sale Information: Approximately $435,000,000 Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2013 Series CC, selling Feb. 20 via negotiation.

Security: The second general resolution (SGR) bonds are special obligations of New York City Municipal Water Finance Authority (NYW, or the authority), payable solely from and secured by a subordinate lien on gross revenues of NYW.

Purpose: To provide funds for the authority's ongoing capital program and retire outstanding commercial paper notes.

Final Maturity: June 15, 2047.

Key Rating Drivers

Sound Legal Protections: NYW's primary credit strength is its legal structure, including its status as a bankruptcy remote issuer, providing substantial protection to bondholders from potential operating risks associated with the utility system and New York City (the city).

Regional Provider of an Essential Service: The combined system provides an essential service to an exceptionally large and diverse service area and benefits from an abundant, high-quality water supply exempt from expensive filtration requirements and transmission costs.

Independent Rate-Setting Authority: Strong financial management and a proven ability and willingness to independently raise rates are reflected in consistently solid financial results, despite the continued volatility in consumption.

Well-Managed Capital Program: Sophisticated capital planning efforts have helped achieve compliance with large and costly mandated regulatory projects and ensured the successful implementation of the large capital improvement plan (CIP).

Highly Leveraged System: Leverage is high as a result of having to comply with environmental mandates and maintain a large urban system and its aging assets. Declining but still sizable debt plans programmed into the current capital plan will keep debt levels elevated for the long term.

Improved Collections: Below-average collection rates persist, although payment incentives and strong enforcement mechanisms have yielded positive results in recent years.

What Could Trigger a Rating Action

Maintenance of Sufficient Rates: Failure to achieve rate hikes sufficient to ensure adequate financial margins and maintain current debt service coverage levels on senior and subordinate lien obligations would be viewed negatively.

Debt Levels Exceeding Projections: Escalation of debt levels beyond what is currently included in the five-year financial forecast would place added pressure on the system's debt profile.

Rating History

Rating	Action	Outlook/ Watch	Date
AA+	Affirmed	Stable	2/14/13
AA+	Affirmed	Stable	11/29/12
AA+	Affirmed	Stable	9/27/12
AA+	Affirmed	Stable	6/15/12
AA+	Affirmed	Stable	3/19/12
AA+	Affirmed	Stable	3/2/12
AA+	Affirmed	Stable	1/20/12
AA+	Affirmed	Stable	1/20/11
AA+	Affirmed	Stable	11/10/11
AA+	Affirmed	Stable	9/23/11
AA+	Affirmed	Stable	6/9/11
AA+	Affirmed	Stable	2/25/11
AA+	Affirmed	Stable	1/14/11
AA+	Affirmed	Stable	11/12/10
AA+	Affirmed	Stable	11/5/10
AA+	Affirmed	Stable	9/14/10
AA+	Affirmed	Stable	9/10/10
AA+	Affirmed	Stable	6/17/10
AA+	Revised[a]	Stable	4/5/10
AA	Affirmed	Stable	3/3/10
AA	Affirmed	Stable	1/22/10
AA	Affirmed	Stable	12/9/09
AA	Affirmed	Stable	10/21/09
AA	Affirmed	Stable	6/5/09
AA	Affirmed	Stable	2/13/09
AA	Affirmed	Stable	1/16/09
AA	Upgraded	—	5/25/00
A+	Upgraded	—	10/7/98
A	Affirmed	—	10/15/96

[a]Reflects rating recalibration.

Related Criteria

Revenue-Supported Rating Criteria (June 2012)

U.S. Water and Sewer Revenue Bond Rating Criteria (August 2012)

Credit Profile

Debt Structure

The 1984 New York Municipal Water Finance Authority Act (the act) and the financing documents provide bondholders, directly and indirectly, with three separate legal interests in the system's revenues. The act grants to NYW, for the bondholders' benefit, a first-priority perfected statutory lien on the system's gross revenues. The New York City Water Board (the board), pursuant to the financing agreement and as owner of the revenues, transfers its entire revenue interest to the authority. NYW, in its general revenue bond resolutions, pledges the revenues first to bondholders for payment, providing further insulation from any potential risk associated with the city's financial position.

