



Mary Taylor, CPA
Auditor of State

CITY OF NEW PHILADELPHIA
PERFORMANCE AUDIT

APRIL 9, 2009



Mary Taylor, CPA
Auditor of State

To the Residents, City Administration, and City Council of New Philadelphia:

The City of New Philadelphia entered into a letter of arrangement with the Auditor of State (AOS) to conduct a performance audit of certain aspects of its water, wastewater and sanitation operations. The performance audit was designed to assess the selected areas of the City's operations and, where appropriate, to develop recommendations based on comparisons with peer cities, benchmarks, and/or recommended or leading practices.

The performance audit contains recommendations which identify the potential for cost savings and efficiency improvements. While the recommendations contained in the audit report are resources intended to assist the City in addressing its financial condition and ensuring efficient operations, the City is also encouraged to assess overall operations and develop alternatives independent of the performance audit.

An executive summary has been prepared which includes the project history; a city overview; the scope, objectives and methodology of the performance audit; and a summary of recommendations, issues for further study, assessments not yielding recommendations, and financial implications. This report has been provided to City of New Philadelphia, and its contents discussed with the appropriate elected officials and administrators. The City has been encouraged to use the results of the performance audit as a resource to further improve its overall operations, service delivery, and financial stability.

Additional copies of this report can be requested by calling the Clerk of the Bureau's office at (614) 466-2310 or toll free at (800) 282-0370. This performance audit can also be accessed online through the Auditor of State of Ohio website at <http://www.auditor.state.oh.us/> by choosing the "Audit Search" option.

Sincerely,

A handwritten signature in black ink that reads "Mary Taylor".

Mary Taylor, CPA
Auditor of State

April 9, 2009

Executive Summary

Project History

The City of New Philadelphia (CNP or the City) engaged the Auditor of State's Office (AOS) to conduct a performance audit of certain aspects of the Water, Wastewater and Sanitation Divisions. The performance audit was designed to assess the selected areas of the City's operations and, where appropriate, to develop recommendations based on comparisons with peer cities, benchmarks, and/or recommended or leading practices.

Overview of the City of New Philadelphia

The City of New Philadelphia is a southeastern Ohio community located in Tuscarawas County. The City covers approximately 8 square miles. During the 2000 census, the City's population was listed as approximately 17,056 with a median family income of \$33,235. In addition, the City is governed by a locally elected seven voting member Council, and one Council President.

The City offers many general government services that include full-service Water and Wastewater operations consisting of treatment, infrastructure maintenance, and utility billing and collections for residential, commercial and industrial users. The City also offers waste collection services, including refuse and recycling collections. User fees are the City's main funding source for all water, wastewater, and sanitation operations. However, prior to 2008, property taxes funded sanitation operations. In 2007, employee wages and benefits were the largest expenditures for the City's Water, Wastewater and Sanitation funds, representing approximately 38 percent of total expenditures in the Water Operating Fund, 34 percent in the Wastewater Operating Fund, and 50 percent in the Sanitation Fund. The Water, Wastewater and Sanitation Divisions (including utility billing) employed approximately 47 full-time equivalent (FTE) employees at the time of this audit.

Objectives

Performance audits are defined as engagements that provide assurance or conclusions based on an evaluation of sufficient, appropriate evidence against stated criteria, such as specific requirements, measures, or defined business practices. Performance audits provide objective analysis so that management and those charged with governance and oversight can use the information to improve program performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability. Based on AOS research and discussions with City officials, the following

questions framed the scope of the areas assessed within the Water, Wastewater and Sanitation Divisions:

- Is the City's current allocation and level of personnel efficient and effective?
- How effective are the financial planning and reporting, and capital planning practices?
- Are the City's rate structures for water, sewer and sanitation sufficient to recoup costs?
- How efficient and effective is the billing and collection process?
- Do technology systems enable efficient and effective water, sewer and sanitation services?
- Are the negotiated agreements relating to water, sewer and sanitation personnel, consistent with peers and leading or recommended practices?

In addition, the scope of the performance audit included the development of financial forecasts for the Water, Wastewater and Sanitation funds. Furthermore, the adequacy of, and compliance with, key local ordinances was reviewed as a component of the above objectives, where applicable.

The performance audit was designed to develop recommendations that provide cost savings, revenue enhancements, and/or efficiency improvements. The recommendations comprise options that the City can consider in the continuing effort to improve its operational and financial condition.

Scope and Methodology

This performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require that AOS plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for findings and conclusions based on the audit objectives.

Audit work was conducted between July 2008 and December 2008, and data was drawn from fiscal years 2004 through 2008. To complete this report, the auditors gathered a significant amount of data pertaining to the City, conducted interviews with numerous individuals associated with the various divisions, and reviewed and assessed available information. Although the audit identified two sets of varying figures pertaining to water sold and solid waste disposed, this did not affect the conclusions reached in the performance audit (see **R3.10** and **R3.11**). Peer data and other information used for comparison purposes was not tested for reliability, although the information was reviewed for reasonableness.

The performance audit process involved significant information sharing with the City, including preliminary drafts of findings and recommendations related to the identified audit areas. Furthermore, periodic status meetings were held throughout the engagement to inform the City

of key issues impacting selected areas, and share draft recommendations to improve or enhance operations. Throughout the audit process, input from the City was solicited and considered when assessing the selected areas and framing recommendations. Finally, the City provided verbal and written comments in response to various recommendations, which were taken into consideration during the reporting process. Where warranted, AOS modified the report based on the City's comments.

Several cities were selected to provide benchmark comparisons for the areas assessed in the performance audit, including the Ohio cities of Athens, Defiance, North Canton, and Lyndhurst. These cities were selected based upon demographic and operational data. Furthermore, other cities, external organizations and sources were used to provide comparative information and benchmarks, including the following:

- Government Finance Officers Association (GFOA);
- *Municipal Benchmarks: Assessing Local Performance and Establishing Community Standards* (David Ammons, 2001);
- American Institute of Certified Public Accountants (AICPA);
- Environmental Protection Agency (EPA); and
- *Consider the Source in Setting Water Rates* (Milwaukee Journal Sentinel).

The Auditor of State and staff express appreciation to the City of New Philadelphia and the cities of Athens, Defiance, North Canton, and Lyndhurst for their cooperation and assistance throughout this audit.

Assessments Not Yielding Recommendations

The following assessments were conducted during this audit which did not warrant changes and did not yield recommendations. The **operations** section contains additional detail.

- Staffing levels, with the exception of the Utility Billing Division;
- Technology for water meter, utility billing and mapping;
- Utility billing and collection process;
- Preventive maintenance program; and
- Compliance with codified ordinances 937.02 (a) (b) and 935.02, and the Ohio Revised Code section 743.04.

Conclusions and Recommendations

The **operations** section of the audit report contains recommendations that are intended to provide the City of New Philadelphia with options to enhance its operational efficiency and improve its long-term financial stability. In order to obtain a full understanding of the assessed areas, the reader is encouraged to review the conclusions and recommendations in their entirety. The following summarizes the forecast conclusions and recommendations from the performance audit report.

The **Financial Forecasts** section revealed that:

- The Water, Wastewater operating, and Sanitation Funds are projected to have deficits for most of the forecast period (2008-2013), even when the impact of the performance audit recommendations is included. This is due to expenditures that exceed revenues for each forecast year in these three funds, with the exception of 2008 in the Sanitation Fund. Consequently, CNP will need to review key factors that can impact the financial condition of these funds. This can be aided, in part, by reviewing the assessments and recommendations in the **operations** section.

*In the area of **Operations**, the City should:*

- Develop financial policies and procedures pertaining to financial forecasting and subsequently develop five-year financial forecasts. A review of the five year forecasts developed in the **financial forecasts** section can help the City in planning for the future and developing subsequent financial forecasts.
- Establish and document its budgetary process in a formal financial manual, and expand upon its financial analyses and related reporting. The City should also ensure compliance with Generally Accepted Accounting Principles (GAAP) by changing the classification and reporting of the Sanitation Division expenditures and revenues from the Special Revenue Fund to an Enterprise Fund.
- Develop multi-year strategic and capital improvement plans, as well as a performance measurement system. The City should link the strategic plan to its forecasts and budgets, capital plan, and performance measurement system.
- Consider reducing its utility billing staff by 1.78 FTEs. This would result in staffing levels that are better aligned with the current technology. However, in order to ensure these reductions are possible, CNP should fully use its billing technology system.

- Negotiate to eliminate the payment of a portion of the employees' retirement contribution, and reduce the maximum number of sick leave days paid out at retirement, vacation accrual rates, and personal days. Additionally, CNP should consider eliminating the Standby Pay/On-Call pay.
- Take necessary steps to identify and reduce the sources of unaccounted for water. Specifically, CNP should install water meters in buildings that rely on the City's water (e.g., municipal buildings and special interest groups), and ensure water is read and billed for all entities (see **Issues for Further Study** for additional discussion). In addition, the City should ensure it is accurately capturing data pertaining to water treatment and billings. It should also continuously monitor the amount of treated water that is sold and the amount of unaccounted for water to maintain the integrity of its assets.
- Establish a formal methodology for setting and reviewing rates for water, wastewater, and sanitation. In setting rates, the City should first ensure cost-effective operations. It should also consider known and anticipated expenses, the cost of production and sales, and other relevant costs (e.g., treating unaccounted water). In regards to sanitation, the General Services Superintendent should ensure the maintenance of accurate information and the tracking of costs associated with all operations. Furthermore, the City should explore other options for ensuring the fiscal solvency of the Sanitation Fund, such as creating a separate charge for recycling, adding a fuel surcharge to the monthly rate, and implementing a pay-as-you-throw program.

Issues for Further Study

Auditing standards require the disclosure of significant issues identified during an audit that were not reviewed in depth. These issues may not be directly related to the audit objectives or may be issues that the auditors do not have time or resources to pursue. AOS has identified the following issues for further study. The **operations** section contains additional detail.

- **Automation:** CNP should further explore automating refuse collection services and water/wastewater treatment as a long-term strategy to improve efficiency and reduce costs. This could subsequently impact future rates charged to customers.
- **Utility Billing Compliance:** The City should further assess adherence to codified ordinances 937.01 (d) and 935.01 (b).

Summary of Financial Implications

The following table summarizes the performance audit recommendations that contain financial implications. Detailed information concerning the financial implications, including assumptions, is contained within the individual sections of the performance audit report.

Summary of Financial Implications

Recommendation	Annual Cost Savings
R3.8 Reduce utility billing staffing levels by 1.78 FTEs	\$67,000
R3.9 Negotiate to eliminate payment of employees' retirement contribution	\$80,000
Total	\$147,000

Source: AOS recommendations

Financial Forecasts

Background

This section of the audit includes six-year financial forecasts of the City of New Philadelphia's (CNP or the City) Water, Sanitation, and Wastewater Funds. The objective is to provide CNP with a financial framework to guide decision-making.

Tables 2-1, 2-2, and 2-3 present six-year financial projections for the Water Operating and Improvement Funds (**Table 2-1**), Wastewater Operating and Improvement Funds (**Table 2-2**) and the Sanitation Fund (**Table 2-3**). These tables also include three years of historical data and the potential effect of implementing the performance audit recommendations. Additionally, detailed assumptions are provided for each line item in the forecast to explain the methodologies used in projecting revenues and expenditures. The assumptions used in the forecasts are based on a combination of available information, including historical events and future plans. More specifically, AOS analyzed five years of historical information to determine trends and to identify inconsistencies that could impact projections. AOS relied on City employees to provide explanations for significant variances. Corroborating evidence was gathered when available.

Tables 2-1, 2-2 and 2-3 show the Water and Wastewater operating funds, and the Sanitation Fund are projected with deficits for most of the forecast period, even when the impact of the performance audit recommendations is included. This is due to the fact that, with the exception of 2008 in the Sanitation Fund, expenditures are projected to exceed revenues for each forecast year in these three funds. Consequently, CNP will need to review key factors that can impact the financial condition of these funds. This can be aided, in part, by reviewing the assessments and recommendations in the **operations** section.

Because circumstances and conditions assumed in the forecast were based on information available at the time the projections were prepared, there will likely be differences between projected and actual results. Therefore, CNP is encouraged to update the projections and related assumptions as conditions change and actual revenue and expenditure data become available. Furthermore, the City is encouraged to begin independently developing financial forecasts (see **operations** section).

Water Funds Financial Forecast

Table 2-1 shows the Water Division's historical and projected revenues and expenditures for its operating and improvement funds.

Table 2-1: Water Funds Forecast (in 000's)

Water Division Operating Fund									
	Actuals			Forecasted					
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Water Operating Receipts	\$1,965	\$1,925	\$1,886	\$1,871	\$1,856	\$1,841	\$1,826	\$1,812	\$1,797
Income Tax Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Misc/Operating	\$55	\$121	\$86	\$88	\$91	\$94	\$97	\$99	\$102
Dept. Reimbursements	\$25	\$6	\$1	\$49	\$25	\$26	\$26	\$27	\$28
Water Taps	\$0	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Miscellaneous Revenue	\$3	\$13	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fixed Asset Sale	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$2,050	\$2,067	\$1,973	\$2,010	\$1,973	\$1,961	\$1,950	\$1,939	\$1,929
Salaries and Wages	\$750	\$706	\$713	\$741	\$771	\$802	\$834	\$867	\$902
Benefits	\$151	\$148	\$157	\$155	\$161	\$167	\$174	\$181	\$188
Health Insurance	\$111	\$124	\$150	\$171	\$195	\$222	\$253	\$288	\$329
Travel & Training	\$3	\$3	\$2	\$3	\$3	\$3	\$3	\$3	\$3
Purchased Services	\$285	\$342	\$323	\$323	\$330	\$337	\$344	\$351	\$358
Supplies and Materials	\$215	\$275	\$262	\$269	\$284	\$301	\$318	\$337	\$356
Capital Outlay	\$345	\$306	\$644	\$379	\$379	\$379	\$379	\$379	\$379
Other Exp. – Well Maint.	\$37	\$44	\$22	\$34	\$35	\$37	\$38	\$39	\$40
Refund	\$1	\$0	\$1	\$1	\$1	\$1	\$1	\$1	\$1
Debt Payments	\$2	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5
Total Expenditures	\$1,906	\$1,956	\$2,282	\$2,084	\$2,167	\$2,256	\$2,352	\$2,454	\$2,565
(Deficit)/Surplus	\$143	\$110	(\$308)	(\$74)	(\$194)	(\$294)	(\$401)	(\$514)	(\$636)
Beginning Cash Balance	\$516	\$660	\$771	\$462	\$388	\$193	(\$100)	(\$502)	(\$1,017)
Ending Cash Balance	\$660	\$771	\$462	\$388	\$193	(\$100)	(\$502)	(\$1,017)	(\$1,653)
Encumbrances ¹	\$130	\$480	\$296	\$302	\$302	\$302	\$302	\$302	\$302
Ending Fund Balance	\$530	\$291	\$166	\$86	(\$108)	(\$403)	(\$804)	(\$1,319)	(\$1,955)
Cumulative Impact of Audit Recommendations	N/A	N/A	N/A	N/A	\$101	\$208	\$318	\$433	\$552
Adjusted Balance	N/A	N/A	N/A	N/A	(\$6)	(\$195)	(\$486)	(\$886)	(\$1,403)
Water Division Improvement Fund									
	Actuals			Forecasted					
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Water Revenue	103	\$101	\$99	\$98	\$98	\$97	\$96	\$95	\$95
Total Revenue	\$103	\$101	\$99	\$98	\$97	\$96	\$96	\$95	\$94
Capital Outlay	\$331	\$497	\$148	\$130	\$97	\$96	\$96	\$95	\$94
Total Expenditures	\$331	\$497	\$148	\$130	\$97	\$96	\$96	\$95	\$94
(Deficit)/Surplus	(\$227)	(\$396)	(\$49)	(\$31)	\$0	\$0	\$0	\$0	\$0
Beginning Fund Balance	\$716	\$488	\$92	\$43	\$11	\$11	\$11	\$11	\$11
Ending Fund Balance	\$488	\$92	\$43	\$11	\$11	\$11	\$11	\$11	\$11

Source: The City of New Philadelphia and AOS

¹ Encumbrances are projected at the average amount from 2005 to 2007. While the Improvement Fund included encumbrances in 2005 and 2006, none were reported in 2007. Coupled with the use of this fund, encumbrances are not projected in the Improvement Fund.

