



FY 2019 Water Rate Proposal to the New York City Water Board

April 27, 2018

WATER SUPPLY

- Deliver one billion gallons of water to nine million New Yorkers every day and maintain 7,000 miles of water mains
- Protect our 2,000 square mile watershed, including 19 reservoirs and three controlled lakes



WASTEWATER TREATMENT

- Treat 1.2 billion gallons of wastewater each day
- Operate and maintain 14 plants, 96 pumping stations, and 7,500 miles of sewers

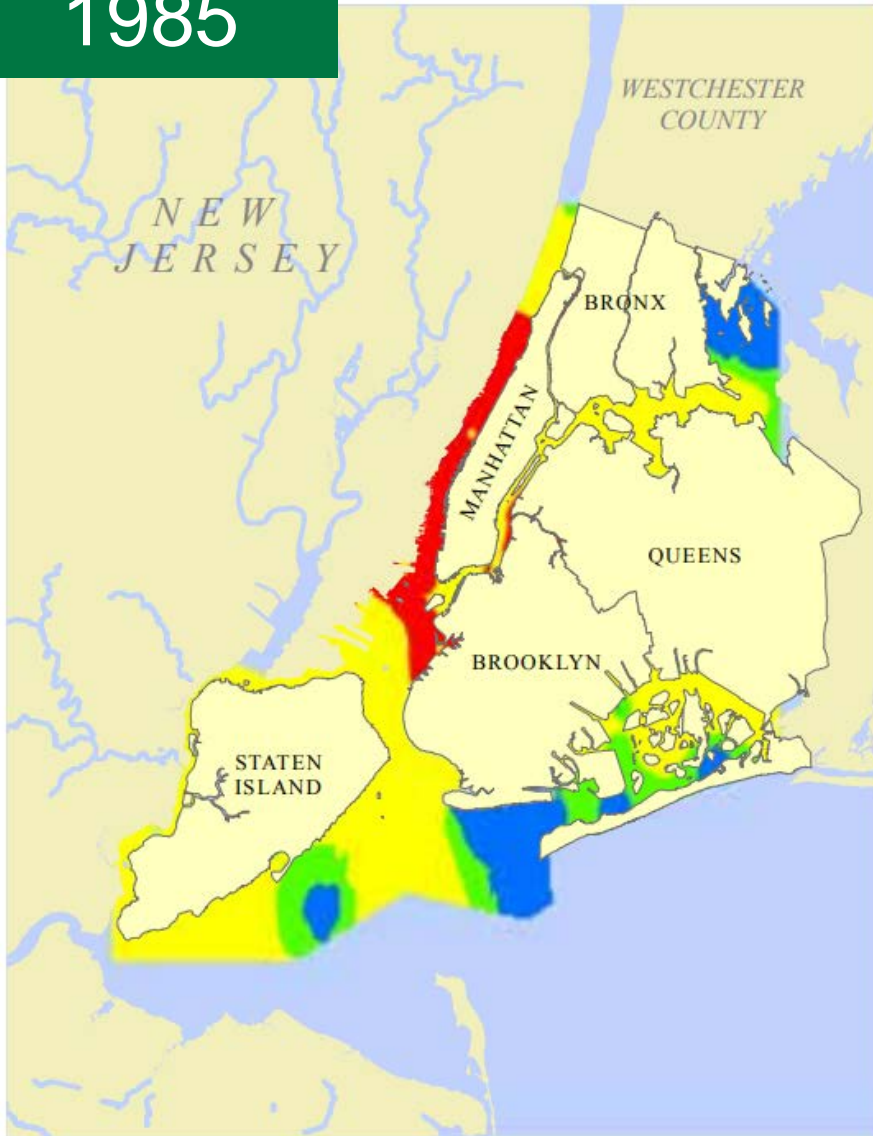


- **DEP annually tests tens of thousands of water samples for multiple contamination parameters.**
 - In 2017, no water quality issues were uncovered through the testing procedures
- **Physical and chemical parameters:**
 - DEP tested for 39 parameters, none exceeded the allowable level
- **Organic parameters:**
 - DEP tested for 14 parameters, none exceeded the allowable level
- **Microbial parameters:**
 - DEP tested for 3 parameters, none exceeded the allowable level



