

2017 Annual Report

The Housing Authority of the City of Pittsburgh

THE HOUSING AUTHORITY OF THE CITY OF PITTSBURGH

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Housing Authority of the City of Pittsburgh
Moving To Work Annual Report
2017

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Introduction

The Housing Authority of the City of Pittsburgh (HACP) is committed to building better communities and improving the lives of the families who reside in HACP housing. Throughout 2017, HACP strived to provide its 20,000 residents with housing that is safe and high quality; while working to provide additional housing opportunities to the thousands of Pittsburgh families currently waiting to find suitable, affordable housing accommodations.

HACP has committed to expanding our affordable housing portfolio to help meet the city's growing demand. This will be accomplished by developing hundreds of new units in locations throughout the city – including mixed-income developments in the East End, Hill District and the North Side, as well as Scattered Site housing located throughout the city limits.

As Pittsburgh's Renaissance continues, the Authority is taking measures to ensure that Pittsburgh's most vulnerable residents – our senior citizens, our disabled individuals and our low-income working families also are able to enjoy the benefits of our City's Renaissance. That is why it is essential to rebuild an adequate supply of affordable housing and why HACP is committed to creating a variety of new affordable homes

In addition to our efforts to develop safe, affordable housing, HACP is also poised to move forward with efforts to assist the 20,000 Pittsburgh residents who currently reside in an HACP home or receive support through our voucher program. We're providing our residents with the tools they need to become upwardly mobile and attain a higher quality of life; and, we're providing training and employment opportunities to any HACP resident committed to achieving self-sufficiency.

Residents continue to enroll in our Family Self-Sufficiency Program – working hard every day to provide a better life for their families through participation in training programs designed to produce quality, sustainable employment opportunities. We are changing the face of affordable housing in communities like Skyline Terrace and Larimer/ East Liberty. More importantly, we're helping to change the lives of the residents who call these communities their home.

Not Yet Implemented Activities

HACP does not currently have any not yet implemented programs.

On-Hold Activities

HACP activities that could be considered as ‘on hold’ are actually subsets of implemented activities. They are as follows:

1. Exception Payment Standard Areas. Originally approved in 2004 as part of a larger approval on Exception payment standards, HACP suspended its Exception Payment Standard Area in 2007 in order to reduce costs and streamline administration. HACP is currently developing an alternative payment standard methodology to increase housing choices for voucher families and will seek approval in the 2018 MTW annual plan.

Closed Out Activities

Since entering the Moving To Work Program in 2000, HACP has also instituted a number of Moving To Work initiatives that in 2014 no longer require specific Moving To Work Authority. Some of those initiatives are:

1. Establishment of Site Based Waiting Lists.
2. Establishment of a variety of local waiting list preferences, including a working/elderly/disabled preference and a special working preference for scattered site units.
3. Modified Rent Reasonableness Process.
4. Transition to Site Based Management and Asset Management, including Site Based Budgeting and Accounting.

Other Activities

Several activities that utilized Moving To Work Authority, but are not specified as specific initiatives waiving specific regulations, were previously included in the initiative section but no longer require that separate listing. They are as follows:

- Use of Block Grant Funding Authority to support Development and Redevelopment, Enhanced and Expanded Family Self-sufficiency and related programming, and the HACP MTW Homeownership Program.
 - Originally approved with the initial Moving To Work Program and expanded to include homeownership and resident service programs in subsequent years,

HACP continues to use Moving To Work block grant funding to support its Moving To Work Initiatives. Additional information on the use of Single Fund block grant authority is included in other sections of this MTW Plan.

- Energy Performance Contracting
 - Under HACP's Moving To Work Agreement, HACP may enter into Energy Performance Contracts (EPC) without prior HUD approval. HACP will continue its current EPC, executed in 2008, to reduce costs and improve efficient use of federal funds.
 - HACP's current EPC included installation of water saving measures across the authority, installation of more energy efficient lighting throughout the authority, and installation of geo-thermal heating and cooling systems at select communities. It was completed in 2010, with final payments made in 2011.

Monitoring and Verification work began in 2011, with the first full Monitoring and Verification report completed for the 2012 year.

- Establishment of a Local Asset Management Program.
 - In 2004, prior to HUD's adoption of a site based asset management approach to public housing operation and management, HACP embarked on a strategy to transition its centralized management to more decentralized site-based
 - Management capable of using an asset management approach. Specific elements of HACP's Local Asset Management Program were approved in 2010. HACP will continue to develop and refine its Local Asset Management Program to reduce costs and increase effectiveness.

B.1 Overview of HACP's Moving To Work Goals and Objectives

The Housing Authority of the City of Pittsburgh (HACP)'s overarching Moving To Work (MTW) Goals are as follows:

1. To reposition HACP's housing stock to preserve and expand affordable housing options and stabilize neighborhoods. These efforts are designed to result in housing that is competitive in the local housing market, is cost-effective to operate, provides a positive environment for residents, and provides broader options of high quality housing for low-income families.

2. To promote independence for residents via programs and policies that promote work and self-sufficiency for those able, and promote independent living for the elderly and disabled.
3. To increase housing choices for low income families through initiatives designed to increase the quality and quantity of housing available to households utilizing tenant-based rental assistance and other available resources.

B.2 Long Term Goals and Vision

HACP's vision for its Moving To Work Program is built around three major themes that together will achieve the statutory objectives of the Moving To Work Demonstration Program.

- *Theme one* is to reposition HACP's housing stock to compete in the local market, stabilize neighborhoods, improve operational efficiencies, and expand housing choices for low-income families.
- *Theme two* is to promote self-sufficiency and independent living through a variety of enhanced services and policy adjustments. These programs and policies are designed to provide incentives to work for adult, able bodied, non-elderly heads of households and family members, and to promote social and academic achievement for children and youth. In addition to increasing economic self-sufficiency among assisted families, these programs and policies are expected to result in increased revenue for the HACP (increasing the cost effectiveness of federal expenditures) while increasing housing choices for families (with increased work and income they will have additional housing choices both within the HACP portfolio and within the larger housing market).
- *Theme three* is to increase housing choices for low income families through initiatives designed to increase the quality and quantity of housing available to households utilizing rental assistance and other available resources.

Theme One: Repositioning of HACP's Housing Stock

Since the initial HACP Moving To Work Annual Plan in 2001, a major component of HACP's Moving To Work strategy has been to reposition HACP's housing stock through a) preservation of successful developments and b) revitalization of distressed developments through strategic investments that re-link public housing properties to their surrounding neighborhoods and act as a driver of other public and private investments to revitalize entire neighborhoods.

Initiated prior to Moving To Work through three HOPE VI redevelopment projects and continued through the Moving To Work Program, HACP has achieved great success.