Pursuant to the 1985 financing agreement among the board, NYW, and the city, system revenues are paid directly into a lockbox structure in the board's name, with NYW holding a statutory first lien. On a daily basis, the board sweeps funds for use in essentially the following order of priority: first general resolution (FGR) bond debt service, NYW expenses, debt service reserve refund refills, SGR bond debt services, water board expenses, system operations and maintenance (O&M) costs, the city lease payment, and the operating and maintenance reserve.

Excess revenues are deposited into the revenue fund and, on July 1 of each fiscal year, applied to reduce the amount of revenues required to meet debt service on SGR bonds and other subordinate indebtedness during that fiscal year, thereby reducing the size of rate increases required to comply with the rate covenant. Failure to generate such surplus revenues is not an event of default under the bond resolutions.

The lease agreement between the board and the city limits the annual rental payments to the greater of principal and interest on city GO debt issued for water and sewer needs due in the first year of the payment, or 15% of the principal and interest due on the authority's bonds in that fiscal year. Fitch Ratings considers a notable credit feature the requirement under the lease of the city to operate and maintain the water and sewer system to certain standards regardless of whether or not the board's rental payment is made.

Since the financing agreement is a true lease and not a financing, in bankruptcy, the city could reject its lease of the system as an executory contract. However, Fitch believes such an action would be quite unlikely because, pursuant to the act, the city would be unable to generate revenues from the system until bondholders are paid in full. The city would be reluctant during a time of fiscal stress to forfeit fees it receives for servicing the system by rejecting the financing agreement.

Should the city reject the lease as executor, the board could retain its possession and use of the system. Fitch believes that the board would likely retain possession, manage the system, or seek a substitute operator should the city relinquish its role. The choice of a different operator would not necessarily have a severe effect on bondholders.

Governance and Management

Municipal Water Finance Authority

NYW was created by the act and serves as the bond-issuing authority for the system. Pursuant to statute, it may require the board to fix sufficient rates and the city to adequately maintain the system. NYW may not file for bankruptcy without state legislative approval and is bankruptcy remote from New York City. In the act, the state pledges not to alter or impair the rights of NYW or the board or in any way inhibit bondholders until all principal and interest are paid in full.

New York Water Board

NYW is governed by a seven-member board of directors. Four of the members are ex officio members: the commissioner of environmental protection of the city, the director of management and budget of the city, the commissioner of finance of the city, and the commissioner of environmental conservation of the state. The remaining three members are public appointments, two by the mayor and one by the governor.

Department of Environmental Protection

The Department of Environmental Protection (DEP) operates and maintains the system, including customer billing, with its 5,600 active employees. The DEP's commissioner is a mayoral appointee.

Operating Profile

Customer Base

NYW's service territory includes approximately 8.2 million New York City residents and an additional one million end users in four upstate counties bordering the water supply system. The authority's customer base is highly diverse, with no single user accounting for more than 5% of total operating revenue. Residential customers compose a substantial 91% of the system's customer base.

Fitch considers the city's unique economic profile, which centers on its singular identity as an international center for numerous industries and major tourist destination, to be a credit strength. The character of the New York City economy contributed to its relative employment stability during the recent recession and its ability to regain by March 2012 the number of private-sector jobs that existed prior to the recession.

The city's economic profile also benefits from its strong wealth, with per capita income 130% of the national average. However, the well above-average individual poverty rate of 20.1% in 2011, compared to 15.2% for the U.S., indicates significant income disparity. The unemployment rate of 8.8% in December 2012 matched the December 2011 rate and remained above the state and federal rates, while year-over-year employment growth was below both.

Collection rates historically have remained below average, despite the overall economic strength of the service territory. Write-offs and the accounts receivable balance remained high in fiscal 2012, equal to 10.5% and 11.5% of fiscal 2012 operating revenues, respectively. However, the ongoing use of a payment incentive program for delinquent customers, a recent reduction in the threshold applicable to accounts eligible for termination of service, and the reauthorization by the city council to conduct a lien sale program independent of the existence of property tax liens have helped result in total annual collections that are typically in excess of yearly billings.

Fitch considers the existing lien sale program a strong enforcement mechanism, given the recovery of approximately $532 million in delinquent accounts over the past three years as a result of actual or pending lien sales. Fitch views positively city's council's 2011 vote to extend the lien sale program through Dec. 31, 2014.