Forecast Assumptions

The following lists the assumptions used to develop the revenue and expenditure projections in **Table 2-1**.

Water Division Operating Fund Revenues:

Water Operating Receipts

Operating receipts are directly related to water rates and water consumption. From 2003 to 2007, the City's operating receipts declined by an annual average of 0.8 percent, with an increase occurring only in 2005 (2.6 percent). Assuming current rates and no significant new residential or commercial development, water operating revenues are projected to decrease by 0.8 percent. Although the City increased rates in 2008, year-to-date projections through July 2008 support this forecast assumption.

Income Tax Revenue

In 1993, the City of New Philadelphia levied a tax increase of five sixteenths of one percent on income for the year 1994. Each year thereafter, the amount was reduced until it was withdrawn in 1998. From 2003 to 2007, the City has recorded immaterial revenues in the income tax category, with the highest amount of \$798 in 2003. The forecast assumes there will be no similar voter approved levies during the forecast period and no revenues are projected in this category.

Water Miscellaneous/Operating

The category reflects miscellaneous revenues from tap fees, turn on fees, meter horn sales, etc. From 2003 to 2007, this line item fluctuated significantly, increasing by an average of 47 percent per year. However, the City included approximately \$51,000 in this category that should have been reflected in department reimbursements. When accounting for this miscoding, water miscellaneous/operating revenues increased each year after 2005: approximately 26 percent in 2006 and 22 percent in 2007. However, to be conservative and appropriately account for the nature of the revenues comprising this category, water miscellaneous/operating revenue is projected to increase by 3 percent per year, based on 2007 actual revenues.

Department Reimbursements

This category primarily represents revenues from a local machining company's reimbursement of aerator tower expenditures that are required by the Environmental Protection Agency (EPA). The City sporadically (every few years) invoices the company for electricity, repairs and volatile organic chemical (VOC) testing. However, the City incurs approximately \$25,000 in annual reimbursable expenditures. The projection for 2008 is based on the actual year-to-date (YTD)

reimbursements through July, which includes reimbursements for 2006 and 2007, and assumes no additional reimbursements in 2008 due to the immateriality of prior years' remaining reimbursements. Thereafter, projections assume the City will bill annually and are based on the average dollar amount of 2006 and 2007 reimbursable expenditures, with a 3 percent annual increase to account for inflation. While this amount does not account for all reimbursements that may accrue to this line item, those additional amounts have historically been insignificant.

Water Taps

Currently, fees for water taps are accounted for in the Water Misc./Operating line item. Except for 2006, there have been no revenues reported in this account. Consequently, no revenues are projected in this line item.

Miscellaneous Revenue

Historically, this revenue has been sporadic and immaterial. Therefore, the forecast assumes no miscellaneous revenues.

Water Division Operating Fund Expenditures:

Salaries and Wages

Projections for salaries and wages assume staffing levels will remain constant, with 3 percent annual negotiated increases to base wages, and 1 percent annually to account for employee step increases. The wage and step increases are based on current collective bargaining agreements. Over the fifteen year step schedule, step increases average approximately 1 percent per year. Because all employees will not receive a step increase each year, forecasting the average increase of 1 percent ensures a conservative assumption. Furthermore, since the same collective bargaining agreement covers employees in the Wastewater and Sanitation funds, this assumption and methodology was also used to project salaries and wages in these funds.

Benefits

This line item includes retirement contributions, worker's compensation and Medicare tax. These benefits are projected at 20.89 percent of salaries and wages. The average from FY 2003 to FY 2007 was 20.74 percent, and an additional 0.15 percent was included to account for the increase in the employer retirement contribution from 2007 to 2008.

Insurance Premiums

Insurance premiums consist of health, dental and life insurance. In 2007, health insurance expenditures made up 95.1 percent of the costs in this line item. From 2002 through February

2009, the City's health insurance premiums increased an average of 13.2 percent per year. The City's premiums run from March to February. The average of 13.2 percent excludes the premium increase taking effect in February 2008 because the City changed the plan offered to employees. In order to be conservative and account for the 17 percent increase in premiums taking effect in March 2008, this category is projected to increase by 14 percent annually. Furthermore, because the City's health insurance premiums affect all employees, this same methodology and assumption was used to project insurance premiums for employees in the Wastewater and Sanitation funds.

Travel & Training

Travel and training represent a small portion of total expenditures. In order to reflect the most recent year's expenditures, this category is projected at the average dollar amount spent the last three years.

Purchased Services

From 2003 to 2007, purchased services did not exhibit a consistent trend. Therefore, this category is projected at the average dollar amount for the last three years and increased by 2.07 percent each year, which was the average annual increase over the last three years. This provides projections based on the most recent information in an effort to best reflect the current situation in the Water Division.

Supplies and Materials

In 2004, this line item was significantly impacted by the High Tech Park infrastructure construction. There are no major projects planned during the forecast period. As of July 31, 2008, the City was on track to spend approximately \$305,000 in 2008. However, according to the Service Director, the Division makes significant purchases of supplies at the beginning of the year. In consideration of this explanation and the year-to-date expenditures, this category is projected at \$269,000 for 2008, which is the average dollar amount spent in 2006 and 2007. Thereafter, this category is increased by 5.8 percent per year. This is half of the average annual percent increase from 2005 through 2007, which is conservative based on the fact that expenditures actually declined in 2007. Furthermore, in contrast to the Sanitation Division, year-to-date fuel costs represent only about 11 percent of year-to-date supply and material expenditures.

Capital Outlay

Capital Outlay includes expenditures for infrastructure improvements to the water treatment plant and distribution system. Since historical data does not reveal a trend for capital

expenditures and because the City does not plan for capital outlay (see **operations** section), this category is projected at the average dollar amount spent over the past five years.

Other Expenses – Well Maintenance

Other expenses – well maintenance did not reveal a consistent trend. In order to account for more recent trends and in light of the lowest and highest expenditures occurring in 2003 and 2004, this category for 2008 is based on the average dollar amount spent from 2005 to 2007. Thereafter, this category is increased by 3 percent annually to account for inflation.

Refunds

Since 2003, refunds have comprised an insignificant level of expenditures. As a result, this category is projected at the average dollar amount spent over the last 3 years.

Debt Payments

The forecast assumes continuation of payments throughout the forecast period, based on the long-term obligations noted in the audited financial statements.

Water Division Improvement Fund Revenues:

Water Revenue

From 2003 to 2007, this line item represented 5.26 percent of water bill receipts. The forecast assumes this level of funding will continue.

Water Division Improvement Fund Expenditures:

Capital Outlay

According to the Auditor, fund revenues will be used for capital outlay throughout the forecast period. Therefore, for 2008, this category is projected at the budgeted amount. Thereafter, the forecast assumes capital outlay expenditures equal to annual revenues.

Wastewater Funds Financial Forecast

Table 2-2 presents three years of historical information and projections through 2013 for the City's Wastewater Division Funds.

Table 2-2: Wastewater Division Forecast (in 000's)

Operating Fund									
	Actuals			Forecasted					
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Wastewater Revenue	\$1,744	\$1,715	\$1,670	\$1,656	\$1,643	\$1,629	\$1,615	\$1,602	\$1,589
Wastewater Tap	\$9	\$9	\$6	\$10	\$10	\$10	\$10	\$10	\$10
Pretreatment	\$16	\$14	\$9	\$9	\$9	\$9	\$9	\$9	\$9
Wastewater Miscellaneous	\$1	\$0	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3
Construction Proceeds	\$112	\$60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Const Proceeds - Sanitary	\$2	N/A	\$15	N/A	N/A	N/A	N/A	N/A	N/A
Loan Proceeds	\$0.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Revenues	\$1,887	\$1,805	\$1,702	\$1,677	\$1,663	\$1,649	\$1,636	\$1,623	\$1,609
Salaries and Wages	\$586	\$564	\$540	\$562	\$584	\$608	\$632	\$657	\$683
Benefits	\$112	\$113	\$118	\$112	\$117	\$121	\$126	\$131	\$136
Health Insurance	\$83	\$92	\$112	\$128	\$146	\$167	\$190	\$217	\$247
Travel & Training	\$1	\$3	\$2	\$2	\$2	\$2	\$2	\$2	\$2
Purchased Services	\$307	\$335	\$292	\$297	\$301	\$306	\$310	\$315	\$320
Supplies and Materials	\$115	\$134	\$127	\$156	\$149	\$160	\$172	\$184	\$198
Capital Outlay	\$232	\$103	\$153	\$132	\$136	\$140	\$144	\$148	\$153
Mill Ave Sewer Debt	\$10	\$10	\$10	\$10	\$10	\$10	\$10	\$0	\$0
Debt Payments	\$582	\$596	\$596	\$596	\$596	\$596	\$596	\$596	\$596
Refund	\$0	\$0	\$0.2	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures	\$2,032	\$1,952	\$1,954	\$1,998	\$2,045	\$2,113	\$2,186	\$2,255	\$2,340
(Deficit)/Surplus	(\$144)	(\$147)	(\$252)	(\$321)	(\$381)	(\$463)	(\$550)	(\$632)	(\$730)
Beginning Cash Balance	\$1,040	\$896	\$748	\$496	\$175	(\$206)	(\$670)	(\$1,220)	(\$1,852)
Ending Cash Balance	\$896	\$748	\$496	\$175	(\$206)	(\$670)	(\$1,220)	(\$1,852)	(\$2,582)
Encumbrances ¹	\$151	\$169	\$70	\$130	\$130	\$130	\$130	\$130	\$130
Ending Fund Balance	\$744	\$579	\$426	\$44	(\$336)	(\$800)	(\$1,350)	(\$1,982)	(\$2,713)
Cumulative Impact of Audit Recommendations	N/A	N/A	N/A	N/A	\$21	\$44	\$67	\$91	\$116
Adjusted Balance	N/A	N/A	N/A	N/A	(\$315)	(\$756)	(\$1,283)	(\$1,891)	(\$2,596)
Improvement Fund									
	Actuals			Forecasted					
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Sewer Revenue	\$91	\$90	\$87	\$87	\$86	\$85	\$84	\$84	\$83
Reimbursements	N/A	\$0	\$37	\$10	\$0	\$0	\$0	\$0	\$0
Total Revenues	\$91	\$90	\$124	\$97	\$86	\$85	\$84	\$84	\$83
Capital Outlay	\$312	\$75	\$200	\$139	\$86	\$85	\$84	\$84	\$83
Total Expenditures	\$312	\$75	\$200	\$139	\$86	\$85	\$84	\$84	\$83
(Deficit)/Surplus	(\$220)	\$15	(\$75)	(\$41)	\$0	\$0	\$0	\$0	\$0
Beginning Fund Balance	\$315	\$94	\$109	\$34	(\$6)	(\$6)	(\$6)	(\$6)	(\$6)
Ending Fund Balance	\$94	\$109	\$34	(\$6)	(\$6)	(\$6)	(\$6)	(\$6)	(\$6)

Source: The City of New Philadelphia and AOS

¹ Encumbrances are projected at the average amount from 2005 to 2007. As encumbrances were not reported in the Improvement Fund from 2005 to 2007, they are not projected for this fund.

Forecast Assumptions

The following lists the assumptions used to develop the revenue and expenditure projections in **Table 2-2**.

Wastewater Division Operating Revenues:

Wastewater Revenue

Wastewater revenue results from consumption fees. From 2003 to 2007, wastewater revenue declined by an average of 0.83 percent per year. Assuming current rates and no significant new residential and commercial development, the forecast reflects an annual 0.83 percent decline, based on actual revenues in 2007. Although the City increased rates in 2008, year-to-date projections through July 2008 support this forecast assumption.

Wastewater Tap

Revenue in this line item increased by an annual average of 47.97 percent over the last five years. However, wastewater tap revenues are immaterial, ranging from approximately \$2,000 to \$10,000 during the last five years. Since there are no known plans for annexation of property and the economic climate is not conducive to new construction, projections for 2008 are based on the tap fees collected as of July 31 (\$9,000), plus an additional \$1,000 to account for the remainder of the year. Thereafter, projections are increased by 1 percent annually.

Pretreatment

These fees are collected from businesses whose water needs to be treated prior to discharge. Due to the lack of a consistent trend, and because pretreatment revenues represent an immaterial amount, this category was projected at the amount collected in 2007. Revenues in 2007 were lower than in the other years since 2003.

Wastewater Miscellaneous

This line item is insignificant (\$385 in 2007); therefore, it is projected at the amount from 2007.

Construction and Loan Proceeds

These line items were used to account for loan money used for the wastewater plant expansion and upgrade, and sale of assets. Since this project is now complete, no revenues are projected throughout the forecast.

Wastewater Division Operating Expenditures:

Salaries and Wages

Refer to the assumption for the Water Fund.

Fringe Benefits

This category is projected at 20.02 percent of the total salaries and wages. The average from 2003 to 2007 was 19.87 percent, and an additional 0.15 percent was included to account for the increase in the employer retirement contribution from 2007 to 2008.

Health Insurance

Refer to the assumption for the Water Fund.

Travel & Training

In order to reflect the most recent years' expenditures, travel and training is projected at the average dollar amount spent the last three years.

