

ANNUAL COMPREHENSIVE FINANCIAL REPORT
FOR THE YEARS ENDED
DECEMBER 31, 2022 AND 2021
LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

PREPARED BY:

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CONTROLLER

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ACCOUNTING SUPERVISOR

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

**ANNUAL COMPREHENSIVE FINANCIAL REPORT
For the Years Ended December 31, 2022 and 2021**

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INTRODUCTORY SECTION



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www.lehighcountyauthority.org

September 28, 2023

Lehigh County Authority Customers
Chairman and Members
Lehigh County Authority
Allentown, PA 18106

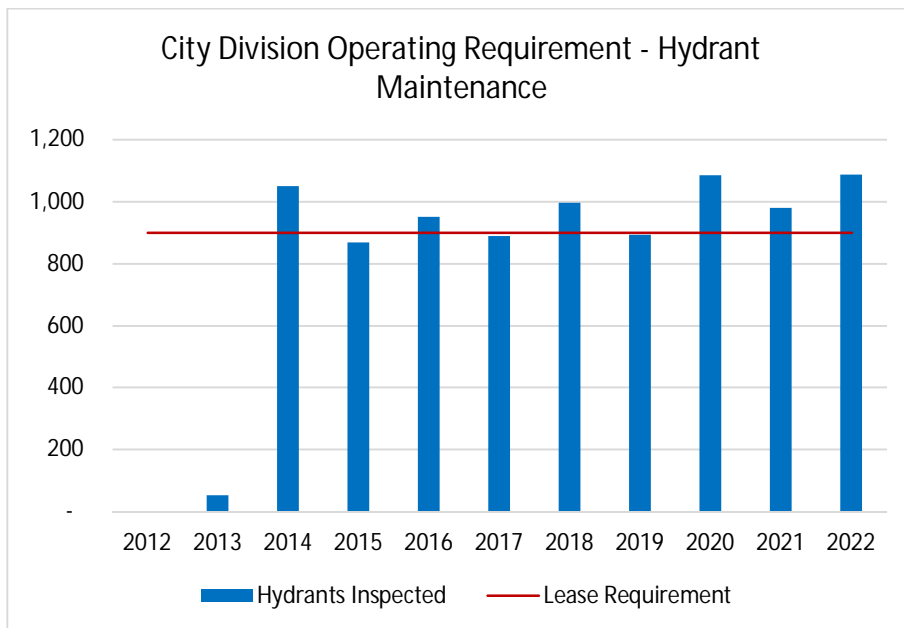
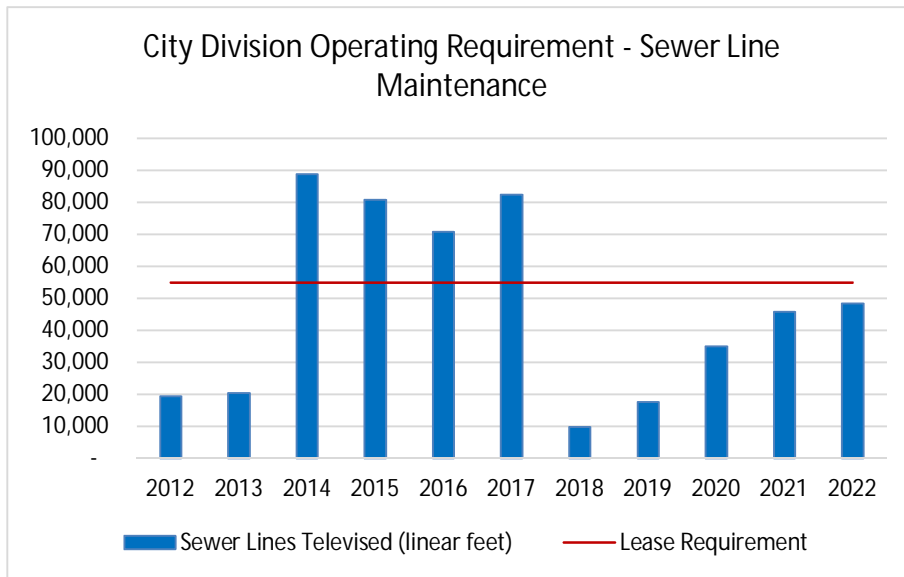
It is our pleasure to present the 2022 Lehigh County Authority ("LCA" or "Authority") Annual Comprehensive Financial Report which includes the results of 2022 operations and activities.

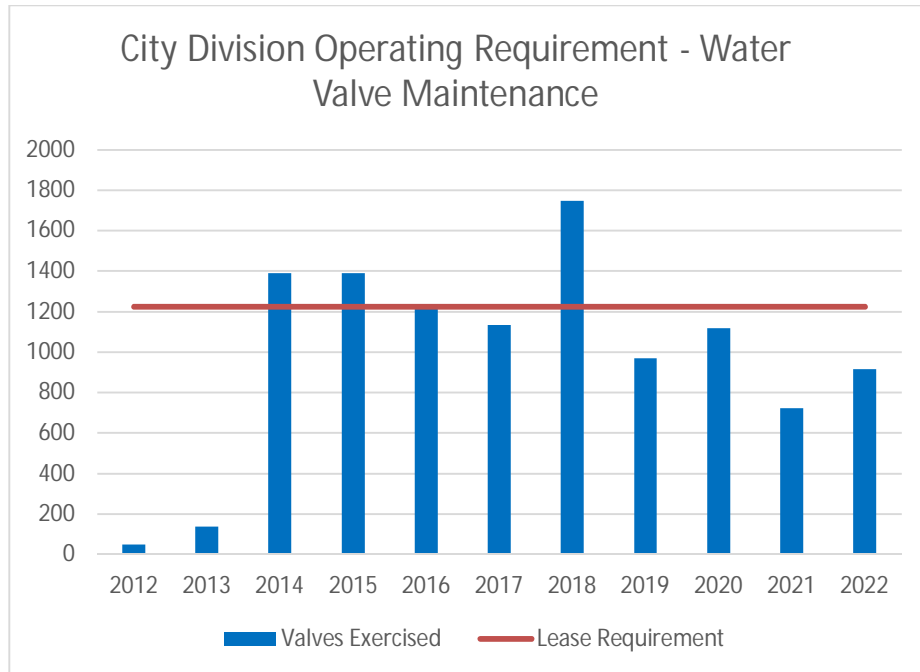
Results from 2022 reflect the ninth full year of operation of the City of Allentown water and wastewater systems (City Systems) under a 50-year Concession Lease (Concession) which commenced on August 8, 2013. Concession activities for the year included a number of significant items:

- The 2022 bond coverage was 214%, exceeding the 120% requirement under the 2013 Concession Bond Financing.¹
- LCA made capital improvements of \$11,946,619 to the City System. Water system improvements amounted to \$6,890,494 and Wastewater projects totaled \$5,056,125.
- The Authority's performance on selected operating standards is displayed in the graphs below.

(Note that the performance levels shown on these graphs indicate actual tasks completed within the calendar year. Full compliance with the Concession operating standards has been met through a combination of both current-year and prior-year activity totals, which accumulate to achieve compliance.)

¹ While the statement of Revenues, Expenses and Changes in Net Position indicates Interest Expense of \$19,703,642, non-cash transactions to interest expense worth (\$8,026,690) and amortized bond discount (\$165,941) were both excluded from the calculation of 2021 interest expense for bond coverage calculation purposes. The 2022 interest expense used for bond coverage calculation was \$11,511,011.





In the Suburban Division, capital improvements totaled \$8,696,253 with \$4,694,717 expended on the water system and \$4,001,536 on the wastewater system.

In late 2021, the Authority's Board of Directors adopted a new Strategic Plan for the time period of 2022 through 2026. As a result of this planning effort, strategic focus areas were established, and the following critical items achieved in 2022:

- **Asset Management** – In 2022, the Authority completed its internal assessment of resource requirements to begin develop a comprehensive Asset Management program. The goal of the program will be to manage the Authority's assets in a comprehensive manner to lower asset failure risk to operations, increase levels of service provided to customers, and achieve overall lower life-cycle cost to operate, maintain, and replace its assets. In 2022, an organizational restructuring occurred to increase internal capacity to manage maintenance functions, and a new Director of Engineering and Asset Management position created to lead the effort in this strategic area. Additional work was completed to identify external support needed to help the Authority develop its strategic Asset Management plan.
- **Process Improvement** – A previous effort was conducted to develop a comprehensive list of process improvement opportunities for the Authority. Through review of this work, Authority staff identified a critical need to evaluate the effectiveness of its financial software system and integrations with other databases and systems. In 2022, a technology roadmap was developed to plan out the next steps in this critical area, including a full re-implementation of its Enterprise Resource Planning software system that will serve as the foundation of other process enhancements in the years ahead.

- Wastewater Capacity – The Authority continued to lead efforts to collaborate with local municipal partners to address the region’s future sewer system needs. An interim 5-year plan was approved in 2021 by the Pa. Department of Environmental Protection, which will serve as the basis for planning efforts through 2025. The goal of this effort is to develop an integrated plan to eliminate sanitary sewer overflows, and provide capacity for economic growth for those municipalities who require it. The Authority led the effort to keep positive momentum on this regional planning effort in 2022, resulting in municipal partners developing sewer rehabilitation programs to be included in the plan. Significant engineering work was completed to develop options for capital improvements to address dry-weather and wet-weather treatment capacity at the Authority’s industrial Pretreatment Plant and the Allentown Kline’s Island Wastewater Treatment Plant. These options will be further refined in 2023 and beyond, for inclusion in the regional plan to be submitted by 2025..

- Operational Excellence – Another key area of focus for 2022 was to develop strategies to address water quality and wastewater treatment effectiveness at the Authority’s small systems. The Authority operates several very small water and wastewater systems that each serve less than 500 customers, located in rural areas throughout the service area. Due to the remote operation of these systems and lack of economies of scale, they are more challenging to operate and are more prone to experiencing compliance excursions such as boil water advisories or wastewater permit exceedances. In 2022, a robust process control plan was developed for these small systems, to support improved performance over time. Elements of the plan were implemented immediately, with other approaches requiring additional investment in 2023 and beyond.

These highlights are provided to illustrate the Authority’s continued focus on developing long-term strategies to serve the region’s needs and ensure continuity of operations during challenging times. Authority employees also focus daily on supporting many other advancements in operations, technology, personnel management, and industry leadership.

For more on 2022 results, additional information is included in Management’s Discussion and Analysis on pages 16-29 of the Report.

Responsibility for the accuracy, completeness and fairness of the report, including all disclosures, rests with the Authority. We believe that this report, which was prepared by the administrative staff, is accurate in all material aspects, is presented in a manner designed to fairly present the financial position and results of operation as measured by the Authority’s financial activity, and includes all disclosures necessary to enable the reader to gain an understanding of the Authority’s financial activity.

Overview of Annual Financial Report: Management's Discussion and Analysis (MD&A) serves as an introduction to, and should be read in conjunction with, the basic audited financial statements and supplementary information. The MD&A represents management's examination and analysis of the Authority's financial condition and performance during the last three years. Summary financial statement data, key financial and operational indicators included in the Authority's Strategic Plan, benchmark program, budget, bond documents and other management tools were used for the analysis.

Accounting System and Internal Control: The Authority's accounting system is maintained on an accrual basis of accounting in accordance with United States generally accepted accounting principles. In developing the Authority's accounting system, consideration was given to the adequacy of internal accounting controls. These controls are designed to provide reasonable, but not absolute, assurance regarding: (1) safeguarding assets against loss from unauthorized use or disposition; and (2) the reliability of financial records for preparing financial statements and maintaining accountability for assets. The concept of reasonable assurance recognizes that: (1) the cost of a control should not exceed the benefits likely to be delivered; and, (2) the evaluation of costs and benefits require estimates and judgments by management. We believe the Authority's internal accounting controls adequately safeguard assets and provide reasonable assurance of proper recording of financial transactions.

Independent Audit: The Pennsylvania Municipality Authorities Act requires an annual audit of the books of account, financial records and transactions of the Authority by an independent certified public accountant selected by the Authority. In addition, various financing documents require such an audit. The auditors' opinion for the 2022 audit has been included in this report.

GOVERNMENT PROFILE

LCA was incorporated in 1966 by the Lehigh County Commissioners and thereafter was directed to plan and construct a water system and a wastewater interceptor system in Western Lehigh County. The systems were needed to serve proposed industrial and commercial developments and serve new residences driven by the growing population of the area. Thereafter, acquiring existing systems and developer extensions were the prime vehicles for LCA's expansion in Western Lehigh County. LCA also expanded into other areas of Lehigh and Northampton counties by acquiring satellite water and wastewater systems and wherever possible integrating them with other LCA systems.

As mentioned previously, in 2013, a major step towards regionalization of Lehigh County water and wastewater systems was accomplished through the Concession for the City Systems, which created a regional service approach for many communities in Lehigh County.

LCA currently provides two types of services to communities in the City Division. Through the Water Plant and Distribution System (the City Water System) LCA serves 47,711 residential and business units in the City of Allentown and supplies water under Municipal Services Agreements to Lehigh County Municipalities of South Whitehall, Hanover, Salisbury, Whitehall, and to the LCA service area adjacent to the City of Allentown (the Suburban Division) under various water supply agreements. Through the Sewer Utility System (the City Sewer System) LCA provides sewage collection, treatment and disposal services to 47,671 residential and business units in the City of Allentown and to the Lehigh County Municipalities of Emmaus, Hanover, Salisbury, Lower Macungie and South Whitehall, the Coplay-Whitehall Sewer Authority, and to the LCA Suburban Division under several inter-municipal agreements.

LCA currently provides four types of service to communities in the Suburban Division. Through the Western Lehigh Interceptor System, LCA provides sewage transportation service to the Townships of Lower Macungie, Upper Macungie, Upper Milford, Weisenberg and the Boroughs of Alburtis, Emmaus and Macungie. LCA also owns and operates wastewater collection systems in the Upper Milford, Heidelberg, Lowhill, Lynn, North Whitehall, Weisenberg and Washington Townships serving a total of 3,090 customers. The Authority provides sewage transportation service to Salisbury and South Whitehall Townships along with the other users of the Western Lehigh Interceptor System. As of December 31, 2022, the Suburban Water System serves 24,165 residential and business units in the Lehigh County Townships of Upper Macungie, Lower Macungie, North Whitehall, Washington, Weisenberg, South Whitehall, Heidelberg, Lower Milford, Lowhill, Lynn, Salisbury and Upper Milford, and Moore Township in Northampton County.

In aggregate, LCA serves a population of more than 200,000 with water, wastewater, or both services throughout its service areas.

Budgetary Control: LCA annually adopts operating and capital budgets based on an assumed level of water and wastewater system operation. Monthly reports are prepared to monitor each budget.

The Chief Executive Officer is authorized to transfer budgeted amounts between line items within any budget; however, any revisions that alter the total expenses or revenue of any budget must be approved by the Authority Board. The level of control (level at which expenses may not exceed budget) is the individual budget within each fund. Budgets for all funds are adopted on a basis consistent with generally accepted accounting principles.

ECONOMIC CONDITIONS

The Lehigh Valley saw favorable economic conditions in 2022, with the unemployment rate decreasing from 4.5% as of year-end 2021 to 3.8% as of year-end 2022 in Lehigh County. The 2022 year-end unemployment rate of 3.8% is lower than the State rate of 4.3% but is higher than the National rate of 3.5%. Over the years, the Lehigh Valley has built a diversified residential and industrial base, which has mitigated the economic volatility experienced in other larger east coast cities. The City of Allentown has experienced significant redevelopment over the past 5 years with projects like the PPL Arena, the NIZ Development Zone, Waterfront Development and other construction.

This increased usage of both water and wastewater services by the Suburban Division's industrial customer base has allowed rates to remain among the lowest in the Commonwealth, although a rate increase of approximately 4.5% was implemented in 2022 to address near-term capital improvement needs in the system, and additional increases are expected in the years ahead to ensure revenues are sufficient to keep pace with increased capital improvement and regulatory requirements. Under the Concession, rates to City residents and businesses rose in 2022 reflecting the change in the Consumer Price Index in 2022 plus Capital Cost Recovery Charges to recover the cost of Major Capital Improvements (>\$1,000,000) completed in 2021 or initiated in 2022. The total increase in water and sewer charges to the average residential customer in the Authority's Allentown Division in 2022 was 10.0%.

AWARDS AND ACKNOWLEDGEMENTS

- LCA was recognized by the Government Finance Officers Association of The United States and Canada with a Certificate of Achievement for Excellence in Financial Reporting for its Annual Comprehensive Financial Report for the year ended December 31, 2021. The Certificate of Achievement is a prestigious national award, recognizing conformance with highest standards for preparation of state and local government financial reports.
- The City Water Filtration Plant was awarded the Area Wide Optimization Award and Directors Award from the Association of State Drinking Water Administrators and the American Water Works Association, respectively, (for the sixteenth consecutive year). This award recognizes the staff's outstanding efforts towards optimizing filter plant performance.

Acknowledgements: We recognize and thank LCA employees and the Board for their focus and dedication which underlie our 2022 accomplishments. We also thank the Board for its continued encouragement and support in planning, operating and managing the Authority's affairs in a forward looking and business-like manner.

Respectfully Submitted,



Liesel M. Gross
Chief Executive Officer



Edward C. Klein
Chief Financial Officer



Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

**Lehigh County Authority
Pennsylvania**

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

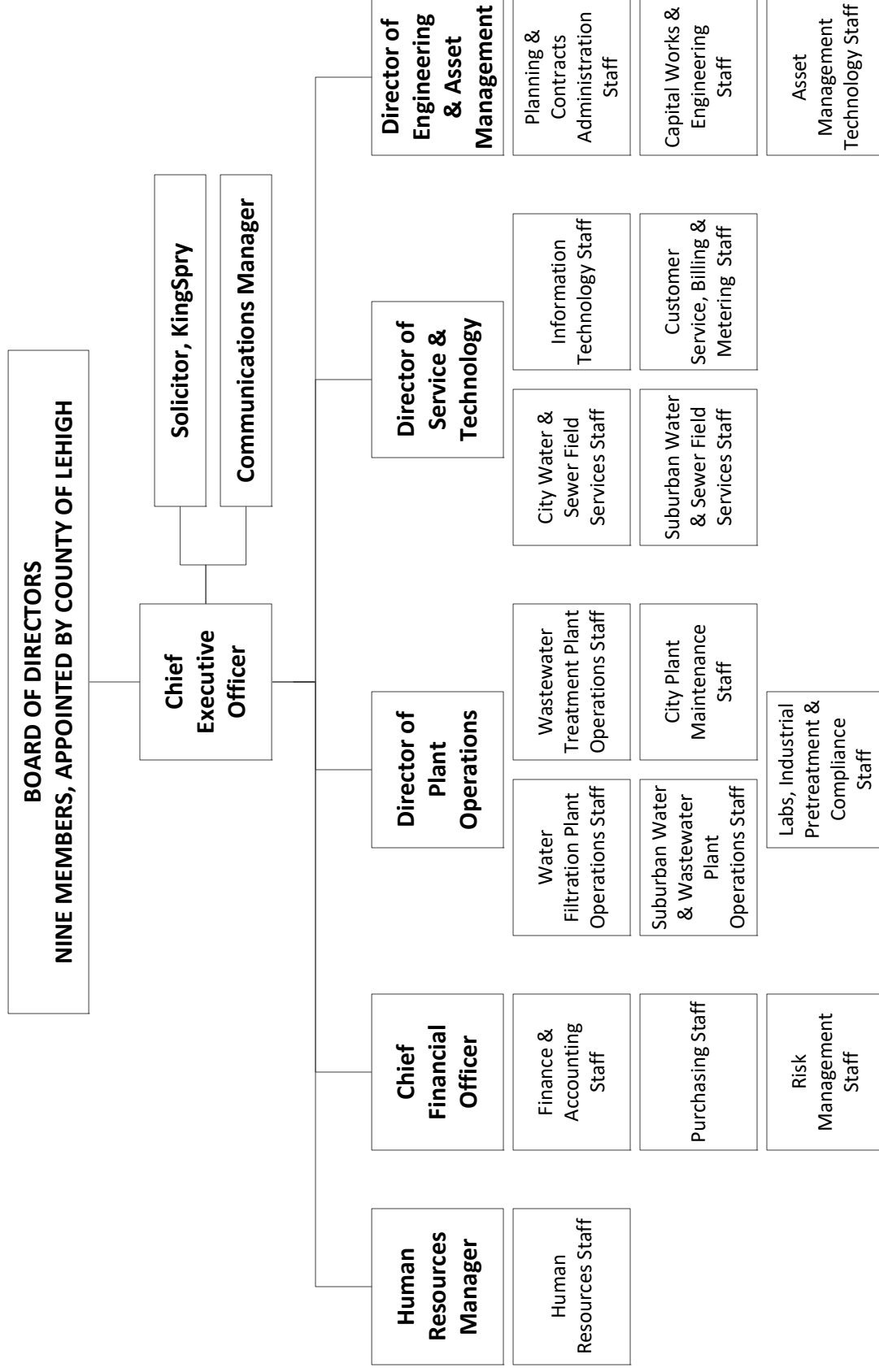
December 31, 2021

Christopher P. Morill

Executive Director/CEO

Lehigh County Authority

Organizational Chart – December 31, 2022



**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
LIST OF PRINCIPAL OFFICIALS
December 31, 2022**

AUTHORITY BOARD

Brian C. Nagle
Chairman

Scott C. Bieber
Vice Chairman

Ted Lyons
Treasurer

Richard H. Bohner
Secretary

Norma A. Cusick
Assistant Secretary

Jeff Morgan
Member

Linda Rosenfeld
Member

Amir Famili
Member

Kevin Baker
Member

AUTHORITY STAFF

Liesel M. Gross
Chief Executive
Officer

Edward C. Klein
Chief Financial
Officer

Christopher W. Moughan
Director of Service &
Technology

Charles E. Volk
Chief Capital Works
Officer

Andrew D. Moore
Director of Plant
Operations

Albert J. Capuzzi
Director of
Engineering & Asset
Management

Kathy A. Martin
Human Resources
Manager

Susan L. Sampson
Communications
Manager

Philip M. DePoe
Senior Planning
Engineer

PROFESSIONAL SERVICES

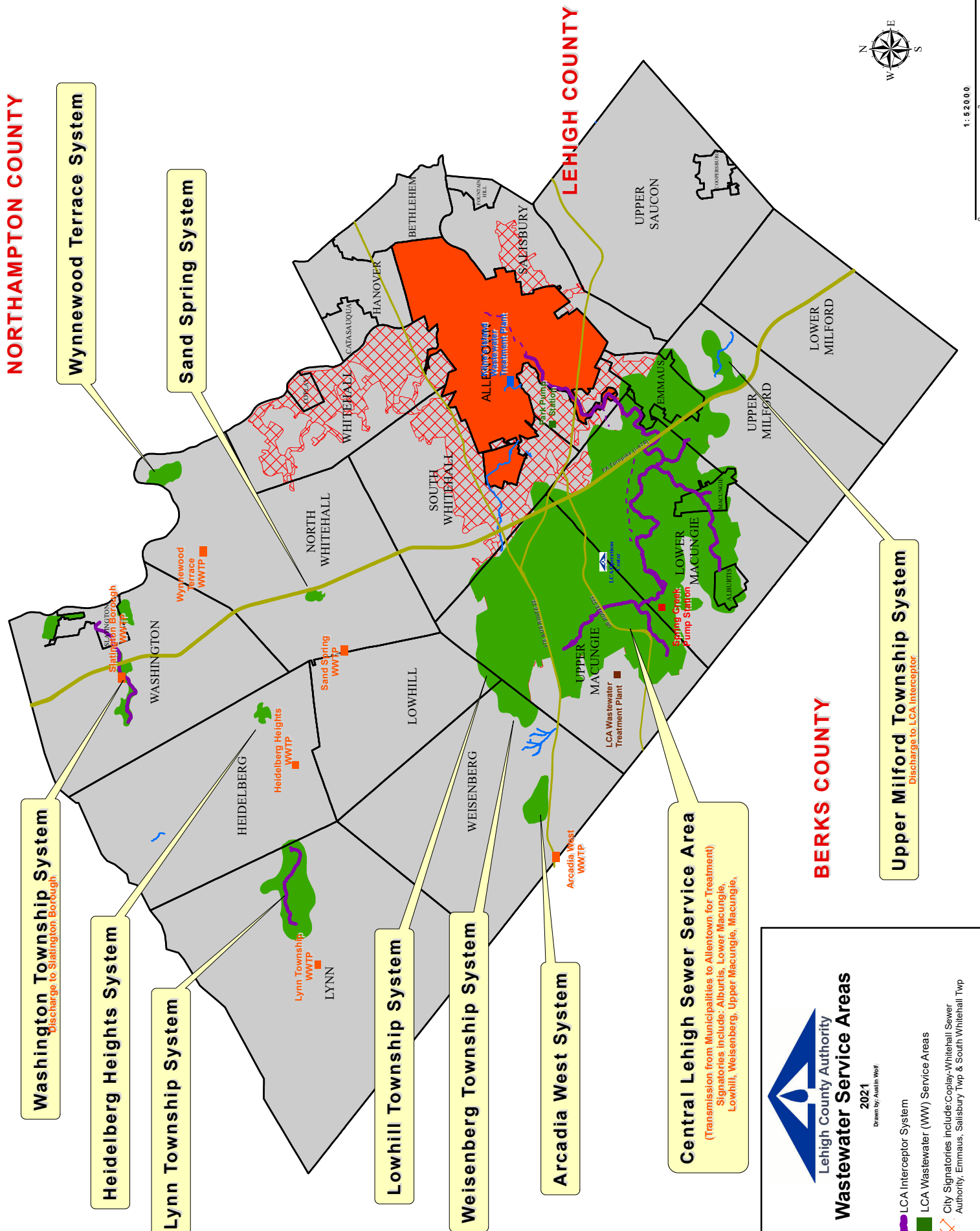
Trustees
Bank of New York Mellon
M & T Bank Corporation

Auditor
Zelenkofske Axelrod LLC

Water Consultant
ARRO Consulting, Inc.

Wastewater Consultant
Arcadis, U.S.

NORTHAMPTON COUNTY



Washington Township System
Discharge to Slatington Borough

Heidelberg Heights System

Lynn Township System

Lowhill Township System

Weisenberg Township System

Arcadia West System

Wynnewood Terrace System

Sand Spring System

Upper Milford Township System
Discharge to LCA Interceptor

Central Lehigh Sewer Service Area
(Transmission from Municipalities to Allentown for Treatment)
Signatories include: Alburts, Lower Macungie, Lowhill, Weisenberg, Upper Macungie, Macungie,



Lehigh County Authority
Wastewater Service Areas
2021
Drawn by: Austin Wolf

LCA Interceptor System

LCA Wastewater (WW) Service Areas

City Signatories include: Coplay-Whitehall Sewer Authority, Emmaus, Salisbury Twp & South Whitehall Twp

FINANCIAL SECTION

This section is composed of the following four parts:

INDEPENDENT AUDITORS' REPORT

MANAGEMENTS DISCUSSION AND ANALYSIS

FINANCIAL STATEMENTS

SUPPLEMENTAL SCHEDULES

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INDEPENDENT AUDITOR'S REPORT

Board of Directors
Lehigh County Authority
Allentown, Pennsylvania

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the business-type activities, each major fund, and the aggregate remaining fund information of Lehigh County Authority, Pennsylvania, as of and for the year ended December 31, 2022 and 2021, and the related notes to the financial statements, which collectively comprise Lehigh County Authority's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the respective financial position of the business-type activities, each major fund, and the aggregate remaining fund information of Lehigh County Authority, as of December 31, 2022 and 2021, and the respective changes in financial position and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Lehigh Authority and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

Lehigh County Authority's management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Lehigh County Authority's ability to continue as a going concern for one year after the date that the financial statements are issued.

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2370 York Road, Suite A-5, Jamison, PA 18929
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210 Tollgate Hill Road, Greensburg, PA 15601

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Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 Lehigh County Authority's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Lehigh County Authority's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 16 through 29 and the schedule of changes in the net pension liability and related ratios, schedule of contributions for the pension plan, schedule of changes in net OPEB liability and related ratios – Suburban Employees, schedule of contributions – Suburban Employees OPEB Plan, schedule of investment returns – Suburban Employees OPEB Plan, and schedule of changes in total OPEB liability and related ratios – City Division, on pages 82 through 87 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 it 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.



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Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise Lehigh County Authority's basic financial statements. The Other Supplementary Information and the Supplemental Schedules are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Other Supplementary Information and the Supplemental Schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Other Supplementary Information and the Supplemental Schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information Included in the Annual Comprehensive Financial Report

Management is responsible for the other information in the annual comprehensive financial report. The other information comprises the introductory and statistical sections, but does not include the basic financial statements and our auditor's report thereon. Our opinions on basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon. In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Zelenkofske Axelrod LLC

ZELENKOFSCHE AXELROD LLC

Harrisburg, Pennsylvania
August 4, 2023

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INTRODUCTION

Lehigh County Authority is pleased to present its Annual Financial Report for the year ended December 31, 2022. The Authority is a water and wastewater agency created by the County of Lehigh, Pennsylvania in 1966 under the Pennsylvania Municipality Authorities Act. Management's Discussion and Analysis (MDA) is intended to serve as an introduction to the Authority's basic financial statements.

Certain prior year amounts have been reclassified to conform with current year presentation.

Information in this MDA is presented under the following headings:

- Authority Activities and Highlights
- Overview of the Financial Statements
- Financial Analysis
- Capital Contributions
- Capital Assets & Service Concession Arrangement
- Debt Administration
- Economic Factors and Rates
- Contacting the Authority's Financial Management

MANAGEMENT'S DISCUSSION AND ANALYSIS

2022: A Year of Looking Forward

For many organizations, including Lehigh County Authority, 2022 was a year to begin moving forward. While the threats associated with the global COVID-19 pandemic continued throughout the year, their impact was greatly lessened, and response measures became more routine. The Authority returned to "normal" pre-pandemic operations in 2022. From a "lessons learned" perspective, however, Authority staff gained significant insights during the COVID-19 experience that will have lasting positive impacts. For example, the hardships felt by many Authority water and wastewater customers created a more poignant need to focus on affordability and rate relief programs, which will continue into the future. In addition, employees' enthusiastic adoption of innovative technology to support pandemic protocols has been extended, allowing certain remote operations protocols to continue that increase efficiency and add workplace flexibility. Looking ahead, the Authority expects to receive help from increased operational resiliency and deeper customer connections because of this highly challenging time.

In late 2021, the Authority adopted an updated Strategic Plan, which included updated mission, vision and values statements that will guide the Authority's work for the next several years. In 2022, LCA launched the "kickoff" of the key strategies defined in the plan, and Authority staff and board embraced the opportunity to look forward once again. Priorities were named in five key areas: Asset Management, Process Improvement, Water & Wastewater Capacity, Operational Excellence, and Employee Engagement & Safety. Throughout the year, strategy teams were developed, with internal "champions" assigned to work the plan. An updated quarterly reporting process was developed to keep the Board and public updated on the Authority's progress, coupled with a new dashboard of key performance indicators to measure success. By the close of the year, significant strides had been made in each of the five strategic priorities, and continued work planned for 2023 and beyond. More information about the Authority's 2022-2025 Strategic Plan is available on the Authority's website, or by contacting CEO Liesel Gross at lieselgross@lehighcountyauthority.org. Looking ahead, the groundwork laid in 2022 will go a long way toward supporting the Authority's mission: *To protect public health and the environment by providing high-quality, safe, and reliable water and wastewater services.*

Authority Activities and Highlights

The Authority's City Division was created on August 7, 2013, when the Authority bought the rights to lease and operate the City of Allentown's Water and Wastewater Systems for a term of 50 years. This transaction, which was memorialized by the Allentown Water and Sewer Utility System Concession and Lease Agreement, was financed through the issuance of \$307,683,599 of bonds. In 2020, the Authority's Concession agreement with the City was amended to achieve mutual goals related to revenue capacity and operational sustainability of the system, and \$155,915,000 of the bonds were refinanced to support the process, the positive impacts of which are described in the financial statements included in this report.

At the close of 2022, the Authority's total assets and deferred outflows exceeded its liabilities and deferred inflows by \$156,868,629 (net position). The part of net position that can be used to meet the Authority's on-going obligations to customers and creditors, unrestricted net position, is (\$25,232,838).

The Authority's net position increased in 2022 by \$10,228,817, with an increase of \$4,138,513 and \$6,545,431 in the Suburban Water and City Division funds, respectively, offset by a decrease in the Suburban Wastewater fund of \$455,127.

Operating revenues increased from \$70,545,721 in 2021 to \$78,096,829 in 2022 due to increased Suburban Water Revenues of \$3,860,065, a decrease in Suburban Wastewater revenues of \$789,768 and an increase in City Division Revenues of \$4,480,811. Operating expenses increased from \$52,626,666 in 2021 to \$55,032,473 in 2022 due to inflationary effects on employee cost, higher purchased services, and higher depreciation and amortization.

Overview of the Financial Statements

Lehigh County Authority's basic financial statements include statements of net position, statements of revenues, expenses and changes in net position, statements of cash flows and notes to the financial statements. This report also includes other supplementary information in addition to the basic financial statements themselves.

The Authority's financial statements are prepared on an accrual basis following generally accepted accounting principles promulgated by the Governmental Accounting Standards Board (GASB).

Government-wide financial statements: The government-wide financial statements are designed to provide readers with a broad overview of the Authority's finances in a manner like private sector business.

Statement of net position: The statement of net position presents the financial position of the Authority. It presents information on the Authority's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, with the difference between the four reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.

Statement of revenues, expenses, and changes in net position: The statement of revenues, expenses, and changes in net position presents information showing how the Authority's net position changed during the most recent fiscal year. 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. Revenues are recognized when earned, not when they are received. Expenses are recognized when incurred, not when they are paid. Additionally, some revenues and expenses are reported in this statement for items that will result in cash flows in future fiscal periods (e.g., accrued wages).

Statement of cash flows: The statement of cash flows presents information on the effects of the changes in assets, liabilities and operations have on cash during the fiscal year.

Statement of fiduciary net position: This statement presents the financial position of the Authority's OPEB Trust Fund. It presents information on the funds, assets, and liabilities, with the difference reported as net position held in trust for employees' post-retirement benefits.

Statement of changes in fiduciary net position: The statement presents information on the contributions, changes in the fair value of investments and expenses of the Authority's Other Post Employment Benefit (OPEB) Trust Fund.

Notes to the financial statements: The notes supply additional information that is essential to a full understanding of the data provided in the Authority-wide financial statements.

Proprietary funds: The Authority maintains proprietary funds. Enterprise funds are used to report functions presented as business-type activities, accounting for its suburban water, suburban wastewater, and city division operations.

Other information: In addition to the basic financial statements and accompanying notes, this report also presents certain required supplementary information concerning the Authority's obligation to supply pension benefits and OPEB for its employees.

Financial Analysis
Net Position (City Division):

A summary of the Authority's City Division Statements of Net Position on December 31 is presented as follows:

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Current Assets, Unrestricted	\$ 28,009,615	\$ 20,025,488	\$ 13,304,647
Non-current Assets:			
Restricted	61,306,220	60,788,278	59,947,285
Capital Assets, Net	1,987,204	945,827	941,153
Other Assets, Net	<u>255,809,350</u>	<u>253,383,943</u>	<u>255,101,102</u>
Total Assets	347,112,389	335,143,536	329,294,187
Deferred Outflows of Resources	<u>28,003,303</u>	<u>29,671,334</u>	<u>30,422,536</u>
Total Assets & Deferred Outflows	\$ 375,115,692	\$ 364,814,870	\$ 359,716,723
Current Liabilities	\$ 7,986,724	\$ 7,552,226	\$ 5,365,963
Non-current Liabilities	<u>415,808,462</u>	<u>413,589,023</u>	<u>412,009,079</u>
Total Liabilities	423,795,186	421,141,249	417,375,042
Deferred Inflows of Resources	<u>4,812,034</u>	<u>3,710,580</u>	<u>2,026,453</u>
Total Liabilities & Deferred Inflows	\$ 428,607,220	\$ 424,851,829	\$ 419,401,495
Net Position:			
Net Investment in Capital Assets	\$ 1,367,914	\$ 693,351	\$ 638,931
Restricted	3,288,666	1,037,068	-
Unrestricted	<u>(58,148,108)</u>	<u>(61,767,378)</u>	<u>(60,323,703)</u>
Total Net Position	<u>\$ (53,491,528)</u>	<u>\$ (60,036,959)</u>	<u>\$ (59,684,772)</u>

As expected for a water/sewer authority, the largest part of the City Division's assets are Capital Assets and Other Assets (74.3%). These categories reflect the Authority's total investment in the leased Concession assets and the purchased rolling stock and other fleet of vehicles, less any depreciation and amortization.

- Current and noncurrent assets other than capital assets and other assets in 2022 increased \$8,502,069, or 10.5%. This increase was primarily due to an increase for unrestricted cash, restricted cash, trade receivables and other receivables.
- Capital assets, net and other assets, net in 2022 increased by \$3,466,784, which was the net increase after considering new acquisitions offset by depreciation and amortization of \$6,492,067 along with an increase in the net pension asset.
- Current liabilities in 2022 increased by \$434,498 from 2021. This increase was primarily due to a higher current part of long-term debt with a partial offset from a reduction in trade payables.
- Noncurrent liabilities in 2022 increased by \$2,219,439 from 2021. The increase was primarily due to additional bond liability for the service concession liability.
- Current and noncurrent assets other than capital assets and other assets in 2021 increased \$7,561,834, or 10.3%. This increase was primarily due to an increase for unrestricted cash which was partially offset by a decrease in other receivable balances and a slight increase in restricted cash.
- Capital assets, net and other assets, net in 2021 decreased by \$1,712,485, which was the net decrease after considering new acquisitions offset by depreciation and amortization of \$6,399,799.
- Current liabilities in 2021 increased by \$2,186,263 from 2020. This increase was primarily due to an increase in trade payables along with a higher current part of long-term debt.
- Noncurrent liabilities in 2021 increased by \$1,579,944 from 2020. The increase was primarily due to additional bond liability for the service concession liability.

Net Position (Suburban Water Fund):

A three-year condensed summary of the Authority's Suburban Water Fund Statements of Net Position as of December 31 of each year is presented as follows:

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Current Assets, Unrestricted	\$ 13,417,932	\$ 12,480,046	\$ 14,104,096
Non-current Asset:			
Restricted	1,875,456	1,943,941	6,314,169
Capital Assets, Net	131,525,866	128,614,268	124,335,781
Other Assets, Net	2,282,894	2,540,046	1,448,937
Total Assets	149,102,148	145,578,301	146,202,983
Deferred Outflows	969,294	744,779	555,570
Total Assets & Deferred Outflows	<u>\$ 150,071,442</u>	<u>\$ 146,323,080</u>	<u>\$ 146,758,553</u>
Current Liabilities	\$ 5,894,716	\$ 3,854,367	\$ 4,486,161
Non-current Liabilities	32,251,632	34,422,363	40,051,208
Total Liabilities	38,146,348	38,276,730	44,537,369
Deferred Inflows	1,101,898	1,361,667	653,881
Total Liabilities & Deferred Inflows	<u>\$ 39,248,246</u>	<u>\$ 39,638,397</u>	<u>\$ 45,191,250</u>
Net Position:			
Net Investment in Capital Assets	\$ 97,314,000	\$ 92,406,620	\$ 86,673,358
Restricted	3,629,406	3,747,477	2,796,165
Unrestricted	9,879,790	10,530,586	12,097,780
Total Net Position	<u>\$ 110,823,196</u>	<u>\$ 106,684,683</u>	<u>\$ 101,567,303</u>

Again, as expected for a water/sewer authority, the largest part of the Suburban Water Fund's total assets & deferred outflows are Capital Assets and Other Assets (89.7%). These categories reflect the Authority's total investment in the capital and other assets (e.g., infrastructure, buildings, machinery, and equipment), less any depreciation and amortization.

- Current and noncurrent assets other than capital assets and other assets in 2022 increased by \$869,401, or 6.0%. This increase was primarily due to an increase in unrestricted cash balances and an increase in trade receivables with a partial offset from a reduction in other receivables.
- Capital assets, net and other assets, net in 2022 increased \$2,654,446 or 2.0%. This was primarily due to capital spending on projects.
- Current liabilities in 2022 increased \$2,040,349 or 52.9% from 2021. This increase was primarily due to an increase in trade payables.
- Noncurrent liabilities in 2022 decreased \$2,170,731 or 6.3% from 2021, due to a reduction in bond liability.
- Current and noncurrent assets other than capital assets and other assets in 2021 decreased by \$5,994,278, or 29.4%. This decrease was primarily due to a reduction in restricted cash balances and a decrease in developer escrow balances.
- Capital assets, net and other assets, net in 2021 increased \$5,369,596 or 4.1%. This was due to capital spending on projects.
- Current liabilities in 2021 decreased \$631,794 or 16.4% from 2020. This decrease was primarily due to decreases in trade payables.
- Noncurrent liabilities in 2021 decreased \$5,628,845 or 14.1% from 2020, due to a reduction in developer escrow balances.

Net Position (Suburban Wastewater Fund):

A three-year condensed summary of the Authority's Suburban Wastewater Fund Statements of Net Position as of December 31 of each year is presented as follows:

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Current Assets, Unrestricted	\$ 18,904,361	\$ 15,726,177	\$ 16,537,194
Non-current Asset:			
Restricted	338,677	338,360	338,204
Capital Assets, Net	82,277,489	83,812,944	83,691,424
Other Assets, Net	6,200,367	8,830,906	11,192,589
Total Assets	<u>107,720,894</u>	<u>108,708,387</u>	<u>111,759,411</u>
Deferred Outflows	269,644	331,223	268,506
Total Assets & Deferred Outflows	<u>\$ 107,990,538</u>	<u>\$ 109,039,610</u>	<u>\$ 112,027,917</u>
Current Liabilities	\$ 2,495,932	\$ 2,516,100	\$ 2,942,341
Non-current Liabilities	5,420,433	6,081,672	6,710,149
Total Liabilities	<u>7,916,365</u>	<u>8,597,772</u>	<u>9,652,490</u>
Deferred Inflows	537,212	449,750	274,730
Total Liabilities & Deferred Inflows	<u>\$ 8,453,577</u>	<u>\$ 9,047,522</u>	<u>\$ 9,927,220</u>
Net Position:			
Net Investment in Capital Assets	\$ 76,055,630	\$ 76,926,452	\$ 76,391,823
Restricted	445,851	140,598	-
Unrestricted	23,035,480	22,925,038	25,708,874
Total Net Position	<u>\$ 99,536,961</u>	<u>\$ 99,992,088</u>	<u>\$ 102,100,697</u>

Again, as expected for a water/sewer authority, the largest part of the Suburban Division's total assets & deferred outflows are Capital Assets and Other Assets (82.1%). These categories reflect the Authority's total investment in the capital and other assets (e.g., infrastructure, buildings, machinery, and equipment), less any depreciation and amortization.

- Current and noncurrent assets other than capital assets and other assets in 2022 increased \$3,178,501, or 19.8%. This increase was primarily due to an increase in unrestricted cash balances and an increase in unrestricted investment balances.
- Capital assets, net and other assets, net in 2022 decreased \$4,165,994 or 4.5%. This was due to capital spending on projects being outpaced by higher depreciation.
- Current liabilities in 2022 decreased \$20,168 or 0.8% from 2021. This decrease was primarily due to decreases in lease liabilities.
- Noncurrent liabilities in 2022 decreased \$661,239 or 10.9% from 2021, due to a reduction in debt balances from principal payments.
- Current and noncurrent assets other than capital assets and other assets in 2021 decreased \$810,861, or 4.8%. This decrease was primarily due to a reduction in restricted and unrestricted cash balances.
- Capital assets, net and other assets, net in 2021 decreased \$2,240,163 or 2.4%. This was due to capital spending on projects being outpaced by higher depreciation.
- Current liabilities in 2021 decreased \$426,241 or 14.5% from 2020. This decrease was primarily due to decreases in trade payables.
- Noncurrent liabilities in 2021 decreased \$628,477 or 9.4% from 2020, due to a reduction in debt related to principal payments.

Changes in Net Position (City Division):

A summary of the Authority's City Division Statement of Revenue, Expenses and Changes in Net Position for the years ended December 31 is presented as follows:

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Operating Revenues:			
User Charges	\$ 46,293,205	\$ 41,949,921	\$ 37,748,826
Other Income & Rent	<u>464,040</u>	<u>326,513</u>	<u>234,849</u>
Total Operating Revenues	<u>46,757,245</u>	<u>42,276,434</u>	<u>37,983,675</u>
Operating Expenses:			
Salaries, Benefits & Administrative	11,922,755	11,658,011	12,466,218
Utilities, Supplies & Services	5,837,862	4,706,369	5,130,094
Treatment & Transportation	11,594	12,480	11,926
Depreciation & Amortization	<u>6,492,067</u>	<u>6,399,799</u>	<u>6,190,313</u>
Total Operating Expenses	<u>24,264,278</u>	<u>22,776,659</u>	<u>23,798,551</u>
Operating Income	<u>22,492,967</u>	<u>19,499,775</u>	<u>14,185,124</u>
Non-Operating Revenues (Expenses):			
Tapping & Capital Recovery Fees	2,491,962	2,173,581	1,901,863
Meter Sales	36,231	29,584	24,595
Inspection, Plan Reviews & Project Reimbursements	5,806,628	1,308,125	841,585
Interest Earnings	914,681	5,373	162,075
Other Income	214,812	113,357	51,620
Interest Expense	(19,703,642)	(19,452,114)	(17,257,071)
Other Expense	<u>(5,708,208)</u>	<u>(4,029,868)</u>	<u>(4,206,199)</u>
Total Net Non-Operating Revenues (Expenses)	<u>(15,947,536)</u>	<u>(19,851,962)</u>	<u>(18,481,532)</u>
Increase (Decrease) in Net Position	<u>6,545,431</u>	<u>(352,187)</u>	<u>(4,296,408)</u>
Beginning Net Position, as Restated	<u>(60,036,959)</u>	<u>(59,684,772)</u>	<u>(55,388,364)</u>
Ending Net Position	<u>\$ (53,491,528)</u>	<u>\$ (60,036,959)</u>	<u>\$ (59,684,772)</u>

Year over year changes are as follows:

- Operating Revenue for 2022 for the City Division was \$46,757,245, compared to \$42,276,434 in 2021 with most of the increase attributable to a rate increase and higher Signatory Revenues.
- Operating Expenses, net of depreciation and amortization were \$17,772,211 in 2022 compared to \$16,376,860 in 2021, an increase of \$1,395,351. The increase is due to higher employee costs, higher costs for materials and supplies, and higher costs for services.
- Operating Income, net of depreciation and amortization was \$28,985,034 in 2022 compared to \$25,899,574 in 2021, an increase of \$3,085,460 driven mostly by the increased operating revenues with a partial offset from higher operating expenses.
- Operating Revenue for 2021 for the City Division was \$42,276,434, compared to \$37,983,675 in 2020 with most of the increase attributable to a rate increase and higher Signatory Revenues.
- Operating Expenses, net of depreciation and amortization were \$16,376,860 in 2021 compared to \$17,608,328 in 2020, a decrease of \$1,231,378. The decrease was due to lower employee costs.
- Operating Income, net of depreciation and amortization was \$25,899,574 in 2021 compared to \$20,375,437 in 2020, an increase of \$5,524,137 driven mostly by the reduction in operating expenses and higher operating revenues.

