# METROPOLITAN UTILITIES DISTRICT

## Committee Meetings

***(rescheduled)***

**8:15 a.m.** **April 16, 2020**

**AGENDA**

1. Safety Briefing
2. Roll Call
3. Open Meetings Act Notice

**Construction and Operations** – *Friend, Frost, Cavanaugh*

1. Capital Expenditures [Dave DeBoer, SVP & Chief Operations Officer] **– Tab 5**
2. Acceptance of Contracts and Payment of Final Estimates
   [Dave DeBoer, SVP & Chief Operations Officer] **– Tab 6**
3. Bids on Materials and Contracts [Jon Zellars – Director, Purchasing] **– Tab 7**

**Services & Extensions** – *Friend, Begley, Howard*

1. Main Extensions [Cory O'Brien, VP – Engineering & Construction] **– Tab 9**

**Personnel –** *Begley, Frost, Friend*

1. Wage and/or Salary Increases and Ratifications
   [Bonnie Savine, VP – Human Resources] - **Tab 10**

**Insurance and Pensions** – *Howard, McGowan, Begley*

1. Actuarial Valuation Report on the Retirement Plan
   [Joseph Schaffart, SVP & Chief Financial Officer – **Tab 11**

**Audit -** *McGowan, Howard, Begley*

1. 2019 Audited Financial Statement
   [Joseph Schaffart, SVP & Chief Financial Officer] – **Tab 12**

# METROPOLITAN UTILITIES DISTRICT

## Regular Meeting

***(rescheduled)***

**9:00 a.m.** **April 16, 2020**

**AGENDA**

| | | |
|---|---|---|
| | 1. | Roll Call |
| | 2. | Open Meetings Act Notice |
| | 3. | Pledge of Allegiance |
| | 4. | Approval of Minutes – Committee Meetings & Regular Board Meeting for March 5, 2020 |
| CONSTRUCTION & OPERATIONS | 5. | Capital Expenditures |
| | 6. | Acceptance of Contracts and Payment of Final Estimates |
| | 7. | Bids on Materials and Contract |
| | 8. | Notice of Purchases Between $25,000 and $50,000 |
| SERVICES & EXTENSIONS | 9. | Main Extensions |
| PERSONNEL | 10. | Wage and/or Salary Increases and Ratifications |
| INSURANCE & PENSIONS | 11. | Actuarial Valuation Report on the Retirement Plan |
| AUDIT | 12. | 2019 Audited Financial Statement |
| BOARD | 13. | Other Matters of District Business for Discussion |

**Adjourn Regular Board Meeting**

Approved by the Board
April 16, 2020

# METROPOLITAN UTILITIES DISTRICT

## Minutes of Committee Meetings

## March 5, 2020

**Safety Briefing**

Vice-President of Safety, Security and Business Continuity Shane Hunter provided a briefing for all individuals in attendance at the Board Meeting regarding safety and security protocol in the event of an emergency.

**Roll Call**

Chairperson Gwen Howard called the Committee Meetings to order at 8:15 a.m. On a roll call vote, the following members were present:

Gwen Howard
Tim Cavanaugh
Jim Begley
Tanya Cook
Dave Friend
Mike McGowan
Mark Doyle, Secretary and President

Also present were various members of the staff, representatives from IBEW #1521, and other members of the public.

Mr. Frost was absent.

**Open Meetings Act Notice**

Chairperson Howard advised those in attendance that a copy of the Open Meetings Act was available on the wall of the Legislative Chamber.

**Construction and Operations** - *Frost, Cavanaugh, Friend*

Senior Vice-President and Chief Operations Officer Dave DeBoer reviewed the proposed capital expenditures as outlined in his letter to the Committee dated February 21, 2020.

Mr. DeBoer reviewed the proposed acceptance of contracts and payment of final estimates as outlined in his letter to the Committee dated February 21, 2020.

Director of Purchasing Jon Zellars presented the bids for materials and contracts as outlined in his letter to the Committee dated February 21, 2020.

**Services and Extensions** - *Howard, Friend, Begley*

Vice-President of Engineering and Construction Cory O'Brien reviewed the proposed main extensions as outlined in his letter to the Committee dated February 20, 2020.

**Personnel** - *Begley, Frost Friend*

Vice-President of Human Resources Bonnie Savine reviewed the proposed wage and/or salary increases and ratifications as outlined in her letter to the Committee dated February 25, 2020.

Ms. Savine presented a review of the District's Summer Student Work Program. Ms. Savine reported that the program is open to college students and entails full-time summer employment at $12.50 per hour for the positions in the following categories: clerical, painter, field or survey worker, and laborer. The application process is handled in the same manner as a regular hire.

**Judicial and Legislative** - *Cook, Cavanaugh, Howard*

Government Relations Attorney Rick Kubat presented the Second Legislative Report for 2020, as outlined in his letter to the Committee dated February 24, 2020. No changes were recommended by Management to the positions previously taken by the Board on legislative bills currently being monitored by the District.

**Committee of the Whole**

Director of Infrastructure Integrity Masa Niiya presented a comprehensive overview of the District's Infrastructure Replacement Program, documenting its history of gas and water main breaks from 1970 to the present and outlining the District's current and planned initiatives. While the cast iron gas mains are on pace to be replaced in their entirety by 2027, the aging and deteriorating water mains present additional challenges such as exorbitant repair costs ($7.8 million in the past year alone) and extensive disruption and inconvenience to businesses and neighborhoods. Initiatives to curtail water main breaks include the creation of a dedicated infrastructure replacement crew; innovations for rehabilitating pipe as opposed to replacement so as to extend the life of current infrastructure; and employing data collection technologies in high risk areas to extend the lifecycle of mains and avert main breaks and the consequential damage. Coordinated planning and sustainable funding is essential to preparing the District for the future in order to continue to provide safe, reliable and cost-effective gas and water service to its customers.

Senior Vice-President of Safety, Security and Field Operations Steve Ausdemore provided an update on the new headquarters building renovation at 7350 World Communications Drive. He reported that the project is on schedule and awaiting finalization of estimate approval to begin renovation of the 2nd and 3rd floors and lobby area. A vestibule is planned for construction at the temporary entrance due to the close proximity of the entrance to employee workstations. Proposed options for construction and layout of the Board Room were distributed to Directors. All renovation work for occupied areas should be completed by the end of the year and no additional funds will be necessary at this time. Weekly meetings are, and will continue, to take place between M.U.D. representatives, contractors and the architect.

There are currently 120 employees working at the new headquarters building in a temporary environment. The remaining employees at the former downtown headquarters at 1723 Harney will move March 13th, while the relocation of additional employees from the Operations Center will occur over the next several months. The final decommissioning of the former headquarters building will occur through the month of April, with transfer of possession to Douglas County to occur on May 1, 2020.

Senior Vice-President and General Counsel Mark Mendenhall provided a follow-up review of the 457(b) Voya changes to the employees' deferred compensation program. The topic was first presented at the November 7, 2019 Board Meeting, but was revisited to ensure that sufficient efforts were made to adequately inform employees about the changes currently underway. Mr. Mendenhall reviewed the efforts made thus far, including mailed postcards, emails and informational meetings offered to employees interested in obtaining more detail.

Chairperson Howard asked whether any Board Member or member of the public had comments to share. There were none.

At 9:35 a.m., Chairperson Howard announced that the Committee Meetings had concluded and the regular Board Meeting would begin at 9:45 a.m.

Mark E. Doyle

Mark E. Doyle
Secretary and President

MED/mjm

Approved by the Board
April 16, 2020

# METROPOLITAN UTILITIES DISTRICT

## Minutes of Regular Board Meeting

## March 5, 2020

The Board of Directors of the Metropolitan Utilities District of Omaha met in the Legislative Chamber, Suite LC-4 in the Omaha Douglas Civic Center at 1819 Harney Street in regular session at 9:45 a.m. on March 5, 2020.

Advance notice of the meeting was published in *The Omaha World-Herald* on Sunday, February 23, 2020. The agenda of the meeting was available for public inspection at the office of the Secretary and President and posted to the website on February 25, 2020. Board documents were delivered to Board Members and posted to the website on February 26, 2020.

**AGENDA NO. 1**
**ROLL CALL**

Chairperson Howard called the meeting to order at 9:45 a.m. On a roll call vote, the following members were present:

Gwen Howard
Tim Cavanaugh
Jim Begley
Tanya Cook
Dave Friend
Mike McGowan
Mark Doyle, Secretary and President

Also present were various members of the staff, representatives from IBEW #1521, and other members of the public.

Mr. Frost was absent.

**AGENDA NO. 2**
**OPEN MEETINGS ACT NOTICE**

Chairperson Howard advised those in attendance that a copy of the Open Meetings Act was posted on the wall of the Legislative Chamber.

**AGENDA NO. 3**
**PLEDGE OF ALLEGIANCE**

Chairperson Howard invited those who wished to participate, to stand and recite the Pledge of Allegiance.

## AGENDA NO. 4
## APPROVAL OF MINUTES FOR COMMITTEE MEETINGS AND REGULAR BOARD MEETING FOR FEBRUARY 6, 2020

Mr. Cavanaugh moved to approve the minutes for the Committee Meetings and regular Board Meeting for February 6, 2020, which was seconded by Mr. Friend and carried on a roll call vote.

Voting Yes: Howard, Cavanaugh, Begley, Cook, Friend, McGowan
Voting No: None

MINUTES FILE DOCUMENT NO. 138033

## AGENDA NO. 5
## CAPITAL EXPENDITURES

Mr. Friend moved to approve the capital expenditures as outlined in Mr. DeBoer's letter to the Committee dated February 21, 2020, which was seconded by Mr. Cavanaugh and carried on a roll call vote.

Voting Yes: Howard, Cavanaugh, Begley, Cook, Friend, McGowan
Voting No: None

MINUTES FILE DOCUMENT NO. 138034

## AGENDA NO. 6
## ACCEPTANCE OF CONTRACTS AND PAYMENT OF FINAL ESTIMATES

Mr. Friend moved to approve the acceptance of contracts and payment of final estimates as outlined in Mr. DeBoer's letter to the Committee dated February 21, 2020. The motion was seconded by Mr. Begley and carried on a roll call vote.

Voting Yes: Howard, Cavanaugh, Begley, Cook, Friend, McGowan
Voting No: None

MINUTES FILE DOCUMENT NO. 138035

## AGENDA NO. 7
## BIDS ON MATERIALS AND CONTRACTS

Mr. Friend moved to approve Management's recommendations regarding the bids on materials and contracts as outlined in Mr. Zellars' letter dated February 21, 2020. The motion was seconded by Mr. Begley and carried on a roll call vote.

Voting Yes: Howard, Cavanaugh, Begley, Cook, Friend, McGowan
Voting No: None

MINUTES FILE DOCUMENT NO. 138036

**AGENDA NO. 8**
**NOTICE OF PURCHASES BETWEEN $25,000 AND $50,000**

Mr. Friend requested that the Notice of Purchases letter dated February 28, 2020, be placed on file.

MINUTES FILE DOCUMENT NO. 138037

**AGENDA NO. 9**
**MAIN EXTENSIONS**

Mr. Friend moved to approve the main extensions as outlined in Mr. O'Brien's letter dated February 20, 2020, which was seconded by Mr. Cavanaugh and carried on a roll call vote.

Voting Yes: Howard, Cavanaugh, Begley, Cook, Friend, McGowan
Voting No: None

MINUTES FILE DOCUMENT NO. 138038

**AGENDA NO. 10**
**WAGE AND/OR SALARY INCREASES AND RATIFICATIONS**

Mr. Begley moved to approve the wage and/or salary increases and ratifications as outlined in Ms. Savine's letter to the Committee dated February 25, 2020. The motion was seconded by Mr. Cavanaugh and carried on a roll call vote.

Voting Yes: Howard, Cavanaugh, Begley, Cook, Friend, McGowan
Voting No: None

MINUTES FILE DOCUMENT NO. 138039

**AGENDA NO. 11**
**SECOND LEGISLATIVE REPORT FOR 2020**

Ms. Cook requested that the Second Legislative Report for 2020 as outlined in Mr. Kubat's letter to the Committee dated February 24, 2020 be placed on file.

MINUTES FILE DOCUMENT NO. 138040

**AGENDA NO. 12**
**OTHER MATTERS OF DISTRICT BUSINESS FOR DISCUSSION**

Chairperson Howard announced that the April Board Meeting will take place in Room 702 which is located on the 7th floor of the Douglas County Civic Center. The temporary change in location is due to renovation in the Legislative Chambers to update audio and visual capabilities.

Chairperson Howard also announced that the annual Heat the Streets Run and Walk for Warmth will take place on Saturday, March 7th at Aksarben Village and urged anyone who may be interested to please attend or make a donation to support the cause.

The event is jointly sponsored by employees from M.U.D. and O.P.P.D., and the funds raised through registrations and donations are used for utility assistance which provides support to customers in our community who are struggling to pay their utility bills.

Chairperson Howard asked if any Board Members or any members in the audience had any comments to share. There were none.

**AGENDA NO. 13**
**CLOSED SESSION: LITIGATION & PERSONNEL MATTERS**

At 9:50 a.m., Mr. Cavanaugh moved to go into Closed Session for the purpose of discussing litigation and personnel matters, which was seconded by Mr. Friend and carried on a roll call vote.

Voting Yes: Howard, Cavanaugh, Begley, Cook, Friend, McGowan
Voting No: None

MINUTES FILE DOCUMENT NO. 138041

At 11:20 a.m., Mr. Friend moved to return to Open Session, which was seconded by Mr. Begley and carried on a roll call vote.

Voting Yes: Howard, Cavanaugh, Begley, Cook, Friend, McGowan
Voting No: None

MINUTES FILE DOCUMENT NO. 138042

Chairperson Howard asked if any members of the public wished to share any comments. There were none.

Mr. Cavanaugh moved to adjourn the regular Board Meeting which was seconded by Mr. Friend and carried on a roll call vote.

Voting Yes: Howard, Cavanaugh, Begley, Cook, Friend, McGowan
Voting No: None

MINUTES FILE DOCUMENT NO. 138043

The regular Board Meeting was adjourned at 11:23 a.m.

Mark E. Doyle
Secretary and President

MED/mjm

Approved by the Board
April 16, 2020

**METROPOLITAN UTILITIES DISTRICT**
*Inter-Department Communication*

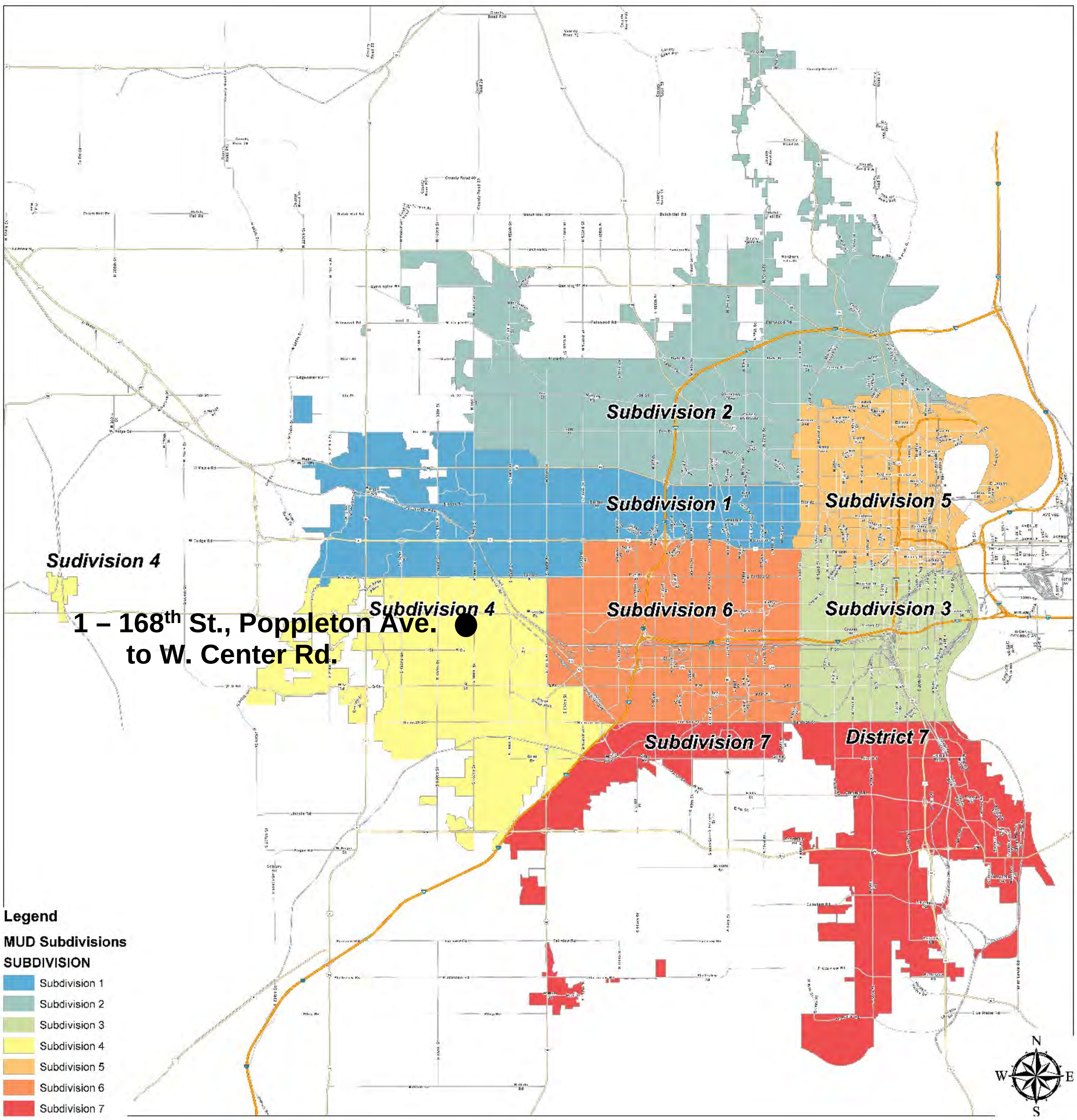
April 1, 2020

**Subject:** CAPITAL EXPENDITURES

**To:** Committee on Construction and Operations
cc: all Board Members, Doyle, Mendenhall, Schaffart, Ausdemore and all Vice Presidents

**From:** Dave W. DeBoer, Senior Vice President, Chief Operations Officer

The following item will be on the April 2020 Committee Agenda for consideration and the April 2020 Board Agenda ratification:



## SYSTEM IMPROVEMENTS

**1. RATIFICATION - 100053001388 and associated job numbers - $845,000 – Road improvement project, 168th Street, Poppleton Avenue to West Center Road.** This work is required to eliminate conflicts with proposed grading, paving and storm sewers being done for a City of Omaha project. This project is anticipated to start May 2020 and be competed May 2021. Due to the aggressive project schedule and delayed Board meeting date, Management felt it necessary to move forward with this project prior to Board approval. The District's work associated with this job has been broken up into two sections to accommodate design and construction schedules. This authorization request is for the first section. This work is not reimbursable as the mains are in public right-of-way. There will be five residential gas services and two residential water services reconnected to the new mains at an estimated cost of $21,000. **(Subdivision 4 – Cavanaugh)**

Dave W. DeBoer
Senior Vice President, Chief Operations Officer

Approved:

Mark E. Doyle
President

Approved by the Board
April 16, 2020

**METROPOLITAN UTILITIES DISTRICT**

*Inter-Department Communication*

March 31, 2020

**Subject:** **RATIFICATION** - ACCEPTANCE OF CONTRACTS AND PAYMENT OF FINAL ESTIMATES

**To:** Committee on Construction and Operations
cc: all Board Members, Doyle, Mendenhall, Schaffart, Ausdemore and all Vice Presidents

**From:** Dave W. DeBoer, Senior Vice President, Chief Operations Officer

Work has been satisfactorily completed on the following contracts and ratification of the final payments are recommended. Due to the unprecedented circumstances of the pandemic emergency, Management felt it was important to not let the delayed Board meeting affect timely payment to our contractors. Therefore, these final payments have been made to the contractors.

| **Contract** | **Board Approval Date** | **Amounts** | | |
|---|---|---|---|---|
| | | ***Unit Price Bid** | **Actual** | **Final** |
| **a.** Est. 3 - Tab Construction, 100055001258, 100057000456, Install water mains in Falcon Pointe, 48th St. and Capehart Rd. | July 3, 2018 | $469,572.40 | $439,531.32 | $9,679.74 |

**Comments:** There was a decrease in unit quantities of $16,253.05. and a deduction of $19,343.08 due to excessive pressure testing and flushing. There was a Change Order in the amount of $5,555.05 to rent concrete barriers, replace a leaking hydrant and to clean out chlorine tube and sample tap excavations.

| **Contract** | **Board Approval Date** | **Amounts** | | |
|---|---|---|---|---|
| | | ***Unit Price Bid** | **Actual** | **Final** |
| **b.** Est. 7 - Kersten Construction, 100051000987, Install water main in 144th St., Eagle Run Dr. to W. Maple Rd., 144th St. to 142nd Sts. | July 6, 2016 | $1,485,142.00 | $1,626,665.26 | $192,032.16 |

**Comments:** There was an increase in unit quantities of $35,025.00 and an increase of $14,927.34 for removal of unacceptable backfill, furnish sand gravel, placement of flowable fill, manual air release and installation of 48-inch vault. There was a Change Order in the amount of $91,570.92 for extra work due to unknown rubble and debris encountered while installing the main in West Maple Road. Approval of this Final Payment will also approve Change Order #1 in the amount of $91,570.92.

| Contract | Board Approval Date | Amounts | | |
|---|---|---|---|---|
| | | *Unit Price Bid | Actual | Final |
| **c.** Est. 5 - Kersten Construction, 100055001254, Install water mains for The Preserve, 222nd and "F" Sts. | June 6, 2018 | $551,343.00 | $557,054.90 | $41,879.50 |

**Comments:** There was a decrease in unit quantities of $6,862.10 and an increase in contractual items in the amount of $12,574.00 to install the main at extra depth, to install it in frost and for a mobilization charge.

| Contract | Board Approval Date | Amounts | | |
|---|---|---|---|---|
| | | *Unit Price Bid | Actual | Final |
| **d.** Est. 2 - Cedar Construction, 100055001276, Install water mains in Somerset Phase 2, Wenninghoff Rd. and State St. | February 6, 2019 | $171,802.50 | $178,403.50 | $24,127.54 |

**Comments:** There was an increase in unit quantities in the amount of $1,036.00 and a Change Order in the amount of $5,565.00 for silt fence removal, trench box rental and removal and replacement of storm sewer and rip rap.

*Based upon Engineering's estimated unit quantities.*

Dave W. DeBoer
Senior Vice President, Chief Operations Officer

Approved:

Mark E. Doyle
President

Approved by the Board
April 16, 2020

METROPOLITAN UTILITIES DISTRICT
*Inter-Department Communication*

April 6, 2020

**Subject:** BIDS ON MATERIALS AND CONTRACTS DURING THE MONTH OF MARCH

**To:** Construction & Operations Committee
cc: All Board Members, Doyle, Ausdemore, DeBoer, Mendenhall, Schaffart and all Vice Presidents

**From:** Jon A. Zellars, Director, Purchasing

The following items will be on the April 16, 2020 Committee Agenda for consideration and the April 16, 2020 Board Agenda for approval. The recommended bid is bolded and listed first.

## WATER/GAS MAIN CONTRACTS

| Item | Bids Sent / Rec'd | Bidders | Bid Amount |
|---|---|---|---|
| Install Water Mains in UNO Nebraska Village, 67th Street and West Center Road<br>100051001049 100055001309<br>WP1697<br>Engineering Estimate: $251,252.00 | 18/1 | **Cedar Construction** | **$384,580.00** |

(A C&A in the amount of $515,895.00 will be presented to the Board on April 16, 2020 for approval.)

| Item | Bids Sent / Rec'd | Bidders | Bid Amount |
|---|---|---|---|
| Install Water Mains in Lakeview 168 Subdivision, 168th Street and Redick Avenue<br>100055001322 100057000478<br>WP1737<br>Engineering Estimate: $578,529.00 | 18/3 | **Cedar Construction** | **$611,068.00** |
| | | Kersten Construction | 631,867.00 |
| | | Valley Corporation | 691,416.23 |

(A C&A in the amount of $757,205.00 will be presented to the Board on April 16, 2020 for approval.)

| | | | |
|---|---|---|---|
| Install Water Mains in West Hampton Park Subdivision, 204th Street and Blondo Parkway<br>100055001324 WP1738<br>Engineering Estimate: $53,059.00 | 18/3 | **Kersten Construction**<br>Cedar Construction<br>Valley Corporation | **$78,002.00**<br>85,210.00<br>88,710.52 |

(A C&A in the amount of $102,147.00 will be presented to the Board on April 16, 2020 for approval.)

| | | | |
|---|---|---|---|
| Install Water Mains in OPS Pine Creek Addition, 156th Street and Ida Street<br>100055001323 WP1739<br>Engineering Estimate: $83,045.00 | 18/2 | **Kersten Construction**<br>Cedar Construction | **$100,203.00**<br>105,500.00 |

(C&A 100055001323 approved February 6, 2020 in the amount of $140,000.00.)

## RATIFICATION

| Item | Bids Sent / Rec'd | Bidders | Bid Amount |
|---|---|---|---|
| Renovation of New Headquarters<br>100084001241 | 1/1 | **MCL** | **$5,816,725.00** |

(C&A for 100084001241 approved February 6, 2019 for $3,852,327.00 and February 6, 2020 for $8,100,000.00 for a total of $11,952,327.00)

## INFORMATION TECHNOLOGY

| Item | Bids Sent / Rec'd | Bidders | Bid Amount |
|---|---|---|---|
| Network Equipment for New Headquarters<br>100084001241 | 1/1 | **Sirius** | **$321,619.15** |

(C&A for 100084001241 approved February 6, 2019 for $3,852,327.00 and February 6, 2020 for $8,100,000.00 for a total of $11,952,327.00)

## OTHER

| Item | Bids Sent / Rec'd | Bidders | Bid Amount |
|---|---|---|---|
| Furniture for New Headquarters | 5/5 | **All Makes** | **$1,997,941.55** |
| 100084001241 | | OID | 2,128,474.63 |
| * Bid rejected, non-responsive | | Sheppard's Office Int. | 2,191,459.84 |
| | | CI Select | 2,324,704.55 |
| | | AOI | 2,121,126.25* |

(C&A for 100084001241 approved February 6, 2019 for $3,852,327.00 and February 6, 2020 for $8,100,000.00 for a total of $11,952,327.00)

## ANNUALS

| Item | Bids Sent / Rec'd | Bidders | Bid Amount |
|---|---|---|---|
| Gas Odorant (40,000 lbs.) | 1/1 | **Arkema Inc.** | **$107,600.00** |
| ($2.69/lb) | | | |
| Extension #1 | | | |
| (June 1, 2020 to May 31, 2021) | | | |

Jon A. Zellars
Director, Purchasing
(402) 504-7253

Approved:

Joseph J. Schaffart
Senior Vice President, CFO

Mark E. Doyle
President

Placed on File
April 16, 2020

METROPOLITAN UTILITIES DISTRICT
*Inter-Department Communication*

April 6, 2020

**Subject:** NOTICE OF PURCHASES BETWEEN $25,000 - $50,000

**To:** All Board Members
cc: Doyle, Ausdemore, DeBoer, Mendenhall, Schaffart and all Vice Presidents

**From:** Jon A. Zellars, Director, Purchasing

During the month of March, the following item was purchased or contracted for and is being submitted to the Board to be placed on file. The purchase or contract was initiated with the low bidder which is bolded and listed first.

| Item | Bids Sent / Rec'd | Bidder | Amount Bid |
|---|---|---|---|
| Soil, Concrete and Subsurface Exploration and Testing Services at Various M.U.D. Construction Sites Extension #4 (May 1, 2020 to April 30, 2021) | 1/1 | **ISG & Associates** | **$44,015.00** |

Jon A. Zellars
Director, Purchasing
(402) 504-7253

Approved:

Joseph J. Schaffart
Senior Vice President, CFO

Mark E. Doyle
President

Approved by the Board
April 16, 2020

**METROPOLITAN UTILITIES DISTRICT**
*Inter-Department Communication*

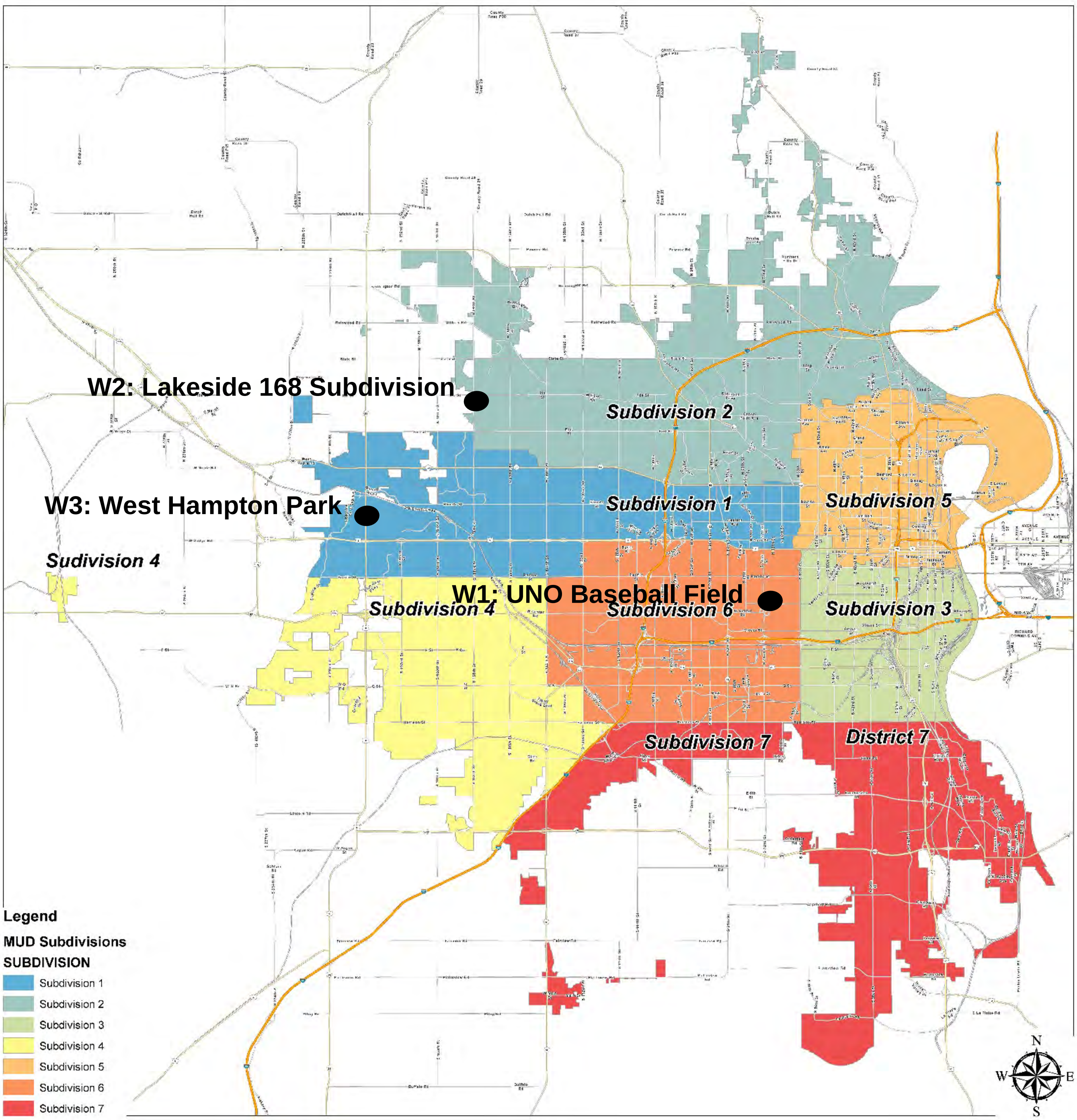
March 25, 2020

**Subject:** MAIN EXTENSIONS

**To:** Services and Extensions Committee
cc: All Board Members, Doyle, Mendenhall, Schaffart, Ausdemore, DeBoer and all Vice Presidents

**From:** Cory J. O'Brien, Vice President, Engineering and Construction

The following main extensions will be on the April 2020 Committee Agenda for consideration and the April 2020 Board Agenda for approval:



| WATER | | | | | |
|---|---|---|---|---|---|
| | **Project Number** | **Project Cost** | **Applicant Contribution** | **Construction by Applicant** | **M.U.D. Cost** |
| | WP 1697 | $515,895 | $341,930 | $0 | $173,965 |
| **1.** | ***Subdivision 6, McGowan:*** *These mains are being installed to provide domestic water service and fire protection to the UNO baseball field, 67th and Center Streets. The District is paying to extend the proposed main to Mercy Road to interconnect mains for reliability and increased fire flow to the area. The District will be reimbursed for the cost of this main when abutting properties request service. (City of Omaha zoning, UNO)* | | | | |
| | **Project Number** | **Project Cost** | **Applicant Contribution** | **Construction by Applicant** | **M.U.D. Cost** |
| | WP 1737 | $781,952 | $781,952 | $0 | $0 |
| **2.** | ***Subdivision 2, Friend:*** *These mains are being installed to provide domestic water service and fire protection to 136 single residence lots in Lakeview 168 Subdivision, 168th Street and Redick Avenue. There are pioneer main fees due to the existing 12-inch water mains in 168th Street in the amount of $24,747. (City of Omaha zoning, Celebrity Homes)* | | | | |
| | **Project Number** | **Project Cost** | **Applicant Contribution** | **Construction by Applicant** | **M.U.D. Cost** |
| | WP 1738 | $193,891 | $193,891 | $0 | $0 |
| **3.** | ***Subdivision 1, Begley:*** *These mains are being installed to provide domestic water service and fire protection to seven commercial lots in West Hampton Park Subdivision, 204th Street and Blondo Parkway. There is a pioneer main fee due to the existing 30-inch water main in Pacific Street and 192nd Street in the amount of $21,759. There is also a connection charge due to the existing 12-inch water main in Blondo Parkway in the amount of $69,985. (City of Omaha zoning, Edward Rose Development Company, LLC)* | | | | |

Cory J. O'Brien
Vice President, Engineering and Construction

Approved:

Dave W. DeBoer
Senior Vice President, Chief Operations Officer

Mark E. Doyle
President

Approved by the Board
April 16, 2020

**METROPOLITAN UTILITIES DISTRICT**
*Inter-Department Communication*

April 2, 2020

**Subject: Wage and/or Salary Increases and Ratifications, April 2020 Board Meeting**

**To:** Personnel Committee members Begley, Friend, and Frost
**cc:** Board Members Cavanaugh, Cook, Howard, and McGowan
President Doyle, and Senior Vice Presidents Ausdemore, DeBoer, Mendenhall and Schaffart

**From:** Bonnie Savine, Vice President, Human Resources

The Human Resources Department is recommending the Board of Directors approve the wage or salary increases outlined below. All positions involve District employees earning more than $10,000 per year and therefore require your approval.

## 1. Operating and Clerical (OAC) Wage Increases Due To Promotion

The Human Resources Department is recommending the Board of Directors approve wage increases for the following Employees within the OAC classification. These wage increases are based on a job selection process, are in compliance with the Collective Bargaining Agreement, and are made following the posting and application process for a job opening in the District. The effective date for these increases will be the beginning of the next OAC pay period following Board approval.

| | |
|---|---|
| **Employee:** | **Phil Gravert** |
| **Current position (department):** | Chemical Equipment Mechanic I (Water Pumping – Florence) |
| **New position (department):** | Gas Plant Operator (Gas Production) |
| **Current rate; step/grade:** | $34.97; Step 4 |
| **Proposed rate; step/grade:** | $38.44; Step 4 |
| **Percent of increase:** | 9.92% |
| **District hire date:** | June 23, 2003 |

| | |
|---|---|
| **Employee:** | **Jesus Guevara** |
| **Current position (department):** | Water Plant Operator – Platte West |
| **New position (department):** | Lead Water Plant Maintenance Mechanic – Platte West |
| **Current rate; step/grade:** | $36.59; Step 4 |
| **Proposed rate; step/grade:** | $38.62; Step 3 |
| **Percent of increase:** | 5.55% |
| **District hire date:** | July 21, 2008 |

| | |
|---|---|
| **Employee:** | **Darrin Jensen** |
| **Current position (department):** | Gas Plant Engineer (Gas Production) |
| **New position (department):** | Gas Plant Engineer – Odorant (Gas Production) |
| **Current rate; step/grade:** | $41.77 Step 4 |
| **Proposed rate; step/grade:** | $42.71; Step 4 |
| **Percent of increase:** | 2.25% |
| **District hire date:** | March 25, 1996 |

## 2. Operating and Clerical (OAC) Wage Increases Due To Job Transfer

The Human Resources Department is recommending the Board of Directors approve wage increases for the following Employees within the OAC classification. A transferring employee who is at less than Standard Wage will be moved to an equal rate in the new job classification or, if there is not an identical wage rate, to the nearest higher wage rate in the new job classification. These wage increases are based on a formal selection process, are in compliance with the Collective Bargaining Agreement, and are made following the posting and application process for a job opening in the District. The effective date for these increases will be the beginning of the next OAC pay period following Board approval.

**There are no recommendations for approval this month**

## 3. Operating and Clerical (OAC) Wage Increases Due To Job Progression

The Human Resources Department is recommending the Board of Directors approve the following wage increases for the OAC employees who have successfully completed required training and who have been recommended by their supervisor for promotion as they progress within their job family. All increases are based on the bargaining unit wage structure. The effective date for these increases will be the beginning of the next OAC pay period following board approval.

**There are no recommendations for approval this month**

## 4. Supervisory, Professional and Administrative (SPA) Salary Increases Due To Job Promotion

The following SPA employees are selected for promotion. It is recommended the President be authorized to increase the salary of these employees. These SPA positions have been evaluated, graded, appropriate job descriptions completed, and posting guidelines fulfilled. The effective date for these salaries will be the beginning of the next SPA pay period following board approval.

| | |
|---|---|
| **Employee:** | **Melissa Polito** |
| **Current position (department):** | Engineer II (Plant Engineering) |
| **New position (department):** | Design Engineer (Plant Engineering) |
| **Current rate; step/grade:** | $97,826; SPA – 04 |
| **Proposed rate; step/grade:** | $102,717; SPA – 05 |
| **Percent of increase:** | 5.00% |
| **District hire date:** | November 7, 2011 |

| | |
|---|---|
| **Employee:** | **William Sargent** |
| **Current position (department):** | Engineer II (Plant Engineering) |
| **New position (department):** | Design Engineer (Plant Engineering) |
| **Current rate; step/grade:** | $89,224; SPA – 04 |
| **Proposed rate; step/grade:** | $93,685; SPA – 05 |
| **Percent of increase:** | 5.00% |
| **District hire date:** | August 4, 2014 |

## 5. Supervisory, Professional and Administrative (SPA) New Hire Ratification

Board of Director Ratification of salaries, for new SPA employees hired from outside the District, is required to confirm the salary within the grade established for the position. Authorization to ratify the annual salary of SPA employees hired from outside the District will be requested each month, if appropriate.

**There are no recommendations for approval this month**

Bonnie Savine
Vice President, Human Resources

**APPROVED:**

Mark A. Mendenhall
Senior Vice President, General Counsel

Mark E. Doyle
President

Placed on File
April 16, 2020

**METROPOLITAN UTILITIES DISTRICT**
*Inter-Departmental Communication*

April 6, 2020

**Subject:** ACTUARIAL AND ACCOUNTING REPORTS FOR THE RETIREMENT PLAN

**To:** Insurance and Pensions Committee
cc: All Board Members; Doyle, Ausdemore, DeBoer, Mendenhall, and all Vice Presidents

**From:** Joseph J. Schaffart, Senior Vice President, Chief Financial Officer

Attached for your review, please find three documents related to the District's Retirement Plan, as follows:

1) The Retirement Plan for Employees of the Metropolitan Utilities District of Omaha – Actuarial Valuation as of January 1, 2020
2) GASB Statements No. 67 & 68 Report for the Retirement Plan for Employees of the Metropolitan Utilities District of Omaha – Measurement Date: December 31, 2019
3) Cavanaugh Macdonald Consulting – Retirement Plan for Employees of MUD – Summary Presentation of the Highlights of the Actuarial Valuation Results

The first document, the Actuarial Valuation of the Retirement Plan, is used to determine the annual actuarially determined contribution amount to fund the Plan. Annual funding of the Plan is comprised of both Employer and Employee contributions, and it reflects the impact of increasing employee contributions as a percentage of "covered payroll", which rise from 6% in 2017 to 9% in 2023, pursuant to the approved Labor Agreement for the period April 1, 2018 through March 31, 2023. The Employee Contribution rate increases to 7.5% of "covered payroll" in 2020, an increase of .5% from 2019's level. An Executive Summary can be found on pages 1-10 of the report, which provides an excellent synopsis of the information contained therein. Though the report contains considerable detail, the key statistical highlights follow:

| | 2020 | 2019 |
|---|---|---|
| Funded Ratio at January 1 (Actuarial Value) | 89.3% | 86.5% |
| Actuarially Determined District Contribution | $ 11,036,307 | $ 11,269,603 |

As a point of reference, the District's actual pension contribution in 2019 was $12,300,000 while the 2020 budget reflects a contribution of $13,558,075. Though we attempt to be conservative in the determination of required employer contributions for budget purposes, positive market returns in 2019 served to reduce 2020's required contribution. The District has historically contributed more than the actuarially required contribution, and we believe it is prudent to continue this practice. Though unrestricted cash balances remain at high levels, the current economic challenges associated with the coronavirus pandemic will likely impact cash receipts. Therefore, I believe it is prudent to hold the District's 2020 pension contribution unchanged from 2019's contribution level of $12.3 million, still significantly higher than the actuarially determined contribution level.

The second document, the "GASB Statements No. 67 & 68 Report", provides the District with necessary information to meet the requirements of the Governmental Accounting Standards Board, most notably relative to financial reporting, which includes the determination of annual pension expense. Guidance prescribed by GASB 67 & 68 was first reflected in our financial statements in 2015. This guidance separates the funding of the pension plan, which is addressed in the actuarial valuation report, from pension expense recognition, which is prescribed by GASB 68. Following are key statistics contained in the GASB 67 & 68 Report:

| | 2019 | 2018 |
|---|---|---|
| Plan Fiduciary Net Position as % of Total Pension Liability (At December 31) | 91.6% | 81.6% |
| Pension Expense | $ 12,378,601 | $ 19,215,382 *1 |

*1 Note: Taken from prior year GASB 67 & 68 report

As you compare the difference in funded percentage as well as pension expense vs. actuarial required funding levels, it becomes very apparent that the GASB 67/68 guidance is much more sensitive to market return volatility, as compared with the information derived from the actuarial valuation. Though market return impacts the actuarial required contribution as well as actuarial funding levels, the actuarial plan valuation uses an actuarial (smoothed) value of assets, not the pure market value.

The final document, "Cavanaugh Macdonald Consulting – Retirement Plan for Employees of MUD", is a synopsis of information contained in the Actuarial Valuation document as prepared by Pat Beckham, Principal and Consulting Actuary with Cavanaugh Macdonald Consulting.

The Board is to be commended for their continuing commitment to taking the necessary steps to ensure that our Retirement Plan is in a strong financial position. It is a testament to the Board's commitment to fulfilling the District's "Fiscal Responsibility" core value, which encompasses a key tenet: properly funding promises to our employees. The documents attached and referred to above will be on the April16, 2020 Committee and Board Agendas to be placed on file.

Joseph J. Schaffart
Senior Vice President, Chief Financial Officer
(402) 504-7111

Approved:

Mark E. Doyle
President

Attachments

Cavanaugh Macdonald
CONSULTING, LLC
*The experience and dedication you deserve*

METROPOLITAN
UTILITIES DISTRICT

# The Retirement Plan for Employees of The Metropolitan Utilities District of Omaha

## Actuarial Valuation as of January 1, 2020

www.CavMacConsulting.com

April 16, 2020

Board of Directors
Metropolitan Utilities District
7350 World Communications Dr.
Omaha, NE 68122-4041

Members of the Board:

In accordance with your request, we have completed an actuarial valuation of the Retirement Plan for Employees of the Metropolitan Utilities District of Omaha as of January 1, 2020 for the plan year ending December 31, 2020. The major findings of the valuation are contained in this report. There have been no changes to the actuarial assumptions and methods since the prior valuation, with one exception. The investment return assumption has been reduced from 7.00% to 6.90% as the result of action taken at the October 2019 Board meeting. The reduction was based on the recommendation of the Insurance and Pensions Committee of the Board and supported by the Plan's investment consultant, Vanguard Institutional Advisory, and the Plan's actuary, Cavanaugh Macdonald Consulting. The assumption change increased both the unfunded actuarial liability and the total actuarial contribution.

This valuation also reflects the scheduled increase in the employee contribution rate from 7.0% in 2019 to 7.5% in 2020, as provided by the collective bargaining agreement approved by the Board in March, 2018. There are additional increases to the employee pension contribution rate scheduled, effective January 1 of each year: 8.0% in 2021, 8.5% in 2022 and 9.0% in 2023. The employee contribution rate for non-bargaining employees aligns with the rates stated in the collective bargaining agreement through 2023. Future scheduled contribution increases will reduce the District's portion of the actuarial contribution rate as they are recognized over the next three years.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the District's staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. We found this information to be reasonably consistent and comparable with information provided in prior years. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our report, we did not perform an analysis of the potential range of future measurements.

Actuarial computations presented in this report are for purposes of determining the actuarial contribution amount for funding the Plan and have been made on a basis consistent with our understanding of the Plan's funding policy and goals. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes. For example, actuarial computations for purposes of fulfilling financial accounting requirements for the Plan under Governmental Accounting Standards No. 67 and No. 68 are provided in a separate report.

The consultants who worked on this assignment are pension actuaries. CMC's advice is not intended to be a substitute for qualified legal or accounting counsel.

This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries and meet the qualification standards to render the actuarial opinion contained herein. We further certify that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement plan and on actuarial assumptions that are internally consistent and reasonable based on the actual experience of the Plan. The Board of Directors has the final decision regarding the appropriateness of the actuarial assumptions used in the valuation and adopted those disclosed in Appendix B.

We respectfully submit the following report and look forward to discussing it with you.

Sincerely,

Patrice Beckham

Patrice A. Beckham, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Bryan K. Hoge FSA, EA, FCA, MAAA
Consulting Actuary

## TABLE OF CONTENTS

This report presents the results of the January 1, 2020 actuarial valuation of the Retirement Plan for Employees of the Metropolitan Utilities District of Omaha. The primary purposes of performing the valuation are:

- to estimate the liabilities for the future benefits expected to be provided by the Plan;
- to determine the recommended contribution amount, based on the District's funding policy;
- to measure and disclose various asset and liability measures;
- to assess and disclose the key risks associated with funding the System;
- to monitor any deviation between actual plan experience and experience predicted by the actuarial assumptions, so that recommendations for assumption changes can be made when appropriate;
- to analyze and report on any significant trends in contributions, assets and liabilities over the past several years.

There have been no changes to the actuarial assumptions and methods since the prior valuation, with one exception. The investment return assumption has been reduced from 7.00% to 6.90% as a result of action taken at the October 2019 Board meeting. The reduction was based on the recommendation of the Insurance and Pensions Committee of the Board and supported by the Plan's investment consultant, Vanguard Institutional Advisory. The Plan's actuary, Cavanaugh Macdonald, also agreed with the change which provides for more conservatism in the investment return assumption. The change in the assumption increased the actuarial liability by $5.1 million and the total contribution rate by 1.08% of pay, or $720,000.

This valuation also reflects the scheduled increase in the employee contribution rate from 7.0% to 7.5%, as provided by the collective bargaining agreement approved by the Board in March, 2018 (effective for April 1, 2018 through March 31, 2023). There are additional increases to the employee pension contribution rate, effective January 1 of each year: 8.0% in 2021, 8.5% in 2022 and 9.0% in 2023. The employee contribution rate for those not covered by the collective bargaining agreement aligns with the rates stated in the collective bargaining agreement through 2023. The increase in the employee contribution rate for 2020 decreased the District's contribution by about $330,000. Future scheduled increases in the employee contribution rate will reduce the District's portion of the total actuarial contribution rate as they are recognized over the next three years.

The actuarial valuation results provide a "snapshot" view of the Plan's financial condition on January 1, 2020 which reflects net favorable experience for the past plan year as demonstrated by an unfunded actuarial liability (UAL) that was lower than expected. The rate of return on the actuarial value of assets was higher than the expected return, which resulted in an actuarial gain on assets of $6.5 million. There was also favorable experience on the plan liabilities for the past plan year, largely due to more deaths than expected and lower COLAs than expected, based on the assumptions. The net liability experience from all demographic assumptions was an actuarial gain of $8.3 million. The aggregate experience for the 2019 plan year, on both actuarial assets and actuarial liabilities, was a gain of $14.8 million.

The valuation uses an asset smoothing method to mitigate the impact of the volatility of investment experience on the funding results. As a result, the plan's funded status and the actuarially determined contribution are based on the actuarial (smoothed) value of assets, not the pure market value. The money-weighted rate of return on the <u>market value of assets</u> during 2019 was 21.0%, as reported by Vanguard, which was considerably higher than the assumption of 7.0% for 2019 (6.9% applies prospectively from January 1, 2020). However, as a result of the deferred (unrecognized) investment experience due to the asset smoothing method, the rate of return on the <u>actuarial value of assets</u> was 8.6%. The strong return on the market value of assets for 2019 created a $19.6 million of deferred investment gain in the 2020 valuation compared to a deferred investment loss of $24.3 million in the January 1, 2019 valuation. Actual returns over the next few years will determine if, and when, the $19.6 million of deferred investment gain will be recognized. For example, a return of approximately 2% on the market value of assets in 2020 would result in the actuarial value of assets being equal to the market value of assets at January 1, 2021, eliminating the deferred investment gain and avoiding an actuarial gain/loss for the 2020 plan year.

The change in the assets, liabilities, and contributions of the Plan over the last year are discussed in more detail in the following pages.

**Assets**

As of January 1, 2020, the Plan had total funds of $452.1 million, when measured on a market value basis. This was an increase of $73.9 million from the prior year, and represents a 21.0% rate of return for the 2019 plan year.

The market value of assets is not used directly in the actuarial calculation of the Plan's funded status and the District's recommended contribution. An asset valuation method is used to smooth the effects of market fluctuations. The actuarial value of assets is equal to the expected asset value (based on last year's actuarial value of assets, net cash flows and a rate of return equal to the actuarial assumed rate (7.0% for 2019 and 6.9% for 2020 and beyond) plus 25% of the difference between the actual market value and the expected asset value. See Exhibit 2 for the detailed development of the actuarial value of assets as of January 1, 2020. The rate of return on the actuarial value of assets was 8.6% (higher than the 7.0% assumption) which generated an actuarial gain of $6.5 million.

The components of the change in the market value and actuarial value of assets are shown below:

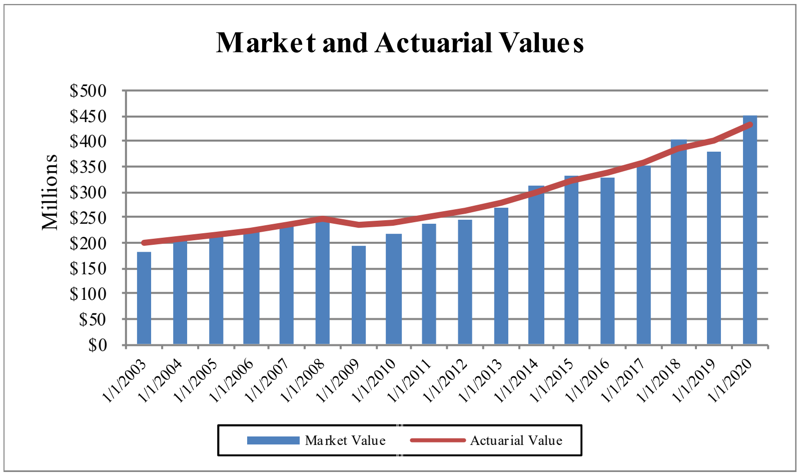
| | Market Value ($M) | Actuarial Value ($M) |
|---|---|---|
| **Net Assets, January 1, 2019** | $ 378.2 | $ 402.5 |
| • District and Member Contributions | + 16.7 | + 16.7 |
| • Benefit Payments, Refunds and Administrative Expenses | - 21.3 | - 21.3 |
| • Net Investment Return | + 78.5 | + 34.6 |
| **Net Assets, January 1, 2020** | $ 452.1 | $ 432.5 |
| **Rate of Return** | 21.0% | 8.6% |

The deferred investment gain (market value less actuarial value of assets) as of January 1, 2020 is $19.6 million, compared to a $24.3 million deferred loss in last year's valuation. This unrecognized investment gain will flow through the asset smoothing method over the next few years, to the extent it is not offset by investment experience that is lower than the assumed rate of return. If the assets earn the assumed rate of investment return of 6.9% per year (net of investment expenses) on a market value basis, it will result in actuarial gains on the actuarial value of assets for the next few years.