A by-product of these redevelopment efforts, which feature reduced densities, mixed income, and modern conveniences, is a reduced number of traditional public housing units. This has

been balanced by the addition of new affordable units supported by tax credits, project based housing choice vouchers, and new units rented at market rates. In some of HACP's mixed finance/mixed income developments, a portion of the market rate units are rented at levels affordable to some low-income (80% of AMI) households. Traditional Housing Choice Vouchers also support low income families and occupancy of units available in the private market.

In recent years, however, Pittsburgh has experienced rapid growth in the technology and healthcare industries attracting high end developers to meet the influx of higher income residents moving to the region. Neighborhoods once abundant with affordable market rate rents have experienced a surge in pricing for both new and existing units. Low income families, including those utilizing Housing Choice Vouchers, have increasing difficulty locating units in neighborhoods of opportunity and are increasingly priced out of additional neighborhoods as the market continues to shift. There is a lack of affordable units in the City of Pittsburgh that disproportionately affects families at and below 30 percent of area medium income. HACP recognizes the affordable housing need and is working to address these concerns through a variety of strategies, including increasing landlord outreach and the development of a payment standard reflective of the increasing cost of housing. One core strategy continues to be the creation of new affordable units supported by tax credits and project based vouchers. This approach has enabled HACP to continue serving substantially the same number of families as would have been served absent the demonstration.

In 2012 and 2013, in light of continued erosion of funding available for affordable housing development and redevelopment, HACP engaged in extensive collaborative work with HUD and other partners to develop new mechanisms for financing redevelopment of distressed properties. The resulting Step Up To Market Financing Program, as detailed in Section IV, was designed to be a key component of future HACP repositioning activities.

HACP has also invested in its successful housing in recent years, including completion of partial comprehensive modernization renovation as noted below and in Section II. HACP completed phases I and II of Addison redevelopment resulting in 232 new Project Based Voucher (PBV) units and Phase I of Larimer Redevelopment resulting in 28 PBV units while construction is under way for Phase II of Larimer Redevelopment. In 2017 Addison Phase III was completed and began initial occupancy. Financial closings were completed for Allegheny Dwellings Phase I and pre-development activities began for Northview Midrise and Addison Terrace Phase IV (Homewood Redevelopment). 2017 also ushered the first closing of HACP's GAP financing product. Miller Street Apartments, a 36-unit project received Gap Financing and will be awarded project based vouchers upon completion. HACP continues to further develop this new financing mechanisms and looks forward to awarding future funding to the development of more affordable units throughout the jurisdiction and continuing to reposition the agency's housing stock.

The charts at the end of this chapter shows projected sources of funds that can be used for capital projects, and projected uses of those funds over the next five years. All of these numbers reflect projected obligations (not expenditure) of funds and are projections only and are subject to change based upon funding levels and opportunities, financial and real estate market conditions, new or changing regulations or requirements, and other unforeseen developments.

The status of projects relating to Repositioning of HACP's Housing Stock are as follows:

Development	FY 2017
Addison Terrace Phase III	Phase III is nearing completion. The phase will consist of 37 affordable units and 13 market rate units. Complete lease up is expected by year end 2017.
Larimer/East Liberty Phase I	Now known as Cornerstone Village, Phase I maintains stabilized occupancy of 85 mixed-income rental units. The community consists of 28 PBV units, 28 tax credit only units and 27 market rate units.
Larimer/East Liberty Phase II	Will result in 150 mixed-income rental units. Seventy-Five (75) will be assisted via transferred HUD multi-family HAP. Pennsylvania Housing Finance Agency (PHFA) approved a four percent LIHTC for this project in April 2017 and financial closing began in October of 2017. Demolition and Site Preparation activities commenced in June 2017 and construction occurred in December of 2017. HUD also approved disposition of two vacant parcels for construction of new community park in Larimer Choice Neighborhoods in December 2017.
Larimer/East Liberty Phase III	HACP is working with the City and community members to identify and acquire Phase III sites in the Larimer neighborhood. Approximately 50 mixed-income rental units will be developed as part of the third phase of redevelopment and a tax credit application will be submitted in 2018.
Larimer/East Liberty Phase IV	Will consist of approximately 49 mixed-income rental units. The project is in the initial planning stage with a LIHTC application scheduled for submission in 2019.
Bedford Dwellings Redevelopment (Choice Neighborhood Planning Grant)	HACP (Lead-grantee) and the City of Pittsburgh (Co-grantee) worked with the community partners to complete a draft CN Transformation Plan and submitted the plan to HUD in December 2017. HACP and its partners will start predevelopment studies and activities for the first phase of the Choice Neighborhood housing redevelopment in 2018. The predevelopment activities may include preparing and submitting a LIHTC application.
Northview Heights Midrise	HACP will construct an 87 unit replacement building on a vacant plot within the community. HACP submitted a four percent LIHTC application in June of 2017 with financial closing and possible construction to begin in 2018.

Allegheny Dwellings Redevelopment	A total number of 65 of mixed-income units (47 affordable/ 18 market rate units), consisting of one, two and three bedroom units will be built on-site and along Federal Street. The four percent tax credit application was submitted on June 30, 2017 and award of tax credits is anticipated in the fall of 2017. Project financial closing was held in December, 2017. Allegheny Dwellings Phase I is currently undergoing demolition and is anticipated to be completed in April 2018. Construction is anticipated to be completed in two years and is estimated to be completed in the first quarter of 2019.
Crawford Square	Crawford square is a pre-existing LIHTC supported mixed income development overlooking downtown Pittsburgh and located a few blocks from the HACP owned mixed finance development Bedford Hill. HACP collaborated with the City of Pittsburgh and the current property owners to develop a solution to maintain the affordable units as the property entered the final year of its tax credit affordability period in 2016. As a mechanism to preserve 188 affordable units at Crawford Square, HACP and its partners will re-syndicate the tax credits at the property and become a partial owner. Of the 188 units, 60 will be designated as Project Based Voucher units and 128 will remain as LIHTC units. Closing is expected to occur in April of 2018 with construction to begin in May.
Manchester	Manchester is an early HOPE VI mixed finance redevelopment with 86 units. The LIHTC compliance period ended in 2016 and HACP and its partners acquired the property in 2017. HACP proposes to preserve the 86 affordable rental units for the next 20 year period through re-syndication and will submit a LIHTC application in 2018. HACP will also complete pre-development activities and initiate modernization of individual units and update/repair ancillary land and building structures as necessary.
Turnkey development of scattered sites	Two Community Development Groups/Faith-based organizations were selected in 2016 to develop up to 50 turnkey units. Turnkey Development of Scattered Sites in the East Liberty Neighborhoods for 20 units is nearing completion and close-out. The Additional 22 units are delayed as the developer secures additional sites. A portion of these units will be built on HACP owned sites in the Hill District as well as other privately owned sites. HACP is in the midst of confirming final site locations.
Addison Terrace Phase IV (Homewood Redevelopment)	HACP and its private co-development partner have submitted a four percent LIHTC application to the PHFA Pennsylvania Housing Finance Agency in May 2017. Part of that closing will involve the disposition of the Kelly St high-rise site along with the use of MTW funds to prepare the site and construct the units.
Disposition and or redevelopment of vacant properties	HACP continues to plan for potential disposition and/or mixed finance development of vacant properties at St. Clair Village, Kelly Street in Homewood, various dilapidated Scattered Sited properties and at Cove Place in Glen Hazel. Vacant properties located within the Glen Hazel community are not included in RAD and St. Clair Village and Kelly Street are former Low Income Public Housing communities prime for redevelopment.

