Continuing Disclosure Report

Introduction

This 2021 Continuing Disclosure Report, prepared in September 2021 (the "2021 CDR" or the "2021 Report"), provides information to supplement and update information presented in the Feasibility Report of the Consulting Engineer and Rate Consultant, prepared in August 2005 (the "2005 Report"), included in the Official Statement for the 2005 Authority Bonds, the Feasibility Report prepared in June 2013, included in the Official Statement for the 2013 Bonds (the "2013 Report"), the Feasibility Report prepared in November 2016, included in the Official Statement for the 2016 Bonds (the "2016 Report"), the 2007 Continuing Disclosure Report prepared in June 2007, the 2008 Continuing Disclosure Report prepared in June 2008, the 2009 Continuing Disclosure Report prepared in July 2009, the 2010 Continuing Disclosure Report prepared in July 2010, the 2011 Continuing Disclosure Report prepared in June 2011, the 2012 Continuing Disclosure Report prepared in June 2012, the 2014 Continuing Disclosure Report prepared in July 2014, the 2015 Continuing Disclosure Report prepared in July 2015, the 2016 Continuing Disclosure Report prepared in July 2016, the 2017 Continuing Disclosure Report prepared in September 2017, the 2018 Continuing Disclosure Report prepared in September 2018, the 2019 Continuing Disclosure Report prepared in September 2019 and the 2020 Continuing Disclosure Report prepared in September 2020 collectively referred to as the "Prior Reports". Except where noted, the table numbers and titles used in the 2021 CDR correspond to the table numbers and titles in the Prior Reports. In matters presented in the Prior Reports where we have been advised by the Board that no material change has occurred since the preparation of the Prior Reports, no additional information is presented in this 2021 CDR. Throughout the 2021 CDR, references are made to the Water, Wastewater and Stormwater System of the Board (the "System") which serves the City of Niagara Falls, NY (the "City") and provides water service to small portions of adjacent communities.

Board and Authority Members

Mr. Nicholas J. Forster became the Chairman of the Board in March 2021. Other members of the Board include Ms. Colleen Larkin, Ms. Gretchen Leffler, Ms. Renae Kimble and Mr. Michael Asklar.

Mr. Jason Murgia is the Chairperson of the Authority (having previously been a member of the Authority). Mr. Daniel Weiss is the Vice Chairman of the Authority, and Mr. Michael Monaco is its third member.

Organization and Staff of the Board

Dr. Abderrahman Zehraoui was appointed as Executive Director of the Niagara Falls Water Board in June 2021. Dr. Zehraoui holds a Philosophical Doctorate (Ph.D) degree in Environmental Engineering from University of Cincinnati, a Masters of Sciences degree in Management of Complex Systems from Pavia University (Pavia, Italy) as well as Bachelor of Science degree from University Mohammed V (Rabat, Morocco). Prior to his appointment as Executive Director, Dr. Zehraoui served as the Director of Utilities at the City of East Chicago, IN. He has more than 25 years of water/wastewater treatment system experience.

The table presented below illustrates the staffing levels for the System as of June 30, 2021.

Table 1 – System Staffing

	Staff Positions *
Water Facilities Division	39.0
Wastewater Facilities Division	54.0
Total System	93.0

* Denotes filled positions. Authority and Board members, as well as, personnel providing support services are not included in the above figures. The above totals also do not include staff members that are currently on unpaid leave.

The City provided certain support services to the System in the form of engineering, legal, billing and collection, accounting and fleet maintenance services during the initial years of the Board's operations. Under the terms of the Operations Agreement between the City and the Board, the Board notified the City that it wished to assume direct responsibility for the support services provided by the City. For example, the Board installed a new financial management system and began billing customer accounts during 2008. The City continues to work with the Board in providing collection services for accounts and tax collection services. Under the terms of the agreement, the Board will pay the City approximately $90,000 per year for the services it receives.

Water Treatment

The average daily output from the Board's water treatment plant for 2017 through 2020 is shown in the following table.

Table 2 – Average Daily Production of Treated Water

Year	2017	2018	2019	2020
Flow (MGD)	20.06	21.35	21.53	22.57

Water Distribution System

The distribution system consists of approximately 260 miles of various diameter water mains, 2,287 fire hydrants, over 5,000 valves, two elevated water storage tanks and over 19,000 metered services. The distribution system is a single pressure system. The Water System services the City and several "out-of-town" customers adjoining the City. The Water System also has two major inter-municipal interconnections with the Niagara County Water District that allow for the purchase/sale of water in either direction for emergency or shut down maintenance events.

Treated water is pumped from the water treatment plant to the Water System's 260 miles of pipe and also to the 56th Street elevated water storage tank that has a capacity of 2 million gallons ("mg"). The elevated tank provides added reliability to the Water System, as it will transparently pick up full system demand if the high-lift pump station is shutdown. A second 2 mg elevated storage tank at Beech Avenue is currently shut down and isolated from the Water System. Demolition and replacement of the Beech Avenue water tank is included in the CIP for 2018 and 2019. The Beech Avenue water tank is being used to generate revenues through the lease of space for cellular antennas. The water distribution system utilizes various materials of construction including lined and unlined cast or ductile iron, polyvinyl chloride (PVC), reinforced concrete pressure pipe (RCPP), and high density polyethylene (HDPE) varying in size from 6 inch to 30 inch.

The following tables provide information on the water mains and the approximate age of the pipes comprising the water distribution system:

Table 3 – Water Distribution System Piping

Water Main	Material Type	Length (ft)
6-inch	PVC	1,500
8-inch	PVC	2,610
10-inch	PVC	700
12-inch	Asbestos Cement	5,500
20-inch	Cast/Ductile Iron	7,800
24-inch	RCPP	5,600
30-inch	RCPP	13,370
36-inch	RCPP	16,810
42-inch	RCPP	7,850
2-inch	Cast/Ductile Iron	700
4-inch	Cast/Ductile Iron	95,030
6-inch	Cast/Ductile Iron	596,540
8-inch	Cast/Ductile Iron	239,680
10-inch	Cast/Ductile Iron	121,455
12-inch	Cast/Ductile Iron	102,045
14-inch	HDPE	6,540
16-inch	Cast/Ductile Iron	59,660
20-inch	Cast/Ductile Iron	46,730
24-inch	Cast/Ductile Iron	26,230
30-inch	Cast/Ductile Iron	9,060
	Total	1,365,410

Table 4 – Niagara Falls Water Distribution System
Approximate Age of Pipe

Age	Feet	Percent
1890-1910	65,802	5%
1911-1930	515,179	38%
1931-1950	288,940	21%
1951-1970	251,682	18%
1971-1990	144,121	11%
1991-2016	101,772	7%
Total	1,367,496	100%

Unbilled Water

In Prior Reports, this section was described as unaccounted-for water. The term unaccounted-for water is redefined below and a definition is provided for unbilled water. The Water Facilities Division calculates the percentage of unbilled water based on the difference in quantity between the treated water pumped into the Water System and the number of billed units provided to customers, divided by the treated water pumped. Unbilled water includes both known uses that are not measured or billed (e.g., water used in firefighting and hydrant flushing) and unaccounted-for water such as losses due to leaks in the System. Unbilled water has been 68% percent or more of treated water for the last five years, a percentage that is significantly higher than typical industry averages. This percentage has been relatively the same since 2017. The table presented below shows the average percentages of unbilled water by year.