It should be noted that interest expense of \$19,703,642 in 2022 is comprised of actual interest paid (\$11,511,011), accretion (\$3,909,635), amortization of the SCA Payable (\$3,074,043), change in accrued interest payable (\$14,860), amortization of bond discount (\$165,941), interest on leases (\$8,236), and deferred refunding loss of (\$1,019,916).

The City Division's Annual Debt Service Coverage Ratio exceeded the indenture requirement of 1.20. The ratio for all years of operation has exceeded 1.20.

Changes in Net Position (Suburban Water Fund):

A condensed summary of the Authority's Suburban Water Fund Statements of Revenues, Expenses and Changes in Net Position for the years ended December 31 is presented below:

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Operating Revenues:			
User Charges	\$ 15,642,798	\$ 12,399,103	\$ 10,834,135
Other Income & Rent	675,134	58,764	32,540
Total Operating Revenues	<u>16,317,932</u>	<u>12,457,867</u>	<u>10,866,675</u>
Operating Expenses:			
Salaries, Benefits & Administrative	3,574,441	3,221,208	2,877,277
Utilities, Supplies & Services	5,006,631	4,340,242	4,351,085
Treatment & Transportation	-	-	-
Depreciation & Amortization	3,665,828	3,373,864	2,942,067
Total Operating Expenses	<u>12,246,900</u>	<u>10,935,314</u>	<u>10,170,429</u>
Operating Income/(Loss)	<u>4,071,032</u>	<u>1,522,553</u>	<u>696,246</u>
Non-Operating Revenues/(Expenses):			
Tapping & Capital Recovery Fees	279,250	386,165	464,648
Meter Sales	140,444	150,087	77,685
Inspection, Plan Reviews & Project Reimbursements	233,338	1,022,771	318,263
Interest Earnings	64,387	34,284	84,958
Other Income	173,318	132,181	105,508
Interest Expense	(847,133)	(1,136,953)	(1,442,776)
Other Expense	(229,725)	(255,343)	(57,563)
Total Net Non-Operating Revenues/(Expenses)	<u>(186,121)</u>	<u>333,192</u>	<u>(449,277)</u>
Increase/(Decrease) in Net Position Before Capital Contributions	<u>3,884,911</u>	<u>1,855,745</u>	<u>246,969</u>
Capital Contributions			
Grants	-	34,523	-
Capital Assets Provided by Developers & Other	253,602	3,227,112	209,793
Total Capital Contributions	<u>253,602</u>	<u>3,261,635</u>	<u>209,793</u>
Increase/(Decrease) in Net Position	<u>4,138,513</u>	<u>5,117,380</u>	<u>456,762</u>
Beginning Net Position, as Restated	<u>106,684,683</u>	<u>101,567,303</u>	<u>101,110,541</u>
Ending Net Position	<u>\$ 110,823,196</u>	<u>\$ 106,684,683</u>	<u>\$ 101,567,303</u>

Changes in the Statements of Revenues, Expenses and Changes in Net Position were as follows:

- Operating Revenue in 2022 for the Suburban Water Fund was \$16,317,932 compared to \$12,457,867 in 2021. The primary driver for the increase in Water Fund revenue was higher volumes along with increased rates.
- Operating expenses, net of depreciation & amortization was \$8,581,072 in 2022 compared to \$7,561,450 in 2021, an increase of \$1,019,622 over 2021. This increase was driven by higher employee costs, higher materials and supplies, and higher services costs.
- Operating Revenue in 2021 for the Suburban Water Fund was \$12,457,867 compared to \$10,866,675 in 2020. The primary driver for the increase in Water Fund revenue was higher volumes along with increased rates.
- Operating expenses, net of depreciation & amortization was \$7,561,450 in 2021 compared to \$7,228,362 in 2020, an increase of \$333,088.

Changes in Net Position (Suburban Wastewater Fund):

A condensed summary of the Authority's Suburban Wastewater Fund Statements of Revenues, Expenses and Changes in Net Position for the years ended December 31 is presented below:

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Operating Revenues:			
User Charges	\$ 14,684,737	\$ 15,606,887	\$ 15,980,601
Other Income & Rent	336,915	204,533	188,326
Total Operating Revenues	<u>15,021,652</u>	<u>15,811,420</u>	<u>16,168,927</u>
Operating Expenses:			
Salaries, Benefits & Administrative	1,470,168	1,437,400	1,364,707
Utilities, Supplies & Services	7,114,123	6,906,429	6,445,488
Treatment & Transportation	2,846,176	3,899,502	2,906,958
Depreciation & Amortization	7,090,828	6,671,362	6,295,598
Total Operating Expenses	<u>18,521,295</u>	<u>18,914,693</u>	<u>17,012,751</u>
Operating Income/(Loss)	<u>(3,499,643)</u>	<u>(3,103,273)</u>	<u>(843,824)</u>
Non-Operating Revenues/(Expenses):			
Tapping & Capital Recovery Fees	3,236,640	752,932	3,575,692
Meter Sales	-	-	-
Inspection, Plan Reviews & Project Reimbursements	82,529	4,108	8,655
Interest Earnings	(3,778)	25,019	193,926
Other Income	1,585	45,690	11,694
Interest Expense	(185,935)	(199,973)	(199,707)
Other Expense	(86,525)	(55,412)	(42,698)
Total Net Non-Operating Revenues/(Expenses)	<u>3,044,516</u>	<u>572,364</u>	<u>3,547,562</u>
Increase/(Decrease) in Net Position Before Capital Contributions	<u>(455,127)</u>	<u>(2,530,909)</u>	<u>2,703,738</u>
Capital Contributions			
Grants	-	-	-
Capital Assets Provided by Developers & Other	-	422,300	7,620
Total Capital Contributions	<u>-</u>	<u>422,300</u>	<u>7,620</u>
Increase/(Decrease) in Net Position	<u>(455,127)</u>	<u>(2,108,609)</u>	<u>2,711,358</u>
Beginning Net Position, as Restated	<u>99,992,088</u>	<u>102,100,697</u>	<u>99,389,339</u>
Ending Net Position	<u>\$ 99,536,961</u>	<u>\$ 99,992,088</u>	<u>\$ 102,100,697</u>

Changes in the Statements of Revenues, Expenses and Changes in Net Position were as follows:

- Operating Revenue in 2022 for the Suburban Wastewater Fund was \$15,021,652 compared to \$15,811,420 in 2021. The primary driver for the decrease in Wastewater Fund revenue was lower flows and loads.
- Operating expenses, net of depreciation & amortization was \$11,430,467 in 2021, a decrease of \$812,864 compared to 2021 of \$12,243,331. The primary driver was lower treatment & transportation charges.
- Operating Revenue in 2021 for the Suburban Wastewater Fund was \$15,811,420 compared to \$16,168,927 in 2020. The primary driver for the decrease in Wastewater Fund revenue was higher flows and loads.
- Operating expenses, net of depreciation & amortization was \$12,243,331 in 2021, an increase of \$1,526,178 compared to 2020 of \$10,717,153.

- As a sign of the new growth in the Suburban Division territory, the following table illustrates the three-year trend of Water System connections and Wastewater capacity sales to new and expanding users.

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Water System # of Units Connected:			
Single Family Detached	175	162	90
Single Family Attached (Townhouses)	95	98	90
Apartments and Mobile Homes	274	9	140
Commercial	<u>9</u>	<u>15</u>	<u>18</u>
Total Water System Connections	<u>553</u>	<u>284</u>	<u>338</u>
Wastewater Capacity Sales in Gallons:			
Residential	71,806	63,555	49,952
Commercial	<u>182,559</u>	<u>1,150</u>	<u>244,921</u>
Total Sales	<u>254,365</u>	<u>64,705</u>	<u>294,873</u>

The table reflects an increase in new Water System connections for both detached and attached single family homes while we had a decrease in connections for Apartments, mobile homes, and commercial. Wastewater capacity sales were higher in 2022 to previous year due to higher commercial activity.

- The Suburban Water System bought 7.34 million gallons per day (mgd) from the interconnection with its City Division in 2022. We expect to buy similar volume in 2023.
- The Suburban Division's Annual Water System Operating Coverage, which is figured out by dividing net operating revenues by annual debt service, was above the 110% required by the Suburban Water Bond Indenture.

Changes in Net Position (Suburban Division Summary):

A summary of the Authority's Statement of Changes in Net Position Suburban Division (Suburban Water and Wastewater) is presented as follows:

Statement of Changes in Net Position Year Ended December 31, 2022

	<u>Beginning Balance</u>	<u>Increased / (Decreased)</u>	<u>Ending Balance</u>
Net Investment in Capital			
Assets	\$ 169,333,072	\$ 4,036,558	\$ 173,369,630
Restricted Net Position	3,888,075	187,182	4,075,257
Unrestricted Net Position	<u>33,455,624</u>	<u>(540,354)</u>	<u>32,915,270</u>
Total Net Position	<u>\$ 206,676,771</u>	<u>\$ 3,683,386</u>	<u>\$ 210,360,157</u>

Other Selected Information:

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Equivalent Fulltime Employees at Year-End	165	158	157
Units Served:			
<u>City Division:</u>			
Water:			
Water – Residential	42,249	41,998	41,742
Water – Industrial & Commercial	<u>5,462</u>	<u>5,184</u>	<u>5,179</u>
Total Water Billable Units	47,711	47,182	46,921
Wastewater:			
Wastewater – Residential	42,219	41,968	41,767
Wastewater – Commercial	<u>5,452</u>	<u>5,174</u>	<u>5,140</u>
Total Wastewater Billable Units	47,671	47,142	46,907
<u>Suburban Division:</u>			
Water – Residential	23,383	22,791	22,522
Water – Industrial & Commercial	<u>782</u>	<u>774</u>	<u>760</u>
Total Water Billable Units	24,165	23,565	23,282
Wastewater Collection – Residential	2,957	2,897	2,820
Wastewater Collection – Commercial	<u>133</u>	<u>132</u>	<u>128</u>
Total Wastewater Billable Units	3,090	3,029	2,948
Customers:	<u>2022</u>	<u>2021</u>	<u>2020</u>
<u>City Division:</u>			
Water – Residential	30,456	30,442	30,408
Water – Industrial & Commercial	<u>3,046</u>	<u>3,034</u>	<u>3,029</u>
Total Water Customers	33,502	33,476	33,437
Wastewater Collection – Residential	30,434	30,420	30,391
Wastewater Collection – Commercial	<u>3,036</u>	<u>3,024</u>	<u>3,014</u>
Total Wastewater Customers	33,470	33,444	33,405

Customers:	<u>2022</u>	<u>2021</u>	<u>2020</u>
<u>Suburban Division:</u>			
Water – Residential	20,417	20,145	19,883
Water – Industrial & Commercial	<u>776</u>	<u>768</u>	<u>756</u>
Total Water Customers	21,193	20,913	20,639
Wastewater Collection – Residential	2,597	2,537	2,460
Wastewater Collection – Commercial	<u>127</u>	<u>126</u>	<u>124</u>
Total Wastewater Customers	2,724	2,663	2,584
Ratios:	<u>2022</u>	<u>2021</u>	<u>2020</u>
<u>City Division:</u>			
Ratio of Operating Revenue to:			
Operating Expenses, Net of Depreciation & Amortization	2.63	2.58	2.16
Total Assets (Annualized)	0.13	0.13	0.12
Total Net Position	N/A	N/A	N/A
Debt Related Ratios:			
Net Position to Long-Term Debt	N/A	N/A	N/A
Current Ratio (Current Assets/Current Liabilities)	3.51	2.65	2.48
<u>Suburban Water:</u>			
Ratio of Operating Revenue to:			
Operating Expenses, Net of Depreciation & Amortization	1.90	1.65	1.50
Total Assets	0.11	0.09	0.07
Total Net Position	0.15	0.12	0.11
Debt Related Ratios:			
Net Position to Long-Term Debt	3.44	3.19	3.02
Current Ratio (Current Assets/Current Liabilities)	2.28	3.24	3.14
<u>Suburban Wastewater:</u>			
Ratio of Operating Revenue to:			
Operating Expenses, Net of Depreciation & Amortization	1.31	1.29	1.51
Total Assets (Annualized)	0.14	0.15	0.14
Total Net Position	0.15	0.16	0.16
Debt Related Ratios:			
Net Position to Long-Term Debt	18.36	16.44	15.22
Current Ratio (Current Assets/Current Liabilities)	7.57	6.25	5.62

Capital Contributions

The Authority received no grants related to construction in 2022 and had \$34,523 in 2021. Another major source of capital contributions was derived from developer installed systems donated to the Authority. In 2022, \$253,602 was received compared to \$3,649,412 in 2021.

Capital Assets & Service Concession Arrangement:

The largest investment in the Authority's history occurred on August 7, 2013, with the financing of the acquisition of the City of Allentown's Water and Sewer System through a 50-year lease concession. The Authority's Net Capital Investment in intangible and other assets decreased from \$248,267,864 in 2021 to \$247,299,215 in 2022, and the City Divisions net capital assets increased from \$945,827 in 2021 to \$1,987,204 in 2022. More detail on the Service Concession Arrangement can be found in Note 6 to the financial statements.

Net Capital Assets in Suburban Water increased by \$2,911,598 and decreased by \$1,535,455 in Suburban Wastewater. The changes from year to year are due to the relative changes in capital spending against depreciation & amortization. More detail on the Authority's Capital Assets can be found in Note 5 to the financial statements.

Debt Administration:

In 2013 the Authority issued \$307,683,599 million in three series of bonds to fund the upfront payment to the City of Allentown, capital improvements, create various reserves necessary under the Indenture and to fund financing and other transaction costs related to the Concession. Increases to debt in 2018 consisted of issuance of the Series 2018 Bond and accreted interest on the 2013 Series B Capital Appreciation Revenue Bonds. The Series C Bonds were refinanced in 2018 and a part of the Series A bonds were refinanced in 2020.

In 2020 the Authority issued City Division Water and Sewer Revenue Bond Series 2020 and Series A of 2020 in the amounts of \$161,035,000 and \$18,150,000, respectively. The Series 2020 Bonds were issued to advance refund a part of the City Divisions Series 2013 A Bonds, fund a debt service reserve, and pay the costs and expenses of issuing the Bonds. The Series A 2020 Bonds were issued to currently refund the City Divisions Series 2018 Bonds, fund a debt service reserve, and pay the costs and expenses of issuing the Bonds.

In 2021, the Authority refinanced \$21,679,902 of existing debt in the Suburban Water fund.

In 2022, there was \$12.2M of additional project financing activity in the Suburban Water Fund.

See note 8 of the Notes to the Financial Statements for further detail on outstanding debt.

Economic Factors and Rates:

City Division:

City Division rates increased by 10% in January 2022 per the Concession Agreement to support the mutual goals of the Authority and the City of Allentown related to revenue capacity and operational sustainability of the system.

Suburban Division:

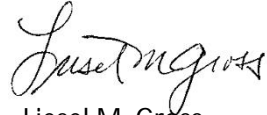
From the Suburban Division perspective, the Authority chose to increase water rates in 2022 to cover the funding of certain capital projects. The Suburban Division's rates continue to be among the lowest in the Lehigh Valley region.

With higher treatment and transportation costs from the former City of Allentown water and wastewater departments and significant maintenance needed on the Authority's Interceptor System, annual Wastewater rate increases have been enacted since 2007. For the Authority's smaller satellite systems and wastewater collection systems, the most recent rate increase was on January 1, 2013, a 5% increase.

Contacting the Authority's Financial Management:

This financial report is designed to provide our customers, creditors, and funding agencies with a general overview of the Authority's finances and to show the Authority's accountability for the money it receives. If you have any questions about this report or need more information, contact Edward C. Klein, the Lehigh County Authority's Chief Financial Officer, P.O. Box 3348, Allentown, PA 18106.

Submitted by,



Liesel M. Gross
Chief Executive Officer



Edward C. Klein
Chief Financial Officer

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LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

STATEMENTS OF NET POSITION
December 31, 2022 AND 2021

- ASSETS AND DEFERRED OUTFLOWS OF RESOURCES-

	Suburban Water Fund		Suburban Wastewater Fund		City Division Fund		Total	
	2022	2021	2022	2021	2022	2021	2022	2021
Current Assets:								
Cash and Cash Equivalents (Note 2)	\$ 5,505,549	\$ 4,546,072	\$ 7,753,178	\$ 6,335,679	\$ 11,937,407	\$ 9,707,253	\$ 25,196,134	\$ 20,589,004
Certificates of Deposit (Note 2)	2,945,069	2,975,124	8,866,269	6,977,547	-	-	11,811,338	9,952,671
Accounts Receivable:								
Customers	2,803,370	2,183,368	2,867,327	2,977,620	7,935,029	7,094,069	13,605,726	12,255,057
Financing Contracts (Note 4)	-	-	210,885	241,683	-	-	210,885	241,683
Others	323,672	1,019,043	652,299	601,489	7,485,033	2,768,144	8,461,004	4,388,676
Due from (to) Other Funds (Note 9)	1,577,517	1,561,765	(1,577,517)	(1,561,765)	-	-	-	-
Inventory	92,544	23,049	-	-	-	-	92,544	23,049
Accrued Interest Receivable	6,766	923	8,211	6,928	211,856	410	226,833	8,261
Prepaid Expenses	163,445	170,702	123,709	146,996	440,290	455,612	727,444	773,310
Total Current Assets	13,417,932	12,480,046	18,904,361	15,726,177	28,009,615	20,025,488	60,331,906	48,231,711
Noncurrent Assets:								
Restricted:								
Cash and Cash Equivalents (Note 2)	1,875,456	1,943,941	338,677	338,360	61,306,220	60,788,278	63,520,353	63,070,579
Total Restricted Assets	1,875,456	1,943,941	338,677	338,360	61,306,220	60,788,278	63,520,353	63,070,579
Capital Assets: (Notes 1 and 5)								
Land	3,334,473	3,295,901	1,896,050	1,896,050	-	-	5,230,523	5,191,951
Construction in progress	4,714,305	1,434,072	1,421,586	829,357	-	-	6,135,891	2,263,429
Wells & Reservoirs	11,702,311	11,069,710	3,494,643	3,494,643	-	-	15,196,954	14,564,353
Transmission & Distribution Mains	88,676,537	88,175,419	-	-	-	-	88,676,537	88,175,419
Services & Hydrants	18,511,665	18,461,760	-	-	-	-	18,511,665	18,461,760
Interceptor & Collector Systems	-	-	39,577,398	39,317,989	-	-	39,577,398	39,317,989
Building Structure & Appurtenances	30,639,526	30,349,884	71,847,880	70,916,999	-	-	102,487,406	101,266,883
Metering System	14,109,805	13,988,178	429,778	429,778	-	-	14,539,583	14,417,956
Equipment and Furnishings	10,619,945	9,552,072	24,113,872	23,887,742	3,784,342	3,346,802	38,518,159	36,786,616
Leased Equipment	8,829	8,829	8,829	8,829	54,217	54,217	71,875	71,875
Leased Vehicles	407,400	97,216	1,100,894	983,239	940,098	338,169	2,448,392	1,418,624
Capacity	1,207,901	1,207,901	248,561	579,587	-	-	1,456,462	1,787,488
Less accumulated depreciation & amortization	(52,406,831)	(49,026,674)	(61,862,002)	(58,531,269)	(2,791,453)	(2,793,361)	(117,060,286)	(110,351,304)
Total Capital Assets	131,525,866	128,614,288	82,277,489	83,812,944	1,987,204	945,827	215,790,559	213,373,039
Other Assets:								
Long-Term Portion of Receivables -	-	-	-	-	-	-	-	-
Financing Contracts (Note 4)	-	-	749,038	960,693	-	-	749,038	960,693
Intangible Service Concession	-	-	-	-	247,299,215	248,267,864	247,299,215	248,267,864
Arrangement (Note 6)	-	-	-	-	3,288,666	1,037,068	4,620,211	1,456,966
Net Pension Asset	885,694	279,300	445,851	140,598	-	-	1,164,309	1,897,911
Net OPEB Asset (Note 12)	1,164,309	1,897,911	-	-	-	-	5,221,469	4,079,011
Other Assets	-	-	-	-	-	-	-	-
Facilities Planning Costs	-	-	-	-	-	-	-	-
(Net of Accumulated Amortization) (Note 7)	232,891	362,835	5,005,478	7,729,615	-	-	5,238,369	8,092,450
Total Other Assets	2,282,894	2,540,046	6,200,367	8,830,906	255,809,350	253,383,943	264,292,611	264,754,895
Total Noncurrent Assets	135,684,216	133,098,255	88,816,533	92,982,210	319,102,774	315,118,048	543,603,523	541,198,513
Total Assets	149,102,148	145,578,301	107,720,894	108,708,387	347,112,389	335,143,536	603,935,431	589,430,224
Deferred Outflows of Resources								
Pensions	535,658	657,983	269,644	331,223	1,988,935	2,443,204	2,794,237	3,432,410
OPEB	433,636	86,796	-	-	601,463	795,309	1,035,099	882,105
Refunding Loss on Bonds	-	-	-	-	25,412,905	26,432,821	25,412,905	26,432,821
Total Deferred Outflows	969,294	744,779	269,644	331,223	28,003,303	29,671,334	29,242,241	30,747,336
Total Assets and Deferred Outflows of Resources	\$ 150,071,442	\$ 146,323,080	\$ 107,990,538	\$ 109,039,610	\$ 375,115,692	\$ 364,814,870	\$ 633,177,672	\$ 620,177,560

This statement is continued on the next page

The accompanying notes are an integral part of the financial statements.

LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

STATEMENTS OF NET POSITION (CONTINUED)
December 31, 2022 AND 2021

- LIABILITIES AND NET POSITION -

	Suburban Water Fund		Suburban Wastewater Fund		City Division Fund		Total	
	2022	2021	2022	2021	2022	2021	2022	2021
Current Liabilities:								
Accounts Payable - Trade	\$ 2,949,674	\$ 919,345	\$ 1,531,795	\$ 1,522,256	\$ 2,701,212	\$ 2,971,985	\$ 7,182,681	\$ 5,413,586
Accounts Payable - Capital	215,964	277,831	46,218	93,956	247,358	195,097	509,540	566,884
Accrued Interest Payable	186,518	200,039	-	3,346	974,111	959,251	1,160,629	1,162,636
Lease Payable	67,711	20,468	130,725	202,687	166,514	78,716	364,950	301,871
Notes Payable (Note 8)	75,541	74,410	453,376	443,724	-	-	528,917	518,134
Revenue Bonds Payable (Note 8)	1,935,000	1,850,767	241,714	177,473	3,441,583	3,023,568	5,618,297	5,051,808
Developer Deposits and Other (Note 10)	256,282	359,362	2,950	2,950	81,682	37,852	340,914	400,164
Accrued Payroll & Other	208,026	152,145	89,154	69,708	374,264	285,757	671,444	507,610
Total Current Liabilities	5,894,716	3,854,367	2,495,932	2,516,100	7,986,724	7,552,226	16,377,372	13,922,693
Noncurrent Liabilities:								
Developer Deposits and Other (Note 10)	118,018	160,360	24,389	19,064	-	10,000	142,407	189,424
SCA Payable (Note 6)	-	-	-	-	67,771,081	65,983,689	67,771,081	65,983,689
Lease Payable	234,993	70,709	233,387	263,627	452,776	173,760	921,156	508,096
Notes Payable (Note 8)	775,582	787,494	4,270,580	4,723,957	-	-	5,046,162	5,511,451
OPEB Liability	-	-	-	-	3,199,323	3,588,854	3,199,323	3,588,854
Revenue Bonds Payable								
(Net of Premium/Discount) (Note 8)	31,123,039	33,403,800	892,077	1,075,024	344,385,282	343,832,720	376,400,398	378,311,544
Total Noncurrent Liabilities	32,251,632	34,422,363	5,420,433	6,081,672	415,808,462	413,589,023	453,480,527	454,093,058
Total Liabilities	38,146,348	38,276,730	7,916,365	8,597,772	423,795,186	421,141,249	469,857,899	468,015,751
Deferred Inflows of Resources								
Pensions	1,067,188	893,441	537,212	449,750	3,962,567	3,317,431	5,566,967	4,660,622
OPEB	34,710	468,226	-	-	849,467	393,149	884,177	861,375
Total Deferred Inflows	1,101,898	1,361,667	537,212	449,750	4,812,034	3,710,580	6,451,144	5,521,997
Net Position: (Notes 1 and 13)								
Net Investment in Capital Assets	97,314,000	92,406,620	76,055,630	76,926,452	1,367,914	693,351	174,737,544	170,026,423
Restricted for Debt Service	1,579,403	1,570,266	-	-	-	-	1,579,403	1,570,266
Restricted for Net Pension Asset	885,694	279,300	445,851	140,598	3,288,666	1,037,068	4,620,211	1,456,966
Restricted for Net OPEB Asset	1,164,309	1,897,911	-	-	-	-	1,164,309	1,897,911
Unrestricted	9,879,790	10,530,586	23,035,480	22,925,038	(58,148,108)	(61,767,378)	(25,232,838)	(28,311,754)
Total Net Position	110,823,196	106,684,683	99,536,961	99,992,088	(53,491,528)	(60,036,959)	156,868,629	146,639,812
Total Liabilities, Deferred Inflows of Resources and Net Position	\$ 150,071,442	\$ 146,323,080	\$ 107,990,538	\$ 109,039,610	\$ 375,115,692	\$ 364,814,870	\$ 633,177,672	\$ 620,177,560

The accompanying notes are an integral part of the financial statements.

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LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
For the Years Ended December 31, 2022 and 2021

	Suburban		Suburban		City Division		Total	
	Water Fund		Wastewater Fund		Fund			
	2022	2021	2022	2021	2022	2021	2022	2021
OPERATING REVENUES:								
Charges for Services	\$ 15,642,798	\$ 12,399,103	\$ 14,684,737	\$ 15,606,887	\$ 46,293,205	\$ 41,949,921	\$ 76,620,740	\$ 69,955,911
Rent	-	-	-	-	-	-	-	-
Other Income	675,134	58,764	336,915	204,533	464,040	326,513	1,476,089	589,810
Total Operating Revenues	<u>16,317,932</u>	<u>12,457,867</u>	<u>15,021,652</u>	<u>15,811,420</u>	<u>46,757,245</u>	<u>42,276,434</u>	<u>78,096,829</u>	<u>70,545,721</u>
OPERATING EXPENSES								
Salaries and Wages	2,273,458	1,936,530	930,273	807,480	7,738,611	7,393,768	10,942,342	10,137,778
Employee Benefits	747,347	774,783	314,861	411,940	2,579,002	2,734,246	3,641,210	3,920,969
General and Administrative	553,636	509,895	225,034	217,980	1,605,142	1,529,997	2,383,812	2,257,872
Utilities	481,997	423,327	271,866	269,555	1,802,290	1,705,824	2,556,153	2,398,706
Materials and Supplies	860,080	472,436	339,120	231,857	2,227,856	1,486,678	3,427,056	2,190,971
Miscellaneous Services	3,664,554	3,444,479	6,503,137	6,405,017	1,807,716	1,513,867	11,975,407	11,363,363
Treatment and Transportation	-	-	2,846,176	3,899,502	11,594	12,480	2,857,770	3,911,982
Depreciation and Amortization	3,665,828	3,373,864	7,090,828	6,671,362	6,492,067	6,399,799	17,248,723	16,445,025
Total Operating Expenses	<u>12,246,900</u>	<u>10,935,314</u>	<u>18,521,295</u>	<u>18,914,693</u>	<u>24,264,278</u>	<u>22,776,659</u>	<u>55,032,473</u>	<u>52,626,666</u>
OPERATING INCOME (LOSS)	<u>4,071,032</u>	<u>1,522,553</u>	<u>(3,499,643)</u>	<u>(3,103,273)</u>	<u>22,492,967</u>	<u>19,499,775</u>	<u>23,064,356</u>	<u>17,919,055</u>
NONOPERATING REVENUES (EXPENSES):								
Tapping and Capital Recovery Fees	279,250	386,165	3,236,640	752,932	2,491,962	2,173,581	6,007,852	3,312,678
Meter Sales	140,444	150,087	-	-	36,231	29,584	176,675	179,671
Inspection, Plan Reviews, and Project Reimbursements	233,338	1,022,771	82,529	4,108	5,806,628	1,308,125	6,122,495	2,335,004
Investment Earnings	64,387	34,284	(3,778)	25,019	914,681	5,373	975,290	64,676
Interest Expense	(847,133)	(1,136,953)	(185,935)	(199,973)	(19,703,642)	(19,452,114)	(20,736,710)	(20,789,040)
Other Expense	(229,725)	(255,343)	(86,525)	(55,412)	(5,708,208)	(4,029,868)	(6,024,458)	(4,340,623)
Other Income	173,318	132,181	1,585	45,690	214,812	113,357	389,715	291,228
Total Nonoperating Revenues/(Expenses)	<u>(186,121)</u>	<u>333,192</u>	<u>3,044,516</u>	<u>572,364</u>	<u>(15,947,536)</u>	<u>(19,851,962)</u>	<u>(13,089,141)</u>	<u>(18,946,406)</u>
Increase (Decrease) in net position before capital contributions	3,884,911	1,855,745	(455,127)	(2,530,909)	6,545,431	(352,187)	9,975,215	(1,027,351)
Capital Contributions:								
Capital Grant	-	34,523	-	-	-	-	-	34,523
Capital Assets Provided by Developers and Others	253,602	3,227,112	-	422,300	-	-	253,602	3,649,412
Total Capital Contributions	<u>253,602</u>	<u>3,261,635</u>	<u>-</u>	<u>422,300</u>	<u>-</u>	<u>-</u>	<u>253,602</u>	<u>3,683,935</u>
Increase (Decrease) in Net Position	4,138,513	5,117,380	(455,127)	(2,108,609)	6,545,431	(352,187)	10,228,817	2,656,584
Net Position at Beginning of Year	106,684,683	101,567,303	99,992,088	102,100,697	(60,036,959)	(59,684,772)	146,639,812	143,983,228
Net Position at End of Year	<u>\$ 110,823,196</u>	<u>\$ 106,684,683</u>	<u>\$ 99,536,961</u>	<u>\$ 99,992,088</u>	<u>\$ (53,491,528)</u>	<u>\$ (60,036,959)</u>	<u>\$ 156,868,629</u>	<u>\$ 146,639,812</u>

The accompanying notes are an integral part of the financial statements.

LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

STATEMENTS OF CASH FLOWS
Years Ended December 31, 2022 AND 2021

	2022	2021	2022	2021	2022	2021	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES								
Cash Received From Customers	\$ 15,718,167	\$ 11,718,156	\$ 14,986,673	\$ 16,282,313	\$ 40,735,356	\$ 43,470,962	\$ 71,440,196	\$ 71,471,431
Cash Payments To Suppliers For Goods And Services	(3,038,540)	(4,653,099)	(9,927,473)	(11,142,933)	(6,104,907)	(3,301,143)	(19,070,920)	(19,097,175)
Cash Payments To Employees For Services	(3,875,636)	(3,696,003)	(1,606,934)	(1,581,866)	(12,725,808)	(12,149,916)	(18,208,378)	(17,427,785)
Other Operating Cash Receipts	675,134	58,764	336,915	204,533	464,040	326,513	1,476,089	589,810
Net Cash Provided By Operating Activities	9,479,125	3,427,818	3,789,181	3,762,047	22,368,681	28,346,416	35,636,987	35,536,281
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES								
Interest Paid on Revenue Bonds and Notes	-	-	-	-	(11,519,246)	(11,554,153)	(11,519,246)	(11,554,153)
Facility Improvement Payments	-	-	-	-	(6,279,961)	(3,228,132)	(6,279,961)	(3,228,132)
Payments to the City of Allentown	-	-	-	-	(1,286,651)	(1,243,524)	(1,286,651)	(1,243,524)
Transfers From Other Funds	(15,752)	57,441	-	-	-	-	(15,752)	57,441
Transfers To Other Funds	-	-	15,752	(21,230)	-	(36,211)	15,752	(57,441)
Net Cash Provided By (Used in) Noncapital Financing Activities	(15,752)	57,441	15,752	(21,230)	(19,085,858)	(16,062,020)	(19,085,858)	(16,025,809)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES								
Receipts/(Release) of Developer Deposits	-	63,857	5,325	-	33,830	22,975	39,155	86,832
Payments of Developer Deposits	(145,422)	-	-	-	-	-	(145,422)	-
Payments of Facilities Planning Costs	(96,748)	(505,178)	(873,051)	(1,176,935)	-	-	(969,799)	(1,682,113)
Acquisition and Construction of Property and Equipment	(5,873,985)	(4,117,160)	(2,180,933)	(3,044,918)	(825,280)	(143,364)	(8,880,198)	(7,305,442)
Proceeds From Capacity Sales	-	-	331,026	298,290	-	-	331,026	298,290
Cash Received from Tapping and Capital Recovery Fees	279,250	386,165	3,236,640	752,932	2,491,962	2,173,581	6,007,852	3,312,678
Cash Received from Meter Sales	140,444	150,087	-	-	36,231	29,584	176,675	179,671
Cash Received from Inspection, Plan Reviews, and Project Reimbursement	233,338	1,022,771	82,529	4,108	5,806,628	1,308,125	6,122,495	2,335,004
Other Capital Cash Receipts	173,318	166,704	(123,301)	(217,072)	214,812	113,357	264,829	62,989
Other Capital Cash Payments	(204,555)	(255,343)	-	-	(5,656,030)	(4,150,067)	(5,860,585)	(4,405,410)
Revenue Bond and Note Issuance Proceeds	63,629	21,066,942	-	-	-	-	63,629	21,066,942
Payments to Escrow Agents	-	-	-	-	-	-	-	-
Principal Paid On Leases	(98,657)	(11,219)	(219,857)	(177,926)	(235,115)	(74,050)	(553,629)	(263,195)
Principal Paid On Revenue Bonds	(1,850,767)	(21,146,465)	(118,706)	(114,595)	(3,105,000)	(2,570,000)	(5,074,473)	(23,831,060)
Principal Paid On Revenue Notes	(74,410)	(1,376,204)	(443,725)	(434,775)	-	-	(518,135)	(1,810,979)
Interest Paid On Revenue Bonds and Notes	(1,206,415)	(1,344,768)	(189,281)	(199,973)	-	-	(1,395,696)	(1,544,741)
Net Cash Provided by (Used in) Capital and Related Financing Activities	(8,660,980)	(5,899,811)	(493,334)	(4,310,864)	(1,237,962)	(3,289,859)	(10,392,276)	(13,500,534)
CASH FLOWS FROM INVESTING ACTIVITIES								
Maturities of Certificates Of Deposit	990,000	1,493,682	2,906,000	3,439,000	-	-	3,896,000	4,932,682
Purchase of Certificates Of Deposit	(984,000)	(1,988,000)	(4,898,000)	(4,084,000)	-	-	(5,882,000)	(6,072,000)
Purchase of U.S. Treasury Obligations	-	-	-	-	-	-	-	-
Maturities of U.S. Treasury Obligations	-	245,000	-	-	-	-	-	245,000
Interest Received On Investments	82,599	51,918	98,217	95,878	703,235	5,454	884,051	153,250
Net Cash Provided by (Used in) Investing Activities	88,599	(197,400)	(1,893,783)	(549,122)	703,235	5,454	(1,101,949)	(741,068)
Net Increase (Decrease) in Cash	890,992	(2,611,952)	1,417,816	(1,119,169)	2,748,096	8,999,991	5,056,904	5,268,870
Cash:								
Beginning	6,490,013	9,101,965	6,674,039	7,793,208	70,495,531	61,495,540	83,659,583	78,390,713
Ending	\$ 7,381,005	\$ 6,490,013	\$ 8,091,855	\$ 6,674,039	\$ 73,243,627	\$ 70,495,531	\$ 88,716,487	\$ 83,659,583
Cash Consisted of the Following:								
Cash and Cash Equivalents	\$ 5,505,549	\$ 4,546,072	\$ 7,753,178	\$ 6,335,679	\$ 11,937,407	\$ 9,707,253	\$ 25,196,134	\$ 20,589,004
Restricted Cash and Cash Equivalents	1,875,456	1,943,941	338,677	338,360	61,306,220	60,788,278	63,520,353	63,070,579
Total Cash and Cash Equivalents	\$ 7,381,005	\$ 6,490,013	\$ 8,091,855	\$ 6,674,039	\$ 73,243,627	\$ 70,495,531	\$ 88,716,487	\$ 83,659,583

This statement is continued on the next page

The accompanying notes are an integral part of the financial statements.

LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

STATEMENTS OF CASH FLOWS (CONTINUED)
Years Ended December 31, 2022 AND 2021

	Suburban Water Fund		Suburban Wastewater Fund		City Division Fund		Total	
	2022	2021	2022	2021	2022	2021	2022	2021
Reconciliation Of Operating Income (Loss) To Net Cash Provided By Operating Activities								
Operating Income (Loss)	\$ 4,071,032	\$ 1,522,553	\$ (3,499,643)	\$ (3,103,273)	\$ 22,492,967	\$ 19,499,775	\$ 23,064,356	\$ 17,919,055
Adjustments to Reconcile Operating Income (Loss) to Net Cash Provided by/(Used In) Operating Activities:								
Depreciation and Amortization	3,665,828	3,373,864	7,090,828	6,671,362	6,492,067	6,399,799	17,248,723	16,445,025
Change in Assets and Liabilities:								
(Increase)/Decrease in Accounts Receivable Custom	(620,002)	(53,878)	110,293	308,421	(840,960)	987,918	(1,350,669)	1,242,461
(Increase)/Decrease in Financing	-	-	242,453	322,261	-	-	242,453	322,261
Contract Receivable	695,371	(627,069)	(50,810)	44,744	(4,716,889)	533,123	(4,072,328)	(49,202)
(Increase)/Decrease in Inventory	(69,495)	1,548	-	-	-	-	(69,495)	1,548
(Increase)/Decrease in Prepaid Expense	7,257	25,216	23,287	(18,914)	15,322	(46,754)	45,866	(40,452)
Increase in OPEB Liability	-	-	-	-	(389,531)	(236,289)	(389,531)	(236,289)
Decrease in OPEB Asset	733,602	(508,812)	-	-	-	-	733,602	(508,812)
Increase/(Decrease) in Accounts Payable - Trade	2,030,329	(339,621)	9,539	(318,088)	(270,773)	1,464,460	1,769,095	806,751
Increase in Net Pension Liability	(606,394)	(466,603)	(305,253)	(234,884)	(2,251,598)	(1,732,541)	(3,163,245)	(2,434,028)
(Increase) in Pension Deferred Outflows	122,325	(124,588)	61,579	(62,717)	454,269	(462,660)	638,173	(649,965)
(Increase) in OPEB Deferred Outflows	(346,840)	(64,621)	-	-	193,846	193,946	(152,994)	129,325
Increase in OPEB Deferred Inflows	(433,516)	360,103	-	-	456,318	393,149	22,802	753,252
Increase in Pension Deferred Inflows	173,747	347,683	87,462	175,020	645,136	1,290,978	906,345	1,813,681
Increase/(Decrease) in Accrued Wages and Other	55,881	(17,957)	19,446	(21,885)	88,507	61,512	163,834	21,670
Net Cash Provided By Operating Activities	\$ 9,479,125	\$ 3,427,818	\$ 3,789,181	\$ 3,762,047	\$ 22,368,681	\$ 28,346,416	\$ 35,636,987	\$ 35,536,281

**Noncash Investing, Capital, and Financing
Activities**

Noncash Capital Activities, Contribution of Capital								
Assets From Developers and Others	\$ 253,602	\$ 3,227,112	\$ -	\$ 422,300	\$ -	\$ -	\$ 253,602	\$ 3,649,412
Noncash Noncapital Activities, Accretion on Bonds Payable	-	-	-	-	3,909,636	3,748,807	3,909,636	3,748,807
Noncash Noncapital Activities, Change in Present Value of SCA Asset	-	-	-	-	-	-	-	-
Noncash Noncapital Activities, Change in Present Value of SCA Payable	-	-	-	-	3,074,043	2,966,136	3,074,043	2,966,136
Change in Fair Value of Investments	24,055	16,943	103,278	55,199	-	-	127,333	72,142

The accompanying notes are an integral part of the financial statements.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

**STATEMENTS OF FIDUCIARY NET POSITION
FIDUCIARY FUND
DECEMBER 31, 2022 and 2021**

	Component Unit Suburban Post Employment Health Fund	
	2022	2021
Assets		
Investments:		
Cash Equivalents	\$ 146,523	\$ 156,984
Mutual Funds - Equity	1,767,807	2,224,550
Stocks	1,288,876	1,491,658
Corporate Bonds	154,422	155,695
Total Assets	<u>\$ 3,357,628</u>	<u>\$ 4,028,887</u>
Liabilities		
Accounts Payable	<u>\$ -</u>	<u>\$ -</u>
Total Liabilities	<u>\$ -</u>	<u>\$ -</u>
Net Position Restricted for Post Retirement Health Benefits	<u>\$ 3,357,628</u>	<u>\$ 4,028,887</u>

The accompanying notes are an integral part of the financial statements.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

**STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
FIDUCIARY FUND
FOR THE YEARS ENDED DECEMBER 31, 2022 and 2021**

	Component Unit Suburban Post Employment Health Fund	
	2022	2021
Additions:		
Contributions:		
Employer	\$ 12,008	\$ 11,831
Total Contributions	12,008	11,831
Investment Income:		
Net Increase/(Decrease) in Fair Value of Investments	(571,813)	540,405
Less Investment Expense	(20,674)	(22,863)
Net Investment Income/(Loss)	(592,487)	517,542
Total Additions	(580,479)	529,373
Deductions:		
Reimbursement of Benefits Expense	90,780	90,518
Total Deductions	90,780	90,518
Net Increase/(Decrease) in Net Position	(671,259)	438,855
Net Position Restricted for Post Retirement Health Benefits:		
Beginning of Year	4,028,887	3,590,032
End of Year	\$ 3,357,628	\$ 4,028,887

The accompanying notes are an integral part of the financial statements.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Reporting Entity

The Lehigh County Authority (the Authority) incorporated under the Pennsylvania Municipal Authorities Act, by the Lehigh County Commissioners in 1966, "... for the purpose of accumulating, conserving and distributing fresh water ..." Under the Act, an authority is an independent municipal corporation and a separate governmental agency of the state. In 1969, the County Commissioners advanced the Authority from a paper organization to an operating unit to plan and construct a water supply system and a wastewater interceptor system to serve residential, commercial and industrial users in the western part of Lehigh County. In 2013, the Authority started serving other areas of Lehigh County when it acquired the rights to lease and operate the City of Allentown's Water and Sewer Systems under a 50-year Concession and Lease Agreement (the Concession). As a result of this Agreement, the Authority created both City and Suburban Divisions, in recognition of the various agreements and financings, related to each entity.

The Authority currently provides two types of services to communities in the City Division. Through the Water Plant and Distribution System (the City Water System) the Authority serves 47,182 residential and business units in the City of Allentown and supplies water under Municipal Services Agreements to Lehigh County Municipalities of South Whitehall, Hanover, Salisbury, Whitehall, Bethlehem and to the Suburban Division under a previously executed water supply agreement. Through the Sewer Utility System (the City Sewer System) the Authority provides sewage collection, treatment and disposal services to 46,907 residential and business units in the City of Allentown and to the Lehigh County Municipalities of Coplay-Whitehall, Emmaus, Hanover, Salisbury, Lower Macungie, South Whitehall and to the Suburban Division, under a previously executed sewer services agreement.

The Authority currently provides four types of service to communities in the Suburban Division. Through the Western Lehigh Interceptor System, the Authority provides sewage transportation service to the Townships of Lower Macungie, Lowhill, Upper Macungie, Upper Milford, and Weisenberg and the Boroughs of Alburtis, Emmaus and Macungie. The Authority owns and operates wastewater collection systems in the Townships of Upper Milford, Heidelberg, Lynn, North Whitehall and Weisenberg serving a total of 3,090 customers as of December 31, 2022. Through the Little Lehigh Relief Interceptor System, the Authority provides sewage transportation service to Salisbury and South Whitehall Townships along with the other users of the Western Lehigh Interceptor System excluding Emmaus. As of December 31, 2022 the Water System serves 24,165 residential and business units in the Lehigh County Municipalities of Upper and Lower Macungie, North Whitehall, Washington, Weisenberg, South Whitehall, Heidelberg, Lower Milford, Lowhill, Lynn, Salisbury and Upper Milford Townships and in Moore Township of Northampton County.

The accompanying financial statements include all funds which are "controlled by or are dependent on" the Authority. The funds included are the Suburban Water Fund, both operating and capital, the Suburban Wastewater Fund, both operating and capital for the Western Lehigh Interceptor System, Little Lehigh Relief Interceptor System, Wastewater Collector Systems in Upper Milford, Weisenberg, Washington, Lynn, Heidelberg and North Whitehall Townships, a Wastewater Treatment Plant and planning activity for providing wastewater service, and the City Division Fund, both operating and capital.

Accordingly, the accompanying financial statements do not include the financial activities of the County of Lehigh (the County), nor are the Authority's financial activities included in the County's financial statements, since each is considered a separate entity under the Governmental Accounting Standards Board (GASB) criteria.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

For purposes of financial reporting, the Authority is considered to be a related organization to the County. The criteria used in determining the scope of the reporting entity are outlined below.

The Authority Board members are appointed to five-year terms by the County Executive, with concurrence by the County Commissioners, in an authoritative, official capacity. After confirmation, only the Court of Common Pleas can remove a member for cause. While there is continuing communication with the County, there is little linkage to the elected County officials thereafter.

The management and employees of the Authority responsible for the operations of the Authority are appointed by and held accountable to the Authority. The County does not possess powers of appointment over any Authority employee.

The Authority reviews and approves all budgets, sets rates, and exercises control over facilities, property and policies relating to the services provided by the Authority. The County is under no obligation to finance operating deficits and does not have claim to any surpluses. The Authority has the power to issue bonds and other financing, with the County having no legal responsibility for debt issued by the Authority.