Major Progress on Harbor Water Quality

1985



Today



Operations and Maintenance Overview

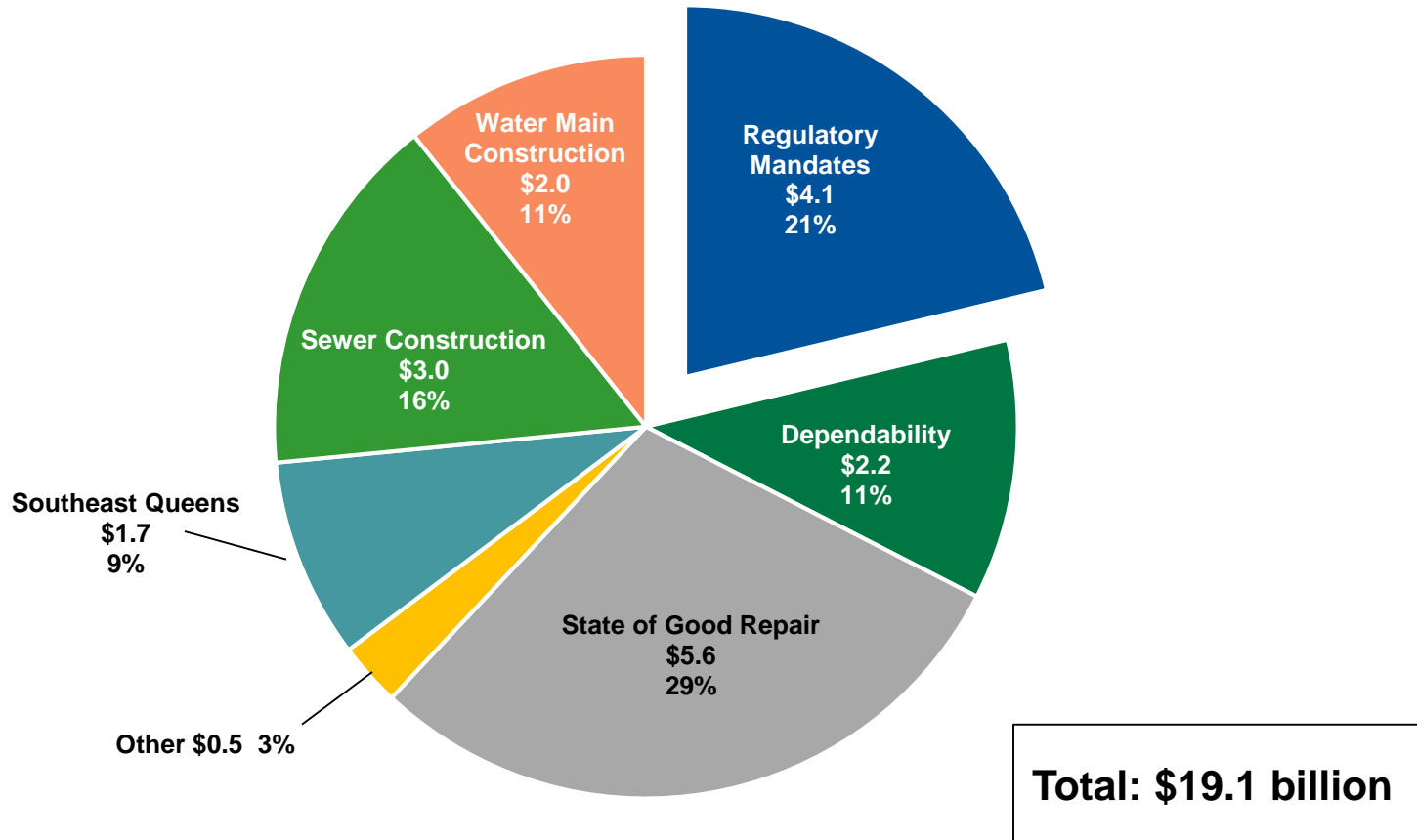
- The operations and maintenance budget funds DEP's non-capital asset budget
- DEP's operating footprint spans all parts of the five boroughs and extensive portions of the City's three watersheds, across eight counties north of the City
- Major expenses: electricity, chemicals, personnel expenses, and property taxes on watershed lands located outside of the City
- New in FY 2019: \$18 million new investment each into water supply and wastewater treatment operating divisions; \$9 million investment in DEP's engineering design organization

Expense Category	Outlook FY 2018	Preliminary FY 2019
Water operations and maintenance	\$596	\$639
Wastewater operations and maintenance	\$807	\$828
Total operations and maintenance	\$1,403	\$1,467