Table 5 – Unbilled Water

Year	Percent of Treated Water
2016	69%
2017	68%
2018	68%
2019	71%
2020	72%

The marginal cost to the Board of treating and pumping water that is not sold is relatively low. Notwithstanding the absence of a significant cost incentive, the CIP for the Water System is focused primarily on improvements to the distribution system that, over time, together with the increased focus on identifying lost water should result in a decline in unaccounted-for water. In 2012, and 2013 through 2015 the Board embarked on an aggressive meter replacement program. In 2012 a pilot study was performed that included replacement of 450 meters. In 2013 through 2015, 16,000 residential and commercial meters have been replaced. The new meters are auto-read (drive by),

which will reduce labor necessary to obtain meter readings and free up personnel for more important tasks. The objective of the meter replacement program is to improve the accuracy of the water meters as metered water use is the means by which revenue is generated. Based on the experiences of other water utilities in similar situations, the implementation of these programs should lead to a reduction in unaccounted-for water.

To improve the water distribution system, the NFWB has undertaken a program to map and hydraulically model the existing water distribution system. The hydraulic model is being used to identify areas where water pressure is insufficient and to plan for future upgrades to the distribution system. Additionally, an aggressive program has been undertaken by the NFWB to repair or replace all out-of-service fire hydrants. The objective is to return all fire hydrants to a fully functional status. Many of these hydrants that are being replaced were also a source of water leakage. During 2017 and 2018, 75 fire hydrants have been replaced or repaired. This number has increased to approximately 100 hydrants in 2019. In 2020, 100 hydrants were replaced and 21 repaired. As of June 30, 2021; 59 hydrants were replaced and 19 were repaired during 2021. As of the date of this report there are no known non-functional fire hydrants.

Water System Staffing

The following table illustrates the number of personnel in each of the seven (7) sections of the Water System as of June 30, 2021.

Table 6 – Water System Staffing

Section	Staff Positions
Laboratory	3.0
Information Technology	3.0
Engineering	3.0
Purification Operations	7.0
Inside Water Maintenance	8.0
Outside Water Maintenance	10.0
Meter Shop	5.0
Total Water System Staff	39.0

We believe that the Water System is adequately staffed and key management personnel have the qualifications and experience commensurate with their responsibilities.

Wastewater Treatment

The table on the following page identifies the historical flows through the wastewater treatment plant ("WWTP").

Table 7 – Average Daily Wastewater Volume Treated

Year	2017	2018	2019	2020
Flow (MGD)	29.28	26.30	26.78	24.10

Wastewater Facilities

The facilities of the Wastewater System include a wastewater treatment plant ("WWTP"), 8 pumping stations, over 255 miles of combined and separate sanitary sewer lines and 6 combined sewer overflow points. The Wastewater System uses a collection system of lateral, collection and trunk sewers that convey wastewater to the WWTP. The majority of the service area utilizes combined sewers that carry both wastewater and storm water in one pipe. Pipe sizes range from 8 inches to 72 inches in diameter. The Wastewater System also includes approximately 15 miles of large conveyance structures ranging in size from 36 inches to 32 feet in diameter (tunnels).

The eastern portion of the City has a separated sanitary system and storm sewer system. This portion of the Wastewater System uses pumps to alleviate sanitary sewer overflows that occur during certain wet weather events. This procedure complies with the terms of the Board's permit from the DEC. The pumping stations of the Board are listed in the table presented below.

Table 8 – Pump Station and Bypass Station Capacities

Lift Station	Location	Approximate Capacity (MGD)
Gorge	Gorge Pump Station Site	19.5
LS-1	Stephenson & 81st Streets	4.3
LS-2	Griffon Avenue	1.0
LS-3	Buffalo Avenue & 56th Street	1.7
LS-4	91st Street & Luick Avenue	1.7
LS-6	81st Street & Frontier Avenue	4.3
LS-7	Boiler Avenue & Military Road	0.8
LS-8	101st Street	1.0
BPS-1	Cayuga Drive & South Military Road	2.9
BPS-2	West Rivershore Drive	1.0

Like most urban systems of its age with combined storm water and sanitary sewer systems, the Wastewater System has incurred problems with infiltration whereby storm water and ground water enter the pipes devoted to wastewater. This has resulted in added treatment expense.

Like the Water System, the Wastewater System obtains low-cost hydropower from National Grid, which is made available through NYPA. In the case of the Wastewater System, this amounts to approximately 1.6 megawatts per year.

Wastewater System Staffing

The table presented below illustrates the number of personnel in each of the six (6) sections of the Wastewater System as of June 30, 2021:

Table 9 – Wastewater System Staffing

Section	Staff Positions
Monitoring and Compliance	4.0
Analytical Services	3.0
Sewer Collection System Maintenance (1)	12.0
Administrative / Technical	2.0
Plant Operations	17.0
Plant Maintenance	16.0
Total Wastewater System Staff	54.0

1) Includes sanitary sewers, combined sewers and storm sewers. Positions for stormwater maintenance were paid for through the City's General Fund, prior to acquisition of the System by the Board.

In the recent past the Wastewater System was understaffed and resulted in extensive overtime. In 2018, a concerted effort was made to increase staffing to necessary levels. At present operations and maintenance are fully staffed. Key management personnel have the qualifications and experience commensurate with their responsibilities.

Wastewater System Customer Base

The Wastewater System serves the City and, through a mutual services agreement, limited portions of the Town of Niagara. The Wastewater System serves a population of approximately 47,136 according to the 2020 U.S. Census. The table on the following page shows consumption and revenue information by category of customer.