The accounting policies of the Lehigh County Authority conform to generally accepted accounting principles as established by the Governmental Accounting Standards Board. The following is a summary of the significant policies:

B. Measurement Focus, Basis of Accounting and Financial Statement Presentation

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and deferred outflows of resources, liabilities and deferred inflows of resources, and net position and disclosures at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

The financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of timing of related cash flows. Grants and similar items are recognized as revenues as soon as all eligibility requirements imposed by the provider have been met.

Operating revenues and expenses are distinguished from non-operating items in the statement of revenues, expenses, and changes in net position. Operating revenues and expenses result from providing services in connection with the Authority's principal ongoing operations. Principal operating revenues of the Authority are charges to customers for water use and wastewater collection, transmission, and treatment. When calculating user fees charged to customers, the Authority includes a component for the repayment of principal on the Authority's outstanding debt. Operating expenses include the cost of supplying water and wastewater services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses. The principal non-operating revenues of the Authority are capital recovery fees, plan review and inspection fees and investment income. The principal non-operating expenses of the Authority include interest expense and cost of goods sold.

Capital grant funding represents amounts received from capital project grants, which are restricted to capital acquisition or construction. The Authority recognizes capital grant funding when the grants are earned which is generally when the related capital expenditure is made.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

The funds and component unit of the Authority are grouped in the financial statements in this report as follows:

1. Proprietary Funds:

Enterprise Funds - are used to account for business-like activities provided to the public. These activities are financed primarily by user charges, and the measurement of financial activity focuses on net income measurement similar to the private sector. The reporting entity includes the following enterprise funds, which are reported as major funds:

Suburban Water Fund - Used to account for the operations of the suburban water supply and distribution system. The suburban water system is a public utility service, which is intended to be maintained on a self-supporting basis.

Suburban Wastewater Fund - Used to account for the operations of the suburban wastewater interceptor, collector systems, and treatment facilities. The suburban wastewater system is a public utility service, which intends to be maintained on a self-supporting basis.

City Division Fund – Used to account for the operations of the City Concessed System. The City Division Fund is a public utility service, which intends to be maintained on a self-supporting basis. This fund was added in 2013 because of the Service Concession Arrangement discussed in Note 6.

2. Fiduciary Component Unit:

The Suburban Post-Employment Health Trust Plan (the “Plan”) was created in 2010 to accumulate assets to be used for payment of health benefits to qualified retirees. The Plan is included in the financial reporting entity as a fiduciary component unit because the Plan is (1) considered to be a separate legal entity, (2) the Authority appoints a voting majority of the governing board, and (3) the plan imposes a financial burden on the Authority as it has assumed an obligation to make contributions to the Plan.

C. Budgets and Budgetary Accounting

The Lehigh County Authority follows these procedures in establishing the annual budgets:

1. Starting in the summer months department heads develop a preliminary budget, including personnel needs, for all capital and operating programs and for all line items for the coming calendar year. Supporting detail provides justification for each budget component, including calculations, quotations, project timetables, and outlines.
2. The budget is given to the Authority Board in September or October for review. A formal presentation is made the second week of October with final adoption at the Authority’s final October meeting. The final copy of the budget includes an individual budget for City and Suburban Divisions, including Water and Wastewater Operating, and Water and Wastewater Capital sections. The officially adopted budget is the financial plan for the ensuing year.
3. Each month, a Budget vs. Actual Report is prepared. The report cites monthly and year-to-date activity as well as unused budgeted monies. All department heads are responsible for evaluating their areas for compliance with the budget and taking appropriate remedial action.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

4. The Accounting Supervisor may transfer budgeted amounts between line items within any budget; however, any revisions that alter the total expenses or revenues of any fund must be approved by the Authority Board. For the year ended December 31, 2022, there were no budget amendments that needed Board approval.
5. The level of control (level at which expenses may not exceed budget) is the individual budgets within each fund. Budgets lapse at year-end.
6. Budgets for the Enterprise Funds are adopted on a basis consistent with accounting principles generally accepted in the United States of America. The budgets of the Authority are maintained and are prepared using the accrual basis of accounting. Budgeted amounts are as originally adopted, as amended by the Accounting Supervisor, or as amended by the Authority Board.

D. Cash and Cash Equivalents

For purposes of the statement of cash flows, the Authority considers all highly liquid investments, including investments in external investment pools and money market mutual funds as discussed in Note 2, with a maturity of three months or less when purchased to be cash equivalents.

Restricted Cash and Certificates of Deposit include escrow accounts established in the Authority's name for maintenance security by developers, funds held by the trustee in debt service accounts, and other special purpose trustee accounts which include unspent bond proceeds.

E. Trade Receivables

All trade receivables are shown net of an allowance for uncollectables, as applicable, trade receivables are evaluated for collectability and an allowance is established, as deemed necessary based on the best information available and in an amount that management believes is adequate. Trade receivables are written off when deemed uncollectible. Recoveries of trade receivables previously written off are recorded when received.

F. Inventory

Inventory of the Suburban Water Fund consists of meters and related components and is stated at cost (first-in, first-out). It is the policy of the Authority to expense all other materials and supplies on a current basis for all funds.

G. Investments, External Investment Pools, Certificates of Deposit

The Authority invests its idle funds in various instruments, including external investment pools which invest in government secured instruments and certificates of deposit with federally-insured financial institutions. The Authority's investment in external investment pools, as discussed in Note 2, and government secured money market instruments are valued at fair value, or amortized cost, which approximates cost and is classified as cash and cash equivalents in the balance sheet. The Authority invests in both negotiable and non-negotiable certificates of deposit (CD) in federally insured financial institutions. Negotiable CDs are valued at fair value while non-negotiable CDs are valued at cost because they are considered non-participating contracts for which redemption terms do not consider market rates.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

H. Capital Assets & Depreciation, and Service Concession Arrangement & Amortization

The Authority uses a capitalization threshold of \$5,000 to record capital assets purchased and constructed. The expenses are recorded at cost including any liability for contract retainage and construction costs payable. In addition, the Authority included any water rights associated with a project as part of the cost of that project and depreciated them accordingly. Intangible assets acquired in the Service Concession Arrangement are amortized over 50 years. Intangible assets with an indefinite life are not subject to amortization. The construction accounts have also been charged with applicable administrative expenses.

Contributed assets are carried at estimated acquisition value at the time of contribution. Depreciation is determined using the straight-line method based upon the following estimated useful lives:

	<u>Years</u>
Wells	45
Transmission and Distribution Mains	100
Services	60
Fire Hydrants	65
Reservoirs	55
Pumping Station – Structures	45
Pumping Station - Electrical and Pumping Appurtenances	35
Pumping Station – Purification	33.5
Metering System	20
Transportation and Computer Equipment	5
Communication and Miscellaneous Equipment	5 - 20
Wastewater Collector System	100
Western Lehigh Interceptor System	50
Relief Interceptor Systems	100
Office Equipment and Furnishings	10
Office Building and Site Improvements	20 - 40
Water Capacity	40

Normal maintenance and repairs are charged to operations as incurred. Renewals and betterments are capitalized and depreciated based upon the expected life of such improvements.

Non-exchange transactions, such as donated system assets and assets acquired by contributions, are recognized as capital contributions in accordance with GASB Statement No. 33.

I. Facilities Planning Costs

The Authority has adopted a policy of amortizing planning costs related to all Water and Wastewater activity. With the exception of the development of a Water System hydraulic model, a Financial Information System Selection, an Integrated Computer System study, a Methane Gas Energy Study and the costs of negotiating a lease agreement with the County of Lehigh for oversight of a wastewater treatment plant, all of which are being amortized over 7 years, and a future water supply drilling program and a wastewater hydraulic model, which are being amortized over 10 years, all other planning costs are amortized over a 3-year period.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

The period over which the costs are amortized and the amortization expense for 2022 and 2021 are as follows:

	<u>Amortization Period (Years)</u>	<u>2022 Amortization</u>	<u>2021 Amortization</u>
Suburban Water Fund:			
Facilities Planning Costs	3-10	\$ 226,692	\$ 202,179
Suburban Wastewater Fund:			
Facilities Planning Costs	3-7	<u>3,597,188</u>	<u>3,309,769</u>
Total Amortization		<u>\$ 3,823,880</u>	<u>\$ 3,511,948</u>

J. Compensated Absences

The Authority has an incentive excused absence policy, which annually compensates employees who are absent from work less than a specific number of days during the year. Excused absences include employee and dependent illness, medical or dental appointments, or any other valid reason approved by the employee's immediate supervisor. There is no carryover of the excused absence allowance.

With approval up to 25 days of unused vacation can accumulate for 18 months beyond the year in which it is earned.

The following table summarizes unused vacation liability:

	<u>2022</u>	<u>2021</u>
Balance at Beginning of Year	\$ 244,820	\$ 319,277
Additions	296,276	244,820
Retirements	<u>(244,820)</u>	<u>(319,277)</u>
Balance at End of Year	<u>\$ 296,276</u>	<u>\$ 244,820</u>

Unused vacation days are used within 12 months and are reported in current liabilities as a part of Accrued Payroll and Other.

K. Deferred Outflows of Resources

The statement of Net Position reports a separate section for deferred outflows of resources. This separate financial statement element represents consumption of net assets that applies to a future period(s) and so will not be recognized as an outflow of resources (expense) until then. The Authority has three items that qualify for reporting in this category: deferred outflows related to pensions, OPEB and refunding losses on bonds.

L. Reclassifications

Certain prior year amounts have been reclassified to conform with current year presentation.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

M. Deferred Inflows of Resources

The statement of Net Position reports a separate section for deferred inflows of resources. This separate financial statement element represents acquisition of net assets that applies to future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The Authority has two items that qualify for reporting in this category: deferred inflows related to pensions and OPEB.

N. Adoption of Governmental Accounting Standards Board Statements

The Authority adopted the provisions of GASB Statement No. 91, “*Conduit Debt Obligations*”, GASB Statement No. 92, “*Omnibus 2020*”, GASB Statement No. 98, “*The Annual Comprehensive Report*”, the remaining provisions of GASB Statement No. 93, “*Replacement of Interbank Offered Rates*”, and the remaining provisions of GASB Statement No. 97, “*Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans—an amendment of GASB Statements No. 14 and No. 84, and a supersession of GASB Statement No. 32*”. The adoption of these statements had no effect on previously reported amounts.

O. Pending Changes in Accounting Principles

In March 2020, the GASB issued Statement No. 94, “*Public-Private and Public-Public Partnerships and Availability Payment Arrangements*”. The Authority is required to adopt statement No. 94 for its calendar year 2023 statements.

In May 2020, the GASB issued Statement No. 96, “*Subscription-Based Information Technology Arrangements*”. The Authority is required to adopt statement No. 96 for its calendar year 2023 statements.

In April 2022, the GASB issued Statement No. 99, “*Omnibus 2022*”. The Authority is required to adopt the remaining provisions of statement No. 99 for its calendar year 2023 and 2024 statements.

In June 2022, the GASB issued Statement No. 100, “*Accounting Changes and Error Corrections – an amendment of GASB Statement No. 62*”. The Authority is required to statement No. 100 for its calendar year 2024 statements.

In June 2022, the GASB issued Statement No. 101, “*Compensated Absences*”. The Authority is required to adopt statement No. 101 for its calendar year 2024 statements.

The Authority has not yet completed the various analysis required to estimate the financial statement impact of these new pronouncements.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 2 – DEPOSITS AND INVESTMENTS

The carrying amounts of the cash and investments at December 31 consist of the following:

	<u>2022</u>	<u>2021</u>
Demand deposit, money market, and savings accounts	\$ 74,050,606	\$ 78,133,366
Certificates of deposit, nonnegotiable	3,045,962	1,000,184
Overnight repurchase	13,241,009	2,121,061
Certificates of deposit, negotiable	8,765,376	8,952,487
Pennsylvania School District Liquid Asset Fund	1,424,872	3,405,156
OPEB Investments:		
Cash Equivalents	146,523	156,984
Mutual Funds - Equity	1,767,807	2,224,550
Mutual Funds – Fixed Income	-	-
Stocks	1,288,876	1,491,658
U.S. Treasury Obligations	-	-
U.S. Agencies	-	-
Corporate Bonds	154,422	155,695
	<u>\$ 103,885,453</u>	<u>\$ 97,641,141</u>
Classification per statements of net position:		
Unrestricted current assets		
Cash and cash equivalents	\$ 25,196,134	\$ 20,589,004
Certificates of deposit	11,811,338	9,952,671
Restricted non-current assets		
Cash and cash equivalents	63,520,353	63,070,579
Certificates of deposit	-	-
Investment U.S. treasury obligations	-	-
OPEB Investments:		
Cash Equivalents	146,523	156,984
Mutual Funds - Equity	1,767,807	2,224,550
Mutual Funds – Fixed Income	-	-
Stocks	1,288,876	1,491,658
U.S. Treasury Obligations	-	-
U.S. Agencies	-	-
Corporate Bonds	154,422	155,695
	<u>\$ 103,885,453</u>	<u>\$ 97,641,141</u>

Deposits:

The Authority has a policy that requires all deposits and investments, other than U.S. government obligations, to be covered by Federal insurance or to be fully collateralized by the financial institution issuing the investment or acquiring the deposit. Deposits that are not insured by the Federal Deposit Insurance Corporation are collateralized using the pooled asset method to 100% of value as required by Pennsylvania Law.

The securities pledged as collateral are held by the trust department of a financial institution or by its agent in the financial institution's name. When certificates of deposit are purchased, the Authority or its agent either holds the actual certificate of deposit or receives a safekeeping certificate as its proof of ownership.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 2 – DEPOSITS AND INVESTMENTS (Continued)

The Authority has custodial credit risk on cash and investment deposits. This is the risk that, in the event of a financial institution failure, the Authority's deposits may not be returned. At December 31, 2022 and 2021, the carrying amounts of the Authority's bank deposits were \$23,679,148 and \$7,483,730 respectively, and the bank balance of \$24,543,946 and \$9,753,407, respectively. As of December 31, 2022 and 2021, \$20,747,985 and \$8,253,223 of deposits were exposed to custodial risk because they were uninsured and collateralized with securities held by the pledging financial institution's trust department or agent, but not in the Authority's name. At December 31, 2022 and 2021 none of the Authority's investments were subject to custodial credit risk.

Investments:

Pennsylvania Law limits investment and deposit types the Authority may purchase as follows:

- (a) U.S. Treasury bills
- (b) Short-term obligations of the U.S. government or its agencies
- (c) Demand, savings and time deposits with institutions insured by the FDIC or the National Credit Union Share Funds or collateralized with securities as provided by law.
- (d) Obligations of the United States or any of its agencies, the Commonwealth of Pennsylvania or any of its agencies or any political subdivisions of the Commonwealth of Pennsylvania or any of its agencies providing the obligations are backed by the full faith and credit of the political subdivisions.

Pennsylvania School District Liquid Asset Fund

The Authority has funds invested with the Pennsylvania School District Liquid Asset Fund (PSDLAF), an investment pool managed by RBC Capital Markets. In 2001, PSDLAF amended its bylaws to allow Pennsylvania municipal entities besides school districts to take part in the fund. The purpose of the pool is to enhance investment potential through cash pooling while providing security and liquidity. Pool participants are allocated a pro-rata share of each investment purchased by the pool.

Purchased securities, placed in the name of PSDLAF, serve as collateral and are held in safekeeping at PNC Bank. A liquid fund and MAX fund require no advance notice for withdrawals; however, since the MAX fund does not provide check writing services, a higher rate of return is earned.

In addition, each member can purchase certificates of deposit and other investments through the pool. Security for collateralized certificate of deposit purchases are held at the Bank of New York or the Federal Reserve Bank of Boston. The PSDLAF fund is regulated by the Municipal Securities Rulemaking Board. Investment policy is guided by Pennsylvania statute. The Authority's fair value of its position in the pool is measured at amortized cost and is the same as the value of the pool shares.

Money Market Funds

The Authority invest in various money market mutual funds. The money market accounts are secured only by the investments within the fund, which are generally U.S. Government obligations.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 2 – DEPOSITS AND INVESTMENTS (Continued)

Investment Maturities

As of December 31, 2022, and 2021, the Authority had the following investments and maturities:

				<u>2022</u>			
				Investment Maturities (In Years)			
<u>Investment Type</u>	<u>Cost</u>	<u>Fair Value</u>	<u>% of Total</u>	<u>Less than One Year</u>	<u>One-to- Five Years</u>	<u>Six-to- Ten Years</u>	<u>More than 10 Years</u>
Certificates of Deposit, negotiable	\$8,954,000	\$8,765,376	74.21%	\$5,231,208	\$3,534,168	-	-
U.S. Treasury Obligations	-	-	-	-	-	-	-
Pennsylvania School District Liquid Asset Fund	<u>3,045,962</u>	<u>3,045,962</u>	<u>25.79%</u>	<u>3,045,962</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total	<u>\$11,999,962</u>	<u>\$11,811,338</u>	<u>100.00%</u>	<u>\$8,277,170</u>	<u>\$3,534,168</u>	<u>\$ -</u>	<u>\$ -</u>
<u>Fiduciary Fund</u>							
U.S Government Agencies	-	-	-	-	-	-	-
U.S. Government Treasury Obligations	-	-	-	-	-	-	-
Corporate Bonds	163,788	154,422	100.00%	41,755	112,667	-	-
Fixed Income Mutual Bonds	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total	<u>\$163,788</u>	<u>\$154,422</u>	<u>100.00%</u>	<u>\$41,755</u>	<u>\$112,667</u>	<u>\$ -</u>	<u>\$ -</u>
				<u>2021</u>			
				Investment Maturities (In Years)			
<u>Investment Type</u>	<u>Cost</u>	<u>Fair Value</u>	<u>% of Total</u>	<u>Less than One Year</u>	<u>One-to- Five Years</u>	<u>Six-to- Ten Years</u>	<u>More than 10 Years</u>
Certificates of Deposit, negotiable	\$8,968,000	\$8,952,487	72.44%	\$3,897,092	\$5,055,395	-	-
U.S. Treasury Obligations	-	-	-	-	-	-	-
Pennsylvania School District Liquid Asset Fund	<u>3,405,156</u>	<u>3,405,156</u>	<u>27.56%</u>	<u>3,405,156</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total	<u>\$12,373,156</u>	<u>\$12,357,643</u>	<u>100.00%</u>	<u>\$7,302,248</u>	<u>\$5,055,395</u>	<u>\$ -</u>	<u>\$ -</u>

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 2 – DEPOSITS AND INVESTMENTS (Continued)

<u>Investment Type</u>	<u>Cost</u>	<u>Fair Value</u>	<u>% of Total</u>	2021 Investment Maturities (In Years)			
				<u>Less than One Year</u>	<u>One-to- Five Years</u>	<u>Six-to- Ten Years</u>	<u>More than 10 Years</u>
<u>Fiduciary Fund</u>							
U.S Government Agencies	-	-	-	-	-	-	-
U.S. Government Treasury Obligations	-	-	-	-	-	-	-
Corporate Bonds	157,065	155,695	100.00%	34,266	121,429	-	-
Fixed Income Mutual Bonds	-	-	-	-	-	-	-
Total	<u>\$157,065</u>	<u>\$155,695</u>	<u>100.00%</u>	<u>\$34,266</u>	<u>\$121,429</u>	<u>\$ -</u>	<u>\$ -</u>

Interest Rate Risk:

As a means of managing its exposure to fair value losses arising from increasing interest rates, the Authority's investment policy limits the value of investments with maturities to no greater than five years.

Credit Risk:

The Authority limits the type of investments permitted as defined in the Municipality Authorities Act and the related trust indentures. Allowed investments are defined above. The Authority's investment policy is consistent with these limitations.

As of December 31, 2022, the Authority's investments were rated by Standard and Poor's as follows:

<u>Investment Type</u>	<u>Credit Quality Rating</u>	<u>Percent of Investment Type</u>
Corporate Bonds	AA-	5.57%
Corporate Bonds	A+	11.68%
Corporate Bonds	A	7.25%
Corporate Bonds	A-	6.29%
Corporate Bonds	BBB	24.10%
Corporate Bonds	BBB+	34.14%
Corporate Bonds	NR	10.99%
Pennsylvania School District		
Liquid Asset Fund	AAAm	100%
Certificates of Deposit Negotiable	NR	100%

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 2 – DEPOSITS AND INVESTMENTS (Continued)

Fair Value:

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the assets. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The Authority's investments in negotiable certificates of deposit, stocks, fixed income mutual funds, and equity mutual funds are valued using quoted market prices (Level 1 inputs).

The Authority's investments in U.S. Treasury Obligations, U.S. Government Agencies, and Corporate Bonds are valued using a matrix pricing model (Level 2 inputs).

	<u>12/31/2022</u>	<u>Quoted Prices in Active Markets for Identical Assets (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u>	<u>Significant Unobservable Inputs (Level 3)</u>
Investments by fair value level				
Debt securities				
Corporate Bonds	\$ 154,422	\$ -	\$ 154,422	\$ -
Total debt securities	<u>154,422</u>	<u>-</u>	<u>154,422</u>	<u>-</u>
Equity securities				
Negotiable Certificates of Deposit	8,765,376	8,765,376	-	-
Stocks	1,288,876	1,288,876	-	-
Equity Mutual Funds	1,767,807	1,767,807	-	-
Total equity securities	<u>11,822,059</u>	<u>11,822,059</u>	<u>-</u>	<u>-</u>
Total investments by fair value	<u>\$ 11,976,481</u>	<u>\$ 11,822,059</u>	<u>\$ 154,422</u>	<u>\$ -</u>

NOTE 3 – DEVELOPER ESCROW DEPOSIT

The Authority requires developers to supply improvement security for system extensions. To meet this requirement, developers supply such security in cash or a letter of credit. An offsetting liability for all developer deposits is shown as a current and non-current liability on the Statement of Net Position.

NOTE 4 – RECEIVABLES – DEVELOPER CONTRACTS

As of December 31, 2022, the Authority has two agreements with customers, which allow for the financing of wastewater capital recovery fees over a multi-year period. The purpose of these arrangements is to make it more affordable for high-volume wastewater users to locate in the Authority service area. The total amounts of unpaid fees have been recorded as current (\$210,885) and long-term receivables (\$749,038). At year-end 2021, there were four agreements, and the unpaid fees were recorded as current (\$241,638) and long-term receivables (\$960,693). The Authority is recording interest income on the receivables in the year of receipt, which is not materially different than the accrual method.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 5 – CAPITAL ASSETS

Capital assets of the Authority for 2022 and 2021 consist of the following:

	<u>Balance at 12/31/21</u>	<u>Additions</u>	<u>Retirements</u>	<u>Balance at 12/31/22</u>
Suburban Water Fund				
Non-depreciable Assets:				
Land	\$ 3,295,901	\$ 38,572	\$ -	\$ 3,334,473
Construction in progress	1,434,072	6,053,338	(2,773,105)	4,714,305
Total Capital Assets Not Being Depreciated	4,729,973	6,091,910	(2,773,105)	8,048,778
Depreciable Assets:				
Wells & Reservoirs	11,069,710	632,601	-	11,702,311
Transmission & Distribution Mains	88,175,419	539,789	(38,671)	88,676,537
Service & Hydrants	18,461,760	49,905	-	18,511,665
Building Structure & Appurtenances	30,349,884	323,792	(34,150)	30,639,526
Metering System	13,988,178	121,627	-	14,109,805
Equipment	9,552,072	1,079,201	(11,328)	10,619,945
Right-To-Use Leased Equipment	8,829	-	-	8,829
Right-To-Use Leased Vehicles	97,216	310,184	-	407,400
Capacity	1,207,901	-	-	1,207,901
Total Capital Assets Being Depreciated	172,910,969	3,057,099	(84,149)	175,883,919
Less Accumulated Depreciation for:				
Wells & Reservoirs	(3,739,968)	(209,828)	-	(3,949,796)
Transmission & Distribution Mains	(15,417,409)	(884,469)	9,474	(16,292,404)
Service & Hydrants	(5,162,213)	(301,040)	-	(5,463,253)
Building Structure & Appurtenances	(10,729,898)	(808,788)	32,072	(11,506,614)
Metering System	(6,339,177)	(608,113)	-	(6,947,290)
Equipment	(6,807,833)	(546,697)	11,328	(7,343,202)
Right-To-Use Leased Equipment	(5,743)	(1,949)	-	(7,692)
Right-To-Use Leased Vehicles	(9,722)	(40,313)	-	(50,035)
Capacity	(814,711)	(31,834)	-	(846,545)
Total Accumulated Depreciation	(49,026,674)	(3,433,031)	52,874	(52,406,831)
Total Net Capital Assets Being Depreciated	123,884,295	(375,932)	(31,275)	123,477,088
Total Capital Assets, Net	<u>\$ 128,614,268</u>	<u>\$ 5,715,978</u>	<u>\$ (2,773,105)</u>	<u>\$ 131,525,866</u>

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 5 – CAPITAL ASSETS (Continued)

	Balance at 12/31/21	Additions	Retirements	Balance at 12/31/22
Suburban Wastewater Fund				
Non-depreciable Assets:				
Land	\$ 1,896,050	\$ -	\$ -	\$ 1,896,050
Capacity	579,587	-	(331,026)	248,561
Construction in progress	829,357	3,081,527	(2,489,298)	1,421,586
Total Capital Assets Not Being Depreciated	3,304,994	3,081,527	(2,820,324)	3,566,197
Depreciable Assets:				
Interceptor & Collector Systems	39,317,989	259,409	-	39,577,398
Wells & Reservoirs	3,494,643	-	-	3,494,643
Building Structure & Appurtenances	70,916,999	930,881	-	71,847,880
Metering System	429,778	-	-	429,778
Right-To-Use Leased Equipment	8,829	-	-	8,829
Right-To-Use Leased Vehicles	983,239	117,655	-	1,100,894
Equipment	23,887,742	398,414	(172,284)	24,113,872
Total Capital Assets Being Depreciated	139,039,219	1,706,359	(172,284)	140,573,294
Less Accumulated Depreciation for:				
Interceptor & Collector Systems	(12,025,413)	(363,878)	-	(12,389,291)
Wells & Reservoirs	(730,297)	(63,540)	-	(793,837)
Building Structure & Appurtenances	(24,114,938)	(2,266,002)	-	(26,380,940)
Metering System	(286,537)	(10,837)	-	(297,374)
Right-To-Use Leased Equipment	(5,743)	(1,949)	-	(7,692)
Right-To-Use Leased Vehicles	(532,530)	(203,364)	-	(735,894)
Equipment	(20,835,811)	(590,257)	169,094	(21,256,974)
Total Accumulated Depreciation	(58,531,269)	(3,499,827)	169,094	(61,862,002)
Total Net Capital Assets Being Depreciated	80,507,950	(1,793,468)	(3,190)	78,711,292
Total Capital Assets, Net	\$ 83,812,944	\$ 1,288,059	\$ (2,823,514)	\$ 82,277,489
	Balance at 12/31/21	Additions	Retirements	Balance at 12/31/22
City Division Fund				
Depreciable Assets:				
Transportation Equipment	\$ 3,074,705	\$ 839,241	\$ (401,701)	\$ 3,512,245
Miscellaneous Equipment & Computers	248,981	-	-	248,981
Right-To-Use Leased Equipment	54,217	-	-	54,217
Right-To-Use Leased Vehicles	338,169	601,929	-	940,098
Office Furniture & Equipment	23,116	-	-	23,116
Total Capital Assets Being Depreciated	3,739,188	1,441,170	(401,701)	4,778,657
Less Accumulated Depreciation for:				
Transportation Equipment	(2,376,252)	(282,957)	387,740	(2,271,469)
Miscellaneous Equipment & Computers	(248,007)	(974)	-	(248,981)
Right-To-Use Leased Equipment	(35,694)	(11,699)	-	(47,393)
Right-To-Use Leased Vehicles	(110,292)	(90,202)	-	(200,494)
Office Furniture & Equipment	(23,116)	-	-	(23,116)
Total Accumulated Depreciation	(2,793,361)	(385,832)	387,740	(2,791,453)
Total Net Capital Assets Being Depreciated	945,827	1,055,338	(13,961)	1,987,204
Total Capital Assets, Net	\$ 945,827	\$ 1,055,338	\$ (13,961)	\$ 1,987,204

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 5 – CAPITAL ASSETS (Continued)

	<u>Balance at</u> <u>12/31/21</u>	<u>Additions</u>	<u>Retirements</u>	<u>Balance at</u> <u>12/31/22</u>
Total Funds				
Total Capital Assets Not Being				
Depreciated	\$ 8,034,967	\$ 9,173,437	\$ (5,593,429)	\$ 11,614,975
Total Capital Assets Being				
Depreciated	315,689,376	6,204,628	(658,134)	321,235,870
Total Accumulated Depreciation	(110,351,304)	(7,318,690)	609,708	(117,060,286)
Total Net Capital Assets Being				
Depreciated	222,522,656	(1,114,062)	(48,426)	204,175,584
Total Capital Assets, Net	<u>\$ 230,557,623</u>	<u>\$ 8,059,375</u>	<u>\$ (5,641,855)</u>	<u>\$ 215,790,559</u>
	<u>Balance at</u> <u>12/31/20</u>	<u>Additions</u>	<u>Retirements</u>	<u>Balance at</u> <u>12/31/21</u>
Suburban Water Fund				
Non-depreciable Assets:				
Land	\$ 2,232,552	\$ 1,063,349	\$ -	\$ 3,295,901
Construction in progress	7,143,221	4,694,717	(10,403,866)	1,434,072
Total Capital Assets Not Being				
Depreciated	9,375,773	5,758,066	(10,403,866)	4,729,973
Depreciable Assets:				
Wells & Reservoirs	9,891,800	1,177,910	-	11,069,710
Transmission & Distribution Mains	85,446,377	2,729,042	-	88,175,419
Service & Hydrants	17,672,546	789,214	-	18,461,760
Building Structure & Appurtenances	27,139,327	3,210,557	-	30,349,884
Metering System	10,800,051	3,188,127	-	13,988,178
Equipment	8,689,068	903,904	(40,900)	9,552,072
Right-To-Use Leased Equipment	8,829	-	-	8,829
Right-To-Use Leased Vehicles	-	97,216	-	97,216
Capacity	1,207,901	-	-	1,207,901
Total Capital Assets Being				
Depreciated	160,855,899	12,095,970	(40,900)	172,910,969
Less Accumulated Depreciation for:				
Wells & Reservoirs	(3,546,684)	(193,284)	-	(3,739,968)
Transmission & Distribution Mains	(14,550,885)	(866,524)	-	(15,417,409)
Service & Hydrants	(4,867,937)	(294,276)	-	(5,162,213)
Building Structure & Appurtenances	(9,965,714)	(764,184)	-	(10,729,898)
Metering System	(5,799,079)	(540,098)	-	(6,339,177)
Equipment	(6,378,896)	(469,837)	40,900	(6,807,833)
Right-To-Use Leased Equipment	(3,819)	(1,924)	-	(5,743)
Right-To-Use Leased Vehicles	-	(9,722)	-	(9,722)
Capacity	(782,877)	(31,834)	-	(814,711)
Total Accumulated Depreciation	(45,895,891)	(3,171,683)	40,900	(49,026,674)
Total Net Capital Assets Being				
Depreciated	114,960,008	8,924,287	-	123,884,295
Total Capital Assets, Net	<u>\$ 124,335,781</u>	<u>\$ 14,682,353</u>	<u>\$ (10,403,866)</u>	<u>\$ 128,614,268</u>

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 5 – CAPITAL ASSETS (Continued)

	Balance at <u>12/31/20</u>	<u>Additions</u>	<u>Retirements</u>	Balance at <u>12/31/21</u>
Suburban Wastewater Fund				
Non-depreciable Assets:				
Land	\$ 1,896,050	\$ -	\$ -	\$ 1,896,050
Capacity	877,877	-	(298,290)	579,587
Construction in progress	8,665,170	4,250,286	(12,086,099)	829,357
Total Capital Assets Not Being Depreciated	11,439,097	4,250,286	(12,384,389)	3,304,994
Depreciable Assets:				
Interceptor & Collector Systems	38,265,579	1,052,410	-	39,317,989
Wells & Reservoirs	3,494,643	-	-	3,494,643
Building Structure & Appurtenances	61,301,596	9,615,403	-	70,916,999
Metering System	429,778	-	-	429,778
Right-To-Use Leased Equipment	8,829	-	-	8,829
Right-To-Use Leased Vehicles	669,052	314,187	-	983,239
Equipment	23,605,871	635,218	(353,347)	23,887,742
Total Capital Assets Being Depreciated	127,775,348	11,617,218	(353,347)	139,039,219
Less Accumulated Depreciation for:				
Interceptor & Collector Systems	(11,579,413)	(446,000)	-	(12,025,413)
Wells & Reservoirs	(666,758)	(63,539)	-	(730,297)
Building Structure & Appurtenances	(22,009,355)	(2,105,583)	-	(24,114,938)
Metering System	(275,700)	(10,837)	-	(286,537)
Right-To-Use Leased Equipment	(3,819)	(1,924)	-	(5,743)
Right-To-Use Leased Vehicles	(357,071)	(175,459)	-	(532,530)
Equipment	(20,630,905)	(558,253)	353,347	(20,835,811)
Total Accumulated Depreciation	(55,523,021)	(3,361,595)	353,347	(58,531,269)
Total Net Capital Assets Being Depreciated	72,252,327	8,255,623	-	80,507,950
Total Capital Assets, Net	<u>\$ 83,691,424</u>	<u>\$ 12,505,909</u>	<u>\$ (12,384,389)</u>	<u>\$ 83,812,944</u>
	Balance at <u>12/31/20</u>	<u>Additions</u>	<u>Retirements</u>	Balance at <u>12/31/21</u>
City Division Fund				
Depreciable Assets:				
Transportation Equipment	\$ 2,985,782	\$ 143,364	\$ (54,441)	\$ 3,074,705
Miscellaneous Equipment & Computers	248,981	-	-	248,981
Right-To-Use Leased Equipment	54,217	-	-	54,217
Right-To-Use Leased Vehicles	313,865	24,304	-	338,169
Office Furniture & Equipment	23,116	-	-	23,116
Total Capital Assets Being Depreciated	3,625,961	167,668	(54,441)	3,739,188
Less Accumulated Depreciation for:				
Transportation Equipment	(2,342,715)	(87,978)	54,441	(2,376,252)
Miscellaneous Equipment & Computers	(246,060)	(1,947)	-	(248,007)
Right-To-Use Leased Equipment	(24,138)	(11,556)	-	(35,694)
Right-To-Use Leased Vehicles	(48,779)	(61,513)	-	(110,292)
Office Furniture & Equipment	(23,116)	-	-	(23,116)
Total Accumulated Depreciation	(2,684,808)	(162,994)	54,441	(2,793,361)
Total Net Capital Assets Being Depreciated	941,153	4,674	-	945,827
Total Capital Assets, Net	<u>\$ 941,153</u>	<u>\$ 4,674</u>	<u>\$ -</u>	<u>\$ 945,827</u>

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 5 – CAPITAL ASSETS (Continued)

	<u>Balance at 12/31/20</u>	<u>Additions</u>	<u>Retirements</u>	<u>Balance at 12/31/21</u>
Total Funds				
Total Capital Assets Not Being				
Depreciated	\$ 20,814,870	\$ 10,008,352	\$ (22,788,255)	\$ 8,034,967
Total Capital Assets Being				
Depreciated	292,257,208	23,880,856	(448,688)	315,689,376
Total Accumulated Depreciation	(104,103,720)	(6,696,272)	448,688	(110,351,304)
Total Net Capital Assets Being				
Depreciated	188,153,488	17,184,584	-	205,338,072
Total Capital Assets, Net	\$ 208,968,358	\$ 27,192,936	\$ (22,788,255)	\$ 213,373,039

Under an agreement dated December 29, 1981, the Authority acquired 1,400,000 gallons per day of sewage treatment capacity ("grandfathered capacity") from the City of Allentown in addition to the amortized costs. This capacity was available to municipalities in Western Lehigh County for developments connected to the wastewater system. When a municipality required capacity to serve a business or residence, a fee was paid and recorded as a sale of capacity on the Authority's books. In addition, on an as-needed basis, the Authority purchases sewage treatment capacity from the City for non-grandfathered users ("General Pool Capacity"). This capacity is recorded on the books at the date of purchase and is reduced as such capacity is sold to the various municipalities and is included as a capital asset in the above table. At year-end 2022 and 2021 the total value of this capacity was \$248,561 and \$579,587, respectively.

NOTE 6 – SERVICE CONCESSION ARRANGEMENT

On August 7, 2013, the Lehigh County Authority ("LCA") entered into the Allentown Water and Sewer Utility System Concession and Lease Agreement (the "Service Concession Arrangement") with the City of Allentown, under which the LCA leased the Water and Sewer Utility Systems and retained the right and related obligation to operate those systems as the Concessionaire for 50 years. The LCA must operate and maintain the systems in accordance with the Service Concession Arrangement. The LCA entered the Service Concession Arrangement to aid further regionalization of water and sewer services in the Lehigh Valley and to benefit the ratepayers with the overall organizational efficiencies. The LCA paid the City an upfront payment of \$211,332,218. The LCA also agreed to make required annual payments of \$500,000 starting in 2016, and every year thereafter, adjusted for inflation using the consumer price index. In addition to the required annual payments, the LCA must establish a Capex Fund (held in trust) no later than January 1, 2033. The LCA must make annual deposits into the Capex Fund in the amounts of \$1,000,000 for years 2033 to 2042, \$2,000,000 for years 2043 to 2052, and \$3,000,000 for years 2053 to 2062, adjusted for inflation using the consumer price index. These funds can be withdrawn by the LCA to pay costs incurred with respect to major capital improvements meeting certain requirements of the concession agreement. On the reversion date of the Water and Sewer Utility System, any moneys or securities held in the Capex Fund shall be applied first to pay any unpaid termination compensation, AA-Compensation and Concession Compensation and any amount remaining shall be remitted to the City. In conjunction with the execution of the service concession arrangement capital assets with an approximate fair value of \$1,485,804 were conveyed to LCA from the City.

This transaction meets the criteria for reporting under Governmental Accounting Standards Board (GASB) Statement No. 60 "Accounting and Financial Reporting for Service Concession Arrangements".

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 6 – SERVICE CONCESSION ARRANGEMENT (Continued)

As a result, an intangible asset (Service Concession Arrangement) of \$246,205,824, representing: I) the upfront payment, less the fair value of conveyed capital assets, II) the discounted future annual payments, and III) the discounted future Capex Fund funding requirements was recorded by LCA on the execution date. The intangible asset will be amortized on the straight-line method over the life of the agreement (50 years). Cost of improvements to the facility during the term of the Service Concession Arrangement that increase capacity or efficiency of the facility are recorded as increases to the intangible asset and amortized systematically over the term of the arrangement. Costs of \$5,137,503 and \$2,323,561 were recorded as increases to the intangible asset in 2022, and 2021, respectively. Amortization expense in the amount of \$6,106,153 and \$5,982,358 was recognized in 2022, and 2021, respectively related to the intangible asset. The net book value of the asset was \$247,299,215 and \$248,267,864 at December 31, 2022 and 2021, respectively.

In addition to the intangible asset, LCA recorded an initial liability ("SCA Payable") of \$36,359,411 representing: I) the present value of future annual payments, and II) the present value of future Capex Fund deposit requirements on the execution date. This liability is adjusted annually to reflect the present value of the future payments. Interest expense of \$3,074,043 and \$2,966,136 was recognized in 2022 and 2021, respectively. The liability was \$67,771,081 and \$65,983,689 at December 31, 2022, and 2021, respectively.

As part of the Service Concession Agreement the LCA was required to offer employment to substantially all existing employees of the Water and Sewer System. The LCA was required to provide existing levels of certain benefits to these employees, including OPEB and Pension. This resulted in the adoption of a new OPEB plan in 2013 (Note 12) and the addition of new employees into the LCA Pension. The impact of the addition of these new employees into the plan resulted in an unfunded actuarial accrued liability of \$220,059 at August 8, 2013.

In 2020 the Authority and the City of Allentown entered into an agreement which modified certain terms of original Service Concession Arrangement. The modified terms included future payments to be made by the Authority to the City, as well as changes to the terms in which the Authority may increase rates to customers of the system. This agreement resulted in the Authority recording additions of \$14,733,768 to the intangible asset and SCA Payable liability in 2020.

NOTE 7 – FACILITIES PLANNING COSTS

Facilities Planning Costs for 2022 and 2021 consist of the following:

	<u>As of 12/31/21</u>	<u>Additions</u>	<u>Retirements</u>	<u>As of 12/31/22</u>
Suburban Water Fund				
Facilities Planning Costs	\$ 606,537	\$ 96,748	\$ (23,209)	\$ 680,076
Less Accumulated Amortization	<u>(243,702)</u>	<u>(226,692)</u>	<u>23,209</u>	<u>(447,185)</u>
Total Suburban Water Facilities Costs - Net	<u>362,835</u>	<u>(129,944)</u>	<u>-</u>	<u>232,891</u>
Suburban Wastewater Fund				
Facilities Planning Costs	13,960,439	873,051	(10,795)	14,822,695
Less Accumulated Amortization	<u>(6,230,824)</u>	<u>(3,597,188)</u>	<u>10,795</u>	<u>(9,817,217)</u>
Total Suburban Wastewater Facilities Planning Costs - Net	<u>7,729,615</u>	<u>(2,724,137)</u>	<u>-</u>	<u>5,005,478</u>
Total Facilities Planning Costs - Net	<u>\$ 8,092,450</u>	<u>\$ (2,854,081)</u>	<u>\$ -</u>	<u>\$5,238,369</u>

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 7 – FACILITIES PLANNING COSTS (Continued)

	<u>As of 12/31/20</u>	<u>Additions</u>	<u>Retirements</u>	<u>As of 12/31/21</u>
Suburban Water Fund				
Facilities Planning Costs	\$ 128,270	\$ 505,176	\$ (26,909)	\$ 606,537
Less Accumulated Amortization	<u>(68,432)</u>	<u>(202,179)</u>	<u>26,909</u>	<u>(243,702)</u>
Total Suburban Water Facilities Planning Costs - Net	<u>59,838</u>	<u>302,997</u>	<u>-</u>	<u>362,835</u>
Suburban Wastewater Fund				
Facilities & Planning Costs	13,288,570	1,176,937	(505,068)	13,960,439
Less Accumulated Amortization	<u>(3,426,123)</u>	<u>(3,309,769)</u>	<u>505,068</u>	<u>(6,230,824)</u>
Total Suburban Wastewater Planning Facilities Costs - Net	<u>9,862,447</u>	<u>(2,132,832)</u>	<u>-</u>	<u>7,729,615</u>
Total Planning Facilities Costs - Net	<u>\$ 9,922,285</u>	<u>\$ (1,829,835)</u>	<u>\$ -</u>	<u>\$ 8,092,450</u>

NOTE 8 – LONG-TERM DEBT

Long-term debt for 2022 and 2021 consists of the following:

	<u>Balance Outstanding As of 12/31/21</u>	<u>Additions / Accretions</u>	<u>Retirements</u>	<u>Balance Outstanding As of 12/31/22</u>	<u>Principal Due Within One Year</u>
Suburban Water Fund Bonds					
Water Revenue Bonds Series of 2011	\$ 65,767	\$ -	\$ (65,767)	\$ -	\$ -
Water Revenue Bonds Series of 2017	14,250,000	-	(340,000)	13,910,000	350,000
Water Revenue Bonds Series of 2021	17,445,000	-	(1,445,000)	16,000,000	1,585,000
Subtotal	<u>\$ 31,760,767</u>	<u>\$ -</u>	<u>\$ (1,850,767)</u>	<u>\$ 29,910,000</u>	<u>\$ 1,935,000</u>
Add Bond Premium	3,493,800	-	(345,761)	3,148,039	
Total Suburban Water Fund Bonds	<u>\$ 35,254,567</u>	<u>\$ -</u>	<u>\$ (2,196,528)</u>	<u>\$ 33,058,039</u>	
Less Current Maturities				<u>(1,935,000)</u>	
Net Suburban Water Fund Long-Term Bonds				<u>\$ 31,123,039</u>	
Notes from Direct Borrowings					
2011 Pennsylvania Infrastructure Investment Authority Note	\$ 861,904	\$ -	\$ (74,410)	\$ 787,494	\$ 75,541
Water Revenue Bonds Series of 2022	-	63,629	-	63,629	-
Total Suburban Water Fund Direct Borrowings	<u>\$ 861,904</u>	<u>\$ 63,629</u>	<u>\$ (74,410)</u>	<u>\$ 851,123</u>	<u>\$ 75,541</u>
Less Current Maturities				<u>(75,541)</u>	
Net Suburban Water Fund Long-Term Direct Borrowings				<u>\$ 775,582</u>	
Total Net Suburban Water Fund Long-Term				<u>\$ 31,898,621</u>	

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 8 – LONG-TERM DEBT (Continued)

	<u>Balance Outstanding As of 12/31/21</u>	<u>Additions / Accretions</u>	<u>Retirements</u>	<u>Balance Outstanding As of 12/31/22</u>	<u>Principal Due Within One Year</u>
Suburban Wastewater Fund Bonds					
2011 Sewer Revenue Bonds					
Series A	\$ 1,252,497	\$ -	\$ (118,706)	\$ 1,133,791	\$ 241,714
Less Current Maturities				(241,714)	
Net Suburban Wastewater Fund Long-Term Bonds				\$ 892,077	
Notes from Direct Borrowings					
2009 Pennsylvania Infrastructure Investment Authority Note	\$ 2,690,721	\$ -	\$ (266,694)	\$ 2,424,027	\$ 273,567
2013 Pennsylvania Infrastructure Investment Authority Note	1,884,953	-	(140,107)	1,744,846	142,238
2015 Pennsylvania Infrastructure Investment Authority Note	592,007	-	(36,924)	555,083	37,571
Total Suburban Wastewater Fund Direct Borrowing	\$ 5,167,681	\$ -	\$ (443,725)	\$ 4,723,956	\$ 453,376
Less Current Maturities				(453,376)	
Net Suburban Wastewater Fund Long-Term Direct Borrowings				\$ 4,270,580	
Total Net Suburban Wastewater Fund Long Term				<u>\$ 5,162,657</u>	
City Division Fund Bonds					
2013 Water and Sewer Revenue Bonds, Series A	\$ 107,615,000	\$ -	\$ -	\$ 107,615,000	\$ -
2013 Water and Sewer Capital Appreciation Revenue Bonds, Series B	66,656,927	3,909,636	(1,895,000)	68,671,563	2,196,583
2020 Water and Sewer Revenue Bonds	161,035,000	-	-	161,035,000	-
Subtotal	\$ 335,306,927	\$ 3,909,636	\$ (1,895,000)	\$ 337,321,563	\$ 2,196,583
Less Bond Discount	(4,300,639)	-	165,941	(4,134,698)	
Total City Division Fund Bonds	\$ 331,006,288	\$ 3,909,636	\$ (1,729,059)	333,186,865	
Less Current Maturities				(2,196,583)	
Net City Division Fund Long-Term Bonds				<u>\$ 330,990,282</u>	
Direct Borrowings					
2020 Series A Refunding Bonds	\$ 15,850,000	\$ -	\$ (1,210,000)	\$ 14,640,000	\$ 1,245,000
Less Current Maturities				(1,245,000)	
Net City Division Fund Long-Term Direct Borrowings				\$ 13,395,000	
Total Net City Division Fund Long Term				<u>\$ 344,385,282</u>	
Total Net Long-Term Debt				<u>\$ 381,446,560</u>	

	<u>Balance Outstanding As of 12/31/20</u>	<u>Additions / Accretions</u>	<u>Retirements</u>	<u>Balance Outstanding As of 12/31/21</u>	<u>Principal Due Within One Year</u>
Suburban Water Fund Bonds					
Water Revenue Bonds					
Series of 2010 A	\$ 11,590,000	\$ -	\$ (11,590,000)	\$ -	\$ -
Water Revenue Bonds					
Series of 2011	191,227	-	(125,460)	65,767	65,767
Water Revenue Bonds					
Series of 2015	1,088,705	-	(1,008,705)	80,000	-
Water Revenue Bonds					
Series of 2015 A	7,717,300	-	(7,717,300)	-	-
Water Revenue Bonds					
Series of 2017	14,580,000	-	(330,000)	14,250,000	340,000
Water Revenue Bonds					
Series of 2021	-	17,740,000	(295,000)	17,445,000	1,445,000
Subtotal	\$ 35,167,232	\$ 17,740,000	\$ (21,066,465)	\$ 31,840,767	\$ 1,850,767
Add Bond Premium	346,272	3,326,942	(179,414)	3,493,800	
Total Suburban Water Fund Bonds	\$ 35,513,504	\$ 21,066,942	\$ (21,245,879)	\$ 35,334,567	
Less Current Maturities				(1,850,767)	
Net Suburban Water Fund Long-Term Bonds				<u>\$ 33,483,800</u>	

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 8 – LONG-TERM DEBT (Continued)

	Balance Outstanding As of <u>12/31/20</u>	Additions / <u>Accretions</u>	<u>Retirements</u>	Balance Outstanding As of <u>12/31/21</u>	Principal Due Within One <u>Year</u>
Suburban Water Fund					
Notes from Direct Borrowings					
2007 State Pennworks Note	1,302,909	-	(1,302,909)	-	-
2011 Pennsylvania Infrastructure Investment Authority Note	935,199	-	(73,295)	861,904	74,410
Total Suburban Water Fund Direct Borrowings	\$ 2,238,108	\$ -	\$ (1,376,204)	\$ 861,904	\$ 74,410
Less Current Maturities				(74,410)	
Net Suburban Water Fund Long-Term Direct Borrowings				\$ 787,494	
Total Net Suburban Water Fund Long-Term				\$ 34,191,294	
Suburban Wastewater Fund					
Sewer Revenue Bonds					
2011 Sewer Revenue Bonds Series A	\$ 1,367,092	\$ -	\$ (114,595)	\$ 1,252,497	\$ 177,473
Less Current Maturities				(177,473)	
Net Suburban Wastewater Fund Long-Term Bonds				\$ 1,075,024	
Direct Borrowings					
2009 Pennsylvania Infrastructure Investment Authority Note	\$ 2,950,716	\$ -	\$ (259,995)	\$ 2,690,721	\$ 266,694
2013 Pennsylvania Infrastructure Investment Authority Note	2,022,962	-	(138,009)	1,884,953	140,107
2015 Pennsylvania Infrastructure Investment Authority Note	628,778	-	(36,771)	592,007	36,923
Total Suburban Wastewater Fund Direct Borrowings	\$ 5,602,456	\$ -	\$ (434,775)	\$ 5,167,681	\$ 443,724
Less Current Maturities				(443,724)	
Net Suburban Wastewater Fund Long-Term Direct Borrowings				\$ 4,723,957	
Net Suburban Wastewater Fund Long Term				\$ 5,798,981	
City Division Fund					
Bonds					
2013 Water and Sewer Revenue Bonds, Series A	\$ 107,615,000	\$ -	\$ -	\$ 107,615,000	\$ -
2013 Water and Sewer Capital Appreciation Revenue Bonds, Series B	64,303,120	3,748,807	(1,395,000)	66,656,927	1,813,568
2020 Water and Sewer Revenue Bonds	161,035,000	-	-	161,035,000	-
Subtotal	\$ 332,953,120	\$ 3,748,807	\$ (1,395,000)	\$ 335,306,927	\$ 1,813,568
Less Bond Discount	(4,466,580)	-	165,941	(4,300,639)	
Total City Division Fund Debt	\$ 328,486,540	\$ 3,748,807	\$ (1,229,059)	331,006,288	
Less Current Maturities				(1,813,568)	
Net City Division Fund Long-Term Debt				\$ 329,192,720	
Direct Borrowings					
2020 Series A Refunding Bonds	\$ 17,025,000	\$ -	\$ (1,175,000)	\$ 15,850,000	\$ 1,210,000
Less Current Maturities				(1,210,000)	
Net City Division Fund Direct Borrowings				\$ 14,640,000	
Total Net City Division Fund Long Term				\$ 343,832,720	
Total Net Long Term Debt				\$ 383,822,995	

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 8 – LONG-TERM DEBT (Continued)

The Authority's direct borrowings hold provisions that in the event of certain defaults the notes or bonds become immediately due and payable at the discretion of the lenders.