Water System

Water is supplied primarily by three interconnected reservoir systems (Croton, Catskill, and Delaware), consisting of 18 reservoirs and three controlled lakes. Approximately 95% of water distributed through the system is conveyed by gravity, which Fitch notes is exceptionally cheap in comparison to pumping requirements.

Conservation efforts within the city have reduced overall consumption by nearly 10% over the prior 10 years, despite modest growth in the overall service territory. NYW's current capacity of its wells and reservoir systems is sufficient to meet the average daily water demand for the foreseeable future, due in part to its ongoing conservation efforts. To date, the system's extensive Catskill and Delaware River watersheds have been able to avoid the costly process of filtering the upstate water supply due to a 10-year filtration avoidance determination (FAD) granted to the city in 2007. Combined, the watersheds provide about 90% of the system's total water supply. Fitch will monitor NYW's ability to successfully renew its current FAD as the 2017 expiration date draws closer.

Annual Water Consumption

Fiscal Year	Consumption (MGD)	% Change
2003	1,232	—
2004	1,221	(0.9)
2005	1,215	(0.5)
2006	1,210	(0.4)
2007	1,218	0.7
2008	1,235	1.4
2009	1,152	(6.7)
2010	1,127	(2.2)
2011	1,152	2.2
2012	1,117	(3.0)

Source: NYCMWFA audited financials.

Sewer System

The sewer system is divided into 14 drainage areas that correspond to the 14 wastewater treatment plants within the city. Approximately 70% of the city's sewers are composed of combined sanitary/storm lines, with wastewater conveyed through 6,700 miles of sewer pipes to the treatment plants. Virtually all dry-weather flows produced in the city, averaging almost 1,300 million gallons per day, are treated at the plants.

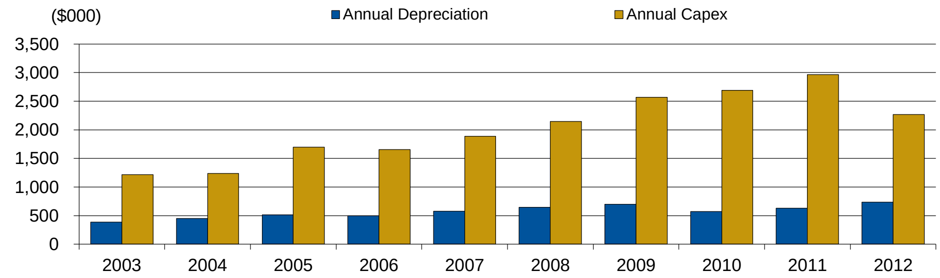
Hurricane Damage in 2012

Fitch does not expect the damage caused by Hurricane Sandy to have a material impact on the financial operations or ongoing capital program of NYW. The delivery of safe drinking water was continued during and after the October 2012 hurricane, and despite needed bypasses and overflows at certain wastewater treatment plants, officials do not expect to incur any regulatory penalties. The assessment of systemwide damage is reportedly ongoing, but the latest cost estimate includes approximately $51 million of O&M expenses and approximately $44 million of capital expenses, the vast majority of which will likely be reimbursable with Federal Emergency Management Agency funds.

Capital Needs

NYW continues to address its large CIP in what Fitch believes is a timely and efficient manner. Sophisticated capital-planning efforts include the formulation of a 10-year comprehensive capital strategy that is updated in its entirety every two years. The CIP, which covers the first five fiscal years of the 10-year forecast, is updated three times each year to reflect any adjustments in contractual commitments and other miscellaneous costs. Each update is done in conjunction with the citywide capital plan, and any changes are incorporated into NYW's multiyear financial projections. The most recent update to the CIP was completed in January 2013.

Capital Investment



Source: NYCMWFA audited financials.

The size of NYW's CIP has come down by a considerable amount compared to the prior decade, although the estimated cost of future needs remains substantial. The CIP for fiscal years 2014–2023 includes an estimated $12.2 billion in water and sewer projects, approximately $1 billion less than the fiscal years 2012–2021 capital program and down significantly from a peak of $19.5 billion projected for fiscal years 2008–2018.