Table 10 – Wastewater Demand, Revenue and Account Information by Customer Class

Class of Customer	2016	2017	2018	2019	2020
Residential/Commercial					
Consumption (CCF)	1,343,375	1,272,267	1,299,934	1,252,451	1,236,314
Number of Accounts	17,954	17,835	17,917	17,918	17,920
Revenues	$ 6,646,141	$ 6,406,907	$ 6,693,730	$ 6,613,490	$ 6,631,300
Industrial					
Consumption (CCF)	804,241	852,457	926,684	912,621	887,571
Number of Accounts	248	261	245	244	258
Revenues	$ 3,963,845	$ 3,487,388	$ 4,197,516	$ 3,879,443	$ 3,165,994
Significant Industrial Users (SIU)					
Consumption (CCF)	1,065,322	971,721	876,822	890,139	930,712
Number of Accounts	23	23	24	23	23
Revenues	$ 7,915,420	$ 8,680,470	$ 8,379,467	$ 7,917,883	$ 10,811,521
Non-Resident Users*					
Consumption (CCF)	-	-	-	-	-
Number of Accounts	-	-	-	-	-
Revenues	$ -	$ -	$ -	$ -	$ -
Total					
Consumption (CCF)	3,212,938	3,096,445	3,103,440	3,055,211	3,054,597
Number of Accounts	18,225	18,119	18,186	18,185	18,201
Revenues	$ 18,525,406	$ 18,574,765	$ 19,270,713	$ 18,410,816	$ 20,608,815
Plus: Other Departmental Revenues	622,505	1,036,764	1,188,385	1,374,123	396,687
Less: Adjustments	(331,546)	(169,020)	(44,948)	-	-
Total Departmental Revenue	18,816,365	19,442,509	20,414,150	19,784,939	21,005,502

*Non-Resident Users are only water supplied, no wastewater activity was recorded in the year listed above.

Preliminary Capital Improvement Program (CIP)

The Board and the Authority have the responsibility to adopt and implement the CIP for the System. Table 11 presents the CIP for the System for 2021 through 2025. The CIP is updated periodically. The updated CIP as presented herein was most recently updated by the executive staff as of September 15, 2021.

Table 11 – Capital Improvement Plan ("CIP")

Description	2021	2022	2023	2024	2025	Total
COMBINED PROJECTS (WATER AND WASTEWATER)						
IT Plan Implementation	$30,000	$30,000	$30,000	$30,000	$30,000	$150,000
Meter Replacement & Upgrades	70,000	70,000	70,000	70,000	70,000	350,000
Fleet Replacement	80,000	80,000	80,000	80,000	80,000	400,000
Water/sewer GIS/GPS Mapping	5,000	5,000	5,000	5,000	5,000	25,000
Combined Projects - Miscellaneous	100,000	100,000	100,000	100,000	100,000	500,000
WASTEWATER INFRASTRUCTURE PROJECTS						
WWTP Rehab Phase 4A	2,193,863	2,193,863	2,193,863	2,193,863	-	8,775,453
WWTP Rehab Phase 4B	905,198	905,198	-	-	-	1,810,396
WWTP Rehab Phase 4C	827,696	827,696	-	-	-	1,655,392
WWTP Rehab Phase 4E	491,585	1,474,755	-	-	-	1,966,340
WWTP Rehab Phase 4G	407,825	611,738	-	-	-	1,019,563
WWTP Rehab Phase 4I	269,246	269,246	-	-	-	538,492
WWTP SCADA Improvements	81,321	81,321	81,321	81,321	-	325,282
Wastewater Treatment Plant Protective Measures	784,000	1,568,000	1,568,000	-	-	3,920,000
WWTP Phase II Upgrades to the Sewer Line	173,914	173,914	-	-	-	347,828
WWTP Phase II Replacement of Sludge and Hypo Pipelines	173,914	173,914	-	-	-	347,828
WWTP Chemical Bulk Storage	-	-	-	50,000	-	50,000
WWTP Infrastructure Projects - Miscellaneous	100,000	100,000	100,000	100,000	100,000	500,000
SEWER INFRASTRUCTURE PROJECTS						
Lasalle Area Sewer Improvements (SSO)	250,000	433,333	433,333	433,333	-	1,550,000
Sewer /GPA Infrastructure Projects - Miscellaneous	100,000	100,000	100,000	100,000	100,000	500,000
WATER TREATMENT PLANT INFRASTRUCTURE PROJECTS						
WTP Pump Replacements	30,000	30,000	30,000	30,000	30,000	150,000
WTP Roofing Work	50,000	50,000	50,000	50,000	50,000	250,000
WTP Building Improvements and Caulking	50,000	50,000	50,000	50,000	50,000	250,000
WTP Infrastructure Projects	100,000	100,000	100,000	100,000	100,000	500,000

(continued)

(concluded)

Description	2021	2022	2023	2024	2025	Total
WATER INFRASTRUCTURE PROJECTS						
10th Street and Michigan Avenue Mains	-	750,000	-	-	-	750,000
18th Street Main - Ontario Avenue to Whitney Avenue	550,000	550,000	-	-	-	1,100,000
77th Street Main - Stephenson Ave to Niagara Falls	-	1,100,000	-	-	-	1,100,000
80th Street - Niagara Falls Blvd. to Rick Manning Drive	-	-	-	-	300,000	300,000
College Terrace - Madison to College Avenue	-	-	-	-	155,000	155,000
Laughlin Drive Main - 82nd Street to Bollier Ave	-	-	-	630,000	-	630,000
McKoon Avenue Main - DeVeaux Ave to James Ave	-	-	-	-	880,000	880,000
Military Road Main - Jacob Place to Bollier Avenue	200,000	-	-	-	-	200,000
Ontario Avenue Main - 13th Street to Main Street	-	-	-	-	800,000	800,000
Van Rensselaer Ave - 900 Block	-	-	-	150,000	-	150,000
Whitney Avenue Main - 11th Street to Hyde Park Blvd.	-	1,850,000	-	-	-	1,850,000
Large Valve Replacement	250,000	250,000	250,000	250,000	250,000	1,250,000
Hydrant Replacement	150,000	150,000	150,000	150,000	150,000	750,000
20 inch main from Beach Ave. Storage Tank to Ontario St	-	-	1,000,000	-	-	1,000,000
Leak Detection/Distribution Modeling	-	50,000	-	-	-	50,000
Loop Niagara Ave. Main to Parkview Drive	7,000	-	-	-	-	7,000
Witkop Avenue and 85th Street Loop (all 8")	-	-	-	720,000	-	720,000
Water Infrastructure Projects - Miscellaneous	120,000	120,000	120,000	120,000	120,000	600,000
Total	**$7,766,561**	**$12,679,978**	**$4,943,517**	**$5,493,517**	**$3,370,000**	**$34,253,573**

On a System-wide basis, the CIP includes provisions for the implementation of new technology which is primarily focused on the monitoring and control of water and wastewater facilities. Such technology will enable Board personnel to continue to attempt to operate more efficiently and effectively. The past improvements have allowed for some significant reductions in personnel. Funds are also included each year for the replacement of Board vehicles.