Elmer Williams Square	Identified through the Project Based Voucher Plus Gap competitive selection process in 2016. The project consists of 36 rehabilitated units and one (1) new construction unit two (2) units will also be fully accessible and meet Uniform Federal Accessibility Standards. All 36 units will be HCV Project Based Voucher units. HACP plans to enter into a gap financing loan agreement and an affordability restriction with owner entity of the project in 2018.
Miller Street Apartments	Identified through the Project Based Voucher Plus Gap competitive selection process in 2016. Project closed on December 21, 2017 and currently undergoing demolition. The project also received a 9% LIHTC award

Pursuit of Rental Assistance Demonstration Conversions

In order to secure the long-term viability of its existing housing stock, HACP is pursuing conversion of some public housing units to HUD contracts for multi-family housing rental assistance through the Rental Assistance Demonstration (RAD) Program. HACP received approval in 2015 for the following properties:

- Glen Hazel and Glen Hazel High Rise
- Murray Towers
- Oak Hill

On July 14, 2015, HACP submitted an additional RAD application for New Pennley Place and received a CHAP notice in May of 2016. The RAD Conversion Commitment Letter for this property was received on January 28, 2017. HACP is collaborating with the property owner to determine a final course of action. HACP successfully achieved financial closing of Oak Hill in October of 2017. Financial closing is expected to occur for Glen Hazel, Glen Hazel High Rise, and Murray Towers in 2018.

Long Term Development and Redevelopment Funding Projections

Below are two charts showing projected funding obligations over the next five years.

Not included in the charts are funding and financing strategies, including those that use MTW funding flexibility and support and leverage MTW funds to support redevelopment of these properties. As funding opportunities and financing mechanisms change, and creative approaches are devised, HACP will adapt and adopt the approaches that are most advantageous to the agency. These approaches include but are not limited to the following:

- Low Income Housing Tax Credits, Historic Tax Credits, and/or New Market Tax Credits.
- Federal, State, and Local Housing Trust Funds dollars as available.
- Other Federal, State, and Local funds such as CDBG, HOME, PA Department of Community and Economic Development Programs, and others as can be secured.
- HUD's new and evolving financing and transformation initiatives (if authorized), or other similar approaches.
- Project basing up to 500 Housing Choice Vouchers.
- HACP's Moving to Work *Step Up To Market Financing Program*.
- Any and all other opportunities and mechanisms that are available or can be identified that will assist HACP in furthering its goals under MTW and under the Low Income Public Housing and Housing Choice Voucher programs.

Other sections of the Annual Report include specifics on the funding strategies utilized in specific development phases that closed in 2017, and future Plans and Reports will include additional details for future phases.

Below are two charts showing project funding obligations over the next Five years.

<i>PROJECTED SOURCES</i>		<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>5-Year SubTotals</i>
MiW Funding		23,379,755	20,000,000	20,000,000	20,000,000	20,000,000	103,379,755
CFBPRHF Projected Future Funding		11,713,098	7,000,000	7,000,000	7,000,000	5,000,000	37,713,098
MiW Reserves		3,325,337	0	0	0	0	3,325,337
TOTALS ALL PROJECTED SOURCES		38,418,190	27,000,000	27,000,000	27,000,000	25,000,000	144,418,190

USES	<i>PROPOSED USES</i>		<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>5-Year SubTotals</i>
	HACP-WIDE	Administrative	1,094,724	1,000,000	1,000,000	1,000,000	1,000,000	5,094,724
		Security	5,167,856	5,322,892	5,482,579	5,647,056	5,816,468	27,436,851
		LBPAbatement - Other Misc Hazmat	60,000	60,000	60,000	60,000	60,000	300,000
		GPNA (Inventory)	0	0	0	200,000	0	200,000
		Utility Repair	25,000	0	0	0	0	25,000
		A/E Technical Services	700,000	700,000	700,000	700,000	500,000	3,300,000
		Resident Services	2,070,026	2,132,127	2,196,091	2,261,974	2,329,833	10,990,051
		Contingencies	50,000	50,000	50,000	50,000	50,000	250,000
	SUBTOTAL HACP-WIDE USES		9,167,606	9,265,019	9,488,670	9,919,030	9,756,301	47,596,626
	SUBTOTAL DEVELOPMENT		21,000,000	47,900,000	29,400,000	34,500,000	17,500,000	150,300,000
	SUBTOTAL MODERNIZATION		8,250,584	7,611,885	11,075,592	7,373,242	3,643,469	37,954,772
	TOTALS ALL PROPOSED USES		38,418,190	64,776,904	49,964,262	51,792,272	30,899,770	235,851,398