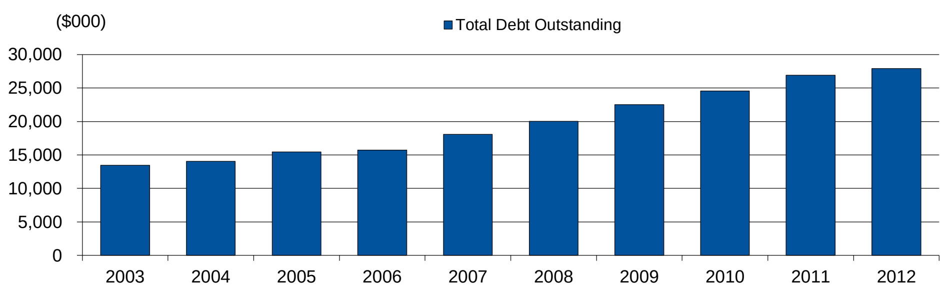
The relatively smaller CIP stems from costly regulatory projects declining to a more manageable one-fourth of total projected capital commitments compared with an average of about 77% over the prior decade. Annual capital expenditures have nearly averaged a robust 400% of annual depreciation over the past 10 years, demonstrating the high cost of meeting regulatory requirements as well as NYW's commitment to proactively maintaining system assets.

Funding for capital projects will continue to come almost entirely from long-term debt issuance and an extensive CIP program. NYW's current forecast shows additional bond issues through 2017 totaling $6.8 billion, or an annual average of approximately $1.36 billion. Projected debt issuance, while sizable, is a marked decline from the annual average of about $3.1 billion incurred over the previous five years, including a peak of $4.6 billion in fiscal 2011.

Debt Profile

Debt levels are high, and the expected escalation included in the current forecast will likely pressure NYW's rating over the medium term. Outstanding debt has doubled to $27.9 billion from $13.4 billion outstanding at the end of fiscal 2003 as a result of the considerable capital investment made during that span. Consequently, debt/net plant now exceeds 100%, and measured on a per capita basis, leverage approximates slightly more than $3,000. By comparison, Fitch's 'AA+' rating category median ratios for debt/net plant and debt per capita are 49% and $475, respectively.

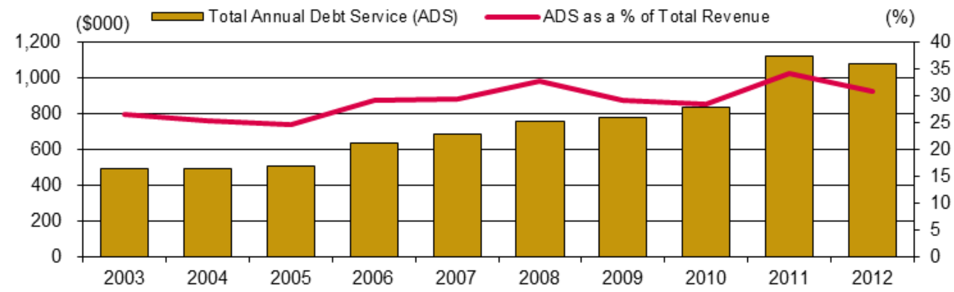
Total Debt Outstanding



Source: NYCMWFA audited financials.

Fitch expects debt levels to remain high for the foreseeable future as the scheduled payout of existing principal is projected to total approximately $1.9 billion compared to NYW's plan to borrow an estimated $6.8 billion. The authority amortizes an exceptionally low 9% and 63% of principal in 10 and 20 years, respectively, although this rate of payout is in part driven by outstanding Build America Bonds that were issued with single bullet maturities. NYW routinely issues debt with maturities beyond 30 years, which, although consistent with asset life, is a longer amortization than is typically used by utilities.

Total Annual Debt Service



Source: NYCMWFA audited financials.

NYW had $3.8 billion of variable-rate bonds outstanding at the close of fiscal 2012, equal to a manageable 14% of total debt outstanding. Management prudently limits exposure to variable-rate obligations to no more than 25% of total debt. All variable-rate bonds outstanding are backed liquidity facilities provided by a diverse pool of providers. Terms included in each liquidity facility are favorable to NYW, including manageable interest rates and the lack of term-out requirements that would accelerate principal in the event that any outstanding bonds become bank bonds. The authority's CP program is authorized at $1 billion, although only $400 million is currently outstanding.

NYW is party to four swap agreements, each with a different counterparty. The notional amount totals $601 million while the mark-to-market value at the close of fiscal 2012 was negative $122.1 million. The ability of each counterparty to terminate a swap is remote in Fitch's view, limited to bankruptcy of the authority, a payment default, or downgrade of the authority's credit rating to below 'BBB–'.