The NFWB is also currently proceeding with various Capital Improvements at the 1201 Buffalo Ave. Wastewater Treatment Plan (WWTP). The improvements are in response to the Order on Consent, entered with the NYDEC in 2017. Work is funded through a combination of grants and low interest loans administered by the NYS Environmental Facilities Corporation (EFC). Capital improvements at the WWTP will continue to constitute a large share of short-term budgeted funds for 2021 through 2023. However, the aforementioned capital expenditures are reimbursed at 50% with the remaining expenses converted to long term low interest loans. On the following page is a comprehensive list of the current Capital Improvements Projects and status to date.

- **Capital Project #1 Sedimentation Basin Upgrades**
  - Design and bidding phases have concluded.
  - Currently in construction, with demolition and improvements of the scum building and sedimentation basin #5.
  - Construction completion is currently anticipated for November 2024.

- **Capital Project #2 Gorge Pump Station Improvements**
  - Design and bidding phases have concluded.
  - Currently in construction, with replacement of existing pumps, channel grinders, and various ancillary components within the Gorge Pump Station.
  - Construction completion is currently anticipated for July 2022.

- **Capital Project #3 Screenings and Grit Conveyance Improvements**
  - Design and bidding phases have concluded.
  - Currently in construction, including improvements to the existing screening, grit, and polymer systems.
  - Construction completion is currently anticipated for January 2022.

- **Capital Project #4 Activated Carbon Filter Media Replacement**
  - Replacement of activated carbon and gravel underdrain media within various filter beds prioritized on the basis of age and filter efficiency.
  - Design, bidding, and construction phases have concluded.

- **Capital Project #5 Electrical System Improvements.**
  - Design is currently underway of replacement and/or upgrade of various high voltage electrical components integral to the operability of the Wastewater Treatment Plant.
  - Improvements are being completed through multiple phases.
  - Next phase of design and construction is currently underway.
  - Construction completion is currently anticipated for November 2022.

- **Capital Project #6 Chemical Treatment System Optimization.**
  - Project included improvements to improve operational efficiency of existing chlorination system, including pumping, distribution, and monitoring.
  - Design, bidding and construction phases have concluded.

- **Capital Project #7 Heating and Ventilation System Upgrades.**
  - Design and bidding phases have concluded.
  - Currently in construction, including improvements to the existing heating and ventilation system throughout the Wastewater Treatment Plant. Improvements replace failing equipment that has deteriorated due to the harsh operating environment.
  - Construction completion is currently anticipated for May 2022

- **Capital Project #8 Replacement of Air Scour Blower.**
  - Project included repair and/or replacement of air scour blower equipment associated with the carbon filter bed system.
  - Design, bidding, and construction phases have concluded.

- **Capital Project #9 Plant Waterline and Process Piping Replacement.**
  - Design and bidding phases have concluded.
  - Currently in construction, including replacement of sections of failing process piping and ancillary equipment throughout the Wastewater Treatment Plant.
  - Construction completion is currently anticipated for January 2022.

- **Capital Project #10 SCADA Improvements**
  - Bidding phase has concluded.
  - Design and construction phase has been underway with ongoing capital projects.
  - Construction completion is currently anticipated for November 2024.

In addition the NFWB has recently embarked on a number of initiatives including the following:

- The NFWB has recently leased 10 new vehicles. The vehicles are more energy efficient and include two hybrids. As a result, the age of the fleet went from an average age of 12 years old to 7 years old. Over the five-year lease the NFWB is projected to save $300,000.
- The NFWB has established a hydrant truck which routinely tests fire flow's and performs hydrant maintenance. The initiative will improve the reliability of the NFWB's hydrant system.
- The NFWB has implemented a 3-D scanning project to scan existing facilities at the wastewater treatment plants. The initiative will save money in engineering design projects, provide accurate measurements for existing facilities, will be used in employee training programs.
- The wastewater treatment plant replaced entrance gates for improved security.
- A professional development program has been financed which will include leadership training, state certified operator license training, and provide access to up-to-date training materials.

In the Water Distribution System, the CIP is focused primarily on distribution system improvements to enhance overall water quality, system reliability and reduce water loss, including a water main, hydrant and large valve replacement programs. In addition, the meter replacement program has become an important part of reducing the cost of reading meters and replacement of older faulty meters. The remainder of the 72nd Street water main was replaced in late 2015 and a portion of the Bollier Avenue water main was replaced in 2017. The City of Niagara Falls has/is providing design, contract administration and inspection services on both projects.

The CIP also includes funds for five (5) specific water distribution main replacement projects, continued replacement of large valves, continued leak detection & distribution system modeling to reduce leakage rates, and funding for unplanned system repairs. The specific areas identified for replacement have been prioritized based on factors such as the history of main breaks, known areas of leakage, the need to upgrade the size or materials of the main and other factors. The continued implementation of a water main replacement program should, over time, reduce the level of unaccounted-for water in the Water System.

In the opinion of management, the CIP is reasonable and will help ensure that quality water and wastewater services are provided to customers in a reliable manner. There continue to be unanswered questions regarding the potential outcome of the 2015 Turbidity Study and the related 2017 Consent Order studies pertaining to alternative wastewater treatment processes. The outcome of these will likely be mandated wastewater treatment plant capital improvements. The NFWB will seek external grants to undertake any major expenditure for changing the treatment technology at the WWTP.

Sources and Uses of Funds

Table 12 shown below presents the anticipated sources and uses of funds for the CIP. The amounts shown are preliminary, pending policy decisions of the Board.

Table 12 – Sources and Use of Funds for the CIP

	2021	2022	2023	2024	2025
Opening balance, January 1:					
Remaining funds restricted for capital projects**	$ 2,786,581	$ 1,909,301	$ 7,590,145	$ 5,784,220	$ 3,778,295
Sources of CIP funds:					
Prior year coverage	842,000	885,000	835,000	885,000	835,000
Bonded	-	11,005,000	-	-	-
Grants	3,552,281	6,470,822	2,302,592	2,602,592	1,521,000
EFC loan	2,495,000	-	-	-	-
Use of CIP funds:					
CIP spending (per Table 11)	(7,766,561)	(12,679,978)	(4,943,517)	(5,493,517)	(3,370,000)
Ending balance, December 31	$ 1,909,301	$ 7,590,145	$ 5,784,220	$ 3,778,295	$ 2,764,295

** The beginning balance includes NYPA funding remaining from $19m settlement, bond proceeds and annual contributions from operating funding coverage.