Proposed Development			2018	2019	2020	2021	2022	5-Year Subtotals
Homewood (Addison Phase 4)			0	0	5,000,000	0	0	5,000,000
Larimer/East Liberty Phases 3/4 (Choice)			1,500,000	2,000,000	0	0	0	3,500,000
Scattered Sites			0	5,000,000	10,000,000	7,000,000	10,000,000	32,000,000
Arlington Heights			0	1,300,000	0	0	0	1,300,000
PBV/Gap Financing & Innovations			10,000,000	4,000,000	400,000	0	0	14,400,000
Allegheny Dwellings Phase 2 & 3			0	14,000,000	0	20,000,000	0	34,000,000
Bedford Dwellings			1,200,000	6,000,000	7,500,000	7,500,000	7,500,000	29,700,000
Northview Phase II			1,000,000	6,000,000	0	0	0	7,000,000
Glen Hazel RAD			1,000,000	0	0	0	0	1,000,000
Murray Towers RAD			2,700,000	0	0	0	0	2,700,000
Manchester All Phases			0	8,600,000	0	0	0	8,600,000
Oak Hill MROPs			1,000,000	0	6,000,000	0	0	7,000,000
Oak Hill Capital Improvements			1,600,000	0	0	0	0	1,600,000
New Pennley Place RAD			1,000,000	1,000,000	500,000	0	0	2,500,000
SUBTOTAL DEVELOPMENT			21,000,000	47,900,000	29,400,000	34,500,000	17,500,000	150,300,000
Proposed Modernization			2018	2019	2020	2021	2022	5- Year Subtotals
901	Addison (201 Kirkpatrick St Central Maintenance)		308,398	0	0	0	0	308,398
902	Bedford Dwellings		90,348	0	0	0	0	90,348
915	PA Bidwell / D.O.C.		554,925	420,875	307,144	895,102	0	2,178,046
917	Pressley		1,339,164	77,381	5,884,400	125,177	13,014	7,439,136
909	Northview Heights		4,771,700	2,747,700	2,600,000	1,400,000	1,400,000	12,919,400
920	Homewood North		607,000	1,904,378	37,920	2,202,046	93,143	4,844,487
904	Arlington Heights		2,822	809,790	0	0	0	812,612
940	Mazza Pavillion		1,500	0	0	7,253	0	8,753
941	Caliguiri Plaza		19,326	511,700	278,200	167,904	0	977,130
944	Finello Pavillion		14,347	141,900	456,226	32,325	154,174	798,972
945	Morse Gardens		27,500	135,782	144,700	47,463	1,399,999	1,755,444
946	Carrick Regency		233,351	394,433	202,300	938,579	76,142	1,844,805
947	Gualtieri Manor		89,000	2,440	47,500	118,959	21,299	279,198
922 & 939	Scattered Sites / Hamilton Larimer		191,203	465,506	1,117,202	1,438,434	485,698	3,698,043
SUBTOTAL MODERNIZATION			8,250,584	7,611,885	11,075,592	7,373,242	3,643,469	37,954,772

Theme Two: Promoting Self-Sufficiency and Independent Living Through a Variety of Enhanced Services and Policy Adjustments.

HACP is committed to continuing pursuit of programs and policies that promote self-sufficiency and independent living. This is pursued through programs and policy modifications.

HACP's Family Self-Sufficiency (FSS) Program, called Realizing Economic Attainment For Life or REAL, includes the Resident Employment Program (REP). REAL and REP provide a variety of supports, programs, and referrals to residents to assist them in preparing for, seeking, finding, and retaining employment. The program and the Authority also work constantly to link with other programs, leverage additional services, and create positive environments for families, adults, seniors, and children. REAL and REP are complemented by the programs provided by HACP and its partners that focus on youth of varying ages, including the BJWL after school and summer programs, YouthPlaces, the Clean Slate Drug Free Lifestyles and Youth Leadership Development Program, and the Creative Arts Corner state of the art audio/video studios at Northview Heights and the Bedford Hope Center. HACP's investments in resident services have leveraged over \$4,000,000 per year in additional programs and services in recent years.

The REAL program's service coordinators are Family Self Sufficiency Program Service Coordinators and they are funded by FSS/ ROSS grants from HUD. There are many service providers that provide in kind services to our residents. Some of these providers and programs include: The Community College of Allegheny County, the Health Professionals Opportunity Grant, Catholic Charities, 412 Food Rescue, City Parks, Annanias Mission, Grow Pittsburgh, Duquesne University, the Juvenile Re-Entry Assistance Program, "Y on the Fly", the Beverly Jewel Wall Lovelace Children's Program and YouthPlaces.

The Clean Slate Program, REP, Creative Arts Corner, Computer Training Program, GED prep program, Drivers Education and all resident services are frontlined out of the Central Office Cost Center.

HACP policy modifications are also designed to promote self-sufficiency, and the modified rent policy (as described in Section IV), is designed to encourage families to participate in the FSS program.

Theme Three: Increasing housing choices for low income families through initiatives designed to increase the quality and quantity of housing available to households utilizing rental assistance and other available resources.

As Pittsburgh's housing market has changed in recent years, the availability of affordable housing has declined. These market changes have affected both naturally occurring affordable units and those available to households utilizing Housing Choice Vouchers. In response, HACP initiated its initial landlord initiatives in an attempt to increase the number of landlords participating in the HCV program, and to increase the number and quality of units available. HACP also used standard regulations to secure approval of a Success Rate Payment Standard for the City, effectively increasing the payment standard to 119% of the area Fair Market Rent. However, the final ruling of the Small Area Fair Market Rents (SAFMR) mandated zip code based payment standards. With rental costs continuing to escalate in many neighborhoods HACP conducted further analysis of market changes and continues to pursue additional initiatives including the development of an alternative payment standard for the HCV program. A waiver request to delay the implementation of the Small Area Fair Market Rents was submitted in March of 2018 in response to public comments and to allow HACP to complete the creation of the alternative methodology. These efforts should result in an increase in the quality of housing options for households utilizing tenant-based rental assistance.

II. GENERAL HOUSING AUTHORITY OPERATING INFORMATION

Annual MTW Report									
II.4.Report.HousingStock									
A. MTW Report: Housing Stock Information									
New Housing Choice Vouchers that were Project-Based During the Fiscal Year									
Property Name	Anticipated Number of New Vouchers to be Project-Based *	Actual Number of New Vouchers that were Project-Based	Description of Project						
Addison Phase III	37	37	New construction tax credit supported housing in the Hill District Neighborhood						
Hillcrest Senior Apartments	16	16	New construction tax credit supported housing in the Carrick Neighborhood.						
Doughboy Square	9	5	Existing construction tax credit supported housing in the Lawrenceville Neighborhood.						
DinwiddiePhaseIII and IV	24	12	Existing construction tax credit supported housing in the Uptown Neighborhood.						
				Anticipated Total Numberof Project-Based Vouchers Committed at the End of the Fiscal Year *			Anticipated Total Number of Project-Based Vouchers Leased Up or Issued to a Potential Tenant at the End of the Fiscal Year*		
Anticipated Total Number of New Vouchers to be Project-Based *		Actual Total Numberof New Vouchers that were Project-Based		532			532		
86		70		Actual Total Number of Project-Based Vouchers Committed at the End of the Fiscal Year			Actual Total Number of Project-Based Vouchers Leased Up or Issued to a Potential Tenant at the End of the Fiscal Year		
				516			516		
* From the Plan									
Other Changes to the Housing Stock that Occurred During the Fiscal Year									
Demolition of 97 units at Allegheny Dwellings									

General Description of Actual Capital Fund Expenditures During the Plan Year		
<p>Completed: Caliguiri Plaza - Windows/EIFS/roof replacement and interior improvements. PA Bidwell- Balcony, railing, roof and corridor safety repair(Substantially Complete-Construction occurred & stopped & to resume when weather improves). Fire alarm replacement authority wide as needed. Northview Heights- Site work improvements and roof repairs/replacements. Authority-wide lead risk assessments (dust, paint, & water)-Under contract - services not commented yet</p>		
Overview of Other Housing Owned and/or Managed by the PHA at Fiscal Year End		
Housing Program *	Total Units	Overview of the Program
Other	769	HACP maintains tax credit only units in various mixed finance/PBV developments.
Total Other Housing Owned and/or Managed	769	
<p>* Select Housing Program from: Tax-Credit, State Funded, Locally Funded, Market-Rate, Non-MTWHUD Funded, Managing Developments for other non-MTW Public Housing Authorities, or Other.</p>		
If Other, please describe:	Tax credit only units	