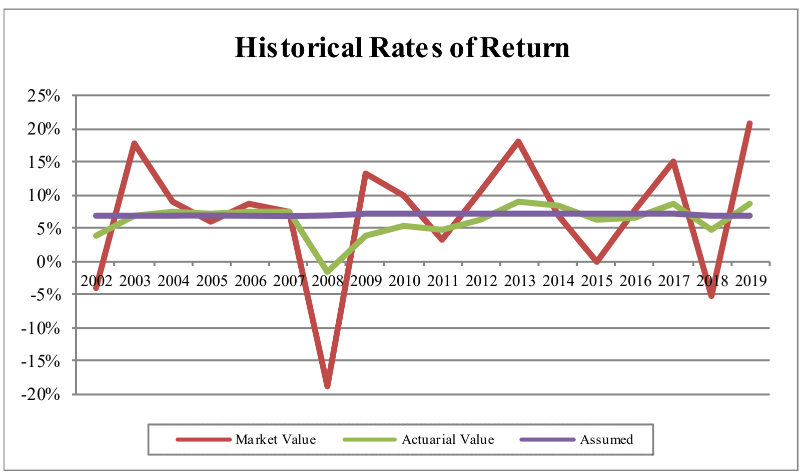
If the deferred investment gain was recognized immediately in the actuarial value assets, the unfunded actuarial liability would decrease by $19.6 million to $32.5 million, the funded percentage would increase from 89.3% to 93.3% and the actuarially determined contribution would decrease from $11.0M to $9.7M.

A comparison of asset values on both a market and actuarial basis for the last six years is shown below.

| | January 1 ($M) | | | | | |
|---|---|---|---|---|---|---|
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Actuarial Value of Assets | 322 | 339 | 359 | 387 | 403 | 432 |
| Market Value of Assets | 333 | 329 | 353 | 403 | 378 | 452 |
| Actuarial Value/Market Value | 97% | 103% | 102% | 96% | 106% | 96% |




*An asset smoothing method is used to mitigate the volatility in the market value of assets. By using a smoothing method, the actuarial (or smoothed) value can be, and actually should be, either above or below the pure market value.*




*The rate of return on the actuarial value of assets has been less volatile than the return on market value, which is the reason for using a smoothing method. However, during this time period, the rate of return on actuarial assets has been at or below the assumed rate of return for much of the period.*

## Liabilities

The first step in determining the contribution for the Plan is to calculate the liabilities for all expected future benefit payments. These liabilities represent the present value of future benefits (PVFB) expected to be paid to the current Plan members, assuming that all actuarial assumptions are realized. Thus, the

PVFB reflects future service and salary increases for active members that are expected to occur before a benefit becomes payable. The components of the PVFB can be found in the liabilities portion of the valuation balance sheet (see Exhibit 3). The other critical measurement of plan liabilities in the valuation process is the actuarial liability (AL). The PVFB is funded over each employees' expected working career and the portion of the PVFB that is allocated to prior service periods is called the actuarial liability.

The following chart compares the Present Value of Future Benefits (PVFB), the Actuarial Liability (AL) and plan assets for the current and prior valuation.

| | As of January 1 | |
|---|---|---|
| | **2020** | **2019** |
| Present Value of Future Benefits (PVFB) | $605,016,424 | $573,466,823 |
| Actuarial Liability (AL) | $484,575,088 | $465,369,852 |
| Assets at Actuarial Value | $432,489,879 | $402,503,121 |
| Funded Ratio (Actuarial Value) | 89.3% | 86.5% |
| Assets at Market Value | $452,080,699 | $378,210,890 |
| Funded Ratio (Market Value) | 93.3% | 81.3% |

The calculation of the unfunded actuarial liability for the Plan as of January 1, 2020 is shown below:

| | |
|---|---|
| Actuarial Liability | $484,575,088 |
| Actuarial Value of Assets | 432,489,879 |
| Unfunded Actuarial Liability | $ 52,085,209 |

Actuarial gains (or losses) result from actual experience that is more (or less) favorable than anticipated based on the actuarial assumptions. These "experience" (or actuarial) gains or losses are reflected in the unfunded actuarial liability and are measured as the difference between the expected unfunded actuarial liability and the actual unfunded actuarial liability, taking into account any changes due to assumption or benefit provision changes. The Plan experience, in total, was favorable (a lower unfunded actuarial liability than expected). There was an actuarial gain of $8.3 million on liabilities and an actuarial gain of $6.5 million on the actuarial value of assets, resulting in an aggregate gain of $14.8 million.

The change in the unfunded actuarial liability between January 1, 2019 and 2020 is shown below (in millions):

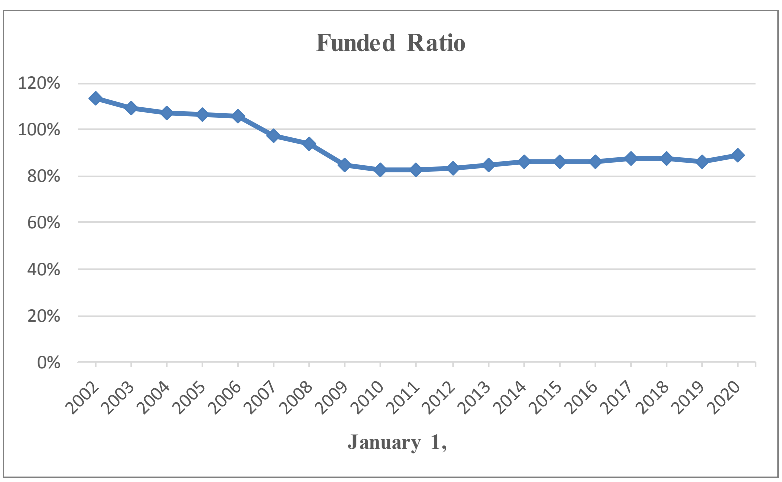
| | | |
|---|---|---|
| **Unfunded Actuarial Liability, January 1, 2019** | $ | 62.9 |
| · Expected change in UAL | + | 0.4 |
| · Contributions in excess of the actuarial amount | - | 1.1 |
| · Investment experience | - | 6.5 |
| · Demographic experience | - | 8.3 |
| · Impact of assumption change | + | 5.1 |
| · Other experience | - | 0.4 |
| **Unfunded Actuarial Liability, January 1, 2020** | $ | 52.1 |

A number of factors impact the funded ratio from year to year. The major drivers of the increase in the funded ratio from the January 1, 2019 to the January 1, 2020 valuation are shown in the following table.

| | Actuarial Value of Assets | Market Value of Assets |
|---|---|---|
| **January 1, 2019 Funded Ratio** | 86.49% | 81.27% |
| · Expected change | 0.63% | 0.52% |
| · Excess contributions | 0.22% | 0.22% |
| · Investment experience | 1.34% | 10.68% |
| · Demographic experience | 1.53% | 1.60% |
| · Impact of assumption change | (0.96%) | (1.00%) |
| · Total Change | 2.76% | 12.02% |
| **January 1, 2020 Funded Ratio** | 89.25% | 93.29% |

Note that the funded ratio, as a standalone measurement, does not indicate whether or not the Plan has sufficient funds to settle all current obligations, nor is it necessarily indicative of the need or amount of future funding.

An evaluation of the unfunded actuarial liability on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both large numbers) is reflected. Another way to evaluate the progress made in funding the Plan is to track the funded ratio, the ratio of actuarial assets to actuarial liability. The historical funded ratio of the Plan since 2002 is shown in the following graph:




The large reduction in the funded ratio from 2006 to 2010 is attributable to the benefit improvement granted in 2007 (change in the benefit formula) and the impact of the actual investment return in 2008. The funded ratio has increased moderately over the last ten years. Given the Plan's funding policy, which includes amortizing the legacy unfunded actuarial liability over 30 years beginning in 2014, we would not expect the funded ratio to reach 100% until 2044. If contributions above the actuarial contribution are made in the future and/or actual experience, especially investment return, is better than anticipated by the assumptions, the Plan may reach fully funded status more rapidly.

## Contribution Levels

The Plan is funded by contributions from both the District and employees who contribute a fixed percentage of their payroll. The District is responsible for contributing the remaining amount required to fund the Plan on an actuarial basis. For calendar year 2020, each member will contribute 7.5% of pensionable earnings, as provided by the collective bargaining agreement. There are additional scheduled increases to the employee pension contribution rate, effective January 1 of each year: 8.0% in 2021, 8.5% in 2022 and 9.0% in 2023. The contribution rate for employees not covered by the collective bargaining agreement aligns with the rates stated in the collective bargaining agreement through 2023.

The scheduled increase in the employee contribution rate from 7.0% to 7.5%, effective January 1, 2020, reduced the District's 2020 actuarial contribution by more than $300,000. As the scheduled increases occur in the future, they will have a significant cumulative impact on the amount of the District's contribution, especially in 2023 and beyond.

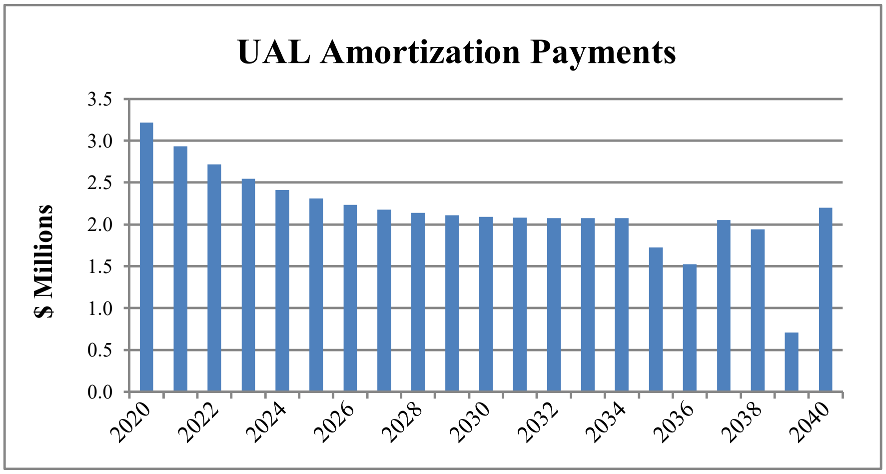
The actuarial contribution to the Plan is composed of three parts:

(1) Normal cost (which is the allocation of benefit costs to the current year of service),
(2) Administrative expense, and
(3) Amortization payment on the Unfunded Actuarial Liability.

The normal cost rate is independent of the Plan's funded status and represents the cost, as a percent of payroll, of the benefits provided by the Plan which is allocated to the current year of service. The total normal cost for the Plan is 19.13% of pay. When offset by the employee contribution rate of 7.50% during 2020, the employer portion of the normal cost is 11.63% of pay. The normal cost represents the long-term cost of the benefit structure in the Plan, based on the current actuarial assumptions. The Plan's administrative expenses are funded using an explicit assumption that is based on the actual administrative expenses in the prior year. The administrative expense component for the 2020 plan year is 0.11% of expected payroll.

Currently, the actuarial value of assets is less than the actuarial liability, so there is an unfunded actuarial liability of $52.1 million. Under the current amortization method, the unfunded actuarial liability as of January 1, 2014 is treated as a separate amortization base that is amortized, on a level-percent of payroll basis, over a closed 30-year period beginning January 1, 2014 (24 payments remaining in this valuation). Additionally, every year a new amortization base is calculated reflecting the actual plan experience in the immediately preceding plan year, as well as any change in the unfunded actuarial liability due to assumption changes or plan amendments. Each new base is amortized, with payments developed as a level-percent of payroll, over a closed 20-year period that begins on the valuation date when the new base is established. Using this methodology, referred to as "layered amortization", the resulting UAL amortization payment for 2020 is 4.83% of pay.

As mentioned earlier, the UAL is amortized with payments that are developed to be level as a percentage of total covered payroll, but there are various amortization bases with different payments and periods. The following graph shows the net UAL amortization payments each year until full funding is reached, assuming all actuarial assumptions are met in the future.




The total actuarial contribution rate for 2020 is:

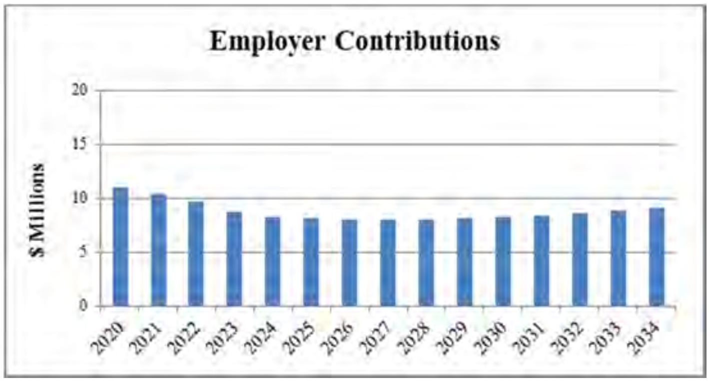
| | |
|---|---|
| 19.13% | (normal cost) |
| 0.11% | (administrative expense) |
| 4.83% | (UAL amortization payment). |
| 24.07% | |

Given the employee contribution rate of 7.50%, the District's share of the total contribution rate is 16.57% of expected payroll in 2020, or $11.0 million.

The primary components of the change in the actuarial required contribution rate are shown in the following table:

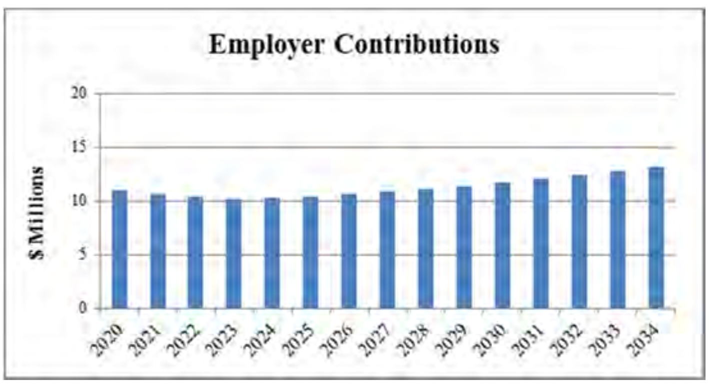
| | |
|---|---|
| **Total Actuarial Required Contribution Rate, January 1, 2019** | 24.62% |
| · Change in normal cost rate and administrative expense | 0.11% |
| · Contributions in excess of the actuarial amount | (0.11%) |
| · Investment experience | (0.68%) |
| · Demographic experience | (0.87%) |
| · Payroll increase greater than expected | (0.03%) |
| · Impact of assumption change | 1.08% |
| · Other experience | (0.05%) |
| **Total Actuarial Required Contribution Rate, January 1, 2020** | 24.07% |

To illustrate the importance of investment returns on the contribution level, we have included graphs of the estimated employer contributions based on three different scenarios for the rate of return on the market value of assets in 2020, 2021 and 2022. <u>The projections reflect the scheduled increases in the employee contribution rate over the next three years and assume that all other actuarial assumptions are met</u> (including a 6.90% assumed rate of return on the market value of assets in 2022 and later) and that the full actuarial contribution will be made each year in the future:



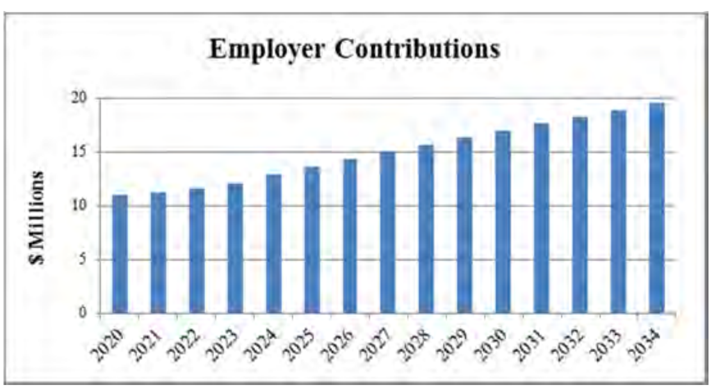

*OPTIMISTIC*
*(10% return on market value for 2020-2022)*

*Under this scenario, the current deferred investment gain is recognized and additional actuarial gains occur. The overall impact is an initial decline in the contribution amount and then a stable contribution amount over most of the time period.*




*INTERMEDIATE*
*(6.90% return on market value for 2020-2022)*

*If the assumed rate of return is earned on the market value of assets, the deferred investment gain will be recognized in the smoothing method. However, contribution amounts still increase over time due to increases in the amount of covered payroll.*




*PESSIMISTIC*
*(0% return for 2020, 4% for 2021-2022)*

*If this scenario occurs, investment losses occur and initially offset the current deferred gain. Despite the scheduled increases in the employee contribution rate in the next three years, the investment losses, coupled with increases in payroll, will cause the District's contributions to increase significantly.*

Under the funding methodology adopted by the Board, contributions by the District (exclusive of employee contributions) in the following amount will satisfy the actuarially determined contribution for the 2020 plan year:

| | |
|---|---|
| Actuarially Determined Contribution: | |
| Normal Cost | $12,745,888 |
| Administrative Expenses | 70,123 |
| Amortization of UAL | 3,215,607 |
| Expected Employee Contributions | (4,995,311) |
| Total | $11,036,307 |

The resulting contribution for the District (net of expected employee contributions) is $11,036,307, which is 16.57% of expected covered payroll for 2020.

In recent years we have recommended that the District contribute an amount at least equal to the amount of the contribution made in the prior year, if greater than the current actuarially determined contribution. The District has followed this recommendation in setting the budgeted contributions. This contribution policy was implemented to reflect several goals:

(1) to pay off the UAL more rapidly,
(2) to improve the Plan's funded status more quickly, and
(3) to mitigate some of the volatility in the District's contribution level.

MUD staff has informed us that the budgeted amount for 2020 is $13,558,075 which is $2.6 million higher than the actuarially determined contribution of $11.0 million for the 2020 plan year. While it would strengthen the Plan's funding if the budgeted amount for 2020 is contributed, it is also reasonable to contribute the same amount as in 2019 ($12.3 million), which still exceeds the actuarial contribution by $1.3 million.

Future contribution levels will continue to depend heavily on investment returns in future years, as illustrated in the graphs on the prior pages. However, it should be noted that even if the actuarial contribution rate were to hold steady, the dollar amount of total contributions is expected to increase as covered payroll increases over time. Overall, the scheduled increases in the employee contribution rate (ultimately reaching 9.0% in 2023) will tend to reduce the District's contributions compared to the amount that would otherwise be due.

A typical retirement plan faces many different risks. The term "risk" is most commonly associated with an outcome with undesirable results. However, in the actuarial world risk can be translated as uncertainty. The actuarial valuation process uses many actuarial assumptions to project how future contributions and investment returns will meet the cash flow needs for future benefit payments. Of course, we know that actual experience will not unfold exactly as anticipated by the assumptions and that uncertainty, whether favorable or unfavorable, creates risk. Actuarial Standard of Practice Number 51 defines risk as the potential of actual future measurements to deviate from expected results due to actual experience that is different than the actuarial assumptions. Risk evaluation is an important part of managing a defined benefit plan. Please see Section III of this report for an in-depth discussion of the specific risks facing the Retirement Plan for Employees of the Metropolitan Utilities District of Omaha.

# METROPOLITAN UTILITIES DISTRICT OF OMAHA
# RETIREMENT PLAN FOR EMPLOYEES

## PRINCIPAL VALUATION RESULTS

| | January 1, 2020 | January 1, 2019 | % Chg |
|---|---|---|---|
| **MEMBERSHIP** | | | |
| 1. Active Membership | | | |
| - Number of Members | 808 | 792 | 2.0 |
| - Projected Payroll for Upcoming Fiscal Year | $66.6M | $64.0M | 4.1 |
| - Average Projected Salary | $82,431 | $80,757 | 2.1 |
| - Average Attained Age | 48.0 | 48.3 | (0.6) |
| - Average Entry Age | 33.7 | 33.6 | 0.3 |
| 2. Inactive Membership | | | |
| - LTD and Inactive Vesteds | 72 | 64 | 12.5 |
| - Inactive Non-vested | 1 | 4 | (75.0) |
| - Number of Retirees / Beneficiaries | 655 | 656 | (0.2) |
| - Average Retiree/Beneficiary Annual Benefit | $32,522 | $31,817 | 2.2 |
| **ASSETS AND LIABILITIES** | | | |
| 1. Net Assets | | | |
| - Market Value | $452M | $378M | 19.6 |
| - Actuarial Value | 432M | 403M | 7.2 |
| 2. Projected Liabilities | | | |
| - Retired Members | $247M | $238M | 3.8 |
| - Inactive Members | 13M | 11M | 18.2 |
| - Active Members | 345M | 324M | 6.5 |
| - Total Liability | $605M | $573M | 5.6 |
| 3. Actuarial Liability | $485M | $465M | 4.3 |
| 4. Unfunded Actuarial Liability (UAL) | $52M | $63M | (17.5) |
| 5. Funded Ratios | | | |
| Actuarial Value Assets / Actuarial Liability | 89.25% | 86.49% | 3.2 |
| Market Value Assets / Actuarial Liability | 93.29% | 81.27% | 14.8 |
| **CONTRIBUTIONS** | | | |
| 1. Normal Cost Rate | 19.13% | 18.39% | 4.0 |
| 2. Administrative Expense | 0.11% | 0.15% | (26.7) |
| 3. UAL Contribution Rate | 4.83% | 6.08% | (20.6) |
| 4. Total Contribution Rate (1) + (2) + (3) | 24.07% | 24.62% | (2.2) |
| 5. Less Employee Contribution Rate | (7.50%) | (7.00%) | 7.1 |
| 6. District Contribution Rate (4) + (5) | 16.57% | 17.62% | (6.0) |
| 7. District Annual Contribution | $11.0M | $11.3M | (2.7) |

Note: numbers may not add due to rounding.

## EXHIBIT 1

### SUMMARY OF FUND ACTIVITY
### (Market Value Basis)

### For Year Ended December 31, 2019

| | | |
|---|---|---|
| 1. Market Value of Assets as of January 1, 2019 | $ | 378,210,890 |
| 2. a. Contributions - District | $ | 12,300,000 |
| b. Contributions - Employees | | 4,413,137 |
| c. Total | | 16,713,137 |
| 3. Benefit payments and refunds | $ | (21,204,786) |
| 4. Administrative expenses | $ | (70,123) |
| 5. Investment income, net of investment expenses | $ | 78,431,581 |
| 6. Market Value of Assets as of December 31, 2019 | $ | 452,080,699 |
| 7. Rate of Return on Market Value of Assets* | | 21.0% |

*Annual money-weighted rate of return, net of investment expenses, as reported by Vanguard

## EXHIBIT 2

## DETERMINATION OF ACTUARIAL VALUE OF ASSETS

The actuarial value of assets is used to minimize the impact of annual fluctuations in the market value of investments on the contribution rate. The current asset valuation method is called the "Expected Value + 25% Method" and has been used since 1998.

The "expected value" of assets is determined by applying the investment return assumption to last year's actuarial value of assets and the net difference of receipts and disbursements for the year. The actual market value is compared to the expected value and 25% of the difference (positive or negative) is added to the expected value to arrive at the actuarial value of assets for the current year.

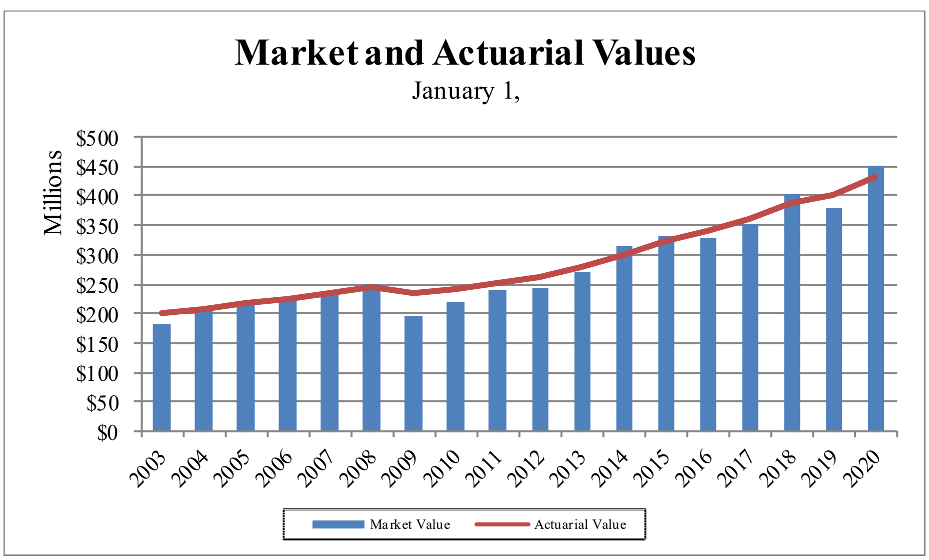
| | |
|---|---|
| 1. Actuarial Value of Assets as of January 1, 2019 | $402,503,121 |
| 2. a. Contributions during 2019 | 16,713,137 |
| b. Benefit payments and refunds during 2019 | 21,204,786 |
| c. Administrative expenses during 2019 | 70,123 |
| 3. Expected Value of Assets as of December 31, 2019 | 425,959,606 |
| (1) x 1.07 + [(2a) - (2b) - (2c)] x 1.07 $^{½}$ | |
| 4. Market Value of Assets as of December 31, 2019 | 452,080,699 |
| 5. Excess of Market Value over Expected Value as of December 31, 2019 | 26,121,093 |
| 6. Actuarial Value of Assets as of December 31, 2019 | 432,489,879 |
| (3) + 0.25 x (5) | |
| 7. Corridor for Actuarial Value of Assets | |
| a. 80% of (4) | 361,664,559 |
| b. 120% of (4) | 542,496,839 |
| 8. Final Actuarial Value of Assets as of December 31, 2019 | $432,489,879 |
| (6) but not < (7a) nor > (7b) | |
| 9. Estimated Rate of Return on Actuarial Value of Assets* | 8.6% |

*Net of investment expenses.

## EXHIBIT 2 (continued)

A historical comparison of the market and actuarial value of assets is shown below:

| Date | Market Value of Assets (MVA) | Actuarial Value of Assets (AVA) | AVA / MVA |
|---|---|---|---|
| 1/1/2003 | $182,802,988 | $201,266,877 | 110.10% |
| 1/1/2004 | 208,097,692 | 208,282,032 | 100.09% |
| 1/1/2005 | 219,605,615 | 216,654,583 | 98.66% |
| 1/1/2006 | 225,161,798 | 224,761,515 | 99.82% |
| 1/1/2007 | 237,959,892 | 234,707,113 | 98.63% |
| 1/1/2008 | 249,095,495 | 245,760,175 | 98.66% |
| 1/1/2009 | 196,124,538 | 235,349,446 | 120.00% |
| 1/1/2010 | 218,042,907 | 241,024,751 | 110.54% |
| 1/1/2011 | 238,265,999 | 252,420,193 | 105.94% |
| 1/1/2012 | 244,777,760 | 263,114,155 | 107.49% |
| 1/1/2013 | 268,895,003 | 277,702,452 | 103.28% |
| 1/1/2014 | 314,630,091 | 300,065,992 | 95.37% |
| 1/1/2015 | 333,135,690 | 322,199,383 | 96.72% |
| 1/1/2016 | 329,261,948 | 339,057,547 | 102.98% |
| 1/1/2017 | 352,513,865 | 358,959,262 | 101.83% |
| 1/1/2018 | 402,738,799 | 387,412,491 | 96.19% |
| 1/1/2019 | 378,210,890 | 402,503,121 | 106.42% |
| 1/1/2020 | 452,080,699 | 432,489,879 | 95.67% |



# EXHIBIT 3

## ACTUARIAL BALANCE SHEET

An actuarial statement of the status of the plan in balance sheet form as of January 1, 2020 is as follows:

### Assets

| | | |
|---|---|---|
| Current assets (actuarial value) | | $ 432,489,879 |
| Present value of future normal costs | | 120,441,336 |
| Present value of future employer contributions to fund unfunded actuarial liability | | 52,085,209 |
| **Total Assets** | | $ 605,016,424 |

### Liabilities

| | | |
|---|---|---|
| Present value of future retirement benefits for: | | |
| Active employees | $ 331,433,064 | |
| Retired employees, contingent annuitants and spouses receiving benefits | 247,490,777 | |
| Deferred vested employees | 6,695,923 | |
| Inactive employees – disabled | 6,575,574 | |
| **Total** | | $ 592,195,338 |
| Inactive non-vested employees – refund due | | 688 |
| Present value of future death benefits payable upon death of active members | | 6,530,992 |
| Present value of future benefits payable upon termination of active members | | 6,289,406 |
| **Total Liabilities** | | $ 605,016,424 |

# EXHIBIT 4

## UNFUNDED ACTUARIAL LIABILITY

### As of January 1, 2020

The actuarial liability is the portion of the present value of future benefits which will not be paid by future normal costs. The actuarial value of assets is subtracted from the actuarial liability to determine the unfunded actuarial liability.

| | | | |
|---|---|---|---|
| 1. | Present Value of Future Benefits | $ | 605,016,424 |
| 2. | Present Value of Future Normal Costs | | 120,441,336 |
| 3. | Actuarial Liability<br>(1) – (2) | | 484,575,088 |
| 4. | Actuarial Value of Assets | | 432,489,879 |
| 5. | Unfunded Actuarial Liability<br>(3) – (4) | $ | 52,085,209 |
| 6. | Funded Ratio<br>(4) / (3) | | 89.25% |

# EXHIBIT 5

## AMORTIZATION SCHEDULE OF THE UNFUNDED ACTUARIAL LIABILITY BASES

| Amortization Bases | Original Amount | January 1, 2020 Remaining Payments | Date of Last Payment | Outstanding Balance as of January 1, 2020 | Annual Contribution* |
|---|---|---|---|---|---|
| 2014 UAL Base | $ 49,110,413 | 24 | 1/1/2044 | $ 53,416,937 | $ 3,255,142 |
| 2015 Assumption Change Base | $ 9,846,943 | 15 | 1/1/2035 | $ 9,564,586 | $ 818,651 |
| 2015 Experience Base | $ (7,281,065) | 15 | 1/1/2035 | $ (7,072,284) | $ (605,330) |
| 2016 Experience Base | $ 1,395,779 | 16 | 1/1/2036 | $ 1,370,922 | $ 111,648 |
| 2017 Experience Base | $ (3,897,186) | 17 | 1/1/2037 | $ (3,855,784) | $ (299,930) |
| 2018 Assumption Change Base | $ 9,057,593 | 18 | 1/1/2038 | $ 8,996,392 | $ 670,677 |
| 2018 Experience Base | $ (8,192,496) | 18 | 1/1/2038 | $ (8,137,141) | $ (606,620) |
| 2019 Experience Base | $ 8,980,430 | 19 | 1/1/2039 | $ 8,962,056 | $ 642,236 |
| 2020 Assumption Change Base | $ 5,133,619 | 20 | 1/1/2040 | $ 5,133,619 | $ 354,585 |
| 2020 Experience Base | $ (16,294,094) | 20 | 1/1/2040 | $ (16,294,094) | $ (1,125,452) |
| **Total** | | | | **$ 52,085,209** | **$ 3,215,607** |

* Contribution amount reflects mid-year timing.

| | |
|---|---|
| 1. Total UAL Amortization Payments | $ 3,215,607 |
| 2. Projected Payroll for FY 2020 | $ 66,604,146 |
| 3. UAL Amortization Payment Rate | 4.83% |

# EXHIBIT 6

## DEVELOPMENT OF 2020 ACTUARIAL DETERMINED CONTRIBUTION

The actuarial cost method used to determine the required level of annual contributions to support the expected benefits is the Entry Age Normal Cost Method. Under this method, the total cost is comprised of the normal cost rate, the administrative expense and the unfunded actuarial liability (UAL) payment. The Plan is financed by contributions from the employees and the District.

| | | |
|---|---|---|
| 1. (a) Normal Cost | $ | 11,897,490 |
| (b) Expected Payroll in 2020 for Current Actives | $ | 62,204,165 |
| (c) Normal Cost Rate<br>(a) / (b) | | 19.13% |
| 2. Administrative Expense | | 0.11% |
| 3. Unfunded Actuarial Liability Payment as Percent of Pay | | 4.83% |
| 4. Total Actuarial Contribution Rate<br>(1c) + (2) + (3) | | 24.07% |
| 5. Employee Contribution Rate* | | 7.50% |
| 6. District Actuarial Contribution Rate<br>(4) – (5) | | 16.57% |
| 7. Expected Payroll for 2020 | $ | 66,604,146 |
| 8. Total Annual District Actuarial Contribution<br>(6) x (7) | $ | 11,036,307 |
| 9. Monthly District Actuarial Contribution | $ | 919,692 |

* Reflects increase to 7.50% effective January 1, 2020.

# EXHIBIT 7

## CALCULATION OF ACTUARIAL (GAIN)/LOSS
## For Plan Year Ending December 31, 2019

| | | |
|---|---|---|
| **Liabilities** | | |
| 1. Actuarial liability as of January 1, 2019 | $ | 465,369,852 |
| 2. Normal cost as of January 1, 2019 | | 10,944,681 |
| 3. Interest at 7.00% on (1) and (2) to December 31, 2019 | | 33,342,017 |
| 4. Benefit payments during 2019 | | (21,204,786) |
| 5. Interest on benefit payments | | (729,615) |
| 6. Assumption Change | | 5,133,619 |
| 7. Expected actuarial liability as of December 31, 2019 | $ | 492,855,768 |
| 8. Actuarial liability as of December 31, 2019 | $ | 484,575,088 |
| **Assets** | | |
| 9. Actuarial value of assets as of January 1, 2019 | $ | 402,503,121 |
| 10. Contributions during 2019 | | 16,713,137 |
| 11. Benefit payments and administrative expenses during 2019 | | (21,274,909) |
| 12. Interest on items (9), (10) and (11) | | 28,018,257 |
| 13. Expected actuarial value of assets as of December 31, 2019 | $ | 425,959,606 |
| 14. Actual actuarial value of assets as of December 31, 2019 | $ | 432,489,879 |
| **(Gain) / Loss** | | |
| 15. Expected unfunded actuarial liability<br>(7) – (13) | $ | 66,896,162 |
| 16. Actual unfunded actuarial liability<br>(8) – (14) | $ | 52,085,209 |
| 17. Actuarial (Gain) / Loss<br>(16) – (15) | $ | (14,810,953) |
| 18. Actuarial (Gain) / Loss on Actuarial Assets<br>(13) – (14) | $ | (6,530,273) |
| 19. Actuarial (Gain) / Loss on Actuarial Liability<br>(8) – (7) | $ | (8,280,680) |

# EXHIBIT 8

## ANALYSIS OF EXPERIENCE

The purpose of conducting an actuarial valuation of a retirement plan is to estimate the costs and liabilities for the benefits expected to be paid from the plan, to determine the annual level of contribution for the current plan year that should be made to support these benefits and, finally, to analyze the plan's experience. The costs and liabilities of this retirement plan depend not only upon the benefit formula and plan provisions but also upon factors such as the investment return on plan assets, mortality rates among active and retired members, withdrawal and retirement rates among active members, rates at which salaries increase and the rate at which the cost of living increases.

The actuarial assumptions employed as to these and other contingencies in the current valuation are set forth in Appendix B of this report.

Since the overall results of the valuation will reflect the choice of assumptions made, periodic studies of the various components comprising the plan's experience are conducted in which the experience for each component is analyzed in relation to the assumption used for that component (experience study). This summary is not intended to be an actual "experience study", but rather an analysis of sources of gain and loss in the past plan year.

**(Gain)/Loss By Source**

The Plan experienced a net actuarial gain on liabilities of $8,281,000 during the plan year ended December 31, 2019, as well as an actuarial gain on assets of $6,530,000. The overall actuarial gain was $14,811,000. The major components of this net actuarial experience (gain)/loss are shown below:

| **Liability Sources** | | **(Gain)/Loss** |
|---|---|---|
| Salary Increases | $ | (1,402,000) |
| Mortality | | (4,416,000) |
| Terminations | | (90,000) |
| Retirements | | (117,000) |
| Disability | | (293,000) |
| New Entrants/Rehires | | 385,000 |
| COLA | | (2,405,000) |
| Miscellaneous | | 57,000 |
| **Total Liability (Gain)/Loss** | $ | (8,281,000) |
| **Asset (Gain)/Loss** | $ | (6,530,000) |
| **Net Actuarial (Gain)/Loss*** | $ | (14,811,000) |

*May not add due to rounding.

# SECTION II

# OTHER INFORMATION

In this section, we provide some historical information regarding the funding progress of the Plan. These exhibits retain some of the information that used to be required for accounting purposes and are included because they provide relevant information on the Plan's historical funding. An exhibit showing the expected future benefit payments for the Plan is also included.

## EXHIBIT 9

## ESTIMATED BENEFIT PAYMENTS*

| Year End | Current In-Pay | Current Not-In-Pay | Total |
|---|---|---|---|
| 2020 | $21,338,000 | $ 922,000 | $22,260,000 |
| 2021 | 21,405,000 | 2,352,000 | 23,757,000 |
| 2022 | 21,404,000 | 3,891,000 | 25,295,000 |
| 2023 | 21,477,000 | 5,577,000 | 27,054,000 |
| 2024 | 21,457,000 | 7,374,000 | 28,831,000 |
| 2025 | 21,456,000 | 9,222,000 | 30,678,000 |
| 2026 | 21,356,000 | 11,199,000 | 32,555,000 |
| 2027 | 21,258,000 | 13,255,000 | 34,513,000 |
| 2028 | 21,153,000 | 15,324,000 | 36,477,000 |
| 2029 | 20,968,000 | 17,439,000 | 38,407,000 |
| 2030 | 20,737,000 | 19,525,000 | 40,262,000 |
| 2031 | 20,531,000 | 21,595,000 | 42,126,000 |
| 2032 | 20,214,000 | 23,637,000 | 43,851,000 |
| 2033 | 19,880,000 | 25,683,000 | 45,563,000 |
| 2034 | 19,466,000 | 27,783,000 | 47,249,000 |

*Amounts shown are the cash flows for current members only, based on the current benefit structure and assuming that all actuarial assumptions are met in each year. To the extent that actual experience deviates from that expected, results will vary. Amounts are shown in future nominal dollars and have not been discounted to the valuation date.

# EXHIBIT 10

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

| Actuarial Valuation Date | Fiscal Year Ending | Actuarial Determined Contribution (ADC) (a) | Total Employer Contribution (b) | Percentage of ADC Contributed (b / a) |
|---|---|---|---|---|
| 1/1/2002 | 12/31/2002 | $ 873,502 | $ 873,502 | 100.00% |
| 1/1/2003 | 12/31/2003 | 1,012,910 | 1,012,910 | 100.00% |
| 1/1/2004 | 12/31/2004 | 543,249 | 1,251,442 | 230.36% |
| 1/1/2005 | 12/31/2005 | 1,454,070 | 1,905,277 | 131.03% |
| 1/1/2006 | 12/31/2006 | 1,723,353 | 2,144,188 | 124.42% |
| 1/1/2007 | 12/31/2007 | 2,602,505 | 2,885,080 | 110.73% |
| 1/1/2008 | 12/31/2008 | 5,965,250 | 3,200,004 | 53.64% |
| 1/1/2009 | 12/31/2009 | 7,688,825 | 6,200,004 | 80.64% |
| 1/1/2010 | 12/31/2010 | 8,587,857 | 8,637,518 | 100.58% |
| 1/1/2011 | 12/31/2011 | 9,235,199 | 9,300,000 | 100.70% |
| 1/1/2012 | 12/31/2012 | 9,231,058 | 10,311,552 | 111.70% |
| 1/1/2013 | 12/31/2013 | 8,995,793 | 10,299,996 | 114.50% |
| 1/1/2014 | 12/31/2014 | 8,987,679 | 10,299,996 | 114.60% |
| 1/1/2015 | 12/31/2015 | 9,956,157 | 10,301,268 | 103.47% |
| 1/1/2016 | 12/31/2016 | 10,214,549 | 10,300,000 | 100.84% |
| 1/1/2017 | 12/31/2017 | 10,273,167 | 11,193,821 | 108.96% |
| 1/1/2018 | 12/31/2018 | 11,198,244 | 11,606,179 | 103.64% |
| 1/1/2019 | 12/31/2019 | 11,269,603 | 12,300,000 | 109.14% |
| 1/1/2020 | 12/31/2020 | 11,036,307 | | |

## EXHIBIT 11

## SCHEDULE OF FUNDING PROGRESS

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Liability (AL) (b) | Unfunded AL (UAL) (b-a) | Funded Ratio (a / b) | Covered Payroll (P / R) (c) | UAL as a Percentage of Covered P / R [(b-a) / c ] |
|---|---|---|---|---|---|---|
| 1/1/2002 | $200,022,238 | $176,355,329 | ($23,666,909) | 113.4% | $33,641,638 | (70.4%) |
| 1/1/2003 | 201,266,877 | 184,584,823 | (16,682,054) | 109.0% | 35,393,305 | (47.1%) |
| 1/1/2004 | 208,282,032 | 194,491,079 | (13,790,953) | 107.1% | 36,756,986 | (37.5%) |
| 1/1/2005 | 216,654,583 | 203,355,807 | (13,298,776) | 106.5% | 38,256,948 | (34.8%) |
| 1/1/2006 | 224,761,515 | 212,358,261 | (12,403,254) | 105.8% | 38,706,810 | (32.0%) |
| 1/1/2007 | 234,707,113 | 241,171,731 | 6,464,618 | 97.3% | 40,945,335 | 15.8% |
| 1/1/2008 | 245,760,175 | 262,626,673 | 16,866,498 | 93.6% | 43,105,294 | 39.1% |
| 1/1/2009 | 235,349,446 | 277,523,938 | 42,174,492 | 84.8% | 46,428,438 | 90.8% |
| 1/1/2010 | 241,024,751 | 291,186,530 | 50,161,779 | 82.8% | 50,781,583 | 98.8% |
| 1/1/2011 | 252,420,193 | 304,163,301 | 51,743,108 | 83.0% | 51,484,227 | 100.5% |
| 1/1/2012 | 263,114,155 | 315,121,772 | 52,007,617 | 83.5% | 51,868,957 | 100.3% |
| 1/1/2013 | 277,702,452 | 328,044,761 | 50,342,309 | 84.7% | 51,031,067 | 98.7% |
| 1/1/2014 | 300,065,992 | 349,176,405 | 49,110,413 | 85.9% | 55,847,203 | 87.9% |
| 1/1/2015 | 322,199,383 | 374,788,099 | 52,588,716 | 86.0% | 59,332,362 | 88.6% |
| 1/1/2016 | 339,057,547 | 393,919,275 | 54,861,728 | 86.1% | 63,384,548 | 86.6% |
| 1/1/2017 | 358,959,262 | 410,749,711 | 51,790,449 | 87.4% | 61,064,398 | 84.8% |
| 1/1/2018 | 387,412,491 | 440,820,801 | 53,408,310 | 87.9% | 62,624,066 | 85.3% |
| 1/1/2019 | 402,503,121 | 465,369,852 | 62,866,731 | 86.5% | 62,865,829 | 100.0% |
| 1/1/2020 | 432,489,879 | 484,575,088 | 52,085,209 | 89.3% | 63,272,421 | 82.3% |

# SECTION III

# RISK CONSIDERATIONS

Actuarial Standards of Practice are issued by the Actuarial Standards Board and are binding on credentialed actuaries practicing in the United States. These standards generally identify what the actuary should consider, document and disclose when performing an actuarial assignment. In November, 2018, Actuarial Standard of Practice Number 51, *Assessment and Disclosure of Risk in Measuring Pension Obligations*, (ASOP 51) was issued as final with application to measurement dates on or after November 1, 2018. This ASOP, which applies to funding valuations, actuarial projections, and actuarial cost studies of proposed plan changes, was first applicable for the January 1, 2019 actuarial valuation for MUD's Retirement Plan.

A typical retirement plan faces many different risks, but the greatest risk is the inability to make benefit payments when due. If plan assets are depleted, benefits may not be paid which could create legal and litigation risk or the plan could become "pay as you go". The term "risk" is most commonly associated with an outcome with undesirable results. However, in the actuarial world, risk is translated into uncertainty. The actuarial valuation process uses many actuarial assumptions to project how future contributions and investment returns will meet the cash flow needs for future benefit payments. Of course, we know that actual experience will not unfold exactly as anticipated by the assumptions and that uncertainty, whether favorable or unfavorable, creates risk. ASOP 51 defines risk as the potential of actual future measurements to deviate from expected results due to actual experience that is different than the actuarial assumptions.

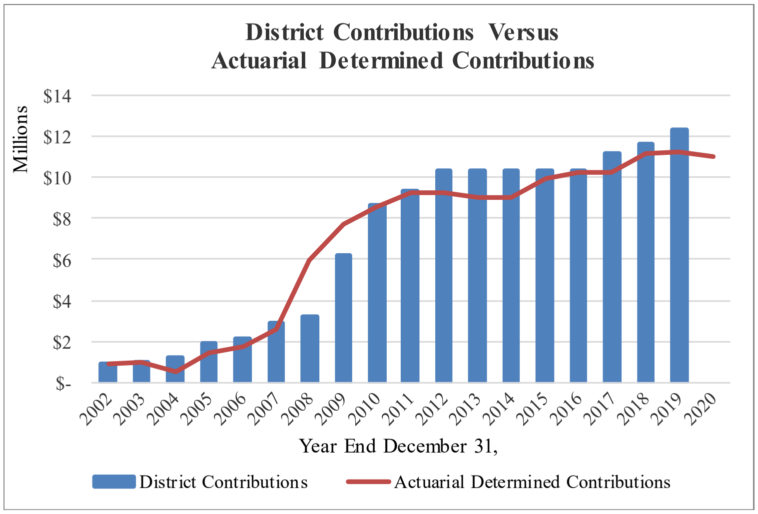
The various risk factors for a given plan can have a significant impact – good or bad – on the actuarial projection of liability and contribution rates.

There are a number of risks inherent in the funding of a defined benefit plan. These include:

- economic risks, such as investment return and inflation;
- demographic risks such as mortality, payroll growth, aging population including impact of baby boomers, and retirement ages;
- contribution risk, i.e., the potential for contributions to become too high for the plan sponsor/employer to pay and
- external risks such as the regulatory and political environment.

Note that the last two items are not risks that the actuary must address under ASOP 51.

There is a direct correlation between healthy, well-funded retirement plans and consistent contributions equal to the full actuarial contribution each year. As the following graph shows, the District has contributed an amount equal to or greater than the actuarial contribution in all but two of the last 18 years, including every year for the past ten years.




One of the strongest factors regarding the funding of the MUD Retirement Plan is the District's commitment to make contributions that are at least equal to the actuarially determined contribution. In more recent years, the District's practice has been to contribute an amount that is at least equal to the contribution in the prior year, if larger than the actuarial contribution. The higher contribution amount serves to reduce the UAL more quickly while producing greater stability in the contribution amounts.

The most significant risk factor is investment return because of the volatility of returns and the size of plan assets compared to payroll (see Exhibit 12). A perusal of historical returns over 10-20 years reveals that the actual return each year is rarely close to the average return for the same period. This is an expected result given the underlying capital market assumptions and the plan's asset allocation. Please see the three investment return scenarios that were illustrated on page 7 in the executive summary as another indication of the investment risk and its impact on the actuarial contribution amount.

A key demographic risk for all retirement systems, including MUD, is improvements in mortality (longevity) greater than anticipated. While the actuarial assumptions reflect small, continuous improvements in mortality experience and these assumptions are refined every experience study, the risk arises because there is a possibility of some sudden shift, perhaps from a significant medical breakthrough that could quickly increase liabilities. Likewise, there is some possibility of a significant public health crisis that could result in a significant number of additional deaths in a short time period, which would also be significant, although more easily absorbed. While these events could happen, it represents a small probability and thus represents much less risk than the volatility associated with investment returns.

Finally, the unfunded actuarial liability is amortized as a level percentage of payroll. The underlying assumption used in developing the payment schedule assumes an increasing payroll over time which is dependent on a stable employment level, i.e., active member count remains the same. When payroll does not grow as expected, the UAL contribution rate will be higher than expected even if the dollar amount of the payment is as scheduled. The growth in the covered payroll is a lower risk for the MUD Plan because the District contributes a dollar amount, not a rate of pay.

The following exhibits summarize some historical information that helps indicate how certain key risk metrics have changed over time.

## EXHIBIT 12

## HISTORICAL ASSET VOLATILITY RATIOS

As a retirement system matures, the size of the market value of assets increases relative to the covered payroll of active members, on which the System is funded. The size of the plan assets relative to covered payroll, sometimes referred to as the asset volatility ratio, is an important indicator of the contribution risk for the System. The higher this ratio, the more sensitive a plan's contribution rate is to investment return volatility. In other words, it will be harder to recover from investment losses with increased contributions.

| Actuarial Valuation Date | Market Value of Assets | Covered Payroll | Asset Volatility Ratio | Increase in ACR with a Return 10% Lower than Assumed* |
|---|---|---|---|---|
| 1/1/2002 | $196,917,301 | $33,641,638 | 5.85 | 4.04% |
| 1/1/2003 | 182,802,988 | 35,393,305 | 5.16 | 3.56% |
| 1/1/2004 | 208,097,692 | 36,756,986 | 5.66 | 3.91% |
| 1/1/2005 | 219,605,615 | 38,256,948 | 5.74 | 3.96% |
| 1/1/2006 | 225,161,798 | 38,706,810 | 5.82 | 4.02% |
| 1/1/2007 | 237,959,892 | 40,945,335 | 5.81 | 4.01% |
| 1/1/2008 | 249,095,495 | 43,105,294 | 5.78 | 3.99% |
| 1/1/2009 | 196,124,538 | 46,428,438 | 4.22 | 2.91% |
| 1/1/2010 | 218,042,907 | 50,781,583 | 4.29 | 2.96% |
| 1/1/2011 | 238,265,999 | 51,484,227 | 4.63 | 3.20% |
| 1/1/2012 | 244,777,760 | 51,868,957 | 4.72 | 3.26% |
| 1/1/2013 | 268,895,003 | 51,031,067 | 5.27 | 3.64% |
| 1/1/2014 | 314,630,091 | 55,847,203 | 5.63 | 3.89% |
| 1/1/2015 | 333,135,690 | 59,332,362 | 5.61 | 3.87% |
| 1/1/2016 | 329,261,948 | 63,384,548 | 5.19 | 3.58% |
| 1/1/2017 | 352,513,865 | 61,064,398 | 5.77 | 3.99% |
| 1/1/2018 | 402,738,799 | 62,624,066 | 6.43 | 4.44% |
| 1/1/2019 | 378,210,890 | 62,865,829 | 6.02 | 4.16% |
| 1/1/2020 | 452,080,699 | 63,272,421 | 7.14 | 4.93% |

*The impact of asset smoothing is not reflected in the impact on the Actuarial Contribution Rate (ACR). Current year assumptions are used for all years shown.

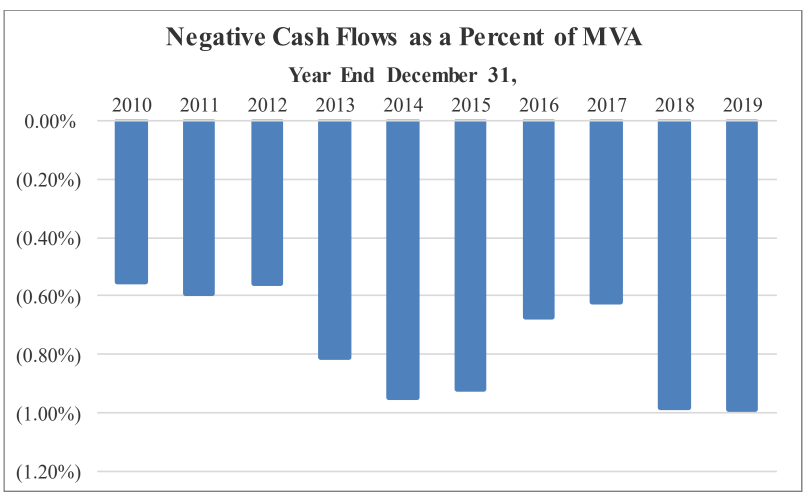
The assets at January 1, 2020 are 714% of payroll so underperforming the investment return assumption by 10% (i.e., earn -2.1% for one year) is equivalent to 71.4% of payroll. While the actual impact in the first year is mitigated by the asset smoothing method and amortization of the UAL, this illustrates the risk associated with volatile investment returns.