It is anticipated that the cash requirements of the CIP for the 2021-2025 period will be met through 1) remaining funds currently on hand with the Board received from the New York Power Authority; 2) remaining funds on hand from cash surpluses from operations of the preceding years; 3) interest on funds on hand whose use is restricted to capital improvements; and, 4) the proceeds of bonded debt to be issued by the Authority. Table 12 assumes that the Board will utilize bond proceeds beginning in 2022 to continue with the projects designated in the 2022, 2023, 2024 and 2025 CIP.

Outstanding Debt

The table on the following page summarizes the outstanding bond issues and remaining principal amounts attributable to the System as of December 31, 2020.

Table 13 –Outstanding Debt

Debt Instrument		**Principal Balance December 31, 2020**
Niagara Falls Public Water Authority Bonds:		
Series 2013A Bonds	$	34,375,000
Series 2013B Bonds		3,120,000
Series 2016A Bonds		20,130,000
NYSEFC Water Revolving Funds Revenue Bonds:		
Series 2013B - Clean Water		10,085,000
Series 2013B - Drinking Water		5,580,000
Series 2015D - Drinking Water		1,345,000
Series 2014B - Drinking Water		3,535,000
Series 2012B - Clean Water		5,020,000
New York State Power Authority:		
Series 2019 Mortgage Loan		1,777,489
Total Amount	**$**	**84,967,489**

The outstanding debt decreased by $4,332,897 from 2019 to 2020 as a result of scheduled principal payments.

Historical Cash Flows and Debt Service Coverage

The Board acquired the System from the City in September 2003. The Board has now completed thirteen full years as the owner and operator of the System. A summary of the financial performance achieved during the years ending December 31, 2018, December 31, 2019, and December 31, 2020 is provided in Table 14 on the following page.

Table 14 –Historical Financial Performance

Line	Description	2018	2019	2020
1	Receipts from customers	$ 31,280,867	$ 30,427,792	$ 32,526,018
3	Interest earnings	647,827	1,163,345	644,697
4	Proceeds from sales of assets	8,783	290,485	308,397
5	Total cash receipts	31,937,477	31,881,622	33,479,112
7	Payments to employees	11,592,392	11,517,253	11,915,979
8	Payments to suppliers	9,418,908	10,191,194	12,620,781
9	Total operating expenses	21,011,300	21,708,447	24,536,760
10	Cash available for debt service (line 5 - line 9)	10,926,177	10,173,175	8,942,352
11	Interest payment	3,419,231	3,119,649	3,225,126
12	Principal payment	3,915,000	4,269,607	4,332,897
13	Total debt service	$ 7,334,231	$ 7,389,256	$ 7,558,023
14	Surplus (line 10 - line 13)	$ 3,591,946	$ 2,783,919	$ 1,384,329
15	Debt service coverage (line 10/line 13)	1.49	1.38	1.18

The preceding table has been prepared based on information presented in the annual financial statements of the Board. The financial statements of the Board for the year ended December 31, 2020 were audited by the firm Bonadio & Co., LLP, while the financial statements of the Board for the years ended December 31, 2019 and 2018 were audited by the firm EFPR Group, LLP.

The results for the year ending December 31, 2018 indicate that the actual debt service coverage achieved by the Board was 149%, exceeding the minimum requirement of 115% of debt service. The results for the year ending December 31, 2019 indicate that the actual debt service coverage achieved by the Board was 138%, also exceeding the minimum requirement of 115% of debt service. The results for the year ending December 31, 2020 indicate that the actual debt service coverage achieved by the Board was 118%, also exceeding the minimum requirement of 115% of debt service.

In April 2017, the Board reached a settlement with the collective bargaining agreements of all four of its labor unions. The new agreements will result in substantial savings in healthcare costs for the Board over the next 7 years while allowing employees and retirees to retain quality and affordable healthcare benefits. Employees share a modest 20% of costs and the Board contributes to employee Health Savings Plans to help offset costs associated with a high deductible health plan. Without burden to rate payers, other cost-savings measures such as comprehensive training, professional development, and greater utilization of technology in daily operations are also being implemented. The Board will spearhead an aggressive and long term public relations campaign to better educate the public on future initiatives such as its aggressive pursuit of funds through the New York State Clean Water Infrastructure Act.

Billing and Collection

All but a limited number of water and sewer customers are billed quarterly based on actual or estimated meter reads. Significant industrial users are billed monthly based on two estimated months followed by an actual meter read in the third month.

Customers of the Board can pay their water and sewer bills either to a lockbox held by Bank on Buffalo or to the City of Niagara Falls Billing and Collection Department at City Hall. All revenues, including those collected by the City, are put immediately into the Board's depository account of the Local Water Fund. The City collects on delinquent accounts and, in particular, any unpaid balances that remain as of November 1 of each year create a lien on the property and are added to the next year's City tax bill. These liens then become due and payable with the tax collection. The City collects the funds, reconciles the tax roll and water/sewer liens and disburses a check to the Board in July and the following January for the two collection periods. These amounts are reconciled to the Board's records for verification of the receipts.

The Board has made meter replacement a major priority, since it last replaced meters in 1990 and the life expectancy of the old style meters averages just 10 years. In 2012, the Board tested a pilot program for electronic meter reading. Based on successful results, the Board has converted all water and sewer meters to electronic read only devices. The advantages of electronic meter reading include having a real-time measure of actual use, taking a fraction of the time, eliminating the need to access a customer's property, minimizing worker's compensation injuries from weather conditions or animals, and detecting continuous water leaks. The use of electronic meters during the pilot program resulted in a 5-7% increase in revenues, and the Board expects similar results for the recently completed meter replacement program.

Table 15 – Water and Sewer Billings and Cash Collections – Historical

FYE 12/31	2016	2017	2018	2019	2020
Service Billings	$ 30,811,823	$ 29,702,412	$ 30,512,619	$ 29,973,753	$ 31,874,002
Penalties	687,806	360,222	331,107	405,651	430,808
Invoice Adjustments	1,494,512	473,046	18,045	(67,164)	169,058
Total Billed	$ 32,994,141	$ 30,535,680	$ 30,861,771	$ 30,312,240	$ 32,473,868
Total Cash Collections - Billings	31,535,662	29,208,181	29,531,100	28,481,104	31,302,901
Total Cash Collections - Property Tax Bill	1,194,643	1,118,498	1,281,664	1,530,987	1,223,117
Total Collections	$ 32,730,305	$ 30,326,679	$ 30,812,764	$ 30,012,091	$ 32,526,018
% of Total Cash Collections to Total Billed	99.2%	99.3%	99.8%	99.0%	100.2%

Compliance with Reserve Fund Requirements

Under the terms of the Financing Agreement between the Board and the Authority, the Board is required to maintain minimum balances in reserve funds relating to its operating expenses and debt service. The amounts on deposit in the Operation and Maintenance Reserve Fund must equal or exceed two months' of the anticipated operation and maintenance expenses in the upcoming year. The amounts on deposit in the Debt Service Reserve Fund must equal or exceed the maximum annual debt service in any future year. The amounts on deposit in the Board's Operation and Maintenance Reserve Fund and Debt Service Reserve Fund as of December 31, 2020 are in compliance with the requirements of the Financing Agreement. The Board expects to continue to be in compliance with these requirements during 2021.