Purchased Services

From 2003 to 2007, purchased service expenditures increased by an average of 1.54 percent per year and are projected to continue to increase at this rate, based on 2007 expenditures. While this category did not exhibit a consistent historical trend, using a growth rate of 1.54 percent per year represents a conservative approach because purchased services declined in 2007.

Supplies and Materials

Supply and material expenditures have fluctuated each year from 2003 to 2007. However, expenditures in 2006 and 2007 were relatively similar (\$135,000 and 128,000, respectively) and represent the highest level of expenditures the last five years. In 2008, the City budgeted \$174,389 for this line item. However, by the end of July, 2008 the Division had spent only \$67,104. The forecast assumes the Division will spend \$156,950. This amount represents 90 percent of the budgeted amount to reflect expected purchases in the latter part of 2008, based on discussions with the Division Supervisor. In 2009, expenditures are projected at the average amount from 2006 to 2008, and are increased by 7.26 percent annually thereafter. This percentage represents the annual average percent change in 2006 and 2007 and the forecast amount in 2008.

Capital Outlay

There are no known plans for major capital outlay and the water treatment plant is new. Therefore, this category is projected at the average amount for the last two years and increased by 3 percent annually.

Mill Ave. Wastewater Debt Service

This debt was incurred in 1991 for financing from the Ohio Public Works Commission. Annual debt payments will continue through 2011, based on the 2007 financial audit debt notes.

Debt payments

The projections for debt assume payments will be in the amounts described in the 2007 financial audit notes.

Refunds

As the last five years showed insignificant amounts paid out (high of approximately \$300), no expenditures are projected throughout the forecast period.

Wastewater Improvement Fund Financial Forecast Assumptions

Wastewater Division Improvement Fund Revenues:

Wastewater Revenue

From 2003 to 2007, the City allocated 5.26 percent of wastewater revenues to this line item. The forecast assumes revenue will continue at this level.

Reimbursements

Since 2003, there have been no reimbursements, except for \$37,000 in 2007. The City year-to-date receipts through July 2008 show reimbursements at \$10,157. According to the Auditor, this was a one-time reimbursement. Therefore, this category is projected at the year-to-date amount for 2008, and \$0 thereafter.

Wastewater Division Improvement Fund Expenditures:

Capital Outlay

This line item was used to account for expenditures related to High Tech Park. For 2008, projected expenditures are based on the City's budgeted amount of \$139,000. However, according to the Auditor, the entire fund amount will be expended every year. Therefore, this line item is projected to match revenues throughout the forecast period.

Sanitation Fund Financial Forecast

Table 2-3 presents three years of historical information and projections through 2013 for the City's Sanitation Fund.

Table 2-3: Sanitation Fund Financial Forecast (in 000's)

	Actuals			Forecasted					
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Real Estate Taxes	\$655	\$692	\$363	\$351	\$0	\$0	\$0	\$0	\$0
State Taxes	\$98	\$75	\$34	\$43	\$0	\$0	\$0	\$0	\$0
Personal Property Taxes	\$176	\$112	\$54	\$44	\$0	\$0	\$0	\$0	\$0
Personal Property Replacement	N/A	\$49	\$93	\$121	\$158	\$160	\$0	\$0	\$0
Manufactured Home Taxes	N/A	N/A	\$2	\$1	\$0	\$0	\$0	\$0	\$0
Recycling Program Proceeds	\$74	\$143	\$67	\$97	\$55	\$12	\$12	\$12	\$12
Sanitation Misc.	\$0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sanitation Billing Receipts	N/A	\$0	\$824	\$824	\$824	\$824	\$824	\$824	\$824
Total Revenues	\$1,004	\$1,073	\$1,441	\$1,484	\$1,039	\$996	\$836	\$836	\$836
Salaries and Wages	\$449	\$446	\$471	\$490	\$510	\$530	\$552	\$574	\$597
Benefits	\$94	\$86	\$96	\$102	\$106	\$110	\$115	\$119	\$124
Health Insurance	\$69	\$80	\$79	\$90	\$102	\$117	\$133	\$152	\$173
Purchased Services	\$52	\$96	\$90	\$105	\$110	\$115	\$121	\$127	\$134
Supplies and Materials	\$34	\$30	\$32	\$62	\$69	\$77	\$86	\$96	\$107
Capital Outlay	\$0	\$0	\$0	\$115	\$0	\$121	\$0	\$129	\$0
Landfill	\$311	\$324	\$327	\$357	\$370	\$385	\$409	\$430	\$452
Recycling	\$17	\$22	\$31	\$35	\$38	\$42	\$46	\$51	\$56
Total Expenditures	\$1,029	\$1,087	\$1,129	\$1,358	\$1,308	\$1,502	\$1,465	\$1,681	\$1,645
Spending (Deficit)/Surplus	(\$25)	(\$14)	\$311	\$126	(\$269)	(\$505)	(\$628)	(\$844)	(\$809)
Beginning Cash Balance	\$165	\$140	\$125	\$437	\$563	\$294	(\$211)	(\$839)	(\$1,684)
Ending Cash Balance	\$140	\$125	\$437	\$563	\$294	(\$211)	(\$839)	(\$1,684)	(\$2,493)
Encumbrances ¹	\$30	\$28	\$40	\$33	\$33	\$33	\$33	\$33	\$33
Ending Fund Balance	\$109	\$96	\$396	\$530	\$261	(\$244)	(\$872)	(\$1,717)	(\$2,526)
Cumulative Impact of Audit Recommendations	N/A	N/A	N/A	N/A	\$21	\$44	\$67	\$92	\$117
Adjusted Balance	N/A	N/A	N/A	N/A	\$282	(\$200)	(\$804)	(\$1,625)	(\$2,408)

Source: The City of New Philadelphia and AOS

Note: The Sanitation Fund consists of only one fund used for operations and capital improvements. Historically, the fund has not been considered an enterprise fund.

¹ Encumbrances are projected at the average amount from 2005 to 2007.

Forecast Assumptions

The following lists the assumptions used to develop the revenue and expenditure projections in **Table 2-3**.

Sanitation Division Fund Revenues:***County Real Estate Taxes***

The sanitation levy of 2.25 mills expired in 2007. As a result, there will be no additional tax revenues after 2008. The collections for 2008 reflect the last half of tax payments.

State Taxes

State taxes comprise rollbacks and exemptions paid to the City by the State. The City's 2008 projected revenues from state taxes reflect final payments from the expiring levy.

Personal Property Taxes

Because of legislated changes in House Bill 66, there will be no additional revenues in this line item after 2008. According to the County Auditor, one final payment of approximately \$24,000 will be received in October 2008, which is reflected in the projected annual revenues for 2008.

Personal Property Replacement

According to the County Auditor and Ohio Department of Taxation, the City will receive reimbursements for phased-out Tangible Personal Property Tax as legislated in HB 66. Reimbursement amounts paid to the City in the five-year forecast are based on Ohio Department of Taxation calculations and will not occur after 2010, based on the current levy status.

Manufactured Home Taxes

The projection for 2008 reflects final payments received as a result of the expiring levy.

Recycling Program Proceeds

These proceeds are from a grant as well as payments for recycling tonnage. After 2008, the City will no longer receive the Transition portion of grant money from the Stark-Tuscarawas-Wayne Joint Solid Waste Management District. However, the final amount of grant money (50 percent) will be paid in 2009. Based on this grant, the tonnage recycled in 2007, and the current rate of \$25 per ton, this category is projected at approximately \$98,000 in 2008 and \$56,000 in 2009. Thereafter, the City will continue to receive only the payment for recycling tonnage, which is expected to generate approximately \$12,000 per year based on recycling tonnage in 2007 and the current rate of \$25 per ton.

Sanitation Miscellaneous

Historically, there have been minimal miscellaneous receipts, with no receipts in 2006 and 2007. Therefore, no revenues are projected in this category.

Sanitation Billing Receipts

The City began charging for sanitation services in 2007. Because only one full year of receipt data is available, the forecast assumes the rates and number of accounts will remain constant. Billing receipts are projected at the 2007 level throughout the forecast period. However, based on year-to-date revenues through July, revenues are on pace to be approximately 2 percent higher in 2008, making the projections somewhat conservative.

Sanitation Division Fund Expenditures:***Wages and Salaries***

Refer to the assumption for the Water Fund.

Benefits

This category is projected at 20.83 percent of salaries and wages. The average from 2003 to 2007 was 20.68 percent, and an additional 0.15 percent was included to account for the increase in the employer retirement contribution from 2007 to 2008.

Health Insurance Premiums

Refer to the assumption for the Water Fund.

Purchased Services

Purchase services increased by an average of 11.52 percent per year from 2003 to 2007. However, expenditures in 2006 and 2007 were similar (\$96,582 and \$90,440), and the year-to-date expenditures through July show that purchased services are on pace to total approximately \$105,000 in 2008. This would result in an average annual increase of 4.9 percent from 2006 to 2008. In order to reflect the most current conditions, expenditures in 2008 are projected based on year-to-date expenditures, with an annual increase of 5 percent thereafter.

Supplies and Materials

While expenditures for supplies and materials fluctuated widely from year-to-year, they increased by an average of 11.43 percent from 2003 to 2007. As of July 31, 2008, fuel costs

alone had exceeded the entire amount spent in 2007 for supplies and materials. In order to best reflect the impact of current fuel prices, this category is projected at the annualized amount for 2008, based on the year-to-date expenditures through July. Thereafter, this category is projected to increase by 11.43 percent annually, based on the average from 2003 to 2007.

Capital Outlay

From 2003 through 2007, there were no capital expenditures. However, forecast projections in 2008 are based on the actual budgeted amount for a new truck. According to the City, a truck is expected to be replaced every other year throughout the forecast period. As a result, projections for capital outlay are shown for 2010 and 2012, based on 2008 actual expenditures and increased by 6 percent in each year of purchase to reflect a 3 percent annual inflationary factor.

Landfill

The City has a contract with a landfill company in Dover, Ohio. The current contract term is from May 2008 to May 2011. Within the contract there is an annual base amount plus variable tonnage and processing fees that are mandated by, and passed on to, the Environmental Protection Agency (EPA). These fees can increase throughout the contract period. In order to project future landfill expenses, the ratio of the annual base contract amount to the actual landfill expenditures was determined for years 2005 through 2007. Tonnage data from 2006 and 2007 was used to estimate future tonnage amounts and associated fees. After May 2011, the base contract and fees are based on the increases in the contracts since March 2005. It is important to note that while the current contract includes fees for leaves, those fee estimates are not included in the forecast because fees are expected to be minimal (according to the Landfill company) and no data was available for projections.

Recycling Expenditures

Recycling expenditures have increased each year since 2005. Increases were 24 percent in 2006 and 43 percent in 2007. In addition, the five-year average annual increase was 82 percent. To best reflect current recycling expenditures, projections are based on expenditures in 2007 and increased by 10 percent each year thereafter. This assumes that the rate of increase will drop, when compared to 2006 and 2007. However, a 10 percent annual increase still represents a relatively aggressive rate of growth. Lastly, recycling expenditures comprise an immaterial portion of total Sanitation Fund expenditures, at less than three percent of total expenditures in 2007 (approximately \$32,000).

This page intentionally left blank.

Operations

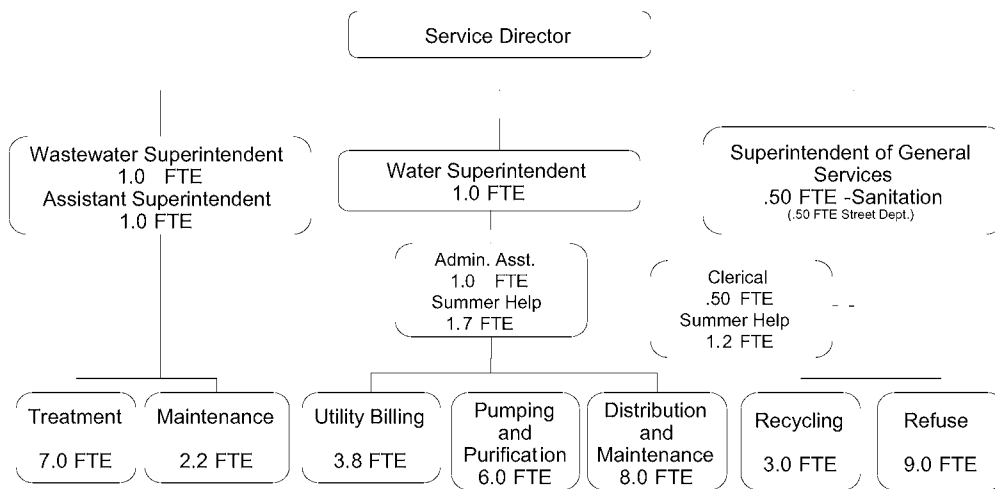
Background

This section of the report focuses on the operations of the City of New Philadelphia’s (the City or CNP) Water, Wastewater and Sanitation divisions. Processes were reviewed, evaluated and compared to leading practices, industry benchmarks, operational standards,¹ and the Ohio Revised Code (ORC). Likewise, peer cities were used for comparison purposes, which included Athens, Defiance, North Canton, and Lyndhurst.

Organization and Operations

Chart 3-1 illustrates the current organization and reporting structure of the Water, Wastewater, and Sanitation Divisions.

Chart 3-1: CNP Organization



Source: CNP

As shown in **Chart 3-1**, each division is under the control of a superintendent, who reports to the Service Director.

¹ Leading practices and industry standards were drawn from several sources, including the Government Finance Officers Association (GFOA) and the Environmental Protection Agency (EPA).

The CNP Water Division is responsible for the pumping, purification, and distribution maintenance of potable water for both residential and commercial customers. In the water treatment facility, water is pumped and purified using two eight hour employee shifts, morning and afternoon. In the evening, the treatment plant operates with only one person for security purposes. The distribution and maintenance section is responsible for the maintenance and repair of water lines as well as residential and commercial meters. Although the distribution maintenance staff spends a large portion of its time maintaining the water distribution infrastructure, staff members are cross-trained to maintain streets or other infrastructure in the Service Division, as needed. The Utility Billing Division (UBD) provides billing and collection services for water, sewer, and sanitation user fees, as well as other customer service related duties, as needed.

The CNP Wastewater Division is responsible for the maintenance of the sewer collection system (storm and sanitary mains and lift stations) and the treatment of wastewater for both residential and commercial customers. There are eighteen wastewater lift (pumping) stations around the City and twenty pumps inside the wastewater treatment plant. The wastewater plant operates three shifts morning, afternoon, and evening to maintain a twenty-four hour operation, seven days a week.