A nominal number of authority employees participate in a defined benefit pension plan and receive other post-employment benefits, resulting in a limited cost to the authority. All other personnel are covered under the city's pension plan that the authority contributes to in order to cover the cost.

Security and Covenants

Security: FGR bonds are secured by a first lien on gross revenues of NYW. The bonds currently being issued will not have a debt service reserve fund. SGR bonds are special obligations of NYW, payable solely from and secured by a subordinate lien on gross revenues of NYW.

Note interest is secured by moneys and investments in the FGR subordinated indebtedness fund, on parity with $400 million in outstanding CP notes and $19.7 billion of outstanding SGR bonds. Note principal is also secured by moneys and investments in the FGR subordinated indebtedness fund, and, ultimately, the authority pledges the sale of first resolution bonds or SGR bonds to the payment of principal on the notes. The original maturity on the notes is 1–90 days; however, NYW has the option to extend the maturity of any note by an additional 180 days and redeem notes at any time during the extension period.

Rate Covenant: Rates and charges must be set to equal 1.15x FGR ADS as well as 100% of SGR ADS, O&M expenses, and the city rental payment.

Additional Bonds Test: Additional FGR parity debt may be issued if net revenues equal 1.15x projected first resolution ADS in the next succeeding five fiscal years and 1.0x subordinate lien ADS, O&M expenses, and the city rental payment.

Additional SGR parity debt may be issued if revenues for either of the past two fiscal years were at least equal to 110% of ADS on outstanding FGR and SGR bonds and 100% of O&M and the city rental payment.

Debt Service Reserve Fund: The debt service reserve requirement for bonds issued under the first general resolution is equal to MADS.

O&M Reserve: The O&M reserve fund requirement equals two months of budgeted operating expenses.

Financial Profile

Rates and Charges

The water board is responsible for rate setting without city council approval, which Fitch considers a key credit strength. About 93% of accounts are metered, and the remaining accounts are billed a flat annual rate based on property frontage and other factors. Sewer charges have been fixed at 159% of water bills since 1992.

The water board has demonstrated its ability and willingness over the years to enact needed rate hikes, including double-digit annual increases in fiscal years 2008–2011. Despite the almost 52% rise in rates over that period, the average monthly residential bill for fiscal 2013 remains affordable at $72, equal to about 1.7% of median household income.

To keep pace with the continued growth in annual debt service, user charges were boosted again in fiscal years 2012 and 2013, albeit by a more moderate 7.5% and 7.0%, respectively. Projected rates hikes include 7.9% in fiscal years 2014 and 2015, 8.7% in fiscal 2016, and 7.5% in fiscal 2017. Despite the affordability of current rates and the recent return to more moderate annual increases, Fitch remains concerned that the longevity of the needed rate increases will eventually lead to rate fatigue as well as political pressure to hold down the cost of service provided to rate payers.

Annual Rate Increases

Fiscal Year	% Increase
2004	5.5
2005	5.5
2006	3
2007	9.4
2008	11.5
2009	14.5
2010	12.9
2011	12.9
2012	7.5
2013	7.0

Source: NYCMWFA audited financials.

Financial Performance

NYW’s strong financial management and conservative budgeting continue to yield solid operating results, despite sizable growth in debt service obligations, volatility in consumption, and subpar collection rates.

Financial results continued to outperform budgeted expectations in fiscal 2012, despite a larger-than-forecast decline in consumption of about 2.3% that partially offset the adopted 7.5% rate hike. Consequently, year-end debt service coverage from net operating revenues improved to 4.5x and 1.8x on FGR and SGR debt service (7.5x and 3.1x reflecting the gross lien), respectively, compared to 3.2x and 1.5x in fiscal 2011.

Liquidity has steadily grown in recent years to a more acceptable level. Unrestricted cash and investments together with O&M reserves have equaled a healthy average of 125 days cash on hand since 2008. The authority's prudent practice of carrying forward and applying any operating surplus generated in the prior year to the payment of debt service in the coming fiscal year prevents the build-up of more robust cash balances, although Fitch continues to view the strategy favorably.

The net surplus generated in fiscal 2012, measured on a cash basis, totaled $498 million. Results through the first seven months of the current fiscal year are positive, with year-to-date revenues reportedly up by almost 3% compared to the adopted budget, despite little change in consumption through the first seven months.