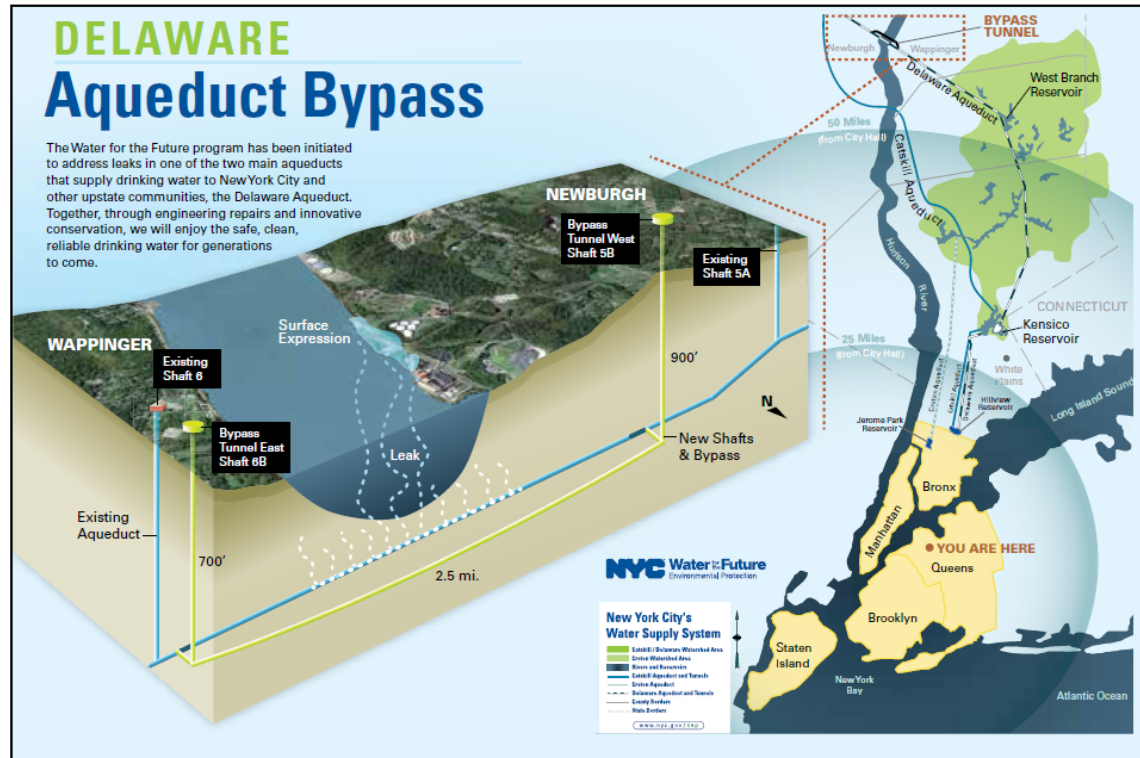


Capital Investment Plan

FY 2018 – FY 2027
(in billions)



Delaware Aqueduct Repair



- DEP began repairing sections of the Delaware Aqueduct in 2017, to repair a 15-35 million gallons per day leak.
- The work is projected to cost \$1.2 billion.
- DEP is currently constructing a 2.5 mile bypass tunnel to create an uninterrupted water supply when the main tunnel is closed in October 2022 for 5-8 months – no reduction in water delivery to NYC is anticipated

Green Infrastructure

- DEP is constructing green infrastructure in Brooklyn, Queens, and the Bronx.
- To date, DEP has:
 - Constructed more than 4,000 green infrastructure assets
 - Committed more than \$480 million to Green Infrastructure projects



Public Streets



Public Schools



Public Housing

- DEP has developed a four-pronged program to improve chronic flooding conditions in Southeast Queens:
 - Construct quick fixes to bring near term flooding relief
 - Build neighborhood sewer projects
 - Create future capacity by investing in large trunk sewers
 - Evaluate opportunities to reduce groundwater flooding
- \$1.7 billion for the program included in current Capital Investment Plan



- Brooklyn-Queens leg is activation ready as of 2017
- Work on remaining project stages is underway, with mid-2020s completion target
- Completed portion is pressurized and can serve as an emergency backup, if required
- \$660 million is allocated to Stage 2 of Tunnel #3 in the current Capital Investment Plan



Long-Term Control Plans

- Most of New York City is served by a combined sewer system, which carries wastewater and rainfall
- During heavy rainfall, parts of the sewer system are overwhelmed, resulting in the release of wastewater mixed with rainfall into rivers and other water bodies
- DEP is creating Long-Term Control plans (LTCPs) to manage the overflow; the plans are subject to approval by the NY State Department of Environmental Conservation
- \$1.9 billion is allocated in the current Capital Investment Plan to fund LTCPs

Affected Waterbodies

Alley Creek	Gowanus Canal
Westchester Creek	Jamaica Tributaries & Bay
Hutchinson River	Coney Island Creek
Flushing Creek	Flushing Bay
Bronx River	Newtown Creek
Citywide (East River and open waters)	



Customer Service Highlights

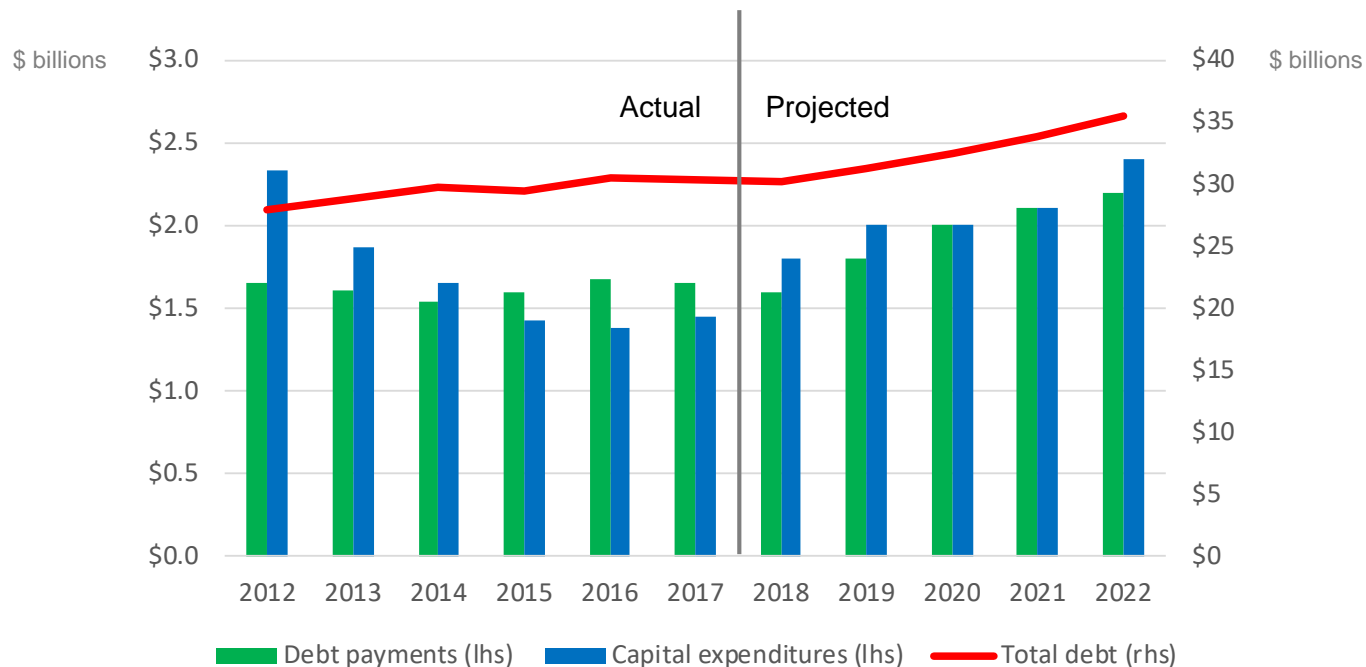
- Major investment in billing software upgrade and business process refinements
- Continued reduction in customer billing disputes, now down by 74% since 2009
- Average call center wait time less than 1 minute
- Estimated bills from 17% of bills issued in 2009, to 3% of bills issued in 2017
- DEP recognized by J.D. Power for top customer satisfaction among its utility peers in 2017