The CNP Sanitation Division is responsible for the collection of refuse and recyclables for both residential and commercial customers. The Sanitation Division uses a manual collection process whereby each truck has one driver and two employees; one riding in the passenger side of the truck, and one standing on the back of the truck. The City runs a shuttle process on heavy days using an empty refuse truck that follows the crew on the route so that the refuse truck can continue its collections. When the refuse truck is filled, the empty truck is given to the crew and their full truck is taken to the landfill by one person. The Sanitation Division collects everything that is set out on the curb to maintain a high level of satisfaction from its residents. The Parks Department also collects debris at the park, which is disposed of by the Sanitation Division to the landfill.

Financial and Statistical Data

Table 3-1 compares CNP Water Division operational data to that of the peers.

Table 3-1: Water Comparison (2007)

	CNP	Athens	Defiance	North Canton	Peer Average
Million Gallons Treated Daily (MGD)	2.4	3.2	3.8	3.6	3.5
MGD Plant Capacity	5.0	7.0	8.0	9.0	8.0
Percent of Maximum Treatment Capacity Used	48%	46%	48%	40%	45%
Expenditures per Gallon Treated	\$0.0028	\$0.0033	\$0.0072	\$0.0098	\$0.0068

Source: City of New Philadelphia and peer entities

Note: Totals may vary due to rounding

As shown in **Table 3-1**, CNP uses 48 percent of its plant capacity, higher than the peer average of 45 percent. In addition, the City's expenditures per gallon treated were 41 percent lower than the peer average and lower than each peer. This could be due, in part, to maintaining efficient staffing levels (see further analysis in **Tables 3-4**).

Table 3-2 compares operational data at CNP's Wastewater Division to the peers.

Table 3-2: Wastewater Comparison (2007)

	CNP	Athens	Defiance	Peer Average
MGD Treated	2.3	2.1	3.5	2.8
MGD Plant Capacity	4.5	7.0	6.5	6.7
Percent of Maximum Treatment Capacity Used	51%	30%	54%	42%
Expenditures per Gallon Treated	\$0.0027	\$0.0023	\$0.0015	\$0.0019

Source: CNP and peer entities.

Note 1: Totals may vary due to rounding

Note 2: The City of North Canton was not used in this analysis because the City of Canton treats its wastewater.

Table 3-2 shows that CNP uses more of its treatment capacity than the peer average. However, CNP's expenditures per gallon treated were higher than both peers. The City's debt service expenditures contribute to the higher costs per gallon. More specifically, debt payments represented the highest expenditure line item in 2007 in the Wastewater Operating Fund, totaling approximately \$596,000 and comprising approximately 31 percent of total expenditures in the Operating Fund. This debt is related to the wastewater treatment plant improvements.

Table 3-3 compares CNP Sanitation Division operational data to that of the peers.

Table 3-3: Sanitation Comparison (2007)

	CNP	Athens ¹	Lyndhurst	North Canton ¹	Peer Average
Total Refuse & Recycling Disposed (Tons)	11,322	6,062	9,340	N/A	7,701
Recycle (Tons)	549	1,973	1,069	774	1,272
Expenditures per Ton Disposed	\$100	\$151	\$94	N/A	\$122

Source: City of New Philadelphia and peer entities

Note 1: Totals may vary due to rounding

Note 2: **Table 3-3** excludes costs and tons for brush because the Street Division is responsible for brush pick-up.

¹ Contracted services

Lyndhurst is the only peer that provides sanitation services in-house. As illustrated in **Table 3-3**, CNP's costs per ton are higher than Lyndhurst, but lower than Athens. The higher costs when compared to Lyndhurst could be due, in part, to providing more services. For instance, in contrast to CNP, Lyndhurst does not provide commercial sanitation services.

Staffing

Table 3-4 compares CNP Water Division staffing to that of the peers.

Table 3-4: Water and Utility Billing Staff Comparison (2008)

	CNP	Athens	Defiance	North Canton	Peer Average
Superintendent	1.00	0.50 ²	2.00	1.00	1.17
Clerk Utility Billing	3.78 ¹	1.50	4.00	2.00	2.50
Clerical Other	1.00	0.00	1.00	1.00	1.00
Supervisors	0.00	1.10	0.00	0.00	N/A
Meter Reader	2.00	2.00	3.00	2.00	2.33
Lab Technician	0.00	2.50	1.00	4.00	2.50
Plant Operator	6.00	7.00	7.00	3.00	5.67
Water Maintenance	6.00	6.00	8.00	2.00	5.33
Summer Help	1.68	0.00	0.00	0.00	N/A
Total FTEs	21.46	20.60	26.00	15.00	20.53
Staff to Supervisor Ratio ³	20.46	11.88	12.00	14.00	12.63
Miles of water mains per maintenance FTE	17.11	18.33	17.14	70.00	17.74⁴
Number of Water Accounts per water meter reader FTE	3,829	2,893	2,245	4,397	3,178
Number of Water Accounts per clerk FTE	2,028	3,857	1,684	4,397	3,312

Source: CNP and peer cities

¹ This includes 3.00 FTEs in utility billing and one part-time employee who accounts for 0.78 FTE.

² This superintendent position is in charge of water and wastewater service. Therefore, one-half of time is charged to the Wastewater Division and the other to Water Division.

³ Includes Superintendent and Supervisor positions.

⁴ Peer average excludes North Canton because of its significantly higher number of miles per FTE.

Table 3-4 shows that, with the exception of clerks, CNP’s staffing levels appear reasonable, based in part on the number of water mains and accounts. Specifically, CNP maintains 1,284 fewer accounts per clerk FTE, when compared to the peer average (see **R3.8**). However, CNP employs only one supervisor position (Superintendent), resulting in a higher staff-to-supervisor ratio than each peer. Furthermore, **Table 3-4** shows that CNP employs fewer plant operators than two of the three peers and does not employ any lab technicians. According to the Water Superintendent, all employees are able to cover every aspect of operations, regardless of their position. For instance, during multiple visits to the water plant that occurred during the course of this performance audit, it was noted that there were plant operators performing lab technician functions. **Table 3-4** also shows that CNP is the only city that has summer help, which accounts for 1.68 FTEs. According to the Water Superintendent, the summer help performs non-routine preventive maintenance work that might be otherwise contracted out. Developing a performance measurement system (see **R3.7**); conducting financial, strategic and capital planning (see **R3.1**, **R3.5** and **R3.6**); and establishing formal budget procedures (see **R3.2**) would help ensure the use of summer help, and staff in general, are cost and operationally effective.

Table 3-5 compares CNP’s wastewater staffing levels to those of the peers.

Table 3-5: Wastewater Staffing Comparison (2008)

Wastewater Staffing	CNP	Athens	Defiance	North Canton	Peer Average
Wastewater/Stormwater Administration					
Superintendent/Assistant Superintendent	2.00	0.50 ¹	2.00	0.33 ²	0.94
Clerical	0.00	1.50	1.00	0.00	1.25
Operations Manager	0.00	1.00	1.00	0.50	0.83
Total Wastewater Administration Staff	2.00	3.00	4.00	0.83	3.06
Wastewater Treatment ³					
Shift Operator	5.00	7.00	6.00	0.00	6.50
Lab/ Plant Workers	2.00	2.50	1.00	0.00	1.75
Total Wastewater Treatment Staff	7.00	9.50	7.00	N/A	8.25
Wastewater/Stormwater Maintenance					
Sewer Maintenance	2.00	6.00	4.00	3.00	4.33
Summer Help	0.20	0.00	0.00	0.00	0.00
Total Wastewater Maintenance Staff	2.20	6.00	4.00	3.00	4.33
Total Wastewater FTEs	11.20	18.50	15.00	3.83	16.75 ³
Staff to Supervisor Ratio ⁴	4.60	11.33	4.00	3.61	6.31
Miles of Sanitary Sewer Mains per Maintenance FTE	44.64	18.33	15.25	25.00	19.53
Miles of Storm Sewer Mains per Maintenance FTE	17.61	N/A	9.75	21.67	15.71 ⁵

Source: CNP and peer cities

¹ This superintendent position is in charge of water and wastewater service. Therefore, one-half of the time is charged to the Wastewater Division and the other to Water Division.

² This is the Superintendent of Utilities, Services and Recreation. Therefore, only 33 percent of the time is presented in **Table 3-5**.

³ North Canton was excluded from the peer average as they do not operate a wastewater treatment facility.

⁴ Supervisors include superintendent, assistant superintendent, and operation manager

⁵ The peer average includes only the cities of Defiance and North Canton as the City of Athens was unable to provide miles of storm sewer mains.

As shown in **Table 3-5**, CNP's staffing levels appear to be efficient. Specifically, the ratios of miles of sanitary sewer mains per FTE and miles of storm sewer mains FTE are higher than the respective peer averages. Likewise, the City employs the same number of treatment staff as Defiance, but fewer than Athens. See **Issues for Further Study** for a discussion of automation which can help the City operate with fewer wastewater treatment and water operator staff (see **Table 3-4**) in the future.

Table 3-6 compares Sanitation Division staffing at CNP to Lyndhurst. The other three peer cities (Athens, Defiance, and North Canton) contract out their waste collection services.

Table 3-6: Sanitation Staffing Comparison (2008)

Sanitation Staffing	CNP	Lyndhurst	Difference
Superintendent	0.50 ¹	1.00	(0.50)
Clerical	0.50 ²	1.00	(0.50)
Foreman	0.00	1.00	(1.00)
Crew Leaders	0.00	4.00	(4.00)
Collection Laborers	12.00	22.60	(10.60)
Summer Help	1.20	2.19	(1.04)
Total FTE	14.20	31.79	(17.64)
Staff to Superintendent Ratio	27.31	30.79	(3.48)
Tons of solid waste collected per FTE³	866.04	351.15	514.89
Number of daily stops per FTE³	172.50	44.81	127.69
Number of weekly stops per FTE³	862.83	224.06	638.77

Source: CNP and peer cities

¹ The superintendent is also responsible for the Street and Traffic Divisions; therefore, only 50 percent of the time is budgeted to the Sanitation Division.

² The clerical position is also responsible for work in the Street and Traffic Divisions; therefore, only 50 percent of the time is budgeted to the Sanitation Division.

³ FTEs include crew leaders and laborers since all are used to collect the solid waste, which includes refuse and recycling.

Lyndhurst, similar to CNP, runs each sanitation truck with one driver and two individuals loading the solid waste onto the truck. Even though Lyndhurst does not provide commercial collections, it has a higher number of FTEs when compared to CNP, which collects commercial solid waste. As shown in **Table 3-6**, CNP collects more than double the amount of refuse and recycling materials per FTE and has significantly more stops per FTE, when compared to Lyndhurst. Furthermore, CNP employs fewer summer help FTEs than Lyndhurst.

Municipal Benchmarks²: Assessing Local Performance and Establishing Community Standards (David Ammons, 2001) provides the following indicators for refuse collection practices:

- Charlotte, NC collects an average of 625 tons per staff (1993), while CNP collects 866 tons per FTE (all 12 are full-time staff). When excluding recyclable FTEs and tonnage, CNP collects 1,094 tons per FTE. However, Peoria, AZ collects 230.45 tons per month per operator in 1991, for 2,765 annual tons per operator.
- Dunedin, FL collects 0.42 tons per labor hour (1992); College Park, MD targets 0.5 tons per labor hour; Long Beach, CA collected 0.7 tons per labor hour in 1994 and 0.8 in both 1995 and 1996; and Victoria, TX collected 1.51 tons of solid waste per hour (1996). By comparison, CNP collect 0.42 tons per labor hour. When excluding recycling tonnage and FTEs, CNP collects 0.53 tons per labor hour.

² It is unclear whether Municipal Benchmarks includes the amount of refuse and recycling collected in the reported ton-to-staff ratios.

- Shreveport, LA averages 1,145 weekly stops per employee (1994), while Corpus Christi, TX averages 1,130 weekly stops per employee (1992). However, CNP averages 863 stops per FTE per week.

Additionally, the City of Edmond, Oklahoma (City of Edmond) runs a fully automated operation. This means that the crew consists of one driver, and the sanitation collections truck automatically lifts the carts or trash cans and dumps them. According to the City of Edmond, by operating a fully automated refuse collection process, a city can increase the number of households served per worker, per hour by 300 percent. The City of Edmond tracks its misses and maintains fewer than five misses per 10,000 collections. A miss is tracked when a customer calls to report they have missed their collection, regardless of the circumstances. CNP has a ratio of approximately 2.5 misses per 10,000 collections. See **Issues for Further Study** regarding the automation of services, which could help CNP increase the number of stops and tonnage per FTE, as well as overall efficiency.

Assessments Not Yielding Recommendation

In addition to the analyses in this report, assessments were conducted on areas which did not warrant changes and did not yield recommendations. These areas include the following:

- **Water Meter Technology:** The City is in the process of automating its meter reading process via a touchpad system. Touch pad systems allow the meter reader to gather data in digital form from a sensor mounted on the outside of the home without having to gain entry. Currently, approximately 70 percent of meters are read by the touch pad system, while the remaining 30 percent are still read manually. According to the Water Superintendent, touchpad technology makes the meter reading process faster and more accurate. The Water Superintendent also noted that prior to the technology upgrade, the City estimated half of the water readings because of inaccessibility of the meters. The rest of the manual meters will need to be replaced with a touchpad system, which will have to be included in the City's planning process (see **R3.6** for more information on capital planning).
- **Utility Billing Technology:** The Utility Billing Division (UBD) uses a software system for its billing and work order process. The software allows the City to include all three utilities (water, wastewater and sanitation) on one monthly bill. Additionally, reports from the system allow UBD to follow up on water use variances, detect possible leaks, track historical usage by customer, and process billing information reports for mailing. UBD uses the reports to contact customers and identify malfunctioning meters that require maintenance. These are then entered in the work order system.

- **Billing Process:** Since April 2008, the City has outsourced a portion of its billing function to a company which processes and mails the water, sewer and sanitation bill. According to the Water Superintendent, this has resulted in a smooth billing process. The company controls the process of printing and mailing the bills. The City does not have a part in the process after creating the bills. The company also includes one extra piece of paper per mailing, so the City can send different fliers to inform the residents of events and services.
- **Mapping Technology:** CNP has a geographical information system (GIS) that is used to house its infrastructure inventory, such as utility mains. There is a connection between the GIS and the work order system. In addition, CNP received the Best Practices Award from the Ohio Geographically Referenced Information Program (OGRIP) in 1998. The program is designed to recognize organizations in Ohio that have implemented, or are in the process of implementing GIS in a manner consistent with OGRIP's goals and objectives.
- **Preventive Maintenance (PM):** The City has a PM program that allows it to create a list of all scheduled maintenance actions that can reduce the amount of unscheduled and emergency repairs on all equipment. The Sanitation, Water and Wastewater divisions have a preventive maintenance program in place and have a form of documentation to ensure the maintenance is completed in a timely and appropriate manner.
- **Utility Collections and Billing Processes:** Along with the use of technology for billing and collections (see above), CNP has been proactive in finding alternative methods of payment for its customers which provide convenient payment options. This, in turn, increases the potential for payment. Furthermore, there has been an increase in the number of liens placed on properties as a means of maintaining aggressive collection practices. In 2007, CNP collected over 100 percent of total billings (water, wastewater and sanitation). Lastly, CNP has an insignificant level of delinquencies. Specifically, as of August 18, 2008, the City reported approximately \$41,000 in amounts 30 to 90 days past due.³ By comparison, CNP reported collections of approximately \$4.6 million in 2007.