A summary of the long-term payable is provided in the ensuing paragraphs.

A. Suburban Division Water Fund

On December 21, 2011, the Authority issued \$1,185,400 of 2011 Water Bonds to refinance the balance of the 2001 Pennvest loan and to cover financing costs. The maturity date for the new bonds remained at July 1, 2022, and carries a fixed interest rate of 2.75%. The loan is secured by a pledge of the gross receipts and revenues of the water system and resulted in a 2% present value savings of refunded principal.

On June 29, 2011, Pennvest approved a \$1,660,303 loan to the Authority for a Water Meter Replacement program. Terms of the loan provide that the Authority will be reimbursed up to the limit of the loan amount. Interest payments began on November 1, 2011. Principal payments began on October 1, 2012. The loan carries a 1% interest rate for the first five years and a 1.51% annual interest rate for the remainder of the 20-year term. The debt is secured by the project collateral.

On June 20, 2017, the Authority issued Water Revenue Bond Series 2017 in the amount of \$14,900,000. The bond was issued to fund capital projects under the Authority's Capital Improvements Program, fund a deposit to the Debt Service Reserve Fund, and pay the costs related to the issuance of the Bonds. Interest payments began on November 1, 2017, and are payable every May and November. Principal payments began on November 1, 2020, and end on November 1, 2047. The bonds carry fixed annual interest rates ranging from 3% to 5%.

In June 2021, the Authority issued Water Revenue Bond, Series of 2021 in the amount of \$17,740,000. The bonds were issued at a premium of \$3,326,942. Proceeds of the bond together with other funds of the Authority were used to currently refund the Authority's 2007 Pennworks loan, currently refund the Authority's Water Revenue Bonds, Series A of 2010, currently refund the Authority's Water Revenue Bonds, 2015 A Series, fund a debt service reserve, and pay the costs and expenses of issuing the Bond. The bond carries a fixed interest rate of 4.00% per annum, payable commencing on November 1, 2021, and semi-annually thereafter on the interest payment date. The bond matures on November 1, 2031, and is secured by a pledge of system revenues. The refunding decreased the Authority's total debt service payments by \$3,037,117 and resulted in an economic gain of \$2,676,038.

In August 2022, the Authority issued Water Revenue Bond, Series 2022 in the amount of \$12,255,000. The bond was issued to fund capital projects of the Suburban Water Fund and pay the cost related to issuance of the bond. Interest payments began on May 1, 2023, and are payable every May and November. Principal payments begin on November 1, 2028 and end on November 1, 2042. The bonds carry fixed annual interest of 4.04% through November 1, 2032, and thereafter variable interest of 80% of the Prime Rate with an interest rate cap of 5.75%. The Authority draws funds as needed. As of December 31, 2023, the Authority has drawn \$63,629 on the bond.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 8 – LONG-TERM DEBT (Continued)

The schedule of principal maturity and annual debt service for the suburban water fund is as follows:

<u>Year</u>	<u>Bonds</u>		<u>Notes from Direct Borrowings</u>	
	<u>Principal Amount</u>	<u>Total Interest</u>	<u>Principal Amount</u>	<u>Total Interest</u>
2023	\$ 1,935,000	\$ 1,119,114	\$ 75,541	\$ 13,941
2024	2,005,000	1,045,214	76,689	12,792
2025	2,090,000	961,414	77,856	11,626
2026	1,890,000	874,014	79,039	10,442
2027	2,200,000	794,414	80,241	9,241
2028-2032	10,125,000	2,611,020	461,757	18,181
2033-2037	2,710,000	1,438,492	-	-
2038-2042	3,185,000	965,924	-	-
2044-2047	3,770,000	390,149	-	-
	<u>\$ 29,910,000</u>	<u>\$ 10,199,755</u>	<u>\$ 851,123</u>	<u>\$ 76,223</u>

B. Suburban Wastewater Fund

On December 21, 2011, the balance of the 2000 Pennvest loan was refinanced by the 2011 Sewer Series A bonds. The new bonds (\$2,166,100) also provided additional funds to pay for a portion of the Vera Cruz sewer project and to cover bond issue financing costs. The maturity date for the new bonds is November 1, 2031. The revenues of the common rate collector systems are serving as loan collateral. The loan carries an interest rate of 2.25% for the first 5 years and a variable rate thereafter, which equates to 70% of the 10-year average prime rate with 3% minimum and 5.5% maximum rate caps.

On November 16, 2009, the Pennsylvania Infrastructure Investment Authority (Pennvest) approved a loan of \$5,878,847 to the Authority to fund the design and construction of a 3-million-gallon flow equalization basin and pump station. The purpose of the project is to shave off and hold wet weather flows to address system capacity deficiencies during precipitation events. The loan carries an annual interest rate of 1.274% for the first five years and 2.547% for the remainder of the loan.

The loan is secured by a pledge of gross receipts and revenues obtained from users of the Western Lehigh Interceptor System. The Authority may not prepay at any time all or any portion of the unpaid principal without the prior written consent of Pennvest. As of December 31, 2012, the Authority received all (\$5,389,323) of the reimbursements for project expenditures. The Authority began paying both interest and principal on February 1, 2011.

On June 19, 2013, the Pennsylvania Infrastructure Investment Authority (Pennvest) approved a loan of \$2,931,170 to the Authority to fund the design and construction of a 40,000 gpd wastewater treatment plant to be built at Arcadia West to replace the existing plant. As of December 31, 2015, the Authority received all (\$2,931,170) of the reimbursement for project expenditures. The loan carries an interest rate of 1% for the first 5 years and 1.51% thereafter, for a period of 15 years.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 8 – LONG-TERM DEBT (Continued)

On February 25, 2015, the Pennsylvania Infrastructure Investment Authority (Pennvest) approved a loan of \$1,000,000 to the Authority to fund the Wynnewood Terrace pump station and force main replacement. The loan carries an interest rate of 1% for the first 5 years and 1.743% thereafter, for a period of 15 years.

The schedule of principal maturity and debt service for the suburban wastewater fund is as follows:

<u>Year</u>	<u>Bonds</u>		<u>Notes from Direct Borrowings</u>	
	<u>Principal Amount</u>	<u>Total Interest</u>	<u>Principal Amount</u>	<u>Total Interest</u>
2023	\$ 241,714	\$ 59,840	\$ 453,376	\$ 93,303
2024	127,004	52,987	463,248	83,431
2025	131,560	45,888	473,347	73,332
2026	136,280	38,534	483,677	63,002
2027	141,169	30,916	494,243	52,434
2027-2031	356,064	44,495	1,986,734	110,049
2032-2036	-	-	369,331	6,717
	<u>\$ 1,133,791</u>	<u>\$ 272,660</u>	<u>\$ 4,723,956</u>	<u>\$ 482,268</u>

C. CITY DIVISION FUND

On July 31, 2013, the Authority issued, in aggregate \$307,683,599 of Water and Sewer Revenue Bonds comprised of \$245,590,000 of Series 2013A Revenue Bonds, \$43,358,599 of Series 2013B Capital Appreciation Revenue Bonds and \$18,735,000 of Series 2013C Federally Taxable Revenue Bonds. The bonds were issued at a discount of \$10,923,458.

The 2013 bonds were issued to provide funding for 1) a single, up-front concession and lease payment to the City of Allentown pursuant to the Allentown Water and Sewer utility system Concession and Lease Agreement, 2) projected capital improvements to the Concessioned System, 3) deposits to certain reserve and other funds, and 4) transaction costs and expenses incurred in connection with the acquisition of the Concessioned System and the issuance of the 2013 Bonds.

The 2013 Bonds were issued under and secured by a Trust Indenture between the Authority and Manufacturers and Traders Trust Company, the concession trustee. The 2013 Bonds are payable from and secured by a pledge and an assignment by the authority of all the concessionaire interest, including revenues derived from operating the Concessioned System certain service charges imposed by the Authority for use of the Concessioned System and certain payments received from the municipal customers of the Concessioned System.

The 2013 Bonds are also secured by a Debt Service Reserve Fund initially funded at \$28,090,273 and held by the Concession Trustee and other funds including an Operations and Maintenance Reserve Fund and a Major Maintenance Reserve Fund in the amounts of \$9,199,515 and \$7,500,000, respectively. These funds are available to pay shortfalls in the scheduled debt service on the 2013 Bonds.

The Series 2013A bonds bear interest of 5% - 5.125% with final maturity on December 1, 2047. The Series 2013 Appreciation bonds bear interest of 3.21% - 6.21% with final maturity on December 1, 2038.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 8 – LONG TERM DEBT (Continued)

In October 2018, the Authority issued Water and Sewer Revenue Bond, Series 2018 (Federally Taxable) in the amount of \$18,735,000. Proceeds of the bond together with other funds of the Authority were used to currently refund the 2013 Series C bonds, fund a debt service reserve, and pay the costs and expenses of issuing the Bond. The bond carries a fixed interest rate of 4.75% per annum, payable commencing on June 1, 2019, and semi-annually thereafter on the interest payment date until June 1, 2029, at which time the fixed rate shall be reset to a floating or variable interest rate. At no time and in no instance shall the variable interest rate exceed 6.5% during the variable rate period. The bond matures on December 1, 2033, and is secured by the Authority's interest in the Concessioned System. The refunding increased the Authority's total debt service payments by \$7,817,099 and resulted in an economic loss of \$2,503,652.

In September 2020, the Authority issued Water and Sewer Revenue Bonds, Series 2020 (Federally Taxable) in the amount of \$161,035,000. Proceeds of the bonds together with other funds of the Authority were used to (1) advance refund a portion of the Authority's Water and Sewer Revenue Bond (City of Allentown Concession), Series 2013A; (2) fund a debt service reserve fund with respect to the 2020 Bonds; and (3) pay transaction costs and expenses in connection with the issuance of the bonds. Interest rates on the bonds range from 3.232% to 3.632% per annum, payable commencing on December 1, 2020, and semi-annually thereafter on the interest payment date until maturity. The bonds are payable from and secured by a pledge and assignment by the Authority of all the Concessionaire Interest in and to the Concessioned System created by the Concession Agreement. The refunding resulted in a deferred refunding loss of \$27,792,709, an increase in the Authority's total debt service payments of \$55,617,288 and resulted in an economic gain of \$9,929,809.

In October 2020, the Authority issued Water and Sewer Revenue Bond, Series A of 2020 (Federally Taxable) in the amount of \$18,150,000. Proceeds of the bond together with other funds of the Authority were used to currently refund the 2018 Series bonds, fund a debt service reserve, and pay the costs and expenses of issuing the Bond. The bond carries a fixed interest rate of 2.90% per annum, payable commencing on December 1, 2020, and semi-annually thereafter on the interest payment date until June 1, 2026, at which time the fixed rate shall be reset to 5.00%. The bond matures on December 1, 2033, and is secured by the Authority's interest in the Concessioned System. The refunding decreased the Authority's total debt service payments by \$1,928,034 and resulted in an economic gain of \$1,419,618.

The schedule of principal maturity and debt service for the City division is as follows:

Year	Bonds		Notes from Direct Borrowings	
	Principal Amount	Total Interest	Principal Amount	Total Interest
2023	\$ 2,196,583	\$ 11,160,551	\$ 1,245,000	\$ 424,560
2024	2,774,856	11,325,733	1,280,000	388,456
2025	3,000,505	11,545,856	1,320,000	351,336
2026	3,292,378	11,823,983	1,130,000	539,750
2027	3,550,688	12,155,673	1,185,000	483,250
2028-2032	20,564,138	67,567,668	6,885,000	1,465,000
2033-2037	26,878,823	88,042,983	1,595,000	79,750
2038-2042	53,293,592	61,784,964	-	-
2043-2047	60,735,000	37,207,056	-	-
2048-2052	59,235,000	24,329,231	-	-
2053-2057	70,115,000	13,446,290	-	-
2058-2059	31,685,000	1,736,459	-	-
	<u>\$ 337,321,563</u>	<u>\$ 352,126,447</u>	<u>\$ 14,640,000</u>	<u>\$ 3,732,102</u>

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 9 – INTERFUND BALANCES

During its operations, the Authority has transactions between funds to finance operations and provide services. The Suburban Water fund has financed the construction and expansion of the Authority's Operation Center and Information Technology Upgrades and is being reimbursed over time by the Suburban Wastewater fund for its share of the costs. Certain cost incurred by the City Division fund, were initially paid by the Suburban Water fund, and will be reimbursed to the Suburban Water fund from the City Division fund. For reporting purposes, the transactions of the Internal Service are included with the Suburban Water and Suburban Wastewater and City Division funds on a proportional basis. The interfund receivables and payables are as follows:

Fund	2022		2021	
	<u>Interfund Receivables</u>	<u>Interfund Payables</u>	<u>Interfund Receivables</u>	<u>Interfund Payables</u>
Enterprise Funds:				
City Division	\$ -	\$ -	\$ -	\$ -
Suburban Water	1,577,517	-	1,561,765	-
Suburban Wastewater	-	<u>1,577,517</u>	-	<u>1,561,765</u>
Total	<u>\$ 1,577,517</u>	<u>\$ 1,577,517</u>	<u>\$ 1,561,765</u>	<u>\$ 1,561,765</u>

NOTE 10 – DEVELOPER DEPOSITS

Developer Deposits represent funds received by the Authority from developers to cover the costs of plan reviews and project inspections and to ensure that infrastructure improvements are constructed in accordance with approved plans. Deposits for developments to be completed within one year are recorded as current liabilities in the amount of \$340,914 and \$400,164 as of December 31, 2022, and 2021, respectively. Deposits for developments not expected to be completed by the end of one year are recorded as long-term liabilities in the amount of \$142,407 and \$189,424 as of December 31, 2022, and 2021, respectively.

NOTE 11 – COMMITMENTS & CONTINGENCIES

In addition to the commitments disclosed in Note 6 related to the Service Concession Arrangement, the Authority as of December 31, 2022, through contractual agreements, had construction commitments of \$4,017,405 for various capital projects as compared to \$6,087,090 at year-end 2021. Operating and Capital reserves, construction note proceeds and grants will fund these expenditures.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 12 – OTHER POSTEMPLOYMENT BENEFITS

A. Health & Welfare Plan For Suburban Employees (Suburban Plan)

Suburban Plan:

Plan Description: The Authority through the Pennsylvania Municipal Health Insurance Cooperative offers a single employer defined benefit plan to eligible retirees for health insurance benefits. The Suburban Plan is reported as the Post Employment Health Trust Fund in the accompanying financial statements and does not issue stand-alone statements.

Management of the Suburban Plan is vested in the Authority's nine members Board of Directors, who are appointed by the Lehigh County Executive and approved by the Lehigh County Commissioners.

Suburban Plan Membership: At January 1, 2021, Plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments	19
Inactive plan members entitled to but not yet receiving benefit payments	-
Active plan members	<u>12</u>
Total	31

The Suburban Plan is closed to new entrants (employees) hired on or after January 1, 2005.

Benefits Provided: Any employee hired prior to January 1, 2005, and retiring with at least 10 years of service is eligible to receive medical and prescription drug coverage at age 65 (as a supplement to Medicare). This coverage will include the spouse of the retiree if the retiree is living. The authority to establish and amend the benefit terms of the Suburban Plan resides with the nine-member Board of Directors.

Contributions: The authority to establish and amend the contribution requirements of the Authority and plan members also resides with the nine-member Board of Directors. The Board establishes rates based on an actuarially determined rate. Based on the funded status of the Suburban Plan and the latest actuarial valuations neither the plan members or the Authority were required to make contributions for the years ended December 31, 2022, and 2021.

Investments: The Suburban Plan's policy regarding the allocation of invested assets is established and may be amended by the nine-member Board of Directors. It is the policy of the Board of Directors to pursue an investment strategy that reduces risk through diversification of the portfolio by investing in a variety of equities and fixed income securities. The following is the Suburban Plan's target asset allocation as of December 31, 2022, and 2021:

2022			
<u>Asset Class</u>	<u>Target Allocation</u>	<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equity			
Large Cap	31.6%	International Equity	16.0%
Small/Mid Cap	20.4%	Non-US Debt	6.0%
Bonds	22.0%	Cash	4.0%

2021			
<u>Asset Class</u>	<u>Target Allocation</u>	<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equity			
Large Cap	49.6%	International Equity	16.8%
Bonds	20.0%	Non-US Debt	5.9%
Cash	3.9%	Blend	3.8%

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 12 – OTHER POSTEMPLOYMENT BENEFITS (Continued)

The annual money-weighted rate of return on investments, net of investment expense, was -14.2% and 14.6%, for the years ended December 31, 2022, and 2021, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

See Note 2 to the financial statements for additional details on the plan's investments.

Net OPEB Liability of the Suburban Plan: The components of the net OPEB liability of the Suburban Plan at December 31, 2022, and 2021, were as follows:

	<u>2022</u>	<u>2021</u>
Total Plan OPEB Liability	\$ 2,193,319	\$ 2,130,976
Plan Fiduciary Net Position	<u>3,357,628</u>	<u>4,028,887</u>
Plan's Net OPEB Liability/(Asset)	<u><u>\$(1,164,309)</u></u>	<u><u>\$(1,897,911)</u></u>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability/(Asset)	153.1%	189.1%

Actuarial Assumptions: The Suburban Plan's net OPEB liability was measured as of December 31, 2022, and 2021, and the plan's total OPEB liability used to calculate the net OPEB liability was determined by actuarial valuation as of January 1, 2021. The actuary utilized update procedures to roll forward the Suburban Plan's total OPEB liability in the January actuarial valuations to the December 31, 2022, and 2021 measurement dates.

The Suburban Plan's total OPEB liability in the January 1, 2021, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.24% for 2021 and 2.45% for 2022
Salary Increases	5.0%, average, including inflation
Investment Rate of Return	6.79%, net of OPEB plan investment expense, including inflation.
Healthcare Cost Trend Rates	For the December 31, 2021 Measurement Date: 7.75% during 2022 followed by a .25% decrease per year to an ultimate rate of 4.00% per year. For the December 31, 2022 Measurement Date: .29% in 2023 to an ultimate rate of 4.75% in 2024.
Cost Sharing with Inactive Plan Members	Eligible retirees who retired prior to January 1, 2005 contribute 50% of premiums, retirees who retire after January 1, 2005 contribute 21% of the premiums.

Mortality rates were based on the 2010 Public General Amount Weighted Mortality Tables projected to 2026 using Scale MP-2020.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 12 – OTHER POSTEMPLOYMENT BENEFITS (Continued)

It is assumed that 100% of eligible retirees and spouses will participate in the plan.

The actuarial assumptions used in the January 1, 2021, valuation were based on historical results, as a recent experience study was not completed.

The long-term expected rate of return on the Suburban Plan's OPEB investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of December 31, 2021 and 2020 are summarized in the following tables:

2022			
<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>	<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic Equity		International Equity	
Large Cap	5.37%	Non-US Debt	6.22%
Small/Mid Cap	6.53%	Blend	0.32%
Bonds	1.36%		-0.45%
2021			
<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>	<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic Equity		International Equity	
Large Cap	5.72%	Non-US Debt	6.55%
Bonds	1.14%	Blend	0.29%
Cash	-0.33%		5.41%

Discount Rate: The discount rate used to measure the Suburban Plan's total OPEB liability was 6.79% at December 31, 2022, and 2021. The projection of cash flows used to determine the discount rate assumed that the Authority's contributions to the plan will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the Suburban 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 Suburban Plan's investments was applied to all periods of projected benefit payments to determine the Suburban Plan's total OPEB liability.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 12 – OTHER POSTEMPLOYMENT BENEFITS (Continued)

Changes in the net OPEB liability for the Suburban plan for the year ended December 31, 2022, were as follows:

	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability/(asset) (a) - (b)
Balances as of 12/31/21	\$ 2,130,976	\$ 4,028,887	\$ (1,897,911)
Service cost	10,732	-	10,732
Interest cost	142,391	-	142,391
Differences between expected and actual experience	-	-	-
Changes in Assumptions	-	-	-
Contributions - employer	-	12,008	(12,008)
Contributions - members	-	-	-
Net investment income	-	(571,813)	571,813
Benefit payments	(90,780)	(90,780)	-
Plan administrative expenses	-	(20,674)	20,674
Other changes	-	-	-
Net Changes	62,343	(671,259)	733,602
Balances as of 12/31/22	<u>\$ 2,193,319</u>	<u>\$ 3,357,628</u>	<u>\$ (1,164,309)</u>

Changes in the net OPEB liability for the Suburban plan for the year ended December 31, 2021, were as follows:

	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability/(asset) (a) - (b)
Balances as of 12/31/20	\$ 2,200,933	\$ 3,590,032	\$ (1,389,099)
Service cost	10,221	-	10,221
Interest cost	138,371	-	138,371
Differences between expected and actual experience	(282,636)	-	(282,636)
Changes in Assumptions	154,605	-	154,605
Contributions - employer	-	11,831	(11,831)
Contributions - members	-	-	-
Net investment income	-	517,542	(517,542)
Benefit payments	(90,518)	(90,518)	-
Plan administrative expenses	-	-	-
Other changes	-	-	-
Net Changes	(69,957)	438,855	(508,812)
Balances as of 12/31/21	<u>\$ 2,130,976</u>	<u>\$ 4,028,887</u>	<u>\$ (1,897,911)</u>

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 12 – OTHER POSTEMPLOYMENT BENEFITS (Continued)

Sensitivity of the Suburban Plan Net OPEB Liability to Changes in the Discount Rate: The following presents the December 31, 2022 net OPEB liability of the Suburban Plan, as well as what the Suburban Plan's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.79%) or 1-percentage-point higher (7.79%) than the current discount rate:

	<u>1 % Decrease (5.79%)</u>	<u>Discount Rate (6.79%)</u>	<u>1% Increase (7.79%)</u>
Net OPEB Liability (Asset) 12/31/22	\$ (938,221)	\$ (1,164,309)	\$ (1,359,317)

Sensitivity of the Suburban Plan Net OPEB Liability to Changes in the Discount Rate: The following presents the December 31, 2021 net OPEB liability of the Suburban Plan, as well as what the Suburban Plan's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.79%) or 1-percentage-point higher (7.79%) than the current discount rate:

	<u>1 % Decrease (5.79%)</u>	<u>Discount Rate (6.79%)</u>	<u>1% Increase (7.79%)</u>
Net OPEB Liability (Asset) 12/31/21	\$ (1,668,735)	\$ (1,897,911)	\$ (2,095,278)

Sensitivity of the Suburban Plan Net OPEB Liability to Changes in the Healthcare Cost Trend Rates: The following presents the December 31, 2021 net OPEB liability of the Suburban Plan, as well as what the Suburban Plan's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower ((.71%) increasing to 3.75%) or 1-percentage-point higher (1.29% increasing to 5.75%) than the current healthcare cost trend rates:

	<u>1 % Decrease ((.71%) decreasing to 3.75%)</u>	<u>Discount Rate (.29% decreasing to 4.75%)</u>	<u>1% Increase (1.29% decreasing to 5.75%)</u>
Net OPEB Liability (Asset) 12/31/22	\$ (1,401,711)	\$ (1,164,309)	\$ (886,957)

Sensitivity of the Suburban Plan Net OPEB Liability to Changes in the Healthcare Cost Trend Rates: The following presents the December 31, 2021 net OPEB liability of the Suburban Plan, as well as what the Suburban Plan's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (6.75% decreasing to 3.0%) or 1-percentage-point higher (8.75% decreasing to 5.0%) than the current healthcare cost trend rates:

	<u>1 % Decrease ((6.75%) decreasing to 3%)</u>	<u>Discount Rate ((7.75%) decreasing to 4%)</u>	<u>1% Increase ((7.75%) decreasing to 5%)</u>
Net OPEB Liability (Asset) 12/31/21	\$ (2,119,754)	\$ (1,897,911)	\$ (1,639,036)

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 12 – OTHER POSTEMPLOYMENT BENEFITS (Continued)

OPEB Expense and Deferred Outflows and Inflows of Resources: For the year ended December 31, 2022, and 2021, the Authority recognized OPEB expense of (\$34,746), and (\$201,499), respectively for the plan. At December 31, 2022, and 2021, the Authority reported deferred outflows and inflows of resources related to the OPEB plan from the following sources:

	12/31/2022		12/31/2021	
	Outflow	(Inflow)	Outflow	(Inflow)
Differences between expected and actual experience	\$ -	\$ (34,710)	\$ -	\$ (158,673)
Net difference between projected and actual earnings on OPEB plan investments	414,649	-	-	(309,553)
Changes of assumptions	18,987	-	86,796	-
Total	<u>\$ 433,636</u>	<u>\$ (34,710)</u>	<u>\$ 86,796</u>	<u>\$ (468,226)</u>

Amounts reported as deferred outflows and inflows of resources related to OPEB will be recognized in OPEB expense as follows:

<u>Year Ended December 31:</u>	
2023	\$ 8,610
2024	108,808
2025	113,110
2026	168,398
2027	-
Total	<u>\$ 398,926</u>

B. Health & Welfare Plan For City Division Employees (City Plan)

City Plan

City Plan Description: The Authority through a single employer defined benefit plan offers to eligible City Division retirees health insurance and prescription drug benefits in accordance with a memorandum of agreement with the Service Employees International Union Local 32BJ. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement 75.

The authority to establish and amend the benefit terms and financing requirements to the Authority resides with the Authority's nine-member Board of Directors, who are appointed by the Lehigh County Executive and approved by the Lehigh County Commissioners.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 12 – OTHER POSTEMPLOYMENT BENEFITS (Continued)

City Plan Membership: At January 1, 2021, Plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments	-
Inactive plan members entitled to but not yet receiving benefit payments	-
Active plan members	<u>72</u>
Total	72

Benefits Provided: The benefits provided to Other Key Employees hired, were the same as those provided to Union Employees, with the exception of union employees hired after January 1, 2017, receive coverage for three years or until Medicare eligible, whichever occurs first. Any employee retiring with a minimum age of 55 and 20 years of service or retiring at the age of 60 with 15 years is eligible to receive medical and prescription drug coverage until they reach the age of 65, with the exception previously noted for union employees hired after January 1, 2017. This coverage will include the spouse of the retiree until the retiree or spouse attains the age of 65 and dependent child coverage that ends when the dependent child reaches the age of 26 or the retiree reaches the age of 65. The authority to establish and amend the benefit terms of the City Plan resides with the nine-member Board of Directors.

Actuarial Assumptions & Total OPEB Liability: The City Plan's total OPEB liability was measured as of December 31, 2022, and 2021, and were determined by an actuarial valuations as of January 1, 2021. The actuary utilized update procedures to roll forward the total OPEB liability for the City Plan in the January 1, 2021 actuarial valuation to the December 31, 2022, and 2021 measurement dates.

The City Plan's total OPEB liability in the January 1, 2021 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.24% for 2021 and 2.45% for 2022
Salary Increases	5.0%, average, including inflation.
Discount Rate	2.25% for 2021 and 4.31 for 2022
Healthcare Cost Trend Rates	For 2021 Measurement Date: 7.75% during 2022 followed by a .25% decrease per year to an ultimate rate of 4.00% per year. For 2022 Measurement Date: (.8%) during 2023 to an ultimate rate of 4.00%
Cost Sharing with Inactive Plan Members	Eligible retirees with a minimum of 15 years pay 25% of premiums, retirees with more than 10 years but less than 15 pay 50% of premiums.

The discount rate was based on the S&P 20-year AA municipal bond rate.

Mortality rates were based on the 2010 Public General Amount Weighted Mortality Tables projected to 2026 using Scale MP-2020.

It is assumed that 100% of eligible retirees and spouses will participate in the plan.

The actuarial assumptions used in the January 1, 2021, valuation were based on historical results as a recent experience study was not completed.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 12 – OTHER POSTEMPLOYMENT BENEFITS (Continued)

Changes in the total OPEB liability for the City Plan for the year ended December 31, 2022, were as follows:

	<u>Increase (Decrease)</u> Total OPEB Liability (a)
Balances as of 12/31/21	\$ 3,588,854
Service cost	231,050
Interest cost	85,577
Change in Benefit Terms	-
Differences between expected and actual experience	-
Change in Assumptions *	(672,953)
Benefit payments	(33,205)
Other changes	-
Net Changes	(389,531)
Balances as of 12/31/22	<u>\$ 3,199,323</u>

*- The December 31, 2022, measurement date reflects a change in assumptions related to the Healthcare Cost Trend Rate, and a change in the discount rate.

Changes in the total OPEB liability for the City Plan for the year ended December 31, 2021, were as follows:

	<u>Increase (Decrease)</u> Total OPEB Liability (a)
Balances as of 12/31/20	\$ 3,825,143
Service cost	220,048
Interest cost	79,341
Change in Benefit Terms	(18,456)
Differences between expected and actual experience	(159,743)
Change in Assumptions *	(324,006)
Benefit payments	(33,473)
Other changes	-
Net Changes	(236,289)
Balances as of 12/31/21	<u>\$ 3,588,854</u>

*- The December 31, 2021, measurement date reflects a change in assumptions related to the Healthcare Cost Trend Rate, and a change in the discount rate.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 12 – OTHER POSTEMPLOYMENT BENEFITS (Continued)

Sensitivity of the City Plan Total OPEB Liability to Changes in the Discount Rate: The following presents the December 31, 2022 total OPEB liability of the City Plan, as well as what the City Plan's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.31%) or 1-percentage-point higher (5.31%) than the current discount rate:

	<u>1 % Decrease (3.31%)</u>	<u>Discount Rate (4.31%)</u>	<u>1% Increase (5.31%)</u>
Total OPEB Liability 12/31/22	\$ 3,514,287	\$ 3,199,323	\$ 2,908,888

Sensitivity of the City Plan Total OPEB Liability to Changes in the Discount Rate: The following presents the December 31, 2021 total OPEB liability of the City Plan, as well as what the City Plan's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (1.25%) or 1-percentage-point higher (3.25%) than the current discount rate:

	<u>1 % Decrease (1.25%)</u>	<u>Discount Rate (2.25%)</u>	<u>1% Increase (3.25%)</u>
Total OPEB Liability 12/31/21	\$ 3,934,251	\$ 3,588,854	\$ 3,262,273

Sensitivity of the City Plan Total OPEB Liability to Changes in the Healthcare Cost Trend Rates: The following presents the December 31, 2022 total OPEB liability of the City Plan, as well as what the City Plan's total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower ((1.8%) increasing to 3%) or 1-percentage-point higher (.2% increasing to 5%) than the current healthcare cost trend rates:

	<u>1 % Decrease ((1.8%) decreasing to 3%)</u>	<u>Discount Rate ((.8%) decreasing to 4%)</u>	<u>1% Increase (.2% decreasing to 5%)</u>
Total OPEB Liability 12/31/22	\$ 2,743,942	\$ 3,199,323	\$ 3,750,206

Sensitivity of the City Plan Total OPEB Liability to Changes in the Healthcare Cost Trend Rates: The following presents the December 31, 2021 total OPEB liability of the City Plan, as well as what the City Plan's total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower ((6.75%) decreasing to 3%) or 1-percentage-point higher ((8.75%) decreasing to 5%) than the current healthcare cost trend rates:

	<u>1 % Decrease ((6.75%) decreasing to 3%)</u>	<u>Discount Rate ((7.75%) decreasing to 4%)</u>	<u>1% Increase ((8.75%) decreasing to 5%)</u>
Total OPEB Liability 12/31/21	\$ 3,057,325	\$ 3,588,854	\$ 4,235,591

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 12 – OTHER POSTEMPLOYMENT BENEFITS (Continued)

OPEB Expense and Deferred Outflows of Resources: For the year ended December 31, 2021, and 2020, the Authority recognized OPEB expense of \$384,229 and \$598,235, respectively for the plan. The plan is funded on a “pay as you go” basis. At December 31, 2021, and December 31, 2020, the Authority reported deferred outflows of resources related to the OPEB plan from the following sources:

	12/31/2022		12/31/2021	
	Outflow	(Inflow)	Outflow	(Inflow)
Differences between expected and actual experience	\$ 152,865	\$ (99,907)	\$ 210,563	\$ (129,825)
Changes of assumptions	448,598	(749,560)	584,796	\$(263,324)
Total	<u>\$ 601,463</u>	<u>\$(849,467)</u>	<u>\$ 795,359</u>	<u>\$(393,149)</u>

Amounts reported as deferred outflows of resources related to OPEB will be recognized in OPEB expense as follows:

<u>Year Ended December 31:</u>	
2023	\$ (22,739)
2024	(22,739)
2025	(59,952)
2026	(99,796)
2027	(42,778)
Thereafter	<u>-</u>
Total	<u>\$ (248,004)</u>

NOTE 13 – NET POSITION

The basic financial statements utilize a net position presentation. Net position is categorized as net investment in capital assets, restricted and unrestricted.

Net investment in capital assets is intended to reflect the portion of net position that are associated with non-liquid, capital assets, less outstanding capital asset related debt. Restricted assets are liquid assets generated from revenues that have third-party (statutory, bond covenant or water user) limitation on their use. Unrestricted net position are amounts that do not meet the definitions of “invested in capital assets” or “restricted assets” and are available for Authority operations.

It is the Authority's policy to first use restricted assets prior to the use of unrestricted net position when an expenditure is incurred for purposes for which both restricted and unrestricted assets are available.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 14 – DEFINED BENEFIT PENSION PLAN

A. General Information about the Pension Plan

Plan Description. The Authority, through a January 2014 agreement, provides employee pension benefits through participation in the Pennsylvania Municipal Retirement System (PMRS). The PMRS was created by the Pennsylvania General Assembly in 1974 with the passage of the Pennsylvania Municipal Retirement Law 1974, P.L. 34, No. 15. PMRS administers pension plans on a contracted basis for any municipality or institution supported and maintained by a Pennsylvania municipality. This agent multiple-employer public employee retirement system maintains each municipality's account separately with that municipality's contributions and related employee contributions, and earnings segregated into separate accounts. PMRS issues a separate Annual Comprehensive Financial Report, which can be obtained by contacting the PMRS accounting office at P.O. Box 1165, Harrisburg, PA 17108-1165.

Benefits Provided. Benefit terms were established under the 2014 agreement between PMRS and the Authority, changes to benefit terms can only occur by modification of this agreement. Major provisions of the 2014 agreement include the following:

All full-time and permanent part-time Authority employees are required to participate in the System. Benefits vest after eight years of service. Employees can retire with an annual retirement benefit after 20 years of service provided age 55 has been attained, or at age 60.

The normal form of payment of retirement benefits is a monthly annuity available for the life of the retired employee. One and two-thirds percent of the employee's average salary for the three consecutive years of greatest compensation multiplied by the number of years of service, and any fraction thereof, is used to calculate the normal retirement benefit funded solely by the Authority's contributions. Supplemental benefits are derived from employee contributions and interest earnings of the fund. A retiree may elect to receive a reduced amount of benefit and provide a death benefit in the form of annuity or lump sum to the designated beneficiary. The plan also provides death and disability benefits for an active employee.

Depending upon the annual investment return, the plan may award excess interest earnings to participating municipalities. The municipalities have the option of either retaining such excess earnings or sharing the additional earnings with active employees and retirees. In all years when excess interest earnings have been awarded, the Authority has elected to pro-ratably share excess earnings resulting in a postretirement increase to retirees. Sharing of excess earnings is the only method available for increasing postretirement benefits.

The plan does not allow for any cost-of-living adjustments to an employee's retirement allowance subsequent to the employee's retirement date.

Employees Covered by Benefit Terms. At December 31, 2020, the following employees were covered by the benefit terms:

Inactive plan members or beneficiaries currently receiving benefits	43
Inactive plan members entitled to but not yet receiving benefits	6
Active plan members	<u>157</u>
Total	206

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 14 – DEFINED BENEFIT PENSION PLAN (Continued)

B. Net Pension Liability (Continued)

Contributions. Required contributions to the plan are governed by the 2014 agreement. The PMRS Board will actuarially determine the normal cost of the benefits provided under the contract (2014 agreement) and any liability associated with the actuarial experience of such benefits which shall be contributed annually by the Authority. The PMRS Board shall determine and the Authority shall be charged an additional amount to be contributed annually toward a reserve account for any disability benefit which may be payable under the contract (2014 agreement). The amounts so determined shall be computed in accordance with the Municipal Pension Plan Funding Standard and Recovery Act, 53 P.S. §895.101 et seq., and the PMRL. Members shall contribute one percent of their compensation to fund the annuity. Members may optionally contribute up to, but no more than an additional ten percent of their compensation. For the years ended December 31, 2022, and 2021, the average active employee contribution rate was 1.0% of annual pay, and the Authority's average contribution rate was 15.6% and 13.10%, respectively, of covered annual payroll.

B. Net Pension Liability

The Authority's net pension liability was measured as of December 31, 2021, and 2020, and the total pension liability used to calculate the net pension liabilities were determined by an actuarial valuation as of December 31, 2020. The actuary utilized update procedures to roll forward the total pension liability in the December 31, 2020 actuarial valuation to the respective measurement dates.

Actuarial assumptions. The total pension liability in the December 31, 2020, actuarial valuation was determined using the following actuarial assumptions:

	December 31, 2020 Valuation
Investment rate of return	5.25%, net of pension plan investment expense, including inflation
Projected salary increases	Age/Merit Scale including inflation ranging from 2.79% to 6.22%
Inflation	2.8%

Mortality rates Pre-Retirement for the December 31, 2020, valuation was based on the RP-2000 Sex-Distinct non-annuitant table projected 15 years with scale AA, and 5 year set back for females. Mortality rates Post-Retirement for the December 31, 2020 valuation was based on the RP-2000 Sex-Distinct Mortality Table projected 15 years with scale AA for males and projected 10 years with scale AA for females.

The actuarial assumptions used in the December 31, 2020, valuation were based on the PMRS Experience Study for the period covering January 1, 2014, through December 31, 2018, issued by the actuary in September 2020 as well as subsequent Board approved assumption changes.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 14 – DEFINED BENEFIT PENSION PLAN (Continued)

B. Net Pension Liability (Continued)

The PMRS system's long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates of expected future real rates of return (expected returns, net of pension plan investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the Long-Term Expected Rate of Return, by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation of December 31, 2020, are summarized in the tables below labeled "System Nominal and Real Rates of Return by Asset Class."

System Nominal and Real Rates of Return by Asset Class
12/31/2020 Valuation

Asset Class	Target Allocation	Nominal Rate of Return	Long-Term Expected Real Rate of Return
Domestic Equities (large capitalized firms)	25.0%	7.56%	5.31%
Domestic Equities (small capitalized firms)	15.0%	8.31%	6.06%
International Equities (international developed markets)	15.0%	7.78%	5.53%
International Equities (emerging markets)	10.0%	8.20%	5.95%
Real Estate	15.0%	7.50%	5.25%
Timber	5.0%	6.03%	3.78%
Fixed income	15.0%	4.12%	1.87%

Based on the three-part analysis, the PMRS Board established the System's Long-Term Expected Rate of Return at 7.8% for the December 31, 2020, valuation.

In addition to determining the System's Long-Term Expected Rate of Return, the PMRS Board, under the laws of the Commonwealth of Pennsylvania (Act 15 of 1974), is obligated to develop and apply the Regular Interest Rate to each of the individual participating municipalities' actuarial asset accounts held by PMRS. The rationale for the difference between the System's Long-Term Expected Rate of Return and the individual participating municipalities' Regular Interest Rate is described in the following section "Discount Rate." This rate was 5.25% for the December 31, 2020, valuation.

The System's policy in regards to the investment income allocation on invested assets is established and may be amended by the PMRS Board. Plan assets are managed on a total return basis with an emphasis on both capital appreciation as well as the production of income, in order to satisfy the short-term and long-term funding needs of PMRS.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 14 – DEFINED BENEFIT PENSION PLAN (Continued)

B. Net Pension Liability (Continued)

Discount rate. While it is often common practice to establish an actuarial Discount Rate that is equal to the Long-Term Expected Rate of Return, PMRS is required by law (Act 15 of 1974) to establish a Discount Rate equal to the Regular Interest Rate (Regular Interest Rate / Discount Rate). The PMRS Board establishes the Regular Interest Rate / Discount Rate on the basis of expected stable and consistent earnings on investments to be applied to the accounts of the individual participating municipalities and includes the accounts of plan participants, municipalities, and plan retirees each year. As a starting point, the Board considers the following five quantitative factors in reviewing the Regular Interest Rate / Discount Rate:

- 1.) Retiree Plan liability as a percentage of total Plan liability,
- 2.) Active Plan participant liability as a percentage of total Plan liability,
- 3.) Smoothed Pension Benefit Guarantee Corporation (PBGC) annuity rates as a proxy for annuity purchase rates,
- 4.) PMRS System Long-Term Expected Rate of Return and,
- 5.) PMRS administrative expenses.

The PMRS Board then adjust the Regular Interest Rate / Discount Rate by a variety of qualitative factors such as the desire to minimize Regular Interest Rate / Discount Rate volatility, varying levels of asset allocation and liquidity, trending of PBGC annuity rates, total PMRS actuarial and market value funding ratios, feedback from existing PMRS municipalities, and recommendations from the System's investment and actuarial consultants. The Regular Interest Rate / Discount Rates adopted by the Board and used to measure the individual participating municipalities' total pension liability was 5.25% for the December 31, 2020, actuarial valuation.