Projected Cash Flows and Rates

The preliminary projection of cash flows of the System is presented in Table 16. These projections are preliminary and subject to change. The future cash flows of the Board are dependent upon many factors, including economic conditions and Board policy decisions regarding the size, scope and timing of the CIP; the use of the remaining monies from the NYPA settlement and potential reductions in annual operation and maintenance expenses. Future increases in rates and revenues are also dependent upon actual experience and assumptions for regarding customer demand as well as other factors. The achievement of any projection of future conditions is dependent upon the occurrence of other future events and circumstances such as changes in the local and national economy, demographic changes, variations in interest rates and inflation, new regulatory agency initiatives and other factors that cannot be predicted. Therefore, the actual financial requirements and performance of the System may vary from the estimates presented herein, and such variations could be material.

The projected cash flows in 2021 through 2025 assume that the Board will enact increases in water and wastewater rates and charges of an average of 6% in 2022, 4% in 2023, 3% in 2024 and 2% in 2025. The projection indicates that under the conditions reflected herein, the System will generate operating revenues of approximately $31.9 million in 2021, and approximately $36.3 million in 2025.

Taking into consideration non-operating revenues, total revenues available for debt service and expenses are projected to be $9.2 million in 2021, increasing to $10.3 million in 2025. These projections are preliminary and subject to change. The projected user payments reflect the assumption that water consumption by customers will remain stable throughout the projection period. If such projections in water sales are not achieved, then the Board will have to increase water and sewer rates at a pace that is greater than assumed and/or decrease expenses in order to achieve the debt service coverage requirement.

On a preliminary basis, operating expenses are projected to increase from approximately $22.7 million in 2021 to $26.0 million in 2025. Operating expenses in 2021 through 2025 are expected to increase with inflation, with the exception of employee benefits which are projected using historical increases (and which have increased at rates significantly higher than inflation).

The projected debt service includes principal and interest payments on outstanding bonds as well as anticipated future bonds of the Authority. It is presently anticipated that the Authority will issue $13,500,000 in additional debt in 2022, with the first interest payment due on such debt occurring in 2022, while the first principal payment is expected in 2023. These amounts and the timing of the potential issuance of debt are subject to change based on policy decisions by the Board. The proceeds of such bonds or notes will be used to pay a portion of the costs associated with the CIP.

In 2012, pursuant to its agreement with the City, the Board is obligated to make annual payments in lieu of taxes to the City. The projected amount to be paid from 2021 through 2025 is $700,000 per year.

The debt service coverage ratios in Table 16 are based on total revenues available for expenses and debt service minus Operating Expenses divided by Total Debt Service. It is projected that debt service coverage will be equal to, or greater than, the minimum requirement of 1.15 throughout the Projection Period. All projections are presented on a preliminary basis and are subject to change. This conclusion assumes the following: the Board adopts the projected rate increases described above, expenses are maintained at or below projected levels, and the future changes in customer usage are consistent with the assumed rate of change. As noted earlier, the actual financial

requirements and performance of the System may vary from the estimates presented herein, and such variations could be material. With regard to the figures presented in Table 16, the preliminary projections show that debt service coverage is maintained at approximately the minimum levels required by the Bond Resolution. Drescher & Malecki LLP recommends that the Board consider taking the actions necessary such that the debt service coverage and surplus exceed the minimum requirement of 1.15 throughout the Projection Period so that if adverse changes occur (e.g., a greater than assumed decline in customer usage), the Board will have some flexibility to address such changes.

Table 16 – Preliminary Projections of Cash Flows and Rates

		Estimated				
Line		**2021**	**2022**	**2023**	**2024**	**2025**
	Revenues					
1	Operating revenues	31,864,560	33,328,028	34,623,149	35,633,343	36,327,010
2	Total	31,864,560	33,328,028	34,623,149	35,633,343	36,327,010
	Operations and Maintenance Expenses					
3	Salaries and benefits	12,024,064	12,375,012	12,737,480	13,111,881	13,498,640
4	Chemicals/sludge	5,468,747	5,861,076	6,064,223	6,273,978	6,490,554
5	Insurance/safety	441,354	473,017	489,411	506,340	523,818
6	Maintenance	754,353	808,471	836,493	865,426	895,300
7	Utilities	2,088,333	2,238,150	2,315,726	2,395,824	2,478,527
8	Other expenses	960,852	1,029,784	1,065,477	1,102,330	1,140,382
9	Equipment	220,630	236,458	244,654	253,116	261,854
10	PILOT payment to City	700,000	700,000	700,000	700,000	700,000
11	Total	22,658,334	23,721,967	24,453,464	25,208,895	25,989,076
12	**Revenues available for debt service**	9,206,226	9,606,060	10,169,685	10,424,449	10,337,934
	Debt Service					
13	Debt service on outstanding bonds	7,198,765	7,541,129	7,268,579	7,875,215	7,813,958
14	Debt service on future Authority bonds	-	275,000	795,000	780,000	765,000
15	Total	7,198,765	7,816,129	8,063,579	8,655,215	8,578,958
16	**Surplus (line 12 - line 15)**	2,007,461	1,789,931	2,106,106	1,769,234	1,758,976
17	**Debt Service Coverage (minimum 1.15)**	1.28	1.23	1.26	1.20	1.21
18	**Actual/Proposed Rate Increase**	2.99%	6.00%	4.0%	3.0%	2.0%

Notes:

1) Projected cash flow and rates above are subject to change.

Water Sales by Customer Class

Table 17 below illustrates the water consumption by customer class for each of the last four years.