³ CNP's delinquency report also shows a "total due" column alongside the 30, 60 and 90 day past due columns. When adding the total due column, the delinquencies amount to approximately \$89,000. While this amount may be duplicating delinquencies, it was not further investigated as it still represents an insignificant amount.

- **Compliance:** Based on a sample review of 33 utility bills (August 2008), CNP is complying with the following ordinances related to billing and collections:
 - Codified Ordinance 937.02 (a) imposes a 10 percent late fee on those who are delinquent after 15 days, which is comparable to the peers.
 - Codified Ordinance 937.02 (b) was developed to enforce and suspend service if utility bills are past due. CNP’s codified ordinance holds both the lessors and lessees responsible and liable for the payment of utility charges, as allowable by ORC § 743.04. In addition to the sample review of utility bills, proof of adherence to the codified ordinance is evident by the City’s low delinquency rates.
 - Codified Ordinance 935.02 – “All consumers of water and sewer outside the City limits shall be charged an additional 50 percent of current water/sewer rate.”

Issues for Further Study

Auditing standards require the disclosure of significant issues identified during an audit that were not reviewed in depth. These issues may not be directly related to the audit objectives or may be issues that the auditors do not have the time or resources to pursue. The following presents issues requiring further study:

- **Automation of Refuse Collection and Water/Wastewater Treatment:** Based on the analyses accompanying **Tables 3-3** and **3-6**, CNP’s manual sanitation services appear to be relatively efficient. However, according to *Automated Refuse Collection* (The Heil Co., 2004), automating services reduces costs for a household by an average of approximately 25 percent, through reduced labor and overtime, fewer injuries and workers compensation claims, lower insurance rates, and a reduction in fuel use. Other benefits of automaton include increased efficiency, reduced turnover, upgraded service for customers, and increased recycling. However, this white paper also notes that automation requires high upfront and maintenance costs, as well as customer training. For example, Longmont, CO recouped its investment of \$5.1 million in automation after five years. In addition, CNP has a Supervisory Control and Data Acquisition (SCADA) system for its treatment plants. The City’s SCADA system is able to monitor its pumps and treatment processing from one centralized location. However, total SCADA automation would allow the City to control these processes from this same location. One of the benefits of fully automated treatment facilities is the need for fewer staff. However, total automation may require major infrastructure upgrades and high up-front costs.

CNP should further explore automating refuse collection services and water/wastewater treatment as a long-term strategy to improve efficiency and reduce costs. This would

subsequently impact the rates charged to customers in the future (see **R3.11**) and should be done in conjunction with financial, strategic and capital planning (see **R3.1**, **R3.5** and **R3.6**).

- **Billing Compliance:** During the course of this performance audit, some City officials expressed concerns related to two entities potentially not being billed for water services or not being charged for initially tapping into CNP's water system. These concerns were further investigated. One entity paid for the water connection fee and is currently paying for water use. While the other entity, Central Catholic, is being billed for building water usage, it appears that it is not being billed for water used by its irrigation system. This determination is based on consistently low billings in 2008. According to City officials, the previous administration approved the provision of free water to Central Catholic for irrigation in exchange for the City's Parks Department's use of Central Catholic's athletic fields, which was ratified in a New Philadelphia Park Board meeting. Additionally, Central Catholic was not assessed a connection fee for water usage for its irrigation system. According to codified ordinance 937.01 (d) "No free product or service of any kind shall be rendered by such waterworks system to any customer, including any public or private corporation, any public or private school, any governmental body or agency, or any institution, charitable or otherwise except the City of New Philadelphia or any department thereof." Likewise, codified ordinance 935.01 (b) states that "The expenses of sewer installations and water and sewer connections shall be borne entirely by the contractor, owner or party requesting the service." Although this is one identified instance of potential noncompliance with codified ordinance, there may be other instances of noncompliance. Therefore, CNP should further review the services provided to Central Catholic and other entities, and bill them accordingly.

Recommendations

Financial Planning and Reporting

R3.1 The City should develop policies and procedures pertaining to financial forecasting and subsequently develop five-year financial forecasts. The policies and procedures should address key elements of the forecast, including identification of parties responsible for developing and reviewing the forecast and the supporting assumptions. Assumptions should account for key factors affecting the forecast and be adequately disclosed. In addition, the City should periodically review the policies and procedures, and promptly update them when changes occur. A forecast would help the City better understand and plan for issues in the future. Lastly, reviewing the five-year forecasts developed in the financial forecasts section for the Water Operating and Improvement Funds (Table 2-1), Sanitation Fund (Table 2-2) and the Wastewater Operating and Improvement Funds (Table 2-3) can help the City in planning for the future and developing subsequent financial forecasts.

The City of New Philadelphia does not have formal policies and procedures for the development of financial forecasts; and does not currently prepare forecasts. The absence of a forecast hinders the City from making well-informed decisions for the future.

According to *Best Practices in Public Budgeting* (GFOA, 2000), financial planning provides management with tools which can be used during the decision-making process. Furthermore, forecasts can expand a governments' awareness of its financial options, potential problems, and opportunities. In addition, the auditing and accounting guide *Prospective Financial Information* (American Institute of Certified Public Accountants (AICPA), 2008) states that financial forecasts may be prepared as the output of a formal system. A formal system consists of a set of related policies, procedures, methods, and practices that are used to prepare financial forecasts, monitor attained results relative to the forecasts, and prepare revisions to, or otherwise update, the forecasts. Financial forecasts may also be prepared via a formal work program. If such a program is used in place of a formal system, it should adequately define the procedures, methods, and practices to be employed. This publication identifies numerous guidelines for preparing and reviewing financial forecasts, including the following:

- Forecasts should be prepared in good faith, using the best information available at the time to develop appropriate assumptions.
- Forecasts should be prepared with care by qualified personnel using appropriate accounting principles. Procedures should be established to facilitate the prevention, detection, and correction of errors.

- The process used to develop financial forecasts should allow users to identify the best information that is available at that time.
- Key factors should be identified as a basis for assumptions. Assumptions used in preparing the financial forecasts should be appropriate, reasonable and well-supported, and could include the following components: market surveys, general economic indicators, trends and patterns developed from the entity's operating history (historical trends), and internal data analysis (union contracts and labor rates).
- The process used to develop financial forecasts should provide adequate documentation of both the financial forecast and the process used to develop them. Documentation should also include recording the underlying assumptions as well as summarizing the supporting evidence for the assumptions. As a result of well supported documentation, users can trace forecasted results back to the support for the basic underlying assumptions.
- The process used to develop financial forecasts should include, where appropriate, the regular comparison of the financial forecasts with the attained results. Comparing prospective financial results with actual fiscal numbers provides a historical measure of success and can be an indicator of the reliability of future forecasts.
- The process used to prepare financial forecasts should include adequate review and approval by the responsible party at appropriate levels of authority. The responsible party should have access to the financial forecasts and supporting documentation in order to adequately review and approve the financial forecasts.

R3.2 The City should establish and document the budgeting process in a formal financial manual to help coordinate related activities and ensure the development of a reliable budget. The manual should include general policy guidelines and budget preparation instructions for each budget cycle to ensure the budget is prepared in a manner consistent with leading practices, and the desires of the Mayor, City Council and other stakeholders. The manual should include a set of procedures that facilitate the review, discussion, modification, and adoption of proposed budgets.

The City has not formally established or documented its budgeting process. In practice, the City's process consists of the superintendents submitting their budget proposals to the Mayor who approves the budget. The budget then goes to the finance committee for revision and ultimately, to council for final approval.

Recommended Budget Practices - A Framework for Improved State and Local Government Budgeting (GFOA, 1999) recommends that governments establish an administrative structure that facilitates the preparation and approval of a budget in a timely manner. Procedures should be established for ensuring coordination of the budget process. A process is also needed to develop and communicate the policies and guidelines that will guide budget preparation. In order for the budget to be adopted in a timely manner, processes should be developed to assist stakeholders in understanding tradeoffs and help decision-makers make choices among available options. The processes should include reporting to, communicating with, involving, and obtaining the support of stakeholders. Recommended practices include⁴:

- Policies on Balancing the Operating Budget;
- Mechanism for Budgetary Compliance;
- The Type, Presentation, and Time Period of the Budget;
- A Budget Calendar;
- Budget Guidelines and Instructions;
- Mechanism for Coordinating Budget Preparation and Review;
- Procedures to Facilitate Budget Review, Discussion, Modification, and Adoption;
- Opportunities for Stakeholders Input;
- Presentation of a Recommended Budget;
- A Budget Summary;
- Presenting the Budget in a Clear, Easy-to-Use Format;
- Monitor, Measure, and Evaluate Budgetary Performance; and
- Procedures for Adopting the Budget and Adjusting the Budget.

Developing formal policies and procedures would help ensure that all aspects of the budget process have been considered, adequate time has been provided, the budgets are prepared in an appropriate and consistent manner, and all stakeholders participate in the process. This, in turn, would result in an improved process that helps provide City officials and other stakeholders with a clearer and more thorough understanding of the budget and financial condition.

R3.3 The City should expand upon its financial analyses and related reporting. Financial reports should be distributed to stakeholders and include information and analyses deemed necessary to make informed decisions and adjustments over the short and long term. This can be aided, in part, by the development of financial forecasts (see R3.1), strategic plans (see R3.5), and a performance measurement system (see R3.7).

⁴ For detailed descriptions and examples of GFOA recommended policies, see <http://www.gfoa.org/services/nacslb/>

The City distributes monthly budget-to-actual reports to the Mayor, Service Director and department supervisors. These reports are provided for informational purposes and used in monitoring budgetary expenditures. Informal discussions regarding information revealed in the monthly reports occur only if there is a problem with the budget. In addition, the Service Director noted that there are no budget meetings, financial analyses, or follow-up on the monthly budgetary reports. As a result, the City focuses on its short-term budgetary position, rather than linking financial analyses and reporting to a financial and strategic plan (see **R3.1** and **R3.5**), and performance measures (see **R3.7**). The Mayor indicated that semi-annual budget reviews were held with department heads in 2008 for the first time and will continue to be held in 2009.

Best Practices in Public Budgeting (GFOA, 2000), notes that budgetary monitoring is for the short term and should be performed in conjunction with regular monitoring and evaluation of an entity's long-term financial condition. The financial condition should be evaluated to identify potential problems and any changes that may be needed to improve performance over both the short and long terms. Financial condition is distinguished from budget performance. Budget performance identifies explicit short-term indicators, primarily revenue and expenditure status for the budget period. An evaluation of financial condition considers a broader array of factors that may have long-term implications for the financial health of the government. These factors may include specific measures of the City's financial performance (e.g., trends in operating position or liquidity) as well as measures of the community's general social, demographic, and economic conditions.

R3.4 The City should ensure compliance with Generally Accepted Accounting Principles (GAAP) by changing the classification and reporting of the Sanitation Division expenditures and revenues from the Special Revenue Fund to an Enterprise Fund.

Prior to 2007, the Sanitation Division's revenue source was from a voter approved 2.25 mill levy. However, that levy expired in 2007 and tax revenues were replaced by monthly user fees for refuse and recycling collections.

According to *Governmental Accounting, Auditing and Financial Reporting* (GFOA, 2005), Generally Accepted Accounting Principles (GAAP) require the use of an Enterprise Fund if the cost of providing services for an activity (including capital costs such as depreciation or debt service) must legally be recovered through fees or charges. In addition, it is necessary to use an Enterprise Fund if the government's policy is to establish activity fees or charges designed to recover the cost of providing services (including capital costs such as depreciation or debt service). In practice, enterprise funds frequently are used to account for activities whose costs are only partially funded by fees and charges. Enterprise Funds are considered useful in such cases because they focus attention on the cost of providing services, and serve to highlight the portion of that cost being funded by taxpayers.

Operational Planning

R3.5 CNP should develop and publish a clearly written multi-year strategic plan with measurable objectives, based on identified needs and projected revenues and expenditures (see Tables 2-1, 2-2, and 2-3 in the forecast section). The City should update the plan on a regular basis and link the plan to its forecasts and budgets (see R3.1 and R3.2), capital plan (see R3.6), and performance measurement system (see R3.7).

According to the Service Director, the City has no formal plans. The City is reactive rather than proactive, and does not like to focus on planning. However, the Mayor intends to improve the City's planning process, including the development of a strategic plan.

Recommended Budget Practice on the Establishment of Strategic Plans (GFOA, 2005), states that all governmental entities should use some form of strategic planning to provide a long-term perspective for service delivery and budgeting, thus establishing logical links between authorized spending and broad organizational goals. The key steps to creating an effective strategic planning process are as follows:

- Prepare a mission statement;
- Assess environmental factors;
- Identify critical issues;
- Agree on a small number of broad goals;
- Create an action plan;
- Develop measurable objectives;
- Incorporate performance measures;
- Monitor progress; and
- Reassess the plan.

The City may wish to use examples and methodologies employed by other government agencies. For instance, the City of Montgomery, Ohio has established a formal strategic plan that meets recommended practices. Montgomery uses information from GFOA, ICMA, and other industry practices to develop its strategic plan. Montgomery's strategic planning process was initially implemented to create a vision and engage Council in its operations. Montgomery has continued its strategic planning efforts beyond the initial implementation period and its new plan extends through 2011. The strategic plan gives its Council and other officials a mutually-agreed-upon framework for achieving the goals of the city and sets parameters for operational goals for the city's divisions.

During the initial stages of its strategic planning, Montgomery performed an environmental assessment and community survey to ensure that the city gathered input

from both internal and external stakeholders. It uses a local university to perform the community survey and compile the results. The community survey helps the city respond to the needs of its citizens and identify areas to improve its operations based on community feedback. It also helps the city align its goals with the expectations of the community it serves.

After the environmental assessment and community survey were complete, Montgomery formed volunteer teams with member from all divisions to develop, execute, and monitor the plan. All employees had an opportunity to be involved, regardless of staff level. The teams met to brainstorm and discuss survey results along with funding and possible goals for the five year strategic plan. The targeted areas were identified, and the team and Council met to discuss and prioritize the goals. Montgomery's strategic plan was then compiled in a table format with stated goals, strategies to meet goals, assigned staff to oversee the goal, resources required and included in the budget, and status or targeted completion dates. The team aligned the strategic plan with the city's forecast and capital budget. Finally, the strategic plan was adopted by Council and reviewed on a quarterly basis.