B. MTW Report: Leasing Information			
Actual Number of Households Served at the End of the Fiscal Year			
Housing Program:	Number of Households Served*		
	Planned	Actual	
Number of Units that were Occupied/Leased through Local Non-Traditional MTW Funded Property-Based Assistance Programs **	635	635	
Number of Units that were Occupied/Leased through Local Non-Traditional MTW Funded Tenant-Based Assistance Programs **	154	159	
Port-In Vouchers (not absorbed)	X	X	
Total Projected and Actual Households Served	789	794	
* Calculated by dividing the planned/actual number of unit months occupied/leased by 12.			
** In instances when a Local, Non-Traditional program provides a certain subsidy level but does not specify a number of units/Households Served, the PHA should estimate the number of Households served.			
Housing Program:	Unit Months Occupied/Leased****		
	Planned	Actual	
Number of Units that were Occupied/Leased through Local Non-Traditional MTW Funded Property-Based Assistance Programs ***	7620	7620	
Number of Units that were Occupied/Leased through Local Non-Traditional MTW Funded Tenant-Based Assistance Programs ***	1848	1908	
Port-In Vouchers (not absorbed)	X	X	
Total Projected and Annual Unit Months Occupied/Leased	9468	9528	
*** In instances when a local, non-traditional program provides a certain subsidy level but does not specify a number of units/Households Served, the PHA should estimate the number of households served.			
**** Unit Months Occupied/Leased is the total number of months the housing PHA has occupied/leased units, according to unit category during the year.			
	Average Number of Households Served Per Month	Total Number of Households Served During the Year	
Households Served through Local Non-Traditional Services Only	X	X	

Reporting Compliance with Statutory MTW Requirements: 75% of Families Assisted are Very Low-Income								
<p>HUD will verify compliance with the statutory objective of "assuring that at least 75 percent of the families assisted by the Agency are very low-income families" is being achieved by examining public housing and Housing Choice Voucher family characteristics as submitted into the PIC or its successor system utilizing current resident data at the end of the agency's fiscal year. The PHA will provide information on local, non traditional families provided with housing assistance at the end of the PHA fiscal year, not reported in PIC or its successor system, in the following format:</p>								
Fiscal Year:	2011	2012	2013	2014	2015	2016	2017	2018
Total Number of Local, Non-Traditional MTW Households Assisted	644	720	746	750	761	769	769	
Number of Local, Non-Traditional MTW Households with Incomes Below 50% of Area Median Income	n/a	n/a	737	747	753	761	769	
Percentage of Local, Non-Traditional MTW Households with Incomes Below 50% of Area Median Income	n/a	n/a	99%	99%	99%	99%	99%	

Reporting Compliance with Statutory MTW Requirements: Maintain Comparable Mix

In order to demonstrate that the statutory objective of “maintaining a comparable mix of families (by family size) are served, as would have been provided had the amounts not been used under the demonstration” is being achieved, the PHA will provide information in the following formats:

Baseline for the Mix of Family Sizes Served

Family Size:	Occupied Number of Public Housing units by Household Size when PHA Entered MTW	Utilized Number of Section 8 Vouchers by Household Size when PHA Entered MTW	Non-MTW Adjustments to the Distribution of Household Sizes *	Baseline Number of Household Sizes to be Maintained	Baseline Percentages of Family Sizes to be Maintained
1 Person	1714	994	X	2708	29.61
2 Person	1721	1536	X	3257	35.62
3 Person	1427	1134	X	2561	28
4 Person	300	208	X	508	5.55
5 Person	84	27	X	111	1.21
6+ Person	X	X	X	X	0
Totals	5246	3899	0	9145	1

Explanation for Baseline Adjustments to the Distribution of Household Sizes Utilized

At this time, HACP has not requested any adjustments to the baseline for the mix of families served. It should be noted that HACP's total baseline of families to be served has increased to a total of 9563, but these additional authorized units do not have a family size and therefore are not reflected in these charts. Also HACP has collected data only for 5+ and does not have a separate entry for 6+

Mix of Family Sizes Served							
	1 Person	2 Person	3 Person	4 Person	5 Person	6+ Person	Totals
Baseline Percentages of Household Sizes to be Maintained **	26.61%	35.62%	28%	5.55%	1.21%	0	0.9699
Number of Households Served by Family Size this Fiscal Year ***	3352	2655	2047	414	75	0	8543
Percentages of Households Served by Household Size this Fiscal Year ****	39.24%	31.08%	23.96%	4.85%	0.88%	0	100%
Percentage Change	-0.47	-0.13	-0.14	-0.95	-0.99	0	0
Justification and Explanation for Family Size Variations of Over 5% from the Baseline Percentages	The increase greater than 5% is in single person households. HACP attributes this to aging in place and the increase number of single elderly households. Not to any decision made by the HACP or due to any impact of an MTW activity.						
**“Non-MTW adjustments to the distribution of family sizes” are defined as factors that are outside the control of the PHA. Acceptable “non-MTW adjustments” include, but are not limited to, demographic changes in the community’s population. If the PHA includes non-MTW adjustments, HUD expects the explanations of the factors to be thorough and to include information substantiating the numbers used.							
*** The numbers in this row will be the same numbers in the chart above listed under the column “Baseline percentages of family sizes to be maintained.”							
*** The methodology used to obtain these figures will be the same methodology used to determine the “Occupied number of Public Housing units by family size when PHA entered MTW” and “Utilized number of Section 8 Vouchers by family size when PHA entered MTW” in the table immediately above.							
**** The “Percentages of families served by family size this fiscal year” will reflect adjustments to the mix of families served that are directly due to decisions the PHA has made. HUD expects that in the course of the demonstration, PHAs will make decisions that may alter the number of families served.							