Table 17 – Water Consumption by Customer Class
(Units in ccf (100 cubic feet)

District 1 - Residential	**2017**	**2018**	**2019**	**2020**
1st billing	100,240	102,819	100,028	96,480
2nd billing	108,303	107,658	102,006	93,876
3rd billing	103,770	107,252	100,227	95,253
4th billing	112,236	116,702	107,348	108,183
Total	424,549	434,431	409,609	393,792
District 2 - Residential				
1st billing	119,963	116,861	115,362	112,723
2nd billing	112,910	113,431	119,916	109,077
3rd billing	127,364	139,490	122,680	124,671
4th billing	122,452	122,469	128,268	137,452
Total	482,689	492,251	486,226	483,923
District 3 - Residential				
1st billing	91,737	91,913	89,117	86,070
2nd billing	87,527	91,425	84,898	84,925
3rd billing	93,276	99,438	91,686	97,608
4th billing	92,489	90,476	90,915	89,996
Total	365,029	373,252	356,616	358,599
District - Industrial				
1st billing	238,737	207,453	220,964	229,987
2nd billing	175,828	187,882	187,131	210,701
3rd billing	188,136	209,908	211,761	180,448
4th billing	249,756	321,441	292,765	266,435
Total	852,457	926,684	912,621	887,571
District - SIU				
1st billing	215,093	153,939	236,512	210,440
2nd billing	242,358	263,402	213,396	225,585
3rd billing	233,796	214,401	210,400	248,179
4th billing	280,474	245,080	229,831	246,508
Total	971,721	876,822	890,139	930,712
District - NR				
1st billing	1,205	569	527	339
2nd billing	950	659	391	248
3rd billing	790	637	406	1,489
4th billing	641	740	423	402
Total	3,586	2,605	1,747	2,478
Grand Total ccf	3,100,031	3,106,045	3,056,958	3,057,075
% Change from Prior Year	-3.51%	0.19%	-1.58%	0.00%

As illustrated by Table 17, water consumption has stayed fairly leveled over the past 3 years following a 3.51% decrease from 2016 to 2017 following the loss of a major customer in the Significant Industrial Users (SIU) category.

The ten largest water customers and wastewater customers are listed in Table 17A below.

Table 17A – Ten Largest Water and Wastewater Customers

	Name	12/31/2020 Revenue	% of Total	6/30/2021 YTD
1	Norampac Industries #50	$ 6,350,172	49.39%	$ 3,239,820
2	Niacet Corporation #17	1,022,031	7.95%	449,954
3	Covanta Niagara, LP #32	860,857	6.70%	401,499
4	Town of Niagara	792,882	6.17%	338,619
5	Occidental Chemical #22	786,923	6.12%	338,406
6	Olin Corp	737,342	5.73%	509,209
7	Seneca NF Gaming - Hotel	702,441	5.46%	343,663
8	Olin Corp #23	595,761	4.63%	333,100
9	Goodyear Tire & Rubber Co.	373,510	2.90%	155,287
10	Seneca NF Gaming	635,660	4.94%	116,894
		$ 12,857,579	100%	$ 6,226,451

The following table illustrates the historical trends in water consumption as well as the distribution of water sales by customer class:

Table 17B – Water Demand, Revenue and Account Information by Customer Class

Class of Customer	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Residential/Commercial										
Consumption (CCF)	1,329,279	1,344,810	1,331,527	1,346,029	1,315,516	1,338,499	1,272,267	1,299,934	1,252,451	1,236,314
Number of Accounts	18,484	18,509	18,470	18,249	18,379	17,954	17,835	17,917	17,944	17,920
Revenues	$ 4,221,051	$ 4,402,971	$ 4,674,230	$ 4,765,290	$ 4,728,578	$ 4,982,389	$ 4,822,853	$ 5,120,518	$ 4,985,808	$ 4,981,737
Industrial										
Consumption (CCF)	725,931	780,293	849,504	745,073	741,580	804,241	852,457	926,684	912,621	887,571
Number of Accounts	339	250	253	255	256	248	261	245	245	258
Revenues	$ 1,860,892	$ 1,875,335	$ 2,033,097	$ 1,975,744	$ 2,399,858	$ 2,956,785	$ 2,327,816	$ 2,722,250	$ 2,597,846	$ 2,358,805
Significant Industrial Users (SIU)										
Consumption (CCF)	820,292	868,945	1,123,975	1,362,443	1,209,147	1,065,322	971,721	876,822	890,139	930,712
Number of Accounts	23	23	24	24	24	23	23	24	22	23
Revenues	$ 1,456,938	$ 1,868,321	$ 2,402,154	$ 2,858,019	$ 2,553,174	$ 2,334,010	$ 2,166,094	$ 2,238,898	$ 2,067,362	$ 2,219,211
Non-Resident Users*										
Consumption (CCF)	6,724	8,499	11,452	3,467	3,862	4,876	3,586	2,605	1,747	2,478
Number of Accounts	27	28	27	27	27	27	27	27	26	26
Revenues	$ 102,362	$ 291,683	$ 289,239	$ 22,750	$ 35,981	$ 46,376	$ 30,912	$ 22,467	$ 22,232	$ 30,633
Total										
Consumption (CCF)	2,882,226	3,002,547	3,316,458	3,457,012	3,270,105	3,212,938	3,100,031	3,106,045	3,056,958	3,057,075
Number of Accounts	18,873	18,810	18,774	18,555	18,686	18,252	18,146	18,213	18,237	18,227
Revenues	$ 7,641,243	$ 8,438,310	$ 7,544,897	$ 7,641,243	$ 8,438,310	10,319,560	9,347,675	10,104,133	9,673,248	9,590,386
Plus: Other Departmental Revenues	1,423,258	2,091,531	4,016,732	3,981,869	3,466,847	1,137,966	1,497,008	1,450,379	1,921,647	1,351,427
Less: Adjustments	(140,271)	(121,154)	(149,000)	(100,245)	(82,143)	(311,134)	(304,026)	(25,013)	(10,629)	(1,124)
Total Departmental Revenue	$ 8,924,230	$10,408,687	$ 11,412,629	$ 11,522,867	$ 11,823,014	$ 11,146,392	$ 10,540,657	$ 11,529,499	$ 11,584,266	$ 10,940,689

Rates for Water Service and Wastewater Service

The rates for water service and wastewater service in 2021 increased 2.99% for both customers within and outside the City. The Board provides wastewater service to Town of Niagara customers outside of the City. The Board reached an agreement with the Town of Niagara in 2015 that includes the use of wastewater flow meters for measuring actual wastewater volumes discharged to the NFWB collection system. These two changes should result in increased revenues from these Out of District users. In addition, the Board is aggressively pursuing water theft and the potential under-recording of water use to ensure that every customer pays their fair share. This includes timely investigation of low or zero meter readings and the recently completed meter replacement program. Water and wastewater rates for 2021 and 2020 are provided in the financial statements of the Board for the year ended December 31, 2020 and are not repeated here. The consumption-related water rates of the Board for 2020-21 are shown in Table 17C below. Historical rate increases for water and wastewater customers are presented in Table 18 that follows.