With a strategic plan, the City will be able to reinforce its commitment to the mission of serving its residents, and be better able to reach consensus on strategies and objectives for achieving that mission. More importantly, the City will be able to more effectively target its financial and human resources during periods of scarce resources.

R3.6 CNP should develop a five-year, comprehensive capital improvement plan (CIP) as part of its overall strategic plan (R3.5) to address all capital assets. As part of the CIP process, the City should ensure that all capital assets are inspected to determine maintenance needs and priority. This will ensure that critical repair work or equipment replacement is completed as funds become available. The financial requirements of the CIP should be incorporated in department budgets and updated annually. CNP should also review the master plan developed for the Water Division in 1999 and incorporate the needed components in a comprehensive CIP. Developing a CIP will provide the City with an opportunity for effective long-range financial planning and management.

The City does not have a CIP that identifies its capital needs and priorities or the expected costs of capital replacement and maintenance, with the exception of a plan developed in 1999 for the Water Division. According to city administrators, repairs and major purchases are made on an as needed basis, without formal planning. For instance, the Water Division began purchasing remote water meter reading touch pads (touch pads) in December 1996 and planned to complete the replacement cycle within a decade. Without a CIP that includes a budget for long-term needs (see **R3.1** and **R3.2**), the City only replaces meters when it has excess revenues. Furthermore, CNP has not factored the

cost of upgrading its water meters into the process for setting its annual water rates (see **R3.11**). While some funds for capital maintenance and replacement are incorporated into the Water and Wastewater Divisions' budgets, they do not represent the total needs of the City because most are unknown. Furthermore, without a CIP, the City is unable to factor all relevant costs into its user fees for water, wastewater and sanitation (see **R3.11** for rate analysis).

In 1999, the Water Division hired a third party consulting firm to prepare a twenty-year master capital improvement plan, which outlines water treatment and distribution system upgrades and the associated costs in five or ten-year increments. The Water Superintendent indicated that he has not had the funding to make all changes and improvements outlined in the master plan. Budgeting based on historical expenditures, rather than anticipated needs, has forced the Water Division to make changes only when it has excess funds.

According to the Water Superintendent, capital improvement projects are not included in annual budget discussions or considered in setting rates. A number of projects recommended by the EPA would allow the Water Division to achieve optimum performance and reduce the potential for future violations or contamination. However, the Water Superintendent does not have the financial resources or manpower to complete a number of the recommendations and noted that implementing some are more feasible than others. For instance, the Water Superintendent wants to implement the EPA recommendations to pressure test the sewer line that runs through the well field on a regular basis and calibrate the chemical feeders. However, as of September 2008, he does not have cost estimates for completing these projects. According to the Water Superintendent, other recommendations, including exercising valves in the treatment plant and the distribution system and inspecting all homes for compliance with backflow prevention are not feasible due to high costs and a lack of manpower.

According to *Multi-Year Capital Planning* (GFOA, 2006), state and local governments should prepare and adopt comprehensive multi-year capital plans to ensure effective management of capital assets. A prudent CIP identifies and prioritizes expected needs based on a government's strategic plan, establishes project scope and costs, details estimated amounts of funding from various sources, and projects future operating and maintenance costs. A capital plan is a component of an entity's strategic plan (see **R3.5**) and is essential to the future financial health of an organization and continued delivery of services to citizens and businesses. A capital plan should not be less than three years in length and should contain the following:

- **Identify Needs:** Governments should identify present and future service needs that require capital infrastructure or equipment.

- **Determine Costs:** The full extent of project costs should be determined when developing the multi-year capital plan.
- **Prioritize Capital Requests:** Continually faced with extensive capital needs and limited financial resources, governments should properly evaluate project submittals.
- **Develop Financing Strategies:** Financing strategies should align with expected project requirements while sustaining the financial health of the organization.

The City of Montgomery, Ohio has established a CIP that meets elements of the GFOA recommended practices. Its capital improvement plan is based on requests from the city divisions which are submitted to the finance director and city manager. The finance director and city manager review the submissions, make adjustments, and then submit a draft version to Council for review and approval. This plan lists the planning initiatives and anticipated capital needs throughout all city funds and related divisions. The plan projects funding needs in order to properly finance capital improvements and goals for the city. Upon approval, Montgomery's CIP is incorporated in its financial forecast and aligned with its strategic plan.

A multi-year, comprehensive CIP would help CNP identify and prioritize expected facility and infrastructure needs, based on its strategic plan and known factors. In addition, a CIP would help establish project scopes and costs, detail estimated amounts of funding by source, and project future operating and maintenance costs.

R3.7 CNP should develop a performance measurement system to permit evaluation of the efficiency and effectiveness of City functions and programs. Using a strategic plan (see R3.5), the City should create goals and objectives, and specific methods for measuring the progress towards their achievement. In addition, the City should create performance targets for the assessment of actual performance data. Likewise, external benchmarks may be used for comparison purposes. The City should use the results of its performance measurement system to more effectively manage operations and better communicate the results of operations to administrators, employees, and citizens.

The City has not implemented a performance measurement system. According to *Municipal Benchmarks* (David Ammons, 2001), a properly developed and administered performance measurement system can offer important support to a host of management functions, including improved accountability, planning/budgeting, operational improvement, program evaluation, allocation of resources, management of operations, and contract monitoring. Performance measures permit governments to identify problem areas and, as corrective actions are taken, to detect the extent to which improvements

have occurred. Performance measures in local government generally may be categorized as one of four types⁵:

- **Workload (Output):** Indicates the amount of work performed or services received.
- **Efficiency:** Reflects the relationship between the work performed and the resources required to perform it. Unit costs are the most common example of efficiency measures and can be reported as the total cost of a service divided by the number of units provided. Efficiency measures can help city managers identify potential areas for improvement if a division regularly performs negatively compared to historical trends and/or other benchmarks.
- **Effectiveness (Outcome):** Depicts the degree to which performance objectives are achieved or otherwise reflects the quality of local government performance. Examples of effectiveness measures include police, fire, and emergency medical services response times, crime rates, and customer satisfaction with road maintenance and water and sewer services. Effectiveness measures show a city how well it is meeting the public purpose it is intended to fulfill.
- **Productivity Measures:** Combines the dimensions of efficiency and effectiveness in a single indicator. For example, where meters repaired per labor hour reflects efficiency, percentage of meters repaired properly reflects effectiveness, and unit cost per effective meter repair reflects productivity. The cost of faulty meter repairs as well as effective repairs is included in the numerator of this calculation, but only effective repairs are included in the denominator, thereby encouraging efficiency and effectiveness by meter repair personnel. Similar examples include law division costs per case successfully prosecuted and refuse costs per ton recycled.

Municipal Benchmarks indicates that comparing information from a performance measurement system with selected benchmarks⁶ is a valuable step in evaluating municipal operations. Important strengths and weaknesses may be revealed and local officials may discover aspects of the operation that deserve detailed analysis. Furthermore, GFOA offers training to assist in implementing performance measurement.

⁵ Some of the examples were developed by the Auditor of State for the City's use in preparing performance measures and benchmarks.

⁶ ICMA creates benchmark data for a range of city operations. Other sources of benchmarks include: *Municipal Benchmarks*, the Ohio EPA, the National Fire Protection Association, and the Federal Bureau of Investigation. Additionally, benchmarks and performance ratios are included throughout this report.

A performance measurement system would provide CNP with an effective tool to collect and analyze data for planning and measuring services. Furthermore, such a system would furnish the City with information to make informed decisions.

Utility Billing Staff

R3.8 The City should consider reducing its utility billing staff by 1.78 FTEs (one full-time and one part-time position). This would result in staffing levels that better align with the current technology. However, in order to ensure these reductions are possible, CNP should fully use its billing technology system.

The Utility Billing Division (UBD) employs 3.78 clerk FTEs, who are responsible for preparing monthly billings, processing customer payments, making courtesy calls for high and low reads, and performing other customer service duties. The City outsources its billing process and has a machine that scans all checks and stubs, then automatically matches them to the account. Furthermore, the machine segregates any checks that are not written for the correct amount or any incorrect account numbers. This allows the clerks to check only those with misinformation or those the scanner cannot read. After implementing the new automated accounts receivable technology in the UBD, which reduced the workload for the clerical staff, the City did not reduce the number of employees. The technology eliminates the work of entering all of the meter reads, breaking apart the postcards, and manually entering the payments.

As shown in **Table 3-4**, UBD processes fewer water accounts per clerk FTE (2,028) when compared to the peer average (3,312) and two of the three peers. UBD uses an automated accounts receivable system while the peers use a manual system. Athens and Defiance also outsource their billing, similar to CNP, while North Canton performs this function in-house. However, according to CNP, the technology system has not been fully implemented because the City is not automatically capturing check data for electronic transfers and bill deposits to its bank.

If CNP reduced staffing levels by 1.78 FTEs (one full time position and one part time position), UBD would process 3,829 accounts per FTE. While this would be a higher number than the peer average, it would be lower than North Canton. Moreover, based on its use of an automated accounts receivable system, it is reasonable that UBD could process more water accounts per FTE than the peers.

Financial Implication: By eliminating one full-time clerical position and the part time clerical position, the City could realize a savings of approximately \$67,000 in salaries and benefits.

Bargaining Unit Agreement

CNP has two collective bargaining agreements with the unions that represent all laborers and the majority of clerical staff. One is between CNP and the American Federation of State, County, and Municipal Employees (AFSCME), local 1958 - Laborer chapter; and the other is between CNP and the AFSCME, local 1958 - Clerical chapter. Since the two collective bargaining agreements are similar, and because the majority of Water, Sewer, and Sanitation employees are laborers, AOS primarily compared the Laborers' contract to peer contracts.

R3.9 In future contract negotiations, the City should eliminate the payment of a portion of the employees' share of retirement contributions. CNP should also negotiate to reduce the maximum number of sick leave days paid out at retirement, vacation accrual rates, and the number of personal days to be more consistent with peer cities. Additionally, CNP should consider eliminating Standby Pay.

The following provisions in the Laborer's collective bargaining agreement appear more generous than the peers:

- In contrast to the peers, the City pays a portion of the employee's retirement contribution. This increases net compensation for staff by 4.5 percent.
- The City's sick leave payout at retirement is higher than all three-peer cities. For example, an employee that retires with 10 or more continuous years of service is paid in cash for 75 percent of accrued sick leave days up to a maximum of 120 days, which results in a maximum payout of 90 days. In contrast, one of the peer cities pays out a maximum of 30 days, while the other two peers pay out a maximum of 60 days at retirement.
- The City's vacation time accrual schedule is shorter than that of two of the three peers. For instance, Water, Sewer, and Sanitation employees at CNP are eligible for 3 weeks of vacation after 5 years of service and 5 weeks of vacation time after 15 years of service. In contrast, employees at two of the three peers become eligible for 3 weeks of vacation after 8 years of service and 5 weeks of vacation per year after 25 years of service.
- The City's collective bargaining agreement with AFSCME, local 1958-Laborer chapter calls for four personal days per year for full-time employees, while the local 1958-Clerical chapter contractual agreement calls for three personal days. In contrast, two of the three peers do not have provisions in their collective bargaining agreements addressing the number of personal days, while the third

(North Canton) stipulates 24 hours of personal leave per year for its water treatment plant operators and 16 hours per year for all other employees.

- The City's collective bargaining agreement with the AFSCME, local 1958-Laborer chapter states, in part, "An employee who is scheduled to be on weekend standby shall receive \$60. Weekend standby shall extend from 4:01 p.m. Friday through 7:30 a.m. Monday. If weekend duty is extended due to a contract holiday, the employee shall receive an additional \$30 for the added 24-hour standby service." None of the three peer cities has this provision.

While salaries with longevity pay are generally comparable to two of the three peers, CNP's payment of the employees' share of retirement contributions results in an overall higher compensation package for staff. This, in turn, increases the City's personnel costs. More specifically, when comparing salary schedules that include longevity pay for select positions⁷ in water, wastewater and sanitation operations, CNP's salaries were lower than the peer average in most cases. When averaging the variances by position, CNP's salaries for the beginning, middle and ending steps were 9.5, 7.8 and 6.6 percent lower than the respective peer averages. However, when excluding North Canton because its significantly higher salaries skew the peer averages, CNP's salaries are similar to the average of the two remaining peers. Specifically, CNP's beginning salaries are higher by an average of 1.2 percent⁸ when compared to the revised peer average. In addition, CNP's middle and ending salaries are lower by an average of only 1.0 and 0.1 percent than the revised peer averages, respectively. Lastly, administrative salaries (superintendent and assistant superintendent positions) in water, wastewater and sanitation were also compared to the peers during the performance audit. The average administrator salary was lower than each peer and 13.5 percent lower than the peer average.

By providing standby pay and a higher severance payout, the City incurs higher costs. Likewise, providing employees with more vacation and personal days can increase expenditures due to increased overtime expenditures to cover shifts for absent employees and reduce productivity because there are fewer days dedicated to City operations.

Financial Implication: Based on the projections in the **financial forecasts** section, CNP would save an average of approximately \$80,000 per year from 2008 to 2013 by eliminating the 4.5 percent retirement payment for water, wastewater and sanitation

⁷ Salaries were reviewed for these positions: head mechanic, heavy equipment operator, pipe fitter, meter installer, serviceman, sewer maintenance tech, chief operator, assistant chief operator, licensed operator (Class 1, 2 and 3), operator in training/maintenance and pretreatment coordinator.

⁸ Two positions at CNP partially skew this comparison because their salaries are much higher than the peer average (14 and 6 percent higher). However, even when excluding these two positions, CNP's beginning salaries are lower by an average of only 0.3 percent than the revised peer average.

employees. The savings associated with future reduction in the sick leave payout at retirement will depend on the number of retirees in a given year, and their respective pay step and sick leave accumulation. For example, if the City reduced the maximum sick leave payout to 60 days, it would incur a 30-day savings. Assuming an employee retires in 2008 at the highest step 5 base pay of \$16.54 per hour, the City would realize \$3,970 in savings per employee. While altering the other provisions could also result in cost savings, they are not readily quantifiable.

Unaccounted Water

R3.10 The City should take steps to identify and reduce its sources of unaccounted for water. Specifically, CNP should install water meters in buildings that rely on the City's water (e.g., municipal buildings and special interest groups), and ensure water use is metered and billed for all entities (see Issues for Further Study for additional discussion). This information, coupled with knowing when the Fire Department uses water from hydrants, would allow the City to more accurately determine actual loss from infrastructure in need of repair or replacement (water main breaks), or theft from hydrants. In addition, the City should ensure it is accurately capturing data pertaining to water treatment and billings, and continuously monitor the amount of treated water that is sold and the amount of unaccounted for water to maintain the integrity of its assets.