Operations Highlights

- Water main breaks per 100 miles of main down 10%; \$2.2 billion budgeted for water main repair and replacement within New York City
- Catch basin complaints down 16% year-over-year
- Street cave-in complaints down 9% year-over-year, with average response time down by 15%

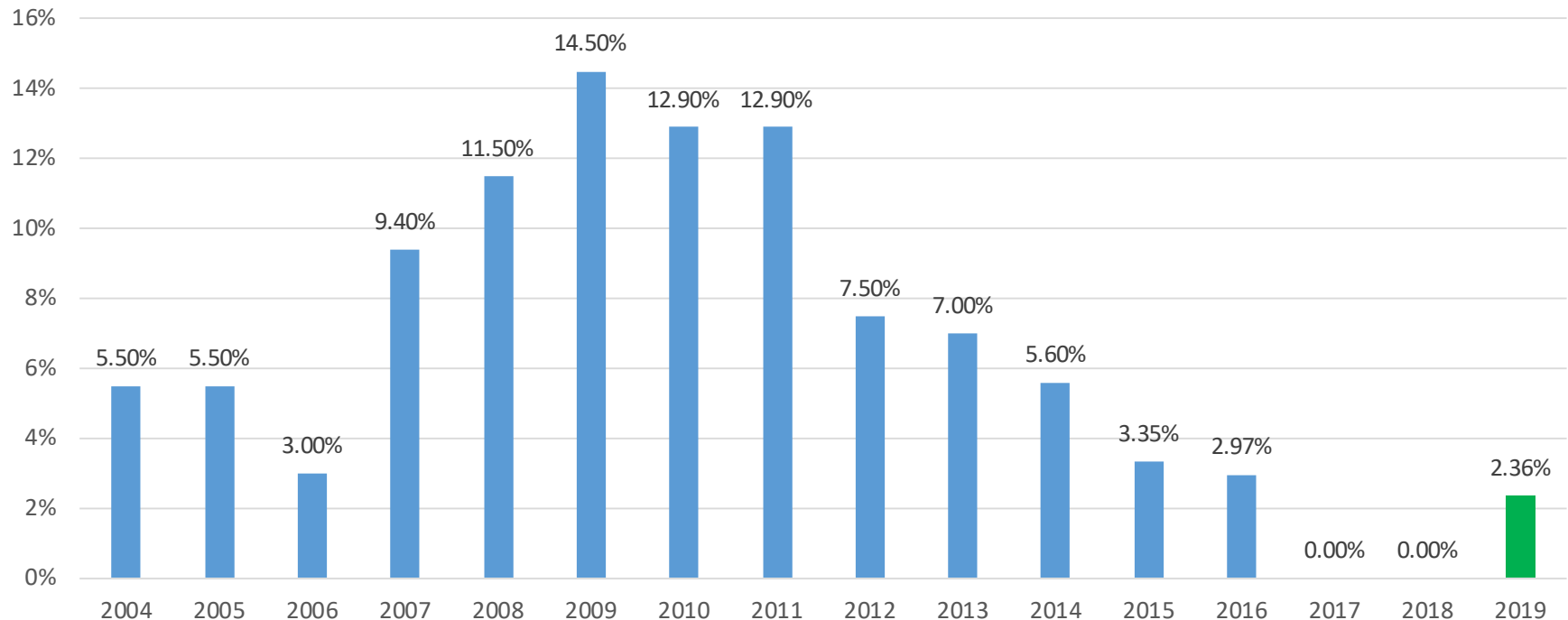
Growing Investment Needs and Debt

- Most DEP capital projects are financed with tax-exempt municipal bonds
- Total debt outstanding: \$31.0 billion
- The interest rate environment influences the system's capital project costs, and higher interest rates on debt would lead to higher system costs
- Principal and interest on debt are paid out of cash from water and sewer bills