The Regular Interest Rate / Discount Rate will likely be less than the System Long-Term Expected Rate of Return. Should the System experience a prolonged period of investment returns in excess of the Regular Interest Rate, the PMRS Board is authorized to allocate any applicable portion of such excess in accordance with PMRS Board policies in the form of Excess Interest as provided for in the law.

The projection of cash flows for each underlying municipal plan, used to determine if any adjustment to the Discount Rate was required (depletion testing"), used the following assumptions: 1.) member contributions will be made at the current contribution rate 2.) participating plan sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate, and 3.) the System's Long-Term Expected Rate of Return will be used in the depletion testing of projected cash flows. Based on those assumptions, the PMRS pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 14 – DEFINED BENEFIT PENSION PLAN (Continued)

C. Changes in the Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a) - (b)
Balances at 12/31/2021(based on 12/31/2020 measurement date)	\$ 36,584,251	\$ 38,041,217	\$ (1,456,966)
Changes for the year:			
Service cost	1,959,422	-	1,959,422
Interest	1,939,928	-	1,939,928
Changes of benefits	-	-	-
Changes of assumptions	-	-	-
Differences between expected and actual experience	-	-	-
Contributions - employer	-	1,684,763	(1,684,763)
Contributions - member	-	674,887	(674,887)
Net investment income/(loss)	-	4,808,310	(4,808,310)
Benefit payments, including refunds of employee contributions	(2,649,981)	(2,649,981)	-
Administrative expense	-	(105,365)	105,365
Net changes	1,249,369	4,412,614	(3,163,245)
Balances at 12/31/22 (based on a 12/31/21 measurement date)	<u>\$ 37,833,620</u>	<u>\$ 42,453,831</u>	<u>\$ (4,620,211)</u>

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 14 – DEFINED BENEFIT PENSION PLAN (Continued)

C. Changes in the Net Pension Liability (Continued)

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 12/31/2020 (based on 12/31/2019 measurement date)	\$ 32,842,049	\$ 31,864,987	\$ 977,062
Changes for the year:			
Service cost	1,949,152	-	1,949,152
Interest	1,784,757	-	1,784,757
Changes of benefits	-	-	-
Changes of assumptions	600,023	-	600,023
Differences between expected and actual experience	409,231	-	409,231
Contributions - employer	-	1,484,790	(1,484,790)
Contributions - member	-	713,435	(713,435)
Net investment income/(loss)	-	5,054,281	(5,054,281)
Benefit payments, including refunds of employee contributions	(1,000,961)	(1,000,961)	-
Administrative expense	-	(75,315)	75,315
Net changes	<u>3,742,202</u>	<u>6,176,230</u>	<u>(2,434,028)</u>
Balances at 12/31/21 (based on a 12/31/20 measurement date)	<u>\$ 36,584,251</u>	<u>\$ 38,041,217</u>	<u>\$(1,456,966)</u>

The December 31, 2020, actuarial valuation reflects a change in assumptions related to the most recent actuarial study that was performed.

Sensitivity of the pension liability to changes in the discount rate. The following tables present the net pension liability of the Authority, calculated using the discount rates of 5.25%, as well as what the Authority's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (4.25%) or 1-percentage-point higher (6.25%) than the discount rate utilized for the December 31, 2020 actuarial valuation:

	1% Decrease (4.25%)	Discount Rate (5.25%)	1% Increase (6.25%)
Authority's net pension liability 12/31/21	\$(342,787)	\$(4,620,211)	\$(8,184,812)
Authority's net pension liability 12/31/20	\$2,679,206	\$(1,456,966)	\$(4,903,854)

Pension plan fiduciary net position. Detailed information about the pension plan's fiduciary net position is available in the separately issues PMRS financial report.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 14 – DEFINED BENEFIT PENSION PLAN (Continued)

D. Pension Expense, Deferred Outflows, and Deferred Inflows of Resources Related to Pensions

For the year ended December 31, 2022, the Authority recognized pension expense of \$(1,627), \$(819), and \$(6,040) in the Suburban Water Fund, Suburban Wastewater Fund, and City Fund, respectively.

For the year ended December 31, 2021, the Authority recognized pension expense of \$80,265, \$40,405, and \$298,032 in the Suburban Water Fund, Suburban Wastewater Fund, and City Fund, respectively.

At December 31, 2022, and 2021 the Authority reported deferred outflows and deferred inflows of resources related to pensions from the following sources:

	12/31/2022		12/31/2021	
	Outflow	(Inflow)	Outflow	(Inflow)
Difference between expected and actual experience	\$ 666,139	\$ -	\$ 1,007,791	\$ -
Changes in assumptions	517,807	-	735,606	-
Net difference between projected and actual earnings on pension plan investments	-	(5,566,967)	-	(4,660,622)
Contributions subsequent to the measurement date	1,610,291	-	1,688,963	-
Total	<u>\$ 2,794,237</u>	<u>\$ (5,566,967)</u>	<u>\$ 3,432,360</u>	<u>\$ (4,660,622)</u>

The \$1,610,291 reported as deferred outflows of resources related to pensions resulting from the Authority contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the subsequent year financial statements. Other amounts reported as deferred outflows of resources related to pensions will be recognized in pension expense as follows:

Year ended December 31:	
2023	\$ (1,071,429)
2024	(1,833,315)
2025	(1,040,928)
2026	(437,349)

NOTE 15 – DEFERRED COMPENSATION PLAN

In 1990, the Authority entered into an agreement with the International City Management Association (ICMA) to provide a Deferred Compensation Plan in accordance with the Internal Revenue Code, Section 457, on a voluntary basis to full-time employees. In 2020, the Authority changed record-keepers to Empower Retirement. The plan permits employees to defer a portion of their salary until future years. The deferred compensation is only available to participants at employment termination, retirement or for an unforeseeable emergency. The Authority makes no contributions to the plan. In accordance with federal law, a trust fund was established for the deposit of Section 457 assets. The trust fund is for the exclusive benefit of plan participants and beneficiaries. Because the assets are not owned by the Authority but are held in a trust, the deferred compensation assets and related liabilities are not recorded in the Authority's financial statements. The Authority's fiduciary responsibilities are to submit participant payroll deductions and enrollment change forms to the plan administrator (Retirement Corporation). Other than reviewing quarterly statements for accuracy, the Authority has no other fiduciary responsibility. Investments are managed by the plan's trustee with various investment options available. The choice of the investment option(s) is made by the employee. Fifty-eight and forty-five employees contributed into the Empower Retirement plan in 2022 and 2021, respectively.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 16 – RISK MANAGEMENT

The Authority joined the Pennsylvania Intergovernmental Risk Management Association (PIRMA) in August 1991, to obtain General, Public Officials' and Automobile Liability Coverage. PIRMA, which has operated since 1987, is a public entity risk pool providing liability insurance coverage to 612 Pennsylvania municipal entities as of December 31, 2022. In paying claims, the pool covers the first \$350,000 per claim. Thereafter, American Public Entity Excess Pool (APEEP) provides coverage of \$4,650,000 per claim and General Reinsurance Company and Markel Reinsurance Company provide quota share coverage at \$5,000,000 per claim of excess coverage over APEEP for a total coverage of \$10,000,000 per claim. The intergovernmental agreement specifies that in the event a claim or claims exhausts total members' equity, plus excess insurance coverage, then payment for such claim shall be the obligation of the respective individual member. In 2022 and 2021 the Authority paid \$346,969 and \$325,582 to PIRMA as its share of liability insurance premiums, respectively.

The Authority has been a member of the Delaware Valley Workers' Compensation Trust (DVWCT) since 1993. The Trust, a risk sharing pool formed in 1992, is comprised of 105 municipal entities located primarily in Southeastern Pennsylvania. The DVWCT assumes the first \$750,000 of each occurrence with excess insurance providing coverage up to the PA Statutory limit. If reserve funds and surplus are exhausted by claims, the Trust Agreement allows the governing board to levy additional assessments against pool members. Any additional assessments would be equal to the ratio of the participant's annual contribution to the total annual contribution paid by all participants in the trust year in which a deficit occurred. The Trust's surplus position makes an assessment unlikely.

The Authority paid a net premium (after payroll audit) of \$244,997 in 2021 and a deposit premium \$179,472 in 2022 before payroll audit. As of January 1, 2022, the Authority had accrued \$88,585 in Rate Stabilization Fund (RSF) credits which were available to reduce the Authority's 2022 premium. Any unused RSF credits will be rolled over to 2023, and the Trust will add investment income to the unused balance. The Authority also received dividends from the Trust of \$12,370 in 2021 and \$7,822 in 2022.

The Authority offers employees health care coverage through a PPO (Preferred Provider Organization) Plan using the Pennsylvania Municipal Insurance Cooperative (PMHIC) to purchase such insurance. The purpose of the cooperative, which consists of 288 municipal entities as of October 1, 2022, is to control escalating health care premiums by allowing municipalities the potential for volume discounts. The pool utilizes an Administrative Services arrangement, which uses the insurer (Capital Blue Cross) only for network access and claims management. The pool is self-funding up to the first \$50,000 per claim with reinsurance available to cover costs in excess of the self-funded limit. Annually a reconciliation of premiums paid to claims incurred is developed and if the cooperative has favorable experience, a dividend is returned to those participants who paid more premium than claims incurred. The cooperative uses a third-party administrator to issue bills and act as the liaison and rate negotiator with the insurers. Authority health benefits payments for retirees and active employees, net of reimbursements and dividend returns, for the years ended December 31, 2022 and December 31, 2021 totaled \$1,019,289 and \$864,611 respectively.

The Authority also purchases property coverage through CNA, brokered through Murray Securus. For 2022 and 2021, insurance costs amounted to \$304,500 and \$269,150, respectively. All other risks of loss including employee bonding, group disability and life insurance are insured through commercial insurance. Settled claims resulting from these risks have not exceeded insurance coverage in any of the past four years.

NOTE 17 – MAJOR CUSTOMER AND ECONOMIC DEPENDENCY

Several service agreements specify that the Authority will provide wastewater service through use of the Western Lehigh and Little Lehigh Relief Interceptor Systems to ten municipalities. As part of this service, the Authority bills certain municipalities for their share of the City of Allentown's treatment and transportation costs and the operating costs of the Western Lehigh and Little Lehigh Relief Interceptor Systems. During 2022 and 2021, two of the municipal customers each provided in excess of 10% of the total operating revenues. Since any reduction in user discharges is offset by lower treatment and transportation costs, and all municipalities share in paying system costs, economic dependency of any one of the customers is absent.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

Notes to Financial Statements

NOTE 18 – LEASES

The Authority leases various office equipment for its operations. The leased office equipment consist of various copiers and printers. Terms of each lease vary with fixed monthly payments ranging from \$43 to \$267, and lease periods ranging from 36 to 60 months. An incremental borrowing rate of 3.25% was utilized when calculating the lease liabilities.

The future principal and interest lease payments on the Authority's leased office equipment as of December 31, 2022, were as follows:

Year	Suburban Water		Suburban Wastewater		City Division	
	Principal	Interest	Principal	Interest	Principal	Interest
2023	1,208	13	1,208	13	7,262	79
	<u>\$ 1,208</u>	<u>\$ 13</u>	<u>\$ 1,208</u>	<u>\$ 13</u>	<u>\$ 7,262</u>	<u>\$ 79</u>

In addition to office equipment the Authority also leases various vehicles for its operations. Terms of each lease vary with fixed monthly payments ranging from \$283 to \$7,770, and lease periods of 60 months. An incremental borrowing rate of 3.25% was utilized when calculating the lease liabilities.

The future principal and interest lease payments on the Authority's leased vehicles as of December 31, 2022, were as follows:

Year	Suburban Water		Suburban Wastewater		City Division	
	Principal	Interest	Principal	Interest	Principal	Interest
2023	\$ 66,503	\$ 8,896	\$ 129,517	\$ 9,372	\$ 159,252	\$ 18,918
2024	67,423	6,677	84,801	6,333	163,341	13,905
2025	71,818	4,385	87,789	3,529	119,751	8,716
2026	63,601	2,085	44,934	1,066	101,802	4,901
2027	32,151	435	15,863	209	67,882	1,347
	<u>\$301,496</u>	<u>\$22,478</u>	<u>\$362,904</u>	<u>\$20,509</u>	<u>\$612,028</u>	<u>\$47,787</u>

The future principal and interest lease payments on all of the Authority's leases as of December 31, 2022, were as follows:

Year	Suburban Water		Suburban Wastewater		City Division	
	Principal	Interest	Principal	Interest	Principal	Interest
2023	\$ 67,711	\$ 8,909	\$ 130,725	\$ 9,385	\$ 166,514	\$ 18,997
2024	67,423	6,677	84,801	6,333	163,341	13,905
2025	71,818	4,385	87,789	3,529	119,751	8,716
2026	63,601	2,085	44,934	1,066	101,802	4,901
2027	32,151	435	15,863	209	67,882	1,347
	<u>\$302,704</u>	<u>\$ 22,491</u>	<u>\$364,112</u>	<u>\$ 20,522</u>	<u>\$619,290</u>	<u>\$ 47,866</u>

**REQUIRED
SUPPLEMENTARY
INFORMATION**

LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN THE AUTHORITY'S NET PENSION LIABILITY
AND RELATED RATIOS
LAST 10 FISCAL YEARS

	2022	2021	2020	2019	2018	2017	2016	2015
Total Pension Liability								
Service Costs	\$ 1,959,422	\$ 1,949,152	\$ 1,779,213	\$ 1,688,127	\$ 1,543,865	\$ 1,452,861	\$ 1,488,350	\$ 677,165
Interest	1,939,928	1,784,757	1,649,798	1,503,378	1,401,384	1,276,753	1,163,405	1,038,585
Changes of Benefit Terms	-	-	-	-	-	-	-	-
Differences Between Expected and Actual Experience	-	409,231	-	563,913	-	1,061,505	-	329,959
Changes of Assumptions	-	600,023	-	-	-	641,095	209,677	-
Benefit Payments, Including Refunds of Member Contributions	(2,649,981)	(1,000,961)	(999,402)	(1,073,743)	(1,166,011)	(915,177)	(600,285)	(544,982)
Net Change in Total Pension Liability	1,249,369	3,742,202	2,429,609	2,681,675	1,779,238	3,517,037	2,261,147	1,500,727
Total Pension Liability - beginning	36,584,251	32,842,049	30,412,440	27,730,765	25,951,527	22,434,490	20,173,343	18,672,616
Total Pension Liability - ending (a)	<u>\$ 37,833,620</u>	<u>\$ 36,584,251</u>	<u>\$ 32,842,049</u>	<u>\$ 30,412,440</u>	<u>\$ 27,730,765</u>	<u>\$ 25,951,527</u>	<u>\$ 22,434,490</u>	<u>\$ 20,173,343</u>
Plan Fiduciary Net Position								
Contributions - Employer	\$ 1,684,763	\$ 1,484,790	\$ 1,410,695	\$ 1,141,302	\$ 1,106,875	\$ 972,122	\$ 978,336	\$ 365,907
Contributions - Member	674,887	713,435	648,390	602,779	543,474	526,823	507,893	473,935
Net Investment Income	4,808,310	5,054,281	5,436,112	(1,157,514)	3,886,626	1,670,359	(99,517)	947,378
Benefit Payments, Including Refunds of Member Contributions	(2,649,981)	(1,000,961)	(999,402)	(1,073,743)	(1,166,011)	(915,177)	(600,285)	(544,982)
Administrative Expense	(105,365)	(75,315)	(55,136)	(62,006)	(60,172)	(63,095)	(52,516)	(41,411)
Net Change in Plan Fiduciary Net Position	4,412,614	6,176,230	6,440,659	(549,182)	4,310,792	2,191,032	733,911	1,200,827
Plan Fiduciary Net Position - beginning	38,041,217	31,864,987	25,424,328	25,973,510	21,662,718	19,471,686	18,737,775	17,536,948
Plan Fiduciary Net Position - ending (b)	<u>\$ 42,453,831</u>	<u>\$ 38,041,217</u>	<u>\$ 31,864,987</u>	<u>\$ 25,424,328</u>	<u>\$ 25,973,510</u>	<u>\$ 21,662,718</u>	<u>\$ 19,471,686</u>	<u>\$ 18,737,775</u>
Authority's Net Pension Liability - ending (a) - (b)	<u>\$ (4,620,211)</u>	<u>\$ (1,456,966)</u>	<u>\$ 977,062</u>	<u>\$ 4,988,112</u>	<u>\$ 1,757,255</u>	<u>\$ 4,288,809</u>	<u>\$ 2,962,804</u>	<u>\$ 1,435,568</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	112.21%	103.98%	97.02%	83.60%	93.66%	83.47%	86.79%	92.88%
Covered Payroll	\$ 10,831,527	\$ 11,336,308	\$ 10,378,157	\$ 9,905,129	\$ 9,135,580	\$ 8,807,193	\$ 8,763,140	\$ 2,314,192
Authority's Net Pension Liability as a Percentage of Covered Payroll	-42.66%	-12.85%	9.41%	50.36%	19.24%	48.70%	33.81%	62.03%

* - Information only available for seven years. Future years will be added as information becomes available.

** - The Authority had changes in assumptions related to mortality rates, retirement rates, and wage scales in the December 31, 2015 measurement date compared to previous measurement dates.

*** - The Authority had changes in assumptions related to the discount rate in the December 31, 2017 measurement date compared to previous measurement dates.

**** - The Authority had changes in assumptions related to the discount rate in the December 31, 2020 measurement date compared to previous measurement dates.

LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF AUTHORITY CONTRIBUTIONS PENSION PLAN
LAST 10 FISCAL YEARS

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially Determined Contribution	\$ 1,610,291	\$ 1,688,963	\$ 1,488,850	\$ 1,414,635	\$ 1,145,082	\$ 1,110,595	\$ 972,122	\$ 978,336	\$ 361,607	\$ 190,996
Contribution in Relation to the Actuarially Determined Contribution	1,610,291	1,688,963	1,488,850	1,414,635	1,145,082	1,110,595	972,122	978,736	365,907	190,996
Contribution Deficiency/(Excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (400)	\$ (4,300)	\$ -
Covered Payroll	\$ 11,291,117	\$ 10,831,527	\$ 11,336,308	\$ 10,378,157	\$ 9,905,129	\$ 9,135,580	\$ 8,807,193	\$ 8,763,140	\$ 2,314,192	\$ 2,220,914
Contribution as a percentage of Covered Payroll	14.26%	15.59%	13.13%	13.63%	11.56%	12.16%	11.04%	11.17%	15.81%	8.60%

Notes to Schedule:

Valuation Date:

Actuarially determined contribution rates are calculated as of January 1 for the odd valuation year at least two years prior to the end of the fiscal year in which the contributions were reported.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method
Amortization Method
Remaining Amortization Period
Asset Valuation Method
Inflation
Salary Increases
Investment Rate of Return
Pre-Retirement Mortality

Entry Age
Level Dollar Closed
7 years
Based Upon Municipal Reserves in PMRS (Fair Value)
2.8%
Age/Merit Scale including inflation ranging from 2.79% to 6.22%.
5.25%, net of pension plan investment expense, including inflation.
Males - RP 2000 with 1 year set back
Females - RP 2000 with 5 year set back
RP-2000 Sex-Distinct Mortality Table projected 15 years with scale AA for males and projected 10 years with scale AA for females

Post-Retirement Mortality:

* - Information not available

LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN THE SUBURBAN NET OPEB LIABILITY
AND RELATED RATIOS
LAST 10 FISCAL YEARS

	* 2022	* 2021	* 2020	* 2019	* 2018	* 2017
Total OPEB Liability Suburban Plan						
Service Cost	\$ 10,732	\$ 10,221	\$ 7,418	\$ 7,065	\$ 7,960	\$ 7,580
Interest	142,391	138,371	167,315	162,742	158,365	151,765
Changes of Benefit Terms	-	-	-	-	-	-
Differences Between Expected and Actual Experience	-	(282,636)	-	90,059	-	-
Changes of Assumptions	-	154,605	-	(99,162)	-	-
Benefit Payments	(90,780)	(90,518)	(115,648)	(110,336)	(92,904)	(61,525)
Net Change in Suburban Plan Total OPEB Liability	62,343	(69,957)	59,085	50,368	73,421	97,820
Suburban Plan Total OPEB Liability - Beginning	2,130,976	2,200,933	2,141,848	2,091,480	2,018,059	1,920,239
Suburban Plan Total OPEB Liability - Ending (a)	<u>\$ 2,193,319</u>	<u>\$ 2,130,976</u>	<u>\$ 2,200,933</u>	<u>\$ 2,141,848</u>	<u>\$ 2,091,480</u>	<u>\$ 2,018,059</u>
Suburban Plan Fiduciary Net Position						
Contributions - Employer	\$ 12,008	\$ 11,831	\$ 27,393	\$ 22,928	\$ 13,376	\$ -
Net Investment Income	(571,813)	517,542	292,386	645,121	(220,248)	485,937
Benefit Payments	(90,780)	(90,518)	(115,648)	(110,336)	(92,904)	(61,526)
Administrative Expense	(20,674)	-	-	-	-	-
Net Change in Suburban Plan Fiduciary Net Position	(671,259)	438,855	204,131	557,713	(299,776)	424,411
Suburban Plan Fiduciary Net Position - Beginning	4,028,887	3,590,032	3,385,901	2,828,188	3,127,964	2,703,553
Suburban Plan Fiduciary Net Position - Ending (b)	<u>\$ 3,357,628</u>	<u>\$ 4,028,887</u>	<u>\$ 3,590,032</u>	<u>\$ 3,385,901</u>	<u>\$ 2,828,188</u>	<u>\$ 3,127,964</u>
Suburban Plan Net OPEB Liability/(Asset) - Ending (a) - (b)	<u>\$ (1,164,309)</u>	<u>\$ (1,897,911)</u>	<u>\$ (1,389,099)</u>	<u>\$ (1,244,053)</u>	<u>\$ (736,708)</u>	<u>\$ (1,109,905)</u>
Suburban Plan Fiduciary Net Position as a Percentage of the Total Suburban Plan OPEB Liability	153.08%	189.06%	163.11%	158.08%	135.22%	155.00%
Covered Payroll Suburban Plan	\$ 1,133,552	\$ 1,079,573	\$ 1,209,753	\$ 1,152,146	\$ 1,098,115	\$ 1,045,824
Suburban Plan Net OPEB Liability/(Asset) as a Percentage of Covered Payroll	-102.71%	-175.80%	-114.83%	-107.98%	-67.09%	-106.13%

* - Information only available for six years. Future years will be added as information becomes available.

LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CONTRIBUTIONS SUBURBAN OPEB PLAN

LAST 10 FISCAL YEARS

	* 2022	* 2021	* 2020	* 2019	* 2018	* 2017
Actuarially Determined Contribution	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contribution in Relation to the Actuarially Determined Contribution	12,008	11,831	27,393	22,928	13,376	-
Contribution Deficiency (Excess)	<u>\$ (12,008)</u>	<u>\$ (11,831)</u>	<u>\$ (27,393)</u>	<u>\$ (22,928)</u>	<u>\$ (13,376)</u>	<u>\$ -</u>
Suburban Plan Covered Payroll	\$ 1,133,552	\$ 1,079,573	\$ 1,209,753	\$ 1,152,146	\$ 1,098,115	\$ 1,045,824
Contributions as a Percentage of Covered Payroll	1.06%	1.10%	2.26%	1.99%	1.22%	0.00%

Notes to Schedule:

Valuation Date:

Actuarially determined contribution rates are calculated as of January 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level percentage of pay
Amortization Period	20 years
Asset Valuation Method	5-year smoothed market
Inflation	2.45%
Healthcare Cost Trend Rates	.29% during 2023 to an ultimate rate of 4.75% per year.
Salary Increases	5.00%
Investment Rate of Return	6.79%
Retirement Age	65
Mortality	2010 Public General Amount Weighted Mortality Tables projected to 2026 usings Scale MP-2020

* - Information only available for six years. Future years will be added as information becomes available.

LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF INVESTMENT RETURNS SUBURBAN OPEB PLAN

LAST 10 FISCAL YEARS

	[*] 2022	[*] 2021	[*] 2020	[*] 2019	[*] 2018	[*] 2017
Annual money-weighted rate of return, net of investment expense	-14.20%	14.60%	8.60%	23.20%	-7.13%	18.18%

* - Information only available for six years. Future years will be added as information becomes available.

LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN THE CITY DIVISION'S TOTAL OPEB LIABILITY
AND RELATED RATIOS
LAST 10 FISCAL YEARS

	*	*	*	*	*
	2022	2021	2020	2019	2018
Total OPEB Liability City Division Plan					
Service Cost	\$ 231,050	\$ 220,048	\$ 269,018	\$ 184,957	\$ 142,941
Interest	85,577	79,341	72,855	106,760	73,458
Changes of Benefit Terms	-	(18,456)	-	(55,110)	-
Differences Between Expected and Actual Experience	-	(159,743)	-	383,657	-
Changes of Assumptions	(672,953)	(324,006)	583,524	322,110	-
Benefit Payments	(33,205)	(33,473)	(45,177)	(17,530)	(24,498)
Net Change in City Division Plan Total OPEB Liability	(383,531)	(236,289)	880,220	924,844	191,901
City Division Plan Total OPEB Liability - Beginning	3,588,854	3,825,143	2,944,923	2,020,079	1,828,178
City Division Plan Total OPEB Liability - Ending (a)	\$ 3,193,323	\$ 3,588,854	\$ 3,825,143	\$ 2,944,923	\$ 2,020,079
Covered-Employee Payroll City Division Plan	\$ 5,191,401	\$ 4,944,191	\$ 4,538,767	\$ 4,322,635	\$ 3,279,472
City Division Plan Total OPEB Liability as a Percentage of Covered-Employee Payroll	61.63%	72.59%	84.28%	68.13%	61.60%

* - Information only available for five years. Future years will be added as information becomes available.

** - The 12/31/2022 measurement date had a change in assumptions related to the Healthcare Cost Trend Rate, and a change in the discount rate compared to previous valuations.

No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.

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**OTHER
SUPPLEMENTARY
INFORMATION**

LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

COMBINING STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
SUBURBAN WASTEWATER FUND
For the year ended December 31, 2022

	Western Lehigh Interceptor System	West. Weisenberg Wastewater	Common Rate Wastewater Fund	Other Wastewater Funds	Total Wastewater Fund
Operating Revenues					
Charges for Services	\$ 6,675,408	\$ 400,810	\$ 921,630	\$ 6,686,889	\$ 14,684,737
Other Income	87,835	29	31,924	217,127	336,915
Total Operating Revenues	6,763,243	400,839	953,554	6,904,016	15,021,652
Operating Expenses					
Salaries and Wages	356,877	79,497	255,004	238,895	930,273
Employee Benefits	24,374	40,320	129,576	120,591	314,861
General and Administrative	86,258	19,215	61,634	57,927	225,034
Utilities	72,511	16,096	38,957	144,302	271,866
Materials and Supplies	92,430	39,858	92,593	114,239	339,120
Miscellaneous Services	292,046	123,794	234,324	5,852,973	6,503,137
Treatment and Transportation	2,808,414	-	37,762	-	2,846,176
Depreciation and Amortization	3,707,788	135,369	825,576	2,422,095	7,090,828
Total Operating Expenses	7,440,698	454,149	1,675,426	8,951,022	18,521,295
Operating Income (Loss)	(677,455)	(53,310)	(721,872)	(2,047,006)	(3,499,643)
Nonoperating Revenues (Expenses)					
Tapping and Capital Recovery Fees	2,709,948	-	58,971	467,721	3,236,640
Inspection and Plan Reviews	-	-	82,029	500	82,529
Interest Earnings	(4,410)	317	-	315	(3,778)
Interest Expense	(74,424)	(27,496)	(68,879)	(15,136)	(185,935)
Other Expense	(67,585)	-	(1,988)	(16,952)	(86,525)
Other Income	1,165	-	255	165	1,585
Total Nonoperating Revenues (Expenses)	2,564,694	(27,179)	70,388	436,613	3,044,516
Increase (Decrease) in net position before capital contributions	1,887,239	(80,489)	(651,484)	(1,610,393)	(455,127)
Capital Contributions					
Capital Assets Provided by Developers and Others	-	-	-	-	-
Total Capital Contributions	-	-	-	-	-
Increase (Decrease) in Net Position	1,887,239	(80,489)	(651,484)	(1,610,393)	(455,127)
Net Position at Beginning of Year, as restated	39,296,755	2,763,144	9,795,275	48,136,914	99,992,088
Net Position at End of Year	\$ 41,183,994	\$ 2,682,655	\$ 9,143,791	\$ 46,526,521	\$ 99,536,961

SUPPLEMENTAL SCHEDULES

- Schedule of Cash and Cash Equivalents
- Combined Schedule of Certificates of Deposit – All Funds
- Schedule of Cash Receipts and Disbursements and Changes in Account Balances – Fixed Rate Water Revenue Bonds
- Budgetary Comparison

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

**SCHEDULE OF CASH AND CASH EQUIVALENTS
CURRENT AND RESTRICTED
December 31, 2022**

Financial Institution	Total	Enterprise Funds		
		Suburban Division		City Division
		Water	Wastewater	Water & Wastewater
Bank of New York	\$ 1,579,636	\$ 1,579,636	\$ -	\$ -
Financial Northeastern Companies	285,551	23,815	261,736	-
Truist Bank	131,494	131,494	-	-
Fulton Bank	19,764,764	5,304,719	6,746,588	7,713,457
PNC Bank (1)	1,424,872	341,341	1,083,531	-
M & T Bank	65,530,170	-	-	65,530,170
Total	<u>\$ 88,716,487</u>	<u>\$ 7,381,005</u>	<u>\$ 8,091,855</u>	<u>\$ 73,243,627</u>

(1) Represents the Authority's share of the Pennsylvania School District Liquid Asset Fund.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

**COMBINED SCHEDULE OF CERTIFICATES OF DEPOSIT - ALL FUNDS
CURRENT AND RESTRICTED FUNDS
December 31, 2022**

	<u>Date of Purchase</u>	<u>Date of Maturity</u>	<u>% Rate of Return</u>	<u>Amount</u>	<u>Total By Fund</u>
CERTIFICATES OF DEPOSIT:					
Enterprise Funds:					
<u>Suburban Water</u>					
Finwise Bank	2/26/21	2/27/23	0.10	\$ 243,449	
Cinfed Federal Credit Union	3/4/21	3/6/23	0.15	247,197	
Flagstar Bank	6/16/21	6/16/23	0.15	240,406	
Synchrony Bank	10/15/21	10/16/23	0.40	240,962	
California First National Bank	2/23/22	2/23/24	1.20	239,513	
Israel Discount Bank of NY	5/27/22	5/28/24	2.85	239,120	
Barclay's Bank Delaware	6/2/22	6/3/24	2.85	239,057	
Oceanfirst Bank	6/29/22	6/28/24	3.25	240,171	
PSDLAF Flex Pool	12/31/22	1/31/23	4.18	1,015,194	\$ 2,945,069
<u>Suburban Wastewater</u>					
Enerbank USA	1/29/21	1/30/23	0.100	\$ 244,177	
Marlin Business Bank	1/29/21	1/30/23	0.100	244,177	
United Fidelity Bank, FSB	2/5/21	2/6/23	0.100	124,498	
Hingham Institution for Savings	6/28/21	6/28/23	0.15	240,058	
Sallie Mae Bank	8/18/21	8/18/23	0.350	238,772	
State Bank of India	12/10/21	12/11/23	0.550	240,623	
EagleMark Savings Bank	1/20/21	1/20/23	0.100	248,432	
BMW Bank of North America	1/22/21	1/23/23	0.100	248,358	
BankUnited, National Association	1/22/21	1/23/23	0.100	248,355	
John Marshall Bank	1/28/21	1/27/23	0.100	248,246	
Parkway Bank and Trust Company	3/30/21	3/30/23	0.150	242,604	
Washington Trust Company of Westerly	4/21/21	4/21/23	0.150	241,996	
Webbank	4/30/21	5/1/23	0.200	244,729	
South Coast Bank and Trust	6/18/21	6/19/23	0.150	243,251	
Goldman Sachs Bank USA	9/8/21	9/8/23	0.350	241,986	
Capital One, National Association	11/24/21	11/24/23	0.500	240,063	
Capital One Bank USA, National Association	12/8/21	12/8/23	0.550	239,747	
Lending Club Bank, NA	1/28/22	1/26/24	0.700	234,913	
Lamar National Bank	1/28/22	1/29/24	0.700	234,673	
Pentagon FCU	1/31/22	1/31/24	0.850	235,202	
Poplar Bank	3/23/22	3/25/24	1.850	239,774	
Live Oak Banking Co.	9/12/22	9/12/24	3.450	240,352	
Comenity Bank (Wilmington)	4/5/22	4/5/24	1.950	193,789	
Ally Bank	5/26/22	5/28/24	2.850	239,122	
Morgan Stanley Bank, Nat'l Assn.	5/26/22	5/28/24	2.850	239,120	
Morgan Stanley Private Bank, Nat'l Assn.	5/26/22	5/28/24	2.850	239,120	
Discover Bank	6/1/22	6/3/24	2.850	239,056	
Connexus CU	8/26/22	8/26/24	3.400	240,267	
Baxter CU	8/30/22	8/30/24	3.350	240,041	
PSDLAF Flex Pool LLRI Capital Reserves	12/31/22	1/31/23	4.18	1,015,384	
PSDLAF Flex Pool WW Capacity	12/31/22	1/31/23	4.18	1,015,384	\$ 8,866,269
TOTAL CERTIFICATES OF DEPOSIT					\$ 11,811,338

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA**

**SCHEDULE OF CASH RECEIPTS AND DISBURSEMENTS AND CHANGES IN ACCOUNT BALANCES
SUBURBAN WATER FUND - TRUSTEE ACCOUNTS - FIXED RATE WATER REVENUE BONDS,
December 31, 2022
For the Year Ended December 31, 2022**

	Debt Service Reserve Accounts	Debt Service Accounts	Construction Accounts	Total
RECEIPTS:				
Interest Income	\$ 14,991	\$ 233	\$ -	\$ 15,224
Bonds Payable	-	-	-	-
Bond Refinancing	-	-	-	-
Treasury Notes Matured	-	-	-	-
Receipts from LCA	-	2,967,305	-	2,967,305
Total Receipts	14,991	2,967,538	-	2,982,529
DISBURSEMENTS:				
Interest Payments	-	1,187,114	-	1,187,114
Water Capital Expenditures	-	-	-	-
Principal Reduction	-	1,787,390	-	1,787,390
Financing Costs	-	-	-	-
Underwriters Discount	-	-	-	-
Transfers to Debt Service Accounts	4,808	(4,808)	-	-
Miscellaneous Expense	-	25	-	25
Total Disbursements	4,808	2,969,721	-	2,974,529
EXCESS OF RECEIPTS OVER (UNDER) DISBURSEMENTS	10,183	(2,183)	-	8,000
TRANSFERS TO (FROM) - NET	-	-	-	-
EXCESS OF RECEIPTS OVER (UNDER) DISBURSEMENTS AND TRANSFERS	10,183	(2,183)	-	8,000
BALANCE, JANUARY 1, 2022	1,646,152	2,416	-	1,648,568
BALANCE, DECEMBER 31, 2022	<u>\$ 1,656,335</u>	<u>\$ 233</u>	<u>\$ -</u>	<u>\$ 1,656,568</u>
BALANCE CONSISTS OF:				
Cash and Cash Equivalents	\$ 1,656,335	\$ 233	\$ -	1,656,568
Certificates of Deposit (CD): (none)	-	-	-	-
CD Total	-	-	-	-
Cash and CD Total	<u>\$ 1,656,335</u>	<u>\$ 233</u>	<u>\$ -</u>	<u>\$ 1,656,568</u>

Note: The Cash and Cash Equivalent amount on this schedule balances to the financial statement as follows:
Cash and Cash Equivalent \$1,656,568 plus Other Developer Savings \$218,888 equals \$1,875,456.

LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA

BUDGETARY COMPARISON SCHEDULE

For the Year Ended December 31, 2022

(With comparative actual amounts for Year Ended December 31, 2021)

	2022			2021			Variance of 2022 Actual Data to	
	Budgeted Amounts		Actual	2021		Actual	Budget	2021
	Original	Final						
OPERATING REVENUES:								
Charges for Services	\$ 81,567,062	\$ 81,567,062	\$ 76,620,740	\$ 69,955,911	\$	(4,946,322)	\$	6,664,829
Rent	-	-	-	-	-	-	-	-
Other Income	424,823	424,823	1,476,089	589,810		1,051,266		886,279
Total Operating Revenues	81,991,885	81,991,885	78,096,829	70,545,721		(3,895,056)		7,551,108
OPERATING EXPENSES								
Salaries and Wages	17,316,519	17,316,519	14,583,552	14,058,747		2,732,967		524,805
Benefits, General and Administrative	2,880,296	2,880,296	2,383,812	2,257,872		496,484		125,940
Utilities	2,914,594	2,914,594	2,556,153	2,398,706		358,441		157,447
Materials and Supplies	3,647,479	3,776,479	3,427,056	2,190,971		349,423		1,236,085
Miscellaneous Services	13,802,667	13,673,667	11,975,407	11,363,363		1,698,260		612,044
Treatment and Transportation	3,858,205	3,858,205	2,857,770	3,911,982		1,000,435		(1,054,212)
Depreciation and Amortization	15,153,577	15,153,577	17,248,723	16,445,025		(2,095,146)		803,698
Total Operating Expenses	59,573,337	59,573,337	55,032,473	52,626,666		4,540,864		2,405,807
OPERATING INCOME (LOSS)	22,418,548	22,418,548	23,064,356	17,919,055		645,808		5,145,301
NONOPERATING REVENUES (EXPENSES):								
Tapping and Capital Recovery Fees	3,312,931	3,312,931	6,007,852	3,312,678		2,694,921		2,695,174
Meter Sales	112,034	112,034	176,675	179,671		64,641		(2,996)
Inspection and Plan Reviews	2,871,820	2,871,820	6,122,495	2,335,004		3,250,675		3,787,491
Interest Earnings	314,509	314,509	975,290	64,676		660,781		910,614
Interest Expense	(18,849,019)	(18,849,019)	(20,736,710)	(20,789,040)		(1,887,691)		52,330
Other Expense	(4,206,200)	(4,206,200)	(6,024,458)	(4,340,623)		(1,818,258)		(1,683,835)
Other Income	102,800	102,800	389,715	291,228		286,915		98,487
Total Nonoperating Revenues (Expenses)	(16,341,125)	(16,341,125)	(13,089,141)	(18,946,406)		3,251,984		5,857,265
Increase (decrease) in net assets before capital contributions	6,077,423	6,077,423	9,975,215	(1,027,351)		3,897,792		11,002,566
Capital Contributions:								
Capital Grant	-	-	-	34,523		-		(34,523)
Capital Assets Provided by Developers and Others	-	-	253,602	3,649,412		253,602		(3,395,810)
Total Capital Contributions	-	-	253,602	3,683,935		253,602		(3,430,333)
Increase (Decrease) in Net Position	\$ 6,077,423	\$ 6,077,423	\$ 10,228,817	\$ 2,656,584	\$	4,151,394	\$	7,572,233

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STATISTICAL SECTION

Sources: *Unless otherwise noted, the information in these schedules is derived from the annual comprehensive financial reports for the relevant year.*

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FINANCIAL TRENDS

This section provides information on Changes in Net Assets/Net Position Components and Changes in Net Assets/Net Position.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
NET ASSETS/ NET POSITION BY COMPONENT**

	2013	2014	2015	2016	2017
Net Position:					
Net Investment in Capital Assets	\$ 152,069,658	\$ 149,158,789	\$ 147,742,061	\$ 152,434,977	\$ 162,309,930
Restricted for Debt Service	1,207,927	1,209,103	1,209,239	1,209,379	1,365,470
Restricted for Net Pension Asset	21,831	-	-	-	-
Restricted for Net OPEB Asset	1,176,470	1,162,905	1,148,526	1,133,284	1,182,363
Unrestricted	21,852,447	18,943,226	10,509,902	811,269	(11,732,211)
Total Net Assets	\$ 176,328,333	\$ 170,474,023	\$ 160,609,728	\$ 155,588,909	\$ 153,125,552
	2018	2019	2020	2021	2022
Net Position:					
Net Investment in Capital Assets	\$ 159,792,232	\$ 168,787,946	\$ 163,724,401	\$ 170,026,423	\$ 174,737,544
Restricted for Debt Service	1,380,654	1,043,094	1,407,066	1,570,266	1,579,403
Restricted for Net Pension Asset	-	-	-	1,456,966	4,620,211
Restricted for Net OPEB Asset	736,708	1,244,053	1,389,099	1,897,911	1,164,309
Unrestricted	(14,863,918)	(25,963,577)	(22,517,049)	(28,311,754)	(25,232,838)
Total Net Assets/ Net Position	\$ 147,045,676	\$ 145,111,516	\$ 144,003,517	\$ 146,639,812	\$ 156,868,629

Note: Beginning in 2015, the amounts reported reflect the adoption of GASB 68 and 71. Amounts prior to 2015 have not been adjusted to reflect the adoption of GASB 68 and 71.

Beginning in 2018, the amounts reported reflect the adoption of GASB 75. Amounts prior to 2018 have not been adjusted to reflect the adoption of GASB 75.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
CHANGES IN NET ASSETS/ NET POSITION**

Fiscal Year	Operating Revenues	Operating Expenses	Operating Income (Loss)	Total Nonoperating Revenues (Expenses)	(1) (2) (3) Increase (Decrease) in Net Assets/ Net Position Before Capital Contributions	Capital Contributions	(1) (2) (3) Change in Net Assets/ Net Position
2013	37,820,024	31,578,208	6,241,816	(13,339,719)	(7,097,903)	874,159	(6,223,744)
2014	56,310,007	45,179,303	11,130,704	(17,829,251)	(6,698,547)	844,237	(5,854,310)
2015	47,477,636	42,312,587	5,165,049	(15,952,394)	(10,787,345)	1,692,811	(9,094,534)
2016	53,361,394	44,722,023	8,639,371	(18,205,887)	(9,566,516)	4,545,697	(5,020,819)
2017	54,808,820	46,719,135	8,089,685	(18,933,193)	(10,843,508)	8,380,151	(2,463,357)
2018	59,507,754	46,926,940	12,580,814	(19,473,727)	(6,892,913)	1,828,692	(5,064,221)
2019	61,088,459	48,768,093	12,320,366	(15,985,945)	(3,665,579)	1,731,419	(1,934,160)
2020	65,019,277	50,981,731	14,037,546	(15,383,247)	(1,345,701)	217,413	(1,128,288)
2021	70,545,721	52,626,666	17,919,055	(18,946,406)	(1,027,351)	3,683,935	2,656,584
2022	78,096,829	55,032,473	23,064,356	(13,089,141)	9,975,215	253,602	10,228,817

NOTES:

(1) Beginning in 2015, the amounts reported reflect the adoption of GASB 68 and 71. Amounts prior to 2015 have not been adjusted to reflect the adoption of GASB 68 and 71.

(2) Beginning in 2018, the amounts reported reflect the adoption of GASB 75. Amounts prior to 2018 have not been adjusted to reflect the adoption of GASB 75.

(3) Beginning in 2020, the amounts reported reflect the adoption of GASB 87. Amounts prior to 2020 have not been adjusted to reflect the adoption of GASB 87.

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REVENUE CAPACITY

This section provides information on the major sources of revenue, expenses, schedules of rates and charges, largest industrial and commercial revenue sources and collections information.