CNP's unaccounted⁹ for water from 2005 to 2007 substantially exceeds the Environmental Protection Agency's (EPA) benchmark of no more than 15 percent. **Table 3-7** compares total water treated, the total water sold, and the percent unaccountable for the last three years.

Table 3-7: Unaccountable Water

	2005	2006	2007
Water Treated (million gallons)	818.33	803.39	867.08
Water Sold (million gallons)	565.90	557.36	534.11
Unaccountable Water	31%	31%	38.4%

Source: City of New Philadelphia

As shown in **Table 3-7**, unaccountable water has averaged approximately 33 percent per year. This can be attributed, in part, to unmetered or unread water, and water loss due to leaks or aging infrastructure. It should be noted that the Water Usage Analysis report generated directly from CNP's computer system is the source of the water sold figures in

⁹ Water loss is described in this section as unaccountable water. Unaccounted for water is treated by the City, but is used or lost prior to going through a meter. According to CNP administration staff, there are unmetered City buildings, which include City hall, the municipal courthouse, general services, the wastewater treatment plant, and water maintenance. Likewise, unmetered water is provided to local parks and for city festivals via fire hydrants.

Table 3-7. While UBD provided other water sold figures that do not reconcile with the Water Usage Analysis report, the average unaccounted for water amounts to approximately 31 percent from 2005 to 2007 when using the other data. Consequently, the two sets of data result in the same conclusion.

According to CNP administration, the City provides unmetered water through its water distribution system at a number of municipal locations, with the exception of the police building and water treatment plant, which are metered but not read. However, the City does not know how much of the water loss is due to its own use. Likewise, the City does not know how much water is being lost through fire hydrants, or from aging infrastructure (leaks or water main breaks). For instance, the water mains in the City date back to the early 1900 and over roughly 81,000 feet of water mains are more than ninety years old (see **R3.6** for further analysis on capital planning). These mains may be functioning adequately; however, without knowledge of the amount of unmetered water, the City cannot accurately assess water loss that results from its aging infrastructure. This type of water loss can be equated to lost revenue for the City. This, in turn, can impact the City's ability to determine appropriate user fees (see **R3.11**) and the overall financial condition of the Water and Wastewater Divisions Operating Funds (see the **financial forecasts** section). For instance, despite the rate increases in 2008 for water and wastewater, year-to-date activity through July 2008 showed that the City is on pace to collect at or slightly below the amounts collected in 2007 in water and wastewater fees.

In a March 2008 letter to the CNP, the Ohio EPA indicated that water loss should be calculated on a regular basis and should not exceed 15 percent. Furthermore, the Ohio EPA stated in this same letter that the Water Division could reach optimal operation by metering all service connections. The Ohio EPA recommended that city owned locations and special interest groups be metered, even if they are not charged for water. The Ohio EPA believes this will help in the calculation of the city's water loss. Usually, the costs associated with unaccounted for water are borne by all consumers because the City is still treating this water and incurs the associated costs.

Municipal Benchmarks: Assessing Local Performance and Establishing Community Standards (Ammons, 2001) explains that unaccounted for water is the difference between the amount of treated water entering the distribution system and the amount of metered (and usually billed) water for use by individual consumers or other authorized users. Steady leakage and intermittent main breaks (i.e., line loss) are major culprits, but unaccounted for water may also result from inaccurate meters, theft, and unmetered water used for fire fighting, hydrant flushing, street cleaning, and other legitimate municipal purposes. *Components of a Water Loss Prevention Plan* (Kentucky Rural Water Association, 2007) indicates that by industry standards, more than 15 percent of water loss in a rural system is unacceptable.

The *Water Loss Manual* (Texas Water Development Board, 2005) explains that authorized consumption of water consists of four sub-categories which include billed metered, billed unmetered, unbilled metered, and unbilled unmetered. Billed metered water is water that is sold to and paid for by customers. Billed unmetered is water that is not metered but still paid for. Unbilled metered is water that is metered but not paid (e.g., used for treatment plant, line, and hydrant flushing). Finally, unbilled unmetered water is not metered and not paid (e.g., line and hydrant flushing or any other uses that are authorized but unbilled and unmetered).

The *Water Loss Manual* further suggests that water loss is broken down into two major sub-categories: real losses and apparent losses. Real losses are figured at the marginal production cost of water and include all types of leaks, bursts, and storage tank overflows that occur before the customer's meter. Apparent loss is figured at the retail rate because its loss is after the customer meter, such as accounting errors, inaccurate customer meters, illegal connections, and bypassed meters. In order to locate leaks or usage, the consumption at each connection should be metered.

Metering all water consumption would require CNP to purchase meters for all allowable connections in municipal buildings, parks, and other areas. Based on information from CNP, metering municipal buildings and parks would cost an estimated \$25,200. However, this does not include the cost of labor or meter pits.¹⁰ This cost estimate is assumed to be captured in the forecast of the City's Water funds (see the **financial forecast** section).

Utility Rates

R3.11 CNP should establish a formal methodology for setting and reviewing rates for water, wastewater, and sanitation. In setting rates, the City should first ensure cost-effective operations. It should also consider known and anticipated expenses (e.g., replacing meters with touch-pad technology), as well as the cost of production and sales, and other relevant costs (e.g., treating unaccounted water).

In regards to sanitation, the General Services Superintendent should ensure the upkeep of accurate information and the tracking of costs associated with all operations. Furthermore, the City should explore other options for ensuring the fiscal solvency of the Sanitation Fund, such as creating a separate charge for recycling, adding a fuel surcharge to the monthly rate, and implementing a pay-as-you-throw program.

¹⁰ The Water Superintendent estimates that CNP would need to purchase five meter pits in order to meter lawn systems and drinking fountains.

CNP does not have a comprehensive methodology for establishing the billing rates for water, wastewater and sanitation. For instance, the City does not perform financial forecasting (see **R3.1**), strategic planning (see **R3.5**), or capital improvement planning (see **R3.6**) to help determine future rates. Instead, CNP raises rates when it needs additional short-term cash, usually after it has experienced negative fund balances over a period of time.

According to the City's codified ordinances (CO), the Service Director is directed to establish a price for the sale of water (CO 937.02, 937.04) and wastewater (CO 933.02). According to the Mayor, resolution 32-2005 requires the Service Director to submit to City Council all changes in water and sewer rates prior to implementation and such changes shall only be enacted with the consent of City Council. The current Service Director has only served in this position since April 2008. The previous Service Director relied on input from water, sewer, and sanitation superintendents in informal discussions to determine changes in rates. After discussions with the superintendents, the Service Director would send a letter to City Council that outlined potential revenue shortfalls and suggested rate changes. The Water Superintendent explained that the historic approach to setting rates entailed matching expenditures from the previous year. To determine capital improvement needs, the Water Superintendent and the former Service Director would informally visit sites that needed repairs and estimate the cost associated with repairs or replacement of infrastructure, such as water mains.

According to *Setting Water and Sewer Rates* (Ohio Rural Community Assistance Program, March 2008), operating and maintenance expenses, debt service, capital replacement expenses, and reserves should be considered when setting rates. It suggests that cities also consider the following factors when setting water and wastewater rates:

- Evaluating flows, usage, expenses and revenues;
- Justifying expenses, long term planning, and community interest; and
- Educating the public through public education programs and consumer confidence reports.

Furthermore, it indicates that a city's financial need is influenced by changes in population, area growth or loss, inflation, new regulations, repairs, replacement, and improvements.

Water Rate Analysis

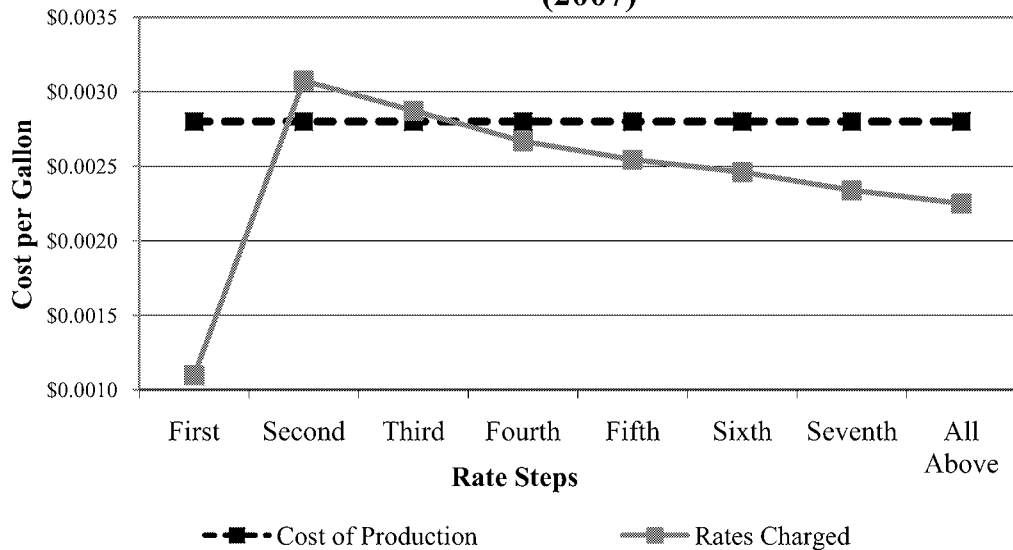
Table 3-8 and **Chart 3-2** compare the rate schedule in 2007 to the cost of production per gallon in 2007.

Table 3-8: Water Rate Schedule

Step	Gallons	Cost of Production	Rates Charged
First	2,491	\$0.0028	\$0.0011
Second	Next 9,972	\$0.0028	\$0.0031
Third	Next 24,933	\$0.0028	\$0.0029
Fourth	Next 24,933	\$0.0028	\$0.0027
Fifth	Next 49,865	\$0.0028	\$0.0025
Sixth	Next 49,865	\$0.0028	\$0.0025
Seventh	Next 87,268	\$0.0028	\$0.0023
All Above	Next 748,051,938	\$0.0028	\$0.0022

Source: City of New Philadelphia
Note: Only includes consumers inside the City limits.

Chart 3-2: Rates vs. Production Cost per Gallon (2007)



Source: City of New Philadelphia

As shown in **Table 3-8** and further illustrated in **Chart 3-2**, the rate charged in six of the eight steps in 2007 failed to cover the cost of production. The City increased its rates in

2008, but it is still not charging enough to meet the cost of production for 2007 in five of the eight steps.

Table 3-9 depicts the gap between revenues and expenditures, and costs per gallon of water produced and sold.

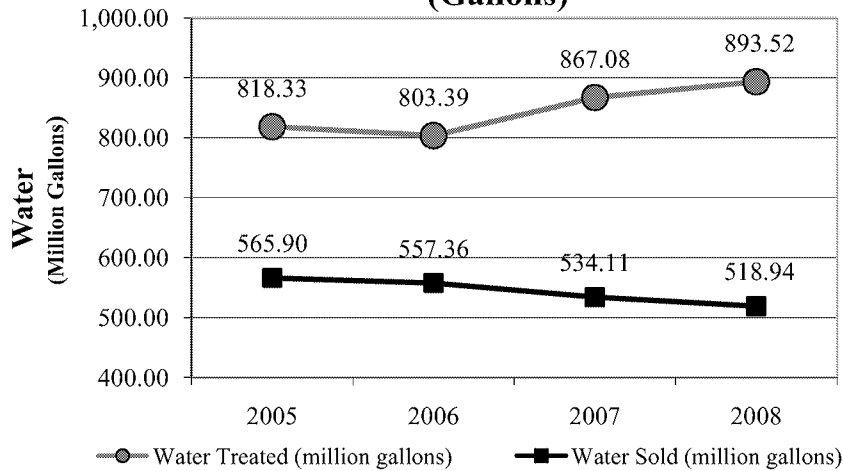
Table 3-9: Water Revenues and Expenditures (Gallons)

	2005	2006	2007
Total Water Produced	818,334,976	803,392,561	867,075,575
Total Water Sold	565,903,541	557,357,047	534,110,585
Total Revenue	\$2,153,856	\$2,168,942	\$2,073,068
Total Expenditures	\$2,237,889	\$2,454,033	\$2,431,643
Cost of Production per Gallon	\$0.0027	\$0.0031	\$0.0028
Cost of Water Sold per Gallon	\$0.0040	\$0.0044	\$0.0046
Difference	(\$0.0012)	(\$0.0013)	(\$0.0017)

Source: City of New Philadelphia

Table 3-9 shows that from 2005 to 2007, expenditures exceeded revenues each year, which is also estimated to occur in the next six years (see **financial forecasts** section). According to CNP officials, expenditures exceeded revenues in these years primarily because the City used water and wastewater funds for the development of High Tech Park (see **Table 3-11** for wastewater revenues and expenditures). In addition, the cost of water sold per gallon is higher than each rate in **Table 3-8**. Furthermore, consumers must subsidize the cost of treating unaccounted for water that is used or lost prior to going through a meter (see **R3.10**). Lastly, water treated increased each year after 2006, while water sold has decreased each year. This is further illustrated in **Chart 3-3**.

**Chart 3-3: Water Loss Analysis
(Gallons)**



Source: City of New Philadelphia
Note: 2008 is estimated based on historical data.

Consider the Source in Setting Water Rates (Milwaukee Journal Sentinel, September 2008) explains that water rate structures in the United States follow three basic structures: flat rates (where the per-gallon fee remains the same regardless of the amount used), decreasing block rates (where the per-gallon fee decreases as more water is used) and increasing block rates (where the per-gallon fee increases as more water is used). It has been argued that decreasing block rates better match the cost of delivering water with the revenues collected, while the increasing block rates encourage conservation. However, neither method considers the value of the water itself. Communities that seek to reflect the value of water in their rates must first consider the source and eventual disposal of that water.

Wastewater Rate Analysis

In 2003, CNP made significant changes to its wastewater treatment plant to comply with new EPA standards and limitations. The upgrades, which cost approximately \$9.2 million, expanded the capacity of the wastewater treatment plant from 3 million gallons daily (MGD) to 4.5 MGD.

Table 3-10 and **Chart 3-4** compare the rate schedule in 2007 to the cost of production per gallon in 2007.