Historical Financial Summary

($000, Audited Fiscal Years Ended June 30)

	2008	2009	2010	2011	2012
Balance Sheet					
Unrestricted Cash and Investments	13,766	2,605	6,142	14,875	5,460
Accounts Receivable	372,300	433,431	542,472	614,322	727,869
Other Current Unrestricted Assets	434,647	498,176	520,681	599,556	705,303
Available Restricted Cash and Investments[a]	409,568	481,192	430,974	563,244	705,276
Current Liabilities Payable from Unrestricted Assets	(1,759,010)	(2,037,362)	(1,556,141)	(1,345,351)	(1,360,745)
Net Working Capital	271,271	19,996	(55,872)	446,646	783,163
Net Fixed Assets	19,347,150	21,139,238	23,016,469	24,988,836	26,474,776
Net Long-Term Debt Outstanding	20,018,937	22,534,797	24,577,715	26,908,869	27,926,870
Operating Statement					
Operating Revenues	2,103,287	2,448,567	2,758,073	3,068,306	3,236,474
Non-Operating Revenues	213,126	207,830	193,870	219,299	245,177
Gross Revenues	**2,316,413**	**2,656,397**	**2,951,943**	**3,287,605**	**3,481,651**
Operating Expenses (Excluding Depreciation)	(1,364,466)	(1,534,909)	(1,884,124)	(1,515,090)	(1,522,795)
Depreciation	(646,377)	(696,345)	(574,483)	(628,339)	(733,425)
Operating Income	**305,570**	**425,143**	**493,336**	**1,144,176**	**1,225,431**
Net Revenues Available for Debt Service[b]	951,947	1,121,488	1,067,819	1,772,515	1,958,856
Senior Lien Debt Service Requirements	529,100	513,900	500,600	551,800	550,400
Total Debt Service Requirements	758,418	780,006	829,265	1,157,700	1,335,300
Financial Statistics					
Senior Lien Debt Service Coverage (x)	1.8	2.2	2.1	3.2	3.6
Total Debt Service Coverage (x)	1.3	1.4	1.3	1.5	1.5
Days Cash on Hand	113	115	85	139	170
Days Working Capital	73	5	(11)	108	188
Debt to Net Plant (%)	103	107	107	108	105
Outstanding Long-Term Debt per Capita ($)	2,150	2,407	2,679	2,931	3,021
Operating Margin (%)[c]	35	37	32	51	53

[a]Includes the operation and maintenance reserve and the revenue fund reserve. [b]Equals gross revenues less operating expenses. [c]Equals operating revenues less operating expenses divided by operating revenues. Note: Numbers may not add due to rounding.

Source: NYCMWFA audited financials.

Financial projections through fiscal 2017 are based on what Fitch believes to be reasonable assumptions. The forecast assumes the continuation of moderately sized rate hikes and incorporates sizable annual debt offerings, 3% yearly increases in salary and wage adjustments, and a 1.5% decline in consumption in fiscal years 2014 and 2015 followed by a 2% drop in 2016 and 2017. As a result, all-in DSC from net revenues is projected to remain at a satisfactory level of about 1.6x through the current planning period.

Projected Financial Summary

($000, Fiscal Years Ending June 30)

	2013[a]	**2014[a]**	**2015[a]**	**2016[a]**	**2017[a]**
Operating Statement					
Total Operating Revenues	3,350,200	3,565,500	3,838,300	4,101,300	4,357,800
Operating Expenses (Excluding Depreciation)	1,365,300	1,413,900	1,476,700	1,523,900	1,574,900
Net Revenues Available for Debt Service	**1,984,900**	**2,151,600**	**2,361,600**	**2,577,400**	**2,782,900**
Senior Lien Debt Service Requirements	403,600	452,400	524,400	478,100	529,000
Total Debt Service Requirements	1,155,400	1,338,400	1,497,200	1,620,500	1,651,500
Financial Statistics					
Senior Lien Debt Service Coverage (x)	4.9	4.8	4.5	5.4	5.3
Total Debt Service Coverage (x)	1.7	1.6	1.6	1.6	1.7

[a]Projected. Note: Numbers may not add due to rounding.

The ratings above were solicited by, or on behalf of, the issuer, and therefore, Fitch has been compensated for the provision of the ratings.