## EXHIBIT 13

## HISTORICAL CASH FLOWS

Plans with negative cash flows will experience increased sensitivity to investment return volatility. Cash flows, for this purpose, are measured as contributions less benefit payments. If the System has negative cash flows and then experiences returns below the assumed rate, there are fewer assets to be reinvested to earn the higher returns that typically follow. While any negative cash flow will produce such a result, it is typically a negative cash flow greater than expected dividends and interest that cause greater concerns. While this is not a concern for MUD at this time, it is important to monitor this metric so that any trends can be identified.

| Year End | Market Value of Assets (MVA) | Contributions | Benefit Payments | Net Cash Flow | Net Cash Flow as a Percent of MVA |
|---|---|---|---|---|---|
| 12/31/2010 | $238,265,999 | $10,512,622 | $11,826,611 | ($1,313,989) | (0.55%) |
| 12/31/2011 | 244,777,760 | 11,186,401 | 12,629,378 | (1,442,977) | (0.59%) |
| 12/31/2012 | 268,895,003 | 12,214,990 | 13,713,290 | (1,498,300) | (0.56%) |
| 12/31/2013 | 314,630,091 | 12,197,069 | 14,731,395 | (2,534,326) | (0.81%) |
| 12/31/2014 | 333,135,690 | 12,412,137 | 15,566,617 | (3,154,480) | (0.95%) |
| 12/31/2015 | 329,261,948 | 13,121,864 | 16,154,414 | (3,032,550) | (0.92%) |
| 12/31/2016 | 352,513,865 | 14,195,899 | 16,555,144 | (2,359,245) | (0.67%) |
| 12/31/2017 | 402,738,799 | 14,951,265 | 17,445,020 | (2,493,755) | (0.62%) |
| 12/31/2018 | 378,210,890 | 15,411,552 | 19,116,693 | (3,705,141) | (0.98%) |
| 12/31/2019 | 452,080,699 | 16,713,137 | 21,204,786 | (4,491,649) | (0.99%) |



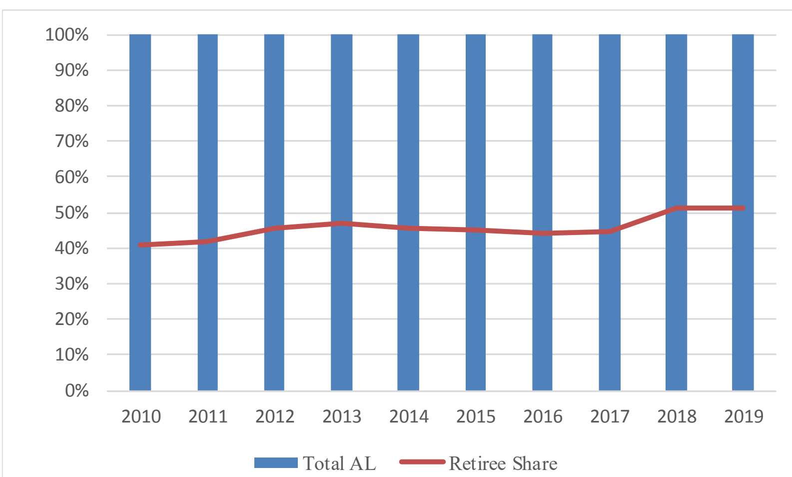
## EXHIBIT 14

## LIABILITY MATURITY MEASUREMENTS

Most public sector retirement systems have been in operation for many years. As a result, they have aging plan populations indicated by an increasing ratio of retirees to active members and a growing percentage of retiree liability. The retirement of the remaining baby boomers over the next decade is expected to further exacerbate the aging of the retirement system population. With more of the total liability residing with retirees, investment volatility has a greater impact on the funding of the system since it is more difficult to restore the system financially after losses occur when there is comparatively less payroll over which to spread costs.

Projections provide the most effective way of analyzing the impact of these changes on future funding measures, but studying several key metrics from the valuation can also provide some valuable insight.

| Valuation Date | Retiree Liability (a) | Total Actuarial Liability (b) | Retiree Percentage (a / b) |
|---|---|---|---|
| 1/1/2011 | $124,451,572 | $304,163,301 | 40.9% |
| 1/1/2012 | 132,413,950 | 315,121,772 | 42.0% |
| 1/1/2013 | 149,277,461 | 328,044,761 | 45.5% |
| 1/1/2014 | 164,136,287 | 349,176,405 | 47.0% |
| 1/1/2015 | 170,780,555 | 374,788,099 | 45.6% |
| 1/1/2016 | 177,342,511 | 393,919,275 | 45.0% |
| 1/1/2017 | 181,213,617 | 410,749,711 | 44.1% |
| 1/1/2018 | 196,060,508 | 440,820,801 | 44.5% |
| 1/1/2019 | 238,188,848 | 465,369,852 | 51.2% |
| 1/1/2020 | 247,490,777 | 484,575,088 | 51.1% |



## EXHIBIT 15

## COMPARISON OF VALUATION RESULTS UNDER ALTERNATE INVESTMENT RETURN ASSUMPTIONS

This exhibit compares the key January 1, 2020 valuation results under five (5) different investment return assumptions to illustrate the impact of different assumptions on the funding of the System. Note that only the investment return assumption is changed, as identified in the heading below. All other assumptions are unchanged for purposes of this analysis.

| **Investment Return Assumption** | **6.00%** | **6.50%** | **6.90%** | **7.50%** | **8.00%** |
|---|---|---|---|---|---|
| **Contributions** | | | | | |
| Normal Cost Rate | 23.77% | 21.05% | 19.13% | 16.60% | 14.79% |
| Administrative Expense | 0.11% | 0.11% | 0.11% | 0.11% | 0.11% |
| UAL Contribution Rate | 9.83% | 7.04% | 4.83% | 1.54% | (0.49%) |
| Total Contribution Rate | 33.71% | 28.20% | 24.07% | 18.25% | 14.41% |
| Employee Contribution Rate | (7.50%) | (7.50%) | (7.50%) | (7.50%) | (7.50%) |
| District Contribution Rate | 26.21% | 20.70% | 16.57% | 10.75% | 6.91% |
| | | | | | |
| **District Contribution Amount ($ in thousands)** | $17,457 | $13,787 | $11,036 | $7,160 | $4,602 |
| | | | | | |
| **Actuarial Liability** | $540,918 | $508,466 | $484,575 | $451,823 | $427,062 |
| **Actuarial Value of Assets** | 432,490 | 432,490 | 432,490 | 432,490 | 432,490 |
| **Unfunded Actuarial Liability*** | $108,428 | $75,976 | $52,085 | $19,333 | ($5,427) |
| | | | | | |
| **Funded Ratio** | 80.0% | 85.1% | 89.3% | 95.7% | 101.3% |

Note: All other assumptions are unchanged for purposes of this sensitivity analysis.

*Numbers may not add due to rounding.

# APPENDIX A

## SUMMARY OF PLAN PROVISIONS

The Retirement Plan for Employees of the Metropolitan Utilities District was established on October 1, 1944, using a conventional group annuity contract with Metropolitan Life Insurance Company (MLI) as the vehicle for funding the retirement benefits under the plan. Effective December 31, 1967, the plan was amended which brought about changes in the benefit and contribution formulas and added a spouse's benefit.

As of December 31, 1967 the MLI Group Annuity Contract was amended to discontinue further purchases of annuities. However, under contractual rights, annuities purchased prior to December 31, 1967 continue to be guaranteed under the provisions of such contract. Further amendments modified the pre-existing contract from a conventional group annuity contract to an Immediate Participation Guaranteed (IPG) group annuity contract (effective December 31, 1967). Investments are being managed by Vanguard Institutional Advisory Services pursuant to the provisions of the Investment Policy Statement.

The following summary of plan provisions reflects the plan as in effect on the date of the valuation.

| | |
|---|---|
| Effective Date: | December 31, 1967 |
| Participation: | (a) Each Employee on the Effective Date, provided he was employed before his 60th birthday, became a participant on the Effective Date<br>(b) Each person who becomes an employee after the Effective Date becomes a participant on his employment date. |
| Final Average Salary: | The average of the salaries for the highest paid 24 consecutive months out of the last 120 months before retirement (high 36 months prior to 3/1/06). |
| Age and Service Requirements for Benefits: | |
| Normal Retirement | First day of the month next following the 60th birthday |
| Early Retirement | Age 55 with at least five years of service. |
| Deferred Vested Benefit | Separate service before age 55 with at least five years of service. |
| Spouse's Benefit | Upon death of employee in active service with at least five years of service and married at least one year prior to the date of death. Payable based on employee's age according to early or normal retirement provisions. |

# APPENDIX A

## SUMMARY OF PLAN PROVISIONS
## (continued)

Retirement Benefits:

| | |
|---|---|
| Normal & Late Retirement | A monthly amount which equals<br><br>(a) percentage of Final Average Salary based on years of continuous service, beginning at 2.15% for each of the first 25 years of service (2.00% prior to 3/1/06) plus 1.00% for the next 10 years, plus .5% for each year of service after 35 years.<br><br>(b) any monthly normal retirement annuity purchased under the MLI contract up to December 31, 1967. |
| Minimal Normal | A monthly amount which, together with the annuity under the MLI contract, if any, equals \$6 for each year of service, beginning with \$30 for five years of service and grading up to \$120 for 20 or more years of service. |
| Early Retirement | A monthly amount which equals (1) times (2)<br><br>(1) An amount determined in the same manner as the normal retirement benefit, based on:<br><br>(a) Years of continuous service and Final Average Salary on the early retirement date, and<br><br>(b) Any monthly annuity, payable at age 65, to which the employee may be entitled under the MLI contract,<br><br>(2) A percentage factor equal to 100% at age 60 and above, with reductions of 0.25% a month for each month of early retirement (from age 60 to age 55) |

Form of Annuity:

| | |
|---|---|
| Normal | Monthly payments for life with refund at death of excess, if any, of the employee’s contributions over payments received. |
| Optional | Contingent annuitant options are provided in the plan (a “pop-up” feature applies to any Contingent Annuitant Option if the employee’s spouse is the Contingent Annuitant and the spouse predeceases the employee). Prior to 3/1/06, the pop up provision applied only to the Joint and 50% Contingent Annuitant option. |

# APPENDIX A

## SUMMARY OF PLAN PROVISIONS
## (continued)

Termination Benefits:

| | |
|---|---|
| Less than 5 years of service | A refund of the employee's contributions under the plan with interest to date of termination. |
| Before age 55 with 5 or more years of service | At the employee's election either:<br>(1) refund of the employee's contributions under the plan with interest to date of termination, or<br><br>(2) a deferred retirement income based on years of service and Final Average Salary at termination date. |

Spouse's Benefit:

Effective 3/1/06:

(1) if death occurs before age 55, the spouse is eligible for a survivor benefit at the member's earliest retirement age. The amount received is the member's accrued benefit adjusted for early commencement, if applicable, and conversion to a joint 100% survivor form of payment.

(2) if death occurs after age 55, the spouse is eligible for a survivor benefit immediately. The amount is adjusted for early commencement, if applicable, and conversion to a joint and 100% survivor form of payment.

Single Sum Death Benefits:

| | |
|---|---|
| Before Retirement (if no spouse eligible for spouse's benefit) | To designated beneficiary or estate of employee – the employee's contributions under the plan with interest to date of death |
| Vested Terminated Employee (before retirement income payments commence) | Same as above. |
| After Retirement (if normal form benefit) | To designated beneficiary or estate of employee – the excess, if any, of the lump sum death benefit that would have been payable at date of retirement over the retirement income payments to date of death. |

## APPENDIX A

## SUMMARY OF PLAN PROVISIONS
(continued)

| | |
|---|---|
| Surviving Spouse (receiving spouse's benefit) | To designated beneficiary or estate of the spouse, the excess, if any, of the employee's contributions under the plan with interest to the date of the employee's death over the payments made to the date of the spouse's death. |
| Contingent Annuitant (if retirement income payments have commenced) | To designated beneficiary or estate of the last survivor as between the retired employee and the contingent annuitant – the excess, if any, of the lump sum death benefit that would have been payable at date of retirement over the retirement income payments to the retired employee and the contingent annuitant to the date of death of the last survivor. |
| Employee Under MLI Contract | Contributions under MLI contract payable subject to provisions of MLI contract. |

<u>Cost of Living Adjustments:</u>

To retired employees, spouses and contingent annuitants – the supplemental pension payments based on the change in the Consumer Price Index, not less than 0% and not more than 3% a year. Adjustments are made twice a year on January 1 and July 1.

<u>Disability Benefits:</u>

If a participant becomes totally and permanently disabled, he/she is deemed to remain active for plan purposes, at his/her salary at the time of disability, until recovery or retirement. No employee contributions are required during the period of disability.

<u>Source of Funds:</u>

Employee Contributions

| Year | Contribution Rate |
|---|---|
| 2020 | 7.50% |
| 2021 | 8.00% |
| 2022 | 8.50% |
| 2023 + | 9.00% |

District Contributions

The remaining amount required to fund the benefit on an actuarially sound basis.

# APPENDIX B

## ACTUARIAL METHODS AND ASSUMPTIONS

### Actuarial Methods

**Liability Method**

Valuations of the plan use the *"entry age-normal"* cost method. Under this actuarial method, the value of future costs attributable to future employment of participants is determined. This is called present value of future normal costs. The following steps indicate how this is determined for benefits expected to be paid upon normal retirement.

The expected pension benefit at normal retirement is determined for each participant.

A normal cost, as a level-percent of pay, is determined for each participant assuming that such a level percent is paid from the employee's entry age into employment to his normal retirement. This normal cost is determined so that its accumulated value at normal retirement is sufficient to provide the expected pension benefits.

The sum of the normal costs for all participants for one year determines the total normal cost of the plan for one year.

The value of future payments of normal cost in future years is determined for each participant based on his years of service to normal retirement age.

The sum of the value of future payments of normal cost for all participants determines the present value of future normal costs.

The value of future costs attributable to past employment of participants, which is called the accrued liability, is equal to the present value of benefits less the present value of future normal costs.

As experience develops with the plan, actuarial gains and actuarial losses result. These actuarial gains and losses indicate the extent to which actual experience is deviating from that expected on the basis of the actuarial assumptions. In each year, as they occur, actuarial gains and losses are recognized in the unfunded accrued liability as of the valuation date.

**Asset Valuation Method**

The actuarial value of assets is determined based on a method that smoothes the effects of short-term volatility in the market value investments. The actuarial value is equal to the expected value, based on the assumed rate of return, plus 25% of the difference between market and expected values. A corridor of 80% to 120% of market value is also applied.

# APPENDIX B

## ACTUARIAL METHODS AND ASSUMPTIONS

### Actuarial Methods
### (continued)

**UAL Amortization Method**

Under the current amortization method, the unfunded actuarial liability as of January 1, 2014 is treated as a separate base that will be amortized on a level-percent of pay basis over a closed 30-year period beginning January 1, 2014. Additionally, each year a new base will be calculated reflecting the Plan experience in the immediately preceding Plan year, changes in plan provisions or actuarial assumptions. Each new base will be amortized on a level-percent of pay basis over a closed 20-year period that begins on the valuation date when the new base is calculated. Changes in plan provisions or actuarial assumptions may be amortized over a longer period if the Retirement Committee elects to do so.

## APPENDIX B

## ACTUARIAL ASSUMPTIONS
**(continued)**

In addition to depending upon the actuarial methods used, actuarial cost estimates depend to an important degree on the assumptions made relative to various occurrences, such as rate of expected investment earnings by the fund, rates of mortality among active and retired employees and rates of termination from employment. In the current valuation, the actuarial assumptions made in the calculation of costs and liabilities are as follows:

Investment Return: (revised 2020) — 6.90% per annum, compounded annually

Payroll Growth: (revised 2018) — 3.50% per year

Inflation: (revised 2018) — 2.60% per year

Mortality Rates: (revised 2018)

Active — RP-2014 Adjusted to 2006 Total Dataset Mortality Table with Female Rates Set Forward One Year – Generational with Projected Improvements under Scale MP-2016

Retired — RP-2014 Adjusted to 2006 Total Dataset Mortality Table with Female Rates Set Forward One Year – Generational with Projected Improvements under Scale MP-2016

On Long Term Disability — RP-2014 Adjusted to 2006 Disabled Retiree Mortality Table with Female Rates Set Forward One Year – Generational with Improvements under Scale MP-2016

Withdrawal Rates: (revised 2018)

| Years of Service | Annual Rate Male | Annual Rate Female |
|---|---|---|
| 1 | 10.00% | 8.00% |
| 5 | 2.00% | 4.00% |
| 10 | 1.05% | 3.00% |
| 15 | 1.05% | 2.50% |
| 20 | 1.05% | 2.50% |
| 25 | 0.00% | 1.50% |
| 30 | 0.00% | 0.00% |

## APPENDIX B

## ACTUARIAL ASSUMPTIONS
## (continued)

Retirement Rates: (revised 2018)

| Age | Annual Rate |
|---|---|
| 55 to 58 | 3% |
| 59 | 13% |
| 60 | 30% |
| 61 | 30% |
| 62 | 40% |
| 63 | 20% |
| 64 | 20% |
| 65 | 60% |
| 66-69 | 30% |
| 70 | 100% |

Retirement benefits are assumed to commence at age 58 for vested terminated members and age 62 for disabled members.

Salary Scale: (revised 2018)

Salaries of the employees are assumed to increase according to the following schedule:

| Years of Service | Annual Percentage Increase |
|---|---|
| 1 | 11.00% |
| 5 | 7.00% |
| 10 | 5.00% |
| 15 | 4.50% |
| 20 | 4.50% |
| 25 | 4.25% |
| 30 | 4.25% |
| 35 | 4.00% |

Note: Includes salary inflation at 3.50%

Spouse's Benefit: (revised 2015)

It is assumed that 90% of employees are married, with wives three years younger than husbands.

# APPENDIX B

## ACTUARIAL ASSUMPTIONS
## (continued)

Probability of Refund:

| Service | Refund |
|---|---|
| 5 | 40% |
| 10 | 40 |
| 15 | 40 |
| 20 | 0 |

Cost of Living Adjustment: (revised 2018) — Retirement benefits are assumed to increase at 2.60% per year

Administrative Expense: (implemented 2015) — Component of contribution rate, based on the prior year's actual administrative expenses.

Decrement Timing: — Middle of year

Other: — Active liabilities for withdrawal and retirement benefits are loaded 0.50% for those members expected to elect a Joint and Contingent Annuitant form of payment that has a pop-up feature.

For those who elect a Joint and Contingent Annuitant form of payment that has a pop-up feature, the assumed pop-up factors for retirees are shown below:

| Joint Percentage | Pop-up Factor |
|---|---|
| 25% | 1.0870 |
| 50% | 1.1628 |
| 75% | 1.2195 |
| 100% | 1.2821 |

The lump sum death benefit (a return of contributions with interest) for vested terminated members is assumed to equal three times the annual benefit amount.

The salary amounts used as an input for valuation purposes represent pensionable compensation for the 12-month period immediately preceding the valuation date. These amounts are calculated by using the employees' contribution amounts for the 12-month period immediately preceding the valuation date, as provided to us by the client.

## APPENDIX C

## HISTORICAL SUMMARY OF MEMBERSHIP

The following table displays selected historical data as available.

| Valuation | | Active Members | | | | | | Number | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Average | | | | | | | | |
| Date January 1 | Total Count | Number | Age | Entry Age | Service | Annual Pay ($) | Pay Increase | Disabled | Vested Inactive | Non-Vested Inactive | Retired/Benef |
| 2001 | 1,300 | 778 | 44.6 | 29.6 | 15.0 | 42,647 | 2.65% | 15 | 18 | | 489 |
| 2002 | 1,318 | 794 | 44.6 | 30.3 | 14.3 | 44,180 | 3.59% | 17 | 18 | | 489 |
| 2003 | 1,338 | 803 | 44.8 | 30.7 | 14.1 | 45,875 | 3.84% | 20 | 19 | | 496 |
| 2004 | 1,333 | 793 | 44.8 | 30.7 | 14.1 | 47,913 | 4.44% | 24 | 18 | | 498 |
| 2005 | 1,345 | 786 | 45.5 | 31.2 | 14.3 | 49,637 | 3.60% | 26 | 27 | | 506 |
| 2006 | 1,352 | 782 | 45.8 | 31.4 | 14.4 | 50,184 | 1.10% | 25 | 35 | | 510 |
| 2007 | 1,371 | 793 | 46.1 | 31.6 | 14.5 | 53,104 | 5.82% | 26 | 37 | | 515 |
| 2008 | 1,401 | 814 | 46.1 | 31.8 | 14.3 | 54,730 | 3.06% | 28 | 38 | | 521 |
| 2009 | 1,413 | 831 | 46.7 | 31.9 | 14.8 | 57,576 | 5.20% | 27 | 38 | | 517 |
| 2010 | 1,429 | 851 | 47.1 | 32.1 | 15.0 | 59,997 | 4.20% | 26 | 38 | | 514 |
| 2011 | 1,434 | 852 | 47.5 | 32.3 | 15.2 | 62,082 | 3.48% | 28 | 40 | | 514 |
| 2012 | 1,436 | 846 | 48.0 | 32.7 | 15.3 | 62,458 | 0.61% | 29 | 44 | | 517 |
| 2013 | 1,409 | 815 | 48.6 | 32.9 | 15.6 | 62,822 | 0.58% | 21 | 34 | | 539 |
| 2014 | 1,446 | 821 | 48.3 | 33.1 | 15.2 | 65,631 | 4.47% | 22 | 35 | | 568 |
| 2015 | 1,491 | 856 | 48.0 | 33.2 | 14.8 | 66,999 | 2.08% | 20 | 38 | | 577 |
| 2016 | 1,492 | 851 | 48.3 | 33.2 | 15.1 | 69,168 | 3.24% | 20 | 34 | 1 | 586 |
| 2017 | 1,484 | 836 | 48.8 | 33.3 | 15.5 | 72,200 | 4.38% | 24 | 34 | 1 | 589 |
| 2018 | 1,489 | 824 | 49.0 | 33.4 | 15.6 | 75,567 | 4.66% | 21 | 40 | 2 | 602 |
| 2019 | 1,516 | 792 | 48.3 | 33.6 | 14.7 | 76,528 | 1.27% | 22 | 42 | 4 | 656 |
| 2020 | 1,536 | 808 | 48.0 | 33.7 | 14.3 | 78,026 | 1.96% | 23 | 49 | 1 | 655 |

## MEMBERSHIP DATA FOR VALUATION

The summary of employee characteristics presented below covers the employee group as of January 1, 2020. The schedules at the end of the report show the distribution of the various employee groups by present age along with other pertinent data.

**Total number of employees in valuation:**

| | | |
|---|---|---|
| (a) | Active employees | 808 |
| (b) | Inactive vested employees | |
| | Terminated* | 49 |
| | Disability | 23 |
| (c) | Inactive non-vested employees | 1 |
| (d) | Retirees and beneficiaries | 655 |
| (e) | Total | 1,536 |

**Average age of employees in valuation:**

| | | |
|---|---|---|
| (a) | Active employees: | |
| | Attained age | 48.0 |
| | Entry age | 33.7 |
| (b) | Inactive vested employees: | |
| | Termination* | 48.7 |
| | Disability | 56.3 |
| (c) | Retired employees | 71.9 |
| (d) | Beneficiaries | 76 |

**Active employees eligible for vested benefits as of January 1, 2020**

| | | |
|---|---|---|
| (a) | Employees under age 55 with 5 or more years of service - eligible for deferred vested benefits | 386 |
| (b) | Employees age 55 and over with 5 or more years of service - eligible for early or normal retirement benefits | 245 |
| (c) | Employees eligible for refund of contributions only | 177 |
| (d) | Total | 808 |

*Includes 2 beneficiaries who are not yet receiving benefits.

## MEMBERSHIP DATA RECONCILIATION

### January 1, 2019 to January 1, 2020

The number of members included in the valuation, as summarized in the table below, is in accordance with the data submitted by the District for eligible employees as of the valuation date.

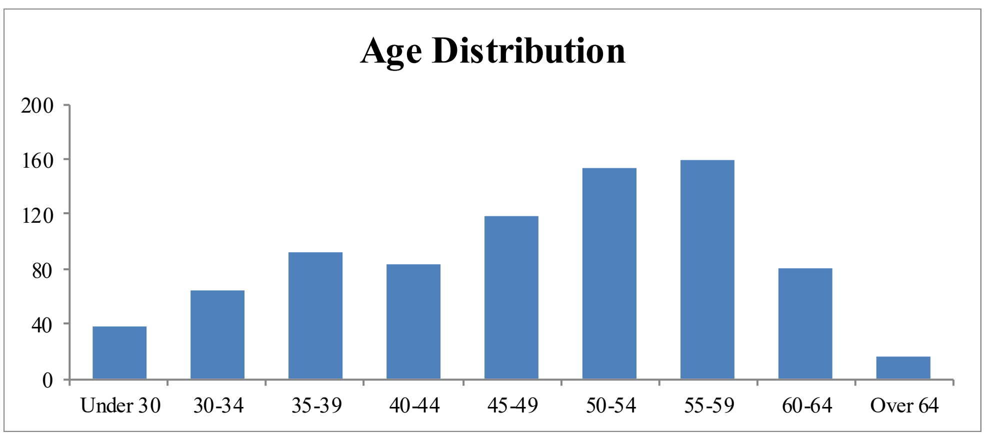
| | Active Participants | Long-Term Disability | Retirees | Terminated Vested* | Terminated Non-Vested | Beneficiaries | Total |
|---|---|---|---|---|---|---|---|
| **Participants as of 1/1/2019** | 792 | 22 | 527 | 42 | 4 | 129 | 1,516 |
| New Participants | 60 | 0 | 0 | 0 | 0 | 5 | 65 |
| Moved to Full-Time | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| Moved to Part-Time | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Terminations | | | | | | | |
| Refunded | (9) | 0 | 0 | 0 | (4) | 0 | (13) |
| Refund-Due | (1) | 0 | 0 | 0 | 1 | 0 | 0 |
| Deferred Vested | (6) | 0 | 0 | 6 | 0 | 0 | 0 |
| Disabilities | (4) | 4 | 0 | 0 | 0 | 0 | 0 |
| Retirements | (25) | 0 | 26 | (1) | 0 | 0 | 0 |
| Deaths | | | | | | | |
| With Beneficiary | (1) | (1) | (11) | 2 | 0 | 11 | 0 |
| Without Beneficiary | 0 | (1) | (25) | 0 | 0 | (7) | (33) |
| Data Corrections | 0 | (1) | 0 | 0 | 0 | 0 | (1) |
| **Total Participants 1/1/2020** | 808 | 23 | 517 | 49 | 1 | 138 | 1,536 |

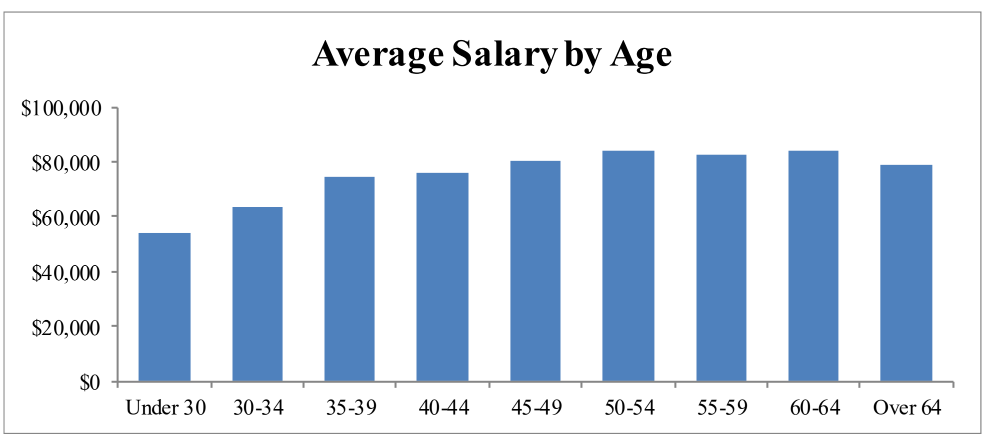
*Includes beneficiaries who are not yet receiving benefits.

## SCHEDULE I

## ACTIVE EMPLOYEES AS OF JANUARY 1, 2020

| | Count of Members | | | 2019 Pensionable Pay of Members | | |
|---|---|---|---|---|---|---|
| Age | Males | Females | Total | Males | Females | Total |
| Under 30 | 35 | 3 | 38 | $ 1,879,578 | $ 168,657 | $ 2,048,235 |
| 30-34 | 53 | 11 | 64 | 3,376,392 | 692,743 | 4,069,135 |
| 35-39 | 71 | 21 | 92 | 5,281,787 | 1,545,742 | 6,827,529 |
| 40-44 | 66 | 18 | 84 | 5,122,701 | 1,250,978 | 6,373,679 |
| 45-49 | 92 | 27 | 119 | 7,531,756 | 2,040,372 | 9,572,128 |
| 50-54 | 114 | 40 | 154 | 9,810,254 | 3,142,923 | 12,953,177 |
| 55-59 | 119 | 40 | 159 | 10,194,236 | 2,882,919 | 13,077,155 |
| 60-64 | 50 | 31 | 81 | 4,452,205 | 2,335,123 | 6,787,328 |
| Over 64 | 10 | 7 | 17 | 888,271 | 448,504 | 1,336,775 |
| Total | 610 | 198 | 808 | $48,537,180 | $14,507,961 | $63,045,141 |

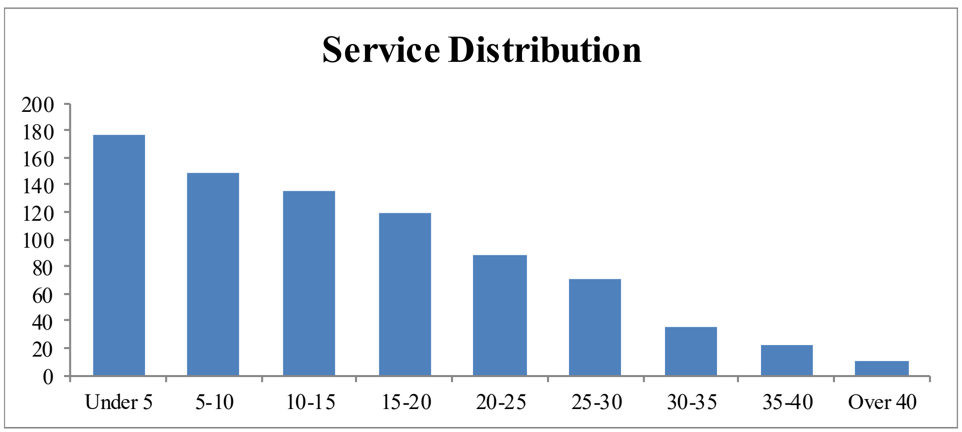


## SCHEDULE I (continued)

## ACTIVE EMPLOYEES AS OF JANUARY 1, 2020

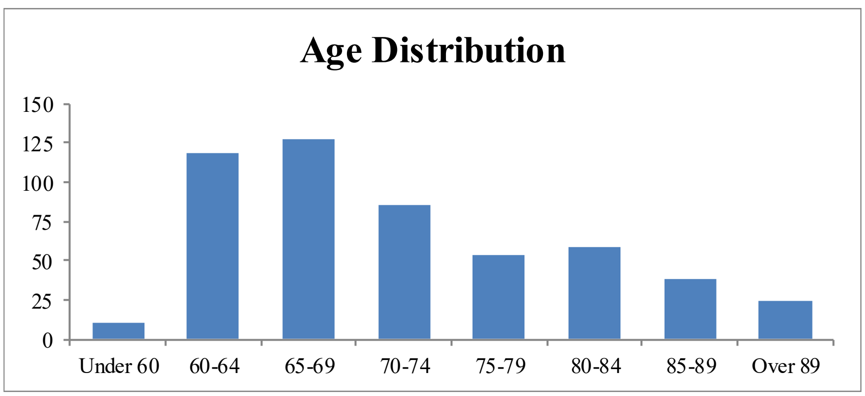
| | Service | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Age | Under 5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 | Over 40 | Total |
| Under 30 | 32 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 |
| 30-34 | 41 | 21 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |
| 35-39 | 39 | 30 | 20 | 3 | 0 | 0 | 0 | 0 | 0 | 92 |
| 40-44 | 24 | 19 | 28 | 13 | 0 | 0 | 0 | 0 | 0 | 84 |
| 45-49 | 17 | 19 | 25 | 31 | 24 | 3 | 0 | 0 | 0 | 119 |
| 50-54 | 12 | 27 | 26 | 32 | 32 | 18 | 7 | 0 | 0 | 154 |
| 55-59 | 9 | 12 | 21 | 24 | 26 | 32 | 23 | 12 | 0 | 159 |
| 60-64 | 2 | 11 | 11 | 13 | 6 | 16 | 5 | 9 | 8 | 81 |
| Over 64 | 1 | 4 | 2 | 3 | 1 | 2 | 1 | 1 | 2 | 17 |
| Total | 177 | 149 | 135 | 119 | 89 | 71 | 36 | 22 | 10 | 808 |

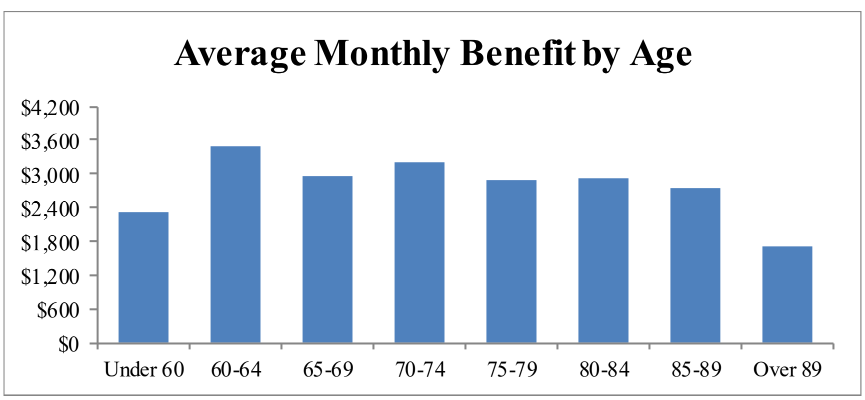


## SCHEDULE II

## RETIRED PARTICIPANTS AS OF JANUARY 1, 2020

| | Count of Retirees | | | Current Monthly Benefits | | |
|---|---|---|---|---|---|---|
| Age | Males | Females | Total | Males | Females | Total |
| Under 60 | 9 | 2 | 11 | $ 20,722 | $ 4,958 | $ 25,680 |
| 60-64 | 82 | 37 | 119 | 311,275 | 103,920 | 415,195 |
| 65-69 | 81 | 46 | 127 | 249,430 | 124,378 | 373,808 |
| 70-74 | 62 | 24 | 86 | 221,911 | 54,295 | 276,206 |
| 75-79 | 42 | 11 | 53 | 128,814 | 23,772 | 152,586 |
| 80-84 | 50 | 9 | 59 | 148,869 | 24,410 | 173,279 |
| 85-89 | 31 | 7 | 38 | 96,227 | 8,732 | 104,959 |
| Over 89 | 18 | 6 | 24 | 35,967 | 5,409 | 41,376 |
| Total | 375 | 142 | 517 | $1,213,215 | $349,874 | $1,563,089 |

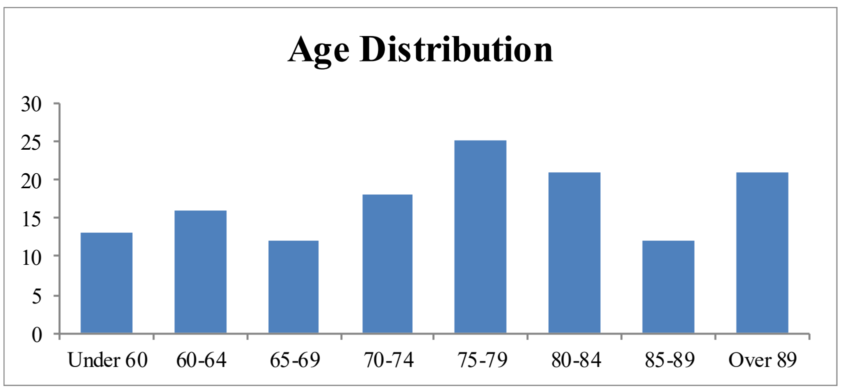


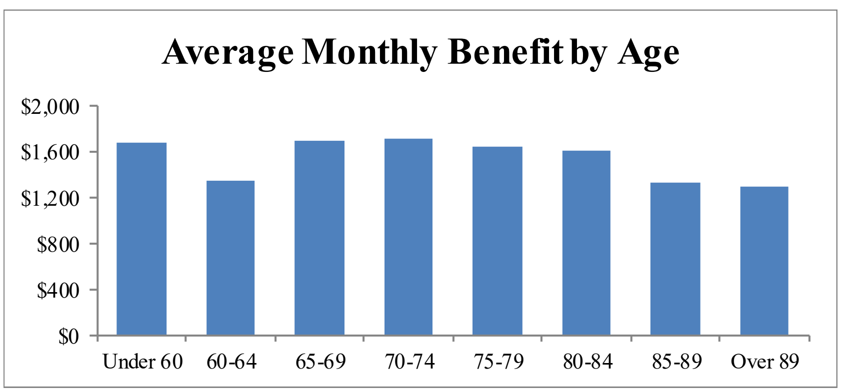



## SCHEDULE III

## BENEFICIARIES RECEIVING BENEFITS AS OF JANUARY 1, 2020

| | Count of Beneficiaries | | | Current Monthly Benefits | | |
|---|---|---|---|---|---|---|
| Age | Males | Females | Total | Males | Females | Total |
| Under 60 | 1 | 12 | 13 | $2,641 | $ 19,187 | $ 21,828 |
| 60-64 | 2 | 14 | 16 | 2,249 | 19,217 | 21,466 |
| 65-69 | 1 | 11 | 12 | 555 | 19,807 | 20,362 |
| 70-74 | 2 | 16 | 18 | 2,308 | 28,424 | 30,732 |
| 75-79 | 0 | 25 | 25 | 0 | 40,968 | 40,968 |
| 80-84 | 1 | 20 | 21 | 2,011 | 31,751 | 33,762 |
| 85-89 | 0 | 12 | 12 | 0 | 15,839 | 15,839 |
| Over 89 | 0 | 21 | 21 | 0 | 27,117 | 27,117 |
| Total | 7 | 131 | 138 | $9,764 | $202,310 | $212,074 |



## SCHEDULE IV

## TERMINATED VESTED FORMER EMPLOYEES AS OF JANUARY 1, 2020

| | Count of Members | | | Expected Monthly Benefit | | |
|---|---|---|---|---|---|---|
| Age | Males | Females | Total | Males | Females | Total |
| Under 25 | 0 | 0 | 0 | $ 0 | $ 0 | $ 0 |
| 25-29 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30-34 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35-39 | 6 | 2 | 8 | 6,496 | 2,362 | 8,858 |
| 40-44 | 4 | 1 | 5 | 5,373 | 1,643 | 7,016 |
| 45-49 | 9 | 4 | 13 | 12,019 | 4,638 | 16,657 |
| 50-54 | 8 | 6 | 14 | 11,131 | 12,871 | 24,002 |
| 55-59 | 3 | 3 | 6 | 2,196 | 5,553 | 7,749 |
| Over 59 | 1 | 2 | 3 | 858 | 554 | 1,412 |
| Total | 31 | 18 | 49 | $38,073 | $27,621 | $65,694 |

Note: Includes 2 beneficiaries who are not yet receiving benefits.

## SCHEDULE V

## DISABLED VESTED FORMER EMPLOYEES AS OF JANUARY 1, 2020

| | Count of Members | | | Expected Monthly Benefit | | |
|---|---|---|---|---|---|---|
| Age | Males | Females | Total | Males | Females | Total |
| Under 25 | 0 | 0 | 0 | $ 0 | $ 0 | $ 0 |
| 25-29 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30-34 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35-39 | 2 | 0 | 2 | 5,547 | 0 | 5,547 |
| 40-44 | 0 | 1 | 1 | 0 | 3,219 | 3,219 |
| 45-49 | 1 | 0 | 1 | 3,247 | 0 | 3,247 |
| 50-54 | 3 | 0 | 3 | 9,754 | 0 | 9,754 |
| 55-59 | 5 | 1 | 6 | 17,030 | 1,357 | 18,387 |
| Over 59 | 8 | 2 | 10 | 21,661 | 3,429 | 25,090 |
| Total | 19 | 4 | 23 | $57,239 | $8,005 | $65,244 |

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# GASB STATEMENTS NO. 67 & 68 REPORT

**FOR THE**

## RETIREMENT PLAN FOR EMPLOYEES OF THE METROPOLITAN UTILITIES DISTRICT OF OMAHA

**MEASUREMENT DATE: DECEMBER 31, 2019**

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The experience and dedication you deserve

March 20, 2020

Mr. Joe Schaffart
Chief Financial Officer
Metropolitan Utilities District
7350 World Communications Dr.
Omaha, NE 68122

Dear Mr. Schaffart:

Presented in this report is information to assist the Retirement Plan for Employees of the Metropolitan Utilities District of Omaha in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statements No. 67 and 68. GASB Statement No. 67 (GASB 67) is the accounting standard that applies to the financial reports issued by retirement systems. GASB Statement No. 68 (GASB 68) establishes accounting and financial reporting requirements for governmental employers who provide pension benefits to their employees through a trust. The information in this report is presented for the December 31, 2019 Measurement Date. The calculations in this report have been made on a basis that is consistent with our understanding of these accounting standards. Please note that the discount rate used to determine the Total Pension Liability changed from 7.00% at the Prior Measurement Date to 6.90% at the current Measurement Date.

The annual actuarial valuation used as the basis for much of the information presented in this report was performed as of January 1, 2019. The valuation was based upon data, furnished by the District's staff, concerning active, inactive and retired members along with pertinent financial information. This information was reviewed for completeness and internal consistency, but was not audited by us. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete our results may be different and our calculations may need to be revised. Please see the actuarial valuation report for additional details on the funding requirements for the Plan including actuarial assumptions and methods and the funding policy.

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To the best of our knowledge, the information contained in this report is complete and accurate. The calculations were performed by qualified actuaries according to generally accepted actuarial principles and practices, as well as in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board. The calculations are based on the current provisions of the Plan, and on actuarial assumptions that are internally consistent and individually reasonable based on the actual experience of the Plan. In addition, in our opinion, the calculations meet the requirements of GASB 67 and GASB 68.

These results are only to be used for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 and GASB 68 may produce significantly different results. Future results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

We, Patrice A. Beckham, FSA, and Bryan K. Hoge, FSA, are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. We are available to answer any questions on the material contained in this report or to provide explanations or further details as may be appropriate.

Respectfully submitted,

Patrice Beckham

Patrice A. Beckham, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Bryan K. Hoge, FSA, EA, FCA, MAAA
Consulting Actuary

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**ANNUAL GASB STATEMENTS NO. 67 & 68 REPORT**

**RETIREMENT PLAN FOR EMPLOYEES OF THE METROPOLITAN UTILITIES DISTRICT OF OMAHA**

## SUMMARY OF PRINCIPAL RESULTS

| | |
|---|---|
| **Valuation Date (VD):** | January 1, 2019 |
| **Prior Measurement Date:** | December 31, 2018 |
| **Measurement Date (MD):** | December 31, 2019 |
| | |
| **Membership Data:** | |
| Retirees and Beneficiaries | 656 |
| Disabled Members | 22 |
| Inactive Vested Members | 42 |
| Inactive Nonvested Members | 4 |
| Active Employees | 792 |
| Total | 1,516 |
| | |
| **Single Equivalent Interest Rate (SEIR):** | |
| Long-Term Expected Rate of Return | 6.90% |
| Municipal Bond Index Rate at Prior Measurement Date | 4.13% |
| Municipal Bond Index Rate at Measurement Date | 2.75% |
| Fiscal Year in which Fiduciary Net Position is Projected to be Depleted | N/A |
| Single Equivalent Interest Rate at Prior Measurement Date | 7.00% |
| Single Equivalent Interest Rate at Measurement Date | 6.90% |
| | |
| **Net Pension Liability:** | |
| Total Pension Liability (TPL) | $493,473,173 |
| Fiduciary Net Position (FNP) | 452,080,699 |
| Net Pension Liability (NPL = TPL – FNP) | $41,392,474 |
| FNP as a percentage of TPL | 91.61% |
| | |
| **Collective Pension Expense:** | $12,378,601 |
| | |
| **Collective Deferred Outflows of Resources:** | $40,287,198 |
| | |
| **Collective Deferred Inflows of Resources:** | $57,943,247 |

## INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), *"Financial Reporting for Pension Plans"*, and Statement No. 68 (GASB 68), *"Accounting and Financial Reporting For Pensions"* in June 2012. GASB 67's effective date was the plan year beginning after June 15, 2013, and GASB 68's effective date was the plan year beginning after June 15, 2014, i.e., the plan year ending December 31, 2015 for the Metropolitan Utilities District of Omaha (District or MUD). The Retirement Plan for Employees of the Metropolitan Utilities District of Omaha (Plan) is a single-employer defined benefit pension plan, as defined by GASB 67 and 68.

This report, prepared as of December 31, 2019 (the Measurement Date), presents information to assist the District in meeting the requirements of GASB 67 and GASB 68. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of the Plan performed as of January 1, 2019 (the Valuation Date). The results of that valuation were detailed in a report dated March 13, 2019.

GASB 67 discloses the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial cost method. If the valuation date at which the TPL is determined is before the Measurement Date, as is the case here, the TPL must be rolled forward to the Measurement Date using standard actuarial formulae. The Net Pension Liability (NPL) is equal to the TPL minus the Fiduciary Net Position (FNP) (basically the fair (market) value of assets). The benefit provisions recognized in the calculation of the TPL are summarized in Appendix B.

Among the items needed for the liability calculation is the discount rate, or Single Equivalent Interest Rate (SEIR), as described by GASB 67. To determine the SEIR, the FNP must be projected using GASB 67 guidelines into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the members and beneficiaries of the Plan on the Measurement Date. If the FNP is not projected to be depleted at any point in the future, the long-term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted at a future measurement date, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long-term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. The rate used, if necessary, for this purpose is the monthly average of the Bond Buyers General Obligation 20-year Municipal Bond Index Rate (formerly published monthly by the Board of Governors of the Federal Reserve System).

Our calculations indicated that the FNP is not projected to be depleted, so the Municipal Bond Index Rate is not used in the determination of the SEIR for the December 31, 2019 TPL. The SEIR for the current Measurement Date is 6.90%, the long-term assumed rate of return on investments. The SEIR for the Prior Measurement Date was 7.00%. Please see Paragraph 31.b.(1) for more explanation of the development of the SEIR.

GASB 68 requires the inclusion of a Net Pension Liability (NPL) on the employer's Statement of Net Position and a determination of a Pension Expense (PE) in the Notes to the Financial Statements that may bear little relationship to the employer's funding requirements. In fact, it is possible in some years for the NPL to be an asset or the PE to be an income item. The NPL is set equal to the Total Pension Liability (TPL) minus the Fiduciary Net Position (FNP).

PE includes amounts for Service Cost (the Normal Cost under Entry Age Normal (EAN) for the year), interest on the TPL, employee contributions, administrative expenses, other cash flows during the year, recognition of increases/decreases in the TPL due to changes in the benefit structure, actual versus expected experience, actuarial assumption changes, and recognition of investment gains/losses. The actual experience and assumption change impacts are recognized over the average expected remaining service life of the Plan membership as of the beginning of the measurement period, while investment gains/losses are recognized equally over five years. The development of the PE is shown in Section III.

The unrecognized portions of each year's experience, assumption changes and investment gains/losses are used to develop Deferred Outflows of Resources and Deferred Inflows of Resources, which also must be included on the employer's Statement of Net Position.

The FNP projections are based upon the Plan's financial status on the Measurement Date, the indicated set of methods and assumptions, and the requirements of GASB 67/68. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing plan basis, reflecting the impact of future members. Therefore, the results of this test do not necessarily indicate whether or not the fund will actually run out of money, the financial condition of the Plan, or the Plan's ability to make benefit payments in future years.

The sections that follow provide the results of all the required calculations, presented in the order laid out in GASB 67 and GASB 68 for note disclosure and Required Supplementary Information (RSI). Some of this information was provided by MUD for use in this report. These sections, not prepared by Cavanaugh Macdonald, LLC are: Paragraphs 37, 38, 40(a)-(b), 40(d)-(e), 43 and 45(e)-(f) for GASB 68.

## SECTION I – NOTES TO FINANCIAL STATEMENTS FOR GASB 67

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

**Paragraph 30.a. (1):** The name of the pension plan is the Retirement Plan for Employees of the Metropolitan Utilities District of Omaha (the Plan). The Plan is a single-employer defined benefit pension plan administered by the District.

**Paragraph 30.a. (2):** The Plan is not a multi-employer pension plan and there are no non-employer contributing entities.

**Paragraph 30.a. (3):** The Board of Directors of the District (the Board) has fiduciary responsibility for the Plan along with Vanguard Institutional Advisory Services, who serves in the role of discretionary asset manager/co-fiduciary. The Board consists of seven directors, elected by the District's customer-owners. Administrative responsibility for the Plan has been delegated to the Board's Insurance and Pension Committee, which consists of three Board members who are appointed by the full Board. The Committee's decisions and direction are implemented by the Management Pension Committee, comprised of the following Metropolitan Utilities District employees: the President, the Chief Financial Officer, the General Counsel and the Vice President of Accounting.

**Paragraph 30.a. (4):** The data required regarding the membership of the Plan were furnished by the District. The following table summarizes the membership of the Plan as of January 1, 2019, the date of the valuation used to determine the December 31, 2019 TPL.

**Membership**

| Number as of January 1, 2019 | |
|---|---|
| Inactive Members Or Their Beneficiaries Currently Receiving Benefits | 656 |
| Disabled Members | 22 |
| Inactive Members Entitled To But Not Yet Receiving Benefits | 42 |
| Inactive Non-vested Members | 4 |
| Active Members | 792 |
| Total | 1,516 |

**Paragraph 30.a. (5):** The Plan was established and may be amended only by the Board. The Plan provides retirement, disability (in the form of continued credited service), death, and termination benefits for all regular full-time employees of the District. An employee of the District is eligible for coverage at the time of employment. Vesting is achieved upon the completion of five years of service. Normal retirement age is 60 with 5 years of service. Retirement benefits are calculated using the average compensation for the highest paid 24 consecutive months out of the most recent

120 months, multiplied by the total years of service and the formula factor of 2.15% for the first 25 years of service, 1.00% for the next 10 years of service and 0.50% for each year of service above 35. The benefit amount is reduced under early retirement which is available at age 55 and 5 years of service.

Benefit provisions include cost-of-living adjustments to each employee's retirement allowance subsequent to the employee's retirement date. Adjustments are made each January 1 and July 1, if warranted, based on the increase in the Consumer Price Index of Urban Wage Earners and Clerical Workers. The annual increase in the member's benefit cannot exceed 3.00% and adjustments cannot be negative.

**Paragraph 30.a. (6):** Benefit and contribution provisions are established by and may be amended only by the Board. The contribution rate for certain employees is established by a collective bargaining agreement. The Board sets the contribution rates for employees who are not covered by the collective bargaining agreement. An actuarial valuation is performed each year to determine the actuarial required contribution, based on the funding goals set by the Board, which is then contributed by the District. The District's policy is to contribute amounts approved in the annual budget, which are generally greater than or equal to the actuarially determined annual contribution. For calendar year 2019, each member contributed 7.00% of pensionable earnings, as provided by the collective bargaining agreement approved by the Board in March of 2018 and effective for April 1, 2018 through March 31, 2023. There are additional increases to the employee pension contributions effective January 1 of each year: 7.50% in 2020, 8.00% in 2021, 8.50% in 2022 and 9.00% in 2023. The contribution rate for employees not covered by the collective bargaining agreement increased to 7.00% on January 1, 2019 and is expected to align with the rates stated in the collective bargaining agreement through 2023. District contributions to the Plan totaled $12,300,000 for the fiscal year ending December 31, 2019.

**Paragraph 30.b. (1):**

(a) The Insurance and Pension Committee reviews the Investment Policy Statement for The Retirement Plan for Employees of The Metropolitan Utilities District of Omaha (the Policy) at least annually in order to ascertain whether there have been any changes in the needs of the Plan and/or major changes in the structure of the capital markets, which require the Policy to be amended. The Committee recommends changes to the Policy to the Board for approval, whenever it is deemed necessary. The Board approves the Committee's annual review of the Policy and any recommended changes.