FY 2019 Rate Proposal

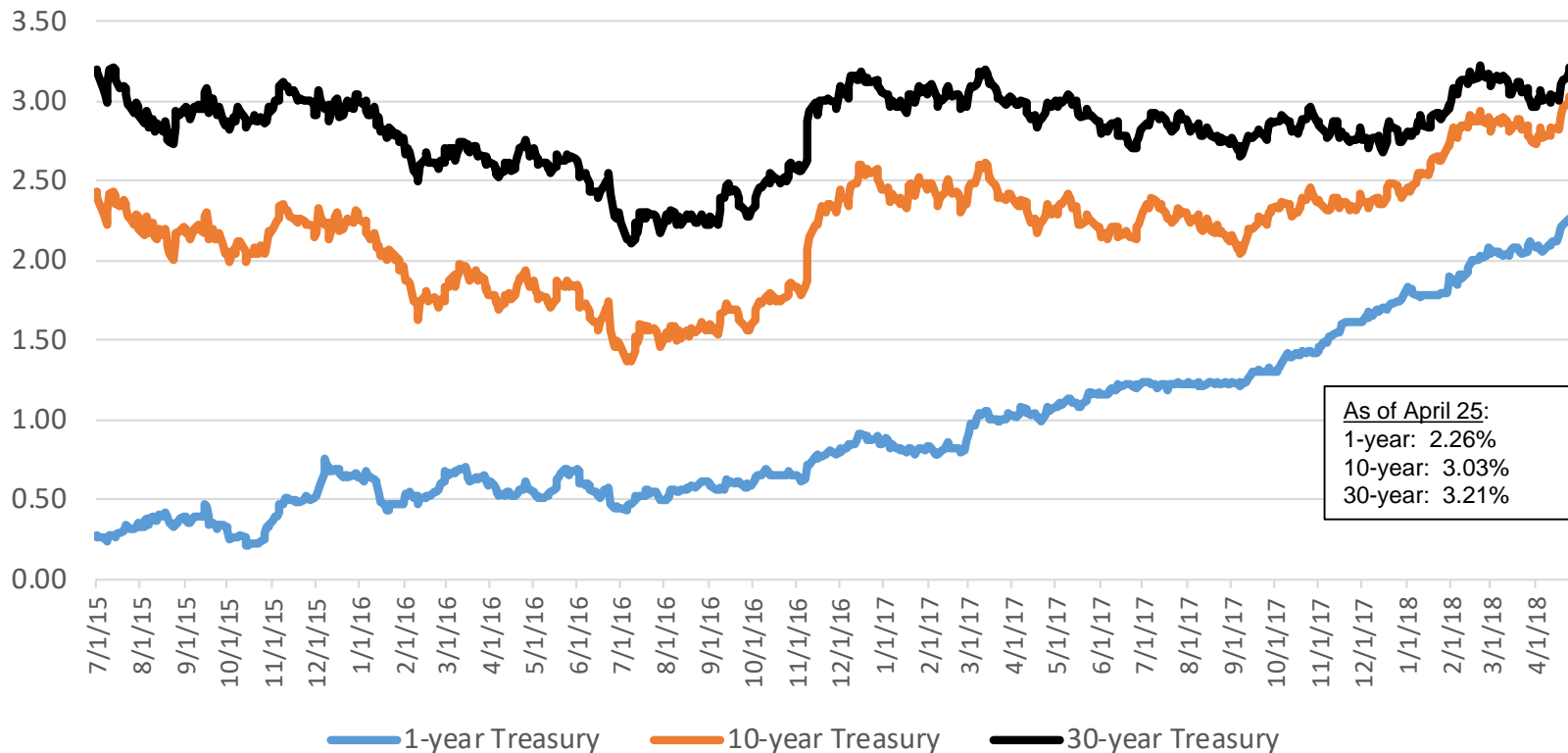
- Proposing a **2.36%** increase to New York City water and sewer rates
- Typical customer monthly bill impact: **\$1.35 - \$2.17**



- **How was 2.36% arrived at as the proposed rate increase?**
 - Water Board rates are based on the cost of providing utility services and servicing outstanding debts that relate to water and wastewater assets
 - A rate increase will:
 - Secure funding for ongoing need to invest in system assets
 - Buffer against risk in a changing interest rate environment
 - Provide for cash flows and debt service coverage that support strong credit ratings and low borrowing costs
 - Satisfy system objective of moderating future rate increases
- **Lower than average increase in last 15-years, supported by:**
 - DEP expense growth comparable to New York City rate of general inflation, and lower than construction industry inflation
 - Interest cost and debt management by Water Authority
 - Ongoing benefit from Mayor's elimination of the rental payment

A Changing Interest Rate Environment

- Short-term U.S. Treasury rates are increasing, leading to higher costs on the Water Authority's \$5 billion variable rate debt portfolio
- May presage rising long-term rates and inflation
- The water and sewer system has \$31.0 billion of outstanding debt, and expects to issue \$7.9 billion of debt over the next four years



Homeowner Assistance Credit

\$115 credit for low income, senior, and disabled households

Multifamily Assistance Credit

\$250 credit for affordable multifamily properties

Minimum Charge Freeze

0% increase to water rate charged to low usage properties, remaining at \$0.49 per day