Description of any Issues Related to Leasing of Public Housing, Housing Choice Vouchers or Local, Non-Traditional Units and Solutions at Fiscal Year End		
Housing Program	Description of Leasing Issues and Solutions	
Low income Public Housing	No issues experienced in leasing public housing units	
Housing Choice Voucher Program	Challenges related to leasing Housing Choice Vouchers include aging housing stock leading to high rate of initial failed inspections, a tightening housing market creating more competition for available units with non voucher households and continued reluctance of many landlords to accept families utilizing voucher assistance. HACP continues to outreach and recruitment of new landlords to increase available units.	
Non Traditional Local programs	Description of specific leasing issues and possible solutions (if applicable)	

Number of Households Transitioned To Self-Sufficiency by Fiscal Year End		
Activity Name/#	Number of Households Transitioned *	Agency Definition of Self Sufficiency
#3 Modified Rent Policy HCV	29	Free of Cash Assistance
#4 Modified Rent Policy LIPH	40	Free of Cash Assistance
#6 Homeownership	15	Completed Home Purchase
Households Duplicated Across Activities/Definitions	0	* The number provided here should match the outcome reported where metric SS #8 is used.
ANNUAL TOTAL NUMBER OF HOUSEHOLDS TRANSITIONED TO SELF SUFFICIENCY	84	

C. MTW Report: Wait List Information					
Wait List Information at Fiscal Year End					
Housing Program(s) *	Wait List Type **	Number of Households on Wait List	Wait List Open, Partially Open or Closed ***	Was the Wait List Opened During the Fiscal Year	
Low income Public Housing	Site-Based	3,902	Partially Open	Yes	
Housing Choice Voucher Program	Community Wide	2,929	Closed	No	
Non Traditional Local Programs (no waitlist for homeownership, combined waitlist at mixed finance, mixed income communities)	Site-Based	n/a	open	Yes	
More can be added if needed.					
<p>* <i>Select Housing Program</i> : Federal MTW Public Housing Units; Federal MTW Housing Choice Voucher Program; Federal non-MTW Housing Choice Voucher Units; Tenant-Based Local, Non-Traditional MTW Housing Assistance Program; Project-Based Local, Non-Traditional MTW Housing Assistance Program; and Combined Tenant-Based and Project-Based Local, Non-Traditional MTW Housing Assistance Program.</p>					
<p>** <i>Select Wait List Types</i>: Community-Wide, Site-Based, Merged (Combined Public Housing or Voucher Wait List), Program Specific (Limited by HUD or Local PHA Rules to Certain Categories of Households which are Described in the Rules for Program Participation), None (If the Program is a New Wait List, Not an Existing Wait List), or Other (Please Provide a Brief Description of this Wait List Type).</p>					
<p>*** For Partially Open Wait Lists, provide a description of the populations for which the waiting list is open.</p>					
<p>MTW Public Housing Wait lists are open in all communities for all bedroom sizes except 1 bedroom family communities</p>					
<p>Housing Choice Voucher Program: wait list reopened in the fall of 2015 for a limited time, with position assigned by lottery to over 7,000 applicants. The wait list remained closed in 2017</p>					
<p>Non Traditional Local Programs-tax credit units in mixed finance developments have wait lists operated by private management.</p>					
<p>If Local, Non-Traditional Program, please describe:</p>					
<p>Homeownership: Currently no wait list participation is open to otherwise eligible families. If demand for soft second mortgage approaches annual budget authority a wait list for participants with mortgage pre-approval letters will be established.</p>					
<p>Non Traditional Local Programs-tax credit units in mixed finance developments have wait lists operated by private management.</p>					

If Other Wait List Type, please describe:															
HACP LIPH Site Based wait list preference system allows applicants to choose up to three communities of preference the first available from all properties. The number listed is of unduplicated applicants on the waiting list, although each may be on more than one individual site list. Public Housing units in mixed finance/mixed income privately managed properties are not included, as each location operates a separate waiting list.															
PBV waitlists operated by HACP open and close based on demand.															
If there are any changes to the organizational structure of the wait list or policy changes regarding the wait list, provide a narrative detailing these changes.															
HACP maintains a centralized application process however pre-applications can be submitted on site.															

III. PROPOSED MOVING TO WORK ACTIVITIES: HUD APPROVAL REQUESTED

All proposed activities that have been approved by HUD are reported on in Section IV as “Approved Activities.”

IV. APPROVED MTW ACTIVITIES: HUD APPROVAL PREVIOUSLY GRANTED.

Activity	Plan Year Approved	Plan Year Implemented	Current Status
1. Pre-Approval Inspection Certification for Multi-Unit Housing	2015 Annual Plan	2015	Implemented
1. Preferred Owners Program	2015 Annual Plan	2015	Implemented
3. Modified Rent Policy - Work or FSS Requirement or increased minimum tenant payment for non-exempt HCV households	2011 Annual Plan	2011	Implemented
4. Modified Rent Policy - Work or FSS Requirement or increased minimum rent for non-exempt LIPH households	2008 Annual Plan	2008-2009	Implemented
5. Revised Recertification Policy – at least once every other year – for Section 8/HCV	2008 Annual Plan	2008	Implemented
6. Revised Recertification Policy – at least once every other year – for LIPH	2009 Annual Plan	2009	Implemented
7. Homeownership Program: Operation of Combined LIPH and Section 8/HCV Homeownership Program; Program assistance to include soft-second mortgage assistance coupled	Combined Program approved in 2007; other elements approved in 2010; expansion of eligibility to	2007; 2010;	Implemented

with closing cost assistance, homeownership and credit counseling, and foreclosure prevention only; establish a soft-second mortgage waiting list; expand eligibility to persons on the LIPH and HCV program waiting lists; expand eligibility to persons eligible for LIPH	person eligible for LIPH proposed in this 2014 plan.		
8. Modified Housing Choice Voucher Program policy on maximum percent of Adjusted Monthly Income permitted.	2001 Annual Plan	2001	Implemented
8. Modified Payment Standard Approval - establish Exception Payment Standards up to 120% of FMR without prior HUD approval.	2004 Annual Plan; additional features in 2013 Annual Plan	2004; 2013	Implemented. Ongoing for persons with disabilities; On Hold for exception areas.
9. Step Up To Market Financing Program	2012 Annual Plan	2013	Implemented

A. Implemented Activates-Ongoing

1. Pre-Approval Inspection Certification for Multi-Unit Housing

Description

The Pre-Approval Inspection Certification process applies to buildings with four or more units located within a single structure; the pre-approval process cannot be applied to scattered site housing. All units seeking Pre-Approval Inspection Certification must be vacant at the time the HQS inspection occurs and must remain vacant until a Request for Tenancy Approval is submitted for the unit. Pre-Approval Inspection Certification status will only be accepted for tenancy approvals during the 60 day period after the unit passes HQS inspection. If a Request for Tenancy Approval is submitted after the 60 day qualifying period, a new initial HQS inspection must be performed before the unit is approved for tenancy. HAP payments are not tied to the Pre-Approval Inspection. HAP payments will begin from the tenancy certification date only.