**LEHIGH COUNTY AUTHORITY
ALLEN TOWN, PENNSYLVANIA
REVENUES BY SOURCE**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Suburban - Water Fund (1)										
Operating Revenues:										
Customer Charges:										
Large Industrial	\$ 872,859	\$ 1,052,611	\$ 1,088,772	\$ 1,101,016	\$ 1,014,054	\$ 1,055,882	\$ 1,118,032	\$ 1,359,677	\$ 1,526,840	\$ 1,759,028
Industrial	1,533,331	1,784,254	1,959,556	1,924,336	1,971,310	2,023,984	2,118,324	2,331,984	2,864,043	3,583,427
Commercial/Institutional	839,616	870,446	934,255	1,044,364	1,134,993	1,193,232	1,286,316	1,480,634	1,618,500	2,248,980
Residential	3,218,823	3,262,746	3,336,469	3,377,843	3,482,627	3,617,000	3,889,305	4,353,510	4,928,585	6,438,205
Other	88,464	79,414	102,100	116,829	107,273	145,911	143,311	24,887	132,252	251,607
Private Fire Service	617,482	667,741	709,983	757,651	795,121	830,655	846,199	871,241	884,816	902,957
Public Fire Service	346,552	348,793	350,225	354,905	357,410	342,867	378,629	412,199	444,067	458,594
Total Charges for Service	7,517,127	8,066,005	8,481,360	8,676,844	8,863,788	9,209,531	9,780,116	10,834,132	12,399,103	15,642,798
Other Income	20,941	42,121	51,327	41,152	98,307	40,949	25,172	32,540	58,764	675,134
Rent	80,930	110,396	111,745	97,011	91,019	98,405	125,253	-	-	-
Total Operating Revenues	7,618,998	8,218,522	8,644,432	8,815,007	9,054,114	9,348,885	9,930,541	10,866,672	12,457,867	16,317,932
Nonoperating Revenues:										
Tapping & Capital Recovery Fees										
Meter Sales	219,845	351,871	276,202	426,177	455,405	221,405	418,775	484,648	386,165	279,250
Inspection, Plan Reviews, & Project Reimbursements	105,361	81,781	88,082	156,365	112,468	85,259	94,763	77,685	150,087	140,444
Interest Income	101,072	102,307	207,982	160,751	154,433	183,148	393,187	318,263	1,022,771	233,338
Other Income	54,544	47,092	54,422	91,619	127,486	255,439	179,191	84,958	34,284	64,387
Total Nonoperating Revenues	783,749	717,309	680,211	947,338	958,135	832,222	1,179,844	1,051,062	1,725,488	890,737
Total Water Fund Revenues	8,402,747	8,935,831	9,324,643	9,762,345	10,013,249	10,181,107	11,110,385	11,917,734	14,183,355	17,208,669
Suburban - Wastewater Fund (1)										
Operating Revenues:										
User Charges										
Other Income	15,935,816	17,290,464	11,616,373	12,756,663	12,568,375	13,720,330	13,840,156	15,980,601	15,606,887	14,684,737
Total Operating Revenues	97,876	213,335	252,802	116,267	290,406	294,099	241,900	193,826	204,533	336,915
Nonoperating Revenues:										
Tapping & Capital Recovery Fees	16,033,692	17,503,799	11,869,175	12,872,930	12,858,781	14,014,429	14,082,056	16,174,427	15,811,420	15,021,652
Meter Sales										
Interest Income	876,328	253,524	2,385,116	1,165,372	449,376	523,526	1,573,749	3,575,692	752,932	3,236,640
Inspection, Plan Reviews, & Project Reimbursements	100,112	87,753	109,829	118,529	162,034	222,306	332,847	193,926	25,019	(3,778)
Other Income	26,372	502,204	689	31,181	12,444	37,773	42,518	8,655	4,108	82,529
Total Nonoperating Revenues	480	630	930	1,090	7,520	690	711	6,194	45,690	1,585
Total Wastewater Fund Revenues	1,003,292	844,111	2,496,564	1,328,172	631,374	784,295	1,949,825	3,784,467	827,749	3,316,976
City Fund (1)*										
Operating Revenues:										
Customer Charges:										
Industrial	203,379	414,857	441,971	439,687	456,835	531,748	558,090	549,661	635,524	680,713
Commercial/Institutional	1,290,438	2,796,800	2,964,011	2,917,340	3,040,810	3,281,625	3,264,399	3,125,615	3,432,025	3,895,849
Residential	4,353,635	9,850,719	9,979,086	10,213,236	10,571,269	11,003,695	11,249,045	12,631,704	14,401,690	16,501,366
User Charges	7,296,874	14,217,123	10,376,636	14,686,290	14,984,978	15,265,064	15,920,317	16,295,859	17,956,563	18,920,688
Other	933,636	3,182,799	3,055,596	3,278,630	3,684,596	5,600,408	5,605,750	5,090,151	5,465,887	6,231,252
Private Fire Service	246,131	57,824	60,184	63,309	63,635	64,322	59,377	55,836	57,692	61,637
Public Fire Service		540	1,015	720	540	765	585	-	540	1,700
Total Charges for Service	14,077,962	30,520,662	26,878,499	31,599,212	32,802,663	35,747,627	36,657,563	37,748,826	41,949,921	46,293,205
Other Income	89,372	67,024	85,530	74,245	93,262	396,813	418,299	234,849	326,513	464,040
Total Operating Revenues	14,167,334	30,587,686	26,964,029	31,673,457	32,895,925	36,144,440	37,075,862	37,983,675	42,276,434	46,757,245
Nonoperating Revenues:										
Tapping & Capital Recovery Fees										
Meter Sales	12,050	58,278	236,343	764,853	725,230	1,383,796	1,707,128	1,901,863	2,173,581	2,491,962
Inspection, Plan Reviews, & Project Reimbursements	1,624	10,795	13,272	13,319	17,187	8,397	22,466	24,595	29,584	36,231
Interest Income	2,600	794,269	1,295,847	1,396,588	1,132,206	912,225	448,402	841,585	1,308,125	5,806,628
Other Income	3,497	113,361	424,171	386,754	341,431	1,047,630	1,193,618	162,075	5,373	914,681
Total Nonoperating Revenues	265,902	1,797,371	2,512,924	3,383,044	3,339,881	3,417,490	3,431,273	2,981,738	3,630,020	9,464,314
Total Allentown Fund Revenues	14,433,236	32,385,057	29,476,953	35,056,501	36,235,806	39,561,930	40,507,135	40,965,413	45,906,454	56,221,559
Total Enterprise Funds	\$ 39,872,967	\$ 59,668,798	\$ 53,167,335	\$ 59,019,948	\$ 59,739,210	\$ 64,541,761	\$ 67,649,401	\$ 72,842,041	\$ 76,728,978	\$ 91,768,856

(1) This data can be compared to Expenses by Function on the following page.

*The City Fund was new to the Authority in 2013, and as such information for 2013 is for a partial year.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
OPERATING EXPENSES BY FUNCTION**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
			(2)			(3)		(4)		
<u>Suburban - Water Fund (1)</u>										
Salaries and Wages	\$ 743,936	\$ 755,025	\$ 801,639	\$ 1,028,004	\$ 1,042,565	\$ 1,037,882	\$ 1,042,754	\$ 1,697,918	\$ 1,936,530	\$ 2,273,458
Benefits, General and Administration	1,007,698	883,400	770,436	1,045,634	1,257,063	1,261,241	1,405,024	1,179,359	1,284,678	1,300,983
Utilities	400,614	418,729	435,422	426,230	422,812	437,253	426,969	419,493	423,327	481,997
Materials and Supplies	314,809	266,886	292,395	288,550	422,730	294,937	371,371	279,430	472,436	860,080
Miscellaneous Services	1,399,343	1,518,486	1,760,084	2,024,840	2,270,359	2,703,594	2,665,139	3,652,162	3,444,479	3,664,554
Depreciation and Amortization	2,494,362	2,461,079	2,508,051	2,587,430	2,695,548	2,768,133	2,602,179	2,942,067	3,373,864	3,665,828
Total	\$ 6,360,762	\$ 6,303,605	\$ 6,568,027	\$ 7,400,688	\$ 8,109,077	\$ 8,503,040	\$ 8,513,436	\$ 10,170,429	\$ 10,935,314	\$ 12,246,900
<u>Suburban - Wastewater Fund (1)</u>										
Salaries and Wages	\$ 290,338	\$ 330,595	\$ 430,271	\$ 440,614	\$ 424,208	\$ 462,145	\$ 551,668	\$ 800,670	\$ 807,480	\$ 930,273
Benefits, General and Administration	370,857	412,512	474,988	564,580	559,911	580,467	714,616	564,037	629,920	539,895
Utilities	167,038	228,184	218,286	204,648	226,197	290,201	374,030	296,419	269,555	271,866
Materials and Supplies	143,800	155,820	187,328	189,418	155,503	264,744	335,419	236,574	231,857	339,120
Miscellaneous Services	5,413,037	6,217,734	6,996,038	7,139,673	6,369,014	5,717,168	6,330,597	5,912,495	6,405,017	6,503,137
Treatment and Transportation	7,128,163	5,523,415	2,347,975	3,021,234	3,516,548	3,543,753	3,385,568	2,906,958	3,899,502	2,846,176
Depreciation and Amortization	3,997,389	4,119,337	4,359,509	4,501,469	4,599,096	4,490,397	4,571,072	6,295,598	6,671,362	7,090,828
Total	\$ 17,510,622	\$ 16,987,597	\$ 15,014,395	\$ 16,061,636	\$ 15,850,477	\$ 15,348,875	\$ 16,262,970	\$ 17,012,751	\$ 18,914,693	\$ 18,521,295
<u>City Fund (1) *</u>										
Salaries and Wages	\$ 2,407,213	\$ 5,970,232	\$ 5,743,818	\$ 5,608,679	\$ 5,870,195	\$ 6,233,387	\$ 6,391,947	\$ 7,498,713	\$ 7,393,768	\$ 7,738,611
Benefits, General and Administration	787,154	3,732,073	3,746,923	4,417,857	5,155,222	5,563,262	6,694,877	4,967,505	4,264,243	4,184,144
Utilities	609,454	1,900,365	1,939,560	1,863,839	1,903,666	2,040,103	1,960,605	1,815,047	1,705,824	1,802,290
Materials and Supplies	634,843	1,839,101	1,400,206	1,333,225	1,312,551	1,267,835	1,315,169	1,393,271	1,486,678	2,227,856
Miscellaneous Services	651,738	3,147,458	2,358,537	2,190,803	2,620,544	2,096,178	1,784,035	1,921,776	1,513,867	1,807,716
Treatment and Transportation	-	5,502	11,043	11,011	10,096	9,827	9,547	11,926	12,480	11,594
Depreciation and Amortization	2,616,422	5,293,370	5,530,078	5,834,285	5,887,307	5,864,433	5,835,507	6,190,313	6,399,799	6,492,067
Total	\$ 7,706,824	\$ 21,888,101	\$ 20,730,165	\$ 21,259,699	\$ 22,759,581	\$ 23,075,025	\$ 23,991,687	\$ 23,798,551	\$ 22,776,659	\$ 24,264,278
Total Operating Expenses	\$ 23,871,384	\$ 23,291,202	\$ 42,312,587	\$ 44,722,023	\$ 46,719,135	\$ 46,926,940	\$ 48,768,093	\$ 50,981,731	\$ 52,626,666	\$ 55,032,473

* The City Fund was new to the Authority in 2013, and as such information for 2013 is for a partial year.

- (1) This data can be compared to Revenues by Source on the previous page.
- (2) The amounts reported reflect the adoption of GASB 68 and 71. Amounts prior to 2015 have not been adjusted to reflect the adoption of GASB 68 and 71.
- (3) The amounts reported reflect the adoption of GASB 75. Amounts prior to 2018 have not been adjusted to reflect the adoption of GASB 75.
- (4) The amounts reported reflect the adoption of GASB 87. Amounts prior to 2020 have not been adjusted to reflect the adoption of GASB 87.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
NONOPERATING EXPENSES**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Suburban - Water Fund:										
Interest Expense	\$ 1,408,407	\$ 1,377,963	\$ 1,269,864	\$ 1,140,565	\$ 1,371,796	\$ 1,576,659	\$ 1,545,028	\$ 1,442,776	\$ 1,136,953	\$ 847,133
Other Expense	106,373	108,430	68,291	157,016	427,991	82,142	98,246	57,563	255,343	229,725
Loss on Disposal of Capital Assets	-	-	-	-	-	-	-	-	-	-
Total	\$ 1,514,780	\$ 1,486,393	\$ 1,338,155	\$ 1,297,581	\$ 1,799,787	\$ 1,658,801	\$ 1,643,274	\$ 1,500,339	\$ 1,392,296	\$ 1,076,858
Suburban - Wastewater Fund:										
Interest Expense	\$ 133,737	\$ 154,205	\$ 151,110	\$ 195,081	\$ 204,418	\$ 197,000	\$ 213,114	\$ 199,707	\$ 199,973	\$ 185,935
Other Expense	561,186	63,029	80,574	65,320	30,104	30,876	44,130	42,698	55,412	86,525
Total	\$ 694,923	\$ 217,234	\$ 231,684	\$ 260,401	\$ 234,522	\$ 227,876	\$ 257,244	\$ 242,405	\$ 255,385	\$ 272,460
City Fund: *										
Interest Expense	\$ 7,101,736	\$ 17,940,740	\$ 18,024,646	\$ 18,280,300	\$ 18,516,650	\$ 18,810,413	\$ 19,386,584	\$ 17,257,071	\$ 19,452,114	\$ 19,703,642
Planning and Issuance Expense	6,081,223	-	-	-	-	-	-	-	-	-
Other Expense	-	1,543,675	2,047,608	4,026,159	3,312,624	3,810,644	1,259,785	4,206,199	4,029,868	5,708,208
Total	\$ 13,182,959	\$ 19,484,415	\$ 20,072,254	\$ 22,306,459	\$ 21,829,274	\$ 22,621,057	\$ 20,646,369	\$ 21,463,270	\$ 23,481,982	\$ 25,411,850
Total Nonoperating Expenses	\$ 2,209,703	\$ 1,703,627	\$ 21,642,093	\$ 23,864,441	\$ 23,863,583	\$ 24,507,734	\$ 22,546,887	\$ 23,206,014	\$ 25,129,663	\$ 26,761,168

* The City Fund was new to the Authority in 2013, and as such information for 2013 is for a partial year.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
CAPITAL CONTRIBUTIONS BY SOURCE**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Suburban - Water Fund:										
Grant	\$ -	\$ -	\$ 421,853	\$ 211,552	\$ 211,892	\$ 212,688	\$ -	\$ -	\$ 34,523	\$ -
Capital Assets Provided by Developers	719,019	826,893	1,270,958	3,348,066	6,112,316	1,581,110	1,716,419	209,793	3,227,112	253,602
Total Water Fund	\$ 719,019	\$ 826,893	\$ 1,692,811	\$ 3,559,618	\$ 6,324,208	\$ 1,793,798	\$ 1,716,419	\$ 209,793	\$ 3,261,635	\$ 253,602
Suburban - Wastewater Fund:										
Grant	\$ 145,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Assets Provided by Developers	9,640	17,344	-	986,079	2,055,943	34,894	15,000	7,620	422,300	-
Total Wastewater Fund	\$ 155,140	\$ 17,344	\$ -	\$ 986,079	\$ 2,055,943	\$ 34,894	\$ 15,000	\$ 7,620	\$ 422,300	\$ -
City Fund:										
Grant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Assets Provided by Developers	-	-	-	-	-	-	-	-	-	-
Total Allentown Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Enterprise Funds	\$ 874,159	\$ 844,237	\$ 1,692,811	\$ 4,545,697	\$ 8,380,151	\$ 1,828,692	\$ 1,731,419	\$ 217,413	\$ 3,683,935	\$ 253,602

* The City Fund was new to the Authority in 2013, and as such information for 2013 is for a partial year.

Note: The significant increase in Capital Assets provided by developers in 2012 is related to the Authority taking ownership of the Lynn Township wastewater treatment facility.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
SCHEDULE OF WATER CAPITAL RECOVERY FEES**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
SUBURBAN DIVISION										
Charge per Typical Residential Customer:										
Central Lehigh Division:										
Supply Tapping Fee	\$ 605	\$ 605	\$ 605	\$ 605	\$ 605	\$ 605	\$ 605	\$ 605	\$ 605	\$ 659.25
Distribution Tapping Fee	1,880	1,880	1,880	1,880	1,880	1,880	1,880	1,880	1,880	125.03
North Whitehall Division:										
Supply Tapping Fee	575	575	575	575	575	575	575	575	575	659.25
Distribution Tapping Fee	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	125.03
Washington Twp Division:										
Supply Tapping Fee	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	659.25
Distribution Tapping Fee	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	125.03
Heidelberg Heights Division:										
Supply Tapping Fee	708	708	708	708	708	708	708	708	708	659.25
Distribution Tapping Fee	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	125.03
Ennaus Consecutive Division:										
Supply Tapping Fee	400	400	400	400	400	400	400	400	400	400.00
Distribution Tapping Fee	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480.00
Upper Milford Central Division:										
Supply Tapping Fee	235	235	235	235	235	235	235	235	235	659.25
Distribution Tapping Fee	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	125.03
Small System Divisions: (2)										
Supply Tapping Fee	192	192	192	192	192	192	192	192	192	659.25
Distribution Tapping Fee	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	125.03
Total Fees collected: (Suburban Divisions, All Customers)										
Supply & Special Tapping Fees	\$ 193,635	\$ 142,032	\$ 212,130	\$ 296,802	\$ 365,395	\$ 184,915	\$ 360,815	\$ 348,206	\$ 336,185	\$ 255,334
Distribution Tapping Fees (1)	27,650	209,839	64,072	129,375	82,010	36,490	57,610	116,080	49,980	23,327
Connection Fees	-	-	-	-	-	-	350	362	-	-
Total Suburban Division	\$ 221,285	\$ 351,871	\$ 276,202	\$ 426,177	\$ 447,405	\$ 221,405	\$ 418,775	\$ 464,648	\$ 386,165	\$ 278,661
CITY DIVISION										
Supply Tapping Fee	\$ 810	\$ 810	\$ 810	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Supply Tapping Fee - Part 1 (3)				\$5.21 per gal.	\$5.38 per gal.	\$5.59 per gal.	\$5.88 per gal.	\$6.12 per gal.	\$6.32 per gal.	\$6.77 per gal.
Supply Tapping Fee - Part 2 Capacity Portion (3)				\$0.00016 per gal	\$0.000851 per gal	\$0.00851 per gal	\$0.00851 per gal	\$0.00851 per gal.	\$0.00851 per gal.	\$0.00851 per gal.
Supply Tapping Fee - Part 2 Distribution Portion (3)				\$0.00328 per gal	\$0.02551 per gal	\$0.02551 per gal	\$0.02551 per gal.	\$0.02551 per gal.	\$0.02551 per gal.	\$0.02551 per gal.
Total Fees collected: (Allentown Division, All Customers)										
Supply & Special Tapping Fees	\$ 7,290	\$ 39,649	\$ 128,605	\$ 474,914	\$ 415,990	\$ 968,123	\$ 1,222,030	\$ 1,292,073	\$ 1,412,728	\$ 1,628,470
Capacity Fees				128	435	1,339	1,390	994	1,380	1,717
Distribution Fees										
Total Allentown Division	\$ 7,290	\$ 39,649	\$ 128,605	\$ 475,042	\$ 416,425	\$ 969,462	\$ 1,244,882	\$ 1,301,236	\$ 1,446,493	\$ 1,692,780

- (1) Distribution Tapping fees only includes type 1 fees, which are fees charged for connections to mains installed by the Authority. Type 2 fees charged for connections to mains installed by developers are not included because such fees are reimbursed back to the developer.
- (2) Includes Mill Creek, Pine Lakes of Lynn, Beverly Hills and Clearview Farm Estates Divisions.
- (3) In 2016, City Division tapping fees were calculated per EDU rather than a flat fee. An EDU for water calculations equals 159.5 gallons.

Note: Water charges per typical residential customer represent rates in effect as of year-end.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
SCHEDULE OF WASTEWATER CAPITAL RECOVERY FEES**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Interceptors - Charge per 1000 Gallons:										
Western Lehigh Interceptor	2,470 \$	2,650 \$	2,800 \$	2,800 \$	3,560 \$	3,870 \$	3,910 \$	4,100 \$	4,100 \$	4,800 \$
Little Lehigh Relief Interceptor	910	940	970	970	990	1,100	1,130	1,170	1,170	1,830
Treatment Capacity	5,350	5,460	5,670	5,670	5,840	6,110	6,140	6,320	6,320	7,130
Total	8,730 \$	9,050 \$	9,440 \$	9,440 \$	10,390 \$	11,080 \$	11,180 \$	11,590 \$	11,590 \$	13,760
Annual Wastewater Capacity Sales - Interceptor System										
Gallons per Day	165,903	42,007	271,831	101,795	75,476	78,511	231,237	294,873	64,705	254,365
Fees Collected (1)	1,425,532 \$	187,988 \$	2,355,746 \$	1,123,945 \$	435,017 \$	490,076 \$	1,525,203 \$	3,370,163 \$	509,990 \$	3,177,669 (10)
Collection Systems - Charge per EDU (2)										
Upper Milford System:										
Collection Part	2,432.25 \$	2,002.20 \$	2,002.20 \$	2,002.20 \$	2,331.00 \$	1,816.55 \$	1,994.49 \$	1,994.49 \$	1,994.49 \$	1,994.49 \$
Capacity Part	712.05	502.90	373.65	373.65	435.00	1,386.50	1,307.03	1,307.03	1,482.85	1,682.60
Heidelberg Heights System:										
Collection Part	395.24	600.75	359.09	359.09	626.55	842.74	889.37	889.37	863.35	1,003.78
Capacity Part	2,506.40	2,506.40	2,227.45	2,227.45	4,754.29	5,388.26	6,110.32	6,110.32	5,859.74	7,825.31
Wynnewood Terrace System:										
Collection Part	2,311.19	2,376.26	2,260.58	2,260.58	2,520.23	2,788.31	3,287.65	3,287.65	2,959.96	4,527.03
Capacity Part	1,407.44	1,447.41	1,376.11	1,376.11	1,534.48	2,567.32	3,251.76	3,251.76	2,822.24	19,535.57
Sand Spring System:										
Collection Part	566.35	583.22	554.30	554.30	617.88	849.83	878.38	878.38	852.69	991.38
Capacity Part	843.50	867.60	826.63	826.63	920.38	1,441.01	2,358.58	2,358.58	1,912.20	31,466.19
Arcadia West System:										
Collection Part	606.38	622.84	640.50	640.50	661.50	661.50	715.82	715.82	715.82	807.91
Capacity Part	9,450.00	9,450.00	9,817.50	9,817.50	10,108.10	10,108.10	10,957.60	10,957.60	10,957.60	12,367.26
Reimbursement Part (3)	18,839.63	19,781.54	20,771.63	20,771.63	21,809.14	21,809.14	N/A	N/A	N/A	N/A
Western Weisenberg Treatment Plant:										
Capacity Part (4)	9,450.00	9,450.00	9,817.50	9,817.50	10,108.10	10,108.10	10,637.12	10,637.12	10,657.60	10,657.60
Annual Wastewater Capacity Sales - Collector Systems										
Gallons per Day (5)	3,273	1,561	1,561	8,251	7,359	10,481	11,150	13,805	18,286	10,481
Fees Collected	15,336 \$	10,715 \$	7,130 \$	12,977 \$	10,359 \$	33,450 \$	48,546 \$	107,409 \$	74,942 \$	58,971
CITY DIVISION										
Tapping Fee	680 \$	680 \$	680 \$	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Tapping Fee - Part 1 (11)				\$3.91 per gal.	\$4.10 per gal.	\$4.26 per gal.	\$4.48 per gal.	\$4.66 per gal.	\$4.82 per gal.	\$5.16 per gal.
Tapping Fee - Part 2 Capacity Portion (11)				\$0.00016 per gal	\$0.01538 per gal	\$0.01538 per gal	\$0.01538 per gal.	\$0.01538 per gal.	\$0.01538 per gal.	\$0.01538 per gal.
Tapping Fee - Part 2 Collection Portion (11)				\$0.000328 per gal	\$0.00052 per gal	\$0.00052 per gal	\$0.00052 per gal.	\$0.00052 per gal.	\$0.00052 per gal.	\$0.00052 per gal.
Total Fees collected: (Allentown Division, All Customers)										
Tapping Fees	4,760 \$	18,629 \$	107,739 \$	153,591 \$	106,694 \$	242,228 \$	208,161 \$	195,643 \$	280,789 \$	348,281
Capacity Fees				68,249	152,502	148,885	254,054	404,962	446,268	450,864
Collection Fees				4	10	30	31	22	31	37
Total Allentown Division	4,760 \$	18,629 \$	107,739 \$	221,844 \$	259,206 \$	391,143 \$	462,246 \$	600,627 \$	727,088 \$	799,182

- (1) Total includes Western Lehigh Interceptor, Little Lehigh Relief Interceptor and Treatment Capacity fees plus Vera Cruz project fees recouped through grant in 2012. 2009 includes a \$195,087 settlement with a township for fees unreimbursed in prior years.
- (2) An EDU or Equivalent Dwelling Unit represents a single family residential property or in the case of the Arcadia West Industrial Park System it represents 262.5 gallons per day.
- (3) Represents the amount reimbursable to the developer for connections within the Arcadia West subdivision. This system was acquired in June 2003. The period of time for eligible reimbursement ended and is no longer applicable.
- (4) Represents a new wastewater treatment plant which will replace the Arcadia West Plant.
- (5) In 2011, the Vera Cruz Sewer project capacity sales in gallons are included but no fees were collected due to grant funding.
- (6) Gallons per Day and fees includes Ocean Spray purchase of 100,000 gpd and purchase price.
- (7) Gallons per Day and fees includes Sunopta purchase of 117,700 gpd and purchase price.
- (8) Gallons per Day and fees includes KRE Group purchase of 61,831 gpd and purchase price.
- (9) Gallons per Day and fees includes Gallop/RPG JV II LLC purchase of 225,000 gpd and purchase price.
- (10) Gallons per Day and fees includes Keung/Dr. Pepper purchase of 175,000 gpd and purchase price.
- (11) In 2016, City Division tapping fees were calculated per EDU rather than a flat fee. An EDU for wastewater calculations equals 175.5 gallons.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
SCHEDULE OF WATER RATES AND CHARGES - SUBURBAN DIVISION**

Effective Date				1/1/20		Common Rates (1)		1/1/21		1/1/22	
Metered Water Usage											
Fixed Charges:											
Meter Size											
Quarterly	5/8" & 3/4"			\$	13.05	\$	20.05	\$	31.30		
	1"				23.13		35.54		55.48		
Monthly	1-1/2"				17.53		26.93		42.04		
	2"				24.26		37.27		58.18		
	3"				43.80		67.29		105.05		
	4"				64.20		98.64		154.00		
	6"				120.30		184.83		288.54		
	8"				186.90		287.15		448.27		
	10"				263.10		404.23		631.04		
Volume Charge per 1,000 gallons: (2)											
Quarterly Usage (gals.)				Monthly Usage (gals.)							
First	120,000			First	40,000			2.76	2.76	3.26	
Next	2,880,000			Next	960,000			2.50	2.68	3.17	
Next	24,000,000			Next	8,000,000			2.18	2.33	2.75	
Next	147,000,000			Next	49,000,000			1.88	2.01	2.38	
Over	174,000,000			Over	58,000,000			1.70	1.82	2.15	
Public Fire Protection (3)											
O&M per Hydrant (Rate per Month)				\$	9.34	\$	9.88	\$	10.01		
Inch-Squared Foot/Year (4)					0.00150		0.00164		0.00167		
Private Fire Protection (Charge per month) (5)											
Fire Line Size											
SF Residential				\$	5.00	\$	5.00	\$	5.00		
2"					13.61		13.61		13.61		
2 1/2"					21.26		21.26		21.26		
3"					30.62		30.62		30.62		
4"					54.43		54.43		54.43		
6"					122.47		122.47		122.47		
8"					217.72		217.72		217.72		
10"					340.18		340.18		340.18		
12"					489.87		489.87		489.87		
Other Fees											
Meter Test Fee (5/8", 3/4" & 1")				\$	50.00	\$	50.00	\$	50.00		
Meter Inspection Fee					50.00		50.00		50.00		
Site Visit Charge (Normal Hrs) & Meter Inspection Fee					50.00		50.00		50.00		
Site Visit Charge (After Hrs)					150.00		150.00		150.00		
Service Order Charge (Normal Hrs) (6)					50.00		50.00		50.00		
Service Order Charge (After Hrs) (6)					150.00		150.00		150.00		
Lien Administration Fee (7)					132.15		132.15		132.15		
Hydrant Security Device Fee (8)					140.00		140.00		140.00		

- (1) The Authority implemented common rates on 7/1/98 for the majority of the water service areas. Of 20,960 customers at year-end 2015, only 264 were on separate rate schedules.
- (2) Effective 4/1/13.
- (3) Municipalities are billed for this protection.
- (4) Applied to total Transmission and Distribution pipe length for mains with a diameter of 6 to 16 inches. The latest rate change took effect on 4/1/06.
- (5) SF Residential effective 7/12/10 while all other Private Fire rates effective 7/1/06.
- (6) Effective 1/1/15.
- (7) Effective 12/1/17.
- (8) Fee charged to developers for hydrant locking device effective 1/1/17.

Note: The Authority has the ability to change rates at any time as authorized by its Board of Directors.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
SCHEDULE OF WATER RATES AND CHARGES - CITY DIVISION**

Effective Date		1/1/20	Rates 1/1/21	1/1/22
Metered Water Usage				
Fixed Charges:				
Meter Size				
Quarterly	5/8"	\$ 30.47	\$ 48.34	\$ 60.81
	3/4"	37.36	55.46	68.43
	1"	51.13	69.88	83.98
	1-1/2"	85.98	n/a	n/a
	2"	127.70	n/a	n/a
	3"	239.07	n/a	n/a
	4"	364.25	n/a	n/a
	6"	712.17	n/a	n/a
	8"	1,129.37	n/a	n/a
Monthly	5/8"	21.04	n/a	n/a
	3/4"	23.34	n/a	n/a
	1"	28.06	n/a	n/a
	1-1/2"	39.67	40.97	43.88
	2"	53.57	55.34	59.27
	3"	90.57	93.56	100.20
	4"	132.41	136.78	146.49
	6"	248.27	256.47	274.67
	8"	387.47	400.25	428.67
Volume Charge per 1,000 gallons:		\$ 3.77037	\$ 3.87478	\$ 4.15670
Public Fire Protection				
Each Hydrant (Rate per year)		\$ 373.48	\$ 385.81	\$ 413.20
Other Fees				
Meter Test Fee (5/8", 3/4" & 1")		\$ 50.00	\$ 50.00	\$ 50.00
Meter Inspection Fee		50.00	50.00	50.00
Site Visit Charge (Normal Hrs) & Meter Inspection Fee		50.00	50.00	50.00
Site Visit Charge (After Hrs)		150.00	150.00	150.00
Service Order Charge (Normal Hrs)		50.00	50.00	50.00
Service Order Charge (After Hrs)		150.00	150.00	150.00
Lien Administration Fee		132.15	132.15	132.15

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
SCHEDULE OF WASTEWATER RATES AND CHARGES - SUBURBAN DIVISION - COLLECTOR SYSTEMS**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Upper Milford System											
Fixed Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Per 1000 gals. per Day
Fixed Charge per Quarter (2)	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	Per Qtr per EDU (3)
Fixed Charge per Quarter (2)	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	Per Multi-Family Unit
Flow Charge:											
All Flow (2)	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53	Per 1000 gals. of Flow
Up to 220 gpd	-	-	-	-	-	-	-	-	-	-	Per 1000 gals. of Flow
From 220 gpd to daily allocation	-	-	-	-	-	-	-	-	-	-	Per 1000 gals. of Flow
Greater than daily allocation	-	-	-	-	-	-	-	-	-	-	Per 1000 gals. of Flow
Exceptional Strength Charges (1):											
Biological Oxygen Demand (BOD)	0.33	0.36	0.22	0.23	0.26	0.29	0.28	0.31	0.36	0.33	Per Pound
Total Suspended Solids (TSS)	0.30	0.35	0.20	0.21	0.24	0.25	0.25	0.29	0.29	0.25	Per Pound
Total Kjeldahl Nitrogen (TKN)	0.53	0.55	0.29	0.31	0.40	0.37	0.43	0.41	0.47	0.38	Per Pound
Sampling & Testing Charge	170.00	170.00	170.00	170.00	170.00	170.00	170.00	182.00	182.00	182.00	Per Day
Weisenberg Twp. Collector System											
Basic Service Charge	-	-	-	-	-	-	-	-	-	-	Per 1000 gals. of Allocation/Day
Fixed Charge per Quarter (2)	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	Per Equivalent Dwelling Unit
Fixed Charge per Quarter (2)	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	Multi-Family Units
Flow Charge (2)	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53	Per 1000 gals. of Flow
Arcadia West Collector System											
Flow Charge	58.00	58.00	58.00	58.00	58.00	58.00	58.00	58.00	58.00	58.00	Per 1000 gals. of Flow
Fixed Charge	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	7.55	Per 1000 gals. of Allocation/Day
Heidelberg Heights Collector System											
Monthly Charge	-	-	-	-	-	-	-	-	-	-	Per Residential Unit
Fixed Charge per Quarter (2)	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	Per Equivalent Dwelling Unit
Fixed Charge per Quarter (2)	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	Per Multi-Family Unit
Flow Charge (2)	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	Per 1000 gals. of Flow
Wynnewood Terrace Collector System											
Monthly Charge	-	-	-	-	-	-	-	-	-	-	Per Residential Unit
Fixed Charge per Quarter (2)	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	Per Equivalent Dwelling Unit
Fixed Charge per Quarter (2)	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	Per Multi-Family Unit
Flow Charge (2)	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	Per 1000 gals. of Flow
Sand Spring Collector System											
Fixed Charge	-	-	-	-	-	-	-	-	-	-	Per Customer per Month
Fixed Charge per Quarter (2)	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	Per Equivalent Dwelling Unit
Fixed Charge per Quarter (2)	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	Per Multi-Family Unit
Flow Charge (2)	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	Per 1000 gals. of Flow
Washington Township Collector System (3)											
District 1 - Fixed Charge per Quarter	124.00	124.00	124.00	124.00	124.00	124.00	124.00	124.00	124.00	124.00	Per EDU
District 1 - Flow Chg per 1000 gals.	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	All flow in excess of 23,000 gals
District 2 - Fixed Charge per Quarter	124.00	124.00	124.00	124.00	124.00	124.00	124.00	124.00	124.00	124.00	Per EDU
District 2 - Flow Chg	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	Per 1000 gals. of Flow
Lynn Township Collector System (4)											
Fixed Charge per Quarter	158.98	158.98	158.98	158.98	158.98	158.98	158.98	158.98	158.98	158.98	Per EDU
Flow Charge	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20	Per 1000 gals. of Flow
Lowhill Township Collector System (5)											
Fixed Charge per Quarter (2)	-	-	-	21.00	21.00	21.00	21.00	21.00	21.00	21.00	Per Equivalent Dwelling Unit
Fixed Charge per Quarter (2)	-	-	-	10.50	10.50	10.50	10.50	10.50	10.50	10.50	Multi-Family Units
Flow Charge (2)	-	-	-	4.53	4.53	4.53	4.53	4.53	4.53	4.53	Per 1000 gals. of Flow

- (1) Applicable only to commercial and industrial customers.
- (2) Effective in 2010, the Authority took the first step of a 3 year phase-in of a common rate structure for the following collector systems:
Upper Milford, Weisenberg, Heidelberg Heights, Wynnewood Terrace and Sand Spring.
- (3) The Authority took over operations and billing responsibilities in April 2009. Washington Township still owns the system. Effective 1/1/13, both districts will pay same fixed and flow charges.
Flow charges apply to all flow discharged.
- (4) Lynn Township Collector System was acquired 2/28/12. The system serves 424 customers.
- (5) Lowhill Township Collector System was acquired 6/8/16. The system serves 43 customers.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
SCHEDULE OF WASTEWATER RATES AND CHARGES - SUBURBAN DIVISION - INTERCEPTOR SYSTEMS**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
<u>Little Lehigh Relief Interceptor - Phase 1</u>											
Flow Charge	\$ 0.17	\$ 0.15	\$ 0.12	\$ 0.12	\$ 0.15	\$ 0.27	\$ 0.22	\$ 0.19	\$ 0.23	\$ 0.23	Per 1000 gals. of Flow
<u>Little Lehigh Relief Interceptor - Phase 2</u>											
Flow Charge	\$ 0.03	\$ 0.03	\$ 0.03	\$ 0.03	\$ 0.02	\$ 0.03	\$ 0.03	\$ 0.00	\$ 0.02	\$ 0.011	Per 1000 gals. of Flow
<u>Western Lehigh Interceptor</u>											
Flow Charge (2)	\$ 1.03	\$ 0.87	\$ 0.97	\$ 1.28	\$ 1.13	\$ 0.98	\$ 0.89	\$ 0.98	\$ 0.91	\$ 1.16	Per 1000 gals. of Flow
<u>Exceptional Strength Charges (1):</u>											
BOD	\$ 0.33	\$ 0.36	\$ 0.22	\$ 0.23	\$ 0.26	\$ 0.29	\$ 0.28	\$ 0.31	\$ 0.36	\$ 0.33	Per Pound
TSS	\$ 0.30	\$ 0.35	\$ 0.20	\$ 0.21	\$ 0.24	\$ 0.25	\$ 0.25	\$ 0.29	\$ 0.29	\$ 0.25	Per Pound
TKN	\$ 0.53	\$ 0.55	\$ 0.29	\$ 0.31	\$ 0.40	\$ 0.37	\$ 0.43	\$ 0.41	\$ 0.47	\$ 0.38	Per Pound
Allocation	\$ 0.25	\$ 0.22	\$ 0.21	\$ 0.22	\$ 0.20	\$ 0.18	\$ 0.29	\$ 0.21	\$ 0.22	\$ 0.21	Per 1000 gals. per Day

- (1) Applicable only to commercial and industrial customers.
(2) The municipalities served by this system are billed based on estimated rates during the year. By mid-year of the following year, the City of Allentown issues a final reconciled bill of actual treatment and transportation costs and these costs together with the Authority interceptor system costs are used to develop a final actual bill to the municipalities. Based on a comparison of estimated to actual costs, the municipalities receive either an additional charge or credit. Because of a dispute with the City, the final costs for 2009 are under protest. Accordingly the rates shown for 2009 - 2013 are as budgeted. A settlement was reached with the City in 2014.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
SCHEDULE OF WASTEWATER RATES AND CHARGES - CITY DIVISION**

Effective Date		1/1/20	Rates 1/1/21	1/1/22
Metered Water Usage				
Fixed Charges:				
	<u>Meter Size</u>			
Quarterly	5/8"	\$ 10.57	\$ 16.79	\$ 21.13
	3/4"	12.96	19.25	23.76
	1"	17.71	24.17	29.03
	1-1/2"	29.61	n/a	n/a
	2"	43.88	n/a	n/a
	3"	81.95	n/a	n/a
	4"	125.04	n/a	n/a
	6"	244.27	n/a	n/a
	8"	385.45	n/a	n/a
Monthly	5/8"	7.31	n/a	n/a
	3/4"	8.11	n/a	n/a
	1"	9.69	n/a	n/a
	1-1/2"	13.66	14.11	15.11
	2"	18.42	19.02	20.37
	3"	31.19	32.22	34.51
	4"	45.47	46.97	50.30
	6"	85.21	88.02	94.27
	8"	156.32	161.48	172.95
Volume Charge per 1,000 gallons:		\$ 2.695880	\$ 2.785200	\$ 2.983180

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
COMPARATIVE WATER CHARGES
FOR MUNICIPAL OWNED WATER UTILITIES IN
LEHIGH VALLEY REGION OF PENNSYLVANIA
Water bill based on 20,000 gallons consumption per Quarter**

Utility	Quarterly Amount
Local Suppliers (1)	
Slatington Borough	175.56
Lehighon Water Authority	168.25
South Whitehall Township Authority	159.00
Lehigh County Authority - City Division (3)	143.94
Easton Suburban Water Authority	139.31
Lower Nazareth Township Authority	136.64
Northampton Borough Municipal Authority - North Whitehall Twp.	129.60
Lehigh County Authority - WTD Welshtown Road	126.00
Northampton Borough Municipal Authority	122.80
Borough of Macungie	122.07
Upper Saucon Township	122.00
City of Bethlehem	120.39
Borough of Alburtis	117.09
Whitehall Township Authority	110.00
Catasauqua Borough	102.60
Lehigh County Authority - Suburban Division (2)	96.50
Borough of Emmaus	42.50

- (1) Quarterly amounts are based on rates in effect as of 12/31/21 unless noted.
- (2) Includes Central Lehigh (Main System), North Whitehall, Millcreek, Pine Lakes of Lynn, Heidelberg Heights, Washington Twp, Clearview Farms, Beverly Hills and Emmaus Consecutive divisions or 98.7% of total customer base.
- (3) The Authority entered into a lease concession agreement with the City of Allentown on 8/8/13 to provide service to approximately 46,650 customers.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
TEN LARGEST INDUSTRIAL & COMMERCIAL WATER CUSTOMERS
CURRENT YEAR AND NINE YEARS AGO**

2022				
	Customer Revenues	% of Total Charges for Services	Customer Water Sales (1000 Gals)	% of Total Water Sales
Sam Adams Pa Brewery (1)	\$ 1,733,348	4.8%	717,059	10.8%
Niagara Bottling	825,002	2.3%	327,877	4.9%
Motts LLC	674,682	1.9%	261,749	3.9%
Ocean Spray Cranberries	498,302	1.4%	187,542	2.8%
Nestle Waters	487,002	1.3%	184,310	2.8%
Sunopta	403,960	1.1%	149,482	2.2%
Coca-Cola	355,877	1.0%	129,019	1.9%
Hamilton Tech Partners (2)	316,975	0.9%	111,706	1.7%
Nestle Waters (Perrier)	307,560	0.8%	109,822	1.7%
AMCOR Pet Packaging	191,402	0.5%	67,860	1.0%
Totals	\$ 5,794,110	15.9%	2,246,426	33.8%
Balance from Other Customers	37,219,505	102.3%	4,723,431	67.8%
Grand Total	\$ 43,013,615	118.2%	6,969,857	101.6%

2013				
	Customer Revenues	% of Total Charges for Services	Customer Water Sales (1000 Gals)	% of Total Water Sales
Sam Adams Pa Brewery (1)	\$ 876,941	6.1%	575,145	13.4%
Niagara Bottling	425,679	3.0%	267,605	6.3%
Nestle Waters	377,019	2.6%	233,461	5.5%
Nestle Waters (Perrier)	207,280	1.5%	118,390	2.8%
Coca-Cola	201,330	1.4%	115,256	2.7%
Hamilton Tech Partners (2)	139,178	1.0%	73,236	1.7%
Kraft Foods	126,137	0.9%	69,324	1.6%
Amcor Pet Packaging	83,684	0.6%	41,843	1.0%
Air Products & Chemicals	69,169	0.5%	34,661	0.8%
CH2MHill (3)	37,690	0.3%	17,989	0.4%
Totals	\$ 2,544,107	17.8%	1,546,910	36.2%
Balance from Other Customers	11,747,777	82.2%	2,730,726	63.8%
Grand Total	\$ 14,291,884	100.0%	4,277,636	100.0%

(1) Site of the former Pabst Brewery. Sam Adams Pa Brewery purchased plant from Diageo on June 2, 2008.

(2) Site of former Agere facility.

(3) CH2MHill is the contract operator of Lehigh County Authority's Wastewater Treatment plant . The Authority acquired the plant from the County of Lehigh in October 2009.

Note: Revenues include usage charges and private fire protection charges.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
WATER BILLING COLLECTIONS
SUBURBAN AND CITY DIVISIONS**

Suburban - Water Fund:

Year	Water Sales	Water Revenues	% Revenues vs. Sales	Uncollectible Amount
2013	6,553,093	6,553,093	100.00%	-
2014	7,049,471	7,048,941	99.99%	530
2015	7,421,152	7,421,152	100.00%	-
2016	7,564,388	7,563,474	99.99%	914
2017	7,711,257	7,710,881	99.99%	376
2018	8,036,009	8,035,228	99.98%	781
2019	8,555,288	8,555,288	100.00%	-
2020	9,550,692	9,550,574	100.00%	118
2021	11,070,220	11,055,039	99.86%	15,181
2022	14,281,247	14,277,918	99.98%	3,329

City* - Water Fund:

Year	Water Sales	Water Revenues	% Revenues vs. Sales	Uncollectible Amount
2013	\$ 6,781,088	\$ 6,781,088	100.00%	-
2014	16,245,175	16,243,410	99.99%	1,765
2015	16,440,664	16,434,872	99.96%	5,792
2016	16,848,893	16,845,133	99.98%	3,760
2017	17,753,510	17,745,266	99.95%	8,244
2018	19,260,747	19,254,867	99.97%	5,880
2019	20,677,284	20,673,531	99.98%	3,753
2020	21,397,131	21,389,064	99.96%	8,067
2021	23,935,127	23,923,509	99.95%	11,618
2022	27,309,180	27,305,914	99.99%	3,266

* The City Fund was new to the Authority in 2013, and as such information for 2013 is for a partial year.

Note: Water Sales excludes private and public fire protection charges as listed on the Revenues by Source schedule.

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DEBT CAPACITY

This section provides data on outstanding debt of the Authority's Suburban and City water and wastewater systems, ratios of debt to personal income and per capita, information on pledged revenue coverage and overlapping debt of other municipal entities within the Authority's Service Area.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
RATIOS OF OUTSTANDING DEBT BY TYPE
SUBURBAN DIVISION - WATER SYSTEM**

Year	Net Revenue Bonds	Net Notes	Net Total O/S Debt	Customers at Year-end	Total Debt per Customer	As a share of	
						Personal Income (1)	Personal Income
2013	\$ 30,175,872	\$ 3,832,021	\$ 34,007,893	20,566	\$ 1,653.60	3.77%	\$ 43,897
2014	28,901,146	3,670,418	32,571,564	20,758	1,569.11	3.47%	45,211
2015	27,872,335	3,440,555	31,312,890	20,960	1,493.94	3.14%	47,537
2016	26,466,155	3,206,739	29,672,894	21,488	1,380.91	2.83%	48,834
2017	40,320,920	2,969,629	43,290,549	21,825	1,983.53	3.87%	51,298
2018	38,853,975	2,730,299	41,584,274	22,737	1,828.93	3.41%	53,614
2019	37,359,583	2,486,487	39,846,070	22,901	1,739.93	3.19%	54,471
2020	35,513,504	2,238,108	37,751,612	23,282	1,621.49	2.78%	58,402
2021	35,254,567	861,904	36,116,471	23,565	1,532.63	2.45%	62,537
2022	33,058,039	851,123	33,909,162	24,167	1,403.12	2.13%	65,821

(1) Although the Suburban Division's service area is in the more affluent areas of Western and Northern Lehigh County, the Personal Income level for the whole County was used to determine the share of personal income attributable to the debt load.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
RATIOS OF OUTSTANDING DEBT BY TYPE
SUBURBAN DIVISION - WASTEWATER SYSTEMS**

Common Rate Collector Systems: (1)

Year	Revenue Bonds	Notes	Total	Customers at Year-end	Total Debt per Customer	As a share of Personal Income (2)	Personal Income
2013	\$ 1,952,730	\$ -	\$ 1,952,730	1,574	\$ 1,240.62	2.83%	\$ 43,897
2014	1,868,705	-	1,868,705	1,585	1,178.99	2.61%	45,211
2015	1,782,769	421,852	2,204,621	1,605	1,373.60	2.89%	47,537
2016	1,696,821	778,492	2,475,313	1,608	1,539.37	3.15%	48,834
2017	1,630,058	740,918	2,370,976	1,689	1,403.78	2.74%	51,298
2018	1,560,901	703,913	2,264,814	1,718	1,318.29	2.46%	53,614
2019	1,481,997	666,533	2,148,530	1,784	1,204.33	2.21%	54,471
2020	1,367,092	628,778	1,995,870	1,825	1,093.63	1.87%	58,402
2021	1,252,497	592,007	1,844,504	1,901	970.28	1.55%	62,537
2022	1,133,791	555,084	1,688,875	1,988	849.53	1.29%	65,821

Western Lehigh Interceptor System:

Year	Revenue Bonds	Notes	Total	Customers at Year-end	Total Debt per Customer	As a share of Personal Income (2)	Personal Income
2013	\$ 499,198	\$ 4,651,717	\$ 5,150,915	19,380	\$ 265.79	0.61%	\$ 43,897
2014	315,745	4,406,406	4,722,151	19,595	240.99	0.53%	45,211
2015	128,167	4,157,973	4,286,140	19,774	216.76	0.46%	47,537
2016	-	3,927,001	3,927,001	19,801	198.32	0.41%	48,834
2017	-	3,692,167	3,692,167	20,245	182.37	0.36%	51,298
2018	-	3,451,275	3,451,275	20,504	168.32	0.31%	53,614
2019	-	3,204,180	3,204,180	20,711	154.71	0.28%	54,471
2020	-	2,950,716	2,950,716	21,031	140.30	0.24%	58,402
2021	-	2,690,721	2,690,721	21,163	127.14	0.20%	62,537
2022	-	2,424,026	2,424,026	21,436	113.08	0.17%	65,821

Arcadia Sewer System (3):

Year	Revenue Bonds	Notes	Total	Customers at Year-end	Total Debt per Customer	As a share of Personal Income (3)	Personal Income
2013	\$ -	\$ 738,818	\$ 738,818	10	\$ 73,881.80	N/A	N/A
2014	-	2,691,700	2,691,700	11	244,700.00	N/A	N/A
2015	-	2,703,890	2,703,890	15	180,259.33	N/A	N/A
2016	-	2,568,833	2,568,833	18	142,712.94	N/A	N/A
2017	-	2,432,419	2,432,419	19	128,022.05	N/A	N/A
2018	-	2,294,634	2,294,634	19	120,770.21	N/A	N/A
2019	-	2,158,904	2,158,904	19	113,626.53	N/A	N/A
2020	-	2,022,962	2,022,962	19	106,471.68	N/A	N/A
2021	-	1,884,953	1,884,953	20	94,247.65	N/A	N/A
2022	-	1,744,846	1,744,846	20	87,242.30	N/A	N/A

(1) Includes Common Rate Collector Systems: Upper Milford, Heidelberg Heights, Wynnwood Terrace, Sand Spring and Weisenberg Township - Pointe West.