(b) See Section 31.b.(1)(f) for the asset allocation guidelines for the Plan. The asset portfolio will be rebalanced to the target asset allocation as follows:

1. Utilizing incoming cash flow (contributions) or outgoing money movements (disbursements) to realign the current weightings closer to the target asset allocation of the Portfolio on an ongoing basis.
2. Reviewing the Portfolio quarterly (March 31, June 30, September 30, and December 31) to identify any deviation(s) from target weightings and acting within a reasonable period of time under the following circumstances:

a. If any asset class (equity, fixed income, alternatives or cash) within the Portfolio is +/- 5 percentage points from its target weighting, the Portfolio will be rebalanced.
b. If any fund within the Portfolio has increased or decreased by greater than 20% of its target weighting, the Portfolio may be rebalanced.
c. Rebalancing the Portfolio at any other time if the Investment Advisor in its discretion deems it appropriate to do so.

(c) There were no significant investment policy changes during the reporting period.

**Paragraph 30.b. (2):** The fair value of investments is based on quoted market prices.

**Paragraph 30.b. (3):** As of December 31, 2019, the Plan did not own an investment in any one organization that represented 5 percent or more of the Plan's fiduciary net position.

**Paragraph 30.b. (4):** Calculation of Money-Weighted Rate of Return

The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of pension plan investments by the proportion of the time they are available to earn a return during that period. External cash flows are determined on a monthly basis. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month. The money-weighted rate of return is calculated net of investment expenses. For the year ended December 31, 2019, the money-weighted rate of return was 21.0%, as calculated by Vanguard.

**Paragraph 30.c.:** There are not any long-term contracts for contributions to the Plan between (1) an employer or non-employer contributing entity and (2) the Plan.

**Paragraph 30.d.:** There are no allocated insurance contracts excluded from pension plan assets.

**Paragraph 30.e.:** There are no reserves setting aside a portion of the Plan's fiduciary net position that otherwise would be available for existing pensions or for pension plan administration.

**Paragraph 30.f.:** The Plan does not offer a deferred retirement option program (DROP).

**Paragraph 31.a. (1)-(4):** As stated earlier, the NPL is equal to the TPL minus the FNP. That result, as of December 31, 2019 is presented in the following table.

| Fiscal Year Ending December 31, 2019 | | |
|---|---|---|
| Total Pension Liability | $ | 493,473,173 |
| Fiduciary Net Position | | 452,080,699 |
| Net Pension Liability | $ | 41,392,474 |
| Ratio of Fiduciary Net Position to Total Pension Liability | | 91.61% |

**Paragraph 31.b.:** This paragraph requires information to be disclosed regarding the actuarial assumptions and other inputs used to measure the TPL. The complete set of actuarial assumptions and other inputs utilized in developing the TPL are outlined in Appendix C. The TPL as of December 31, 2019 was determined based on an actuarial valuation prepared as of January 1, 2019, but using the new long-term rate of return assumption adopted by the Board in November 2019, rolled forward one year to December 31, 2019, using the following key actuarial assumptions and other inputs:

| | |
|---|---|
| Price Inflation | 2.60 percent |
| Wage Growth Rate | 3.50 percent |
| Salary increases, including price inflation | 4.00 to 11.00 percent |
| Long-term Rate of Return, net of investment expense, including price inflation | 6.90 percent |
| Municipal Bond Index Rate | |
| Prior Measurement Date | 4.13 percent |
| Measurement Date | 2.75 percent |
| Year FNP is projected to be depleted | N/A |
| Single Equivalent Interest Rate, net of investment expense, including price inflation | |
| Prior Measurement Date | 7.00 percent |
| Measurement Date | 6.90 percent |
| Cost-of-Living Adjustment | 2.60 percent |
| Mortality | Pre-retirement mortality rates were based on the RP-2014 Total Dataset Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016. |

Post-retirement mortality rates were based on the RP-2014 Total Dataset Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016.

Disabled mortality rates were based on the RP-2014 Disabled Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016.

The actuarial assumptions used in the January 1, 2019 valuation are based on the results of the most recent actuarial experience study, which covered the four year period ending December 31, 2016. The experience study report is dated August 2, 2017. The MUD Board adopted a revision to the Investment Policy Statement, including lowering the long-term investment return assumption to 6.90%, at their November 2019 meeting based on the recommendation of the Plan's investment consultant, Vanguard Institutional Advisory Services. The lower expected return will be implemented in the January 1, 2020 actuarial valuation and, therefore, is used to develop the December 31, 2019 TPL.

**Paragraph 31.b.(1)**

**(a) Discount rate (SEIR):** The discount rate used to measure the TPL at December 31, 2019 was 6.90 percent. The discount rate used to measure the TPL at the Prior Measurement Date was 7.00 percent.

**(b) Projected cash flows:** The projection of cash flows used to determine the discount rate assumed that plan contributions from members and the District will be made at the current contribution rates as set out in the labor agreements in effect on the Measurement Date:

   a. Employee contribution rate: 7.00% of pensionable earnings for all employees, as provided by the collective bargaining agreement approved by the Board in March of 2018 and effective for April 1, 2018 through March 31, 2023. There are additional increases to the employee pension contributions effective January 1 of each year: 7.50% in 2020, 8.00% in 2021, 8.50% in 2022 and 9.00% in 2023. The contribution rate for employees not covered by the collective bargaining agreement also increased to 7.00% on January 1, 2019 and is expected to align with the rates stated in the collective bargaining agreement through 2023.
   b. District contribution: The actuarial contribution rate less the employee contribution rate times expected pensionable payroll for the plan year.
   c. Administrative expenses in the prior year were projected forward with price inflation as an estimate for administrative expenses in current and future years. The portion of expenses in future years allocated to the current members was based on the proportionate share of covered payroll in each year for the remainder of the existing members to the total covered payroll for all members.

Based on those assumptions, the Plan's FNP was projected to be available to make all projected future benefit payments of current Plan members. Therefore, the long-term expected rate of return on Plan investments of 6.90% was applied to all periods of projected benefit payments to determine the TPL.

The FNP projections are based upon the Plan's financial status on the Measurement Date, the indicated set of methods and assumptions, and the requirements of GASB 67/68. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing plan basis, reflecting the impact of future members. Therefore, the results of this test do not necessarily indicate whether or not the fund will actually run out of money, the financial condition of the Plan, or the Plan's ability to make benefit payments in future years.

(c) **Long-term rate of return:** The long-term expected rate of return on pension plan investments is reviewed as part of the regular experience study prepared for the Plan. The results of the most recent experience study were presented in a report dated August 2, 2017. The MUD Board adopted a revision to the Investment Policy Statement, including lowering the long-term investment return assumption to 6.90%, at their November 2019 meeting based on the recommendation of the Plan's investment consultant, Vanguard Institutional Advisory Services. The lower expected return will be implemented in the January 1, 2020 actuarial valuation and, therefore, is used to develop the December 31, 2019 TPL.Several factors are considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and an analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation), along with estimates of variability and correlations for each asset class, were developed by the Plan's investment consultant. These ranges were combined to develop the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The assumed long-term rate of return is intended to be a long-term assumption (50 years) and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

(d) **Municipal bond rate:** A municipal bond rate was not used in determining the discount rate. If it were required, the rate would be 2.75% on the Measurement Date.

(e) **Periods of projected benefit payments:** Projected future benefit payments for all current plan members were projected through 2118.

(f) **Assumed asset allocation**: The target asset allocation as of October 2019, along with best estimates of geometric real rates of return for each major asset class, were provided by the Plan's investment consultant, Vanguard Institutional Advisory Services. These assumptions were used to develop the long-term assumed rate of return of 6.9%.

| Asset Class | Target Allocation | Long-Term Expected Real Rate of Return* |
|---|---|---|
| Domestic (U.S.) Equities | 40.0% | 6.3% |
| International (Non-U.S.) Equities | 20.0% | 6.9% |
| U.S. Aggregate Bonds | 15.0% | 1.2% |
| International Bonds | 3.0% | 0.8% |
| Intermediate Term Credit | 11.0% | 1.9% |
| Short Term Credit | 3.0% | 1.7% |
| REITS | 8.0% | 4.6% |
| Total | 100.0% | |

* Geometric mean, net of investment expenses

**(g) Sensitivity analysis**: This paragraph requires disclosure of the sensitivity of the NPL to changes in the discount rate. The following presents the NPL of the Plan, calculated using the discount rate of 6.90 percent, as well as the Plan's NPL calculated using a discount rate that is 1-percentage-point lower (5.90 percent) or 1-percentage-point higher (7.90 percent) than the current rate:

| | 1% Decrease (5.90%) | Current Discount Rate (6.90%) | 1% Increase (7.90%) |
|---|---|---|---|
| Total Pension Liability | $557,141,738 | $493,473,173 | $440,307,833 |
| Fiduciary Net Position | $452,080,699 | $452,080,699 | $452,080,699 |
| Net Pension Liability | $105,061,039 | $41,392,474 | ($11,772,866) |

**Paragraph 31.c.:** The TPL at December 31, 2019 is based upon an actuarial valuation prepared as of January 1, 2019, but using the new long-term investment return assumption of 6.90%, as adopted by the Board in November 2019. The valuation was used to determine the TPL on the Measurement Date, by rolling the liabilities forward one year to December 31, 2019 using standard actuarial techniques. The roll-forward begins with the actuarial accrued liability (TPL) at January 1, 2019, adds the annual normal cost (also called Service Cost), subtracts the actual benefit payments and refunds for the plan year and then applies interest to December 31, 2019 using the discount rate as of the Prior Measurement Date.

## SECTION II – REQUIRED SUPPLEMENTARY INFORMATION FOR GASB 67

There are several tables of Required Supplementary Information (RSI) that need to be included in the Plan's financial statements:

**Paragraphs 32.a.-c.:** The required tables of schedules are provided in Appendix A.

**Paragraph 32.d.:**

| Fiscal Year Ended December 31 | Annual Money-Weighted Rate of Return |
|---|---|
| 2019 | 21.0% |
| 2018 | -5.2% |
| 2017 | 15.2% |
| 2016 | 7.9% |
| 2015 | -0.2% |

Note: This schedule is intended to show a 10-year trend. GASB 67 was adopted in 2015, as such, only five years are presented. Additional years will be reported as they become available.

**Paragraph 34**: The following information should be noted regarding the RSI, particularly for the *Schedule of Employer Contributions*:

***Changes to benefit and funding terms:*** The following changes to the plan provisions were reflected in the valuation performed as of January 1 listed below:

2019: The member contribution rate increased to 7.00% of total pay, as scheduled.

2018: The member contribution rate increased from 6.00% to 6.50% of total pay on September 1, 2018 for employees not covered by the collective bargaining agreement, as scheduled.

2016: The member contribution rate increased from 4.88% to 6.00% of total pay, as scheduled.

2015: The member contribution rate increased from 4.32% to 4.88% of total pay, as scheduled.

2014: The member contribution rate increased from 3.76% to 4.32% of total pay.

***Changes in actuarial assumptions and methods:***

1/1/2020 valuation (assumptions used for measuring the 12/31/2019 TPL):

- The investment return assumption was decreased from 7.00% to 6.90%.

1/1/2018 valuation (assumptions used for measuring the 12/31/2017 TPL):

- The investment return assumption was decreased from 7.25% to 7.00%.
- The price inflation assumption was lowered from 3.10% to 2.60%.
- The cost of living adjustment assumption was lowered from 3.00% to 2.60%.
- The general wage growth assumption was lowered from 4.00% to 3.50%.
- The covered payroll increase assumption was lowered from 4.00% to 3.50%.
- The mortality assumption was modified by moving to the RP-2014 Mortality Table, adjusted to 2006, with a one-year set forward for females and projected generationally using Scale MP-2016.
- Assumed retirement rates were adjusted to better reflect actual experience.
- Assumed termination rates were adjusted to better reflect actual experience.

1/1/2015 valuation:

- The price inflation assumption was lowered from 3.25% to 3.10%.
- Retirement rates were adjusted to better reflect actual experience.
- The mortality assumption was changed to reflect full generational mortality improvements.
- An explicit assumption for administrative expenses was created and is based on the prior year's reported administrative expenses.
- The marriage assumption was changed to assume 90% of all active members are married. Prior to the change, the marriage assumption was based on the member's age and gender.
- The amortization of the unfunded actuarial liability moved from a single amortization base to a "layered" approach. The UAL as of January 1, 2014 is amortized over a closed 30-year period that began January 1, 2014. Changes to the UAL from actual versus expected experience, assumption changes, or method changes in each subsequent year create a new amortization base with a separate payment, determined as a level percentage of payroll, over a closed 20-year period beginning on that valuation date.

## SECTION III – PENSION EXPENSE FOR GASB 68

As noted earlier, the Pension Expense (PE) consists of a number of different items. GASB 68 refers to the first item as Service Cost, which is the Normal Cost using the Entry Age Normal (EAN) actuarial funding method. The second item is interest on the TPL at 7.00%, the discount rate in effect as of the Prior Measurement Date.

The next three items refer to any changes that occurred in the TPL due to:

- benefit changes,
- actual versus expected experience, or
- changes in actuarial assumptions or other inputs.

Benefit changes, which are reflected immediately, will increase PE if there is a benefit improvement for existing Plan members, or decrease PE if there is a benefit reduction. For the year ended December 31, 2019, there were no benefit changes to be recognized.

The next item to be recognized is the portion of current year changes in TPL due to actual versus expected experience for the year. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire Plan membership at the beginning of the measurement period. The average expected remaining service life of active members is the average number of years the active members are expected to remain in covered employment. At the beginning of the measurement period, this number is 11.93 years. The average expected remaining service life of the inactive members is zero. Therefore, the recognition period is the weighted average of these two amounts or 6.23 years.

The last item under changes in TPL is changes in actuarial assumptions or other inputs. There was one change in the actuarial assumptions or other inputs since the Prior Measurement Date. This change is detailed in Section II of this report. The change in the TPL from the new assumption will be recognized over the average expected remaining service life of the entire Plan membership, using the same approach that applied to experience gains and losses as described earlier.

Employee contributions for the year and projected earnings on the FNP at the long-term rate of return, are subtracted from the amount determined thus far. One-fifth of current-period differences between projected and actual earnings on the FNP is recognized in the PE.

The current year portions of previously determined experience, assumption changes and earnings amounts, recognized as Deferred Outflows of Resources and Deferred Inflows of Resources are included next. Deferred Outflows of Resources are added to the PE while Deferred Inflows of Resources are subtracted from the PE. Finally, administrative expenses and other miscellaneous items are included.

The calculation of the PE for the year ended December 31, 2019 is shown in the following table.

**Pension Expense**
**For the Year Ended**

| | December 31, 2019 |
|---|---|
| Service Cost at end of year | $11,710,809 |
| Interest on the Total Pension Liability | 31,734,106 |
| Benefit term changes | 0 |
| Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability | 275,212 |
| Expensed portion of current-period assumption changes | 923,118 |
| Employee contributions | (4,413,137) |
| Projected earnings on plan investments | (26,317,800) |
| Expensed portion of current-period differences between projected and actual earnings on plan investments | (10,422,756) |
| Administrative expenses | 70,123 |
| Other | 0 |
| Recognition of beginning Deferred Outflows of Resources | 16,037,942 |
| Recognition of beginning Deferred Inflows of Resources | (7,219,016) |
| **Total Pension Expense** | **$12,378,601** |

Note: Average expected remaining service life for all members is 6.23 years.

## SECTION IV – NOTES TO FINANCIAL STATEMENTS FOR GASB 68

The material presented herein will follow the order presented in GASB 68. Paragraph numbers are provided for ease of reference. Some of this information is duplicative of information provided earlier in this report under GASB 67. In such cases, the GASB 67 section is referenced rather than including the information a second time.

**Paragraph 37:** The District only sponsors one pension plan. Total amounts are identifiable from information presented in the financial statements. No additional information is required.

**Paragraph 38:** The Metropolitan Utilities District of Omaha is the plan sponsor for the Retirement Plan for Employees of the Metropolitan Utilities District of Omaha, a single-employer defined benefit pension plan as defined by GASB 68. Information for paragraphs 39 to 45 can be found on the following pages.

**Paragraph 39:** Not Applicable.

**Paragraph 40(a):** The name of the pension plan is the Retirement Plan for Employees of the Metropolitan Utilities District of Omaha and it is administered by the District. The Plan is a single-employer defined benefit pension plan as defined by GASB 68.

**Paragraph 40(b):**

**(1) Classes of employees covered:** The membership includes all regular full-time employees of the District.

**(2) Types of benefits:** The main benefits provided are retirement benefits. However, the Plan also provides ancillary benefits in the event of pre-retirement death, disability, or termination of employment prior to meeting the eligibility requirements to retire.

**(3) Key elements of the pension formulas:** Normal retirement age is age 60 with 5 years of service. The retirement benefit is calculated using the average compensation for the highest paid 24 consecutive months out of the most recent 120 months, multiplied by the total years of service and the formula factor of 2.15 percent for the first 25 years of service, 1.00 percent for the next 10 years of service and 0.50% for each year of service above 35. The benefit amount is reduced under early retirement which is available at age 55 and 5 years of service. Benefits vest when the member has five or more years of service.

**(4) Terms with respect to automatic postemployment benefit changes, including automatic COLAs and ad hoc COLAs:** Each January 1 and July 1, a cost of living adjustment is made, if warranted, to each retirement benefit being paid based on the increase in the Consumer Price Index of Urban Wage Earners and Clerical Workers. The annual increase in the member's benefit cannot exceed 3.0 percent and adjustments cannot be negative.

**(5) Authority under which benefit terms are established or may be amended:** Benefit and contribution provisions are established by and may be amended only by the Board.

The contribution rate for certain employees is established by a collective bargaining agreement. The Board sets the contribution rates for employees who are not covered by the collective bargaining agreement.

**Paragraph 40(c):** The data required regarding the membership of the Plan were furnished by the District. The following table summarizes the membership of the Plan as of January 1, 2019, the date of the valuation used to determine the December 31, 2019 TPL.

**Membership**

| Number as of January 1, 2019 | |
|---|---|
| Inactive Members Or Their Beneficiaries Currently Receiving Benefits | 656 |
| Disabled Members | 22 |
| Inactive Members Entitled To But Not Yet Receiving Benefits | 42 |
| Inactive Non-vested Members | 4 |
| Active Members | 792 |
| Total | 1,516 |

**Paragraph 40(d):**

**(1) Basis for determining the employer's contributions to the plan:** An actuarial valuation is performed each year to determine the actuarial required contribution, based on the funding goals set by the Board of Directors, which is then contributed by the District.

**(2) Identification of the authority under which contribution requirements of the employer and employees are established or may be amended:** Benefit and contribution provisions are established by and may be amended only by the Board of Directors of the Metropolitan Utilities District of Omaha.

**(3) The contribution rates (in dollars or as a percentage of covered payroll) of those entities for the reporting period:**

**Members:** For calendar year 2019, each member contributed 7.00% of pensionable earnings, as provided by the collective bargaining agreement approved by the Board in March of 2018 and effective for April 1, 2018 through March 31, 2023. There are additional increases to the employee pension contributions effective January 1 of each year: 7.50% in 2020, 8.00% in 2021, 8.50% in 2022 and 9.00% in 2023. The contribution rate for employees not covered by the collective bargaining agreement increased to 7.00% on January 1, 2019 and is expected to align with the rates stated in the collective bargaining agreement through 2023.

**Employer:** The District's policy is to contribute amounts approved in the annual budget, which are generally greater than or equal to the actuarially determined annual required contribution.

**Amount of contributions recognized by the pension plan from the employer during the reporting period (only the total amounts recognized as additions to the plan's fiduciary net position are reflected here):** For the fiscal year ending December 31, 2019 the Plan received $12,300,000 in contributions from the District.

**Paragraph 40(e): Whether the pension plan issues a stand-alone financial report (or the pension plan is included in the report of a public employee retirement system or another government) that is available to the public and, if so, how to obtain the report:** This information will be supplied by the Plan.

**Paragraph 41:** This paragraph requires information to be disclosed regarding the significant actuarial assumptions and other inputs used to measure the TPL. The summary of the key actuarial assumptions can be found in **GASB 67, Paragraph 31.b**.

**Paragraph 42: Please see GASB 67 Paragraph 31.b.(1)(a)-(g).**

**Paragraph 43:** This information is provided in Appendix A of this report.

**Paragraph 44 (a) – (c):** This paragraph requires a schedule of changes in NPL. The necessary information is provided in the table below for fiscal year ended December 31:

| | Total Pension Liability (a) | Plan Fiduciary Net Position (b) | Net Pension Liability (a) – (b) |
|---|---|---|---|
| **Balances at December 31, 2018** | $463,767,450 | $378,210,890 | $85,556,560 |
| **Changes for the year:** | | | |
| Service Cost at end of year | 11,710,809 | | 11,710,809 |
| Interest on TPL | 31,734,106 | | 31,734,106 |
| Benefit term changes | 0 | | 0 |
| Differences between expected and actual experience | 1,714,570 | | 1,714,570 |
| Assumption changes | 5,751,024 | | 5,751,024 |
| Employer contributions | | 12,300,000 | (12,300,000) |
| Employee contributions | | 4,413,137 | (4,413,137) |
| Net investment income | | 78,431,581 | (78,431,581) |
| Benefit payments, including member refunds | (21,204,786) | (21,204,786) | 0 |
| Administrative expenses | | (70,123) | 70,123 |
| Other | | 0 | 0 |
| **Net changes** | 29,705,723 | 73,869,809 | (44,164,086) |
| **Balances at December 31, 2019** | $493,473,173 | $452,080,699 | $41,392,474 |

**Paragraph 44(d):** There is no special funding situation.

**Paragraph 45:**

**(a):** The Measurement Date of the NPL is December 31, 2019. The TPL as of December 31, 2019 was determined based upon an actuarial valuation prepared as of the Valuation Date, January 1, 2019, but using the new long-term investment return assumption of 6.90%, adopted by the Board in November 2019, rolled forward to December 31, 2019 using standard actuarial formulae.

**(b):** There is no special funding situation.

**(c):** There was one change in the actuarial assumptions or other inputs since the Prior Measurement Date. This change is detailed in Section II of this report.

**(d):** There were no changes in the benefit terms since the Prior Measurement Date.

**(e):** There were no benefit payments in the measurement period attributable to the purchase of allocated insurance contracts.

**(f):** The measurement date of the NPL and the employer's reporting date, December 31, 2019, are the same, so there are no significant effects on the NPL due to differing dates.

**(g):** Please see Section III of this report for the development of the PE.

**(h):** Since certain expense items are recognized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce PE they are labeled Deferred Inflows of Resources. If they will increase PE they are labeled Deferred Outflows of Resources. The recognition of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions, if any, are recognized over the average expected remaining service life of the active and inactive Plan members at the beginning of the measurement period. Investment gains and losses are recognized equally over a five-year period.

The following tables provide a summary of the amounts of the Deferred Outflows of Resources and Deferred Inflows of Resources as of the Measurement Date (December 31, 2019). Per GASB 68, reporting of the differences between projected and actual earnings should be on a net basis, with only one Deferred Outflow or Inflow. This information is provided in the following table.

| | Deferred Outflows of Resources | Deferred Inflows of Resources | Net Deferred Outflows/(Inflows) of Resources |
|---|---|---|---|
| Differences between expected and actual experience | $1,439,358 | $4,930,730 | ($3,491,372) |
| Changes of assumptions | 9,574,565 | 0 | 9,574,565 |
| Differences between projected and actual earnings | 29,273,275 | 53,012,517 | (23,739,242) |
| Total | $40,287,198 | $57,943,247 | ($17,656,049) |

The following tables show the Deferred Outflows of Resources and Deferred Inflows of Resources separately to provide additional detail.

| Deferred Outflows of Resources | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | December 31, 2018 | | Additions | | Recognition | | December 31, 2019 | |
| Differences between expected and actual experience | | | | | | | | |
| FY 2015 Base | $ | 0 | $ | 0 | $ | 0 | $ | 0 |
| FY 2016 Base | | 0 | | 0 | | 0 | | 0 |
| FY 2017 Base | | 0 | | 0 | | 0 | | 0 |
| FY 2018 Base | | 0 | | 0 | | 0 | | 0 |
| FY 2019 Base | | 0 | | 1,714,570 | | 275,212 | | 1,439,358 |
| Total | $ | 0 | $ | 1,714,570 | $ | 275,212 | $ | 1,439,358 |
| Changes of assumptions | | | | | | | | |
| FY 2015 Base | $ | 0 | $ | 0 | $ | 0 | $ | 0 |
| FY 2016 Base | | 0 | | 0 | | 0 | | 0 |
| FY 2017 Base | | 6,068,849 | | 0 | | 1,322,190 | | 4,746,659 |
| FY 2018 Base | | 0 | | 0 | | 0 | | 0 |
| FY 2019 Base | | 0 | | 5,751,024 | | 923,118 | | 4,827,906 |
| Total | $ | 6,068,849 | $ | 5,751,024 | $ | 2,245,308 | $ | 9,574,565 |
| Differences between projected and actual earnings | | | | | | | | |
| FY 2015 Base | $ | 4,957,994 | $ | 0 | $ | 4,957,994 | $ | 0 |
| FY 2016 Base | | 0 | | 0 | | 0 | | 0 |
| FY 2017 Base | | 0 | | 0 | | 0 | | 0 |
| FY 2018 Base | | 39,031,033 | | 0 | | 9,757,758 | | 29,273,275 |
| FY 2019 Base | | 0 | | 0 | | 0 | | 0 |
| Total | $ | 43,989,027 | $ | 0 | $ | 14,715,752 | $ | 29,273,275 |
| Total | $ | 50,057,876 | $ | 7,465,594 | $ | 17,236,272 | $ | 40,287,198 |

| Deferred Inflows of Resources | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | December 31, 2018 | | Additions | | Recognition | | December 31, 2019 | |
| Differences between expected and actual experience | | | | | | | | |
| FY 2015 Base | $ | 0 | $ | 0 | $ | 0 | $ | 0 |
| FY 2016 Base | | 887,037 | | 0 | | 230,400 | | 656,637 |
| FY 2017 Base | | 4,064,435 | | 0 | | 885,498 | | 3,178,937 |
| FY 2018 Base | | 1,346,338 | | 0 | | 251,182 | | 1,095,156 |
| FY 2019 Base | | 0 | | 0 | | 0 | | 0 |
| Total | $ | 6,297,810 | $ | 0 | $ | 1,367,080 | $ | 4,930,730 |
| Changes of assumptions | | | | | | | | |
| FY 2015 Base | $ | 0 | $ | 0 | $ | 0 | $ | 0 |
| FY 2016 Base | | 0 | | 0 | | 0 | | 0 |
| FY 2017 Base | | 0 | | 0 | | 0 | | 0 |
| FY 2018 Base | | 0 | | 0 | | 0 | | 0 |
| FY 2019 Base | | 0 | | 0 | | 0 | | 0 |
| Total | $ | 0 | $ | 0 | $ | 0 | $ | 0 |
| Differences between projected and actual earnings | | | | | | | | |
| FY 2015 Base | $ | 0 | $ | 0 | $ | 0 | $ | 0 |
| FY 2016 Base | | 764,768 | | 0 | | 382,383 | | 382,385 |
| FY 2017 Base | | 16,408,660 | | 0 | | 5,469,553 | | 10,939,107 |
| FY 2018 Base | | 0 | | 0 | | 0 | | 0 |
| FY 2019 Base | | 0 | | 52,113,781 | | 10,422,756 | | 41,691,025 |
| Total | $ | 17,173,428 | $ | 52,113,781 | $ | 16,274,692 | $ | 53,012,517 |
| Total | $ | 23,471,238 | $ | 52,113,781 | $ | 17,641,772 | $ | 57,943,247 |

**(i):** Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in PE in future years as follows:

| Fiscal Year Ending December 31: | Deferred Outflows of Resources | Deferred Inflows of Resources | Net Deferred Outflows/(Inflows) of Resources |
|---|---|---|---|
| 2020 | $12,278,278 | $17,641,774 | ($5,363,496) |
| 2021 | 12,278,278 | 17,259,390 | (4,981,112) |
| 2022 | 12,278,279 | 11,755,273 | 523,006 |
| 2023 | 1,978,419 | 11,196,382 | (9,217,963) |
| 2024 | 1,198,330 | 90,428 | 1,107,902 |
| Thereafter | 275,614 | 0 | 275,614 |

**(j):** Based on information supplied by the District, they receive no revenue from non-employer contributing entities.

## SECTION V – REQUIRED SUPPLEMENTARY INFORMATION FOR GASB 68

Under GASB 68, there are several tables of Required Supplementary Information (RSI) that need to be included in the Plan's financial statements. This information can be found in Section II of this report, Required Supplementary Information for GASB 67, and is not repeated here.

# APPENDIX A

# REQUIRED
# SUPPLEMENTARY INFORMATION

# Exhibit A

## GASB 68 Paragraph 43

**STATEMENT OF PLAN FIDUCIARY NET POSITION AND CHANGES IN THE FIDUCIARY NET POSITION**
**Fiscal Year Ended December 31, 2019**

Statement of Plan Fiduciary Net Position at December 31, 2019

| | | |
|---|---|---|
| Assets | | |
| Cash and cash equivalents | $ | 1,693,223 |
| Investments at fair value | | |
| Fixed income | | 142,203,573 |
| Domestic stock | | 199,638,211 |
| International stock | | 108,545,692 |
| Total investments | | 450,387,476 |
| Total assets | | 452,080,699 |
| Liabilities | | |
| Accrued expenses and benefits payable | | 0 |
| Total liabilities | | 0 |
| Net position restricted for pensions | $ | 452,080,699 |

Statement of Changes in the Fiduciary Net Position
for the Year Ended December 31, 2019

| | | |
|---|---|---|
| Additions: | | |
| Employer contributions | $ | 12,300,000 |
| Employee contributions | | 4,413,137 |
| Total contributions | | 16,713,137 |
| Net investment income | | 78,431,581 |
| Total additions | | 95,144,718 |
| Deductions: | | |
| Service benefits | | 21,204,786 |
| Administrative expenses | | 70,123 |
| Total deductions | | 21,274,909 |
| Net increase/(decrease) | | 73,869,809 |
| Net position restricted for pensions: | | |
| Beginning of year | | 378,210,890 |
| End of year | $ | 452,080,699 |

# Exhibit B

## GASB 67 Paragraphs 32(a)-(b)
## GASB 68 Paragraphs 46(a)-(b)
### SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY

**Fiscal Year Ended December 31**

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| **Total Pension Liability** | | | | | |
| Service Cost | $11,710,809 | $11,863,654 | $11,137,854 | $10,857,017 | $10,160,376 |
| Interest | 31,734,106 | 30,304,199 | 29,552,506 | 28,076,211 | 26,596,785 |
| Benefit term changes | 0 | 0 | 0 | 0 | 0 |
| Differences between expected and actual experience | 1,714,570 | (1,597,520) | (5,835,431) | (1,578,237) | 0 |
| Assumption changes | 5,751,024 | 0 | 8,713,229 | 0 | 0 |
| Benefit payments, including member refunds | (21,204,786) | (19,116,693) | (17,445,020) | (16,555,144) | (16,154,435) |
| **Net change in Total Pension Liability** | $29,705,723 | $21,453,640 | $26,123,138 | $20,799,847 | $20,602,726 |
| **Total Pension Liability - beginning** | $463,767,450 | $442,313,810 | $416,190,672 | $395,390,825 | $374,788,099 |
| **Total Pension Liability - ending (a)** | $493,473,173 | $463,767,450 | $442,313,810 | $416,190,672 | $395,390,825 |
| **Plan Fiduciary Net Position** | | | | | |
| Employer contributions | $12,300,000 | $11,606,179 | $11,193,821 | $10,300,000 | $10,301,268 |
| Employee contributions | 4,413,137 | 3,805,373 | 3,757,444 | 3,895,899 | 2,820,596 |
| Net investment income | 78,431,581 | (20,727,828) | 52,812,850 | 25,696,348 | (748,921) |
| Benefit payments, including member refunds | (21,204,786) | (19,116,693) | (17,445,020) | (16,555,144) | (16,154,435) |
| Administrative expenses | (70,123) | (94,940) | (94,161) | (85,186) | (92,250) |
| Other | 0 | 0 | 0 | 0 | 0 |
| **Net change in Plan Fiduciary Net Position** | $73,869,809 | ($24,527,909) | $50,224,934 | $23,251,917 | ($3,873,742) |
| **Plan Fiduciary Net Position – beginning** | $378,210,890 | $402,738,799 | $352,513,865 | $329,261,948 | $333,135,690 |
| **Plan Fiduciary Net Position - ending (b)** | $452,080,699 | $378,210,890 | $402,738,799 | $352,513,865 | $329,261,948 |
| **Net Pension Liability - ending (a) - (b)** | $41,392,474 | $85,556,560 | $39,575,011 | $63,676,807 | $66,128,877 |
| **Plan Fiduciary Net Position as a percentage of the Total Pension Liability** | 91.61% | 81.55% | 91.05% | 84.70% | 83.28% |
| **Covered payroll** | $63,272,421 | $62,865,829 | $62,624,066 | $61,064,398 | $63,384,548 |
| **Employers' Net Pension Liability as a percentage of covered payroll** | 65.42% | 136.09% | 63.19% | 104.28% | 104.33% |

Note: Schedule is intended to show 10-year trend. Additional years will be reported as they become available.

## Exhibit C

## GASB 67 Paragraph 32(c)
## GASB 68 Paragraph 46(c)
### SCHEDULE OF EMPLOYER CONTRIBUTIONS
### ($ in Thousands)

| FY Ending December 31, | Actuarially Determined Contribution | Actual Contribution | Contribution Deficiency/ (Excess) | Covered Payroll | Actual Contribution as a % of Covered Payroll |
|---|---|---|---|---|---|
| 2010 | $ 8,588 | $ 8,638 | $ (50) | $ 51,484 | 16.78% |
| 2011 | 9,235 | 9,300 | (65) | 51,869 | 17.93% |
| 2012 | 9,231 | 10,312 | (1,080) | 51,031 | 20.21% |
| 2013 | 8,996 | 10,300 | (1,304) | 55,847 | 18.44% |
| 2014 | 8,988 | 10,300 | (1,312) | 59,332 | 17.36% |
| 2015 | 9,956 | 10,301 | (345) | 63,385 | 16.25% |
| 2016 | 10,215 | 10,300 | (85) | 61,064 | 16.87% |
| 2017 | 10,273 | 11,194 | (921) | 62,624 | 17.87% |
| 2018 | 11,198 | 11,606 | (408) | 62,866 | 18.46% |
| 2019 | 11,270 | 12,300 | (1,030) | 63,272 | 19.44% |

Note: Information prior to 2011 was produced by the prior actuary.

## NOTES TO SCHEDULE OF EMPLOYER CONTRIBUTIONS

| | |
|---|---|
| **Valuation Date:** | January 1, 2019 |
| Notes | Actuarially determined contribution is determined in the valuation performed as of January 1 of the year in which contribution are made. |

**Methods and Assumptions Used to Determine Actuarial Contribution Rates:**

| | |
|---|---|
| Actuarial Cost Method | Entry Age Normal |
| Amortization Method | Level Percentage of Payroll, Closed |
| Remaining Amortization Period | Range from 16 to 25 years (Single Equivalent Amortization Period is 24 years) |
| Asset Valuation Method | Expected Value + 25% of (Market – Expected Values) |
| Price Inflation | 2.60 percent |
| Salary Increases, including price inflation | 4.00 to 11.00 percent, depending on years of service |
| Long-Term Rate of Return | 7.00 percent |
| Retirement | Service-based table of rates. |
| Mortality | Pre-retirement mortality rates were based on the RP-2014 Total Dataset Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016.<br>Post-retirement mortality rates were based on the RP-2014 Total Dataset Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016.<br>Disabled mortality rates were based on the RP-2014 Disabled Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016. |
| Cost-of-Living Adjustment | 2.60 percent per year |

## APPENDIX B

### SUMMARY OF KEY BENEFIT PROVISIONS

The Retirement Plan for Employees of the Metropolitan Utilities District was established on October 1, 1944, using a conventional group annuity contract with Metropolitan Life Insurance Company (MLI) as the vehicle for funding the retirement benefits under the plan. Effective December 31, 1967, the plan was amended which brought about changes in the benefit and contribution formulas and added a spouse's benefit.

As of December 31, 1967 the MLI Group Annuity Contract was amended to discontinue further purchases of annuities. However, under contractual rights, annuities purchased prior to December 31, 1967 continue to be guaranteed under the provisions of such contract. Further amendments modified the pre-existing contract from a conventional group annuity contract to an Immediate Participation Guaranteed (IPG) group annuity contract (effective December 31, 1967). Investments are being managed by Vanguard Institutional Advisory Services pursuant to the provisions of the Investment Policy Statement.

The following summary of plan provisions reflects the plan as in effect on the date of the valuation.

| | |
|---|---|
| Participation: | (a) Each Employee on the effective date, provided he was employed before his 60th birthday, became a participant on the effective date<br>(b) Each person who becomes an employee after the effective date becomes a participant on his employment date. |
| Final Average Salary: | The average of the salaries for the highest paid 24 consecutive months out of the last 120 months before retirement (high 36 months prior to 3/1/06). |
| Age and Service Requirements for Benefits: | |
| Normal Retirement | First day of the month next following the 60th birthday |
| Early Retirement | Age 55 with at least five years of service. |
| Deferred Vested Benefit | Separate service before age 55 with at least five years of service. |
| Spouse's Benefit | Upon death of employee in active service with at least five years of service and married at least one year prior to the date of death. Payable based on employee's age according to early or normal retirement provisions. |

Retirement Benefits:

| | |
|---|---|
| Normal & Late Retirement | A monthly amount which equals<br><br>(a) percentage of final average salary based on years of continuous service, beginning at 2.15% for each of the first 25 years of service (2.00% prior to 3/1/06) plus 1.00% for the next 10 years, plus .5% for each year of service after 35 years.<br><br>(b) any monthly normal retirement annuity purchased under the MLI contract up to December 31, 1967. |
| Minimal Normal | A monthly amount which, together with the annuity under the MLI contract, if any, equals $6 for each year of service, beginning with $30 for five years of service and grading up to $120 for 20 or more years of service. |
| Early Retirement | A monthly amount which equals (1) times (2)<br><br>(1) An amount determined in the same manner as the normal retirement benefit, based on:<br><br>(a) Years of continuous service and final average salary on the early retirement date, and<br><br>(b) Any monthly annuity, payable at age 65, to which the employee may be entitled under the MLI contract,<br><br>(2) A percentage factor equal to 100% at age 60 and above, with reductions of 0.25% a month for each month of early retirement (from age 60 to age 55) |

Form of Annuity:

| | |
|---|---|
| Normal | Monthly payments for life with refund at death of excess, if any, of the employee's contributions over payments received. |
| Optional | Contingent annuitant options are provided in the plan (a "pop-up" feature applies to any Contingent Annuitant Option if the employee's spouse is the Contingent Annuitant and the spouse predeceases the employee). Prior to 3/1/06, the pop up provision applied only to the Joint and 50% Contingent Annuitant option. |

Termination Benefits:

| | |
|---|---|
| Less than 5 years of service | A refund of the employee's contributions under the plan with interest to date of termination. |
| Before age 55 with 5 or more years of service | At the employee's election either:<br>(1) refund of the employee's contributions under the plan with interest to date of termination, or<br>(2) a deferred retirement income based on years of service and final average salary at termination date. |

| | |
|---|---|
| Spouse's Benefit: | Effective 3/1/06:<br>(1) if death occurs before age 55, the spouse is eligible for a survivor benefit at the member's earliest retirement age. The amount received is the member's accrued benefit adjusted for early commencement, if applicable, and conversion to a joint 100% survivor form of payment.<br>(2) if death occurs after age 55, the spouse is eligible for a survivor benefit immediately. The amount is adjusted for early commencement, if applicable, and conversion to a joint and 100% survivor form of payment. |

Single Sum Death Benefits:

| | |
|---|---|
| Before Retirement (if no spouse eligible for spouse's benefit) | To designated beneficiary or estate of employee – the employee's contributions under the plan with interest to date of death |
| Vested Terminated Employee (before retirement income payments commence) | Same as above. |
| After Retirement (if normal form benefit) | To designated beneficiary or estate of employee – the excess, if any, of the lump sum death benefit that would have been payable at date of retirement over the retirement income payments to date of death. |

| | |
|---|---|
| Surviving Spouse (receiving spouse's benefit) | To designated beneficiary or estate of the spouse, the excess, if any, of the employee's contributions under the plan with interest to the date of the employee's death over the payments made to the date of the spouse's death. |
| Contingent Annuitant (if retirement income payments have commenced) | To designated beneficiary or estate of the last survivor as between the retired employee and the contingent annuitant – the excess, if any, of the lump sum death benefit that would have been payable at date of retirement over the retirement income payments to the retired employee and the contingent annuitant to the date of death of the last survivor. |
| Employee Under MLI Contract | Contributions under MLI contract payable subject to provisions of MLI contract. |

<u>Cost of Living Adjustments:</u>

To retired employees, spouses and contingent annuitants – the supplemental pension payments based on the change in the Consumer Price Index, not less than 0% and not more than 3% a year. Adjustments are made twice a year on January 1 and July 1.

<u>Disability Benefits:</u>

If a participant becomes totally and permanently disabled, he/she is deemed to remain active for plan purposes, at his/her salary at the time of disability, until recovery or retirement. No employee contributions are required during the period of disability.

<u>Source of Funds:</u>

Employee Contributions

| Year | Contribution Rate |
|---|---|
| 2019 | 7.00% |
| 2020 | 7.50% |
| 2021 | 8.00% |
| 2022 | 8.50% |
| 2023 + | 9.00% |

District Contributions

The remaining amount required to fund the benefit on an actuarially sound basis.

## APPENDIX C

### STATEMENT OF ACTUARIAL ASSUMPTIONS

| | |
|---|---|
| Long-term Expected Rate of Return: (revised 2020) | 6.90% per annum, compounded annually |

Mortality Rates: (revised 2018)

| | |
|---|---|
| Active | RP-2014 Adjusted to 2006 Total Dataset Mortality Table with Female Rates Set Forward One Year – Generational with Projected Improvements under Scale MP-2016 |
| Retired | RP-2014 Adjusted to 2006 Total Dataset Mortality Table with Female Rates Set Forward One Year – Generational with Projected Improvements under Scale MP-2016 |
| On Long Term Disability | RP-2014 Adjusted to 2006 Disabled Retiree Mortality Table with Female Rates Set Forward One Year – Generational with Improvements under Scale MP-2016 |

Withdrawal Rates: (revised 2018)

| | Annual Rate | |
|---|---|---|
| Years of Service | Male | Female |
| 1 | 10.00% | 8.00% |
| 5 | 2.00% | 4.00% |
| 10 | 1.05% | 3.00% |
| 15 | 1.05% | 2.50% |
| 20 | 1.05% | 2.50% |
| 25 | 0.00% | 1.50% |
| 30 | 0.00% | 0.00% |

Retirement Rates: (revised 2018)

| Age | Annual Rate |
|---|---|
| 55 to 58 | 3% |
| 59 | 13% |
| 60 | 30% |
| 61 | 30% |
| 62 | 40% |
| 63 | 20% |
| 64 | 20% |
| 65 | 60% |
| 66-69 | 30% |
| 70 | 100% |

Retirement benefits are assumed to commence at age 58 for vested terminated members and age 62 for disabled members.

Salary Scale: (revised 2018)

Salaries of the employees are assumed to increase according to the following schedule:

| Years of Service | Annual Percentage Increase |
|---|---|
| 1 | 11.00% |
| 5 | 7.00% |
| 10 | 5.00% |
| 15 | 4.50% |
| 20 | 4.50% |
| 25 | 4.25% |
| 30 | 4.25% |
| 35 | 4.00% |

Note: Includes salary inflation at 3.50%

Spouse's Benefit: (revised 2015)

It is assumed that 90% of employees are married, with wives three years younger than husbands.

Probability of Refund:

| Service | Refund |
|---|---|
| 5 | 40% |
| 10 | 40 |
| 15 | 40 |
| 20 | 0 |

| | |
|---|---|
| Cost of Living Adjustment: (revised 2018) | Retirement benefits are assumed to increase at 2.60% per year |
| Payroll Growth (revised 2018): | 3.50% per year. |
| Inflation: (revised 2018) | 2.60% per year. |
| Administrative Expense: (implemented 2015) | Component of contribution rate, based on the prior year's actual administrative expenses. |
| Decrement Timing | Middle of year |
| Other: | Active liabilities for withdrawal and retirement benefits are loaded 0.50% for those members expected to elect a Joint and Contingent Annuitant form of payment that has a pop-up feature. |

For those who elect a Joint and Contingent Annuitant form of payment that has a pop-up feature, the assumed pop-up factors for retirees are shown below:

| Joint Percentage | Pop-up Factor |
|---|---|
| 25% | 1.0870 |
| 50% | 1.1628 |
| 75% | 1.2195 |
| 100% | 1.2821 |

The lump sum death benefit (a return of contributions with interest) for vested terminated members is assumed to equal three times the annual benefit amount.

The salary amounts used as an input for valuation purposes represent pensionable compensation for the 12-month period immediately preceding the valuation date. These amounts are calculated by using the employees' contribution amounts for the 12-month period immediately preceding the valuation date, as provided to us by the client.

Cavanaugh Macdonald
CONSULTING, LLC
*The experience and dedication you deserve*

# Retirement Plan for Employees of MUD

## January 1, 2020 Actuarial Valuation Results

**Presented: April 16, 2020**

www.CavMacConsulting.com

# Funding of Retirement System

- Very long term in nature – the obligations (liabilities) to current members stretch out over 75 years

- Estimated benefit payments are the Plan's liabilities
  - Based on many actuarial assumptions, but actual experience may vary from that expected
  - That variability creates "risk" (uncertainty)
  - Increased focus on assessment and disclosure of such risk

- Prudent to regularly monitor funding progress so adjustments can be made if trends become apparent

- Actuarial valuations are performed annually to evaluate current funded status and determine the District's contribution for current year

# Funding of MUD's Retirement Plan

- The key metric coming out of the actuarial valuation is the actuarial contribution rate and amount for the current year

- Employees contribute a fixed percent of their pay to the Plan
  - In 2020, the employee contribution rate is 7.50%
  - Increasing 0.50% each year until 9.00% in 2023

- District contributes the remainder of the actuarial contribution rate times the expected payroll

# Significant Factors in the 2020 Valuation

- Investment return assumption lowered from 7.00% to 6.90%
- Employee contribution rate increased, as scheduled, from 7.00% to 7.50%
- Actual versus expected experience
  - Investment return (on both market value and actuarial (smoothed) value) was higher than expected
  - Liabilities were lower than expected
  - Positive impact on the Plan's funding

# Actual Experience in 2019

- Overall, favorable experience for the year
  - Investment return was 21% on market value and 9% on actuarial (smoothed) value. Actual return was higher than assumed (7.0%), resulting in an actuarial gain of $7 million.
  - Liabilities were lower than expected (actuarial gain of $8 million) largely due to more deaths and lower COLAs than expected based on assumptions
  - Total actuarial gain was $15 million
  - Market value of assets is now higher than the actuarial value by $20 million (deferred gain)
    - In the 2019 valuation, actuarial value exceeded market value by $24 million (deferred loss)
    - Deferred gain would be eliminated with a return of less than 2% in 2020

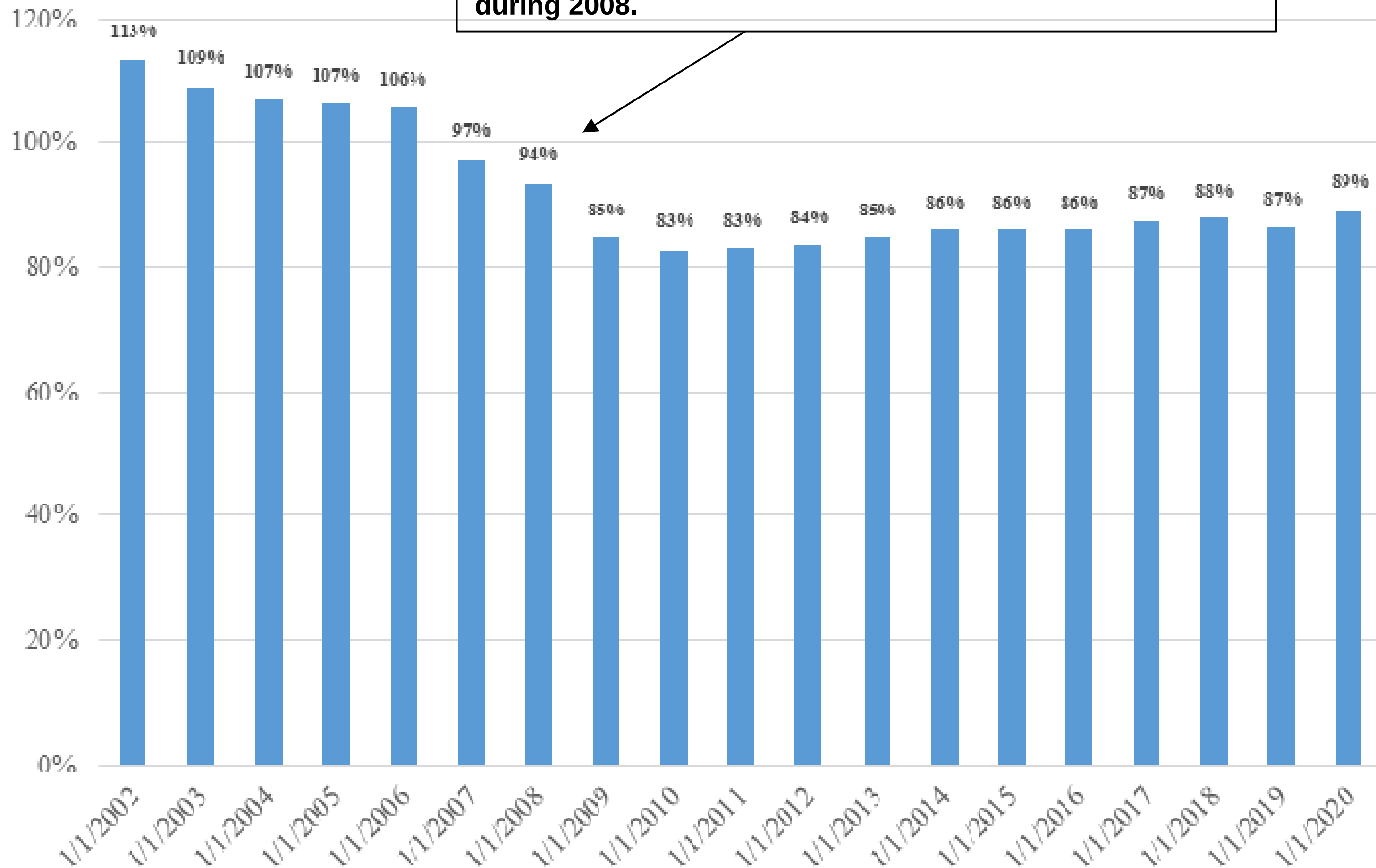
# Summary of Results
# Funded Status

| | 1/1/20 Valuation | 1/1/19 Valuation |
|---|---|---|
| Actuarial liability ($M) | $485 | $465 |
| Actuarial assets ($M) | (432) | (403) |
| Unfunded actuarial liability $M) | $ 52 | $ 63 |
| | | |
| **Funded Ratio: Assets/Liability** | | |
| Actuarial Value of Assets | 89.3% | 86.5% |
| | | |
| Market Value of Assets | 93.3% | 81.3% |

Note: Actuarial value of assets is a smoothed, market-related value, which is used to smooth the volatility inherent in pure market value measurements.