Leak Repair Credit

Partial credit for excess charges for repaired leaks

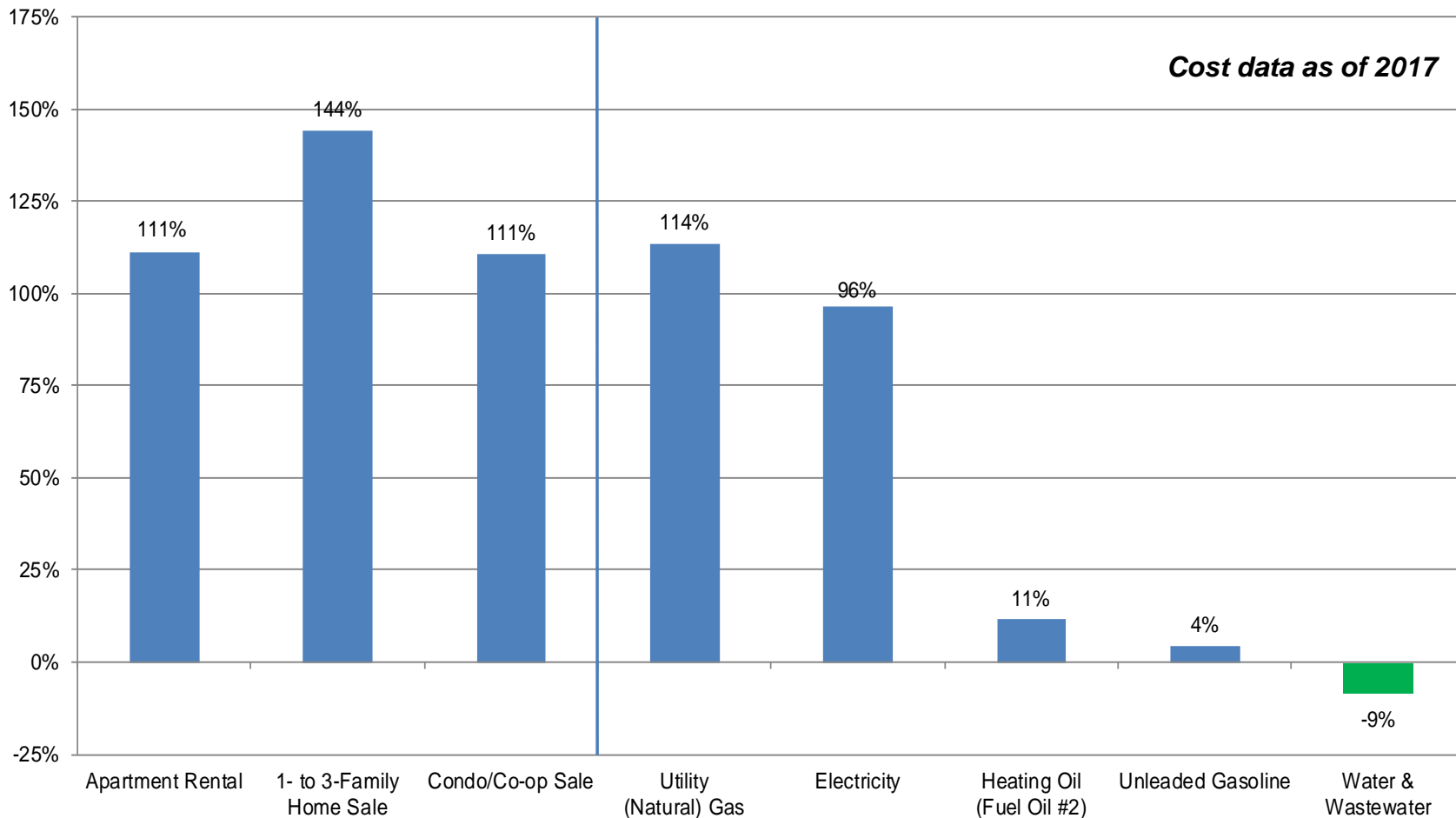
Typical Customer Monthly Bill Impact \$1.35 - \$2.17

Water and Sewer Charges	FY 2016 – FY 2018	2.36% FY 2019	Monthly Impact
Average Annual Single Family Charge (80,000 gal)	\$1,055	\$1,081	\$2.17
Average Annual Multi-family Metered Charge (52,000 gal)	\$686	\$702	\$1.35
Multi-family Conservation Program (Per Residential Unit)	\$1,005	\$1,029	\$1.98
Minimum charge properties	\$463	\$463	\$0.00

- **Minimum charge for water frozen at \$0.49 for fifth consecutive year**
 - Applies to customers with low water consumption
 - Usage threshold: less than ~94 gallons per day
 - Bills are calculated using a fixed water rate – metered rates are not used
 - Fixed water rate will remain at \$0.49 per day, and combined water and sewer rate of \$1.27 per day
 - Total annual water and sewer bill \$463

Difference in Consumer Costs, NYC vs. U.S.

Cost data as of 2017



	(average monthly rent)	(median per sale)	(median per sale)	(average per year)	(average per year; 6,000 kwh)	(average per gallon)	(average per gallon)	(average per year; 80,000 gallons)
NYC	\$2,460	\$620,000	\$500,000	\$1,290	\$1,603	\$3.01	\$2.57	\$1,055
U.S. Cities	\$1,166	\$254,000	\$237,200	\$604	\$816	\$2.70	\$2.46	\$1,156

Source: Apartment List (apartment rental); The Real Estate Board of New York and National Association of Realtors (condo/co-op and 1-3 family home sale); Consolidated Edison and U.S. Bureau of Labor Statistics "BLS" (electricity); National Grid and American Gas Association (natural gas); New York State Energy Research and Development Authority and U.S. BLS (heating oil); U.S. BLS (gasoline); NYC FY 2018 Water and Wastewater Rate Report (water & wastewater)