Standard Metric	Unit of Measurement	Baseline	Benchmark	2017 Outcome	Benchmark Achieved?
Local Metric- Housing Choice: Additional Units of Housing Made Available	Number of new housing units made available for households at or below 80% of AMI as a result of the activity (increase).	Housing units prior to implementation : 0	Increase the number of units in multi-unit housing structures available to low-income families after implementation: 30 Yes	Actual number of units in multi-unit housing structures after implementation. 35	Yes

Cost Effectiveness #1: Agency Cost Savings	Total cost of task in dollars (decrease).	Cost of inspections in dollars prior to implementation \$677,300 annually	Expected cost of task after implementation: \$674,375 annually	Actual cost after implementation (in dollars). \$675,025 annually	No
Cost Effectiveness #2: Staff Time Savings	Total time to complete the task in staff Hours (decrease).	Total staff time to complete inspections prior to implementation 15,662.5 hours annually	Expected amount of total staff time dedicated to inspections after implementation: 15,630 hours annually	Actual amount of staff time after implementation (in hours). 15,645 hours annually	Yes
Cost Effectiveness #3: Decrease in Error Rate of Task Execution (inspections)	Average error rate in completing a task as a percentage (decrease).	Average error rate of task prior to implementation : 0.1%	Expected average error rate of inspections after implementation: 0.1% (HACP does not expect a change in error rate as a result of this program.)	Expected average error rate of inspections after implementation: .1%	Yes

This activity was approved and implemented in 2015.

Changes and Modifications

No changes to this activity during this fiscal year.

Authorization

Attachment C (D)(5)

Attachment C(D)(1)(d)

Regulatory Citation

24 CFR 982.311.

24 CFR982 Subpart

Comparison of Outcome to Benchmarks

HACP experienced positive yet modest results in the third year of implementation. With the establishment of the landlord advisory council and the addition of the landlord outreach specialist more landlords are interested in the pre-approval process. The benefit requires a minimum of four units within a structure which can be challenging for smaller landlords to achieve. HACP is reviewing this activity with the Landlord Advisory Council to determine how the HCV department can support landlords in achieving this requirement and if the activity should be revised.

2. Preferred Owners Program

Description

The Preferred Owners Program provides incentives to landlords to participate in the Housing Choice Voucher Program and to provide quality housing units in a variety of neighborhoods. Participating landlords must consistently pass Housing Quality Standards (HQS) inspections and participate in annual training. In return, they will receive priority placement of their listings on the HACP apartment listings web site and can be eligible for the following:

- a) Changes in inspection schedule:
 - i. Priority inspection scheduling- Preferred Owners will be moved to the top of the waiting list for annual and initial inspections.
 - ii. Biennial inspections- Owners who have passed annual inspection on the first inspection for the past three consecutive years will be moved to biennial inspections. If a future inspection results in a fail, the owner will be removed from the Preferred Owners Program and will return to an annual inspection schedule.
 - iii. Acceptance of prior inspections for new tenancies if an annual or initial inspection was conducted less than 60 days ago for vacated units- If, after initial inspection and move-in, a unit is vacated for any reason and a new RFTA is returned for a new voucher holder in the same unit within 60 days, the previous inspection will be accepted as the initial inspection for the new RFTA.
 - iv. Construction completion inspection to be accepted as initial inspection for project-based voucher units for 60 days- When Project-Based Voucher (PBV) owners or property managers are Preferred Owners, the construction completion inspection on a new PBV unit can be used as the initial inspection
 - v. if the unit is occupied within 60 days if that inspection.

b) Vacancy Payment

- i. When a voucher holder moves out, if the landlord re-leases the unit to another voucher holder, HACP will issue vacancy payment of up to two months of the previous tenant's HAP as a HAP Adjustment Vacancy Payment. The impact of this initiative is to encourage landlords to work with HACP and the HCV program long-term, preserving housing for families at or below 50% AMI.

Application for Membership

In order to gain membership to the Preferred Owners Program, an owner or property manager must apply by submitting a form to the HCV office. This form will include

1. Landlord's name;
2. Contact information;
3. Addresses of units currently leased to voucher holders;
4. Checklist of the standards for membership which must be passed by the landlord, which are:

a. Consistent HQS Inspection Passes

Units have passed annual inspection on the first inspection for the past three consecutive years.

b. Trainings

Preferred Owners must complete a minimum of one training per year to maintain membership. All trainings will be provided free of charge to all landlords; however, to maintain membership in the Preferred Owners Program, owners or property managers must complete a minimum of one training per year. Trainings may be chosen from the following options:

1. Screening Tenants- Includes information about background checks, references, and Fair Housing law.
2. The Magistrate Process- Includes information about legal recourse landlords may take if they feel their tenant has broken his or her lease.
3. Mental Health First Aid Training- This training is provided by Mercy Behavioral Health.
4. Real Estate continuing education credits may also be counted as Preferred Owners trainings, when proof of completion is provided.

This activity was approved and implemented in 2015.

Changes and Modifications

No changes to this activity during this fiscal year.

Authorization

Attachment C (D)(5)

Regulatory Citation

24 CFR 982.311.

Standard HUD Metric	Unit of Measurement	Baseline	Benchmark	2017 Outcome	Benchmark Achieved
Local Metric- Housing Choice: Additional Units of Housing Made Available	Number of new housing units made available for households at or below 80% AMI as a result of the activity (increase). If units reach a specific type of household, give that type in this box.	Housing units of this type prior to implementation: 0 (current number of units of landlords in this program).	Expected housing units of this type after implementation of the activity: 120	Actual housing units of this type after implementation (number). 437	Yes
Housing Choice #2: Units of Housing Preserved	Number of housing units preserved for households at or below 80% AMI that would otherwise not be available (increase). If units reach a specific type of household	Housing units preserved prior to implementation of the activity: 0 (number of units currently in the program).	Expected housing units preserved after implementation of the activity: 120	Actual housing units preserved after implementation of the activity (number): 437	Yes

Cost Effectiveness #1: Agency Cost Savings	Total cost of task in dollars (decrease).	Cost of inspecting 90 units in dollars prior to implementation: \$5,850	Expected cost of task after implementation: \$7,800	Actual cost after implementation (in dollars): 5,200	Yes
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Cost Effectiveness #2: Staff Time Savings	Total time to complete the task in staff hours (decrease).	Total staff time to complete inspections for 90 Preferred Owner units prior to implementation: 135 hours per year.	Expected amount of total staff time dedicated to inspecting 90 Preferred Owner units after implementation 67.5 hours per year	Actual amount of staff time after implementation (in hours). 15 hours (saved)	Yes
Cost Effectiveness #3: Decrease in Error Rate of Task Execution	Average error rate in completing a task as a percentage (decrease).	Average error rate of task prior to implementation: 0.1%	Expected average error rate of inspections after implementation: 0.1% [HACP does not expect a change in error rate as a result of this program.]	Actual average error rate of inspections after implementation (percentage). 0.1%	Yes