# Historical Funded Ratio

**The significant decline in the funded ratio between 2006 and 2009 reflects the change in the benefit formula in 2007 (retroactively) and investment returns far below expected during 2008.**



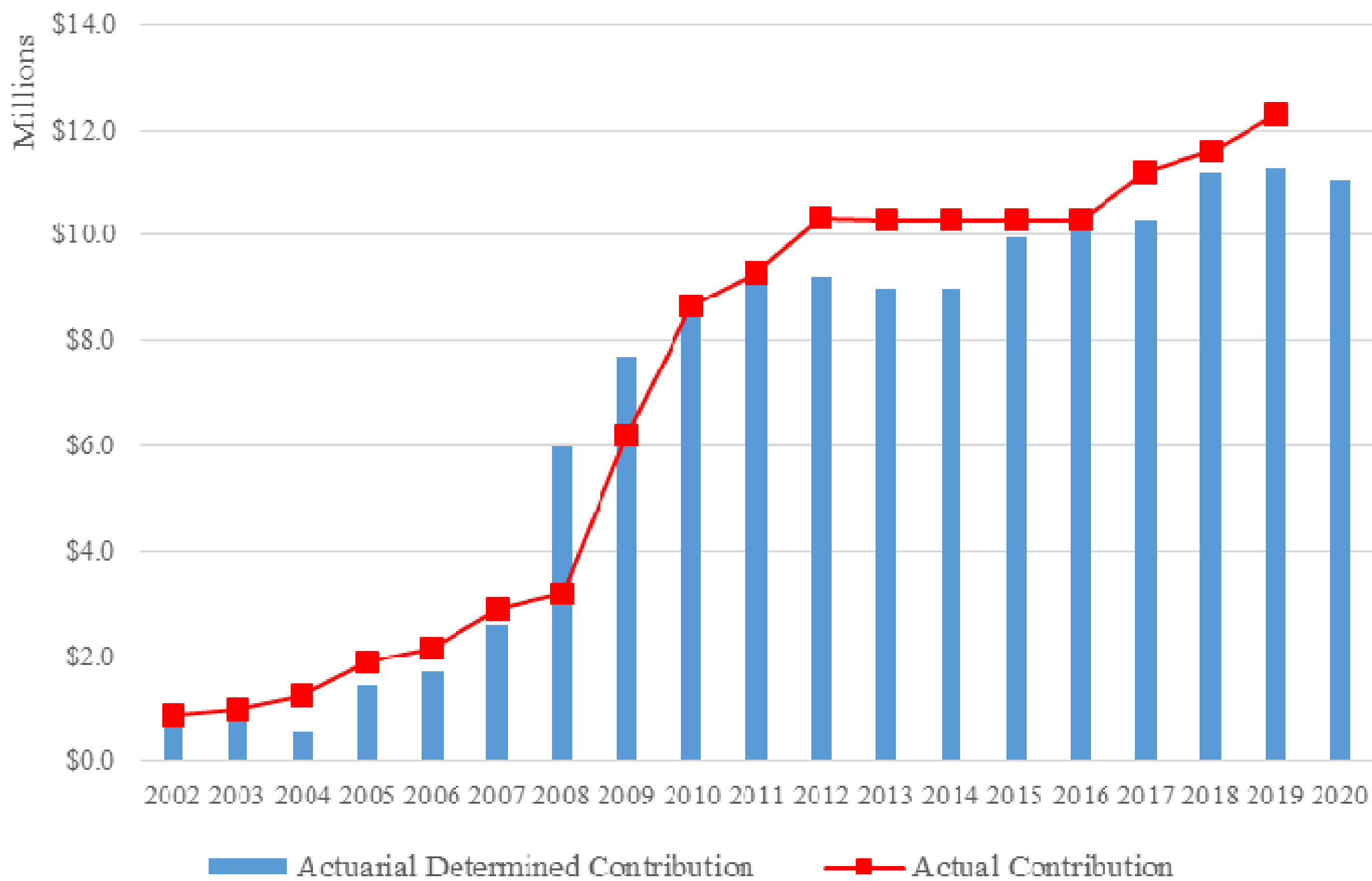
# 2020 Plan Contribution

| | 1/1/20 Valuation | 1/1/19 Valuation | Change |
|---|---|---|---|
| Total Contribution Rate | 24.07% | 24.62% | (0.55%) |
| Employee Rate | (7.50%) | (7.00%) | (0.50%) |
| **Employer Rate** | **16.57%** | **17.62%** | **(1.05%)** |
| | | | |
| Estimated Covered Payroll | $66,604,146 | $63,959,152 | $2,644,994 |
| **Employer Contribution** | **$11,036,307** | **$11,269,603** | **($233,296)** |
| | | | |
| **Actual or Budgeted District Contribution** | **$13.6 million** | **$12.3 million** | **$1.3 million** |

# Sources of Change in Key Valuation Results

| | District Contribution Rate | Funded Ratio |
|---|---|---|
| **January 1, 2019 Valuation** | **17.62%** | **86.49%** |
| Expected year to year change | 0.00% | 0.63% |
| Contributions above actuarial rate | (0.11%) | 0.22% |
| Assumption change | 1.08% | (0.96%) |
| Investment experience | (0.68%) | 1.34% |
| Demographic/other experience | (0.81%) | 1.53% |
| Increase in employee contributions | (0.50%) | 0.00% |
| Payroll greater than expected | (0.03%) | 0.00% |
| **Total Net Change** | **(1.05%)** | **2.76%** |
| **January 1, 2020 Valuation** | **16.57%** | **89.25%** |

# Historical Employer Contributions




**Actuarial Determined Contribution includes a component to address the funding of the unfunded actuarial liability and move the Plan to a funded ratio of 100%.**

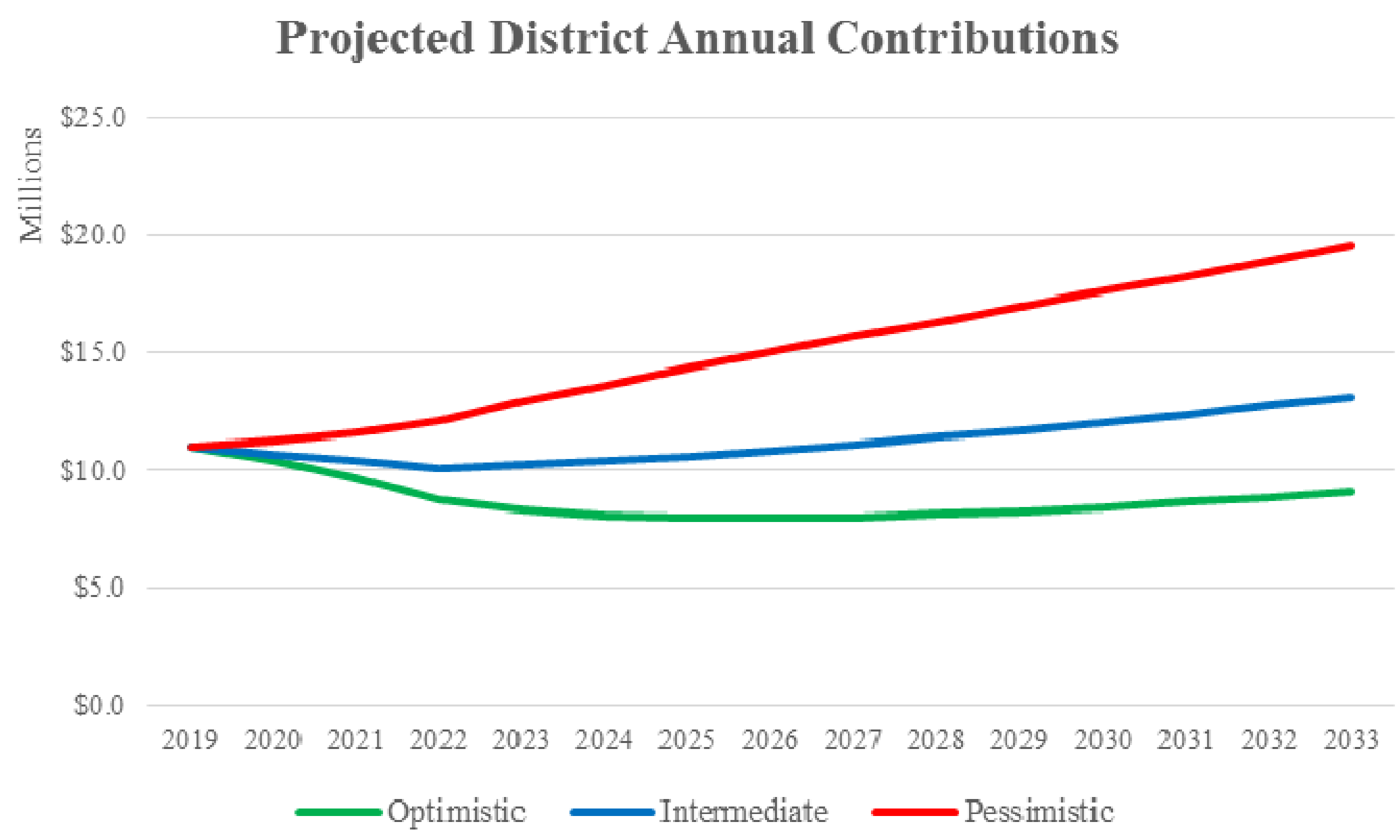
# Employee Contribution Rate Increases

- Future scheduled increases in the employee contribution rate will decrease the District's contributions in future years

| Estimated Impact of Increase in Employee Contribution Rate | | | |
|---|---|---|---|
| Year | Change | Incremental Change | Cumulative Change |
| 2021 | 7.50% to 8.00% | $345,000 | $345,000 |
| 2022 | 8.00% to 8.50% | $357,000 | $713,000 |
| 2023 | 8.50% to 9.00% | $369,000 | $1,108,000 |

**Note: cumulative change column is the cumulative change in the employee contribution rate times the expected payroll for that year, not the sum of amounts shown in the incremental change column.**

# Investment Return Risk




**Optimistic: 10% return for 2020-2022, 6.9% thereafter**
**Intermediate: 6.9% return in all years (assumed rate)**
**Pessimistic: 0% for 2020, 4% for 2021-2022, 6.9% thereafter**

# Comments

- There is direct correlation between well-funded plans and consistent contributions at the full actuarial contribution rate
  - MUD's Plan has a strong funded ratio of 89%
  - Result of consistent funding of the full actuarial contribution (or more) by the District (16 of last 18 years)
  - Compared to other public plans in the NASRA Survey, MUD is better funded than 75% of the plans
- Biggest challenge continues to be managing the volatility in actual returns that is inevitable when investing in the market and the corresponding impact on contributions

# Supplemental Information

# Total Membership

| | 1/1/20 Valuation | 1/1/19 Valuation | Change |
|---|---|---|---|
| Active members | 808 | 792 | 2.0% |
| LTD/Inactive vested | 72 | 64 | 12.5% |
| Inactive non-vested | 1 | 4 | (75.0%) |
| Retirees and Beneficiaries | 655 | 656 | (0.2%) |
| Total | 1,536 | 1,516 | 1.3% |

# Details of 2020 Contribution Rate

| | 1/1/20 Valuation | 1/1/19 Valuation | Change |
|---|---|---|---|
| Normal cost rate | 19.24% | 18.54% | 0.70% |
| UAL contribution* | 4.83% | 6.08% | (1.25%) |
| Total Contribution Rate | 24.07% | 24.62% | (0.55%) |
| Employee Rate | (7.50%) | (7.00%) | (0.50%) |
| **Employer Rate** | **16.57%** | **17.62%** | **(1.05%)** |
| | | | |
| Estimated Covered Payroll | $66,604,146 | $63,959,152 | $2,644,994 |
| Total Required Contribution | $16,031,618 | $15,746,744 | 284,874 |
| Employee Contribution | $ 4,995,311 | $ 4,477,141 | 518,170 |
| **Employer Contribution** | **$11,036,307** | **$11,269,603** | **$ (233,296)** |

*** Legacy UAL is amortized over a closed 24 year period (as of 1/1/2020).**

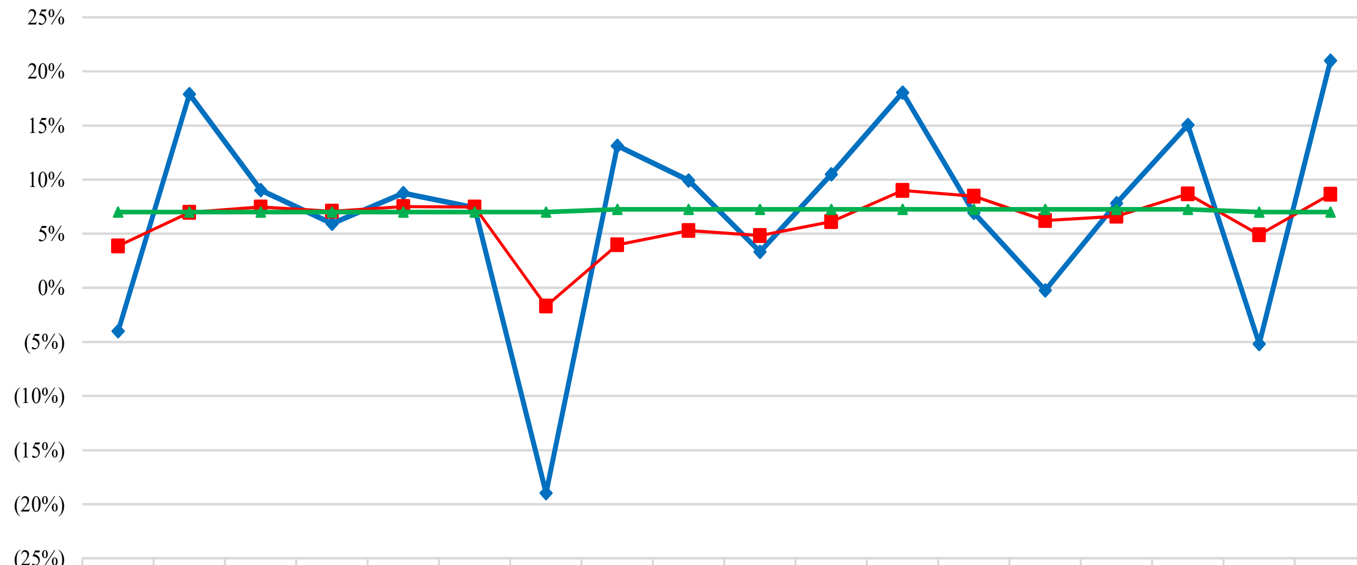
# Contribution Rate Volatility

- MUD's Plan is very mature, similar to most plans in the U.S
- The more mature the plan, the more sensitive the contribution rate is to investment volatility

| Year | Assets | Payroll | Ratio | Impact on Actuarial Contribution Rate |
|---|---|---|---|---|
| 2020 | $452.1M | $63.3M | 714% | 4.93% |

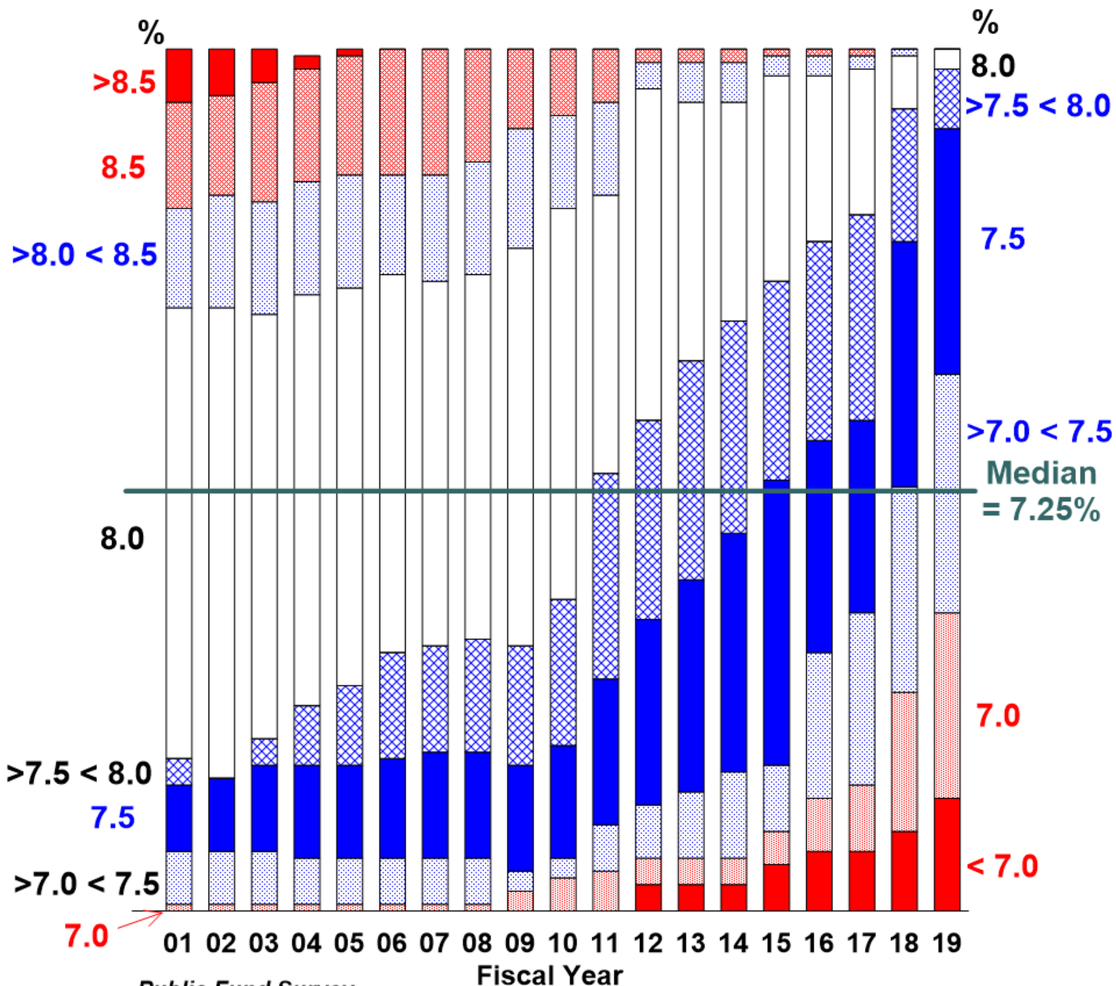
- Assets are more than seven times payroll
  - Underperforming the investment return assumption by 10% (earn -3.1%) is equivalent to 71% of payroll
  - Even with asset smoothing and amortization of losses, the impact on the contribution rate is significant
  - That level of volatility is not unexpected given the asset allocation

# Investment Return Volatility
# Returns for MUD's Plan




| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MVA | -3.99% | 17.90% | 9.02% | 5.92% | 8.76% | 7.41% | -18.98 | 13.13% | 9.91% | 3.35% | 10.50% | 18.04% | 6.92% | -0.23% | 7.83% | 15.04% | -5.17% | 21.00% |
| AVA | 3.88% | 6.97% | 7.48% | 7.06% | 7.49% | 7.48% | -1.70% | 3.97% | 5.29% | 4.82% | 6.13% | 9.01% | 8.47% | 6.23% | 6.61% | 8.68% | 4.90% | 8.63% |
| Assumed | 7.00% | 7.00% | 7.00% | 7.00% | 7.00% | 7.00% | 7.00% | 7.25% | 7.25% | 7.25% | 7.25% | 7.25% | 7.25% | 7.25% | 7.25% | 7.25% | 7.00% | 7.00% |

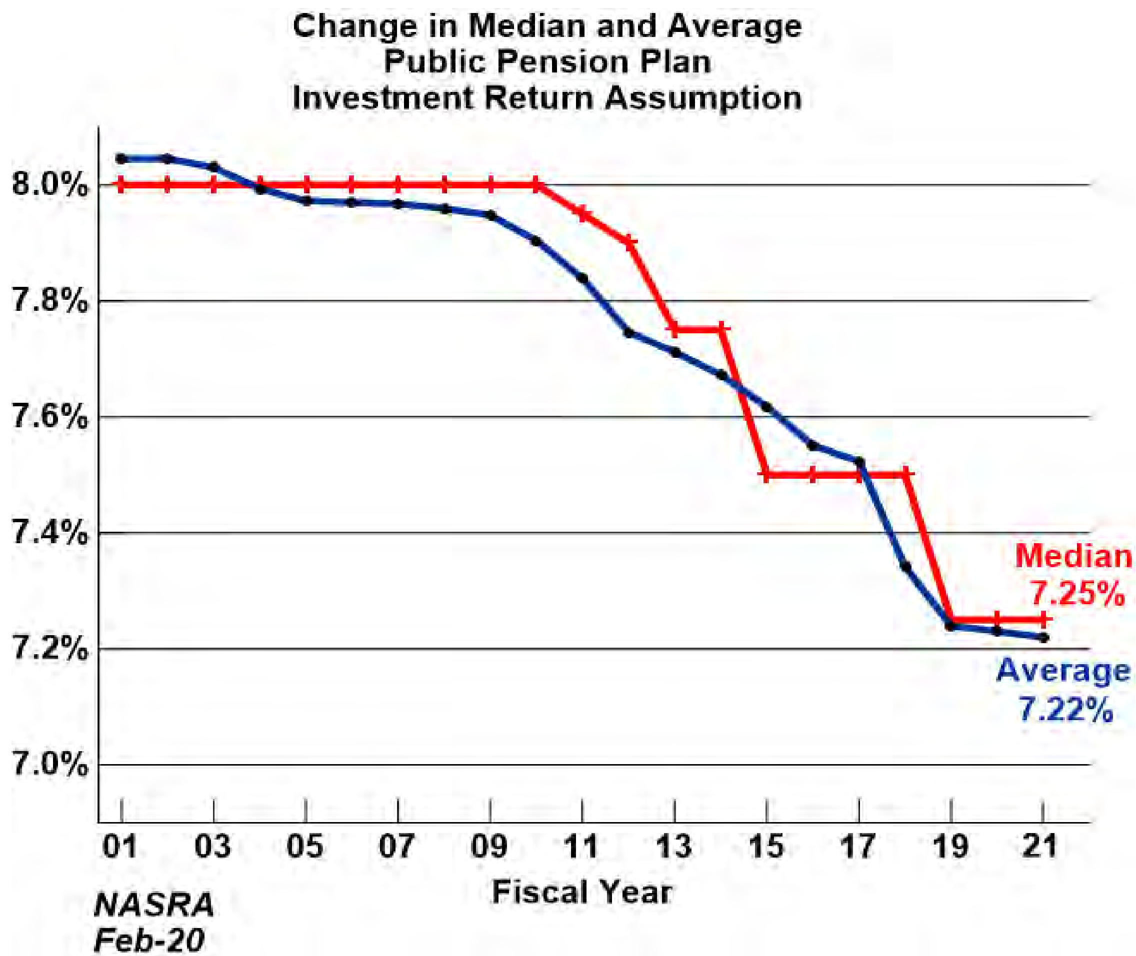
# Distribution of Investment Return Assumptions - Large Public Plans




*Public Fund Survey, Dec-19*

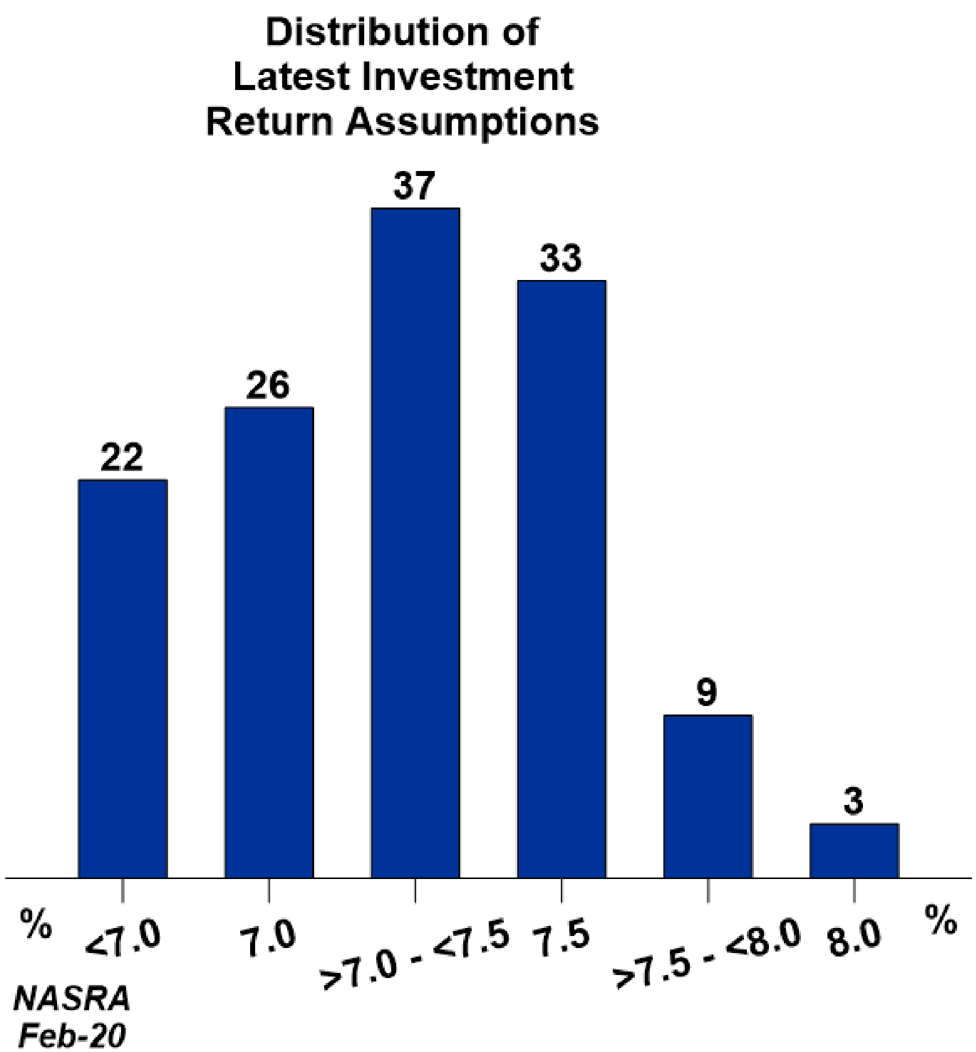
**The key takeaway from this chart is the dramatic reduction in the median investment return assumption over the last 10 years. Currently, the median return is 7.25%, but we continue to see many systems reducing their assumptions so a further reduction would not be unexpected.**

# Assumptions Used by Other Public Plans




The key takeaway from this graph is the downward trend in the assumption, particularly in the last 6-8 years.

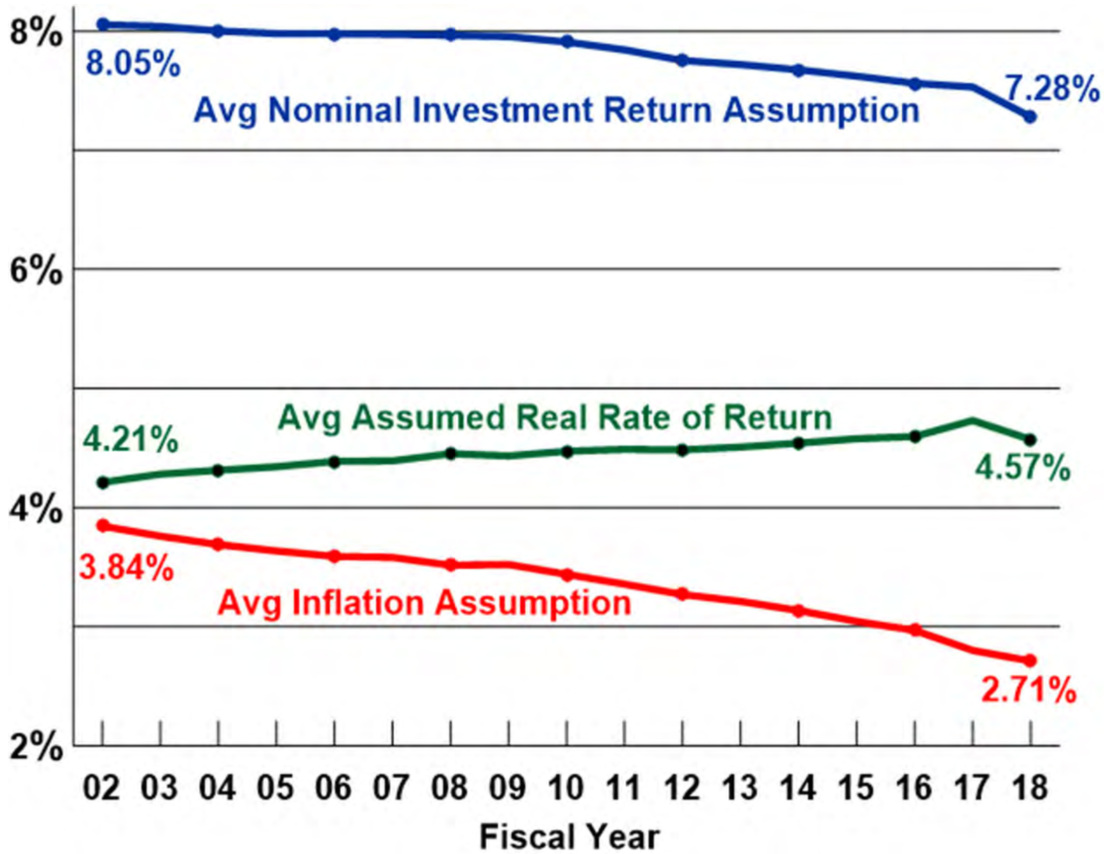
# Other Public Plans Return Assumptions




48 of 130
Plans in the Survey (37%) use an investment return assumption of 7.0% or below.

Note: asset allocations vary among different retirement systems.

# Trend to Lower Return Assumptions

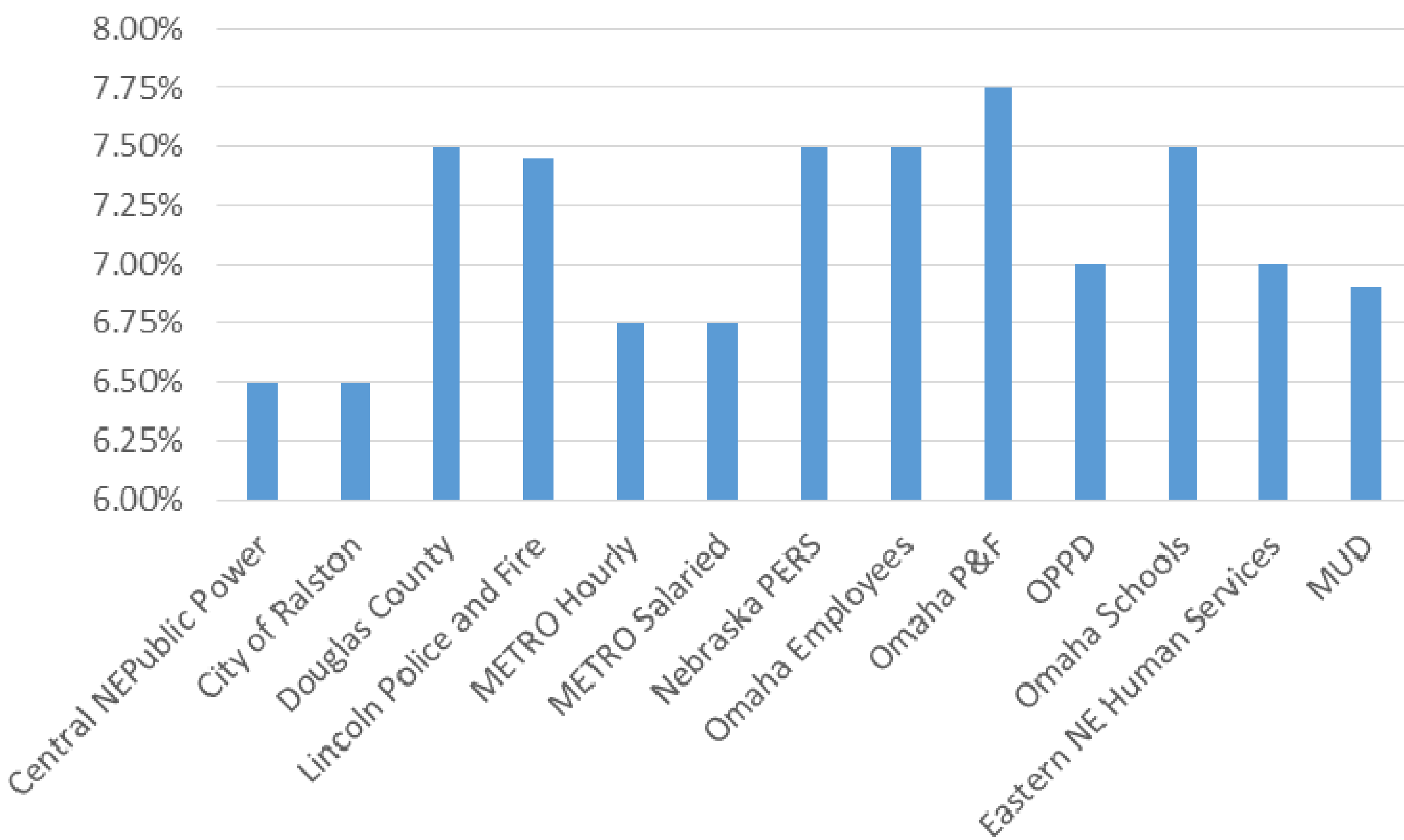



The decline in the investment return assumption has been heavily impacted by the decrease in the inflation assumption.

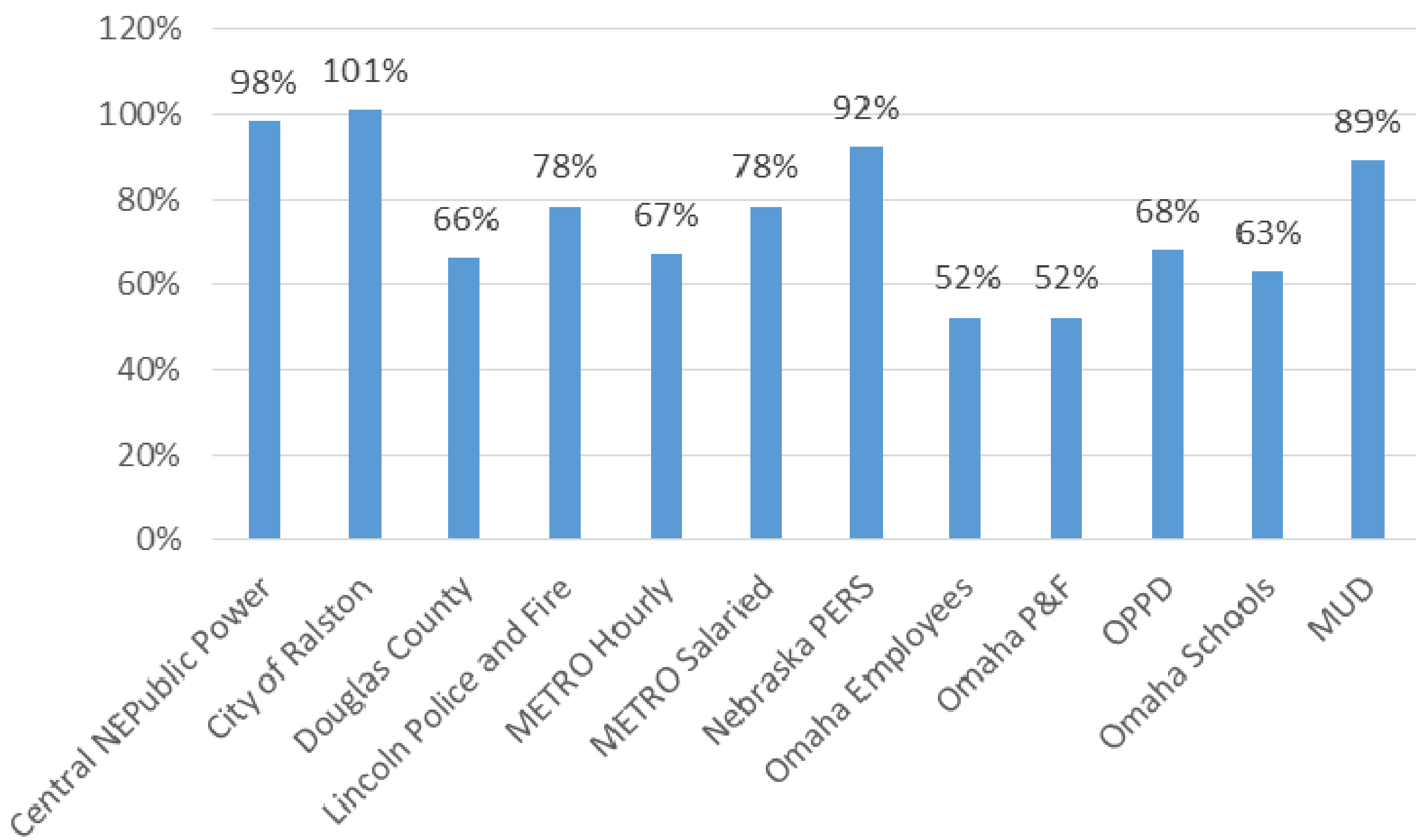
MUD's real return assumption is 4.30% compared to the average survey result of 4.57%.

Note: Public Plan database reflects median returns which reflect different investment mixes among the various funds.

# Investment Return Assumption of Other Nebraska Plans



# Funded Ratio of Other Nebraska Plans



# Caveats and Limitations

This presentation is based on the data, methods, assumptions and plan provisions described in the actuarial valuation report dated March 26, 2020. The statements of reliance and limitations on the use of this material are reflected in the actuarial report and also apply to this presentation. These statements include reliance on the data provided, the actuarial certification and the purpose of the report.

Please see the January 1, 2020 actuarial valuation report for more detailed information on the data, assumptions, methods and plan provisions that were used to develop the valuation results presented herein. We are happy to provide additional information or respond to questions as needed.

*Cavanaugh Macdonald Consulting, LLC*

Placed on File
April 16, 2020

**METROPOLITAN UTILITIES DISTRICT**
*Inter-Departmental Communication*

April 6, 2020

**Subject:** RSM AUDIT REPORT FOR THE YEAR ENDED DECEMBER 31, 2019

**To:** Audit Committee
cc: All Board Members; Doyle, Ausdemore, DeBoer, Mendenhall, and all Vice Presidents

**From:** Joseph J. Schaffart, Senior Vice President, Chief Financial Officer

Attached for your review, please find the "Financial Statements and Supplemental Schedules" for the year ended December 31, 2019 as audited by RSM, our external auditors. I am pleased to inform you that RSM expressed an unmodified, or "clean" audit opinion, which means that the financial statements present fairly, in all material respects, the financial position of both the Gas and Water divisions as of December 31, 2019. It is important to note that the District is responsible for the preparation and fair presentation of financial statements in accordance with generally accepted accounting principles, whereas it is RSM's responsibility to issue an opinion on the financial statements based on their audit.

Additionally, please find three documents directed to the Board pursuant to your governance role, as follows:

1) Memo from RSM to the Board explaining the responsibilities of the Auditor and Management as it relates to the performance of the audit as well as significant accounting practices, policies, estimates, disclosures and any recommended or "passed" adjustments;
2) "Report on Internal Control Over Financial Reporting and on Compliance and Other Matters";
3) Management Representation Letter, signed by the President and Chief Financial Officer, whereby we acknowledge, among other things, our responsibility to prepare fair financial statements in accordance with generally accepted accounting principles.

I will provide a summary of the audit and associated required communications during the Board meeting.

The aforementioned documents will be on the April 16, 2020 Committee and Board Agendas to be placed on file.

Joseph J. Schaffart
Senior Vice President, Chief Financial Officer
(402) 504-7111

Approved:

Mark E. Doyle
President

Attachments

**METROPOLITAN UTILITIES DISTRICT**

Financial Statements and Supplemental Schedules

December 31, 2019 and 2018

(With Independent Auditor's Report Thereon)

THE POWER OF BEING UNDERSTOOD
AUDIT | TAX | CONSULTING

RSM

**METROPOLITAN UTILITIES DISTRICT**

**Table of Contents**

RSM US LLP

## Independent Auditor's Report

Board of Directors
Metropolitan Utilities District

**Report on the Financial Statements**
We have audited the accompanying financial statements of the business-type activities, each major fund, and the fiduciary fund type of the Metropolitan Utilities District (the District), as of and for the years ended December 31, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

***Management's Responsibility for the Financial Statements***
Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

***Auditor's Responsibility***
Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the District's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

***Opinions***
In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities, each major fund, and the fiduciary fund type of the District, as of December 31, 2019 and 2018, and the respective changes in financial position and, where applicable, cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

***Other Matters***

*Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, and other postemployment benefit plan and pension schedules, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers them to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

*Supplementary and Other Information*

Our audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the District's basic financial statements. The accompanying supplemental and statistical sections as listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. This information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated March 16, 2020 on our consideration of the District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control over financial reporting and compliance.

RSM US LLP

Omaha, Nebraska
March 16, 2020

"Management's Discussion and Analysis" presents management's analysis and overview of the Metropolitan Utilities District's (the District) financial condition and activities as of and for the years ended December 31, 2019 and 2018. This information should be read in conjunction with the Financial Statements, Notes to Basic Financial Statements and Required Supplementary Information.

**Overview of Financial Statements**

Management's discussion and analysis serves as an introduction to the financial statements and supplementary information. The financial statements have been prepared in accordance with generally accepted accounting principles (GAAP) for proprietary funds of governmental entities.

The statement of net position presents information on the District's assets, deferred outflows of resources, liabilities and deferred inflows of resources, with the difference between them reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of the District's financial position.

The statement of revenues, expenses, and changes in net position presents information on how the District's net position changed during the year; all revenues and expenses are accounted for in this statement. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in future periods.

The notes to the financial statements provide required disclosures and additional information that is necessary to support the financial statements. The notes begin on page 22.

**Financial Highlights**

The District's overall financial position and results of operations for the current and prior years are summarized in the paragraphs and exhibits to follow.

***Gas Department***

| | 2019 | | 2018 | | 2017 | |
|---|---|---|---|---|---|---|
| Sales, volume sold – DTH: | | % | | % | | % |
| Firm gas sales | 30,853,007 | 85 | 30,744,499 | 87 | 25,483,606 | 86 |
| Interruptible gas sales | 5,366,081 | 15 | 4,721,333 | 13 | 4,013,805 | 14 |
| Total gas sales | 36,219,088 | 100 | 35,465,832 | 100 | 29,497,411 | 100 |
| Heating degree days | 6,206 | | 6,329 | | 5,208 | |
| Customers (at December 31): | | | | | | |
| Firm customers | 232,742 | | 230,983 | | 229,342 | |
| Interruptible customers | 27 | | 29 | | 23 | |
| | 232,769 | | 231,012 | | 229,365 | |

Gas volumes sold in 2019 increased 753,256 DTH, or 2.1% from 2018 due primarily to colder winter weather and customer growth. There was an increase in firm gas customers in 2019 of 1,759 or 0.8%; the number of interruptible customers decreased by 2, from 29 to 27.

Gas volumes sold in 2018 increased 5,968,421 DTH, or 20.2% from 2017 due primarily to colder winter weather, as evidenced by the 21.5% increase in the number of heating degree days. There was an increase in firm gas customers in 2018 of 1,641 or 0.7%; the number of interruptible customers increased by 6, from 23 to 29.

***Gas Department Summary of Results of Operations***

| | 2019 | | 2018 | | 2017 (*1) | |
|---|---|---|---|---|---|---|
| Operating revenues: | | | | | | |
| Firm and interruptible gas sales | $ 205,780,148 | 92% | $ 219,785,893 | 92% | $ 186,381,676 | 91% |
| Infrastructure charge | 13,112,638 | 6 | 13,078,406 | 6 | 12,983,793 | 6 |
| Other | 4,987,913 | 2 | 5,224,527 | 2 | 4,727,757 | 3 |
| Less bad debt expense | (614,407) | — | (501,779) | — | (413,588) | — |
| Total operating revenues, net | 223,266,292 | 100% | 237,587,047 | 100% | 203,679,638 | 100% |
| Operating expenses: | | | | | | |
| Cost of natural gas | 114,501,720 | 62% | 126,286,762 | 62% | 106,365,860 | 59% |
| Other operating expenses | 69,889,570 | 38 | 77,523,065 | 38 | 75,003,512 | 41 |
| Total operating expenses | 184,391,290 | 100% | 203,809,827 | 100% | 181,369,372 | 100% |
| Nonoperating revenues (expenses), net | 958,281 | | (864,993) | | (190,809) | |
| Change in net position | 39,833,283 | | 32,912,227 | | 22,119,457 | |
| Net position, beginning of year, as restated for 2018) | 363,102,867 | | 330,190,640 | | 337,157,813 | |
| Net position, end of year | $ 402,936,150 | | $ 363,102,867 | | $ 359,277,270 | |

(*1) 2017 amounts do not reflect the adoption of GASB Statement No. 75, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions".

Revenues for gas sales, net, were down 6.0% in 2019 vs. 2018, due to decreased gas costs, the benefit of which is a direct "pass-through" to our customers, partially offset by a 2.1% increase in volumes. Revenues for gas sales, net, were up 16.6% in 2018 vs. 2017, due to a 20.2% increase in volumes partially offset by decreased gas costs, the benefit of which is a direct "pass-through" to our customers. The annual revenues for the average residential gas customer were $627.55 in 2019, as compared to $667.24 in 2018 and to $568.25 in 2017.

The District initiated an Infrastructure Replacement Charge effective January 2, 2008. This charge is included in the annual revenue for the average residential customer stated above for all years presented.

Total operating expenses in 2019 were down by $19.4 million or 9.5% from 2018. In 2019, the cost of natural gas was $11.8 million, or 9.3% lower than 2018, due to decreased gas cost ($14.5 million), partially offset by increased volumes ($2.7 million). In 2019, other operating expenses were $7.6 million, or 9.8%, lower than 2018 due primarily to: decreased administrative and general expense (largely due to decreased OPEB expense), decreased production maintenance expense (primarily LNG equipment), partially offset by increased depreciation and amortization expense. Total operating expenses in 2018 were up by $22.4 million or 12.4% from 2017. In 2018, the cost of natural gas was $19.9 million, or 18.7% greater than 2017, due to increased volumes ($22.0 million), partially offset by decreased gas cost ($2.1 million). In 2018, other operating expenses were $2.5 million, or 3.4%, higher than 2017 due primarily to: increased distribution operating expense (Locating and Field Services), depreciation and amortization expense, gas production operating expenses (primarily LNG) and increased statutory payments attributed to higher revenues, partially offset by reduced Meter Reading and Credit Service expenses.

Net non-operating revenues were $1.0 million in 2019 compared to net non-operating expenses of $0.9 million in 2018, a change of $1.9 million. This change was due primarily to increased investment earnings on Gas Department cash balances, the write-off of selected information technology-related assets in 2018, bond issuance costs in 2018, partially offset by increased bond interest expense. Non-operating expenses in 2018 increased by $0.7 million due primarily to the write-off of selected information technology-related assets no longer in service, 2018 bond interest expense and bond issuance costs, partially offset by investment earnings on Gas Department cash balances.

The District contracts with Central Plains Energy Project (CPEP) for a significant portion of its gas purchases. CPEP is a public body created under Nebraska Interlocal Law for the purpose of securing long-term, economical, and reliable gas supplies. CPEP currently has three members: the District, Cedar Falls Utilities, and Hastings Utilities. CPEP has acquired gas through long-term prepaid gas purchase agreements and delivers gas to its members or customers through long-term gas supply contracts for specified volumes of gas at market-based pricing less a contractual discount. Under the current agreements, the District anticipates taking approximately 90% of the gas acquired in these transactions under a 20-year gas purchase agreement entered into with CPEP in 2007 (CPEP #1) and three 30-year gas purchase agreements, one entered into in 2009 (CPEP #2), one in 2012 (CPEP #3) and one in 2018 (CPEP #4). In 2019, the CPEP prepaid gas purchase agreements accounted for approximately 40% of the District's annual natural gas requirements.

Terms of the 2007 gas supply agreement (CPEP #1) were renegotiated in 2009 and again in 2012; the gas flows under this agreement will now expire on October 31, 2020.

Subsequent to litigation, the 2009 long-term prepaid gas purchase contract (CPEP #2) was renegotiated in 2014. The renegotiated contract provided for the following: 1) $12.5 million up-front proceeds at closing, which was recorded as unearned gas purchase discounts by the District and recognized as a reduction of the cost of natural gas based on the pattern of gas purchases through October 2019; 2) locked-in discounts of $.16 per DTH for the period November 1, 2014 through October 31, 2019, and 3) the ability to renegotiate discounts for the November 1, 2019 through June 30, 2039. In 2019, this project was refinanced as required in the 2014 documents; the gas flows under this agreement will now expire in 2049.

In 2012 the District participated in CPEP Project 3 Series Transaction (CPEP #3). This agreement is for a 30-year fixed term with defined savings over the life of the project. In 2017 CPEP did an early refinancing of this transaction that will increase the District's savings beginning in 2022.

In November 2018, the District entered into a 30-year gas supply contract with CPEP (CPEP #4) with gas flows commencing on August 1, 2019. This agreement expires on January 31, 2050. After the initial five-year term, CPEP, and the counterparty to the transaction, will negotiate an extension of the contractual gas discounts based on market rates at that time. The District is not required to purchase gas after the initial five-year term unless the discount to market is $.20 per Dth or greater; parties to the agreement believe that it is probable that volumes will be taken for the full 30-year duration of the agreement.

In addition to the aforementioned activity with CPEP, the District is party to three other significant gas supply agreements. In 2017, the District entered into a 30-year gas supply contract with the Tennessee Energy Acquisition Corporation (TEAC) for three to four percent of our annual gas requirements. After the initial five-year term, TEAC, and the counterparty to the transaction, will negotiate an extension of the contractual gas discounts based on future interest rate levels at that time. The District is not required to purchase gas after the initial five-year term unless the discount to market is $.20 per Dth or greater; parties to the agreement believe that it is probable that volumes will be taken for the full 30-year duration of the agreement.

In February 2018, the District entered into a 30-year gas supply contract with the Public Energy Authority of Kentucky (PEAK) for approximately five percent of our annual gas requirements. After the initial five-year term, PEAK, and the counterparty to the transaction, will negotiate an extension of the contractual gas discounts based on market rates at that time. The District is not required to purchase gas after the initial five-year term unless the discount to market is $.20 per Dth or greater; parties to the agreement believe that it is probable that volumes will be taken for the full 30-year duration of the agreement.

In March 2018, the District entered into a 30-year gas supply contract with the Black Belt Energy Gas District (Black Belt) for approximately three percent of our annual gas requirements. After the initial five-year term, Black Belt, and the counterparty to the transaction, will negotiate an extension of the contractual gas discounts based on market rates at that time. The District is not required to purchase gas after the initial five-year term unless the discount to market is $.20 per Dth or greater; parties to the agreement believe that it is probable that volumes will be taken for the full 30-year duration of the agreement.

### *Gas Department Summary Financial Position*

| | | 2019 | | 2018 | | 2017 (*1) |
|---|---|---|---|---|---|---|
| Plant in service, net | $ | 452,932,182 | $ | 433,060,254 | $ | 417,087,906 |
| Noncurrent assets | | 1,204,765 | | 17,210,164 | | 631,799 |
| Current assets | | 196,831,726 | | 174,427,601 | | 142,963,446 |
| Total assets | | 650,968,673 | | 624,698,019 | | 560,683,151 |
| Deferred outflows of resources | | | | | | |
| Pension amounts | | 5,256,517 | | 18,192,808 | | 4,050,289 |
| OPEB amounts | | - | | 1,329,047 | | - |
| Total deferred outflows of resources | | 5,256,517 | | 19,521,855 | | 4,050,289 |
| Total assets and deferred outflows of resources | $ | 656,225,190 | $ | 644,219,874 | $ | 564,733,440 |
| Deferred inflows of resources | | | | | | |
| Pension amounts | $ | 14,861,988 | $ | 3,457,932 | $ | 10,554,908 |
| OPEB amounts | | 30,771,073 | | 30,381,030 | | - |
| Contributions in aid of construction | | 41,101,682 | | 41,250,869 | | 41,267,726 |
| Total deferred inflows of | | 86,734,743 | | 75,089,831 | | 51,822,634 |
| Current liabilities | | 58,068,102 | | 63,235,523 | | 58,557,128 |
| Noncurrent liabilities | | 108,486,195 | | 142,791,653 | | 95,076,408 |
| Total liabilities | | 166,554,297 | | 206,027,176 | | 153,633,536 |
| Net position | | | | | | |
| Net investment in capital assets | | 378,171,010 | | 373,518,801 | | 375,101,336 |
| Restricted | | 199,689 | | 187,293 | | - |
| Unrestricted | | 24,565,451 | | (10,603,227) | | (15,824,066) |
| Total net position | | 402,936,150 | | 363,102,867 | | 359,277,270 |
| Total liabilities, deferred inflows of resources, and net position | $ | 656,225,190 | $ | 644,219,874 | $ | 564,733,440 |

(*1) 2017 amounts do not reflect the adoption of GASB Statement No. 75, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions".

***Gas Department Long-Term Debt Activity***

The following table summarizes the long-term debt of the Gas Department at December 31, 2019 and 2018.

| | Balance at December 31, 2018 | Increases | Decreases | Balance at December 31, 2019 |
|---|---|---|---|---|
| Gas Revenue Bonds | | | | |
| Series 2018 | $ 31,605,000 | $ - | $ 1,040,000 | $ 30,565,000 |
| Plus unamortized premium | 1,322,622 | - | 119,944 | 1,202,678 |
| CNG promissory note | 485,037 | - | 239,802 | 245,235 |
| Total Long-Term Debt | $ 33,412,659 | $ - | $ 1,399,746 | $ 32,012,913 |

On June 28, 2018 the District issued $31,605,000 of Gas Department Revenue Bonds Series 2018; the all-in cost of funds associated with the offering is 3.296 percent. The proceeds of the sale of the 2018 bonds were used, together with other available funds, to finance a portion of the costs of improvements to the District's Gas System, including replacement of cast iron gas mains throughout the District's service area and infrastructure improvements to the Gas System. During 2019, the District made principal payments of $1,040,000 towards its outstanding Series 2018 gas revenue bonds. The remaining long-term debt, the CNG promissory note, relates to a low-interest loan obtained from the Nebraska Energy Office and its lending partner; the loan matures December 15, 2020 and the interest rate is fixed at 2.5% per annum.