Table 17C – 2021 Rates for Water Customers

	Inside City ($/ccf)	Outside City ($/ccf)
First 20,000 CF	3.52	9.40
Next 60,000 CF	3.05	8.21
Next 120,000 CF	2.59	6.84
> 200,000 CF	2.14	5.76

Table 18 –Historical Percentage Increases in Rates for Water and Wastewater Customers

2014	2015	2016	2017	2018	2019	2020	2021
2.60%	0.00%	4.40%	0.00%	2.40%	2.00%	0.00%	2.99%

The rate structure for sewer service consolidates all consumers into two classes: Significant Industrial Users (SIU), and Commercial, Small Industrial, and Residential Users (CSIRU). The user charge system includes ten Substance of Concern charges that are assessed exclusively within the SIU class.

The 2021 wastewater user charges for the CSIRU class of customers are summarized in Table 19.

Table 19 – 2021 Wastewater Rates for CSIRU Customers

Minimum Charge	Volume Charge
All meter sizes and flow up to 1,300 cf	Usage in excess of 1,300 cf per quarter (per 100 cf)
$60.55	$4.66

Three of the wastewater user charges for the SIU class of customers in 2021 are summarized in Table 20.

Table 20 – 2021 Wastewater Rates & Charges for SIU Customers

Flow Charge ($/MG)	Solids Charge ($/lb)	SOC Charge ($/lb)
3,275	1.05	1.81

Interest Earnings

The System will earn interest on the funds maintained by the Board and the Authority. Based on the anticipated balances in each fund and the current investment rates, Table 21 presents the estimated interest earnings for 2021.

Table 21 – Estimated Interest Earnings - 2021

Fund	Average End of Month Balance	Interest Earnings Rate	Estimated Annual Earnings
Debt Service restricted cash	$ 20,406,355	Varies	$ 408,127
Capital Project restricted cash	2,786,581	0.25%	6,966
Operating cash	21,859,723	0.15%	32,790
			$ 447,883

Interest earnings rates have continued to decrease in 2021. This situation is affecting the revenue of water utilities across the country.

System Operating Expenses

The System's expenses include the costs associated with the operation, maintenance and administration of the water treatment facilities and distribution system, as well as the costs associated with the operations of the wastewater collection and treatment facilities and stormwater facilities. The principal components of operating expenses other than labor as projected for 2021 are shown in Table 22

Table 22 – Major Components of Expenses Other Than Labor - 2021

Item	Amount
Chemicals	$ 5,468,747
Utilities	2,088,333
Maintenance	754,353
Computer Service Contracts / Supplies / Professional Services	960,852
Insurance	441,354
Equipment	220,630

Chemicals are used in both the water treatment and the wastewater treatment processes although the majority of the cost of chemicals is wastewater related. The System receives low cost hydroelectric power from the New York Power Authority which significantly reduces its electrical costs relative to market rates. The Board will be proactively seeking opportunities to further reduce such costs. Other expenses are assumed to be affected by inflation as well as the results of cost saving initiatives of the Board during the projection period.

The total operating expenses of the Board in 2018, 2019 and 2020 were approximately $29.2 million, $30.0 million and $31.2 million, respectively.

ECONOMIC AND DEMOGRAPHIC DATA

The following information was provided by other sources and provides updated information regarding the Board's Service Area. Since the Service Area consists primarily of the City of Niagara Falls, the information is limited to that portion of the Service Area that is within the boundaries of the City.

Major Employers in Niagara Falls Area

City / County	Employer	Employees
County	Niagara Falls Air Reserve Station	3165
City	Seneca Niagara Casino and Hotel	2528
City	Fashion Outlets of Niagara	2027
County	Niagara County	1425
County	General Motors Components Holdings, LLC	1400
City	Niagara Falls City School District	1200
City	Niagara Falls Memorial Medical Center	1029
County	North Tonawanda City School District	704
County	Niagara County Community College	700
County	Lockprt City School District	675

Source: Niagara County Center for Economic Development

Population

Changes in the City's population compared to changes in the population of the County, the State and the United States are as follows:

	1990	2000	2010	% of Change 1990-2000	% of Change 2000-2010
City	61,840	55,593	50,193	-10.10%	-9.71%
County	220,756	219,846	216,469	-0.41%	-1.54%
State	17,990,455	18,876,457	19,378,102	4.92%	2.66%
United States	248,709,873	281,421,906	308,745,338	13.15%	9.71%

Source: United States Bureau of the Census

Civilian Labor Force – Annual Average (thousands)

	2016	2017	2018	2019	2020
City	21.3	21.1	20.9	20.6	21.2
County	100.3	99.3	98.9	98.2	98.1
State	9,527.0	9,549.0	9,511.2	9,507.1	9,289.2

Source: New York State Department of Economic Development: Bureau of Economic and Demographic Information (note that "City" refers to Niagara Falls city, NY Statistical Area).

Yearly Average Unemployment Rates

Year	City	County	State
2016	7.2%	5.8%	4.8%
2017	7.9%	6.2%	4.7%
2018	6.7%	5.2%	4.1%
2019	5.9%	5.0%	3.8%
2020	13.8%	10.4%	10.0%

Source: New York State Department of Labor, Bureau of Labor Statistics, Information not seasonally adjusted (note that "City" refers to Niagara Falls city, NY Statistical Area)

Monthly Unemployment Rates

Month	City	County	State
January, 2021	10.6%	8.0%	9.4%
February	10.7%	8.4%	9.7%
March	9.7%	7.6%	8.4%

Source: New York State Department of Labor, Bureau of Labor Statistics, Information not seasonally adjusted (note that "City" refers to Niagara Falls city, NY Statistical Area).

Comparative Housing, Income and Population Data (as of December 2013)

	City	State	U.S.
Age Distribution:			
% under 5 years	5.6	6.0	6.4
% 20 to 64	61.0	80.0	80.2
% 65 and over	15.0	13.8	13.4
Median age	39.4	38.1	37.3
Person / Household	2.28	2.61	2.63
Housing:			
% owner occupied housing units	55.8%	54.2%	64.9
Median value housing ($)	66,600	288,200	176,700
Median gross rent ($)	718	1,109	962
% housing built 1990 - 2000	7.0	6.0	13.9
% housing built before 1939	33.2	33.1	13.7
% with 5 or more units in structure	14.1	34.9	24.5
Income:			
Per capita income ($)	20,549	32,382	28,155
Median family income ($)	32,326	58,003	53,046
% below poverty level	24.9	15.3	15.4

Source: Census of Population and Housing, U.S. Department of Commerce, Bureau of Census (note that "City" refers only to Niagara Falls)