(2) Although Lehigh County Authority's service area is in the more affluent areas of Western and Northern Lehigh County, the Personal Income level for the whole County was used to determine the share of personal income attributable to the debt load. Specific municipal income levels for years other than a census year were not available.

(3) An upgrade to the wastewater treatment facility was necessary in order to maintain compliance with its NPDES permit. The eighteen customers are commercial and governmental entities.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
RATIOS OF OUTSTANDING DEBT BY TYPE
CITY DIVISION**

Year	Net Revenue Bonds				Net Total O/S Debt	Customers at Year-end	Total Debt per Customer	As a share of	
	Tax Exempt	Taxable	Capital Appreciation	Personal Income (1)				Personal Income	
2013	\$ 234,666,542	\$ 18,735,000	\$ 44,343,347	\$ 297,744,889	46,648	\$ 6,382.80	14.54%	\$ 43,897	
2014	235,141,475	18,735,000	46,898,566	300,775,041	46,781	6,429.43	14.22%	45,211	
2015	235,458,097	18,735,000	49,602,860	303,795,957	46,748	6,498.59	13.67%	47,537	
2016	235,774,717	18,735,000	52,465,010	306,974,727	46,762	6,564.62	13.44%	48,834	
2017	236,091,337	18,735,000	55,494,318	310,320,655	46,770	6,635.04	12.93%	51,298	
2018	236,407,957	18,735,000	58,700,641	313,843,598	46,337	6,773.07	12.63%	53,614	
2019	236,724,577	17,940,000	61,643,216	316,307,793	46,523	6,798.96	12.48%	54,471	
2020	281,208,420	-	64,303,120	345,511,540	46,921	7,363.69	12.61%	58,402	
2021	280,199,361	-	66,656,927	346,856,288	47,182	7,351.45	11.76%	62,537	
2022	279,155,302	-	68,671,563	347,826,865	47,712	7,290.13	Not Available	65,821	

(1) The Personal Income level for the whole County was used to determine the share of personal income attributable to the debt load.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
SUMMARY OF DEBT SERVICE**

Year	Suburban Division						City Division Fund						Total Funds		Total	
	Water Fund			Wastewater Fund			Principal			Interest			Principal	Interest	Debt Service	
	Principal	Interest		Principal	Interest		Principal	Interest		Principal	Interest					
2023	\$ 2,010,541	\$ 1,133,055	\$	695,090	\$ 153,143	\$	3,441,583	\$		11,585,111	\$		6,147,214	\$	12,871,309	\$
2024	2,081,689	1,058,006		590,252	136,418		4,054,856			11,714,189			6,726,797		12,908,613	
2025	2,167,856	973,040		604,907	119,220		4,320,505			11,897,192			7,093,268		12,989,452	
2026	1,969,038	884,456		619,957	101,536		4,422,378			12,363,733			7,011,373		13,349,725	
2027	2,280,241	803,655		635,412	83,350		4,735,688			12,638,923			7,651,341		13,525,928	
2028-2032	10,586,757	2,629,201		2,342,798	154,544		27,449,138			69,032,668			40,378,693		71,816,413	
2033-2037	2,710,000	1,438,492		369,331	6,717		28,473,823			88,122,733			31,553,154		89,567,942	
2038-2042	3,185,000	965,924					53,293,592			61,784,964			56,478,592		62,750,888	
2043-2047	3,770,000	390,149					60,735,000			37,207,056			64,505,000		37,597,205	
2048-2052							59,235,000			24,329,231			59,235,000		24,329,231	
2053-2057							70,115,000			13,446,290			70,115,000		13,446,290	
2058-2059							31,685,000			1,736,459			31,685,000		1,736,459	
	\$ 30,761,122	\$ 10,275,978	\$	5,857,747	\$ 754,928	\$	351,961,563	\$	355,858,549	\$	388,580,432	\$	366,889,455	\$	755,469,887	

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
DEBT SERVICE COVERAGE - SUBURBAN - WATER SYSTEM
(IN THOUSAND DOLLARS)**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
REVENUES:										
Operating Revenues:										
Customer Charges	\$ 7,517	\$ 8,066	\$ 8,481	\$ 8,677	\$ 8,864	\$ 9,210	\$ 9,780	\$ 10,834	\$ 12,399	\$ 15,643
Other Income (1)	21	42	51	41	99	41	25	33	59	675
Transfer from other Funds (2)	81	110	112	97	91	98	125	-	-	-
Non-Operating Revenues	784	717	680	947	959	832	1,180	1,051	1,725	891
Total Revenues	8,403	8,935	9,324	9,762	10,013	10,181	11,110	11,918	14,183	17,209
EXPENSES:										
Operating Expenses (3)	3,866	3,843	4,060	4,813	5,414	5,729	5,911	7,221	7,561	8,581
Non-Operating Expenses (4)	106	108	68	157	428	82	98	58	255	230
Total Expenses	3,972	3,951	4,128	4,970	5,842	5,811	6,009	7,279	7,816	8,811
Total Net Revenues	4,431	4,984	5,196	4,792	4,171	4,370	5,101	4,639	6,367	8,398
Debt Service:										
2001 Note	-	-	-	-	-	-	-	-	-	-
2007 Pennworks Note	204	204	204	204	204	204	204	204	102	-
2001 Bonds	-	-	-	-	-	-	-	-	-	-
2003 Bonds	-	-	-	-	-	-	-	-	-	-
2008 Bond	618	614	517	-	-	-	-	-	-	-
2010 A Bonds	649	649	649	649	649	649	649	649	431	-
2010 AA Bonds	1,102	1,105	461	-	-	-	-	-	-	-
2011 Pennvest Note	80	90	84	84	85	87	87	87	87	87
2011 Bond	129	129	129	129	129	129	129	129	129	65
2015 Bond	-	-	436	1,109	1,105	1,107	1,103	1,107	1,110	-
2015A Bond	-	-	-	400	513	508	513	513	123	-
2017 Bond	-	-	-	-	185	509	509	829	829	829
2021 Bond	-	-	-	-	-	-	-	-	534	2,143
2022 Bond	-	-	-	-	-	-	-	-	-	-
Total Debt Service	2,782	2,791	2,480	2,575	2,870	3,193	3,194	3,518	3,345	3,124
Annual Debt Service Coverage (5)	1.59	1.79	2.10	1.86	1.45	1.37	1.60	1.32	1.90	2.69

(1) Includes interest income, miscellaneous income, and federal subsidy on Build America bonds

(2) Represents share of operating and debt service cost of the Office/Operations Center.

(3) Excludes depreciation and amortization.

(4) Includes trustee, remarketing and liquidity fees.

(5) Net revenues divided by debt service.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
WATER AND WASTEWATER SERVICE AREAS
SCHEDULE OF OVERLAPPING DEBT**

Entity	Gross Outstanding Debt 12/31/22	2022 Assessment Valuation of Taxable Property (7)	Ratio of Debt to Assessed Taxable Property
Lehigh County	\$ 116,924,690	\$ 31,206,269,200	0.0037
Borough of Alburtis	-	153,240,100	-
Borough of Emmaus	n/a	837,590,000	-
Borough of Macungie	2,252,768	233,780,500	0.0096
Heidelberg Township	n/a	276,281,400	-
Lowhill Township	n/a	265,287,200	-
Lower Macungie Township	10,950,000	3,707,064,300	0.0030
Lynn Township	n/a	366,026,900	-
North Whitehall Township	-	1,595,411,100	-
Salisbury Township	n/a	1,317,867,700	-
South Whitehall Township	10,985,000	2,458,418,800	0.0045
Upper Macungie Township	-	4,492,538,900	-
Upper Milford Township	-	816,423,500	-
Washington Township	-	486,820,500	-
Weisenberg Township	n/a	763,822,000	-
East Penn School District (1)	16,497,000	5,748,098,400	0.0029
Parkland School District (2)	-	8,824,960,200	-
Northern Lehigh School District (3)	22,905,000	661,682,900	0.0346
Northwestern Lehigh School District (4)	40,681,000	1,671,417,500	0.0243
Salisbury School District (5)	-	1,318,625,200	-
Northampton School District (6)	125,745,000	1,251,659,500	0.1005

(1) East Penn School District includes Boroughs of Alburtis, Emmaus, Macungie, Lower Macungie and Upper Milford Townships.

(2) Parkland School District includes Upper Macungie, South Whitehall and North Whitehall Townships, and portions of the City of Allentown, which are not served by LCA.

(3) Northern Lehigh School District includes Washington Township as a portion of area served.

(4) Northwestern Lehigh School District includes Heidelberg, Lowhill, Weisenberg and Lynn Townships.

(5) Salisbury School District includes Salisbury Township.

(6) Northampton School District includes Clearview Farm Estates.

(7) Lehigh County reassessed all properties in 2012. Valuation changed from 50% to 100%.

Source: Lehigh County Assessment Office

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DEMOGRAPHIC AND ECONOMIC

This section provides trend information on population, major employees, income levels, housing starts, commercial and industrial facilities and unemployment rates, which can indicate the level of economic activity.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
MAJOR EMPLOYERS
CURRENT YEAR AND TEN YEARS AGO**

Employer	Type of Business	2022			2013		
		Employees	% to Total (A)	Rank	Employees	% to Total (A)	Rank
Lehigh Valley Hospital & Health Network	Health Services	16,582	4.8%	1	12,077	3.5%	1
St. Luke's Hospital & Health Network	Health Services	10,982	3.2%	2	9,500	2.8%	2
Amazon.com	E-commerce Warehouse	2,756	0.8%	3	1,937	0.6%	10
Giant Food Stores	Grocery Store	2,508	0.7%	4	2,449	0.7%	4
Allentown School District	Education	2,429	0.7%	5	2,072	0.6%	8
Air Products & Chemicals	Industrial Gases	2,082	0.6%	6	3,500	1.0%	3
County of Lehigh	Government	1,906	0.6%	7	2,057	0.6%	9
Mack Trucks	Vehicle Manufacturer	1,975	0.6%	8	1,650	0.5%	12
Wegmans Food Markets	Grocery Store	1,870	0.5%	9	1,803	0.5%	11
Sodexo / Wood Company	Food Service	1,852	0.5%	10	2,170	0.6%	7
Weis Markets	Grocery Store	1,606	0.5%	11	1,400	0.4%	14
Guardian Life	Insurance Services	1,426	0.4%	12	1,574	0.5%	13
HCR Manorcare	Health Services	1,196	0.3%	13	1,298	0.4%	16
Walmart	Department Store	1,177	0.3%	14	1,000	0.3%	24
Lutron Electronics Company	Electronic Manufacturer	1,067	0.3%	15	1,100	0.3%	21
Kidspace	Mental Health	1,025	0.3%	16	1,187	0.3%	20
PPL	Electricity	992	0.3%	17	2,413	0.7%	5
City of Allentown	Local Government	912	0.3%	18			
Lehigh Carbon Community College	Higher Education	887	0.3%	19	961	0.3%	25

**(A) Represents the percentage of employees to total employment in Lehigh and Northampton Counties.
Note: Number of employees are for all locations in Lehigh and Northampton Counties. The listed employers have at least one location in Lehigh County Authority's service area.**

Source: greaterlehighvalleyrealtors.com

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
ECONOMIC AND SOCIAL INDICATORS**

Entity	Population		Income \$			Poverty %			Education %		
	2022 Persons	Density (Sq. Mile)	Household (Median)	Family (Median)	Per Capita Income	Persons Below	Families Below	High School Graduate	College Graduate		
Pennsylvania	12,972,008	284	\$ 67,587	\$ 87,262	\$ 37,725	12.1	8.3	91.4	33.1		
Lehigh County	379,968	1,101	70,857	104,046	40,117	11.1	7.7	89.7	31.5		
Northampton County	318,526	805	77,103	94,697	39,789	9.7	9.1	91.6	32.8		
Alburtis Borough	2,567	3,631	91,591	106,828	40,118	4.6	5.2	92.7	31.8		
Allentown City	127,738	7,273	48,694	68,040	25,008	25.6	22.1	79.1	16.8		
Emmaus Borough	11,590	4,003	77,864	96,486	42,450	8.5	3.5	94.5	32.5		
Heidelberg Township	3,334	52	89,702	88,261	40,770	2.7	14.0	91.9	26.9		
Lower Macungie Township	32,543	1,465	106,288	118,486	51,328	3.6	3.7	96.4	49.8		
Lower Milford Township	3,843	195	108,060	125,094	57,263	1.4	1.3	97.1	35.9		
Lowhill Township	2,276	162	115,938	128,432	61,450	2.2	1.7	93.2	17.3		
Lynn Township	4,240	103	78,839	111,750	37,184	7.0	4.0	90.8	30.7		
Macungie Borough	3,298	3,334	63,852	94,258	42,670	4.6	5.1	94.2	34.2		
Moore Township	9,333	248	92,939	95,802	37,646	2.3	2.7	95.2	25.0		
North Whitehall Township	15,749	584	92,312	113,360	48,430	3.1	3.0	95.2	35.6		
Salisbury Township	13,585	283	84,937	103,114	42,527	9.9	7.2	93.1	33.1		
South Whitehall Township	21,283	1,189	86,158	109,995	41,383	5.4	3.1	93.8	41.9		
Upper Macungie Township	27,875	978	104,631	125,864	49,568	2.8	1.8	95.8	55.5		
Upper Milford Township	8,019	427	98,588	114,959	46,129	2.2	3.3	97.8	91.4		
Washington Township	6,560	281	78,843	84,201	37,985	4.7	5.9	92.5	22.2		
Weisenberg Township	4,976	186	112,366	123,924	48,227	2.0	0.9	91.7	31.3		

Note: The above-listed Boroughs and Townships are within the Lehigh County Authority service area.

Source: US Census Bureau
quickfacts.census.gov
factfinder.census.gov
 PA Hometown Locator
censusreporter.org

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
MUNICIPAL POPULATION TRENDS**

Area	2010 Census	2020 Census	2022	Change	
				No.	%
Lehigh County	349,497	374,557	379,968	25,060	7.2%
Northampton County	297,735	312,951	318,526	15,216	5.1%
Allentown	118,032	125,845	127,738	7,813	6.6%
Borough of Alburtis	2,361	2,643	2,567	282	11.9%
Borough of Emmaus	11,211	11,652	11,590	441	3.9%
Heidelberg Township	3,416	4,313	3,334	897	26.3%
Lower Macungie Township	30,633	32,426	32,543	1,793	5.9%
Lower Milford Township	3,775	3,891	3,843	116	3.1%
Lowhill Township	2,173	2,276	2,276	103	4.7%
Lynn Township	4,229	4,368	4,240	139	3.3%
Borough of Macungie	3,074	3,148	3,298	74	2.4%
Moore Township	9,198	9,460	9,333	262	2.8%
North Whitehall Township	15,703	16,370	15,749	667	4.2%
Salisbury Township	13,505	11,828	13,585	(1,677)	-12.4%
South Whitehall Township	19,180	20,306	21,283	1,126	5.9%
Upper Macungie Township	20,063	26,377	27,875	6,314	31.5%
Upper Milford Township	7,292	7,675	8,019	383	5.3%
Washington Township	6,624	7,057	6,560	433	6.5%
Weisenberg Township	4,923	5,284	4,976	361	7.3%

Note: Lehigh County Authority provides water and wastewater service to portions of the listed areas.

Source: U.S. Census Quickfacts
data.census.gov(formally factfinder.census.gov)

PA HomeTown Locator
pennsylvania.hometownlocator.com

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
COMPARATIVE POPULATION STATISTICS 1950 - 2022**

Year	Lehigh County	Change (1)	(2) ABE - MSA	Change	Pennsylvania	Change (1)	United States	Change
1950	198,207		437,824		10,498,012		151,325,798	
1960	227,536	14.8%	492,168	12.4%	11,319,366	7.8%	179,323,000	18.5%
1970	255,702	12.4%	521,447	5.9%	11,811,561	4.3%	203,215,000	13.3%
1980	272,778	6.7%	551,800	5.8%	11,868,305	0.5%	226,502,000	11.5%
1990	291,946	7.0%	596,817	8.2%	11,903,299	0.3%	248,709,873	9.8%
2000	312,090	6.9%	638,867	7.0%	12,286,107	3.2%	273,643,273	10.0%
2010	349,497	12.0%	821,623	28.6%	12,702,379	3.4%	308,745,538	12.8%
2013	355,768	1.8%	829,300	0.9%	12,781,296	0.6%	316,128,839	2.4%
2014	357,823	0.6%	829,835	0.1%	12,787,209	0.0%	318,857,056	0.9%
2015	360,685	0.8%	832,327	0.3%	12,802,503	0.1%	321,418,820	0.8%
2016	356,756	-1.1%	835,652	0.4%	12,779,559	-0.2%	316,515,021	-1.5%
2017	366,494	2.7%	840,550	0.6%	12,805,537	0.2%	325,719,178	2.9%
2018	368,100	0.4%	842,913	0.3%	12,807,060	0.01%	327,167,434	0.4%
2019	369,318	0%	844,052	0.14%	12,801,989	-0.04%	328,239,523	0.33%
2020	374,557	1.4%	846,399	0%	13,002,700	1.6%	331,449,281	1.0%
2021	375,539	0%	865,310	2%	12,964,056	0%	331,893,745	0%
2022	379,968	1%	871,229	1%	12,972,008	0%	338,289,857	2%

(1) Change from prior decade.

(2) Allentown-Bethlehem-Easton Metropolitan Service Area

Source: U.S. Department of Commerce, Bureau of Economic Analysis
HUD PD&R Housing Market Profiles
City Population
American Fact Finder-data.census.gov

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
2022 New Industrial / Commercial / Institutional Customers - Suburban Division**

		(1)	
Name	Classification	Approximate Size in Sq. Ft.	Est. Water Usage in gallons per day
<u>Customer Additions in 2022:</u>			
7743 Hamilton McCalls Brewery	Brewery/Bar	1,440	171
8182 Century Blvd-Poolhouse/Clubhouse	Pool House/Clubhouse	15,660	411
Green Acres Outdoor Living	Commercial/Office Space	13,500	800
Lehigh Hills Apts	Apartments	2,229,117	2,941
Sheetz - Cetronia Road	Gas Station/Convenience Store	6,070	5,000
Shepherd's Corner	Bank / Retail Stores	16,460	525
Top Star Express	Gas Station/Convenience Store	24,960	128
<u>Plans Approved or under Review:</u>			
248 RT 100 Taco Bell	Restaurant	30,181	600
749 PA RT 100	Warehouse	160,000	1,200
861 N. Route 100	Financial Institution	1,975	N/A
1435 Nursery Street	Financial Institution	3,110	22
2766 Rt 100	Warehouse	187,000	1,200
3200 Orchard Road (7284 Alburtis Rd)	Warehouse/Logistics Facility	N/A	485
3262 Schoeneck Road	Warehouse	200,000	5,250
3369 Route 100	Hospital/Medical Offices	156,092	4,260
Air Products Cetronia Road	3 Warehouses	2,600,100	95,000
3500 Brookside Road Apts	Development	13,300	7,700
3952 Independence Drive	Warehouse	12,500	1,200
5329-5347-5357 Hamilton Blvd	Retail Stores/Fast Food	N/A	1,300
5420 Crackersport Road	Commercial/Office Space	21,100	2,156
6503 Lower Macungie Road	Funeral Processing Facility w/ Crematorium	10,309	465
6950 Ambassador Drive - Millipore Sigma	Warehouse	350,324	720
7312 Windsor Drive - Lot 61	Warehouse	90,664	1,610
7503 Kernsville Road	Warehouse	100,569	1,000
8323 & 8449 Congdon Hill Road	Warehouse	917,760	5,000
ABE Doors & Windows Redevelopment (6776 Hamilton Blvd)	Car Wash & Retail Stores/Restaurant	15,252	10,107
Advanced Health Care of Allentown	Transitional Care Facility	33,349	5,778
ATAS International	Industrial - Manufacturing	474,800	1,980
Bandit Truck Stop	Sewer ext and gas staion	8,500	1,850
Beit Simcha	Messianic Fellowship	14,200	N/A
Betz Court	Warehouse	299,880	3,000
Chestnut Street Water extension	Commercial	52,642	300
Green Hill Commerce Center III	Office Buildings	11,200	1,000
Guardian Storage	Self-Storage Facility	1,200	30
Lehigh Valley South, Lots 1 & 2	Office Buildings	131,060	7,000
Lehigh Valley West IP, Lots 5-11	Warehouse	384,500	4,540
Macungie Crossings (Hamilton & Grange Road)	Retail Stores	146,470	15,000
Penns View Madison Village	Development With Master Meter	705,672	9,900
Posh Properties	Day Care / Self Storage Facility	121,388	1,115
Raising Cains	Restaurant	3,600	605
Shoppes at Trexler Plaza	Gas Station/Car Wash/Retail	2,311	3,268
Towneplace Suites by Marriott	Hotel	64,000	8,190
Trexler Senior Living Center	Senior Living Center / Retail Stores	132,000	2,665
Spring Creek Properties - Lot 12	Warehouse	337,000	15,500
U-Haul of Lower Macungie	Rental	87,044	111
West Hills Business Center - Lot H	Warehouse	105,000	40,000
Woodmont Valley 2	Apartments Mixed use Master Meter	13,000	28,090
Yourway Facility Expansion	Pharmaceutial Warehouse/Testing Facility	90,805	4,125

N/A = Not Available

(1) Water Usage can be based on a developer estimate, LCA estimate based on submitted plans, township information, application for water service, wastewater allocation purchase, or Department of Environmental Protection sewage planning modules.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
2022 New Industrial / Commercial / Institutional Customers - City Division**

			(1)
Name	Classification	Approximate Size in Sq. Ft.	Est. Water Usage in gallons per day
<u>Customer Additions in 2022:</u>			
107 N 7th St - Linden St Commons	Apartment Building/Retail	76,570	33,320
301 Cooper St	Restaurant	930	1,000
920 Maple St	Garage	357,700	50
957 Kurtz	Commercial Disposal	20,430	160
1134 N Quebec St- Allentown Terminals	Warehouse	5,000	1,000
1935 S 4th St	Restaurant	2,145	1,500
Lehigh Parkway Apts - 1625 Lehigh Parkway E	Apartment Building	192,400	10,200
Lehigh Parkway Apts - 1607 Lehigh Parkway E	Apartment Building	192,400	10,200
<u>Plans Approved or under Review:</u>			
18 N 8th St - Davinci Center	Learning Center	80,000	9,000
101 N 6th St	Apartments	248,000	24,770
120 Union St	Industrial	16,000	2,050
123 N Lumber St	Apartment Building	20,000	2,500
128 E Walnut St	Manufacturing	200,000	90,000
301 Union Blvd	Hotel	9,285	3,510
349 Hanover	Apartment Building	4,000	500
401 Auburn Ct - North Building	Apartment Building	8,000	1,020
401 Auburn Ct - South Building	Apartment Building	8,000	1,020
401 N Front St	BrewPub/Office Building	100,000	2,760
402 Basin St	Warehouse	130,000	5,250
414 S Carlise St	Apartment Building	N/A	1,020
440 S 15th St	Dialysis Center	1,900	5,800
450 Lloyd St	Idustrial Warehouse	326,000	2,810
502 E Walnut St	School	N/A	N/A
526 S Aubrey St	Daycare	5,000	2,115
560 Waterfront Dr	Office/Retail/Restaurant	175,000	N/A
606 S 10th St	Industrial Manufacturing	51,000	2,400
615 Waterfront Dr	Office/Retail/Restaurant	159,000	N/A
630 Waterfront Dr	Office/Retail/Restaurant	150,000	N/A
645 Waterfront Dr	Office/Retail/Restaurant	133,000	N/A
826 W Turner St	Apartment Building	N/A	16,200
836 Constitution Dr	Apartment Building	63,390	23,450
864 Dauphin St	Mixed Use	N/A	N/A
909 Walnut St - Walnut View Apartments	Apartment Building	50,000	7,300
926 W Hamilton St	Apartments/Retail	62,350	10,800
932 Hamilton St	Apartment/Retail/Restaurant	130,000	23,915
1010 Hamilton St	Apartment Building	100,000	23,800
1014 Sumner Ave	Warehouse	23,525	750
1024 N Bradford St	Warehouse	146,000	160
1035 Ridge Ave	Apartment Building	16,000	510
1051 American Parkway	Warehouse	100,000	1,994
1115 American Parkway	Warehouse	205,475	3,990
1129 Union Blvd	Daycare	2,000	80
1358 S 5th St	Storage	87,500	240
1384 S 5th St	Storage	50,000	180
1414 E Cedar St	School	24,000	3,190
1501 S 12th St	LANTA Bus	60,000	2,050
1528 Hamilton St	Apartment Building	63,305	7,050
1736 Hamilton	St Lukes Mother Baby	8,860	6,880
1811 Glenwood	Industrial	148,100	4,725
1901 S 12th St	Warehouse	133,000	4,200
2039 Vultee St	Warehouse	88,500	320
2401 W Emaus Ave	Warehouse	224,000	8,330
2443 Lehigh St - Haldeman	Auto Sales	6,700	215
2939 Lehigh St - Sheetz	Gas Station	6,070	2,500
Cumberland Apt Complex	Apartments	250,000	67,210
Maple Street Garage	Parking Garage	82,000	N/A
Royal Farms - 3015 Lehigh St	Gas Station	6,500	1,700
Valania Park	City Swimming Pool	N/A	1595

N/A = Not Available

(1) Water Usage can be based on a developer estimate, LCA estimate based on submitted plans, township information, application for water service, wastewater allocation purchase, or Department of Environmental Protection sewage planning modules.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
2022 MAJOR INDUSTRIAL AND COMMERCIAL COMPLEXES
WITHIN THE LCA SUBURBAN AND CITY SERVICE AREAS**

Name	Total Acreage	Status
Air Products & Chemicals	52	Infrastructure Complete
Alburtis Crossing	89	Infrastructure Complete
Arcadia West Industrial Park	210	Infrastructure Complete
Boulder Business Center	256	Infrastructure Complete
Diocesan Pastoral Center	62	Design/Review
Grandview Crossings	53	Infrastructure Complete
Greentree Industrial Park	80	Infrastructure Complete
Hamilton Crossings	55	Infrastructure Complete
Indian Creek Industrial Park	26	Design/Review
Iron Run Industrial Park	533	Infrastructure Complete
JDN Retail Development	39	Infrastructure Complete
Lehigh 100 Corporate Center	87	Infrastructure Complete
Lehigh Valley South Industrial Park	116	Infrastructure Complete
Lehigh Valley West	337	Infrastructure Complete
Lehigh Valley West II	517	Infrastructure Complete
Liberty at Mill Creek	289	Infrastructure Complete
Macungie Crossing	27	Infrastructure Complete
Meadows Business Center	59	Infrastructure Complete
Mill Run Corporate Center	157	Infrastructure Complete
North Whitehall Commercial Center	41	Design/Review
North Whitehall Industrial Park	77	Infrastructure Complete
Spring Creek Properties Settlement Subd	620	Infrastructure Complete
Springside Industrial Acres	28	Infrastructure Complete
Tek Park	137	Infrastructure Complete
The Crossings	201	Infrastructure Complete
The Waterfront, Phase 1	26	Infrastructure Complete
The Waterfront, Phase 2	26	Design/Review
Trexler Business Center	17	Infrastructure Complete
West Hills Business Center, Lots A-F	313	Infrastructure Complete
West Park Business Center	35	Infrastructure Complete
West Park II	92	Infrastructure Complete
Western Lehigh Valley Corp.	18	Infrastructure Complete
William Penn Business Center	135	Infrastructure Complete

Source: Plans submitted to Lehigh County Authority.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
WATER & WASTEWATER SERVICE AREAS
HOUSING GROWTH TRENDS**

Single Family												Mobile Homes											
Municipality	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
Alburtis	27	37	20	23	1	1	1	1	0	0		-	-	-	-	-	-	-	-	-	-		
Allentown City	1	8	2	12	12	12	18	14	32	14		-	-	-	-	-	-	-	-	-	-		
Emmaus	-	2	3	3	5	2	13	1	10	51		-	1	-	-	-	-	-	-	-	-		
Heidelberg	3	1	5	2	4	8	11	5	2	7		-	1	-	-	2	1	-	1	-	-		
Lower Macungie	-	31	17	9	26	22	19	20	67	48		-	6	5	2	2	8	3	3	4	2		
Lowhill	3	8	4	4	15	9	4		3	5		-	-	-	-	-	-	-	-	-	-		
Lynn	4	13	6	6	9	6	12	4	5	9		-	1	-	-	-	1	-	2	2	-		
Macungie	-	4	2	5	3	2	1		5	17		-	-	-	-	-	-	-	-	-	-		
North Whitehall	1	13	27	29	11	13	3	24	37	25		-	2	1	4	9	-	-	16	17	22		
Salisbury	-	5	3	10	2	6	4	5	3	6		-	-	-	-	-	-	-	-	-	-		
South Whitehall	2	17	20	10	23	48	93	32	82	74		-	-	6	-	-	-	-	-	-	-		
Upper Macungie	-	160	123	149	163	132	108	56	109	171		-	4	-	6	7	6	5	24	22	16		
Upper Milford	-	14	7	11	73	45	73	7	76	88		-	-	1	-	-	-	-	-	-	-		
Washington	-	2	3	4	2	7	8	9	10	4		-	3	-	2	-	-	4	5	3	2		
Weisenberg	7	11	13	9	17	11	4	3	10	10		-	2	-	-	1	-	-	-	-	-		
Total	48	326	255	286	366	324	372	181	451	529		-	20	13	14	21	16	12	48	49	44		
Total																							
Municipality	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
Alburtis	56	-	-	-	-	-	-	-	-	-		37	37	20	23	1	1	1	1	0	0		
Allentown City	-	20	170	-	128	-	-	169	68	160		28	28	172	12	140	12	18	82	100	174		
Emmaus	-	-	-	-	-	-	-	-	-	-		-	3	3	3	5	2	13	1	10	51		
Heidelberg	-	-	-	-	-	-	-	-	-	-		3	2	5	2	6	9	11	5	3	7		
Lower Macungie	-	-	-	-	110	138	-	-	-	-		-	37	22	11	138	168	22	23	71	50		
Lowhill	-	-	-	-	-	-	-	-	-	-		3	8	4	4	15	9	4	0	3	5		
Lynn	-	-	-	-	-	-	-	-	-	-		4	14	6	6	9	7	12	4	7	11		
Macungie	-	-	-	-	-	-	-	-	-	-		-	4	2	5	3	2	1	0	5	17		
North Whitehall	-	-	-	-	-	-	-	-	-	-		1	15	28	33	20	13	3	40	54	47		
Salisbury	-	-	40	-	-	-	-	-	-	-		-	5	43	10	2	6	4	5	3	6		
South Whitehall	14	-	5	-	-	450	1350	72	-	-		16	17	31	10	23	498	1443	32	82	74		
Upper Macungie	-	-	3	240	168	-	-	44	-	-		-	164	126	395	338	138	113	80	131	187		
Upper Milford	-	-	-	-	-	-	-	-	-	-		-	14	8	11	73	45	73	7	76	88		
Washington	-	-	-	-	-	-	-	-	-	-		-	5	3	6	2	7	12	14	13	6		
Weisenberg	-	-	-	-	-	-	-	-	-	-		7	13	13	9	18	11	4	3	10	10		
Total	70	20	218	240	406	588	1,350	285	68	160		99	366	486	540	793	928	1,734	297	558	733		

(1) Includes Condominiums and Apartments.
Note: The schedule represents approved lots.
Source: Lehigh County Assessment Office

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
AVERAGE ANNUAL UNEMPLOYMENT RATES**

<u>Year</u>	<u>Lehigh County</u>	<u>Pennsylvania</u>	<u>United States</u>
2013	6.5%	6.0%	6.7%
2014	6.9%	5.8%	6.2%
2015	5.0%	5.1%	5.0%
2016	4.7%	4.8%	4.7%
2017	4.4%	4.9%	4.4%
2018	4.0%	4.2%	3.9%
2019	4.5%	4.6%	3.7%
2020	7.0%	7.1%	6.7%
2021	4.5%	5.5%	3.9%
2022	3.8%	4.3%	3.5%

Source: US Bureau of Labor Statistics
FRED - fred.stlouisfed.org

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
PERSONAL INCOME**

	2013	2014	2015	2016	2017
Lehigh County					
Total Personal Income (\$000)	\$ 15,587,384	\$ 16,177,642	\$ 17,145,783	\$ 17,734,075	\$ 18,800,570
Population (000)	355	358	360	366	368
Per Capita Personal Income	\$ 43,897	\$ 45,211	\$ 47,537	\$ 48,834	\$ 51,298
Pennsylvania					
Total Personal Income (\$000)	\$ 594,915,004	\$ 618,858,628	\$ 649,909,812	\$ 676,880,269	\$ 682,533,744
Population (000)	12,781	12,792	12,802	12,805	12,807
Per Capita Personal Income	\$ 46,202	\$ 48,378	\$ 49,786	\$ 52,096	\$ 53,300
United States					
Total Personal Income (\$000)	\$ 14,166,900,000	\$ 14,955,700,000	\$ 15,737,700,000	\$ 15,928,700,000	\$ 17,164,600,000
Population (000)	316,497	320,222	325,200	325,719	327,164
Per Capita Personal Income	\$ 44,543	\$ 40,962	\$ 48,112	\$ 50,398	\$ 53,712
	2018	2019	2020	2021	2022
Lehigh County					
Total Personal Income (\$000)	\$ 19,735,321	\$ 20,116,946	\$ 21,655,640	\$ 23,484,928	\$ 24,987,016
Population (000)	363	369	376	373	375
Per Capita Personal Income	\$ 53,614	\$ 54,471	\$ 58,402	\$ 62,537	\$ 65,821
Pennsylvania					
Total Personal Income (\$000)	\$ 720,073,441	\$ 749,808,500	\$ 776,466,700	\$ 750,118,900	\$ 855,739,000
Population (000)	12,791	12,802	12,964	13,001	12,970
Per Capita Personal Income	\$ 56,225	\$ 58,046	\$ 60,720	\$ 64,042	\$ 65,167
United States					
Total Personal Income (\$000)	\$ 18,205,500,000	\$ 18,675,100,000	\$ 19,607,450	\$ 21,294,800	\$ 21,277,200
Population (000)	328,240	331,163	331,449	332,032	333,288
Per Capita Personal Income	\$ 54,501	\$ 56,650	\$ 58,865	\$ 63,591	\$ 66,534

Source: U.S. Department of Commerce, Economics and Statistical Administration, Bureau of Economic Analysis.
Office of Financial Management
FRED - Federal Reserve Economic Data
The Statistical Portal
PA WorkStats-PA.gov

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
CIVILIAN LABOR FORCE 2001 - 2040**

	Age Group	2001	2010	2020	Estimate	
					2030	2040
Lehigh Valley	16 - 19	17,626	15,006	5,720	14,199	16,476
	20 - 24	27,409	34,858	14,487	34,313	40,776
	25 - 34	60,332	63,229	36,507	84,598	92,329
	35 - 44	81,995	71,451	33,984	94,126	92,172
	45-54	73,679	83,551	32,140	74,911	99,258
	55-64	34,398	52,236	27,293	60,838	62,106
	65+	11,172	15,280	10,613	33,884	33,775
	Total	306,611	335,611	160,744	396,869	436,892
Pennsylvania		9,363,040	7,137,155	6,396,000	6,467,625	NA
United States		212,577,000	233,658,000	160,671,000	165,400,000	NA

Note: NA means not available.

Source: FRED - fred.stlouisfed.org
Bureau of Labor and Statistics - www.bls.gov

****Some estimate figures not yet available****

OPERATING INFORMATION

This section provides trends of sales, customer growth, systems capacity, number of employees and other significant operating and capital indicators.

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**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
WATER SALES AND CUSTOMER GROWTH**

Customer Class	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
SUBURBAN DIVISION										
Western Lehigh Service Area (1) :										
Sales:										
Large Industrial	575,145	699,377	726,196	732,464	647,574	622,634	665,161	663,152	745,311	722,607
Other Industrial	920,043	1,067,360	1,181,947	1,158,204	1,127,906	1,121,571	1,086,340	1,108,619	1,271,081	1,349,293
Commercial/Sm. Industrial/Institutional/Other	336,593	350,800	383,238	452,939	442,098	466,086	473,801	528,193	516,334	596,583
Residential	940,112	945,500	954,476	1,072,729	960,682	1,041,458	1,060,341	1,176,376	1,162,801	1,154,805
Total Sales	2,771,893	3,063,037	3,245,857	3,416,336	3,178,240	3,251,749	3,285,643	3,476,340	3,695,527	3,823,288
Customers:										
Large Industrial	1	1	1	1	1	1	1	1	1	1
Other Industrial	8	8	8	8	8	8	8	9	9	9
Commercial/Sm. Industrial/Institutional	571	575	591	622	642	655	662	674	682	691
Residential	17,977	18,160	18,338	18,828	19,143	20,042	20,232	20,544	20,791	21,376
Total Customers	18,557	18,744	18,938	19,459	19,794	20,706	20,903	21,228	21,483	22,077
Northern Lehigh Service Area (2):										
Sales:										
Commercial/Sm. Industrial/Institutional	15,597	13,295	12,119	13,021	12,009	12,961	15,056	13,330	18,345	20,518
Residential	87,898	86,939	86,239	88,078	83,774	84,353	82,771	90,181	90,221	90,551
Total Sales	103,495	100,234	98,358	101,099	95,783	97,314	97,827	103,511	108,566	111,069
Customers:										
Commercial/Sm. Industrial/Institutional	69	69	69	69	70	70	71	72	80	81
Residential	1,873	1,878	1,886	1,893	1,894	1,894	1,901	1,911	1,935	1,942
Total Customers	1,942	1,947	1,955	1,962	1,964	1,964	1,972	1,983	2,015	2,023
Northampton County Service Area (3):										
Sales:										
Residential	3,352	3,438	3,286	3,627	3,459	3,498	3,383	3,537	3,540	3,970
Customers:										
Residential	67	67	67	67	67	67	67	67	67	67
CITY DIVISION (4)										
Sales:										
Other Industrial	46,193	106,851	113,671	113,470	107,331	126,736	128,113	116,293	136,202	133,842
Commercial/Sm. Industrial/Institutional/Other	326,015	769,692	816,700	785,917	769,492	784,930	789,274	678,080	710,283	731,297
Residential	1,026,687	2,121,604	2,147,484	2,160,603	2,158,560	2,152,837	2,137,892	2,269,456	2,188,391	2,166,195
Total Sales	1,398,895	2,998,147	3,077,855	3,059,990	3,035,383	3,064,503	3,055,279	3,063,829	3,034,876	3,031,334
Customers:										
Other Industrial	547	419	417	419	419	419	419	422	423	467
Commercial/Sm. Industrial/Institutional	4,637	4,747	4,743	4,728	4,731	4,720	4,724	4,757	4,761	4,995
Residential	41,464	41,615	41,588	41,615	41,620	41,198	41,274	41,742	41,998	42,250
Total Customers	46,648	46,781	46,748	46,762	46,770	46,337	46,417	46,921	47,182	47,712
ALL SERVICE AREAS:										
Sales:										
Large Industrial	575,145	699,377	726,196	732,464	647,574	622,634	665,161	663,152	745,311	722,607
Other Industrial	966,236	1,174,211	1,285,618	1,271,674	1,235,237	1,248,307	1,214,453	1,224,912	1,407,283	1,483,135
Commercial/Sm. Industrial/Institutional	678,205	1,133,787	1,212,057	1,251,877	1,223,599	1,263,977	1,278,131	1,219,603	1,244,962	1,348,398
Residential	2,058,049	3,157,481	3,191,485	3,325,037	3,206,455	3,282,146	3,284,387	3,539,550	3,444,953	3,415,521
Total Sales	4,277,635	6,164,856	6,425,356	6,581,062	6,312,865	6,417,064	6,442,132	6,647,217	6,842,509	6,969,661
Customers:										
Large Industrial	1	1	1	1	1	1	1	1	1	1
Other Industrial	555	427	425	427	427	427	427	431	432	476
Commercial/Sm. Industrial/Institutional	5,277	5,391	5,403	5,419	5,443	5,445	5,457	5,503	5,523	5,767
Residential	61,381	61,720	61,879	62,403	62,724	63,201	63,474	64,264	64,791	65,635
Total Customers	67,214	67,539	67,708	68,250	68,595	69,074	69,359	70,199	70,747	71,879

(1) Includes the Central Lehigh, Upper Milford, Arcadia West, Beverly Hills and Emmaus Consecutive divisions. Includes sales to Municipalities within Commercial/Sm Industrial/Institutional/Other.

(2) Includes the North Whitehall, Washington Township, Mill Creek, Heidelberg Heights and Pine Lakes of Lynn divisions.

(3) The Cleanview Farm Estates system was acquired in May 2006.

(4) The City Division was acquired through a Lease Concession agreement on 8/8/13.