NYC Charges Are Below Other Large Cities

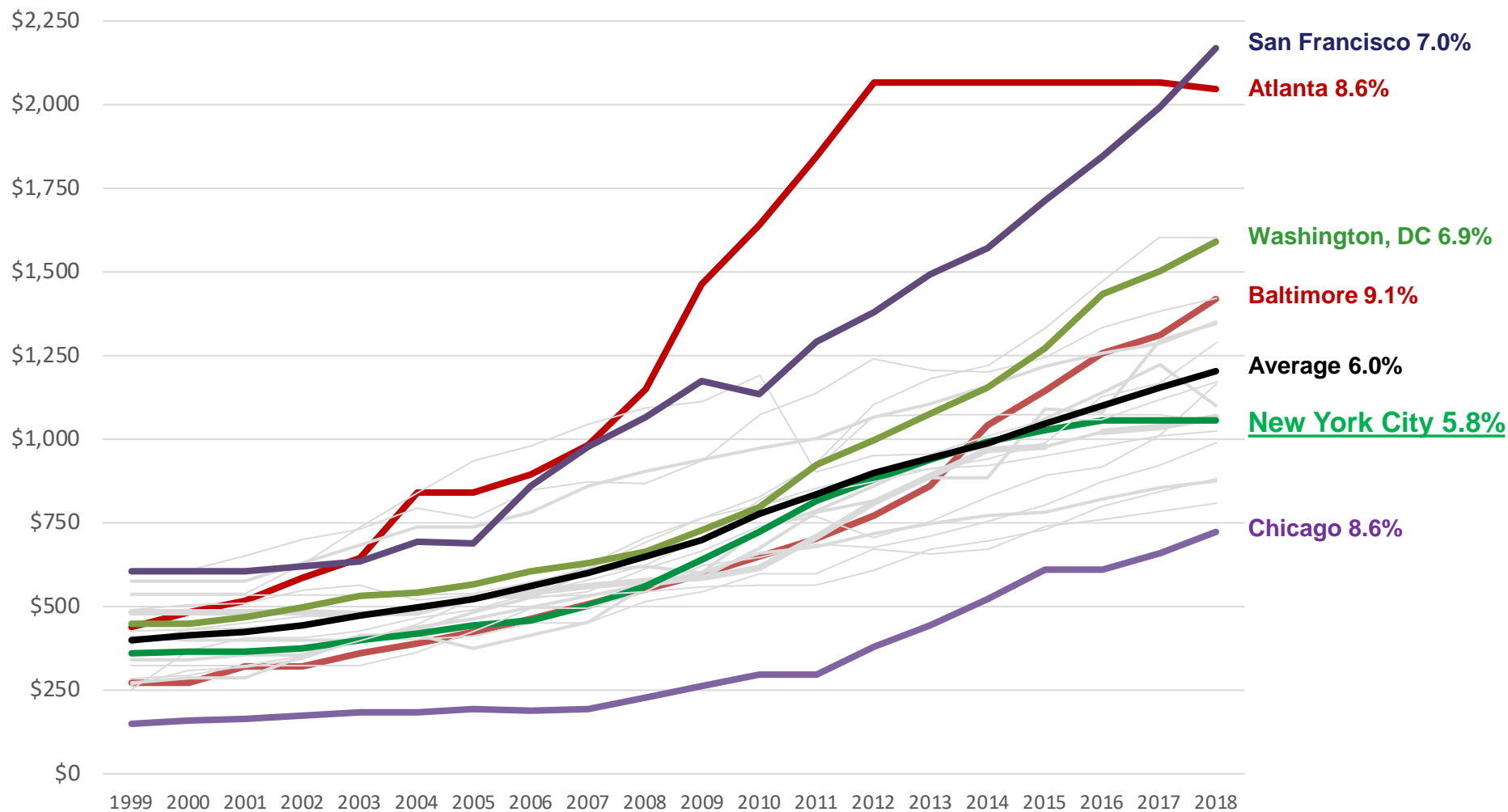
	New York City	30 Large City Average ¹	NYC vs. Average
2013	\$939	\$943	-0.4%
2014	\$992	\$987	0.5%
2015	\$1,025	\$1,048	-2.2%
2016	\$1,055	\$1,101	-4.2%
2017	\$1,055	\$1,156	-8.7%
2018	\$1,081	\$1,205	-10.4%

¹ Based on consumption of 80,000 gallons per year and rates in effect as of February 2018

Rate Trends in Major Cities

**Average annual growth
1999 - 2018**

Average annual single family charge in dollars



Preliminary Financial Outlook

Million of dollars (with percent of total within column)	Outlook FY 2018	Preliminary FY 2019	Comment
Water Authority funds for debt service plus funds for cash capital investment or defeasance of existing debt	\$2,162 (58.9%)	\$2,225 (58.5%)	Funding of ongoing capital program and balance sheet management
DEP operations and maintenance	\$1,403 (38.2%)	\$1,467 (38.6%)	Investments include funds for operating divisions, engineering organization, and customer service
Water Board and Water Authority direct expenses	\$107 (2.9%)	\$110 (2.9%)	No significant changes anticipated
Water Board revenue requirement	\$3,672 (100%)	\$3,802 (100%)	

Source:

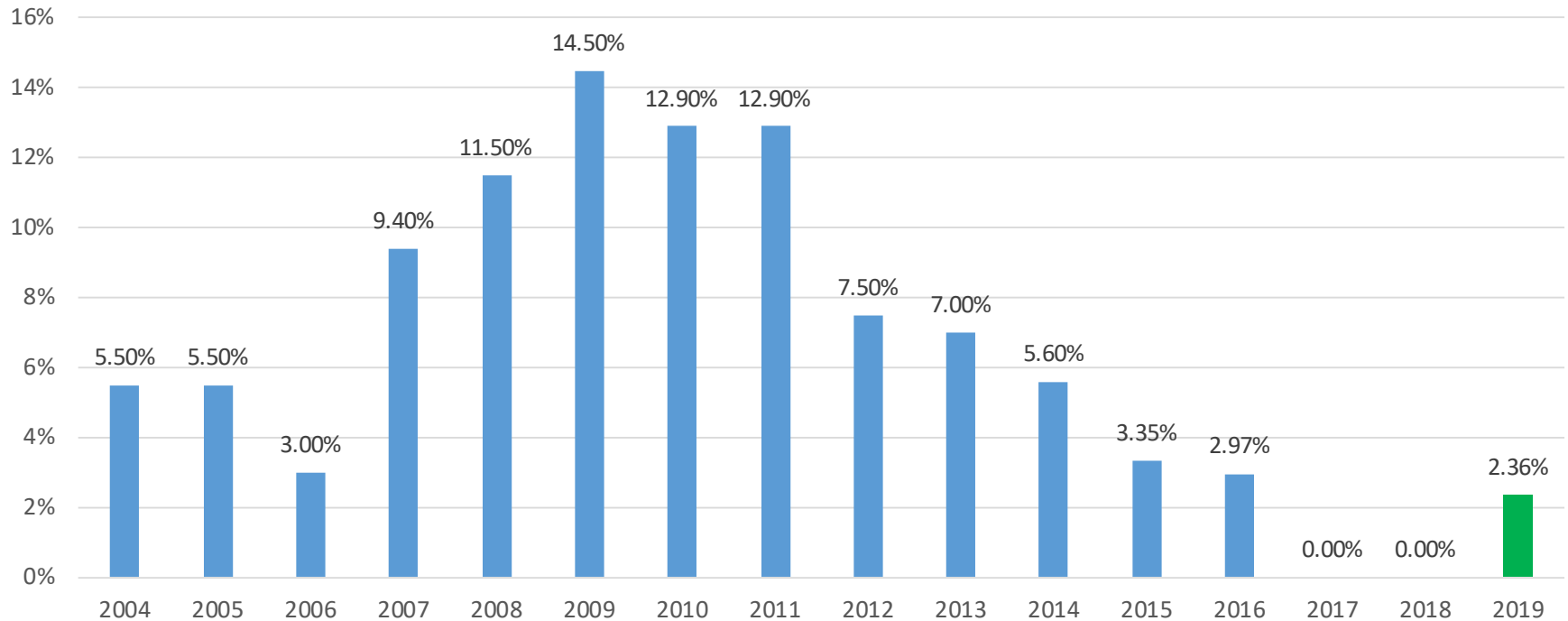
- Water Authority: FY 2018 per Water Board budget as amended January 26, 2018; FY 2019 per Water Authority budget adopted March 27, 2018
- DEP O&M: FY 2018 and FY 2019 per DEP budget projection as of March 16, 2018
- Water Authority direct expenses: FY 2018 per Water Board budget amended January 26, 2018; FY 2019 per Water Authority budget adopted March 27, 2018
- Water Board budget: FY 2018 per Water Board budget amended January 26, 2018; FY 2019 per system official statement dated April 5, 2018

- **Default term of third-party letter of authorization (LOA)**
 - LOAs will be valid for two years, unless the customer specifies a different amount of time (current rule provides for one year)
 - Customers can revoke an LOA at any time by notifying DEP (no change to current policy)
 - This policy update will reduce the paperwork burden on customers and their advisors

- The rate schedule's current "innocent purchaser" policy will be divided into two different policies:
- **"Title Read Letter"**: For requests made prior to an arms-length property transfer:
 - DEP will issue a title read letter stating an amount due, which will remain on the account until paid
 - Letter valid for 60 days
 - DEP will not later adjust the charges incurred prior to issuing the title read letter
- **"Off-Cycle Account Reconciliation Letter"**: For all other requests:
 - DEP will issue a letter showing the amount due as of the date
 - Amount stays on the account until paid
 - DEP reserves the right to adjust charges incurred prior to issuing the title read letter

FY 2019 Rate Proposal Recap

- Proposing **2.36%** rate increase
- Typical customer's bill impact: \$1.35 - \$2.17 per month increase



Borough Rate Hearing Schedule

Borough	Date	Location	Time
Brooklyn	May 21	St. Francis College 180 Remsen Street, Founders Hall	7:00 pm
Queens	May 22	John F. Kennedy, Jr. School (P721Q) 57-12 94 th Street	7:00 pm
Bronx	May 29	Hostos Community College Savoy Building, 2 nd Floor 120 East 149 th Street	7:00 pm
Staten Island	May 30	Joan and Alan Bernikow JCC 1466 Manor Road	7:00 pm
Manhattan	May 31	Spector Hall 22 Reade Street	10:00 am



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