***Gas Department Long-Term Debt Covenant Compliance***

**Gas Revenue Bonds Series 2018**

The District was in compliance with the provisions of the Gas Revenue Series 2018 bond covenants at December 31, 2019 and 2018. Relative to this bond offering, the District covenants that it will fix, establish, and maintain rates or charges for natural gas, services, or facilities supplied or furnished by the District that will provide an amount sufficient to pay current expenses and to generate net revenue at least equal to the sum of: (a) 120% of the amount equal to the average principal and interest requirements on the bonds, including any parity revenue bonds, then outstanding; and (b) 100% of the amount required to pay any other unpaid long term obligations (excluding current expenses) and any other unpaid indebtedness of the District (including any amounts required to be accumulated and maintained as reserves therefore) that are payable from system revenues, as the same shall become due.

Funds available for debt service exceeded amounts required by covenants by approximately $52.1 million and $52.7 million for 2019 and 2018, respectively. Please see the chart below for debt service coverage ratio information:

| | 2019 | 2018 |
|---|---|---|
| Debt service coverage ratios | 24.37x | 25.55x |
| Debt service coverage requirements | 1.20x | 1.20x |

### *Credit Ratings and Liquidity*

In December 2019, Fitch Ratings affirmed the District's AA+ rating, citing the District's "stronger financial profile as evidenced by its very low net leverage and strong operating cash flows…" In November 2019, S&P Global Ratings assigned a rating of AA+ to District's gas system as part of the District's obligations under certain of its gas purchase contracts; the District was previously rated AA by the rating agency. At the AA+ rating level, the District's gas system is now the highest rated municipal gas system of those to which S&P assigns credit ratings.

In support of the 2018 Gas Department revenue bond issuance, a presentation was made to Moody's Investors Service as a basis for obtaining an independent credit rating. On June 5, 2018, Moody's assigned a rating of Aa2 to the Series 2018 bond offering. The favorable credit rating enabled the District to issue bonds at an all-in cost of 3.296 percent, as stated previously.

The District continues to focus on maintaining strong liquidity for the Gas Department through adherence to disciplined financial and operational management practices. These efforts have resulted in consistently strong liquidity as demonstrated by "days cash on hand" of 313 days at year end 2019, as compared with 216 days at year-end 2018 and 215 days at year end 2017.

The Gas Department's liquidity is further enhanced by a $30,000,000 unsecured line of credit that may be drawn upon by both the Gas and Water Departments. The current Loan Agreement matures June 1, 2021. The interest rate on the line of credit is variable and is calculated based on the "One Month London Interbank Offered Rate (LIBOR)" plus 50 basis points. As of December 31, 2019, the interest rate was 2.30% and no amount was outstanding. The District did not draw on the line of credit during 2019, 2018 or 2017.

### *Gas Department Capital Asset Activity*

The District remains committed to expending the funds necessary to allow for continued safe and reliable delivery of natural gas to the District's customers. A key component of this commitment is addressing the District's aging infrastructure, as evidenced by the District's ongoing efforts to replace all remaining cast iron gas mains, approximately 240 miles, over the next eight years; the District expended $19.0 million to improve infrastructure and replace cast iron gas mains in 2019, $18.0 million in 2018 and $19.7 million in 2017. Significant projects in 2019 and 2018 are as follows:

In 2019, capital and construction-related costs totaled $50.7 million, consisting of:

1) Cast iron infrastructure replacement: $19.0 million (discussed above);
2) Other gas mains and distribution: $13.1 million;
3) Facility costs associated with new headquarters: $8.3 million;
4) Other buildings, land and equipment: $3.2 million;
5) Information technology-related: $1.3 million;
6) Vehicles, equipment and all other general plant: $5.8 million.

In 2018, capital and construction-related costs totaled $39.3 million, consisting of:

1) Cast iron infrastructure replacement: $18.0 million (discussed above);
2) Other gas mains and distribution: $12.7 million;
3) Buildings, land and equipment: $3.1 million;
4) Information technology-related: $1.2 million;
5) Vehicles, equipment and all other general plant: $4.3 million.

***Water Department***

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Water sales (million gallons) | 27,747.0 | 28,483.0 | 30,059.0 |

In 2019, the volume of water sales decreased 736.0 million gallons vs. prior year, or 2.6%, due in part to full year precipitation levels that were 9 inches, or 30%, above normal (39.9 inches for the year). In 2018, the volume of water sales decreased 1,576.0 million gallons vs. prior year, or 5.2%, due in part to full year precipitation levels that were 6 inches above normal (36.8 inches for the year), coupled with the fact that 2017 precipitation levels were 4 inches below normal (26.4 inches for the year). Varying precipitation levels have the greatest impact on commercial and residential sprinkling volumes.

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Customers (December 31) | 218,116 | 216,180 | 214,142 |

The number of customers at the end of 2019 increased 1,936, or 0.9% over 2018. The number of customers at the end of 2018 increased 2,038, or 1.0% over 2018.

***Water Department Summary of Results of Operations***

| | 2019 | | 2018 | | 2017 (*1) | |
|---|---|---|---|---|---|---|
| Operating revenues: | | | | | | |
| Water sales | $ 102,555,331 | 85% | $ 101,244,655 | 84% | $ 103,479,774 | 84% |
| Infrastructure charge | 14,798,599 | 12 | 14,710,635 | 13 | 14,546,568 | 12 |
| Other | 4,154,150 | 3 | 3,997,328 | 3 | 4,494,121 | 4 |
| Less bad debt expense | (247,118) | — | (169,421) | — | (192,277) | — |
| Total operating revenues, net | 121,260,962 | 100% | 119,783,197 | 100% | 122,328,186 | 100% |
| Operating expenses | 92,350,493 | | 91,730,706 | | 92,744,154 | |
| Nonoperating expenses net | 5,913,435 | | 5,881,868 | | 6,717,715 | |
| Change in net position | 22,997,034 | | 22,170,623 | | 22,866,317 | |
| Net position, beginning of year (as restated for 2018) | 313,019,622 | | 290,848,999 | | 293,844,710 | |
| Net position, end of year | $ 336,016,656 | | $ 313,019,622 | | $ 316,711,027 | |

(*1) 2017 amounts do not reflect the adoption of GASB Statement No. 75, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions".

Operating revenues, net, increased 1.2% in 2019 due to a 7.0% increase to the Commodity component of rates effective July 1, 2019 to partially fund the District's water infrastructure replacement program, partially offset by decreased usage associated with precipitation levels that were more than 9 inches above normal and 3 inches greater than 2018 levels. Operating revenues, net, decreased 2.1% in 2018 due to decreased usage associated with precipitation levels that were 6 inches above normal and more than 10 inches greater than 2017 levels. The impact of decreased usage was partially offset by a 2.5% increase to the Commodity component of rates in 2018. The annual revenues for the average residential water customer were $345.27 in 2019, compared to $345.02 in 2018 and compared to $355.81 in 2017.

Total operating expenses in 2019 were up by $0.6 million, or 0.7%, due primarily to increased distribution maintenance expense (increased main breaks vs. prior year), increased purification maintenance expense, mostly offset by decreased administrative and general expense (decreased OPEB expense partially offset by increased public liability claims related to water main breaks). Total operating expenses in 2018 were down by $1.0 million, or 1.1%, due primarily to decreased distribution maintenance expense (decreased main breaks vs. prior year), decreased Meter Reading expense and decreased Credit Service expenses, partially offset by increased depreciation and amortization expense.

Non-operating expenses in 2019 were essentially flat compared to 2018 due primarily to increased interest income on investable cash balances and bond issuance costs in 2018, partially offset by increased interest expense associated with the Series 2018 water revenue bonds (outstanding for full year in 2019) and the discontinuance of capitalizing interest to construction projects. Non-operating expenses decreased by $0.8 million in 2018 due primarily to increased interest income on investable cash balances partially offset by bond issuance expenses associated with the Series 2018 water revenue bond.

***Water Summary Financial Position***

| | 2019 | 2018 | 2017 (*1) |
|---|---|---|---|
| Plant in service, net | $ 910,548,673 | $ 883,751,308 | $ 853,179,220 |
| Current assets | 118,354,147 | 119,651,472 | 106,958,728 |
| Noncurrent assets | 25,545,917 | 35,633,585 | 12,698,840 |
| Total assets | 1,054,448,737 | 1,039,036,365 | 972,836,788 |
| Deferred outflows of resources | | | |
| Pension amounts | 4,318,048 | 14,691,640 | 3,340,750 |
| OPEB amounts | — | 1,074,293 | — |
| Debt refunding | 3,257,838 | 3,756,589 | 4,285,703 |
| Total deferred outflows of resources | 7,575,886 | 19,522,522 | 7,626,453 |
| Total assets and deferred outflows of resources | $ 1,062,024,623 | $ 1,058,558,887 | $ 980,463,241 |
| Deferred inflows of resources | | | |
| Pension amounts | $ 12,368,626 | $ 2,839,878 | $ 8,621,839 |
| OPEB amounts | 24,938,524 | 24,557,542 | — |
| Contributions in aid of construction | 312,463,282 | 305,208,722 | 296,727,173 |
| Total deferred inflows of resources | 349,770,432 | 332,606,142 | 305,349,012 |
| Current liabilities | 81,241,559 | 76,083,058 | 61,845,746 |
| Noncurrent liabilities | 294,995,976 | 336,850,065 | 296,557,456 |
| Total liabilities | 376,237,535 | 412,933,123 | 358,403,202 |
| Net position: | | | |
| Net investment in capital assets | 382,918,990 | 360,201,986 | 348,129,966 |
| Restricted | 2,036,531 | 1,904,008 | 1,654,424 |
| Unrestricted | (48,938,865) | (49,086,372) | (33,073,363) |
| Total net position | 336,016,656 | 313,019,622 | 316,711,027 |
| Total liabilities, deferred inflows of resources, and net position | $ 1,062,024,623 | $ 1,058,558,887 | $ 980,463,241 |

(*1) 2017 amounts do not reflect the adoption of GASB Statement No. 75, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions".

***Water Department Long-Term Debt Activity***

The following table summarizes the long-term debt of the Water Department at December 31, 2019 and 2018:

| | Balance at December 31 ,2018 | Increases | Decreases | Balance at December 31 ,2019 |
|---|---|---|---|---|
| Water Revenue Bonds | | | | |
| Series 2018 | $ 37,390,000 | $ - | $ 1,255,000 | $ 36,135,000 |
| Plus unamortized premium | 1,226,341 | - | 111,528 | 1,114,813 |
| Water Revenue Bonds | | | | |
| Series 2015 | 166,120,000 | - | 8,320,000 | 157,800,000 |
| Plus unamortized premium | 9,673,717 | - | 1,251,615 | 8,422,102 |
| Water Revenue Bonds | | | | |
| Series 2012 | 31,695,000 | - | 1,800,000 | 29,895,000 |
| Plus unamortized premium | 1,808,924 | - | 129,513 | 1,679,411 |
| NDEQ Note Payable #2 | 3,887,288 | - | 276,692 | 3,610,596 |
| Total Long Term Debt | $ 251,801,270 | $ - | $ 13,144,348 | $ 238,656,922 |

On September 27, 2018 the District issued $37,390,000 of Water Revenue Bonds Series 2018; the all-in cost of funds associated with the offering is 3.225 percent. The proceeds of the sale of the 2018 bonds are being used, together with other available funds, to finance a portion of the costs of improvements to the District's Water System, including multiple projects undertaken to upgrade the Florence Water Treatment Plant and other improvements to the District's Water System. During 2019, the District made principal payments of $1,255,000 towards its outstanding Series 2018 water revenue bonds. At December 31, 2019, $21.7 million of the bond proceeds remained.

At December 31, 2019 and 2018, the District's long-term debt included $157,800,000 and $166,120,000 respectively of Series 2015 bonds outstanding. During 2019 and 2018, respectively, the District made principal payments of $8,320,000 and $7,915,000 towards its outstanding Series 2015 water revenue bonds.

At December 31, 2019 and 2018, the District's long-term debt included $29,895,000 and $31,695,000, respectively, of Series 2012 bonds outstanding. During 2019 and 2018, respectively, the District made principal payments of $1,800,000 and $1,735,000 towards its outstanding Series 2012 water revenue bonds.

In 2009, the District entered into an American Recovery and Reinvestment Act loan agreement with the NDEQ for the construction of a contact basin located near its Platte South Water Treatment Plant; the loan is at a 2% interest rate per annum (NDEQ Note Payable #2). This loan provided for $1,089,775 in loan forgiveness in the form of a grant, at project completion. At December 31, 2019 and 2018, long term obligations for this note were $3,610,596 and $3,887,288 respectively. During 2019 and 2018, the District made principal payments of $276,692 and $271,241 respectively pursuant to this note payable.

***Water Department Long-Term Debt Covenant Compliance***

**Water Revenue Bonds Series 2012, Water Revenue Bond Series 2015 and Water Revenue Bond Series 2018**

The District was in compliance with the provisions of the Water Revenue Series 2012, Water Revenue Series 2015 and Water Revenue Series 2018 bond covenants at December 31, 2019 and 2018. Relative to these bond offerings, the District covenants that it will fix, establish, and maintain rates or charges for water, services, or facilities supplied or furnished by the District that will provide an amount sufficient to pay current expenses and to generate net revenue at least equal to the sum of: (a) 120% of the amount equal to the average principal and interest requirements on the bonds, including any parity revenue bonds, then outstanding; and (b) 100% of the amount required to pay any other unpaid long term obligations (excluding current expenses) and any other unpaid indebtedness of the District (including any amounts required to be accumulated and maintained as reserves therefore) that are payable from system revenues, as the same shall become due.

Funds available for debt service exceeded amounts required by covenants by approximately $21.9 million, $24.0 million and $30.4 million for 2019, 2018 and 2017, respectively. Please see the chart below for debt service coverage ratio information:

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Debt service coverage ratios | 2.62x | 2.74x | 3.14x |
| Debt service coverage requirements | 1.20x | 1.20x | 1.20x |

***Credit Ratings and Liquidity***

In support of the 2018 Water Department revenue bond issuance, a presentation was made to Moody's Investors Service as a basis for obtaining an independent credit rating. On August 2, 2018, Moody's assigned a rating of Aa2 to the Series 2018 bond offering. The favorable credit rating enabled the District to issue bonds at an all-in cost of 3.225 percent, as stated previously.

The District continues to focus on maintaining strong liquidity for the Water Department through adherence to disciplined financial and operational management practices. These efforts have resulted in a significant improvement in liquidity as demonstrated by the number of "days cash on hand", with 388 days at year-end 2019 as compared with 417 days at year-end 2018 and 357 days at year end 2017.

The Water Department's liquidity is further enhanced by a $30,000,000 unsecured line of credit that may be drawn upon by both the Gas and Water Departments. The current Loan Agreement matures June 1, 2021. The interest rate on the line of credit is variable and is calculated based on the "One Month London Interbank Offered Rate (LIBOR)" plus 50 basis points. As of December 31, 2019, the interest rate was 2.30% and no amount was outstanding. The District did not draw on the line of credit during 2019, 2018 or 2017.

***Water Department Capital Asset Activity***

Significant projects in 2019 and 2018 are as follows:

- In 2019, capital and construction-related costs totaled $49.5 million; significant expenditures for projects completed or in process included:

  1) Infrastructure replacement (i.e. Cast Iron main abandonment/replacement): $14.7 million;
  2) Other water mains and distribution: $18.4 million;
  3) Florence water treatment plant – Chemical building architectural, mechanical, structural and electrical improvements: $8.3 million;
  4) Florence water treatment plant – Basin 1 refurbishment: $3.0 million;
  5) Land purchase for future pump station: $1.1 million;
  6) Construction machines: $0.9 million.

- In 2018, capital and construction-related costs totaled $53.2 million; significant expenditures for projects completed or in process included:

  1) Infrastructure replacement (i.e. Cast Iron main abandonment/replacement): $7.0 million;
  2) Other water mains and distribution: $23.7 million;
  3) Florence water treatment plant – Chemical building architectural, mechanical, structural and electrical improvements: $15.3 million;
  4) Florence water treatment plant – Minne Lusa high service pump architectural, mechanical, structural and electrical improvements: $1.9 million;
  5) Construction machines: $1.2 million;
  6) Platte West water treatment plant – well abandonment/replacement: $.6 million.

**Contact Information**

This financial report is designed to provide a general overview of the District's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the President of the District at 7350 World Communications Drive, Omaha, Nebraska 68122-4041.

**METROPOLITAN UTILITIES DISTRICT**

Statements of Net Position

December 31, 2019 and 2018

| Assets and Deferred Outflows of Resources | 2019 Gas Department | 2019 Water Department | 2019 Eliminations | 2019 Business-type Activities Total | 2018 Gas Department | 2018 Water Department | 2018 Eliminations | 2018 Business-type Activities Total |
|---|---|---|---|---|---|---|---|---|
| Capital assets: | | | | | | | | |
| Utility plant in service | $ 631,065,357 | 1,159,933,052 | — | 1,790,998,409 | $ 615,192,112 | 1,131,651,797 | — | 1,746,843,909 |
| Less accumulated depreciation | 199,449,662 | 309,099,003 | — | 508,548,665 | 192,871,595 | 288,801,342 | — | 481,672,937 |
| | 431,615,695 | 850,834,049 | — | 1,282,449,744 | 422,320,517 | 842,850,455 | — | 1,265,170,972 |
| Construction in progress | 21,316,487 | 59,714,624 | — | 81,031,111 | 10,739,737 | 40,900,853 | — | 51,640,590 |
| Net capital assets | 452,932,182 | 910,548,673 | — | 1,363,480,855 | 433,060,254 | 883,751,308 | — | 1,316,811,562 |
| Noncurrent assets: | | | | | | | | |
| Cash and cash equivalents – restricted | — | 14,743,711 | — | 14,743,711 | 3,754,586 | 9,399,758 | — | 13,154,344 |
| Investments - restricted | — | 10,129,565 | — | 10,129,565 | 12,807,428 | 25,771,941 | — | 38,579,369 |
| Other noncurrent assets | 1,204,765 | 672,641 | — | 1,877,406 | 648,150 | 461,886 | — | 1,110,036 |
| Total noncurrent assets | 1,204,765 | 25,545,917 | — | 26,750,682 | 17,210,164 | 35,633,585 | — | 52,843,749 |
| Current assets: | | | | | | | | |
| Cash and cash equivalents | 140,401,286 | 80,796,131 | — | 221,197,417 | 108,816,238 | 86,722,620 | — | 195,538,858 |
| Cash and cash equivalents – restricted | 199,689 | 1,864,143 | — | 2,063,832 | 187,293 | 1,731,917 | — | 1,919,210 |
| Accounts receivable – customers and others, less allowance for doubtful accounts | 34,738,884 | 30,364,427 | — | 65,103,311 | 41,966,817 | 26,536,290 | — | 68,503,107 |
| Interdepartmental receivable | 1,325,135 | — | (1,325,135) | — | 3,229,529 | — | (3,229,529) | — |
| Natural gas in storage | 8,160,066 | — | — | 8,160,066 | 9,536,178 | — | — | 9,536,178 |
| Propane in storage | 4,053,608 | — | — | 4,053,608 | 4,150,179 | — | — | 4,150,179 |
| Materials and supplies | 3,704,538 | 3,521,469 | — | 7,226,007 | 3,161,140 | 2,734,297 | — | 5,895,437 |
| Construction materials | 3,196,978 | 1,660,307 | — | 4,857,285 | 2,341,745 | 1,819,154 | — | 4,160,899 |
| Prepayments | 1,051,542 | 147,670 | — | 1,199,212 | 1,038,482 | 107,194 | — | 1,145,676 |
| Total current assets | 196,831,726 | 118,354,147 | (1,325,135) | 313,860,738 | 174,427,601 | 119,651,472 | (3,229,529) | 290,849,544 |
| Total assets | 650,968,673 | 1,054,448,737 | (1,325,135) | 1,704,092,275 | 624,698,019 | 1,039,036,365 | (3,229,529) | 1,660,504,855 |
| **Deferred Outflows of Resources** | | | | | | | | |
| Pension amounts | 5,256,517 | 4,318,048 | — | 9,574,565 | 18,192,808 | 14,691,640 | — | 32,884,448 |
| OPEB amounts | — | — | — | — | 1,329,047 | 1,074,293 | — | 2,403,340 |
| Deferred charge on refunding | — | 3,257,838 | — | 3,257,838 | — | 3,756,589 | — | 3,756,589 |
| Total deferred outflows of resources | 5,256,517 | 7,575,886 | — | 12,832,403 | 19,521,855 | 19,522,522 | — | 39,044,377 |
| Total assets and deferred outflows of resources | $ 656,225,190 | 1,062,024,623 | (1,325,135) | 1,716,924,678 | $ 644,219,874 | 1,058,558,887 | (3,229,529) | 1,699,549,232 |

See accompanying notes to basic financial statements.

| Liabilities, Deferred Inflows and Net Position | 2019 Gas Department | 2019 Water Department | 2019 Eliminations | 2019 Business-type Activities Total | 2018 Gas Department | 2018 Water Department | 2018 Eliminations | 2018 Business-type Activities Total |
|---|---|---|---|---|---|---|---|---|
| Net position: | | | | | | | | |
| Net investment in capital assets | $ 378,171,010 | 382,918,990 | — | 761,090,000 | $ 373,518,801 | 360,201,986 | — | 733,720,787 |
| Restricted: | | | | | | | | |
| Environmental | — | 172,388 | — | 172,388 | — | 172,091 | — | 172,091 |
| Debt service requirements-sinking fund | 199,689 | 1,864,143 | — | 2,063,832 | 187,293 | 1,731,917 | — | 1,919,210 |
| Unrestricted | 24,565,451 | (48,938,865) | — | (24,373,414) | (10,603,227) | (49,086,372) | — | (59,689,599) |
| Total net position | 402,936,150 | 336,016,656 | — | 738,952,806 | 363,102,867 | 313,019,622 | — | 676,122,489 |
| Deferred inflows of resources | | | | | | | | |
| Pension amounts | 14,861,988 | 12,368,626 | — | 27,230,614 | 3,457,932 | 2,839,878 | — | 6,297,810 |
| OPEB amounts | 30,771,073 | 24,938,524 | — | 55,709,597 | 30,381,030 | 24,557,542 | — | 54,938,572 |
| Contributions in aid of construction | 41,101,682 | 312,463,282 | — | 353,564,964 | 41,250,869 | 305,208,722 | — | 346,459,591 |
| Total deferred inflows of resources | 86,734,743 | 349,770,432 | — | 436,505,175 | 75,089,831 | 332,606,142 | — | 407,695,973 |
| Noncurrent liabilities: | | | | | | | | |
| Long-term debt, excluding current installments | 30,672,678 | 226,449,668 | — | 257,122,346 | 32,132,822 | 240,149,578 | — | 272,282,400 |
| Self-insured risks | 125,000 | 174,926 | — | 299,926 | 122,584 | 178,920 | — | 301,504 |
| Net pension liability | 22,669,301 | 18,723,173 | — | 41,392,474 | 46,959,548 | 38,597,012 | — | 85,556,560 |
| Net OPEB liability | 53,871,418 | 48,454,520 | — | 102,325,938 | 62,468,217 | 56,772,566 | — | 119,240,783 |
| Other accrued expenses | 1,147,798 | 1,193,689 | — | 2,341,487 | 1,108,482 | 1,151,989 | — | 2,260,471 |
| Total noncurrent liabilities | 108,486,195 | 294,995,976 | — | 403,482,171 | 142,791,653 | 336,850,065 | — | 479,641,718 |
| Current liabilities: | | | | | | | | |
| Accounts payable | 28,389,492 | 8,092,583 | — | 36,482,075 | 34,905,976 | 8,437,697 | — | 43,343,673 |
| Customer deposits | 18,712,524 | 3,186,588 | — | 21,899,112 | 17,105,465 | 4,863,421 | — | 21,968,886 |
| Customer advances for construction | 785,096 | 24,805,018 | — | 25,590,114 | 683,327 | 19,229,425 | — | 19,912,752 |
| Interdepartmental payable | — | 1,325,135 | (1,325,135) | — | — | 3,229,529 | (3,229,529) | — |
| Sewer fee collection due to municipalities | — | 24,726,862 | — | 24,726,862 | — | 23,047,515 | — | 23,047,515 |
| Statutory payment due to municipalities | 1,128,353 | 532,901 | — | 1,661,254 | 1,291,953 | 515,000 | — | 1,806,953 |
| Other accrued expenses | 2,879,560 | 2,994,692 | — | 5,874,252 | 2,780,929 | 2,890,079 | — | 5,671,008 |
| Current installments of long-term debt | 1,340,235 | 12,207,254 | — | 13,547,489 | 1,279,837 | 11,651,692 | — | 12,931,529 |
| Accrued interest | 96,119 | 708,326 | — | 804,445 | 100,452 | 754,222 | — | 854,674 |
| Self-insured risks | 1,206,955 | 2,662,200 | — | 3,869,155 | 834,712 | 1,464,478 | — | 2,299,190 |
| Other liabilities | 3,529,768 | — | — | 3,529,768 | 2,427,872 | — | — | 2,427,872 |
| Unearned gas purchase discounts | — | — | — | — | 1,825,000 | — | — | 1,825,000 |
| Total current liabilities | 58,068,102 | 81,241,559 | (1,325,135) | 137,984,526 | 63,235,523 | 76,083,058 | (3,229,529) | 136,089,052 |
| Total liabilities | 166,554,297 | 376,237,535 | (1,325,135) | 541,466,697 | 206,027,176 | 412,933,123 | (3,229,529) | 615,730,770 |
| Total liabilities, deferred inflows of resources, and net position | $ 656,225,190 | 1,062,024,623 | (1,325,135) | 1,716,924,678 | $ 644,219,874 | 1,058,558,887 | (3,229,529) | 1,699,549,232 |

See accompanying notes to basic financial statements.

**METROPOLITAN UTILITIES DISTRICT**

Statements of Revenues, Expenses, and Changes in Net Position

December 31, 2019 and 2018

| | 2019 | | | 2018 | | |
|---|---|---|---|---|---|---|
| | **Gas Department** | **Water Department** | **Business-type Activities Total** | **Gas Department** | **Water Department** | **Business-type Activities Total** |
| Operating revenues: | | | | | | |
| Charges for services | $ 223,880,699 | 121,508,080 | 345,388,779 | $ 238,088,826 | 119,952,618 | 358,041,444 |
| Less bad debt expense | 614,407 | 247,118 | 861,525 | 501,779 | 169,421 | 671,200 |
| Charges for services, net | 223,266,292 | 121,260,962 | 344,527,254 | 237,587,047 | 119,783,197 | 357,370,244 |
| Operating expenses: | | | | | | |
| Cost of natural gas | 114,501,720 | — | 114,501,720 | 126,286,762 | — | 126,286,762 |
| Operating and maintenance | 49,420,891 | 75,833,634 | 125,254,525 | 57,926,952 | 75,354,382 | 133,281,334 |
| Depreciation and amortization | 16,666,592 | 14,873,197 | 31,539,789 | 15,799,471 | 14,758,448 | 30,557,919 |
| Payment in lieu of taxes | 3,802,087 | 1,643,662 | 5,445,749 | 3,796,642 | 1,617,876 | 5,414,518 |
| Total operating expenses | 184,391,290 | 92,350,493 | 276,741,783 | 203,809,827 | 91,730,706 | 295,540,533 |
| Operating income | 38,875,002 | 28,910,469 | 67,785,471 | 33,777,220 | 28,052,491 | 61,829,711 |
| Nonoperating revenues (expenses): | | | | | | |
| Investment income, net | 2,759,105 | 2,279,259 | 5,038,364 | 1,737,469 | 968,315 | 2,705,784 |
| Other expense | (652,472) | (67,274) | (719,746) | (2,063,342) | (146,203) | (2,209,545) |
| Interest expense | (1,148,352) | (8,125,420) | (9,273,772) | (539,120) | (6,703,980) | (7,243,100) |
| Total nonoperating revenues (expenses), net | 958,281 | (5,913,435) | (4,955,154) | (864,993) | (5,881,868) | (6,746,861) |
| Change in net position | 39,833,283 | 22,997,034 | 62,830,317 | 32,912,227 | 22,170,623 | 55,082,850 |
| Net position, beginning of year | 363,102,867 | 313,019,622 | 676,122,489 | 330,190,640 | 290,848,999 | 621,039,639 |
| Net position, end of year | $ 402,936,150 | 336,016,656 | 738,952,806 | $ 363,102,867 | 313,019,622 | 676,122,489 |

See accompanying notes to basic financial statements.

**METROPOLITAN UTILITIES DISTRICT**

Statements of Cash Flows

December 31, 2019 and 2018

| | 2019 | | | 2018 | | |
|---|---|---|---|---|---|---|
| | **Gas Department** | **Water Department** | **Business-type Activities Total** | **Gas Department** | **Water Department** | **Business-type Activities Total** |
| Cash flows from operating activities: | | | | | | |
| Receipts from customers | $ 232,209,154 | 117,663,313 | 349,872,467 | $ 223,280,891 | 117,911,161 | 341,192,052 |
| Payments to suppliers | (133,620,883) | (56,675,806) | (190,296,689) | (141,296,178) | (50,054,014) | (191,350,192) |
| Cash collections on behalf of other governments | — | 173,112,775 | 173,112,775 | — | 164,428,132 | 164,428,132 |
| Cash disbursements to other governments | — | (165,733,943) | (165,733,943) | — | (156,876,824) | (156,876,824) |
| Payments to employees | (38,200,087) | (31,402,806) | (69,602,893) | (37,780,572) | (30,606,441) | (68,387,013) |
| Payments in lieu of taxes | (3,802,087) | (1,643,662) | (5,445,749) | (3,796,642) | (1,617,876) | (5,414,518) |
| Net cash provided by operating activities | 56,586,097 | 35,319,871 | 91,905,968 | 40,407,499 | 43,184,138 | 83,591,637 |
| Cash flows from noncapital financing activities: | | | | | | |
| Interdepartmental loans and advances | 1,960,558 | (1,960,558) | — | (4,498,322) | 4,498,322 | — |
| Net cash provided by (used in) noncapital financing activities | 1,960,558 | (1,960,558) | — | (4,498,322) | 4,498,322 | — |
| Cash flows from capital and related financing activities: | | | | | | |
| Plant additions | (47,669,991) | (49,729,503) | (97,399,494) | (36,898,792) | (49,737,588) | (86,636,380) |
| Plant removal/retirement costs | 3,094,126 | (656,008) | 2,438,118 | (3,620,418) | (274,942) | (3,895,360) |
| Debt issuance costs | — | — | — | (375,881) | (305,932) | (681,813) |
| Payments on long-term debt | (1,279,802) | (11,651,692) | (12,931,494) | (233,806) | (9,921,240) | (10,155,046) |
| Proceeds from issuance of debt | — | — | — | 32,988,813 | 38,645,573 | 71,634,386 |
| Customer advances/CIAC | 857,965 | 19,471,166 | 20,329,131 | 1,057,085 | 15,786,046 | 16,843,131 |
| Interest paid | (1,272,628) | (9,165,221) | (10,437,849) | (580,768) | (8,508,020) | (9,088,788) |
| Net cash used in capital and related financing activities | (46,270,330) | (51,731,258) | (98,001,588) | (7,663,767) | (14,316,103) | (21,979,870) |
| Cash flows from investing activities: | | | | | | |
| Interest received | 2,759,105 | 2,279,259 | 5,038,364 | 1,737,469 | 968,315 | 2,705,784 |
| Sales of investment securities | 12,807,428 | 15,642,376 | 28,449,804 | | | |
| Purchase of investments | — | — | — | (12,807,428) | (25,771,941) | (38,579,369) |
| Net cash flows provided by (used in) investing activities | 15,566,533 | 17,921,635 | 33,488,168 | (11,069,959) | (24,803,626) | (35,873,585) |
| Net increase (decrease) in cash and cash equivalents | 27,842,858 | (450,310) | 27,392,548 | 17,175,451 | 8,562,731 | 25,738,182 |
| Cash and cash equivalents, beginning of year | 112,758,117 | 97,854,295 | 210,612,412 | 95,582,666 | 89,291,564 | 184,874,230 |
| Cash and cash equivalents, end of year | $ 140,600,975 | 97,403,985 | 238,004,960 | $ 112,758,117 | 97,854,295 | 210,612,412 |
| Reconciliation of operating income to net cash provided by operating activities: | | | | | | |
| Operating income | $ 38,875,002 | 28,910,469 | 67,785,471 | $ 33,777,220 | 28,052,491 | 61,829,711 |
| Adjustments to reconcile operating income to net cash provided by operating activities | | | | | | |
| Depreciation and amortization | | | | | | |
| Depreciation charged to depreciation and amortization | 16,369,195 | 14,550,406 | 30,919,601 | 15,502,074 | 14,393,096 | 29,895,170 |
| Depreciation charged to operating and maintenance | 3,959,457 | 1,195,303 | 5,154,760 | 4,468,502 | 832,250 | 5,300,752 |
| Amortization charged to depreciation and amortization | 297,397 | 322,791 | 620,188 | 297,397 | 365,352 | 662,749 |
| Amortization charged to operating and maintenance | 1,815,273 | 197,050 | 2,012,323 | 1,914,113 | 163,198 | 2,077,311 |
| Cash flows impacted by changes in | | | | | | |
| Amounts due from customers and others | 7,227,933 | (3,828,137) | 3,399,796 | (14,782,355) | (2,041,458) | (16,823,813) |
| Natural gas, propane, materials, supplies, and prepayments | 916,225 | (827,648) | 88,577 | 237,209 | (225,813) | 11,396 |
| Other noncurrent assets | (556,615) | (210,755) | (767,370) | (16,348) | 109,387 | 93,039 |
| Accounts payable and other | (6,760,252) | 2,327,767 | (4,432,485) | 6,594,405 | 2,646,139 | 9,240,544 |
| Customer deposits | 1,618,536 | (1,676,833) | (58,297) | (4,581,420) | 514,292 | (4,067,128) |
| Self-insurance and other liabilities | 1,476,555 | 1,193,728 | 2,670,283 | (177,870) | 203,176 | 25,306 |
| Net pension liability | (24,290,247) | (19,873,839) | (44,164,086) | 25,427,796 | 20,553,754 | 45,981,550 |
| Deferred inflows pension | 18,972,787 | 15,499,222 | 34,472,009 | (7,096,976) | (5,781,961) | (12,878,937) |
| Deferred outflows pension | 5,367,560 | 4,403,118 | 9,770,678 | (14,142,519) | (11,350,890) | (25,493,409) |
| Net OPEB liability | (8,596,799) | (8,318,046) | (16,914,845) | (33,565,712) | (28,732,124) | (62,297,836) |
| Deferred inflows OPEB | 1,386,828 | 1,186,702 | 2,573,530 | 30,381,030 | 24,557,542 | 54,938,572 |
| Deferred outflows OPEB | 332,262 | 268,573 | 600,835 | (1,329,047) | (1,074,293) | (2,403,340) |
| Unearned gas purchase discounts | (1,825,000) | — | (1,825,000) | (2,500,000) | — | (2,500,000) |
| Net cash provided by operating activities | $ 56,586,097 | 35,319,871 | 91,905,968 | $ 40,407,499 | 43,184,138 | 83,591,637 |
| Supplemental schedules of noncash capital and related financing items: | | | | | | |
| Capitalized interest | $ — | — | — | $ 80,908 | 922,415 | 1,003,323 |
| Construction in accounts payable | 1,646,577 | 4,468,206 | 6,114,783 | 1,439,939 | 5,297,527 | 6,737,466 |

See accompanying notes to basic financial statements.

**METROPOLITAN UTILITIES DISTRICT**

Statements of Fiduciary Net Position

Pension and Other Post Employment Benefits

December 31, 2019 and 2018

| | 2019 | 2018 |
|---|---|---|
| **Assets** | | |
| Cash, Investments and pooled separate accounts | $ 493,430,076 | $ 402,646,777 |
| **Liabilities** | - | - |
| **Net position held in trust for pension and other post employment benefits** | $ 493,430,076 | $ 402,646,777 |

See accompanying notes to basic financial statements

**METROPOLITAN UTILITIES DISTRICT**
Statements of Changes in Fiduciary Net Position
Pension and Other Post Employment Benefits
December 31, 2019 and 2018

| | **2019** | **2018** |
|---|---|---|
| Additions: | | |
| Investment income (loss), net appreciation (depreciation) in the fair value of pooled separate accounts, interest and dividends, net of investment expense | $ 84,973,228 | $ (22,344,006) |
| Employer contributions | 26,554,367 | 24,056,434 |
| Employee contributions | 4,413,137 | 3,805,373 |
| **Total additions** | 115,940,732 | 5,517,801 |
| Deductions: | | |
| Benefit payments | 25,083,943 | 19,116,693 |
| Administrative expenses | 73,490 | 98,134 |
| **Total deductions** | 25,157,433 | 19,214,827 |
| **Net increase (decrease)** | 90,783,299 | (13,697,026) |
| Net position held in trust for pension and OPEB benefits | | |
| Beginning of year | 402,646,777 | 416,343,803 |
| End of year | $ 493,430,076 | $ 402,646,777 |

See accompanying notes to basic financial statements

## (1) Summary of Significant Accounting Policies

### *(a) Nature of Operations*

Metropolitan Utilities District (the District), a political subdivision of the State of Nebraska, is a public utility providing water and gas service to a diversified base of residential, commercial, and industrial customers. State statutes vest authority to establish rates in the board of directors (the Board) and provide, among other things, that separate books of account be kept for each utility department and for the equitable allocation of joint expenses. The Board determines the District's rates. The District is not liable for federal and state income taxes. The District pays ad valorem taxes on real property not used for public purposes. As required by the Enabling Act, the District pays 2% of its revenue from retail sales within the corporate limits of the City of Omaha to the City of Omaha, and 2% of its retail sales within other city and village corporate limits to those cities and villages. The District is subject to state sales and use tax on certain labor charges and nearly all material purchases.

### *(b) Basis of Presentation*

The District's financial statements are presented in accordance with generally accepted accounting principles (GAAP) for business-type activities of governmental entities. Accounting records are maintained generally in accordance with the Uniform System of Accounts as prescribed by the National Association of Regulatory Utility Commissioners (NARUC) and all applicable pronouncements of the Governmental Accounting Standards Board (GASB). The District accounts for the operations of the water and gas systems in separate major funds.

Operating revenues and expenses generally result from providing gas and water services to the District's customers. The principal operating revenues are charges to customers for providing gas and water services. Operating expenses include the cost of services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

The District's accounting policies also follow the regulated operations provisions of GASB Statement No. 62, which permits an entity with cost based rates to defer certain costs as income, that would otherwise be recognized when incurred, to the extent that the rate-regulated entity is recovering or expects to recover such amounts in rate changes to its customers.

### *(c) Fiduciary Fund Type*

The District also includes a pension trust fund and other postemployment benefits (OPEB) trust fund as a fiduciary fund type. Fiduciary funds are used to report assets held in a trustee or agency capacity for others and therefore cannot be used to support the District's own programs or operations. Pension and OPEB trust funds are accounted for in essentially the same manner as the enterprise funds, using the same measurement focus and basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plans are recognized when due. Benefits and refunds are recognized when due and payable in accordance with terms of the plans. The Pension Trust Fund accounts for the assets of the Retirement Plan for Employees of the Metropolitan Utilities District of Omaha. The OPEB Trust Fund accounts for the assets of the Postretirement Benefits for Employees of the Metropolitan Utilities District of Omaha. These plans are included in the reporting entity because the District controls the assets of each of these trust funds, as defined by GASB Statement No. 84.

### *(d) Deferred Outflows and Inflows of Resources*

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense) until that time. The District has four items that meet the criterion for reporting as deferred outflows on the statement of net position: the deferred charge on refunding, the changes of actuarial assumptions used in the measurement of total pension liability, the differences between projected and actual earnings on pension plan investments (in 2018 only) and the differences between projected and actual earnings on OPEB plan investments (in 2018 only). A deferred charge on refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. The deferred amount for changes of actuarial assumptions used in the measurement of total pension liability is recognized in pension expense over the average expected remaining service life of the active and inactive pension plan members at the beginning of the measurement period. The difference between projected and actual earnings on pension and OPEB plan investments is recognized in expense over a five-year period, as of the beginning of each measurement period.

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue and/or contra expense) until that time. The District has six items that meet the criterion for reporting as deferred inflows on the statement of net position: contributions in aid of construction (CIAC), the difference between expected and actual experience in the measurement of total pension liability, the differences between projected and actual earnings on pension plan investments (in 2019 only), the differences between projected and actual earnings on OPEB plan investments (in 2019 only), the difference between expected and actual experience in the measurement of total OPEB liability and the changes in actuarial assumptions used in the measurement of total OPEB liability. As described below, CIAC is included in depreciation expense and amortized over the estimated useful lives of the related utility plant. The difference between expected and actual experience and the changes in actuarial assumptions in the measurement of the pension and OPEB liabilities is recognized over the average expected remaining service life of the active and inactive plan members at the beginning of the measurement period. The difference between projected and actual earnings on pension and OPEB plan investments is recognized in expense over a five-year period, as of the beginning of each measurement period.

### *(e) Utility Plant*

Utility plant is stated at cost. Cost includes direct charges such as labor, material, and related overhead. Allowance for borrowed funds used during construction represents interest capitalized on construction projects not paid for by contributions to the extent such projects are financed by debt. Interest of $80,908 was capitalized on Gas Department projects in 2018. Interest of $922,415 was capitalized on Water Department projects in 2018. With the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, interest is no longer capitalized on construction projects, effective fiscal year ending December 31, 2019. Expenditures for ordinary maintenance and repairs are charged to operations.

Depreciation of utility plant is computed primarily on the straight-line method over its estimated useful life. The weighted average composite depreciation rates, expressed as a percentage of the beginning of the year cost of depreciable plant in service, were:

| | 2019 | 2018 |
|---|---|---|
| Water Department | 2.1% | 2.1% |
| Gas Department | 3.5 | 3.5 |

Contributions in aid of construction (CIAC) are reported as a deferred inflow of resources. For ratemaking purposes, the District does not recognize such revenues when received; rather CIAC is included in depreciation expense as such costs are amortized over the estimated lives of the related utility plant. The credit is being amortized into rates over the depreciable lives of the related plant in order to offset the earnings effect of these nonexchange transactions.

### *(f) Net Position*

The net position of the District is broken down into three categories: (1) net investment in capital assets, (2) restricted for environmental funds and debt service requirements, and (3) unrestricted.

- Net investment in capital assets consist of capital assets, including restricted capital assets, net of accumulated depreciation, plus unspent bond proceeds and reduced by the outstanding balance of debt that are attributable to the acquisition, construction, or improvement of those assets.
- Restricted for environmental funds represent net position whose use is restricted through external constraints imposed by the Nebraska Department of Environmental Quality and the Nebraska Game and Parks Commission. Restricted for debt service requirements represent net position whose use is restricted per the provisions of the Series 2012, Series 2015 and Series 2018 water revenue bonds, and the Series 2018 gas revenue bonds.
- Unrestricted net position consists of net position that does not meet the definition of net investment in capital assets or restricted for environmental, debt reserve funds, debt service requirements, or capital.

When both restricted and unrestricted resources are available for use, it is the District’s policy to use restricted first, and then unrestricted resources when they are needed.

### *(g) Bond Premium and Discounts*

Bond premium and discounts are deferred and amortized over the life of the bond using the straight-line method, which approximates the effective interest method.

### *(h) Cash and Cash Equivalents and Investments*

Cash and cash equivalents include cash on hand, bank demand accounts, overnight repurchase agreements, and short-term liquid investments purchased with an original maturity of 90 days or less. At December 31, 2018, the Gas Department held $16.6 million in noncurrent "Cash and cash equivalents – restricted" and "Investments – restricted" which consisted of proceeds remaining from the Gas System Revenue Bond Series 2018 issued in June 2018. These proceeds were expended for the replacement of cast iron gas mains throughout the District's service area and infrastructure improvements to the Gas System. At December 31, 2019, the Gas Department held no funds in noncurrent "Cash and cash equivalents – restricted" and "Investment – restricted." At December 31, 2019 and 2018, the Gas Department also held current "Cash and cash equivalents – restricted" of $0.2 million pursuant to various bond resolutions.

At December 31, 2019, the Water Department held $24.9 million in noncurrent "Cash and cash equivalents – restricted" and "Investments – restricted" which is made up of $0.2 million in funds required by the Nebraska Game and Parks Commission for environmental mitigation of wetlands, $3.0 million pursuant to various bond resolutions, and $21.7 million of proceeds remaining from the Water System Revenue Bond Series 2018 issued in September 2018, which will be expended to upgrade the District's Florence Water Treatment Plant and for other improvements to the District's Water System. At December 31, 2018, the Water Department held $35.2 million in noncurrent "Cash and cash equivalents – restricted" and "Investments – restricted" which was made up of $0.2 million in funds required by the Nebraska Game and Parks Commission for environmental mitigation of wetlands, $3.0 million pursuant to various bond resolutions, and $32.0 million of proceeds remaining from the Water System Revenue Bond Series 2018 issued in September 2018. At December 31, 2019 and 2018, the Water Department also held current "Cash and cash equivalents – restricted" of $1.9 and $1.7 million, respectively, pursuant to various bond resolutions.

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is a market-based measurement, not an entity-specific measurement. For some assets and liabilities, observable market transactions or market information might be available; for others, it might not be available. However, the objective of a fair value measurement in both cases is the same—that is, to determine the price at which an orderly transaction to sell the asset or to transfer the liability would take place between the market and participants at the measurement date under current market conditions. Fair value is an exit price at the measurement date from the perspective of a market participant that controls the asset or is obligated for the liability. Purchases and sales of securities are recorded on a trade-date basis. See Note 3 for additional information regarding fair value measures.

### *(i) Accounts Receivable and Unbilled Revenue*

Accounts receivable are recorded at the invoiced amount and do not bear interest. Amounts collected on accounts receivable are included in net cash provided by operating activities in the statements of cash flows. The accounts receivable balance also includes an accrual related to unbilled revenues, determined by prorating actual subsequent billings. The allowance for doubtful accounts is the District's best estimate of the amount of probable credit losses in the District's existing accounts receivable. The District's allowance methodology was developed based on an analysis of open accounts and historical write-off experience.

***(j) Inventories***

Inventories include natural gas, liquefied natural gas, propane, construction materials, and materials and supplies. All inventories are carried at weighted average cost.

***(k) Compensated Absences***

The District employees earn vacation days at specific rates during their employment. In the event of termination, an employee is reimbursed for accumulated vacation time up to a maximum allowed accumulation of no more than what they are eligible to earn in two years. Current and noncurrent amounts pertaining to accrued compensated absences are recorded within "Other accrued expenses" in the statement of net position.

***(l) Revenues***

The District recognizes operating revenues as they are earned. Revenues earned after meters are read are estimated and accrued as unbilled revenues at the end of each accounting period. Accounts receivable include unbilled revenues as follows:

| | | 2019 | 2018 |
|---|---|---|---|
| Gas | $ | 16,866,883 | 19,971,850 |
| Water | | 3,542,418 | 3,371,865 |

***(m) Interdepartmental Transactions***

Most routine disbursement transactions of the District are paid by the Gas Department, due in part to the fact that the Gas Department collects virtually all billings for the District in combined Gas/Water invoices; balancing between the departments occurs via maintenance of interdepartmental receivable and payable accounts. At December 31, 2019, the Gas Department reflected a receivable from the Water Department and the Water Department reflected a payable to the Gas Department of $1,325,135. At December 31, 2018, the Gas Department reflected a receivable from the Water Department and the Water Department reflected a payable to the Gas Department of $3,229,529. The receivable and payable have been eliminated in the business-type activities total column.

***(n) Billing and Collection Agent Services***

The District serves as the billing and collection agent for fees related to sewer services provided by certain political subdivisions, including the City of Omaha. Separate accounting records are maintained by the District for these collection services. Fees billed but not yet remitted by the District to the applicable entities totaled $24,726,862 and $23,047,515 as of December 31, 2019 and 2018, respectively. These fees have been reflected in the District's statement of net position and amounts collected were remitted to the cities subsequent to year-end. Processing fees billed to the cities for billing and collection services provided by the District totaled approximately $5.0 million in both 2019 and 2018. These processing fees have been reflected as a reduction to operating and maintenance expenses in the District's statement of revenue, expenses, and changes in net position. The cities' fees reflect only the expenses incurred by the District to bill and collect the cities' charges.

***(o) Pensions***

For purposes of measuring the net pension liability, deferred outflows and inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Retirement Plan for Employees of the Metropolitan Utilities District of Omaha (the Plan) and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

***(p) Other Postemployment Benefits***

For purposes of measuring the net OPEB liability, deferred outflows and inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the Postretirement Benefits for Employees of the Metropolitan Utilities District of Omaha (the OPEB Plan) and additions to/deductions from the OPEB Plan's fiduciary net position have been determined on the same basis as they are reported by the OPEB Plan. For this purpose, the OPEB Plan recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value.

***(q) Use of Estimates***

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management of the District to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying footnotes. Actual results could differ from these estimates.

***(r) Recent Accounting Pronouncements***

GASB Statement No. 87, *Leases*, issued in June 2017, will be effective for the District beginning with its year ending December 31, 2020. The objective of Statement No. 87 is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases; enhancing comparability of financial statements between governments; and also enhancing the relevance, reliability (representation faithfulness), and consistency of information about the leasing activities of governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The District is currently assessing the impact of this Statement.

GASB Statement No. 92, *Omnibus 2020*, issued in January 2020, will be effective for the District beginning with its year ending December 31, 2020. The objective of Statement No. 92 is to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB statements. This Statement addresses a variety of topics including issues related to leases, postemployment benefits (pensions and other postemployment benefits), fiduciary activities, asset retirement obligations and fair value measurement and application. The District is currently assessing the impact of this Statement.

## (2) Impact of Adoption of New Accounting Standard

The District has implemented GASB Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*, for the fiscal year ending December 31, 2019. Statement No. 88 requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses. This Statement also requires that existing and additional information be provided for direct borrowings and direct placements of debt separately from other debt. The adoption of this Statement resulted in additional note disclosures related to debt, with disclosures for direct borrowings and direct placements of debt reported separately from other debt.

The District has implemented GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period,* for the fiscal year ending December 31, 2019. Statement No. 89 requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result of adopting Statement No. 89, interest cost incurred before the end of a construction period is no longer included in the historical cost of a capital asset reported in a business-type activity or enterprise fund. This statement is effective for reporting periods beginning after December 15, 2019, and requirements are to be applied prospectively. Thus, prior periods were not restated.

## (3) Deposits and Investments

State Statute 14-2144 R.R.S. authorizes funds of the District to be invested at the discretion of the board of directors in the warrants and bonds of the District and the municipalities constituting the District, including the warrants and bonds of the sanitary improvement districts thereof. In addition to such securities, the funds may also be invested in any securities that are legal investments for the school funds of the State of Nebraska as delineated in the State of Nebraska Statute, Section 30-3209. The trust funds related to the District's retirement plan and other postemployment benefit plan invest pursuant to the same statutory investment restrictions.

Custodial credit risk is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. For deposits, custodial credit risk is the risk that, in the event of a bank failure, the District's deposits might not be returned. At December 31, 2019 and 2018, all bank balances were covered by federal depository insurance or collateralized with securities held by the Federal Reserve Bank.

**Fair Value Measurements:** The District categorizes its assets and liabilities measured at fair value within the hierarchy established by generally accepted accounting principles. Assets and liabilities valued at fair value are categorized based on inputs to valuation techniques as follows:

***Level 1 input:*** Quoted prices for identical assets or liabilities in an active market that an entity has the ability to access.

***Level 2 input:*** Quoted prices for similar assets or liabilities in active markets and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability.

***Level 3 input:*** Inputs that are unobservable for the asset or liability which are typically based upon the District's own assumptions as there is little, if any, related market activity.

***Hierarchy:*** The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs.

***Inputs:*** If the fair value of an asset or a liability is measured using inputs from more than one level of the fair value hierarchy, the measurement is considered to be based on the lowest priority level input that is significant to the entire measurement.

For the District, the following fair value techniques were utilized in measuring the fair value of its investments:

***Bond and Equity Mutual Funds:*** These investments are reported at fair value based on published fair value per share (unit) for each fund.