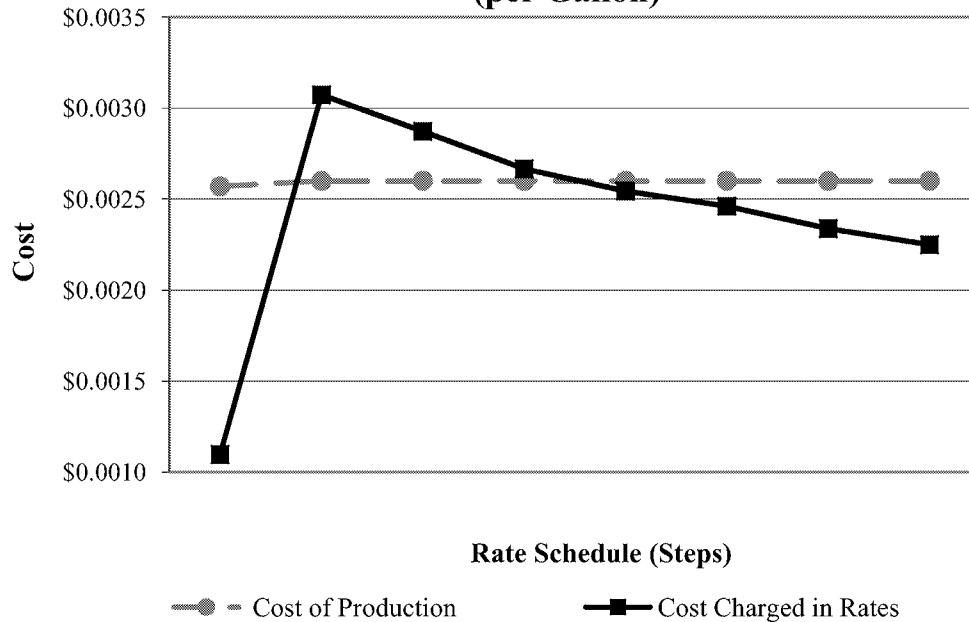
Table 3-10: 2007 Wastewater Rate Schedule

Step	Gallons	Cost of Production	Rates Per Gallon
First	2,491	\$0.0026	\$0.0011
Second	Next 9,972	\$0.0026	\$0.0031
Third	Next 24,933	\$0.0026	\$0.0029
Fourth	Next 24,933	\$0.0026	\$0.0027
Fifth	Next 49,865	\$0.0026	\$0.0025
Sixth	Next 49,865	\$0.0026	\$0.0025
Seventh	Next 87,268	\$0.0026	\$0.0023
All Above	Next 748,051,938	\$0.0026	\$0.0022

Source: City of New Philadelphia

Note: Only includes consumers inside the City limits.

Chart 3-4: 2007 Wastewater Cost (per Gallon)



Source: CNP

As shown in **Table 3-10** and **Chart 3-4**, similar to water rates, there are five steps that pay less than the cost of production per gallon of wastewater treated. While the City increased rates in 2008, it is still not meeting its cost of production in five steps.

Table 3-11 depicts the gap between revenues and expenditures, and costs per gallon of wastewater treated.

Table 3-11: CNP Wastewater Revenues, Expenditures and Gallons

Year	2005	2006	2007
Revenues	\$1,979,148	\$1,895,490	\$1,827,528
Expenditures	\$2,344,827	\$2,027,602	\$2,154,794
Total Gallons Treated	854,998,000	773,309,600	838,505,000
Total Gallons Billed	549,362,616	536,605,338	517,919,000
Cost of Treatment per Gallon	\$0.0027	\$0.0026	\$0.0026
Cost of Wastewater Billed per Gallon	\$0.0043	\$0.0038	\$0.0042
Difference	(\$0.0015)	(\$0.0012)	(\$0.0016)

Source: City of New Philadelphia

Similar to water (see **Table 3-9**), **Table 3-11** shows that from 2005 to 2007, expenditures exceeded revenues in each year, which is also projected to occur in the next six years (see **financial forecasts** section). In addition, the cost of wastewater billed per gallon is higher than each rate in **Table 3-10**. The difference in treatment and billed costs per gallon is due to unaccounted for water (see **R3.10** and **Chart 3-3**).

Sanitation Rate Analysis

Prior to 2007, sanitation revenue was generated from county real estate taxes. However, in 2007, the City began charging residents a monthly fee for waste collection and disposal. As of September 2008, residential units are charged \$8.00 per month for weekly curbside services and businesses are charged \$10.00 per pick up per week.¹¹ Locations with more than seven units are charged \$3.00 for each additional unit. The weekly rate for sanitation collection includes curbside recycling (collected every-other week) and three special pick-ups per year. Furthermore, the City does not limit the amount of waste disposed of by residents. According to the Superintendent of General Services, sanitation employees will typically pick up everything left at the curb. The Superintendent of General Services explained that current sanitation rates do not include planning for future projects. The Superintendent believes that CNP may need to build a new garage because the City's garbage trucks do not fit in the current garage and it is in need of repairs. According to the Mayor, an engineer frequently used by the City has estimated the cost for building a garage to be approximately \$750,000 (see **R3.5** for strategic planning and **R3.6** for capital planning).

When sanitation rates were set in January 2007, the Superintendent of General Services predicted expenditures, including the cost of diesel fuel, would increase three percent annually. Anticipating fuel cost increases at an annual rate of three percent has not allowed CNP to cover the cost of purchasing diesel fuel. Furthermore, the amount of diesel fuel used for recycling and sanitation operations has increased annually since 2005. Fuel consumed during the first eight months of 2008 increased by 6.7 percent compared to the same time period in 2007. The Superintendent of General Services indicated there have not been any major changes to routes that explain increased fuel consumption. Instead, he believes any changes in consumption could be the result of more frequent trips to the landfill, due to the Sanitation Division's practice of picking up everything left at the curb.

The landfill contract is based on a monthly fee, regardless of the tons disposed of by CNP. However, the tax for EPA, township, and district fees is based on the actual volume received at the landfill. The solid waste reported by the General Services Director for CY 2006 and CY 2007 was approximately 400 tons, 3.8 and 3.7 percent lower than the

¹¹ Commercial businesses with hopper services are charged five dollars per week. The Sanitation Division will pick up bulk items at the request of businesses.

respective tonnage reported by the landfill for each year. Accurate figures would help the City ensure that it pays the appropriate taxes. However, as the variance is less than four percent, using the City's data does not affect the conclusions derived from the comparisons in **Tables 3-3** and **3-6**, or the comparisons to other staffing benchmarks that follow **Table 3-6**. Further, the City's information contained more detail to support its tonnage figure than the landfill.

While the **financial forecast** section shows the Sanitation Fund is projected to have a positive fund balance in 2008 and 2009, expenses are projected to exceed revenues in 2009. This will result in projected negative ending balances in the Sanitation Fund beginning in 2010 that will reach approximately \$2.5 million in 2013 (see **financial forecasts** section). Consequently, it is important that CNP begin to review sanitation expenditures and revenues, and make corresponding adjustments to cover the cost of sanitation collections.

Along with ensuring cost-effective operations and adjusting rates, there are alternative methods of assuring a sound financial position in the Sanitation Fund. For instance, the City of Athens, Ohio implemented a monthly recycling fee to support its recycling program. As of September 2008, the fee is \$2.50 and is applied to all accounts, regardless of participation in the recycling program. Additionally, Athens has a pay-as-you-throw program for waste collection. Specifically, a charge of \$5.50 per month entitles residents to put out one thirty gallon container of garbage per week, while \$9.50 per month entitles residents to put out two thirty gallon containers of garbage per week. Each additional container must have a sticker, which can be purchased for \$1.50 each. Residents are charged \$3.00 for each un-stickered bag of garbage picked up. The United States Environmental Protection Agency (EPA, September 16, 2008) explains that in communities with pay-as-you-throw programs, residents are charged for the collection of municipal solid waste -- ordinary household trash -- based on the amount they throw away. This creates a direct economic incentive to recycle more and generate less waste. According to EPA, most communities with pay-as-you-throw programs charge residents a fee for each bag or can of waste they generate. A small number of communities bill residents based on the weight of their trash. Furthermore, Defiance, Ohio customers pay a base rate for monthly waste collection. However, when the cost of diesel fuel fluctuates above the base price, residents are charged a fuel surcharge. The fuel surcharge fluctuates quarterly based on the prior month's costs. A fuel surcharge is designed to compensate for a portion of the costs associated with recent and extreme increases in diesel fuel prices.

Financial Implications Summary

The following table summarizes the estimated annual cost savings identified in recommendations presented in this section of the report.

Summary of Financial Implications for Operations Section

Recommendation	Annual Cost Savings
R3.8 Reduce utility billing staffing levels by 1.78 FTEs	\$67,000
R3.9 Negotiate to eliminate payment of employees' retirement contribution	\$80,000
Total	\$147,000

Source: AOS recommendations

This page intentionally left blank.

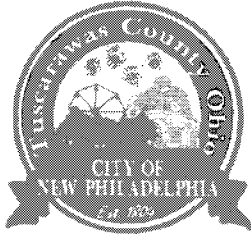
Client Response

The letter that follows is the City of New Philadelphia's (CNP or the City) official response to the performance audit. Throughout the audit process, staff met with City officials to ensure substantial agreement on factual information presented in the report. When the City disagreed with information contained in the report and provided supporting documentation, appropriate revisions were made to the audit report.

The client response notes that reducing staffing levels in the billing office is not feasible because of the workload, time related to serving customers, and vacation leave. The performance audit compared staffing levels based on a uniform workload measure for CNP and the peer cities: the number of water accounts. CNP processes fewer water accounts per full-time equivalent clerk when compared to two of the three peers, despite the use of an automated accounts receivable system while the peers use a manual system. The recommendation (**R3.8**) to reduce staffing levels by 1.78 FTEs was based on these factors. However, **R3.8** also indicates that "...in order to ensure these reductions are possible, CNP should fully use its billing technology system." In addition, **R3.9** recommends that the City negotiate to lower vacation accrual rates, based on comparisons to the peer cities.

The client response also notes a concern that the performance audit does not provide specific solutions to the identified problems, particularly with regard to revenue shortfalls and financial issues facing the City. Contrary to these concerns, the performance audit was conducted in accordance with generally accepted government auditing standards, which require that Auditor of State's Office to plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for findings and conclusions based on the audit objectives. Regarding the revenue shortfalls and "mystery of lost water revenue," the performance audit found that CNP does not have a comprehensive methodology for establishing the billing rates for water, wastewater and sanitation, which is the primary problem with the current water rates. Instead, CNP raises rates when it needs additional short-term cash, usually after it has experienced negative fund balances over a period of time. As a result, **R3.11** recommends that CNP establish a formal methodology for setting and reviewing rates for water, wastewater, and sanitation. The scope of the performance audit did not entail developing a rate structure for the City. Furthermore, the performance audit found that the City provides unmetered water. This prevents it from accurately assessing the water loss that results from its aging infrastructure, which can be equated to lost revenue for the City. This, in turn, can impact the City's ability to determine appropriate water rates. As a result, **R3.11** provides specific suggestions for CNP to begin addressing its significantly high rate of unaccounted for water. Although specific concerns raised by various City officials were reviewed during the audit, the scope of the performance audit did not include an investigation of every potential source of unaccounted for water.

Lastly, the performance audit included the development of five-year financial forecasts for the water, wastewater and sanitation operations (including revenues). The City requested these forecasts to help guide long-term decision-making and address its financial issues. While the City requested the performance audit to assess several issues that impact the financial condition of the reviewed areas (e.g., staffing levels), other factors beyond the scope of the audit can also impact financial conditions (e.g., health benefits and purchasing practices).



City of New Philadelphia

March 23, 2009

Auditor of State
Mate Rogonjic, Assistant Chief Auditor
615 West Superior Avenue 12th Floor
Cleveland, Ohio 44113

Dear Auditor of State:

A post audit conference on the final performance audit was held in city council chambers on March 16, 2009 at 6:00 pm. Present were all administration members and all councilmen with the exception of Councilman Darrin Lautenschleger. The Auditor of State was represented by the performance audit team and audit staff of Dawn Bendel, Mate Rogonjic, Michael Chadsey, Cooper Martin and Randy Cole.

The performance audit team reviewed the Executive Summary and explained their processes and scope of the performance audit. City Council ordered the performance audit in an attempt to explain the continued loss of water revenue and as a tool to help establish new water, sewer and sanitation/recycling rates. The audit team's findings determined that in the near future all the departments audited, Water, Wastewater and Sanitation/Recycling would be in a deficit position based on projected revenues and expenses. Staffing levels were also reviewed. With the exception of the Water Billing Office, the auditors commended the City for its efficient staffing levels and production levels in each department. The performance audit team also reviewed the collective bargaining agreements and compared them to those they had access to in the peer group.

The performance audit made two specific cost saving recommendations. One was to eliminate 1.78 FTE from the water billing office. At this point in time, the .78 person is no longer there and work flow has become burdensome at certain times of the month. Some obvious suggestions were made, but they would not reduce the work load or time commitment of the staff people handling incoming calls or dealing with walk-in customers at the walk-up window. Also, the current three staff people are entitled to several weeks each of vacation a year due to their longevity. This creates problems as the city has no real office pool of staff to draw from when these people are absent. On those occasions, service slows and response time is compromised. Therefore, the Administration is not in agreement in reducing water billing office staffing. We feel that good service and adequate time to serve the public is worth the cost. In addition, the .78 FTE position needs replaced or there will be a huge backlog of work over the summer months.



City of New Philadelphia

The other specific suggestion of eliminating the pension pick-up of 4 ½ % in the bargaining contract is fine in theory, but the unions will want something of equal value in return. The union's sick leave and vacation benefits and weekend on-call pay are contractually negotiated. The unions will not just cede those benefits easily. The Administration can address those issues in negotiations this year, but major progress is unlikely.

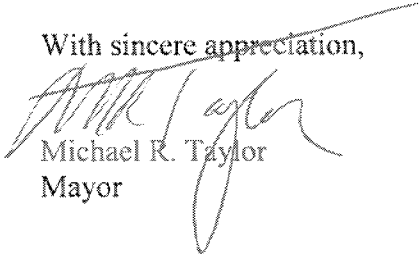
Other recommendations from a financial planning, forecasting and budgeting viewpoint were suggested in the performance audit. The Administration intends to explore those recommendations with a regional accounting firm who the city has used in the past and continues to use in our regular audit process. The accounting firm will inform the city how they might help with the suggestions from the performance audit and at what cost. City Council will then have to determine what resources can be spent on future financial planning.

We feel the performance audit team was professional and thorough. They were easy to work with and communicated well. Our major disappointment was in the audit's findings not giving specific solutions to the identified problems, particularly the revenue shortfalls. Both the Administration and City Council believed the performance audit would also help solve the mystery of lost water revenue and provide more definitive solutions to the financial issues uncovered in the other departments.

All in all, the performance audit process was a positive learning experience. In the future, the City would have to consider all sources in addition to the Auditor of State for analysis purposes. Analysis type and needed results would determine the best choice for the city's selection.

Please share our thanks with the members of the performance audit team and all who assisted them in this project.

With sincere appreciation,


Michael R. Taylor
Mayor


Joel B. Day
President of Council