Note: Total Sales is shown in thousands of gallons. Total Customers represent units served at year-end, not customer connections.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
WATER SUPPLY SOURCES, DEMAND AND CAPACITY INFORMATION**

Customer Class	ACTUAL										PROJECTED	
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2025	2030
SUBURBAN DIVISION												
Central Lehigh Division:												
Average Daily Demand (Gallons)	8,000,000	8,760,000	9,085,000	9,329,000	9,284,500	9,557,914	9,736,210	10,328,712	11,062,251	11,513,533	11,650,000	12,100,000
Maximum Daily Demand (Gallons)	11,129,000	10,935,000	10,819,000	12,273,000	11,830,000	12,101,447	11,754,797	13,107,605	13,935,073	15,092,530	14,920,000	18,790,000
Estimated Safe Yield of Supplies (GPD)	15,760,000	15,760,000	15,760,000	15,760,000	15,760,000	15,760,000	15,760,000	15,760,000	15,760,000	15,760,000	23,260,000	(1)*
Surplus/(Deficit) (GPD)	4,631,000	4,825,000	4,941,000	3,487,000	3,930,000	3,658,553	4,005,203	2,652,395	1,824,927	667,470	8,340,000	4,470,000
(1) Includes WL-3 (-1.29 mgd) which is used intermittently												
* Includes 2010 Max day purchase from City of Allentown @ 3mgd and @ 10.5 mgd for 2020 and beyond												
Washington Township Division:												
Average Daily Demand (Gallons)	71,000	63,000	44,000	48,000	48,000	48,403	68,413	60,369	68,173	62,351	60,158	62,938
Maximum Daily Demand (Gallons)	98,000	89,000	92,000	89,000	64,000	74,400	85,000	103,429	83,714	113,000	88,737	94,407
Estimated Safe Yield of Supplies (GPD)	214,000 *	214,000 *	214,000 *	214,000 *	214,000 *	214,000 *	214,000 *	214,000	214,000	214,000	214,000 *	214,000 *
Surplus/(Deficit) (GPD)	116,000	125,000	122,000	125,000	150,000	139,600	129,000	110,571	130,286	101,000	125,263	119,593
* Maximum day purchase from Slatington (1,500,000 gal. over 7 days), by agreement												
North Whitehall Township Division:												
Average Daily Demand (Gallons)	253,000	259,000	346,000	469,000	356,000	406,121	461,086	500,771	603,234	471,501	500,000	505,000
Maximum Daily Demand (Gallons)	413,000	364,000	520,000	835,000	454,000	538,443	735,015	796,986	790,636	638,044	535,000	540,000
Estimated Safe Yield of Supplies (GPD)	703,000 *	703,000 *	703,000 *	703,000 *	703,000 *	703,000 *	703,000 *	703,000	703,000	703,000	703,000 *	703,000 *
Surplus/(Deficit) (GPD)	290,000	339,000	183,000	(132,000)	249,000	164,557	(32,015)	(93,986)	(87,636)	64,956	168,000	163,000
* Includes 390,000 gpd maximum purchase from NBMA over 30 days by agreement												
Mill Creek Estates Division:												
Average Daily Demand (Gallons)	5,000	6,000	5,000	5,200	5,200	5,191	4,916	5,208	4,925	5,435	9,000	10,000
Maximum Daily Demand (Gallons)	15,000	26,000	12,000	10,000	10,000	10,007	8,680	8,480	6,384	9,536	15,000	15,000
Estimated Safe Yield of Supplies (GPD)	51,800	51,800	51,800	51,800	51,800	51,800	51,800	51,800	51,800	51,800	51,800	51,800
Surplus/(Deficit) (GPD)	36,800	25,800	39,800	41,800	41,800	41,793	43,120	43,320	45,416	42,264	36,800	36,800
Heidelberg Heights Division:												
Average Daily Demand (Gallons)	25,000	35,000	42,000	33,000	29,800	31,862	31,332	32,362	27,575	30,514	37,000	37,000
Maximum Daily Demand (Gallons)	68,000	84,600	70,000	73,000	43,000	62,883	64,723	54,945	69,684	54,074	64,000	64,000
Estimated Safe Yield of Supplies (GPD)	129,000	129,000	129,000	129,000	129,000	129,000	129,000	129,000	129,000	129,000	129,000	129,000
Surplus/(Deficit) (GPD)	61,000	44,400	59,000	56,000	86,000	66,117	64,277	74,055	59,316	74,926	65,000	65,000
Pine Lakes of Lynn Division:												
Average Daily Demand (Gallons)	8,000	7,000	9,000	7,300	7,200	7,187	7,353	9,328	10,654	14,317	11,000	11,000
Maximum Daily Demand (Gallons)	24,000	11,000	15,000	12,000	13,000	14,583	11,121	29,370	25,230	29,360	19,000	19,000
Estimated Safe Yield of Supplies (GPD)	72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000
Surplus/(Deficit) (GPD)	48,000	61,000	57,000	60,000	59,000	57,417	60,879	42,630	46,770	42,640	53,000	53,000
Arcadia West Division:												
Average Daily Demand (Gallons)	17,000	18,000	22,000	22,000	23,000	27,374	25,705	23,030	29,289	28,561	48,500	48,500
Maximum Daily Demand (Gallons)	38,000	73,000	54,000	85,000	49,000	58,386	46,133	145,200	121,200	199,200	194,000	194,000
Estimated Safe Yield of Supplies (GPD)	264,000	264,000	264,000	264,000	264,000	264,000	264,000	264,000	264,000	264,000	264,000	264,000
Surplus/(Deficit) (GPD)	226,000	191,000	210,000	179,000	215,000	205,614	217,867	118,800	142,800	64,800	70,000	70,000
Beverly Hills Division:												
Average Daily Demand (Gallons)	8,000	6,000	6,000	6,800	6,000	6,089	8,919	6,270	7,000	8,452	12,000	12,000
Maximum Daily Demand (Gallons)	17,000	11,000	14,000	14,000	13,000	14,477	15,330	13,963	12,500	16,373	18,000	18,000
Estimated Safe Yield of Supplies (GPD)	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000
Surplus/(Deficit) (GPD)	16,000	22,000	19,000	19,000	20,000	18,523	17,670	19,007	20,500	16,627	15,000	15,000

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
WATER SUPPLY SOURCES, DEMAND AND CAPACITY INFORMATION (Continued)**

Customer Class	ACTUAL										PROJECTED	
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2025	2030
Clearview Farm Estates Division:												
Average Daily Demand (Gallons)	10,000	10,000	10,000	10,000	8,800	9,147	9,857	8,755	8,729	8,782	13,000	13,000
Maximum Daily Demand (Gallons)	20,000	11,000	19,000	29,000	15,000	17,400	21,550	16,470	21,800	19,680	25,000	25,000
Estimated Safe Yield of Supplies (GPD)	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Surplus/(Deficit) (GPD)	15,000	24,000	16,000	6,000	20,000	17,600	13,450	18,530	13,200	15,320	10,000	10,000
Emmaus Consecutive Division:												
Average Daily Demand (Gallons)	65,000	63,000	63,000	63,000	64,000	59,871	61,824	71,016	61,198	60,544	64,000	64,000
Maximum Daily Demand (Gallons)	72,000	67,000	67,000	71,000	68,000	64,541	67,785	80,030	69,419	74,496	67,000	67,000
Estimated Safe Yield of Supplies (GPD)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surplus/(Deficit) (GPD)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Buss Acres Division:												
Average Daily Demand (Gallons)	18,000	17,000	23,000	28,000	24,000	21,401	19,289	18,248	18,487	25,608	21,000	21,000
Maximum Daily Demand (Gallons)	31,000	27,000	53,000	51,000	16,000	35,525	32,900	33,167	37,100	51,500	30,000	30,000
Estimated Safe Yield of Supplies (GPD)	118,000	118,000	118,000	118,000	118,000	118,000	118,000	118,000	118,000	118,000	118,000	118,000
Surplus/(Deficit) (GPD)	87,000	91,000	65,000	67,000	102,000	82,475	85,100	84,833	80,900	86,500	88,000	88,000
Madison Park Division:												
Average Daily Demand (Gallons)	14,000	13,000	13,000	13,000	13,000	13,308	14,602	13,886	16,455	16,210	27,000	27,000
Maximum Daily Demand (Gallons)	24,000	25,000	30,000	24,000	24,000	18,300	20,533	27,001	52,836	35,174	41,000	41,000
Estimated Safe Yield of Supplies (GPD)	137,000	137,000	137,000	137,000	137,000	137,000	137,000	137,000	137,000	137,000	137,000	137,000
Surplus/(Deficit) (GPD)	113,000	112,000	107,000	113,000	113,000	118,700	116,467	109,999	84,164	101,826	96,000	96,000
CITY DIVISION												
Average Daily Demand (Gallons)	18,373,000	18,389,059	19,989,940	20,408,474	21,156,763	21,492,755	21,512,142	21,368,766	22,003,852	22,504,438	23,000,000	26,000,000
Maximum Daily Demand (Gallons)	29,457,000	25,288,600	26,120,900	25,296,100	27,135,900	29,756,200	29,504,800	28,256,200	29,196,300	30,870,900	30,000,000	33,000,000
Estimated Safe Yield of Supplies (GPD)	71,000,000	71,000,000	71,000,000	71,000,000	71,000,000	71,000,000	71,000,000	71,000,000	71,000,000	71,000,000	71,000,000	71,000,000
Surplus/(Deficit) (GPD)	41,543,000	45,711,400	44,879,100	45,703,900	43,864,100	41,243,800	41,495,200	42,744,000	41,803,700	40,129,100	41,000,000	38,000,000

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
WASTEWATER COLLECTOR SYSTEM GROWTH AND BILLABLE FLOW**

System	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Upper Milford:										
Residential Customers	762	773	781	790	819	849	916	956	1,031	1,117
Commercial/Industrial Customers	42	42	49	49	49	48	47	48	48	48
Total Customers	804	815	830	839	868	897	963	1,004	1,079	1,165
Billable Flow (1)	51,626	56,443	58,976	52,959	57,509	58,436	58,896	64,746	69,678	71,732
Weisenberg Township: (4)										
Residential Customers	146	146	149	149	149	149	149	149	149	149
Commercial/Industrial Customers	14	15	3	3	3	3	3	3	3	3
Total Customers	160	161	152	152	152	152	152	152	152	152
Billable Flow (1)	13,939	14,818	12,196	12,285	10,833	10,975	11,454	9,571	10,524	10,721
Heidelberg Heights: (2)										
Residential Customers	145	145	145	145	145	145	145	145	145	145
Billable Flow	7,663	6,872	6,112	6,752	6,544	6,638	6,613	6,721	6,396	6,494
Wynnewood Terrace: (2)										
Residential Customers	217	217	219	219	222	222	222	222	222	223
Commercial/Industrial Customers	2	2	2	2	2	2	2	2	2	2
Total Customers	219	219	221	221	224	224	224	224	224	225
Billable Flow (1)	13,854	13,211	13,249	13,386	13,087	12,785	12,960	12,442	12,673	12,105
Sand Spring: (3)										
Residential Customers	248	248	248	248	248	248	248	248	248	248
Commercial/Industrial Customers	9	9	9	9	9	9	9	9	10	10
Total Customers	257	257	257	257	257	257	257	257	258	258
Billable Flow (1)	8,277	8,019	8,080	8,143	8,954	8,196	8,201	8,501	11,971	15,304
Washington Township: (5)										
Residential Customers	599	601	601	602	602	602	602	602	603	603
Commercial/Industrial Customers	22	22	23	23	23	23	23	23	23	23
Total Customers	621	623	624	625	625	625	625	625	626	626
Billable Flow (1)	26,397	25,940	25,963	25,327	24,587	23,642	23,775	25,489	24,659	24,345
Lynn Township: (6)										
Residential Customers	403	406	406	410	411	411	411	411	411	411
Commercial/Industrial Customers	21	21	21	21	21	21	21	21	21	21
Total Customers	424	427	427	431	432	432	432	432	432	432
Billable Flow (1)	1,444	1,746	1,406	1,150	1,223	1,199	1,116	883	1,221	972
Lowhill Township: (7)										
Residential Customers				43	43	43	43	43	43	43
Billable Flow				1,789	2,114	2,335	2,220	2,060	2,230	2,480
Total Collector Systems:										
Residential Customers	2,520	2,536	2,549	2,606	2,639	2,669	2,736	2,776	2,852	2,639
Commercial/Industrial Customers	110	111	107	107	107	106	105	106	107	107
Total Customers	2,630	2,647	2,656	2,713	2,746	2,775	2,841	2,882	2,959	2,746
Billable Flow (1)	123,200	127,049	125,982	121,791	124,851	124,206	125,235	130,413	139,352	144,153

- (1) Flow is shown in thousands of gallons.
- (2) The Authority acquired these systems in the initial year where a customer total is indicated. Customers within these service areas were billed based on a flat rate through 2009. In 2010, metered water usage was used to bill those customers with meters and an assumed usage of 180 gallons per day was used to bill unmetered customers.
- (3) The Authority acquired this system on 12/30/04, but since there was very little billable flow the customer additions are shown in 2005. During 2006 individual water meters were installed to record billable flow at 26 residential apartment buildings and each commercial facility.
- (4) Includes Pointe West and Arcadia West systems.
- (5) The Authority took over operations and billing responsibilities for this system on April 1, 2009.
- (6) The Authority took over operations and billing responsibilities for this system on February 29, 2012.
- (7) The Authority took over operations and billing responsibilities for this system on June 8, 2016.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
WESTERN LEHIGH INTERCEPTOR
AVERAGE DAILY WASTEWATER FLOW
ACTUAL AND PROJECTED**

	Year	System Flow (1)	Billable Flow (2)	% of Flow Unbilled
Actual	2013	7.87	5.43	31.0%
	2014	9.48	5.91	37.6%
	2015	8.27	7.38	10.8%
	2016	7.76	7.21	7.1%
	2017	9.25	6.83	26.2%
	2018	11.85	7.26	38.7%
	2019	11.65	7.41	36.4%
	2020	9.61	7.52	21.7%
	2021	9.75	8.08	17.1%
	2022	10.17	8.46	16.8%
Projected (A)	2025	10.78		
	2030	11.00		

(1) System flow to City of Allentown recorded at Keck's Bridge Meter Station and Spring Creek Road Pump Station.

(2) Flow billed to municipalities.

Note: Flow is reported in millions of gallons per day.

(A) Source: LCA Planning Records.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
LITTLE LEHIGH RELIEF INTERCEPTOR BILLABLE FLOWS**

Municipality	Billable System Flow										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Alburtis	41,777	51,354	51,158	54,195	52,490	50,308	48,755	50,092	51,887	51,710	
Lowhill	2,776	2,644	2,677	2,544	2,144	2,345	2,284	2,376	2,364	2,524	
Lower Macungie	516,771	533,139	527,857	494,538	518,599	634,716	545,880	567,224	532,872	537,989	
Macungie	73,737	76,675	68,271	70,642	61,212	69,421	66,273	61,002	64,662	66,092	
Salisbury	150,181	136,491	144,735	143,806	140,072	148,696	156,206	149,637	136,911	160,491	
South Whitehall	607,613	491,939	407,528	384,152	292,224	283,239	247,576	276,788	248,373	254,788	
Upper Macungie	1,098,889	1,125,723	1,136,997	1,182,468	1,114,969	1,095,301	1,082,922	1,131,753	1,355,265	1,525,816	
Upper Milford	54,840	60,363	61,345	55,120	60,916	60,910	45,499	51,552	54,409	55,366	
Weisenberg	15,741	11,624	11,869	12,396	10,649	13,377	11,154	11,909	9,244	9,274	
Total	2,562,325	2,489,952	2,412,437	2,399,861	2,253,275	2,358,313	2,206,549	2,302,333	2,455,987	2,664,050	

Note: Flow is shown in thousands of gallons per year.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
OPERATING AND CAPITAL INDICATORS**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Suburban Division Water System:										
Water Sales (MGD)	7.89	8.68	9.17	9.62	8.98	8.79	8.89	9.79	10.43	10.79
Average Daily Demand (MGD)	8.50	9.27	9.68	10.04	9.88	10.07	10.35	11.09	11.92	12.25
Peak Day Demand (MGD)	11.97	11.75	11.78	13.60	12.65	13.02	12.88	14.43	15.23	16.33
Safe Supply Capacity (MGD)	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70
System Storage Capacity (MG)	11.15	11.15	11.15	11.15	11.17	11.17	11.17	11.17	11.17	11.17
Miles of Water Mains	318.35	319.92	322.52	329.67	341.78	343.00	341.80	341.80	341.80	353.10
Suburban Division Wastewater System:										
Average Daily flow to Kline's Island (1)	7.77	8.92	7.88	7.98	8.80	11.19	10.92	9.04	9.16	9.65
Treatment Capacity (2)	10.78	10.78	10.78	10.78	10.78	10.78	10.78	10.78	10.78	10.78
Wastewater Allocation Sold (gallons per day)	165,903	47,609	273,392	124,800	75,476	78,511	231,237	294,873	64,705	254,365
Treatment Plant Design Capacity in Collector Systems (GPD) (3)	315,000	355,000	355,000	355,000	355,000	355,000	355,000	355,000	355,000	355,000
Miles of Pipe:										
Western Lehigh Interceptor	25.51	25.51	25.51	25.51	25.51	25.51	25.51	25.51	25.51	25.51
Little Lehigh Relief Interceptor	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66
Collector System	36.62	35.86	35.97	40.16	40.51	40.76	39.19	39.07	39.28	39.28
Total Miles of Wastewater System Pipe	67.79	67.03	67.14	71.33	71.68	71.93	70.36	70.24	70.45	70.45
City Division Water System:										
Water Sales (MGD)	9.65	8.21	8.43	8.36	8.32	8.40	8.37	8.37	8.31	8.31
Average Daily Demand (MGD)	18.37	18.39	19.99	20.41	21.16	21.49	21.51	21.67	22.00	22.50
Peak Day Demand (MGD)	29.46	25.29	26.12	25.30	27.14	29.76	29.50	28.26	29.20	30.87
Safe Supply Capacity (MGD)	71.00	71.00	71.00	71.00	71.00	71.00	71.00	71.00	71.00	71.00
System Storage Capacity (MG)	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Miles of Water Mains	320.00	320.00	320.00	320.00	320.00	320.00	320.00	320.00	320.00	320.00
City Division Wastewater System:										
Average Daily flow received at Klines Island (1)	30.71	32.39	30.44	29.67	30.78	36.07	37.64	32.28	32.25	32.61
Wastewater Allocation Used (MGD)	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Treatment Plant Design Capacity	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Miles of Pipe	285.00	285.00	285.00	285.00	285.00	285.00	285.00	285.00	285.00	285.00

- (1) Represents the annual flow in millions of gallons per day billed by the Kline Island WW Treatment Plant to the Divisions for treatment services.
- (2) Represents Divisional Capacity in millions of gallons per day in the Kline Island WW Treatment Plant's 40 million gallons per day (mgd) treatment plant at year end.
- (3) The following collector systems with package treatment plants were acquired by the Suburban Division:
- a. Heidelberg Heights in 1998. A new treatment plant was completed in 2000 to replace a nonfunctioning plant.
 - b. The Wynnewood Terrace (51,900 gallons per day) and Arcadia Industrial Park (12,000 gallons per day) systems were purchased in 2003. The Wynnewood Plant was upgraded to 60,000 gallons per day in December 2005. The Arcadia plant was permanently removed from service in August 2006 because of operating problems. Flow through the station resumed in January 2014.
 - c. The Sand Spring System (35,000 gallons per day) was purchased in 2004.

Note: MGD equates to millions of gallons per day. GPD equates to gallons per day and MG equates to millions of gallons.

Note: MGD equates to millions of gallons per day, GPD equates to gallons per day and MG equates to millions of gallons.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
NUMBER OF EMPLOYEES BY FUND**

		Total Fulltime Equivalent Employees									
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
SUBURBAN DIVISION											
Administration, Customer Service & Clerical		10.6	9.8	9.3	10.1	10.0	11.3	12.5	12.4	13.4	13.9
Water Operations		15.2	14.8	14.2	15.3	18.2	17.0	17.1	21.2	18.7	20.4
Water Capital (1)		5.7	1.9	3.5	3.2	2.8	3.3	3.4	5.0	4.6	2.9
Wastewater Operations		5.5	5.8	6.5	7.1	6.9	7.1	8.5	8.3	7.2	8.2
Wastewater Capital (1)		1.3	1.0	1.0	1.0	1.3	1.7	2.9	2.5	1.6	1.5
CITY DIVISION (2)											
Administration, Customer Service & Clerical		8.8	15.6	17.1	17.0	18.3	18.3	19.2	17.5	17.7	18.5
Water Operations		17.5	48.3	43.5	34.7	37.5	39.4	39.8	39.3	35.6	37.3
Water Capital (1)		1.6	2.0	4.4	6.9	5.8	4.9	3.0	2.5	2.6	1.6
Wastewater Operations		17.9	46.8	46.6	47.9	48.5	48.8	47.7	51.8	46.6	47.6
Wastewater Capital (1)		0.3	1.7	1.7	2.3	1.4	1.2	1.2	2.0	1.2	1.3
Total		84.4	147.7	147.8	145.5	150.7	153.0	155.3	162.5	149.2	153.2
# of Employees at year-end:											
Fulltime		141	150	148	148	155	160	162	157	158	165
Parttime		1	-	-	-	-	-	-	-	2	-

(1) Includes inspectors and employees working on Capital Projects.

(2) For 2013, count includes City employees from 8/8/13 to end of year. Calculation for 2013 was corrected in 2014.

Note: A fulltime employee is equivalent to 2,080 hours per year (including vacation and other offtime). Fulltime equivalent employment is calculated by dividing total hours allocated to a fund by total organization hours. Total FTE's may exceed employees at year-end because of seasonal help and fulltime employees leaving employment before year-end without being replaced.

OTHER INFORMATION

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
PROFILE OF AUTHORITY MANAGEMENT STAFF
December 31, 2022**

Liesel M. Gross, Chief Executive Officer

Ms. Gross holds a Master's Degree in Public Administration Degree from Kutztown University and a Bachelor's Degree in Journalism / Public Relations from Indiana University of Pennsylvania. She has been employed by the Authority since 1998. She began her service to the Authority in a public relations role and became the Authority's Customer & Communications Manager in 2006. In her role as Chief Executive Officer, which she began in 2016, Ms. Gross focuses attention on providing broad organizational leadership both internally and externally, with a focus on developing collaboration and synergies among operational groups and engaging employees and the public in future decision-making of the Authority.

Over her years of service to the Authority, she has served in numerous positions in local, state and national professional associations. She served on the Board of Directors of the American Water Works Association (AWWA) from 2016 to 2019. She also has served as Chair of the American Water Works Association, Pennsylvania Section, Trustee of the Northeast District AWWA, and has served on numerous committees of the Association at the state and national level, including the Water Utility Council and the Workforce Strategies, Knowledge Management, and Diversity & Member Inclusion committees of the AWWA. She is a current member of the Board of Directors for the East Penn Chamber of Commerce, and the Greater Lehigh Valley Chamber of Commerce's Energy & Environment Committee, and serves as the secretary of the Lehigh Valley Water Suppliers, Inc. She is currently serving on the Legislative Committee of the Pennsylvania Municipal Authorities Association and the Executive Committee of the Water Resources Association of the Delaware River Basin.

Edward C. Klein, Chief Financial Officer

Prior to joining the Authority in 2015, Mr. Klein worked for almost fifteen years with Weir Hazleton, Inc. as Vice President of Finance. His primary area of responsibility was for all financial activities of the business and had responsibility for Human Resources, Information Technology, Safety, and Administration. He also served in the operations area of the business for a short period of time as Interim Vice President of Operations.

Mr. Klein has a Master's Degree in Business Administration from Pennsylvania State University and a Bachelor's Degree in Accounting from King's College. He has provided financial leadership which had a positive impact on the performance of the businesses that he has served by implementing solid financial structure, being a business partner to the executive team through analysis and advice, eliminating waste, managing risks of the business, and being a champion of change.

In his role as Chief Financial Officer, Mr. Klein focuses on the financial infrastructure and controls to support the strategic objectives of the Authority and provides the financial leadership to allow the Authority to improve its overall performance in a highly dynamic economic environment.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
PROFILE OF AUTHORITY MANAGEMENT STAFF
December 31, 2022
(Continued)**

Charles Volk, P.E., Chief Capital Works Officer

Charles Volk holds a Bachelor's Degree in Civil Engineering from the Pennsylvania State University. He joined the Authority in 2015 after 30 years of engineering experience, the majority of which was spent engineering water and wastewater system projects as a consultant. Mr. Volk has designed and managed numerous water and wastewater treatment and conveyance projects, and has extensive experience with regulatory and funding agencies. He also served as engineer for Lehigh Northampton Airport Authority. Mr. Volk is a registered professional engineer in Pennsylvania, and is a member of various professional organizations and also serves as a Township Supervisor for his local municipality.

In his role as Chief Capital Works Officer, Mr. Volk is responsible for the planning, design, and construction of capital improvement projects, many of which are driven by an asset management protocol for Authority's linear and vertical water and wastewater assets. Mr. Volk is responsible for prioritizing facility improvements projects in the capital planning process, with a focus on reducing long term life-cycle costs and minimizing risk. Mr. Volk also oversees management and providing capital planning leadership for the Authority's industrial wastewater pre-treatment plant and provides in-house engineering support across departments.

Susan Sampson, Communications Manager

Susan Sampson holds a Bachelor's Degree in Rehabilitation Counseling from the Pennsylvania State University. She joined the Authority in 2017 after 23 years of corporate public relations, communications, and management experience. She attended the Carroll School of Management at Boston College, earning a certificate in Corporate Community Involvement. She has extensive community, media, and legislative relations experience and has managed corporate partnerships with national organizations, driving results with customer and public education campaigns.

In her role as Communications Manager, Ms. Sampson is responsible for the development and implementation of a strategic communications plan, including internal and external communications, and customer education. She manages the company website and social media, as well as relationships with media contacts. She coordinates community relations on behalf of Lehigh County Authority, including youth outreach, volunteer events, site visits, speaking engagements, community partnerships, and more.

Christopher W. Moughan, Director of Service & Technology

Christopher Moughan holds a Master's of Business Administration from DeSales University and undergraduate degrees from Muhlenberg College and Penn State. He is also MCSE Certified, and has certificates of training for several business reporting software suites. He joined the Authority in 2017 after spending many years in the information technology field focusing on security and innovative ways for organizations to gain efficiencies.

He is responsible for leading, planning and organizing all activities of the Information Technology (IT) department and to ensure the effective, efficient and secure operation of information technology processes and systems. He also governs the Authority's IT strategic plan and direction of the department, including providing oversight on IT governance, developing user groups, and assessing development training needs. Mr. Moughan provide the vision and leadership to drive the adoption of technology, innovation and automation for the organization. Through this work, he

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
PROFILE OF AUTHORITY MANAGEMENT STAFF
December 31, 2022
(Continued)**

supports the Authority's goals for process improvement, knowledge retention and capture, and efficiency.

Philip M. DePoe, P.E., Senior Planning Engineer

Mr. DePoe holds a Bachelor's Degree in Civil Engineering from the Pennsylvania State University. He joined the Authority in 2014 as a Capital Works Engineer after eight years of service in the engineering consulting business. He worked as a project engineer prior to joining the Authority, where he obtained his professional engineering license for Pennsylvania in 2012. In addition, Mr. DePoe is a Board member of the Water Works Operators' Association of Pennsylvania, where he served as Editor from 2010-2020. In 2021, he transitioned into the role of Secretary-Treasurer for the Association.

Prior to his new role as the Senior Planning Engineer at the Authority, Mr. DePoe was the Capital Works Program Manager where he helped to develop the annual capital plan for both the Suburban and City Division. His role included significant management of capital activities for the Allentown Filtration Plant and the Kline's Island Wastewater Treatment Plant. Mr. DePoe assumed his new role as Senior Planning Engineer in late 2019 and is now responsible for strategic long-term water and wastewater facility planning, resource development, and support for the Authority's overall regional service approach. In this role, he works closely with all municipalities within the Authority's service area to ensure long-term water and sewer needs are met, and coordinates activities among various Authority departments, regulators and consultants to develop plans to meet the region's needs.

Andrew D. Moore, Director of Plant Operations

Mr. Moore holds a Bachelor's Degree in Forensic Chemistry from York College of Pennsylvania. He joined the Authority in 2017 after seven years of laboratory management and wastewater plant operation. He holds a PA DEP State Board Wastewater Operators A-E 2-5 certification and is involved with multiple wastewater and drinking water organizations, including sitting on the Board of Directors for the Pretreatment Information Exchange, Inc.

In his role as Director of Plant Operations, Mr. Moore is responsible for overseeing operation and compliance of the Authority's water and wastewater facilities. He ensures the organization is held to the highest standards to ensure efficient and cost-effective treatment. In addition, he examines and advises on new environmental regulations in order to identify risks to the Authority's compliance.

Kathy A. Martin, Human Resources Manager

Mrs. Martin joined Lehigh County Authority in July 2013, just prior to the lease concession agreement with the City of Allentown. Prior to joining the Authority, Mrs. Martin had more than 25 years of human resources experience primarily with SPX Heat Transfer and predecessor companies. She has a Bachelor of Arts Degree in Human Resources from Moravian College, and Professional Human Resources certifications from the Human Resources Certification Institute and the Society of Human Resources Management.

In her role as Human Resources Manager, Mrs. Martin is responsible for developing and executing human resources strategies in support of the overall business plan and strategic direction of the organization, specifically in the areas of succession planning, talent management,

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
PROFILE OF AUTHORITY MANAGEMENT STAFF
December 31, 2022
(Continued)**

performance management, employee engagement and labor relations, compensation and benefits, training and development, and policy management.

Albert J. Capuzzi, P.E., Director of Engineering & Asset Management

Albert J. Capuzzi holds a Bachelor's Degree in Civil Engineering from the Villanova University and a Master of Arts from Seton Hall University. He is a licensed professional engineer in the states of New Jersey and New York and a Designated Design Build Professional. He joined the Authority in 2022. He spent his 30+ year career protecting public health and the environment in consulting by assisting water and wastewater utilities with successful studies (master plans, asset management, water quality), designs (conveyance, storage, treatment) and construction projects. In his role as Director of Engineering and Asset Management, Mr. Capuzzi is responsible for the leading planning, design, construction, and asset management activities for the Authority.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
PROFILE OF AUTHORITY BOARD MEMBERS
December 31, 2022**

Brian C. Nagle, Chairman – Term Expires December 31, 2024

Mr. Nagle holds a Bachelor of Science degree in Mechanical Engineering from Rutgers University. Mr. Nagle is a life-long resident of the Lehigh Valley and is now retired from PPL Corporation after 38 years of service in engineering, project management, environmental management and regulatory affairs. He was a founding Board member of the Sustainable Energy Fund and served on the Board of the Wildlands Conservancy for 8 years until 2015. He also served on the Board of Macungie Memorial Park Association for 9 years until 2019. Mr. Nagle has also been involved in the Lehigh Valley's initiatives to preserve open space and revitalize abandoned industrial sites. Mr. Nagle has been an Authority Board member since 2009.

Scott C. Bieber, Vice Chairman – Term Expires December 31, 2022

Mr. Bieber lives in Upper Milford Township and holds a Bachelor of Arts Degree in Political Science from Kutztown University. He is the owner of Lehigh Soils and Wetlands, a small environmental consulting firm that offers on-site sewage treatment testing and design, storm water infiltration and wetland services. He is also a certified Pennsylvania Sewage Enforcement Officer providing regulatory contract services to several municipalities in Lehigh and Carbon Counties. Prior to that, he was a reporter for *The Morning Call* for ten years covering local government, the environment and water and sewer issues. He is vice chair of the Lehigh County Agricultural Land Preservation Board, a member of the Upper Milford Open Space Committee and a former member of the Upper Milford Planning Commission. Mr. Bieber became an Authority Board member in March 2010.

Richard H. Bohner, Secretary – Term Expires December 31, 2022

Mr. Bohner holds a Master of Business Administration degree from Lehigh University and a Bachelor of Science degree in Finance from Pennsylvania State University. He is retired from Pennsylvania Power & Light Company where he was Manager of Customer Support Systems. During his career, he was active in the Edison Electric Institute. Mr. Bohner has served as an Authority director since 1972 and has received the Sahli Award and the Extended Service Award from the Pennsylvania Municipal Authorities Association.

Norma A. Cusick, Assistant Secretary – Term Expires December 31, 2024

Ms. Cusick holds a Bachelor of Arts degree from De Sales University and a Master of Arts degree from Kutztown University and is a certified paralegal. She has been a resident of Lehigh County for 49 years and was a small business owner and business manager. Ms. Cusick has served as the Division Director for the American Heart Association, Allentown Downtown Improvement District, the Board of Directors of the Allentown Public Library, Salisbury Township School Board, Salisbury Township Commissioner, Salisbury Township Planning Commission and is currently on the Salisbury Township Education Foundation.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
PROFILE OF AUTHORITY BOARD MEMBERS
December 31, 2022**

Ms. Cusick has served on the Board of Directors of the Pennsylvania Shakespeare Festival, Child Advocacy Center and was past President of the Lehigh County Sports Fields. She has also participated with and served on several additional community organizations, including the Greater Lehigh Valley Girl Scouts. Throughout the period of her residence, she continues to be active in many other local, regional, and statewide endeavors. Ms. Cusick is currently on the Executive Committee of the Board of Associates of Lehigh Valley Hospital Network. Ms. Cusick became an Authority Board member in March 2010.

Ted Lyons Jr., Treasurer – Term Expires December 31, 2023

Mr. Lyons holds a Bachelor of Science degree in Civil Engineering from Duke and an MBA from the Wharton School University of Pennsylvania. He is retired from HT Lyons, Inc., a mechanical contracting and engineering firm which he founded in 1973 and was acquired by PPL in 1998. He serves on the boards of the Allentown Boys and Girls Club and the Allentown Art Museum. He is also a past board member of the Allentown Symphony and the DaVinci Science Center. Mr. Lyons became an Authority Board member in August 2014.

Linda A. Rosenfeld, Member – Term Expires December 31, 2026

Ms. Rosenfeld attended Penn State University. A lifelong resident of Lehigh County, she is a retired office manager and has served as President of Allentown City Council, Vice-president of Lehigh County Board of Commissioners, Chair of the Allentown Commercial and Industrial Development Authority, Vice-chair of the Lehigh Northampton Airport Authority, Member of the Bridgeworks Advisory Board, Chair of the Allentown Parking Authority, President of Big Brothers and Big Sisters of Lehigh County, President of Haven House (Partial Hospitalization Program for the Mentally Ill). She is presently Secretary of Repertory Dance Theatre, member of the Haven House Advisory Board, ex-officio on the Board of Allentown Economic Development Authority (AEDC) and most recently appointed to the Allentown Commercial and Industrial Development Authority (ACIDA). She served 15 years as a Court Appointed Special Advocate (CASA) a volunteer representing and advocating for children going through the Court System, many of whom are neglected or abused. Ms. Rosenfeld became an Authority Board member in January 2015.

Kevin I. Baker, Assistant Treasurer – Term Expires December 31, 2025

Mr. Baker holds a Bachelor of Science degree in Chemical Engineering from University College, London and an MBA from Manchester Business School, University of Manchester in the UK. He is a Fellow of the Institution of Chemical Engineers and a Chartered European Engineer. He is President and CEO of UIG, LLC a supplier of industrial gases and related equipment and services, owned by Nucor Corporation. He is a long-time resident of Lehigh County and previously served as President of the East Penn Chamber of Commerce and on the Board of Governors for the Lehigh Valley Chamber. Mr. Baker became an Authority Board member in April of 2016.

**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
PROFILE OF AUTHORITY BOARD MEMBERS
December 31, 2022**

Jeffrey J. Morgan, Member – Term Expires December 31, 2026

Mr. Morgan grew up in Allentown and graduated from William Allen High School. He earned a Bachelor of Science degree in Physics from Muhlenberg College and a Master of Science degree in Environmental Engineering and Water Resources from Villanova University. He is a professional engineer licensed in PA, NJ and DE. He has over 30 years of diverse engineering and client management experience in the water and wastewater industry. Mr. Morgan works for a small engineering firm that specializes in water, wastewater, industrial pretreatment, construction management and stormwater work for municipalities and authorities. Mr. Morgan has volunteered his time with various youth sports organizations over the years and is currently in his sixteenth year of volunteering with the South Parkland Youth Association's Football Program. Mr. Morgan currently resides in South Whitehall Township. Mr. Morgan became an Authority Board member in March 2017.

Amir Famili, Member – Term Expires December 31, 2023

Mr. Famili holds a Ph.D. degree in Chemistry from University of Akron. He worked at Air Products and Chemicals for 34 years before retirement in 2018. While in Air Products, Mr. Famili was Global Technology Director and Chief Technology Officer of the Performance Material business responsible for new products, application development and new process development. He is a long-time resident of the Lehigh Valley. Mr. Famili is member of Allentown West Rotary Club and a core volunteer of Lehigh Valley Habitat for Humanity. Mr. Famili became an Authority Board member in July 2019.

LCA Strategic Plan:

2022-2027

Our Mission

Who is Lehigh County Authority?

Why do we exist?

To protect public health and the environment by providing high-quality, safe, and reliable water and wastewater services.

Our Vision

What does LCA aspire to become in the future?

To be a trusted and engaged community partner, advancing the vitality of our region through exceptional water and wastewater services.



Lehigh County Authority

Our Shared Values



Service - We take pride in our role as public servants. We focus on serving customers and each other.



Engagement - We enjoy learning, exploring new ideas, solving problems, and embracing changes that support continuous improvement.



Dedication - We give our best effort every day and seek ways to contribute to achieving LCA's goals.



Positivity - We face challenges with optimism and foster trust, teamwork, and collaboration.



Excellence - We strive to make LCA the best utility it can be!



Operational Excellence

To proactively ensure safe and reliable service delivery, regulatory compliance, and resilient operations through streamlined processes, best practices, and data-driven decision-making

Strategy 1: Establish and implement plans to meet or exceed all regulatory requirements.

Examples of what we are already doing:

- Responding to the Lead and Copper Rule
- Participate in the Partnership for Safe Drinking Water – (exceed DEP requirements)
- Update and implement existing master plans
- Continue to update SCADA systems (4-year project)

NEW Activities Beginning in 2022:

- Address small system challenges that result in violations / boil advisories
- Conduct root cause analysis and identify targeted improvements to mitigate permit exceedances

Strategy 2: Participate in the legislative and regulatory review process to prepare for new regulations and ensure LCA's interests are considered

Examples of what we are already doing:

- Responding to the Lead and Copper Rule
- Monitor via committees, associations
- Participate by providing comments on proposed legislation

NEW Activities Beginning in 2022:

- Increase staff / leadership team awareness and participation in regulatory review / legislative processes
- Proactively address upcoming regulations (e.g., PFAS, internal targets, etc.)

Strategy 3: Develop strategies to enhance organizational resiliency, especially in the areas of cyber security, emergency preparedness, system redundancy, and climate change.

Examples of what we are already doing:

- Constant monitoring of DHS ISAC (cyber-threats)
- Develop/Update and implement appropriate master plans
- Develop and implement recovery plans/succession plans by departments
- Update standard operating procedures

NEW Activities Beginning in 2022:

- Improve emergency communications protocols for cyber event / other events
- Implement large diameter valve maintenance program



Regional Collaboration and Leadership

To help our region to thrive by growing community confidence in LCA, advancing collaborative efforts, and demonstrating operational excellence

Strategy 1: Collaborate with municipalities, stakeholders, regulators, and community groups to increase our understanding of the region's goals and strengthen the role LCA plays in supporting them.

Examples of what we are already doing:

- Manage complex intermunicipal service agreements
- Regulatory outreach

NEW Activities Beginning in 2022:

- Monitor meeting agendas and attend municipal meetings to address topics where LCA could add value.
- Develop an engagement strategy for municipalities

Strategy 2: Advance LCA's position in the region as the leading resource on water and wastewater-related issues.

Examples of what we are already doing:

- Active involvement in industry organizations
- Municipal meeting facilitation

NEW Activities Beginning in 2022:

- Increase visibility of LCA team member's industry participation

Strategy 3: Support environmental sustainability and water equity initiatives through partnerships, education, and policy.

Examples of what we are already doing:

- Project-specific energy efficiencies
- Water equity network participation

NEW Activities Beginning in 2022:

- Expand LCA's watershed monitoring program (include more stakeholders & publish data and results)
- Identify LCA-specific environmental sustainability goals (energy efficiency, waste reduction, others) and policies
- Develop relationships with organizations that address equity and environmental sustainability issues.
- Create employee volunteer network to participate in community / environmental events (ex., stream cleanups, tree plantings)



Financial Stewardship

To cost-effectively serve our community, now and in the future, by managing funds effectively and responsibly to support debt commitments, operational needs, and asset management

Strategy 1: Sustainably support LCA's water and wastewater systems through responsible financial management.

Examples of what we are already doing:

- Financial reporting
- 5-year capital plan

NEW Activities Beginning in 2022:

- Enhance financial forecasting from quarterly to rolling monthly
- Departmental level financial reporting
- Begin analyzing and reporting on the cost of internal processes and activities
- Simplify payroll process / time reporting

Strategy 2: Develop decision-making criteria for evaluating growth opportunities.

Examples of what we are already doing:

- When an opportunity arises, identify the quality of the assets, determine cash flow impact, and identify operational viability of the system before deciding on LCA's involvement

NEW Activities Beginning in 2022:

- Determine LCA's desired role in acquiring small systems
- Create menu of options / capabilities list for contract operations, lease options, acquisition, etc.

Strategy 3: Establish rates that balance affordability with achieving required revenue targets that support the financial needs of LCA.

Examples of what we are already doing:

- Evaluate future of LCA's customer assistance program & support through payment plans and other options
- Annual rate adjustment
- Regular rate studies

NEW Activities Beginning in 2022:

- Pursue alternative funding sources (e.g., Pennvest, WIFIA, grants)



Customer Engagement and Support

To create an exceptional customer experience and build trust and understanding of LCA's essential services

Strategy 1: Enhance customer engagement and experience through process improvements and adoption of new technology.

Examples of what we are already doing:

- Improve customer service processes (from process improvement list) including evaluation of phone system, IVR updates, and other technology solutions

NEW Activities Beginning in 2022:

- Enhance customer self-service tools
- Standardize complaint tracking & handling protocols (including scripting)
- Define customer service excellence & metrics to track performance

Strategy 2: Improve our responsiveness to customers' needs.

Examples of what we are already doing:

- Improve customer service processes (from process improvement list) including evaluation of phone system, IVR updates, and other technology solutions

NEW Activities Beginning in 2022:

- Improved delinquency termination process
- Create after hours customer service staffing plan for emergency response.
- After-hours service enhancement
- Develop customer service SOPs

Strategy 3: Grow customer awareness and support for LCA's goals and direction.

Examples of what we are already doing:

- Newsletter
- Social media
- Public education / events

NEW Activities Beginning in 2022:

- Communication / customer education about risk prevention
- Website enhancements
- Private side sewer system customer education



System Capacity and Reliability

To dependably meet current and future community needs and achieve optimal levels of service by effectively managing assets and implementing projects to ensure sufficient system capacity

Strategy 1: Increase our systems' capacity to address economic development needs in our region.

Examples of what we are already doing:

- DEP-mandated regional sewer planning
- DEP-issued Consent Orders, corrective action plan activities

NEW Activities Beginning in 2022:

- Assess water supply resiliency (Suburban focus)
- Develop and implement master plan for pre-treatment plant
- Develop concepts and information around regional service approaches

Strategy 2: Define and establish plans to meet LCA's targeted levels of service

Examples of what we are already doing:

- Data collection on system performance (linear and vertical assets)

NEW Activities Beginning in 2022:

- Begin a level of service (LoS) assessment, including stakeholder/regulatory review, current performance assessment, definition of LCA's LoS goals, and facility-specific considerations / constraints
- Research approaches and LCA's needs for a develop a data analytics program

Strategy 3: Standardize and implement a comprehensive asset management program to ensure infrastructure reliability, guide investment, and support data-driven decision-making.

Examples of what we are already doing:

- Master plan updates for existing plans
- Annual water main replacement prioritization
- Flow metering activities/Western Lehigh

NEW Activities Beginning in 2022:

- Identify master planning needs for all systems.
- Figure out where Asset Management sits within the LCA organization (create clear ownership & responsibility of AM functions)
- Standardize master planning approach, frequency & data collection



Employee Engagement and Safety

To build a safe, cohesive, and engaging workplace in which employees feel personally connected to their work, each other, and LCA's commitment to excellence

Strategy 1: Ensure a safe working environment for all employees.

Examples of what we are already doing:

- Safety training
- Bi-monthly safety meetings
- Accident/injury investigation to correct action
- Driving safety program

NEW Activities Beginning in 2022:

- Identify and prioritize safety policies for review and update.
- Develop a more comprehensive training program
- Improve root cause analysis process
- Standardize / define safety training requirements for new hires

Strategy 2: Standardize and enhance our approaches to succession planning, knowledge management, and performance management.

Examples of what we are already doing:

- Documenting work processes (SOPs)
- Workforce analysis, retirement risk profile
- Annual performance evaluations
- Disciplinary program

NEW Activities Beginning in 2022:

- Identify job specific performance measures and training plans
- Standardize new employee onboarding program

Strategy 3: Expand opportunities for employee and leadership development, technical training, and certification.

Examples of what we are already doing:

- Access to certification training
- Tuition program (improve on promotion)
- Leadership development programs
- Skill-based / certification-based job advancement (selected operational roles)
- Education policy w/ tuition reimbursement option

NEW Activities Beginning in 2022:

- Expand Lunch & Learn program
- Standardize supervisory onboarding / training

Strategy 4: Openly explore the diversity, equity, and inclusion issues that are important to LCA and our employees.

NEW Activities Beginning in 2022:

- Bullying/sensitivity training
- Provide DEI training for LCA leadership

Strategy 5: Engage employees in LCA's work through collaboration, communication, and cooperation.

Examples of what we are already doing:

- Company-wide meetings
- Regular top-down communication on major LCA issues
- Quarterly managers' meetings
- Strategic planning process
- SharePoint site

NEW Activities Beginning in 2022:

- Standardize / increase use of exit and stay interviews
- Evaluate flexible work arrangements / policies
- New employee check in program (after onboarding)
- Develop a mentoring program

How will we stay focused?

It's a big plan with a lot of important goals and activities!

1. Metrics to illustrate progress

- ✓ **Reporting on 2022 Milestones**
 - Asset management program development
 - Water & sewer capacity projects
 - Process efficiency improvements
- ✓ **Reduction of reportable employee safety incidents**
- ✓ **Capital program management (on time / on budget)**
- ✓ **Planned vs. unplanned maintenance**
- ✓ **Other metrics:**
 - Monthly financial reporting
 - Regulatory compliance
 - Customer responsiveness
 - Employee turnover

2. Communication

- Board of Directors
- Stakeholders
- Municipalities
- Customers

3. Teamwork!

- LCA Strategy Teams
- Department Goals
- Employee Town Hall Meetings



**LEHIGH COUNTY AUTHORITY
ALLENTOWN, PENNSYLVANIA
ACQUISITIONS/LEASES/OPERATING CONTRACTS**

Acquisition Date	Development	Municipality	Purchase Price		Original Customers	Current Customers
Water Systems:						
April 14, 1976	Fairways at Brookside	Lower Macungie Twp.	\$ 180,000		92	596
June 1, 1976	Millbrook Farms	Lower Macungie Twp.	92,339		2	367
July 1, 1976	Pine Grove Park	Lower Macungie Twp.	25,000		166	187
January 1, 1979	Shepherd Hills	Lower Macungie Twp.	325,000		453	675
June 28, 1979	Mark Terrace	Upper Macungie Twp.	8,250		25	27
January 1, 1980	Ancient Oak	Lower Macungie Twp.	1,350,000		1,055	1,143
May 20, 1980	Upper Macungie	Upper Macungie Twp.	200,000	(5)	479	7,623
October 1, 1981	Country Downs	Lower Macungie Twp.	12,000		36	131
March 14, 1984	Clearview Manor	Lower Macungie Twp.	150,000	(1)	191	592
May 31, 1989	Penn Hills	North Whitehall Twp.	78,500		94	114
August 16, 1991	Slatedale/Emerald	Washington Twp.	-		360	405
September 30, 1991	Schnecksville North	North Whitehall Twp.	210,000	(2)	238	349
October 1, 1991	Crestwood	North Whitehall Twp.	105,000	(3)	210	264
January 24, 1992	Green Hills	Upper Macungie Twp.	357,700	(4)	307	726
December 14, 1993	Country Home Acres	Lower Macungie & Salisbury Twps.	32,000		56	60
February 2, 1998	Mink Estates/Farview Farms	Upper Milford Twp.	-		41	71
February 22, 2002	Pine Lakes of Lynn	Lynn Township	-		59	60
June 26, 2002	Heidelberg Heights	Heidelberg Twp.	267,481		189	190
June 12, 2003	Arcadia West IP	Weisenberg Twp.	400,000		5	19
December 30, 2004	Sand Spring	North Whitehall Twp.	35,350		257	260
February 22, 2005	Mill Creek	Washington Twp.	-		35	35
March 30, 2005	Beverly Hills	Lower Milford Twp.	29,800		43	44
May 31, 2006	Clearview Farms Estates	Moore Twp, Northampton Co.	-		66	67
March 16, 2007	Emmaus Out-of-Borough	Lower Macungie & Upper Milford Twps.	131,000		415	421
April 4, 2007	Buss Acres	Upper Milford Twp.	205,450		100	100
July 8, 2010	Lynn Water Company	Lynn Township	233,637		116	116
Wastewater Systems:						
September 23, 1998	Heidelberg Heights	Heidelberg Twp.	-		145	145
June 12, 2003	Arcadia West IP	Weisenberg Twp.	-		5	20
July 11, 2003	Wynnewood Terrace	North Whitehall Twp.	547,184		216	220
December 30, 2004	Sand Spring	North Whitehall Twp.	126,000		257	259
May 16, 2006	Lehigh County Wastewater Treatment Plant	Upper Macungie Twp.	-		Not Applicable	
April 1, 2009	Washington Township Sewer System	Washington Twp.	-		613	627
February 29, 2012	Lynn Township Sewer System	Lynn Township	-		424	431
June 8, 2016	Lowhill Township Sewer System	Lowhill Township	-		43	43
City Division System:						
August 7, 2013	City of Allentown	City of Allentown	246,205,824	(6)	46,643	47,712

- (1) Purchase price represents the initial upfront payment. Additional payments of \$680 per connection are made as new homes are served. A total of \$396,160 has been paid through 12/31/12.
- (2) Purchase price represents the initial upfront payment. Additional payments of \$375 per apartment and \$750 per single family or twin connection are made as new units are served. The Authority has an additional exposure of \$17,550 for new commercial connections to the system. A total of \$251,250 has been paid through 12/31/12.
- (3) Purchase price represents an initial upfront payment. Additional payments of \$500 per connection are made as new homes are served. A total of \$118,500 has been paid through 12/31/12.
- (4) Purchase price represents an initial upfront payment. Additional payments of \$1,100 or \$1,250 per connection, dependent upon location, are made as new homes are served. A total of \$817,750 has been paid through 12/31/12.
- (5) Excludes Mark Terrace and Green Hills customers which are listed separately.
- (6) Purchase price represents the I) upfront payment, less fair value of conveyed capital assets, II) the discounted future annual payments, and III) the discounted future Capex Fund funding requirements.

Note: Current customers represents residential and commercial units served as of 12/31/22, not customer connections, for those systems acquired before 12/31/22.