As of December 31, 2019 and 2018, the District had the following investments and maturities:

| | | | Investment Maturities in Years | | | Rating |
|---|---|---|---|---|---|---|
| | | | Less | | Hierarchy | Standard & |
| Investment Type | | Fair Value | Than One | 1-5 | Level | Poors |
| 2019 | | | | | | |
| U.S. Treasury and agency obligations | $ | 5,956,598 | 3,955,178 | 2,001,420 | 1 | A-1+ to AA+ |
| Foreign bonds | | 1,199,868 | 1,199,868 | — | 1 | AA- |
| Commercial paper | | 2,973,099 | 2,973,099 | — | 1 | A-1 |
| | $ | 10,129,565 | 8,128,145 | 2,001,420 | | |
| 2018 | | | | | | |
| U.S. Treasury and agency obligations | $ | 15,339,262 | 10,284,362 | 5,054,900 | 1 | AA+ |
| Corporate bonds and notes | | 14,061,817 | 12,556,072 | 1,505,745 | 1 | A- to AA+ |
| Foreign bonds | | 2,586,899 | 2,586,899 | — | 1 | AA- |
| Commercial paper | | 6,591,391 | 6,591,391 | — | 1 | Not rated |
| | $ | 38,579,369 | 32,018,724 | 6,560,645 | | |

As of December 31, 2019 and 2018, the District's fiduciary funds had the following investments.

| Investment Type | Fair Value Pension Plan | Fair Value OPEB | Fair Value Total | Hierarchy Level |
|---|---|---|---|---|
| 2019 | | | | |
| Mutual Funds: | | | | |
| Fixed Income Funds | $ 142,203,573 | 10,084,389 | 152,287,962 | 1 |
| Domestic Equity Funds | 199,638,211 | 20,105,749 | 219,743,960 | 1 |
| International Equity Funds | 108,545,692 | 11,159,239 | 119,704,931 | 1 |
| | $ 450,387,476 | 41,349,377 | 491,736,853 | |
| 2018 | | | | |
| Mutual Funds: | | | | |
| Fixed Income Funds | $ 129,382,864 | 6,409,422 | 135,792,286 | 1 |
| Domestic Equity Funds | 158,710,068 | 11,346,023 | 170,056,091 | 1 |
| International Equity Funds | 88,516,853 | 6,680,442 | 95,197,295 | 1 |
| | $ 376,609,785 | 24,435,887 | 401,045,672 | |

**Credit risk:** Generally, credit risk is the risk that the issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. The District does not have a formal policy over credit risk for investments, other than pension and OPEB plan investments. Although the District does not have a formal policy, this risk is mitigated by adherence to the requirements of State Statute 30-3209, which prescribes investments that are authorized. The pension and OPEB plans' investments in mutual funds are not rated. Purchases of fixed income investments must be rated BBB by Standard and Poor's or Baa by Moody's or higher. The investment policy statements of the pension and OPEB plans define fixed income investments as U.S. government and agency securities, corporate notes and bonds and private and agency residential and commercial mortgage-backed securities.

**Interest rate risk:** Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment means the greater the sensitivity of its fair value to changes in market interest rates. The District does not have a formal policy over interest rate risk for investments, other than pension and OPEB plan investments. Although the District does not have a formal policy, investments other than those in the pension and OPEB plans are generally short-term, reducing exposure to fair value losses arising from increasing interest rates. The investment policy statements of the pension and OPEB plans do not limit investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates. Mutual funds (debt and equity funds) are not subject to interest rate risk given they have no maturity dates.

**Concentration of credit risk:** The District does not have a formal policy over concentration of credit risk for investments, other than pension and OPEB investments. Although the District does not have a formal policy, this risk is mitigated by adherence to the requirements of State Statute 30-3209, which prescribes investments that are authorized. The investment policy statements of the pension and OPEB plans apply the prudent investor guidelines. Consistent with prudent standards for the preservation of capital and maintenance of liquidity, the goal of the plans is to earn the highest possible rate of return consistent with the plans' tolerance for risk. It is the policy of the pension and OPEB plans that the portfolios should be well diversified in an attempt to reduce the overall risk of the portfolios. The investment policy statements of the pension and OPEB plans limit the amount invested in a single investment security to 5 percent of the total portfolio, with the exception of investments guaranteed by the U.S. government. The investment policy statements also limit the amount invested in a single investment pool or company (mutual fund) to 20 percent of the total portfolio, with the exception of passively-managed investment vehicles seeking to match the returns on a broadly-diversified market index.

**Rate of return:** For the years ended December 31, 2019 and 2018, the annual money weighted rate of return on pension plan investments, net of pension plan investment expense was 21.0% and -5.2%, respectively. For the years ended December 31, 2019 and 2018, the annual money weighted rate of return on OPEB plan investments, net of OPEB plan expense was 21.4% and -8.0%, respectively. The money weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

**Asset allocation:** The investment policy statements of the pension and OPEB plans have the following asset allocation ranges permitted and the long-term expected geometric real rate of return for each major asset class:

| | **Target Allocation** | |
|---|---|---|
| **Asset Class** | **Pension Plan** | **OPEB** |
| Domestic (U.S.) Equities | 40.0 % | 40.0 % |
| International (Non-U.S.) Equities | 20.0 | 27.0 |
| U.S. Aggregate Bonds | 15.0 | 11.0 |
| International Bonds | 3.0 | 3.0 |
| Intermediate Term Credit | 11.0 | 9.0 |
| Short Term Credit | 3.0 | 2.0 |
| REITS | 8.0 | 8.0 |
| Total | 100.0 % | 100.0 % |

Mutual funds may be used for these asset classes. Investments in mutual funds are not subject to concentration of credit risk.

**Custodial credit risk:** The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The District and the pension and OPEB plans do not have a policy for custodial credit risk. As of December 31, 2019 and 2018, the District's investments were not exposed to custodial credit risk because they were registered in the District's name and held by the counterparty or the counterparty's trust department. The mutual funds (equity and debt funds) of the pension and OPEB plans are not exposed to custodial credit risk.

## (4) Utility Plant

Utility plant at December 31, 2019 and 2018 is summarized as follows:

| | Gas Department | Water Department | Total |
|---|---|---|---|
| 2019 | | | |
| Utility plant in service: | | | |
| Depreciable | $ 626,527,186 | 1,146,056,346 | 1,772,583,532 |
| Nondepreciable (land) | 4,538,171 | 13,876,706 | 18,414,877 |
| Total | 631,065,357 | 1,159,933,052 | 1,790,998,409 |
| Construction in progress (nondepreciable) | 21,316,487 | 59,714,624 | 81,031,111 |
| | 652,381,844 | 1,219,647,676 | 1,872,029,520 |
| Less: | | | |
| Accumulated depreciation | (199,449,662) | (309,099,003) | (508,548,665) |
| | $ 452,932,182 | 910,548,673 | 1,363,480,855 |
| 2018 | | | |
| Utility plant in service: | | | |
| Depreciable | $ 610,353,182 | 1,118,853,173 | 1,729,206,355 |
| Nondepreciable (land) | 4,838,930 | 12,798,624 | 17,637,554 |
| Total | 615,192,112 | 1,131,651,797 | 1,746,843,909 |
| Construction in progress (nondepreciable) | 10,739,737 | 40,900,853 | 51,640,590 |
| | 625,931,849 | 1,172,552,650 | 1,798,484,499 |
| Less: | | | |
| Accumulated depreciation | (192,871,595) | (288,801,342) | (481,672,937) |
| | $ 433,060,254 | 883,751,308 | 1,316,811,562 |

The provision for depreciation expense is as follows:

| | 2019 | | | 2018 | | |
|---|---|---|---|---|---|---|
| | Gas Department | Water Department | Total | Gas Department | Water Department | Total |
| Charged to depreciation | $ 16,369,195 | 14,550,403 | 30,919,598 | 15,502,074 | 14,393,096 | 29,895,170 |
| Charged to operating and maintenance | 3,959,457 | 1,195,303 | 5,154,760 | 4,468,502 | 832,250 | 5,300,752 |
| | $ 20,328,652 | 15,745,706 | 36,074,358 | 19,970,576 | 15,225,346 | 35,195,922 |

The depreciation expense presented above includes a reduction of expense of $7,546,396 and $7,273,312 for the year ended December 31, 2019 and 2018, respectively, due to the amortization of CIAC.

Capital asset activity for the year ended December 31, 2019 and 2018 is as follows:

| | Balance, beginning of year | Increases | Decreases | Balance, end of year |
|---|---|---|---|---|
| 2019 | | | | |
| Gas Department: | | | | |
| Utility plant in service | $ 615,192,112 | 36,444,646 | (20,571,401) | 631,065,357 |
| Construction in progress | 10,739,737 | 47,019,265 | (36,442,515) | 21,316,487 |
| Accumulated depreciation | (192,871,595) | (21,158,092) | 14,580,025 | (199,449,662) |
| | $ 433,060,254 | 62,305,819 | (42,433,891) | 452,932,182 |
| Water Department: | | | | |
| Utility plant in service | $ 1,131,651,797 | 30,245,256 | (1,964,001) | 1,159,933,052 |
| Construction in progress | 40,900,853 | 48,426,263 | (29,612,492) | 59,714,624 |
| Accumulated depreciation | (288,801,342) | (22,462,663) | 2,165,002 | (309,099,003) |
| | $ 883,751,308 | 56,208,856 | (29,411,491) | 910,548,673 |
| | $ 1,316,811,562 | 118,514,675 | (71,845,382) | 1,363,480,855 |
| 2018 | | | | |
| Gas Department: | | | | |
| Utility plant in service | $ 597,112,263 | 37,327,962 | (19,248,113) | 615,192,112 |
| Construction in progress | 10,860,193 | 37,184,422 | (37,304,878) | 10,739,737 |
| Accumulated depreciation | (190,884,550) | (20,822,864) | 18,835,819 | (192,871,595) |
| | $ 417,087,906 | 53,689,520 | (37,717,172) | 433,060,254 |
| Water Department: | | | | |
| Utility plant in service | $ 1,093,314,388 | 42,200,781 | (3,863,372) | 1,131,651,797 |
| Construction in progress | 30,921,408 | 52,236,126 | (42,256,681) | 40,900,853 |
| Accumulated depreciation | (271,056,576) | (21,646,365) | 3,901,599 | (288,801,342) |
| | $ 853,179,220 | 72,790,542 | (42,218,454) | 883,751,308 |
| | $ 1,270,267,126 | 126,480,062 | (79,935,626) | 1,316,811,562 |

## (5) Long-Term Obligations

Activity in long-term obligations for the year ended December 31, 2019 and 2018 is as follows:

| | Balance, beginning of year | Increases | Decreases | Balance, end of year | Due within one year |
|---|---|---|---|---|---|
| 2019 | | | | | |
| Revenue Bonds: | | | | | |
| Water Revenue Bonds Series 2018 | $ 37,390,000 | — | 1,255,000 | 36,135,000 | 1,315,000 |
| Plus unamortized premium | 1,226,341 | — | 111,528 | 1,114,813 | — |
| Water Revenue Bonds Series 2015 | 166,120,000 | — | 8,320,000 | 157,800,000 | 8,750,000 |
| Plus unamortized premium | 9,673,717 | — | 1,251,615 | 8,422,102 | — |
| Water Revenue Bonds Series 2012 | 31,695,000 | — | 1,800,000 | 29,895,000 | 1,860,000 |
| Plus unamortized premium | 1,808,924 | — | 129,513 | 1,679,411 | — |
| Gas Revenue Bonds Series 2018 | 31,605,000 | — | 1,040,000 | 30,565,000 | 1,095,000 |
| Plus unamortized premium | 1,322,622 | — | 119,944 | 1,202,678 | — |
| Notes from Direct Borrowings and Direct Placements: | | | | | |
| NDEQ note payable | 3,887,288 | — | 276,692 | 3,610,596 | 282,254 |
| CNG promissory note | 485,037 | — | 239,802 | 245,235 | 245,235 |
| Net OPEB liability | 119,240,783 | — | 16,914,845 | 102,325,938 | — |
| Net pension liability | 85,556,560 | — | 44,164,086 | 41,392,474 | — |
| Self-insured risks | 2,600,694 | 5,498,127 | 3,929,740 | 4,169,081 | 3,869,155 |
| Other accrued expenses | 7,931,479 | 5,852,588 | 5,568,328 | 8,215,739 | 5,874,252 |
| | $ 500,543,445 | 11,350,715 | 85,121,093 | 426,773,067 | 23,290,896 |

| | Balance, beginning of year, as restated | Increases | Decreases | Balance, end of year | Due within one year |
|---|---|---|---|---|---|
| 2018 | | | | | |
| Revenue Bonds: | | | | | |
| Water Revenue Bonds Series 2018 | $ — | 37,390,000 | — | 37,390,000 | 1,255,000 |
| Plus unamortized premium | — | 1,255,573 | 29,232 | 1,226,341 | — |
| Water Revenue Bonds Series 2015 | 174,035,000 | — | 7,915,000 | 166,120,000 | 8,320,000 |
| Plus unamortized premium | 11,001,529 | — | 1,327,812 | 9,673,717 | — |
| Water Revenue Bonds Series 2012 | 33,430,000 | — | 1,735,000 | 31,695,000 | 1,800,000 |
| Plus unamortized premium | 1,938,437 | — | 129,513 | 1,808,924 | — |
| Gas Revenue Bonds Series 2018 | — | 31,605,000 | — | 31,605,000 | 1,040,000 |
| Plus unamortized premium | — | 1,383,813 | 61,191 | 1,322,622 | — |
| Notes from Direct Borrowings and Direct Placements: | | | | | |
| NDEQ note payable | 4,158,529 | — | 271,241 | 3,887,288 | 276,692 |
| CNG promissory note | 718,844 | — | 233,807 | 485,037 | 239,837 |
| Net OPEB liability | 181,538,620 | — | 62,297,837 | 119,240,783 | — |
| Net pension liability | 39,575,011 | 45,981,549 | — | 85,556,560 | — |
| Self-insured risks | 2,546,508 | 3,138,665 | 3,084,479 | 2,600,694 | 2,299,190 |
| Other accrued expenses | 8,287,534 | 5,696,470 | 6,052,525 | 7,931,479 | 5,671,008 |
| | $ 457,230,012 | 126,451,070 | 83,137,637 | 500,543,445 | 20,901,727 |

### *(a) Water Revenue Bonds*

**Water Revenue Bonds Series 2012**

On December 17, 2012, the District issued Water Revenue Bonds Series 2012 for a par value of $40,745,000. The balance, annual installments, and interest rates at December 31, 2019 and 2018 consist of:

| | Interest rate | | Annual installment | Principal outstanding 2019 | Principal outstanding 2018 |
|---|---|---|---|---|---|
| Series 2012 bonds: | | | | | |
| Serial | 2.000% - 4.000% | $ | 1,185,000 - 2,335,000 | 16,620,000 | 18,420,000 |
| Term | 3.0 | | 2,455,000 - 2,865,000 | 13,275,000 | 13,275,000 |

The Water Revenue Bonds Series 2012 are subject to optional redemption prior to maturity on and after December 15, 2022. Principal and interest payments are as follows:

| | | Principal | Interest | Total |
|---|---|---|---|---|
| 2020 | $ | 1,860,000 | 1,040,694 | 2,900,694 |
| 2021 | | 1,925,000 | 966,293 | 2,891,293 |
| 2022 | | 1,970,000 | 908,544 | 2,878,544 |
| 2023 | | 2,020,000 | 849,444 | 2,869,444 |
| 2024 | | 2,095,000 | 768,644 | 2,863,644 |
| 2025 – 2029 | | 11,755,000 | 2,544,100 | 14,299,100 |
| 2030 – 2032 | | 8,270,000 | 523,594 | 8,793,594 |
| | $ | 29,895,000 | 7,601,313 | 37,496,313 |

The indenture, under which the revenue bonds were issued, provides for the creation and maintenance of certain funds. These cash and cash equivalents are classified as restricted on the statement of net position. The District has pledged future water revenues to repay the Water Revenue Bonds Series 2012. Proceeds from the bonds were used to finance a portion of the costs of improvements to the District's Water System including multiple projects undertaken to upgrade the District's Platte South Plant and Florence Plant in part to comply with current regulatory requirements. The Water Revenue Bonds Series 2012 are payable solely from water revenues and are payable through 2032. Principal and interest payments of $1,800,000 and $1,112,694, respectively, were paid on these bonds in 2019. Principal and interest payments of $1,735,000 and $1,182,094, respectively, were paid on these bonds in 2018. Total water revenues for the year ended December 31, 2019 and 2018 were $121,508,080 and $119,952,618 respectively.

**Water Revenue Bonds Series 2015**

On December 8, 2015, the District issued Water System Improvement and Refunding Revenue Bonds, Series 2015 (the 2015 Bonds) for a par value of $188,895,000. The 2015 Bonds were issued for the purpose of financing a portion of the costs of improvements to the District's Water System including multiple projects undertaken to upgrade the District's Florence Water Treatment Plant, and to refund $153,780,000 aggregate principal amount of the District's outstanding 2006A Bonds and 2006B Bonds.

The indenture, under which the revenue bonds were issued, provides for the creation and maintenance of certain funds. These cash and cash equivalents are classified as restricted on the statement of net position. The District has pledged future water revenues to repay the 2015 Bonds. The 2015 Bonds are payable solely from water revenues and are payable through 2035. Principal and interest payments of $8,320,000 and $6,563,005, respectively, were paid on these bonds in 2019. Principal and interest payments of $7,915,000 and $6,958,755, respectively, were paid on these bonds in 2018. Total water revenues for the year ended December 31, 2019 and 2018 were $121,508,080 and $119,952,618, respectively.

The balance, annual installments, and interest rates at December 31, 2019 and 2018 consist of:

| | Interest rate | Annual installment | Principal outstanding 2019 | Principal outstanding 2018 |
|---|---|---|---|---|
| Series 2015 bonds: | | | | |
| Serial | 2.850% - 5.000% | $ 7,330,000 - 14,115,000 | 149,980,000 | 158,300,000 |
| Term | 3.500 | 2,520,000 - 2,695,000 | 7,820,000 | 7,820,000 |

The Water Revenue Bonds Series 2015 are subject to optional redemption prior to maturity on and after December 1, 2025. Principal and interest payments are as follows:

| | Principal | Interest | Total |
|---|---|---|---|
| 2020 | $ 8,750,000 | 6,147,005 | 14,897,005 |
| 2021 | 9,200,000 | 5,709,505 | 14,909,505 |
| 2022 | 9,665,000 | 5,249,505 | 14,914,505 |
| 2023 | 10,155,000 | 4,766,255 | 14,921,255 |
| 2024 | 10,680,000 | 4,258,505 | 14,938,505 |
| 2025 – 2029 | 60,470,000 | 14,219,370 | 74,689,370 |
| 2030 – 2034 | 46,185,000 | 3,996,878 | 50,181,878 |
| 2035 | 2,695,000 | 94,325 | 2,789,325 |
| | $ 157,800,000 | 44,441,348 | 202,241,348 |

**Water Revenue Bonds Series 2018**

On September 27, 2018, the District issued Water System Revenue Bonds, Series 2018 (the 2018 Water Bonds) for a par value of $37,390,000. The 2018 Water Bonds were issued for the purpose of financing a portion of the costs of improvements to the District's Water System including multiple projects undertaken to upgrade the District's Florence Water Treatment Plant and other improvements to the District's Water System.

The indenture, under which the revenue bonds were issued, provides for the creation and maintenance of certain funds. These cash and cash equivalents are classified as restricted on the statement of net position. The remaining net proceeds from the 2018 Water Bonds will be used to finance a portion of the costs to improve the District's Florence Water Treatment Plant.

The District has pledged future water revenues to repay the 2018 Water Bonds. The 2018 Water Bonds are payable solely from water revenues and are payable through 2038. Principal and interest payments of $1,255,000 and $1,374,969, respectively, were paid on these bonds in 2019. Interest payments of $244,439 were paid on these bonds in 2018. Total water revenues for the year ended December 31, 2019 and 2018 were $121,508,080 and $119,952,618, respectively.

The balance, annual installments, and interest rates at December 31, 2019 and 2018 consist of:

| | Interest rate | Annual installment | Principal outstanding 2019 | 2018 |
|---|---|---|---|---|
| Series 2018 bonds: | | | | |
| Serial | 2.500% - 5.000% | $ 1,255,000 - 2,540,000 | 36,135,000 | 37,390,000 |

The Water Revenue Bonds Series 2018 are subject to optional redemption prior to maturity on and after December 1, 2025. Principal and interest payments are as follows:

| | Principal | Interest | Total |
|---|---|---|---|
| 2020 | $ 1,315,000 | 1,312,219 | 2,627,219 |
| 2021 | 1,355,000 | 1,272,769 | 2,627,769 |
| 2022 | 1,425,000 | 1,205,019 | 2,630,019 |
| 2023 | 1,495,000 | 1,133,769 | 2,628,769 |
| 2024 | 1,570,000 | 1,059,019 | 2,629,019 |
| 2025 – 2029 | 8,855,000 | 4,287,244 | 13,142,244 |
| 2030 – 2034 | 10,435,000 | 2,703,412 | 13,138,412 |
| 2035 – 2038 | 9,685,000 | 827,537 | 10,512,537 |
| | $ 36,135,000 | 13,800,988 | 49,935,988 |

**Series 2012, Series 2015 and Series 2018 Debt Service Requirements**

The total principal and interest payments for the Series 2012, 2015 and 2018 water revenue bonds are as follows:

| | | Principal | Interest | Total |
|---|---|---|---|---|
| 2020 | $ | 11,925,000 | 8,499,918 | 20,424,918 |
| 2021 | | 12,480,000 | 7,948,567 | 20,428,567 |
| 2022 | | 13,060,000 | 7,363,068 | 20,423,068 |
| 2023 | | 13,670,000 | 6,749,468 | 20,419,468 |
| 2024 | | 14,345,000 | 6,086,168 | 20,431,168 |
| 2025 – 2029 | | 81,080,000 | 21,050,714 | 102,130,714 |
| 2030 – 2034 | | 64,890,000 | 7,223,884 | 72,113,884 |
| 2035 – 2038 | | 12,380,000 | 921,862 | 13,301,862 |
| | $ | 223,830,000 | 65,843,649 | 289,673,649 |

**Series 2012, Series 2015 and Series 2018 Debt Covenant Compliance**

At December 31, 2019, the District was in compliance with the provisions of the Series 2012, 2015 and 2018 water revenue bond covenants. The District covenants that it will fix, establish, and maintain rates or charges for water, services, or facilities supplied or furnished by the District that will provide an amount sufficient to pay current expenses and to generate net revenue at least equal to the sum of: (a) 120% of the amount equal to the average principal and interest requirements on the bonds, including any parity revenue bonds, then Outstanding; and (b) 100% of the amount required to pay any other unpaid long-term obligations (excluding current expenses) and any other unpaid indebtedness of the District (including any amounts required to be accumulated and maintained as reserves therefore) that are payable from system revenues, as the same shall become due.

Charges and assessments exceeded amounts required by covenants by approximately $21.9 million for 2019; funds available for debt service were equal to 2.6 times average debt service costs in 2019.

**Series 2012, Series 2015 and Series 2018 Remedies for Default**

The Series 2012, 2015 and 2018 water revenue bond agreements contain a provision that in an event of default, outstanding amounts become immediately due if the District is unable to make payment.

### *(b) Gas Revenue Bonds*

**Gas Revenue Bonds Series 2018**

On June 28, 2018, the District issued Gas System Revenue Bonds, Series 2018 (the 2018 Gas Bonds) for a par value of $31,605,000. The 2018 Gas Bonds were issued for the purpose of financing a portion of the costs of improvements to the District's Gas System, including replacement of cast iron gas mains throughout the District's service area and infrastructure improvements to the Gas System.

The indenture, under which the revenue bonds were issued, provides for the creation and maintenance of certain funds. These cash and cash equivalents are classified as restricted on the statement of net position.

The District has pledged future gas revenues to repay the 2018 Gas Bonds. The 2018 Gas Bonds are payable solely from gas revenues and are payable through 2038. Principal and interest payments of $1,040,000 and $1,205,429, respectively, were paid on these bonds in 2019. Interest payments of $512,307 were paid on these bonds in 2018. Total gas revenues for the year ended December 31, 2019 and 2018 was $223,880,699 and $238,088,826, respectively.

The balance, annual installments, and interest rates at December 31, 2019 and 2018 consist of:

| | Interest rate | | Annual installment | Principal outstanding 2019 | 2018 |
|---|---|---|---|---|---|
| Series 2018 bonds: | | | | | |
| Serial | 2.750% - 5.000% | $ | 1,040,000 - 2,175,000 | 21,160,000 | 22,200,000 |
| Term | 3.500% - 4.000% | $ | 1,650,000 - 2,095,000 | 9,405,000 | 9,405,000 |

The Gas Revenue Bonds Series 2018 are subject to optional redemption prior to maturity on and after December 1, 2024. Principal and interest payments are as follows:

| | | Principal | Interest | Total |
|---|---|---|---|---|
| 2020 | $ | 1,095,000 | 1,153,429 | 2,248,429 |
| 2021 | | 1,150,000 | 1,098,679 | 2,248,679 |
| 2022 | | 1,205,000 | 1,041,179 | 2,246,179 |
| 2023 | | 1,265,000 | 980,929 | 2,245,929 |
| 2024 | | 1,330,000 | 917,679 | 2,247,679 |
| 2025 – 2029 | | 7,475,000 | 3,760,669 | 11,235,669 |
| 2030 – 2034 | | 8,825,000 | 2,414,196 | 11,239,196 |
| 2035 – 2038 | | 8,220,000 | 772,750 | 8,992,750 |
| | $ | 30,565,000 | 12,139,510 | 42,704,510 |

**Series 2018 Debt Covenant Compliance**

At December 31, 2019, the District was in compliance with the provisions of the Series 2018 gas revenue bond covenants. The District covenants that it will fix, establish, and maintain rates or charges for gas, services, or facilities supplied or furnished by the District that will provide an amount sufficient to pay current expenses and to generate net revenue at least equal to the sum of: (a) 120% of the amount equal to the average principal and interest requirements on the bonds, including any parity revenue bonds, then Outstanding; and (b) 100% of the amount required to pay any other unpaid long-term obligations (excluding current expenses) and any other unpaid indebtedness of the District (including any amounts required to be accumulated and maintained as reserves therefore) that are payable from system revenues, as the same shall become due.

Charges and assessments exceeded amounts required by covenants by approximately $52.1 million for 2019; funds available for debt service were equal to 24.4 times average debt service costs in 2019.

**Series 2018 Remedies for Default**

The Series 2018 gas revenue bond agreement contains a provision that in an event of default, outstanding amounts become immediately due if the District is unable to make payment.

***(c) Direct Borrowings and Direct Placements***

**NDEQ Note Payable**

Included in long-term debt in the Water Department is a note payable, bearing a 2% interest rate, to the Nebraska Department of Environmental Quality (NDEQ). This note payable relates to construction of the Platte South contact basin project. The District's loan agreement was based on a budgeted project cost of $7,049,000; if actual project costs equal budget, the agreement results in a loan amount of $5,959,225 with the NDEQ, and principal forgiveness of $1,089,775, in the form of a grant. The Platte South contact basin project was completed in late 2012, with total direct project costs of $6,886,837, resulting in total committed loan funds of $5,797,062.

The District has pledged future water revenues to repay this note payable. The lien of NDEQ on the water revenues is subordinate to the lien on such revenues of the District's water revenue bonds.

This note payable contains a provision that in the event of default on the part of the District, all unpaid amounts outstanding are due and payable immediately. The District must also pay reasonable fees and expenses incurred by the NDEQ in the collection of the loan and enforcement of the agreement.

During 2019 and 2018, the District paid back $276,692 and 271,240, respectively, as principal. The note payable requirements to maturity, June 15, 2031, for the NDEQ note payable are as follows:

| | | Principal | Interest | Administrative fee | Total |
|---|---|---|---|---|---|
| 2020 | $ | 282,254 | 70,808 | 35,404 | 388,466 |
| 2021 | | 287,927 | 65,135 | 32,567 | 385,629 |
| 2022 | | 293,715 | 59,347 | 29,674 | 382,736 |
| 2023 | | 299,618 | 53,443 | 26,722 | 379,783 |
| 2024 | | 305,641 | 47,421 | 23,711 | 376,773 |
| 2025-2029 | | 1,622,861 | 142,447 | 71,224 | 1,836,532 |
| 2030-2031 | | 518,581 | 10,400 | 5,200 | 534,181 |
| | $ | 3,610,597 | 449,001 | 224,502 | 4,284,100 |

**CNG Promissory Note**

The District's Gas Department entered into a Business Loan Agreement on December 16, 2010 for $2,200,300. This loan is a low-interest loan obtained from the Nebraska Energy Office and its lending partner. This loan matures December 15, 2020 and the interest rate is fixed at 2.5%.

This note payable contains a provision that in the event of default on the part of the District, all unpaid amounts outstanding are due and payable immediately. The District must also pay reasonable fees and expenses incurred by the lender in the collection of the loan and enforcement of the agreement.

Principal and interest payments for the CNG promissory note are as follows:

| | | Principal | Interest | Total |
|---|---|---|---|---|
| 2020 | $ | 245,235 | 3,371 | 248,606 |

## (6) Line of Credit

The District has an unsecured line of credit for $30,000,000. The current Loan Agreement matures June 1, 2021. The interest rate on the line of credit is variable and is calculated based on the "One Month London Interbank Offered Rate (LIBOR)" plus 50 basis points. As of December 31, 2019, the interest rate was 2.30% and no amount was outstanding. The District did not draw on the line of credit during 2019 or 2018.

## (7) Defined-Benefit Pension Plan

### General Information about the Pension Plan

#### *(a) Plan Description*

The District sponsors the Retirement Plan for Employees of the Metropolitan Utilities District of Omaha (the Plan) for all regular full-time employees of the Water and Gas Departments. The Plan is a single-employer defined benefit pension plan administered by the District. The Plan was established and may be amended only by the Board. The Plan is not subject to either minimum funding standards of the Employee Retirement Income Security Act of 1974 or the maximum funding limitations. The District does not issue a separate report that includes financial statements and required supplementary information for the Plan.

The Board has fiduciary responsibility for the Plan along with Vanguard Institutional Advisory Services, who serves in the role of discretionary asset manager/co-fiduciary. The Board consists of seven directors, elected by the District's customer-owners. Administrative responsibility for the Plan has been delegated to the Board's Insurance and Pension Committee, which consists of three Board members who are appointed by the full Board. The Committee's decisions and direction are implemented by the Management Pension Committee, comprised of the following District employees: the President, the Chief Financial Officer, the General Counsel and the Vice President of Accounting.

#### *(b) Benefits Provided*

The Plan provides retirement, disability (in the form of continued credited service), death, and termination benefits. An employee of the District is eligible for coverage at the time of employment. Vesting is achieved upon the completion of five years of service. Normal retirement age is 60 with 5 years of service. Retirement benefits are calculated using the average compensation for the highest paid 24 consecutive months out of the most recent 120 months, multiplied by the total years of service and the formula factor of 2.15% for the first 25 years of service, 1.00% for the next 10 years of service and 0.50% for each year of service above 35. The benefit amount is reduced under early retirement which is available at age 55 and 5 years of service.

Benefit terms provide for cost-of-living adjustments to each employee's retirement allowance subsequent to the employee's retirement date. Adjustments are made, if warranted, each January 1 and July 1 based on the increase in the Consumer Price Index of Urban Wage Earners and Clerical Workers. The annual increase in the member's benefit cannot exceed 3.00%, and adjustments cannot be negative.

### *(c) Employees Covered by Benefit Terms*

As of January 1, 2019, membership of the Plan consisted of the following:

| | |
|---|---|
| Inactive members or their beneficiaries currently receiving benefits | 656 |
| Disabled members | 22 |
| Inactive members entitled to but not yet receiving benefits | 42 |
| Inactive non-vested members | 4 |
| Active members | 792 |
| Total | 1,516 |

### *(d) Contributions*

Benefit and contribution provisions are established by and may be amended only by the Board. The contribution rate for certain employees is established by a collective bargaining agreement. The Board sets the contribution rates for employees who are not covered by the collective bargaining agreement. An actuarial valuation is performed each year to determine the actuarial required contribution, based on the funding goals set by the Board, which is then contributed by the District. The District's policy is to contribute amounts approved in the annual budget, which are generally greater than or equal to the actuarially determined annual required contribution. At times, the District has contributed in excess of the full annual required contribution.

For calendar year 2019, each member contributed 7.0% of pensionable earnings, as provided by the collective bargaining agreement approved by the Board in March 2018 and effective for April 1, 2018 through March 31, 2023. There are additional increases to the employee pension contributions effective January 1 of each year: 7.5% in 2020, 8.0% in 2021, 8.5% in 2022 and 9.0% in 2023. The contribution rate for employees not covered by the collective bargaining agreement increased to 7.00% on January 1, 2019 and is expected to align with the rates stated in the collective bargaining agreement through 2023. District contributions to the Plan totaled $12,300,000 and $11,606,179 for the fiscal years ending December 31, 2019 and 2018, respectively.

**Pension Plan Fiduciary Net Position**

Financial information about the pension plan's fiduciary net position and the changes in fiduciary net position for the year ended December 31, 2019 are as follows:

Statements of Plan Fiduciary Net Position at December 31, 2019 and 2018

| | | 2019 | 2018 |
|---|---|---|---|
| Assets | | | |
| Cash and cash equivalents | $ | 1,693,223 | 1,601,105 |
| Investments at fair value | | | |
| Mutual funds: | | | |
| Fixed income funds | | 142,203,573 | 129,382,864 |
| Domestic equity funds | | 199,638,211 | 158,710,068 |
| International equity funds | | 108,545,692 | 88,516,853 |
| Total investments | | 450,387,476 | 376,609,785 |
| Total assets | | 452,080,699 | 378,210,890 |
| Net position restricted for pensions | $ | 452,080,699 | 378,210,890 |

Statements of Changes in the Fiduciary Net Position
for the Years Ended December 31, 2019 and 2108

| | | 2019 | 2018 |
|---|---|---|---|
| Additions: | | | |
| Employer contributions | $ | 12,300,000 | 11,606,179 |
| Employee contributions | | 4,413,137 | 3,805,373 |
| Total contributions | | 16,713,137 | 15,411,552 |
| Net investment income (loss) | | 78,431,581 | (20,727,828) |
| Total additions | | 95,144,718 | (5,316,276) |
| Deductions: | | | |
| Service benefits | | 21,204,786 | 19,116,693 |
| Administrative expenses | | 70,123 | 94,940 |
| Total deductions | | 21,274,909 | 19,211,633 |
| Net increase (decrease) | | 73,869,809 | (24,527,909) |
| Net position restricted for pensions: | | | |
| Beginning of year | | 378,210,890 | 402,738,799 |
| End of year | $ | 452,080,699 | 378,210,890 |

**Net Pension Liability**

All of the District's pension assets are available to pay member's benefit. The net pension liability as of December 31, 2019 and 2018 was as follows:

| | | 2019 | 2018 |
|---|---|---|---|
| Total pension liability | $ | 493,473,173 | 463,767,450 |
| Fiduciary net position | | 452,080,699 | 378,210,890 |
| Net pension liability | | 41,392,474 | 85,556,560 |
| Fiduciary net position as a % of total pension liability | | 91.61% | 81.55% |
| Covered payroll | $ | 63,272,421 | 62,865,829 |
| Net pension liability as a % of covered payroll | | 65.42% | 136.09% |

### *(a) Actuarial Assumptions*

The District's net pension liability was measured as of December 31, 2019, and the total pension liability used to calculate the net pension liability was determined based on an actuarial valuation prepared as of January 1, 2019, but using the new long-term rate of return assumption adopted by the Board in November 2019, rolled forward one year to December 31, 2019.

The total pension liability was determined using the following actuarial assumptions:

| | |
|---|---|
| Inflation | 2.60% |
| Salary increases, including inflation | 4% to 11% |
| Long-term investment rate of return, net of pension plan investment expenses, including inflation | 6.90% |
| Cost-of-living adjustment | 2.60% |

Mortality rates for employees and healthy annuitants were based on the RP-2014 Total Dataset Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016.

Mortality rates for disabled annuitants were based on the RP-2014 Disabled Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016.

The long-term expected rate of return on pension plan investments is reviewed as part of the regular experience study prepared for the Plan. The results of the most recent experience study were presented in a report dated August 2, 2017. In November 2019, the Board adopted a revision to the Investment Policy Statement, including lowering the long-term investment return assumption to 6.90%. The lower expected return will be implemented in the January 1, 2020 actuarial valuation and, therefore, is used to develop the December 31, 2019 total pension liability. Several factors are considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and an analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation), along with estimates of variability and correlations for each asset class, were developed by the Plan's investment consultant. These ranges were combined to develop the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The assumed long-term rate of return is intended to be a long-term assumption (50 years) and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

Projected future benefit payments for all current plan members were projected through 2118.

The target asset allocation and best estimate of geometric real rates of return for each major asset class are summarized in the following table:

| Asset Class | Target Allocation | Long-Term Expected Real Rate of Return |
|---|---|---|
| Domestic (U.S.) equities | 40.0 % | 6.3 % |
| International (Non-U.S.) equities | 20.0 | 6.9 |
| U.S. aggregate bonds | 15.0 | 1.2 |
| International bonds | 3.0 | 0.8 |
| Intermediate term credit | 11.0 | 1.9 |
| Short term credit | 3.0 | 1.7 |
| REITS | 8.0 | 4.6 |
| Total | 100.0 % | |

### (b) *Discount Rate*

The discount rate used to measure the total pension liability at December 31, 2019 was 6.90%. The discount rate used to measure total pension liability at the prior measurement date was 7.00%. The projection of cash flows used to determine the discount rate assumed the plan contributions from members and the District will be made at the current contribution rates as set out in the labor agreements in effect on the measurement date:

a. Employee contribution rate: 7.00% of pensionable earnings for all employees, as provided by the collective bargaining agreement approved by the Board in March 2018 and effective for April 1, 2018 through March 31, 2023. There are additional increases to the employee pension contributions effective January 1 of each year: 7.50% in 2020, 8.00% in 2021, 8.50% in 2022 and 9.00% in 2023. The contribution rate for employees not covered by the collective bargaining agreement also increased to 7.00% on January 1, 2019 and is expected to align with the rates stated in the collective bargaining agreement through 2023.

b. District contribution: The actuarial contribution rate less the employee contribution rate times expected pensionable payroll for the plan year.

c. Administrative expenses in the prior year were projected forward with price inflation as an estimate for administrative expenses in current and future years. The portion of expenses in future years allocated to the current members was based on the proportionate share of covered payroll in each year for the remainder of the existing members to the total covered payroll for all members.

Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current Plan members. Therefore, the long-term expected rate of return on Plan investments of 6.90% was applied to all periods of projected benefit payments to determine the total pension liability.

### *(c) Sensitivity of the Net Pension Liability to Changes in the Discount Rate*

The following presents the net pension liability (asset) of the District as of December 31, 2019, calculated using the discount rate of 6.90%, as well as the District's net pension liability (asset) calculated using a discount rate that is 1 percentage point lower (5.90%) or 1 percentage point higher (7.90%) than the current rate:

| | | **1% Decrease (5.90%)** | **Current Discount Rate (6.90%)** | **1% Increase (7.90%)** |
|---|---|---|---|---|
| 2019 | $ | 105,061,039 | 41,392,474 | (11,772,866) |

The following presents the net pension liability of the District as of December 31, 2018, calculated using the discount rate of 7.00%, as well as the District's net pension liability calculated using a discount rate that is 1 percentage point lower (6.00%) or 1 percentage point higher (8.00%) than the discount rate used as of December 31, 2018:

| | | **1% Decrease (6.00%)** | **Current Discount Rate (7.00%)** | **1% Increase (8.00%)** |
|---|---|---|---|---|
| 2018 | $ | 145,675,973 | 85,556,560 | 35,293,141 |

### *(d) Changes in Net Pension Liability*

| | | Increases (Decreases) | | |
|---|---|---|---|---|
| | | **Total Pension Liability (a)** | **Plan Fiduciary Net Position (b)** | **Net Pension Liability (a) - (b)** |
| **Balances at December 31, 2017** | $ | 442,313,810 | 402,738,799 | 39,575,011 |
| **Changes for the year:** | | | | |
| Service cost | | 11,863,654 | - | 11,863,654 |
| Interest on total pension liability | | 30,304,199 | - | 30,304,199 |
| Differences between expected and actual experience | | (1,597,520) | - | (1,597,520) |
| Employer contributions | | - | 11,606,179 | (11,606,179) |
| Employee contributions | | - | 3,805,373 | (3,805,373) |
| Net investment loss | | - | (20,727,828) | 20,727,828 |
| Benefit payments, including member refunds | | (19,116,693) | (19,116,693) | - |
| Administrative expenses | | - | (94,940) | 94,940 |
| **Net changes** | | 21,453,640 | (24,527,909) | 45,981,549 |
| **Balances at December 31, 2018** | $ | 463,767,450 | 378,210,890 | 85,556,560 |
| **Changes for the year:** | | | | |
| Service cost | | 11,710,809 | - | 11,710,809 |
| Interest on total pension liability | | 31,734,106 | - | 31,734,106 |
| Differences between expected and actual experience | | 1,714,570 | - | 1,714,570 |
| Assumption changes | | 5,751,024 | - | 5,751,024 |
| Employer contributions | | - | 12,300,000 | (12,300,000) |
| Employee contributions | | - | 4,413,137 | (4,413,137) |
| Net investment loss | | - | 78,431,581 | (78,431,581) |
| Benefit payments, including member refunds | | (21,204,786) | (21,204,786) | - |
| Administrative expenses | | - | (70,123) | 70,123 |
| **Net changes** | | 29,705,723 | 73,869,809 | (44,164,086) |
| **Balances at December 31, 2019** | $ | 493,473,173 | 452,080,699 | 41,392,474 |

**Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions**

The District recognized pension expense of $12,378,601 and $19,215,382 for the year ended December 31, 2019 and 2018, respectively.

At December 31, 2019, the District reported deferred outflows of resources and deferred inflows of resources related to the Plan from the following sources:

| | | Deferred Outflows of Resources | Deferred Inflows of Resources |
|---|---|---|---|
| Differences between expected and actual experience | $ | - | 3,491,372 |
| Changes of assumptions | | 9,574,565 | — |
| Differences between projected and actual earnings on pension plan investments | | - | 23,739,242 |
| Total | $ | 9,574,565 | 27,230,614 |

At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to the Plan from the following sources:

| | | Deferred Outflows of Resources | Deferred Inflows of Resources |
|---|---|---|---|
| Differences between expected and actual experience | $ | - | 6,297,810 |
| Changes of assumptions | | 6,068,849 | — |
| Differences between projected and actual earnings on pension plan investments | | 26,815,599 | - |
| Total | $ | 32,884,448 | 6,297,810 |

The net amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future years as follows:

| Year ended December 31: | | Net Deferred Outflows/(Inflows) of Resources |
|---|---|---|
| 2020 | $ | (5,363,496) |
| 2021 | | (4,981,112) |
| 2022 | | 523,006 |
| 2023 | | (9,217,963) |
| 2024 | | 1,107,902 |
| Thereafter | | 275,614 |
| | $ | (17,656,049) |

## (8) Postemployment Benefits

### General Information about the OPEB Plan

#### *(a) Plan Description*

The District sponsors the Postretirement Benefits for Employees of the Metropolitan Utilities District of Omaha (OPEB Plan). The Plan is a single employer defined benefit health care plan administered by the District. The OPEB Plan provides certain postemployment healthcare and life insurance benefits to eligible retirees and their spouses in accordance with provisions established by the Board. An employee is eligible to elect medical coverage upon retiring. Eligibility for retirement requires attaining age 55 with five years of service. For employees covered by the collective bargaining agreement, and hired on or after September 28, 2013, coverage ceases at age 65. For employees not covered by the collective bargaining agreement hired after January 1, 2014, coverage ceases at age 65. The OPEB Plan was established and may be amended only by the Board. The plan does not issue separate financial statements.

The Board has fiduciary responsibility for the OPEB Plan along with Vanguard Institutional Advisory Services, who serves in the role of discretionary asset manager/co-fiduciary. The Board consists of seven directors, elected by the District's customer-owners. Administrative responsibility for the OPEB Plan has been delegated to the Board's Insurance and Pension Committee, which consists of three Board members who are appointed by the full Board. The Committee's decisions and direction are implemented by the Management Pension Committee, comprised of the following District employees: the President, the Chief Financial Officer, the General Counsel and the Vice President of Accounting.

### *(b) Plan Membership*

As of January 1, 2019, the date of the latest actuarial valuation, membership of the OPEB Plan consisted of the following:

| | |
|---|---|
| Inactive members or their beneficiaries currently receiving benefits | 780 |
| Active members | 792 |
| Total | 1,572 |

### *(c) Contributions*

The contribution requirements of plan members and the District are established and can be amended by the Board. Contributions are made to the plan based on a pay-as-you-go basis, with an additional amount to prefund benefits through an OPEB trust created in 2016, as determined annually by the Board. For the years ended December 31, 2019 and 2018, the following payments were made:

| | 2019 | 2018 |
|---|---|---|
| Water retirees | $ 2,833,946 | $ 2,825,204 |
| Gas retirees | 3,463,712 | 3,453,027 |
| Total claims/fees paid | $ 6,297,658 | $ 6,278,231 |
| Prefunded benefits | 10,375,210 | 12,450,255 |
| Retiree contributions | (2,418,501) | (2,024,466) |
| Total | $ 14,254,367 | $ 16,704,020 |

Retiree health premiums are calculated based on a three-year rolling average, with 2019 projected costs serving as the final year of the calculation when determining premiums that went into effect April 1, 2019. Retirees contribute to the cost of retiree health care at varying rates based on their age, as follows: 1) ages 59 and older: 33% of the full premium, 2) age 58: 50% of the full premium and 3) ages 55 through 57: 100% of the full premium. The rates in effect as of April 1, 2019 are as follows: 1) ages 59 and older: $244.72 per month, 2) age 58: $367.08 per month and 3) ages 55 through 57: $734.17 per month. If spousal coverage is purchased, the same age-based monthly rates apply based on the retiree's age, meaning that the cost for spousal coverage is the same as the cost for the retiree's coverage (i.e. in the case of a married couple comprised of a retiree who is 59 and a spouse who is 55; each would pay $244.72 per month).

## OPEB Plan Fiduciary Net Position

Financial information about the OPEB plan's fiduciary net position and the changes in fiduciary net position for the years ended December 31, 2019 and 2018 are as follows:

Statements of Plan Fiduciary Net Position at December 31, 2019 and 2018

| | 2019 | 2018 |
|---|---|---|
| Assets | | |
| Investments at fair value | | |
| Mutual funds: | | |
| Fixed income funds | $ 10,084,389 | 6,409,422 |
| Domestic equity funds | 20,105,749 | 11,346,023 |
| International equity funds | 11,159,239 | 6,680,442 |
| Total investments | 41,349,377 | 24,435,887 |
| Total assets | 41,349,377 | 24,435,887 |
| Net position restricted for other postemployment benefits | $ 41,349,377 | 24,435,887 |

Statements of Changes in the Fiduciary Net Position
For the Years Ended December 31, 2019 and 2018

| | 2019 | 2018 |
|---|---|---|
| Additions: | | |
| Employer contributions | $ 10,375,210 | 12,450,255 |
| Net investment income (loss) | 6,541,647 | (1,616,178) |
| Total additions | 16,916,857 | 10,834,077 |
| Deductions: | | |
| Administrative expenses | 3,367 | 3,194 |
| Total deductions | 3,367 | 3,194 |
| Net increase | 16,913,490 | 10,830,883 |
| Net position restricted for other postemployment benefits: | | |
| Beginning of year | 24,435,887 | 13,605,004 |
| End of year | $ 41,349,377 | 24,435,887 |

**Net OPEB Liability**

The net OPEB liability as of December 31, 2019 and 2018 was as follows:

| | | 2019 | 2018 |
|---|---|---|---|
| Total OPEB liability | $ | 143,675,315 | 143,676,670 |
| Fiduciary net position | | 41,349,377 | 24,435,887 |
| Net OPEB liability | | 102,325,938 | 119,240,783 |
| Fiduciary net position as a % of total OPEB liability | | 28.78% | 17.01% |

### *(a) Actuarial Assumptions*

The District's net OPEB liability was measured as of December 31, 2019, and the total OPEB liability used to calculate the net OPEB liability was determined based on an actuarial valuation prepared as of January 1, 2019 rolled forward using standard actuarial techniques to December 31, 2019.

The total OPEB liability was determined using the following actuarial assumptions:

| | |
|---|---|
| Inflation | 2.60% |
| Salary increases, including inflation | 4% to 11% |
| Long-term investment rate of return, net of OPEB plan investment expenses, including inflation | 6.90% |
| Healthcare cost trend rates: | |
| Medical trend assumptions (under age 65) | 7.00% - 4.60% |
| Medical trend assumptions (Ages 65 and older) | 5.00% - 4.60% |
| Year of ultimate trend rate | Fiscal Year Ended 2026 |

Pre-retirement and post-retirement mortality rates were based on the RP-2014 Total Dataset Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016.

Post-retirement mortality rates were based on the RP-2014 adjusted to 2006 Total Dataset Mortality Table with Female rates set forward one year – Generational with Projected Improvements under Scale MP-201.

Disability mortality rates were based on the RP-2014 Disabled Retiree Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016.

The actuarial assumptions used in the valuation are based on the results of the most recent actuarial experience study, which covered the four-year period ending December 31, 2016.

Several factors are considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed by the investment consultant for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The assumed long-term rate of return is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The following actuarial assumptions and methods used for measuring total OPEB liability were changed since the prior measurement date:

- The discount rate was decreased from 7.00% to 6.90%.
- The spousal coverage assumption was changed from 75% to 65%.
- Health care cost trend rates and assumed withdrawal rates were updated.

The target asset allocation and best estimate of geometric real rates of return for each major asset class are summarized in the following table:

| Asset Class | Target Allocation | Long-Term Expected Real Rate of Return |
|---|---|---|
| Domestic (U.S.) equities | 40.0 % | 6.8 % |
| International (Non-U.S.) equities | 27.0 | 8.9 |
| U.S. aggregate bonds | 11.0 | 2.5 |
| International bonds | 3.0 | 2.8 |
| Intermediate term credit | 9.0 | 4.0 |
| Short term credit | 2.0 | 3.8 |
| Intermediate term TIPS | 0.0 | 2.8 |
| REITS | 8.0 | 5.9 |
| Total | 100.0 % | |

### *(b) Discount Rate*

The discount rate used to measure the total OPEB liability at December 31, 2019 was 6.90%. The projection of cash flows used to determine the discount rate was based on an actuarial valuation performed as of January 1, 2019 with some adjusted assumptions regarding election of coverage. In addition to the actuarial methods and assumptions, the following actuarial methods and assumptions were used in the projection of cash flows:

a. The District is currently paying benefits on a pay-as-you-go basis and has established a trust to pay future benefits. The trust is still growing and has not yet begun to pay benefit payments. The long-term intent is to eventually pay benefits from the trust.

b. Based on the funding policy adopted on August 1, 2018, the District intends to contribute, at a minimum, the Actuarially Determined Contribution (ADC) for all years beginning in 2019. The ADC is calculated under funding assumptions, not under GASB 74 or GASB 75 assumptions. There is a separate January 1, 2019 funding report, issued November 12, 2019, that describes the assumptions and methods used to determine the ADC.

c. Because there is a formal funding policy, the amount contributed in future years follows the funding policy: 100% of the ADC.

d. Administrative expenses in the prior year were projected forward with price inflation as an estimate for administrative expenses in current and future years. The portion of expenses in future years allocated to the current members was based on the proportionate share of covered payroll in each year for the remainder of the existing members to the total covered payroll for all members.

e. Projected future payments for all current plan members were projected into the future.

Based on these assumptions, the plan's FNP was not projected to be depleted and, as a result, the Municipal Bond Index Rate was not used in the determination of a single equivalent interest rate (SEIR). The long-term expected rate of return of 6.90% on Plan investments was applied to all periods, resulting in a SEIR of 6.90%.

### *(c) Sensitivity of the Net OPEB Liability to Changes in the Discount Rate*

The following presents the net OPEB liability of the District as of December 31, 2019, calculated using the discount rate of 6.90%, as well as the District's net OPEB liability calculated using a discount rate that is 1 percentage point lower (5.90%) or 1 percentage point higher (7.90%) than the current rate:

| **2019** | | **1% Decrease (5.90%)** | **Discount Rate (6.90%)** | **1% Increase (7.90%)** |
|---|---|---|---|---|
| Net OPEB Liability | $ | 122,296,249 | 102,325,938 | 85,954,720 |

The following presents the net OPEB liability of the District, calculated using the discount rate of 7.00%, as well as the District's net OPEB liability calculated using a discount rate that is 1 percentage point lower (6.00%) or 1 percentage point higher (8.00%) than the current rate:

| **2018** | | **1% Decrease (6.00%)** | **Discount Rate (7.00%)** | **1% Increase (8.00%)** |
|---|---|---|---|---|
| Net OPEB Liability | $ | 140,469,400 | 119,240,783 | 101,959,536 |

### *(d) Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates*

The following presents the net OPEB liability of the District, calculated using the healthcare cost trend rate of 7.00% decreasing to 4.60% for pre-Medicare and 5.00% decreasing to 4.60% for Medicare eligible, as well as the District's net OPEB liability calculated using a healthcare trend rate that is 1 percentage point lower (6.00% decreasing to 3.60%) or 1 percentage point higher (8.00% decreasing to 5.60%) than the current rate:

| **2019** | | **1% Decrease** | **Current Trend Rates** | **1% Increase** |
|---|---|---|---|---|
| Net OPEB Liability | $ | 83,828,491 | 102,325,938 | 125,374,302 |

The following presents the net OPEB liability of the District, calculated using the healthcare cost trend rate of 7.50% decreasing to 5.00% for pre-Medicare and 5.50% decreasing to 5.00% for Medicare eligible, as well as the District's net OPEB liability calculated using a healthcare trend rate that is 1 percentage point lower (6.50% decreasing to 4.00%) or 1 percentage point higher (8.50% decreasing to 6.00%) than the current rate:

| **2018** | | **1% Decrease** | **Current Trend Rates** | **1% Increase** |
|---|---|---|---|---|
| Net OPEB Liability | $ | 110,095,100 | 119,240,783 | 134,054,722 |

### *(e) Changes in Net OPEB Liability*

| | Increases (Decreases) | | |
|---|---|---|---|
| | Total OPEB Liability (a) | Plan Fiduciary Net Position (b) | Net OPEB Liability (a) - (b) |
| **Balances at December 31, 2017** | $ 195,143,624 | 13,605,004 | 181,538,620 |
| **Changes for the year:** | | | |
| Service cost | 7,514,662 | - | 7,514,662 |
| Interest | 9,748,668 | - | 9,748,668 |
| Assumption changes | (64,476,519) | | (64,476,519) |
| Employer contributions | - | 16,704,020 | (16,704,020) |
| Net investment loss | - | (1,616,178) | 1,616,178 |
| Benefit payments | (4,253,765) | (4,253,765) | - |
| Administrative expenses | - | (3,194) | 3,194 |
| **Net changes** | (51,466,954) | 10,830,883 | (62,297,837) |
| **Balances at December 31, 2018** | $ 143,676,670 | 24,435,887 | 119,240,783 |
| **Changes for the year:** | | | |
| Service cost | 4,185,594 | - | 4,185,594 |
| Interest | 9,923,893 | - | 9,923,893 |
| Difference between expected and actual experience | (513,787) | - | (513,787) |
| Assumption changes | (9,717,898) | - | (9,717,898) |
| Employer contributions | - | 14,254,367 | (14,254,367) |
| Net investment income | - | 6,541,647 | (6,541,647) |
| Benefit payments | (3,879,157) | (3,879,157) | - |
| Administrative expenses | - | (3,367) | 3,367 |
| **Net changes** | (1,355) | 16,913,490 | (16,914,845) |
| **Balances at December 31, 2019** | $ 143,675,315 | 41,349,377 | 102,325,938 |

**OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB**

The District recognized OPEB expense of $513,887 and $6,941,415 for the years ended December 31, 2019 and 2018, respectively.

At December 31, 2019, the District reported deferred outflows of resources and deferred inflows of resources related to the OPEB Plan from the following sources:

| | | Deferred Outflows of Resources | Deferred Inflows of Resources |
|---|---|---|---|
| Differences between expected and actual experience | $ | — | 428,440 |
| Changes of assumptions | | — | 53,504,254 |
| Differences between projected and actual earnings on OPEB plan investments | | — | 1,776,903 |
| Total | $ | — | 55,709,597 |

At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to the OPEB Plan from the following sources:

| | | Deferred Outflows of Resources | Deferred Inflows of Resources |
|---|---|---|---|
| Changes of assumptions | $ | — | 54,938,572 |
| Differences between projected and actual earnings on OPEB plan investments | | 2,403,340 | — |
| Total | $ | 2,403,340 | 54,938,572 |

The net amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB benefits will be recognized in OPEB expense in future years as follows:

| Year ended December 31: | | Net Deferred Outflows/(Inflows) of Resources |
|---|---|---|
| 2020 | $ | (11,531,580) |
| 2021 | | (11,531,580) |
| 2022 | | (11,531,580) |
| 2023 | | (12,132,415) |
| 2024 | | (8,948,453) |
| Thereafter | | (33,989) |
| | $ | (55,709,597) |

## (9) Deferred Compensation

The District offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan is available to all District employees and permits them to defer a portion of their salary until future years. For bargaining employees, following one year of service, the District matches 50% of the first $2,000 deferred by employees hired before September 28, 2013; for employees hired after September 28, 2013, the District matches 100% of the first $2,000 deferred by employees. For employees not covered by the collective bargaining agreement, following one year of service, the District matches 50% of the first $2,000 deferred by employees hired prior to January 1, 2014; for employees hired after January 1, 2014, the District matches 100% of the first $2,000 deferred by employees. “Matching” contributions are remitted following each pay period during which amounts are deferred by eligible employees, until the aforementioned matching limitations are reached; matching contributions immediately vest. The deferred compensation, and associated matching contribution, are available to employees when one of three events occurs: separation of employment, hardship for unforeseeable emergency, or a small balance distribution. District matching contributions totaled $654,587 and $675,167 for 2019 and 2018, respectively. Management has determined the criteria established in GASB Statement No. 84 for control of assets has not been met for this plan, and therefore it is not reported as a fiduciary fund.

## (10) Self-Insured Risks

The District is exposed to various risk of loss related to torts, theft of and destruction of assets, errors and omissions, and natural disasters. In addition, the District is exposed to risks of loss due to injuries to, and illnesses of, its employees. The District provides its employees with two health insurance options, both of which are primarily self-insured: a Health Maintenance Organization (HMO) and a preferred provider Organization (PPO). The District utilizes an “Administrative Services Only” contract under which the District reimburses the HMO/PPO for actual claims paid, a monthly administrative fee, and stop-loss protection for individual claims. Individual stop-loss coverage is effective when annual individual claims exceed $425,000, and when aggregate claims exceed 125% of projected levels. A liability for claims is recorded in accounts payable, and was $1,840,248 and $1,986,721 at December 31, 2019 and 2018, respectively.

Changes in the District’s self-insured risk balances for the health plan during 2019 and 2018 are as follows:

| | Business-type Activities Total | |
|---|---|---|
| | 2019 | 2018 |
| Beginning balance | $ 1,986,721 | 1,562,494 |
| Expenses | 35,045,282 | 31,550,203 |
| Payments | (35,191,755) | (31,125,976) |
| Ending balance | $ 1,840,248 | 1,986,721 |

The District carries commercial insurance coverage for auto and property with deductibles ranging from $500 to $250,000. The District is also self-insured for workers' compensation and general liability and does not carry additional commercial coverage. There have been no significant reductions in insurance coverage in 2019. In 2018, 2017, and 2016, the insurance policies in effect have adequately covered all settlements of claims against the District. No claims have exceeded the limits of property or liability insurance in any of the past three years. Liabilities are recorded for these self-insured risks. The liabilities are based on a combination of loss experience and estimates by the District's in-house legal department.

Changes in the District's self-insured risk balances for workers' compensation and general liabilities during 2019 and 2018 are as follows:

| | | Gas Department | | Water Department | |
|---|---|---|---|---|---|
| | | **2019** | **2018** | **2019** | **2018** |
| Beginning balance | $ | 957,296 | 1,106,286 | 1,643,398 | 1,440,222 |
| Expenses | | 924,027 | 817,438 | 4,574,100 | 2,321,227 |
| Payments | | (549,368) | (966,428) | (3,380,372) | (2,118,051) |
| Ending balance | $ | 1,331,955 | 957,296 | 2,837,126 | 1,643,398 |

## (11) Allowance for Doubtful Accounts and Accounts Receivable Write-offs

The allowance for doubtful accounts provides for the potential write-off of uncollectible account balances. An estimate is made for the Allowance for Doubtful Accounts based on an analysis of the aging of Accounts Receivable and historical write-offs. The District's policy is to write off receivable balances that are over five years old. During 2019, the Gas Department and Water Department wrote off receivables totaling $1,893,792 and $1,412,923, respectively. During 2018, the Gas Department and Water Department wrote off receivables totaling $5,234,987 and $2,000,702, respectively. The allowance consists of the following at December 31:

| | | 2019 | 2018 |
|---|---|---|---|
| Water Department | $ | 1,814,575 | 2,455,871 |
| Gas Department | | 3,673,965 | 4,895,378 |

## (12) Commitments

### *(a) Central Plains Energy Project (CPEP)*

Central Plains Energy Project (CPEP) is a public body created under Nebraska Interlocal Law for the purpose of securing long-term, economical, and reliable gas supplies. CPEP currently has three members: the District, Cedar Falls Utilities, and Hastings Utilities, each of which has equal representation on the board of CPEP. CPEP has acquired gas through long-term prepaid gas purchase agreements and delivers gas to its members or customers through long-term gas supply contracts for specified volumes of gas at market-based pricing less a contractual discount. Members or customers are only obligated to pay for gas if, and when, delivered by CPEP. CPEP's debt is not an obligation of the District or any other members or customers of CPEP. CPEP has issued $4.2 billion of gas supply revenue bonds ($2.4 billion of outstanding bonds) to fund these natural gas prepayment transactions, which are secured by gas contracts entered into with each project's members or customers. MUD currently has four Gas Supply Agreements with CPEP as described below.

In 2007 MUD participated in the CPEP Project 1 Series transaction. Under this agreement, the District is taking approximately 90% of the gas acquired in this transaction under a 20-year gas purchase agreement. Terms of this 2007 gas supply agreement were renegotiated in 2009 and again in 2012; the gas flows under this agreement will now expire on October 31, 2020.

In 2009 MUD participated in the CPEP Project 2 Series transaction. This agreement was for a 30-year supply of gas that the District is taking approximately 88% of the gas acquired in this agreement or 16% of the District's annual gas requirements. This project was refinanced in 2014 subsequent to litigation. The 2014 bonds were refinanced into a 5-year mandatory put of the bonds. The gas in this agreement had 25-years remaining and gas flow was scheduled to end in 2039. In 2019 this project was refinanced as required in the 2014 documents. The gas volumes were extended back to 30-years and now scheduled to end in 2049 and is structured in a similar 5-year mandatory put of the bonds. In 2024 CPEP will have to negotiate a refinance of this transaction.

In 2012 the District participated in CPEP Project 3 Series Transaction. This agreement is for a 30-year supply of gas that the District is taking approximately 86% of the gas acquired in this agreement or 15% of the District's annual gas requirements. This agreement is for a 30-year fixed term with defined savings over the life of the project. In 2017 CPEP did an early refinancing of this transaction that will increase the District's savings beginning in 2022.

In 2018 the District participated in CPEP Project 4 Series Transaction. This agreement is for a 30-year supply of gas that the district is taking approximately 76% of the gas acquired in this agreement or 17% of the District's annual gas requirements. This agreement if for an initial five-year term and subject to refinancing at end of this first term. After the initial five-year term, CPEP, and the counterparty to the transaction, will negotiate an extension of the contractual gas discounts based on market rates at that time. The District is not required to purchase gas after the initial five-year term unless the discount to market is $.20 per Dth or greater; parties to the agreement believe that it is probable that volumes will be taken for the full 30-year duration of the agreement.

At December 31, 2019, the District owed CPEP $5,982,100 for gas purchases under these agreements, which is recorded within "Accounts payable and remediation obligation" in the statements of net position. During the year ended December 31, 2019, billings from CPEP to the District for services provided under these agreements were $30,677,548.

The District has contracted to purchase the following volumes of gas from CPEP, through 2050, at a discount to market-based pricing on a pay-as-you-go basis:

| | DTH |
|---|---|
| 2020 | 15,211,658 |
| 2021 | 14,241,600 |
| 2022 | 14,635,600 |
| 2023 | 15,756,100 |
| 2024 | 16,154,500 |
| 2025-2050 | 368,266,300 |
| | 444,265,758 |

In 2019, the District purchased 12,120,494 DTH of gas under these agreements, representing 40% of the District's annual gas requirements.

### *(b) Other Gas Supply Agreements*

The District has various other gas supply contracts with a variety of suppliers, which consist of contracts that expire March 31, 2020 and October 31, 2020 and are generally renewed on an annual basis. The District has other gas supply contracts that expire December 31, 2022 and March 31, 2027 that were purchased based off market conditions and are not an annual purchase.

In 2017, the District entered into a 30-year gas supply contract with the Tennessee Energy Acquisition Corporation (TEAC) for three to four percent of our annual gas requirements. TEAC completed a 30-year natural gas pre-pay transaction using tax exempt bond financing that closed on November 7, 2017; the District was a participant in the deal. Gas flows commenced on April 1, 2018, and the District will achieve total gas cost savings of $1.4 million vs. market prices over the initial five-year term of the deal. After the initial five-year term, TEAC, and the counterparty to the transaction, will negotiate an extension of the contractual gas discounts based on future interest rate levels at that time. The District is not required to purchase gas after the initial five-year term unless the discount to market is $.20 per Dth or greater; parties to the agreement believe that it is probable that volumes will be taken for the full 30-year duration of the agreement.

The District has contracted to purchase the following volumes of gas from TEAC, through 2048, at a discount to market-based pricing on a pay-as-you-go basis:

| | DTH |
|---|---|
| 2019 | 1,063,400 |
| 2020 | 1,068,600 |
| 2021 | 1,063,400 |
| 2022 | 1,063,400 |
| 2023 | 1,063,400 |
| 2024 – 2048 | 37,046,700 |
| | 42,368,900 |

In February 2018, the District entered into a 30-year gas supply contract with the Public Energy Authority of Kentucky (PEAK) for approximately five percent of our annual gas requirements. Gas flows commenced on April 1, 2018, and the District will achieve total gas cost savings of $1.7 million vs. market prices over the initial five-year term of the deal. After the initial five-year term, PEAK, and the counterparty to the transaction, will negotiate an extension of the contractual gas discounts based on market rates at that time. The District is not required to purchase gas after the initial five-year term unless the discount to market is $.20 per Dth or greater; parties to the agreement believe that it is probable that volumes will be taken for the full 30-year duration of the agreement.

The District has contracted to purchase the following volumes of gas from PEAK, through 2048, at a discount to market-based pricing on a pay-as-you-go basis:

| | **DTH** |
|---|---|
| 2019 | 1,452,550 |
| 2020 | 1,459,750 |
| 2021 | 1,452,550 |
| 2022 | 1,452,550 |
| 2023 | 1,524,569 |
| 2024 – 2048 | 43,652,425 |
| | 50,994,394 |

In March 2018, the District entered into a 30-year gas supply contract with the Black Belt Energy Gas District (Black Belt) for approximately three percent of our annual gas requirements. Gas flows commenced on November 1, 2018, and the District will achieve total gas cost savings of $1.8 million vs. market prices over the initial five-year term of the deal. After the initial five-year term, Black Belt, and the counterparty to the transaction, will negotiate an extension of the contractual gas discounts based on market rates at that time. The District is not required to purchase gas after the initial five-year term unless the discount to market is $.20 per Dth or greater; parties to the agreement believe that it is probable that volumes will be taken for the full 30-year duration of the agreement.

The District has contracted to purchase the following volumes of gas from Black Belt, through 2048, at a discount to market-based pricing on a pay-as-you-go basis:

| | **DTH** |
|---|---|
| 2019 | 1,004,200 |
| 2020 | 1,009,200 |
| 2021 | 1,004,200 |
| 2022 | 1,004,200 |
| 2023 | 1,004,200 |
| 2024 – 2048 | 40,494,175 |
| | 45,520,175 |

### *(c) Gas Transportation Agreement*

On November 7, 2012, the District's entered into a twenty (20) year firm transportation agreement with Northern Natural Gas; the term of the agreement runs from November 1, 2016 to October 31, 2036. Under this agreement, NNG will provide 198,975 Dth/day of firm transportation service during the months of November through March and 139,283 Dth/day of firm transportation service during the months of April through October. Per the terms of the agreement, 61% of the transportation volumes are priced at a discounted rate below NNG's maximum tariff rate with the remaining 39% priced at NNG's maximum tariff rates. The District's annual pipeline demand costs under this agreement, based on NNG's current tariff rates, will be $15 million.

In June 2019, NNG filed a rate case with the Federal Energy Regulatory Commission (FERC) to increase their rates by over 90%. The District's existing contract has a rate cap due to any rate cases that has a maximum annual fee of $20 million. Due to this increase all of the District's transportation rates are now discounted below their proposed rates. This case is set for trial in the summer of 2020 and interim rates will go into effect on January 1, 2020. If the final approved rates are lower than our cap, NNG will owe back to the District any over collection in fees from the interim rate plus interest.

### *(d) Construction*

At December 31, 2019, the District's obligation under the uncompleted portion of contracts for plant facilities and equipment for the Water Department amounted to approximately $10.3 million, which will be financed through operations and the proceeds from the Water System Revenue Bonds Series 2018. For the Gas Department, obligations amounted to approximately $2.5 million at December 31, 2019, which will be financed through operations and the proceeds from the Gas System Revenue Bonds Series 2018.

## (13) Contingencies

The District is subject to legal proceedings and claims that arise in the ordinary course of business, as well as litigation related to the M's Pub fire. Management believes, based on the opinion of legal counsel, that the amount of ultimate liability with respect to these actions is adequately covered by the District's accrued liabilities for self-insured risks.

**METROPOLITAN UTILITIES DISTRICT**

Required Supplementary Information
Schedule of Changes in Net OPEB Liability and Related Ratios
Fiscal Years ended December 31

| | | 2019 | 2018 | 2017 |
|---|---|---|---|---|
| **Total OPEB Liability** | | | | |
| Service cost | $ | 4,185,594 | 7,514,662 | 7,150,328 |
| Interest | | 9,923,893 | 9,748,668 | 9,806,106 |
| Differences between expected and actual experience | | (513,787) | - | - |
| Assumption changes | | (9,717,898) | (64,476,519) | (4,130,520) |
| Benefit payments | | (3,879,157) | (4,253,765) | (4,015,207) |
| Net change in total OPEB liability | | (1,355) | (51,466,954) | 8,810,707 |
| Total OPEB liability, beginning | | 143,676,670 | 195,143,624 | 186,332,917 |
| Total OPEB liability, ending (a) | $ | 143,675,315 | 143,676,670 | 195,143,624 |
| **Plan Fiduciary Net Position** | | | | |
| Employer contributions | $ | 14,254,367 | 16,704,020 | 11,015,207 |
| Net investment income (loss) | | 6,541,647 | (1,616,178) | 1,407,980 |
| Benefit payments | | (3,879,157) | (4,253,765) | (4,015,207) |
| Administrative expenses | | (3,367) | (3,194) | (1,491) |
| Net change in plan fiduciary net position | | 16,913,490 | 10,830,883 | 8,406,489 |
| Plan fiduciary net position, beginning | | 24,435,887 | 13,605,004 | 5,198,515 |
| Plan fiduciary net position, ending (b) | $ | 41,349,377 | 24,435,887 | 13,605,004 |
| Net OPEB liability, ending (a) - (b) | $ | 102,325,938 | 119,240,783 | 181,538,620 |
| Plan fiduciary net position as a percentage of the total OBEP liability | | 28.78% | 17.01% | 6.97% |
| Covered payroll | | 69,759,343 | 68,704,312 | 67,761,364 |
| Net OPEB liability as a percentage of covered payroll | | 146.68% | 173.56% | 267.91% |

**Notes to Schedule:**

Changes since prior valuation:

1. The discount rate was decreased from 7.00% to 6.90%.
2. The spousal coverage assumption was changed from 75% to 65%.
3. Health care cost trend rates and assumed withdrawal rates were updated.

Note: Schedule is intended to show 10-year trend. GASB 74 was adopted in 2017, as such, only three years are presented. Additional years will be reported as they become available.

**METROPOLITAN UTILITIES DISTRICT**

Required Supplementary Information
Schedule of Employer Contributions - Other Post Employment Benefits
January 1, 2010 Through December 31, 2019
($ in Thousands)

| Fiscal Year Ending December 31 | Actuarial Determined Contribution | Actual Contribution | Contribution Deficiency (Excess) | Covered Payroll | Actual Contribution as a % of Covered Payroll |
|---|---|---|---|---|---|
| 2010 | 16,116 | 3,145 | 12,971 | 51,484 | 6.11% |
| 2011 | 15,101 | 4,046 | 11,055 | 51,869 | 7.80% |
| 2012 | 15,101 | 3,155 | 11,946 | 51,031 | 6.18% |
| 2013 | 15,297 | 3,686 | 11,611 | 55,847 | 6.60% |
| 2014 | 15,297 | 3,225 | 12,072 | 59,332 | 5.44% |
| 2015 | 16,874 | 3,935 | 12,939 | 63,385 | 6.21% |
| 2016 | 16,874 | 8,167 | 8,707 | 66,054 | 12.36% |
| 2017 | 15,950 | 11,015 | 4,935 | 67,761 | 16.26% |
| 2018 | 15,950 | 16,704 | (754) | 68,704 | 24.31% |
| 2019 | 13,545 | 14,254 | (709) | 69,759 | 20.43% |

Beginning Fiscal Year ending December 31, 2017, the Actuarial Determined Contribution (ADC) is calculated in accordance with the District's funding policy, if one exists.

Prior to Fiscal Year ending December 31, 2017, the ADC is equal to the Annual Required Contribution (ARC) calculated under GASB Standards No. 45.

**Notes to Schedule**

| | |
|---|---|
| Valuation date: | January 1, 2019 |
| Methods and assumptions used to determine contribution rates: | |
| Actuarial cost method | Entity Age Normal |
| Amortization method | Level Dollar |
| Remaining amortization period | 20 years |
| Asset valuation method | Market value |
| Inflation | 2.60% |
| Healthcare cost trend rates | The immediate trend rates are assumed to decrease to an ultimate trend rate over a period of 5 years. |
| Long-term investment rate of return | 6.90% |
| Mortality | RP-2014 Mortality Table, adjusted to 2006, with a one-year set forward for females and projected generationally using Scale MP-2016. |

**METROPOLITAN UTILITIES DISTRICT**

Required Supplementary Information
Schedule of Annual Money-Weighted Rate of Return on OPEB Plan Investments
Fiscal Years ended December 31

| Fiscal Year Ending December 31 | Annual Money-Weighted Rate of Return |
|---|---|
| 2019 | 21.4% |
| 2018 | -8.0% |
| 2017 | 16.2% |
| 2016 | 6.3 |

Note: Schedule is intended to show 10-year trend. The OPEB trust was created in 2016, as such, only four years are presented. Additional years will be reported as they become available.

**METROPOLITAN UTILITIES DISTRICT**

Required Supplementary Information
Schedule of Changes in Net Pension Liability and Related Ratios
Fiscal Years ended December 31

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| **Total Pension Liability** | | | | | |
| Service cost | $ 11,710,809 | $ 11,863,654 | 11,137,854 | 10,857,017 | 10,160,376 |
| Interest on total pension liability | 31,734,106 | 30,304,199 | 29,552,506 | 28,076,211 | 26,596,785 |
| Differences between expected and actual experience | 1,714,570 | (1,597,520) | (5,835,431) | (1,578,237) | - |
| Assumption changes | 5,751,024 | - | 8,713,229 | - | - |
| Benefit payments, including member refunds | (21,204,786) | (19,116,693) | (17,445,020) | (16,555,144) | (16,154,435) |
| Net change in total pension liability | 29,705,723 | 21,453,640 | 26,123,138 | 20,799,847 | 20,602,726 |
| Total pension liability, beginning | 463,767,450 | 442,313,810 | 416,190,672 | 395,390,825 | 374,788,099 |
| Total pension liability, ending (a) | $ 493,473,173 | $ 463,767,450 | 442,313,810 | 416,190,672 | 395,390,825 |
| | | | | | |
| **Plan Fiduciary Net Position** | | | | | |
| Employer contributions | $ 12,300,000 | $ 11,606,179 | 11,193,821 | 10,300,000 | 10,301,268 |
| Employee contributions | 4,413,137 | 3,805,373 | 3,757,444 | 3,895,899 | 2,820,596 |
| Net investment income | 78,431,581 | (20,727,828) | 52,812,850 | 25,696,348 | (748,921) |
| Benefit payments, including member refunds | (21,204,786) | (19,116,693) | (17,445,020) | (16,555,144) | (16,154,435) |
| Administrative expenses | (70,123) | (94,940) | (94,161) | (85,186) | (92,250) |
| Net change in plan fiduciary net position | 73,869,809 | (24,527,909) | 50,224,934 | 23,251,917 | (3,873,742) |
| Plan fiduciary net position, beginning | 378,210,890 | 402,738,799 | 352,513,865 | 329,261,948 | 333,135,690 |
| Plan fiduciary net position, ending (b) | $ 452,080,699 | $ 378,210,890 | 402,738,799 | 352,513,865 | 329,261,948 |
| | | | | | |
| Net pension liability, ending (a) - (b) | $ 41,392,474 | $ 85,556,560 | 39,575,011 | 63,676,807 | 66,128,877 |
| | | | | | |
| Fiduciary net position as a percentage of the total pension liability | 91.61% | 81.55% | 91.05% | 84.70% | 83.28% |
| | | | | | |
| Covered payroll* | $ 63,272,421 | $ 62,865,829 | 62,624,066 | 61,064,398 | 63,384,548 |
| | | | | | |
| Net pension liability as a percentage of covered payroll | 65.42% | 136.09% | 63.19% | 104.28% | 104.33% |

**Notes to Schedule:**

Changes to benefit terms and funding terms:
2019: The member contribution rate increased from 6.50% to 7.00% of total pay, as scheduled
2018: The member contribution rate increased from 6.00% to 6.50% of total pay on September 1, 2018 for employees not covered by the collective bargaining agreement, as scheduled.
2016: The member contribution rate increased from 4.88% to 6.00% of total pay, as scheduled.
2015: The member contribution rate increased from 4.32% to 4.88% of total pay, as scheduled.

Changes in actuarial assumptions and methods:
1/1/2020 valuation (assumptions used for measuring 12/31/19 total pension liability):
The investment return assumption was decreased from 7.00% to 6.90%.
1/1/2018 valuation (assumptions used for measuring 12/31/17 total pension liability):

1. The investment return assumption was decreased from 7.25% to 7.00%.
2. The price inflation assumption was lowered from 3.10% to 2.60%.
3. The cost of living adjustment assumption was lowered from 3.00% to 2.60%
4. The general wage growth assumption was lowered from 4.00% to 3.50%.
5. The covered payroll increase assumption was lowered from 4.00% to 3.50%.
6. The mortality assumption was modified by moving to the RP-2014 Mortality Table, adjusted to 2006, with a one-year set forward for females
7. Assumed retirement rates were adjusted to better reflect actual experience.
8. Assumed termination rates were adjusted to better reflect actual experience.

* Prior to Fiscal Year ending December 31, 2016, covered payroll represents total payroll of employees provided with pensions through the pension plan. Beginning in Fiscal Year ending December 31, 2016, covered payroll represents compensation to active employees on which the District bases pension plan contributions.

Note: Schedule is intended to show 10-year trend. GASB 68 was adopted in 2015, as such, only five years are presented. Additional years will be reported as they become available.

**METROPOLITAN UTILITIES DISTRICT**

Required Supplementary Information
Schedule of Employer Contributions - Defined Benefit Pension Plan
January 1, 2010 Through December 31, 2019
($ in Thousands)

| Fiscal Year Ending December 31 | Actuarial Determined Contribution | Actual Contribution | Contribution Deficiency (Excess) | Covered* Payroll | Actual Contribution as a % of Covered Payroll |
|---|---|---|---|---|---|
| 2010 | 8,588 | 8,638 | (50) | 51,484 | 16.78% |
| 2011 | 9,235 | 9,300 | (65) | 51,869 | 17.93% |
| 2012 | 9,231 | 10,312 | (1,081) | 51,031 | 20.21% |
| 2013 | 8,996 | 10,300 | (1,304) | 55,847 | 18.44% |
| 2014 | 8,988 | 10,300 | (1,312) | 59,332 | 17.36% |
| 2015 | 9,956 | 10,301 | (345) | 63,385 | 16.25% |
| 2016 | 10,215 | 10,300 | (85) | 61,064 | 16.87% |
| 2017 | 10,273 | 11,194 | (921) | 62,624 | 17.87% |
| 2018 | 11,198 | 11,606 | (408) | 62,866 | 18.46% |
| 2019 | 11,270 | 12,300 | (1,030) | 63,272 | 19.44% |

* Prior to Fiscal Year ending December 31, 2016, covered payroll represents total payroll of employees provided with pensions through the pension plan. Beginning in Fiscal Year ending December 31, 2016, covered payroll represents compensation to active employees on which the District bases pension plan contributions.

**Notes to Schedule**

| | |
|---|---|
| Valuation date: | January 1, 2019<br>Actuarially determined contribution is determined in the valuation performed as of January 1 of the year in which contribution is made. |

Methods and assumptions used to determine contribution rates:

| | |
|---|---|
| Actuarial cost method | Entry age normal |
| Amortization method | Level percentage of payroll, closed |
| Remaining amortization period | Range from 16 to 25 years (single equivalent amortization period is 24 years) |
| Asset valuation method | Expected Value + 25% of (market - expected values) |
| Inflation | 2.60% |
| Salary increases | 4.00% to 11.00%, depending on years of service |
| Long-term investment rate of return | 7.00% |
| Retirement | Service-based table of rates. |
| Mortality | Pre-retirement mortality rates were based on the RP-2014 Total Dataset Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016.<br><br>Post-retirement mortality rates were based on the RP-2014 Total Dataset Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016.<br><br>Disabled mortality rates were based on the RP-2014 Disabled Mortality Table, adjusted to 2006, with Female rates set forward one year, projected with generational improvements under Scale MP-2016. |
| Cost of living adjustments | 2.6% per year |

**METROPOLITAN UTILITIES DISTRICT**

Required Supplementary Information
Schedule of Annual Money-Weighted Rate of Return on Pension Plan Investments
Fiscal Years ended December 31

| Fiscal Year Ending December 31 | Annual Money-Weighted Rate of Return |
|---|---|
| 2019 | 21.0% |
| 2018 | -5.2 |
| 2017 | 15.2 |
| 2016 | 7.9 |
| 2015 | -0.2 |

Note: Schedule is intended to show 10-year trend. GASB 68 was adopted in 2015, as such, only five years are presented. Additional years will be reported as they become available.

**METROPOLITAN UTILITIES DISTRICT**

Water Department

Schedule of Insurance Coverage

December 31, 2019

(Unaudited)

| Coverage | Description | Name of insurer | Deductible or coinsurance amounts | Expiration date |
|---|---|---|---|---|
| Buildings (including contents) | Fire and extended coverage | Associated Electric & Gas Insurance Services (AEGIS) & Starr Technical Risk Agency | $100,000 deductible | 6-15-2020 |
| Data Processing Equipment | Equipment, media and extra expense | Associated Electric & Gas Insurance Services (AEGIS) & Starr Technical Risk Agency | $100,000 deductible | 6-15-2020 |
| Contractors Equipment floater | Construction equipment and communication equipment | Continental Casualty Co. | $50,000 deductible | 6-15-2020 |
| Travel Insurance | All employees and directors while on a bonafide business trip | Reliance Std. Life Ins. Co. | $200,000 per loss | 2-7-2020 |

**METROPOLITAN UTILITIES DISTRICT**

Water Department

Statutory Information Required by Chapter 14,
Section 2145 of the Revised Statutes of Nebraska of 1943

Year ended December 31, 2019

(Unaudited)

| | | |
|---|---|---|
| Operating revenues, net | $ | 121,260,962 |
| Thousands of gallons of water supplied to mains | | 31,234,950 |
| Thousands of gallons of water sold | | 27,746,974 |
| Maintenance | $ | 25,656,522 |
| Gross additions to utility plant in service, exclusive of land | $ | 28,497,749 |
| Land purchased | $ | 1,078,082 |
| Depreciation charged to operations and other accounts | $ | 15,745,706 |
| Cost per thousand gallons of water sold (schedule A) | $ | 3.62 |
| Collected for sale and rent of meters, net | $ | 318,899 |
| Assessments against property for extension of mains | $ | — |
| Operating expenses (schedule B) | $ | 92,350,493 |
| Average number of employees for the year | | 372 |
| Compensation of employees for the year | $ | 31,402,806 |
| Direct taxes levied against property at request of District for fire protection service (in lieu of hydrant rental) | $ | — |
| All other facts necessary to give an accurate and comprehensive view of the cost of maintaining and operating the plant | | — |

**Schedule A**

**METROPOLITAN UTILITIES DISTRICT**

Water Department

Cost per Thousand Gallons of Water Sold

Year ended December 31, 2019

(Unaudited)

| | | |
|---|---|---|
| Operating expenses: | | |
| Operations | $ | 50,177,112 |
| Maintenance | | 25,656,522 |
| Depreciation | | 14,873,197 |
| Provision for statutory payments to municipalities | | 1,643,662 |
| Total operating expenses | | 92,350,493 |
| Other deductions: | | |
| Interest | | 8,125,420 |
| Total operating expenses and other deductions | $ | 100,475,913 |
| Thousands of gallons of water sold | | 27,746,974 |
| Cost per thousand gallons of water sold | $ | 3.62 |

**Schedule B**

**METROPOLITAN UTILITIES DISTRICT**

Water Department

Operating Expenses

Year ended December 31, 2019

(Unaudited)

| | | |
|---|---|---|
| Operating expenses: | | |
| Operations: | | |
| Primary pumping | $ | 8,993,873 |
| Purification | | 11,688,111 |
| Booster pumping | | 2,657,835 |
| Distribution | | 8,858,089 |
| Customer accounting | | 8,013,872 |
| Marketing | | 1,011,295 |
| Administrative | | 8,954,037 |
| Total operating | | 50,177,112 |
| Maintenance: | | |
| Primary pumping | | 2,221,519 |
| Purification | | 4,381,099 |
| Booster pumping | | 2,054,903 |
| Distribution | | 16,999,001 |
| Total maintenance | | 25,656,522 |
| Depreciation | | 14,873,197 |
| Provision for statutory payments to municipalities | | 1,643,662 |
| Total operating expenses | $ | 92,350,493 |

**METROPOLITAN UTILITIES DISTRICT**

Gas Department

Schedule of Insurance Coverage

December 31, 2019

(Unaudited)

| Coverage | Description | Name of insurer | Deductible or coinsurance amounts | Expiration date |
|---|---|---|---|---|
| Buildings (including contents) | Fire and extended coverage | Associated Electric & Gas Insurance Services (AEGIS) & Starr Technical Risk Agency | $100,000 deductible | 6-15-2020 |
| Data Processing Equipment | Equipment, media and extra expense | Associated Electric & Gas Insurance Services (AEGIS) & Starr Technical Risk Agency | $100,000 deductible | 6-15-2020 |
| Contractors Equipment floater nonowner liability | Construction equipment and communication equipment | Continental Casualty Co. | $50,000 deductible | 6-15-2020 |
| Travel Insurance | All employees and directors while on a bonafide business trip | Reliance Std. Life Ins. Co. | $200,000 per loss | 2-7-2020 |
| Auto Fleet | Physical damage - specified parts | Amco Insurance, Inc. (Nationwide) | $500 deductible | 6-15-2020 |
| LNG plant | LNG plant and contents | Associated Electric & Gas Insurance Services (AEGIS) & Starr Technical Risk Agency | $250,000 deductible | 6-15-2020 |
| Propane caverns | Two caverns - special cause of loss, including earthquake and flood | Associated Electric & Gas Insurance Services (AEGIS) & Starr Technical Risk Agency | $250,000 deductible | 6-15-2020 |

**METROPOLITAN UTILITIES DISTRICT**

Gas Department

Statutory Information Required by Chapter 14,
Section 2145 of the Revised Statutes of Nebraska of 1943

Year ended December 31, 2019

(Unaudited)

| | | |
|---|---|---|
| Operating revenues, net | $ | 223,266,292 |
| Dekatherms of gas delivered to mains | | 36,219,088 |
| Dekatherms of gas sold | | 36,219,088 |
| Maintenance | $ | 15,538,993 |
| Gross additions to utility plant in service | $ | 36,258,128 |
| Depreciation charged to operations and other accounts | $ | 20,328,652 |
| Cost per thousand cubic feet of gas sold (schedule A) | $ | 5.14 |
| Collected for sale and rent of meters | $ | — |
| Assessments against property for extension of mains | $ | — |
| Operating expenses (schedule B) | $ | 184,391,290 |
| Average number of employees for the year | | 452 |
| Compensation of employees for the year | $ | 38,200,087 |
| Direct taxes levied against property at request of District | $ | — |
| All other facts necessary to give an accurate and comprehensive view of the cost of maintaining and operating the plant | | — |

**Schedule A**

**METROPOLITAN UTILITIES DISTRICT**

Gas Department

Cost per Thousand Cubic Feet of Gas Sold

Year ended December 31, 2019

(Unaudited)

| | | |
|---|---|---|
| Operating expenses: | | |
| Natural gas | $ | 114,501,720 |
| Operations | | 33,881,898 |
| Maintenance | | 15,538,993 |
| Depreciation | | 16,666,592 |
| Provision for statutory payments to municipalities | | 3,802,087 |
| Total operating expenses | $ | 184,391,290 |
| Thousands of cubic feet of gas sold | | 35,901,640 |
| Cost per thousand cubic feet of gas sold | $ | 5.14 |

**Schedule B**

**METROPOLITAN UTILITIES DISTRICT**

Gas Department

Operating Expenses

Year ended December 31, 2019

(Unaudited)

| | | |
|---|---|---|
| Operating expenses: | | |
| Natural gas | $ | 114,501,720 |
| Operations: | | |
| Production | | 3,213,342 |
| Distribution | | 12,849,186 |
| Customer accounting and collecting | | 10,770,941 |
| Marketing | | 1,499,035 |
| Administrative | | 5,549,394 |
| Total operations | | 33,881,898 |
| Maintenance: | | |
| Production | | 2,743,462 |
| Distribution | | 12,795,531 |
| Total maintenance | | 15,538,993 |
| Depreciation | | 16,666,592 |
| Provision for statutory payments to municipalities | | 3,802,087 |
| Total operating expenses | $ | 184,391,290 |

## METROPOLITAN UTILITIES DISTRICT

Statistical Highlights

Years ended December 31, 2019, 2018, and 2017

(Unaudited)

| **Water Department** | **2019** | **2018** | **2017** |
|---|---|---|---|
| Number of customers (December) | 218,116 | 216,180 | 214,142 |
| Sales (thousand gallons) | 27,746,974 | 28,482,950 | 30,058,950 |
| Operating revenues, net | $ 121,260,962 | 119,783,197 | 122,328,186 |
| Operating expenses | 92,350,493 | 91,730,706 | 92,744,154 |
| Operating income | $ 28,910,469 | 28,052,491 | 29,584,032 |
| Plant additions and replacements, net | $ 49,545,081 | 53,189,874 | 41,097,383 |
| Plant in service | 1,159,933,052 | 1,131,651,797 | 1,093,314,388 |
| Miles of mains | 2,985 | 2,962 | 2,928 |
| Average daily pumpage (thousand gallons) | 82,482 | 85,375 | 91,269 |
| **Gas Department** | | | |
| Number of customers (December) | 232,769 | 231,012 | 229,365 |
| Sales (DTH): | | | |
| Firm | 30,853,007 | 30,744,499 | 25,483,606 |
| Interruptible | 5,366,081 | 4,721,333 | 4,013,805 |
| Total | 36,219,088 | 35,465,832 | 29,497,411 |
| Operating revenues, net | $ 223,266,292 | 237,587,047 | 203,679,638 |
| Cost of gas sold | 114,501,720 | 126,286,762 | 106,365,860 |
| Other operating expenses | 69,889,570 | 77,523,065 | 75,003,512 |
| Operating income | $ 38,875,002 | 33,777,220 | 22,310,266 |
| Plant additions and replacements, net | $ 44,073,867 | 39,321,821 | 39,309,642 |
| Plant in service | 631,065,357 | 615,192,112 | 597,112,263 |
| Miles of mains | 2,866 | 2,856 | 2,832 |
| Average daily sendout (DTH) | 102,140 | 99,895 | 72,022 |
| Number of active employees – water and gas combined | 817 | 810 | 831 |

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March 16, 2020

Board of Directors
Metropolitan Utilities District
Omaha, Nebraska

This letter is to inform the Board of Directors of Metropolitan Utilities District (the District) about significant matters related to the conduct of our audit as of and for the year ended December 31, 2019, so that it can appropriately discharge its oversight responsibility and we comply with our professional responsibilities.

The following summarizes various matters that must be communicated to you under auditing standards generally accepted in the United States of America.

**The Respective Responsibilities of the Auditor and Management**
Our responsibility under auditing standards generally accepted in the United States of America and *Government Auditing Standards* issued by the Comptroller General of the United States have been described to you in our arrangement letter dated January 27, 2020. The audit of the financial statements does not relieve management or those charged with governance of their responsibilities, which are also described in that letter.

**Overview of the Planned Scope and Timing of the Financial Statement Audit**
We have issued a separate communication dated January 27, 2020 regarding the planned scope and timing of our audit and have discussed with you our identification of, and planned audit response to, significant risks of material misstatement.

**Significant Accounting Practices, Including Policies, Estimates and Disclosures**
In our meeting with you, we will discuss our views about the qualitative aspects of the District's significant accounting practices, including accounting policies, accounting estimates and financial statement disclosures. The following is a list of the matters that will be discussed, including the significant estimates, which you may wish to monitor for your oversight responsibilities of the financial reporting process:

- Depreciable useful life of capital assets
- Unbilled revenue
- Net pension liability (NPL) assumptions
- OPEB liability assumptions
- Fair value of investments

**Audit Adjustments**
There were no audit adjustments made to the original trial balance presented to us to begin our audit.

**Uncorrected Misstatements**
We identified the following uncorrected misstatements that management has concluded are not, individually or in the aggregate, material to the financial statements. We agree with management's conclusion in that regard.

- There is a judgmental misstatement of ending net position of the business type activities of approximately $2.5 million ($1.4 million for gas fund and $1.1 million of water fund) relation to the net pension and other post-employment benefits (OPEB) liabilities. There were differences in the mortality assumption estimates utilized by RSM and the District's actuaries. This misstatement is a judgmental misstatement because it involves a significant estimate which can provide for a broad range of reasonable outcomes. The difference between the estimate is that the net pension and OPEB liabilities are potentially understated by approximately $14.3 million as of December 31, 2019, of which $11.8 million would have been reported as a deferred outflow of resources and the remaining $2.5 million would be an understatement of pension and OPEB expenses and net position.

**Internal Control Matters**
We have separately communicated in a report on internal control over financial reporting and on compliance and other matters based on an audit of the of the financial statements dated March 16, 2020 as required by *Government Auditing Standards*.

**Consultation with Other Accountants**
We are not aware of any consultations management had with other accountants about accounting or auditing matters.

**Management Representations**
Attached is a copy of the management representation letter.

**Closing**
We will be pleased to respond to any questions you have about the foregoing. We appreciate the opportunity to continue to be of service to the Metropolitan Utilities District.

This report is intended solely for the information and use of the Board of Directors and management and is not intended to be, and should not be, used by anyone other than these specified parties.

RSM US LLP

RSM US LLP

**Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards***

**Independent Auditor's Report**

To the Board of Directors
Metropolitan Utilities District

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the business-type activities, each major fund, and the fiduciary fund type of the Metropolitan Utilities District (District), as of and for the year ended December 31, 2019, and the related notes to the financial statements, which collectively comprise the District's basic financial statements, and have issued our report thereon dated March 16, 2020.

**Internal Control over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the District's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

**Compliance and Other Matters**
As part of obtaining reasonable assurance about whether the District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Comments involving statutory and other legal matters about the District's operations for the year ended December 31, 2019 are based exclusively on knowledge obtained from procedures performed during our audit of the basic financial statements of the District. Since our audit was based on tests and samples, not all transactions that might have had an impact on the comments were necessarily audited. The comments involving statutory and other legal matters are not intended to constitute legal interpretations of those statutes.

**Purpose of this Report**
The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

RSM US LLP

Omaha, Nebraska
March 16, 2020

METROPOLITAN
UTILITIES DISTRICT

**M.U.D. Headquarters**
**7350 World Communications Drive**
**Omaha, NE 68122-4041**
**mudomaha.com**

March 16, 2020

RSM US LLP
1299 Farnam St
Suite 530
Omaha, NE 68102

This representation letter is provided in connection with your audits of the basic financial statements of Metropolitan Utilities District (the District) as of and for the years ended December 31, 2019 and 2018 for the purpose of expressing an opinion on whether the financial statements are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP).

We confirm, to the best of our knowledge and belief, that as of March 16, 2020:

**Financial Statements**

1. We have fulfilled our responsibilities, as set out in the terms of the audit arrangement letter dated January 27, 2020, for the preparation and fair presentation of the financial statements referred to above in accordance with U.S. GAAP.

2. We acknowledge our responsibility for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

3. We acknowledge our responsibility for the design, implementation and maintenance of internal control to prevent and detect fraud.

4. Significant assumptions used by us in making accounting estimates, including those measured at fair value, are reasonable and reflect our judgment based on our knowledge and experience about past and current events, and our assumptions about conditions we expect to exist and courses of action we expect to take.

5. Related-party transactions, including interfund accounts and advances receivable and payable, sale and purchase transactions, interfund transfers, long-term loans, leasing arrangements and guarantees, have been recorded in accordance with the economic substance of the transaction and appropriately accounted for and disclosed in accordance with the requirements of U.S. GAAP.

6. There are no events subsequent to the date of the financial statements for which U.S. GAAP requires adjustment or disclosure.

7. The effects of all known actual or possible litigation and claims have been accounted for and disclosed in accordance with U.S. GAAP.

8. The following have been properly recorded and/or disclosed in the financial statements:

   a. Arrangements with financial institutions involving restrictions on cash balances.

   b. Net position classifications.

   c. Expenses and revenues have been appropriately classified.

   d. Future changes in accounting pronouncements for GASB Statement Nos. 87 and 92 which have been issued, but which have not yet been adopted. GASB Statement No. 90, and 91 are not disclosed in the financial statements since it is not expected to significantly impact the District's financial statements.

9. We have no direct or indirect legal or moral obligation for any debt of any organization, public or private, that is not disclosed in the financial statements.

10. We have complied with all aspects of contractual agreements that would have a material effect on the financial statements in the event of noncompliance. In connection therewith, we specifically represent that we are responsible for determining that we are not subject to the requirements of the Single Audit Act because we have not received, expended or otherwise been the beneficiary of the required amount of federal awards during the period of this audit.

11. We agree with the findings of specialists in evaluating Other Postemployment Benefits under GASB Statement Nos. 74 and 75 and pension related obligations and disclosures under GASB Statement Nos. 67 and 68, and have adequately considered the qualifications of the specialists in determining the amounts and disclosures used in the financial statements and underlying accounting records. We did not give or cause any instructions to be given to specialists with respect to the values or amounts derived in an attempt to bias their work, and we are not otherwise aware of any matters that have had an impact on the independence or objectivity of the specialists.

12. As of and for the year ended December 31, 2019, we believe that the effects of the uncorrected misstatement stated below is immaterial to the financial statements of the gas fund and business-type activities opinion units. For purposes of this representation, we consider items to be material, regardless of their size, if they involve the misstatement or omission of accounting information that, in light of surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information would be changed or influenced by the omission or misstatement.

    - There is a judgmental misstatement of ending net position of the business type activities of approximately $2.5 million ($1.4 million for gas fund and $1.1 million of water fund) relation to the net pension and other post-employment benefits (OPEB) liabilities. There were differences in the mortality assumption estimates utilized by RSM and the District's actuaries. This misstatement is a judgmental misstatement because it involves a significant estimate which can provide for a broad range of reasonable outcomes. The difference between the estimate is that the net pension and OPEB liabilities are potentially understated by approximately $14.3 million as of December 31, 2019, of which $11.8 million would have been reported as a deferred outflow of resources and the remaining $2.5 million would be an understatement of pension and OPEB expenses and net position.

13. We believe the implementation of GASB Statements Nos. 88 and 89 are appropriate, and the effects are properly disclosed in the basic financial statements of the District.

**Information Provided**

14. We have provided you with:

    a. Access to all information of which we are aware that is relevant to the preparation and fair presentation of the financial statements such as records, documentation and other matters;

    b. Additional information that you have requested from us for the purpose of the audits;

    c. Unrestricted access to persons within the District from whom you determined it necessary to obtain audit evidence; and

    d. Minutes of the meetings of the governing boards and committees, or summaries of actions of recent meetings for which minutes have not yet been prepared.

15. All transactions have been recorded in the accounting records and are reflected in the financial statements.

16. We have disclosed to you the results of our assessment of risk that the financial statements may be materially misstated as a result of fraud.

17. We have no knowledge of allegations of fraud or suspected fraud affecting the District's financial statements involving:

    a. Management.

    b. Employees who have significant roles in internal control.

    c. Others where the fraud could have a material effect on the financial statements.

18. We have no knowledge of any allegations of fraud or suspected fraud affecting the District's financial statements received in communications from employees, former employees, analysts, regulators, or others.

19. We have no knowledge of noncompliance or suspected noncompliance with laws and regulations whose effects were considered when preparing financial statements.

20. We have disclosed to you all known actual or possible litigation and claims whose effects should be considered when preparing the financial statements.

21. We have disclosed to you the identity of the District's related parties and all the related-party relationships and transactions of which we are aware.

22. We are not aware of any significant deficiencies or material weaknesses in the design or operation of internal controls that could adversely affect the District's ability to record, process, summarize and report financial data.

23. We are aware of no communications from regulatory agencies concerning noncompliance with, or deficiencies in, financial reporting practices.

24. During the course of your audits, you may have accumulated records containing data that should be reflected in our books and records. All such data have been so reflected. Accordingly, copies of such records in your possession are no longer needed by us.

25. We have communicated to you that there are no asset retirement obligations identified under GASB Statement No. 83.

**Supplementary Information**

26. With respect to supplementary information presented in relation to the financial statements as a whole:

    a. We acknowledge our responsibility for the presentation of such information.

    b. We believe such information, including its form and content, is fairly presented in accordance with U.S. GAAP.

    c. The methods of measurement or presentation have not changed from those used in the prior period.

    d. When supplementary information is not presented with the audited financial statements, we will make the audited financial statements readily available to the intended users of the supplementary information no later than the date of issuance of the supplementary information and the auditor's report thereon.

27. With respect to management's discussion and analysis, pension and other postemployment benefit plan information presented as required by the Governmental Accounting Standards Board to supplement the basic financial statements:

    a. We acknowledge our responsibility for the presentation of such required supplementary information.

    b. We believe such required supplementary information is measured and presented in accordance with guidelines prescribed by accounting principles generally accepted in the United States of America.

    c. The methods of measurement or presentation have not changed from those used in the prior period.

    d. The underlying significant assumptions or interpretations regarding the measurement or presentation of such information includes the assumptions used by the actuary for the Pension Plans and OPEB Plans.

**Compliance Considerations**

28. In connection with our audit, conducted in accordance with *Government Auditing Standards*, we confirm that management:

    a. Is responsible for the preparation and fair presentation of the financial statements in accordance with the applicable financial reporting framework.

    b. Is responsible for compliance with the laws, regulations and provisions of contracts and grant agreements applicable to the auditee.

c. Is not aware of any instances, that have occurred or are likely to have occurred, of fraud and noncompliance with provisions of law and regulations that have a material effect on the financial statements or other financial data significant to the audit objectives, and any other instances that warrant the attention of those charged with governance.

d. Is not aware of any instances that have occurred or are likely to have occurred of noncompliance with provisions of contracts and grant agreements that have a material effect on the determination of financial statement amounts.

e. Is not aware of any instances that have occurred or are likely to have occurred of abuse that could be quantitatively or qualitatively material to the financial statements.

f. Is responsible for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatements, whether due to fraud or error.

g. Acknowledges its responsibility for the design, implementation and maintenance of internal controls to prevent and detect fraud.

h. Has a process to track the status of audit findings and recommendations.

i. Has identified for the auditor previous audits, attestations engagements, and other studies related to the audit objectives and whether related recommendations have been implemented.

Metropolitan Utilities District

Mark Doyle, President

Joseph Schaffart, Chief Financial Officer