HACP Specific Metric	Unit of Measurement	Baseline	Benchmark	2017 Outcome	Benchmark Achieved
Landlords are enrolled in Preferred Owners Program.	Landlords enrolled in Preferred Owners Program (number).	Landlords enrolled in Preferred Owners Program before start of the program: zero (0).	Expected number of landlords enrolled in Preferred Owners Program: 15	Actual number of landlords enrolled in Preferred Owners Program: 15	Yes
Increase in landlord satisfaction with HACP.	Landlords who rate HACP as “good” or “excellent” (percentage).	Amount of landlords who rate HACP as “good” or “excellent” before start of the program: 55%.	Expected amount of landlords who rate HACP as “good” or “excellent” after six months of the program: 55%	Actual amount of landlords who rate HACP as “good” or “excellent” after six months of the program (percentage): 56%	Yes

Total number of units in the program decreased overall as one of the agencies largest landlord sold a significant portion of its units to another non participating owner. Similar to 2016, much of the plan year required extensive outreach to landlords unfamiliar with the program and wary of entering another process. HACP also onboarded a new special projects manger to further support the program. By year end despite losses in housing stock HACP recruited several landlords totaling 437 units by the end of 2017. Efforts to target smaller landlords are anticipated for 2018. HACP and the landlord outreach team remain committed to forging relations within the community and recruiting new landlords to the HCV program and in turn increasing participation.

3. Modified Rent Policy for the Section 8 Housing Choice Voucher Program

Description

Requires that any non-elderly, able-bodied head of household who is not working to either: a) participate in a self-sufficiency program, including but not limited to the HACP Family Self-Sufficiency program (FSS), other Local Self-Sufficiency program (LSS), welfare to work, or other employment preparation and/or training/educational program or b) pay a minimum tenant payment of \$150.00 per month. This policy provides additional incentives for families to work or prepare for work and increases overall accountability.

This activity was approved and implemented in 2011.

Changes and Modifications

No changes to this activity during this fiscal year.

Authorization

Section D. 2. a. of Attachment C

Section D. 1. of Attachment D

Regulatory Citation

24 CFR 982.311.

Because of limited capacity in HACP's REAL Family Self-Sufficiency Program, voucher holders whose rent calculation results in a rent of less than \$150 per month are permitted to certify via independent third party to their participation in an eligible local self-sufficiency, welfare to work, or other training or education program. HACP continues to pursue expanded partnerships to maximize the program options available for voucher holders.

HACP initially identified programs that would qualify affected families for an exemption from the \$150.00 minimum tenant payment, including the Pennsylvania Department of Public Welfare's Welfare to Work program that is associated with TANF assistance. HACP is working with the Allegheny County Department of Human Services and the Pennsylvania Department of Public Welfare and has identified additional programs and conducted outreach to identified programs to notify agencies of the new requirements and what constitutes acceptable verification.

The provisions of the modified policy are expected to increase the percentage of families reporting earned income and increase the number of families pursuing training and preparation for work through local self-sufficiency, welfare to work, or other employment preparation/training/education programs.

Baselines, Benchmarks, and metrics – benchmarks established as of August 2010 remain and are indicated in the bullets below. Subsequent numbers are included in the charts.

- a. HACP's August 2010 HCV Program population included 1976 non-elderly, non-disabled families whose tenant payment calculation was less than \$150 per month.
- b. Of those families, 1454 did not report any wage income. This is the group that this policy was expected to impact.
- c. Participation among all HCV program participants in HACP's REAL FSS program was 371.
- d. 769 program participants showed TANF income, and thus were assumed to be compliant with state welfare to work requirements. 98 of these families were enrolled in HACP's REAL FSS program.
- e. HACP also calculated average HAP overall, average HAP for non-elderly/non-disabled households, and average HAP for households whose rent calculation is less than \$150 per month prior to application of utility allowances. See charts for results.

Please see the chart below for December baseline information and Benchmark targets for each measure.

Housing Choice Voucher Program

Measure	Baseline	Benchmark	Outcome	Benchmark
	12/2010	12/2017	12/2017	Achieved
**Non-Elderly, non-disabled families with total tenant payment <\$150	1988	650	911	Yes
Average overall HAP	\$486	\$575	\$497	Yes
Average HAP for non-elderly, non-disabled	\$538	\$570	\$579	Yes
**Average HAP for non-elderly, non-disabled paying <\$150	\$657	\$420	\$371	Yes

FSS program Stats subdivided by LIPH/HCV	LIPH or HCV	2017 Benchmark	2017 Totals
FSS Participants	LIPH	375	623
	HCV	248	
Number of families working (of FSS Participants)	LIPH	175	423
	HCV	248	
Percentage of families working (of FSS participants)	LIPH	47%	68%
	HCV	63%	
Number of participants graduating from FSS	LIPH	40	69
	HCV	29	
Number of participants from Escrow accounts	LIPH	132	295
	HCV	163	

Information for Rent Reform Activities

- A review of the data above and below indicates the policy is having the anticipated impact, although HACP FSS enrollments, and declines in average HAP payments for non-elderly, non-disabled families paying less than \$150 per month rent are behind projections. Mechanisms to confirm participation in non-HACP Local Self-Sufficiency programs (LSS) are continuing to be reviewed to ensure accuracy of collected data and the benchmark for FSS enrollments may be unnaturally inflated as families choose LSS programs. As capacity becomes available, families are encouraged to enroll in HACP's FSS program.

Comparison of Outcome to Benchmarks

- HACP did not meet MTW metrics SS3 SS4 SS5 and SS8. In 2017, HACP experienced a decrease in overall program participation resulting in metrics below benchmark in FSS graduation, FSS participation, total number of escrow accounts and

total number of participants receiving educational and training services. Participation in training declined, as criteria for training participation remained competitive, and resources for training were limited including the loss of HACP's in house GED tutor. Other measures remained fairly stable, as expected but more importantly, participants within the impacted population averaged HAP payments that were significantly lower than the program average. Average escrow account balance continued to increase despite decrease in program sizes which implies an increase in per family savings. Moving forward the FSS team will focus its resources to increase program participation through the growing PBV portfolio. The FSS department is making strategic efforts to educate and recruit PBV residents to the program through assigning staff members to the various PBV communities and building stronger relationships with communities.

- HACP remains committed to, and optimistic about, the long term impact of this policy and secured new third party evaluators to further analyze HACP's rent policies and the FSS program in 2017.
- Additional Data and HUD Standard Metrics are included below.
- Hardship Requests: HACP approved one (1) hardship request in 2017.

Standard HUD Metrics – Self- Sufficiency – modified based on HACP capability				
Unit of Measure	Baseline	Benchmark	2017 Outcome	Benchmark Achieved?
SS#1: Increase on Household Income: Average Gross Income of all households	\$11,802	\$12,000	\$13,002	Yes
SS#2: Increase in Household Savings: Average amount of savings/escrow of households affected by this policy in dollars (increase)	\$3,789.66	\$2,900	\$2,898.86	Yes
SS#3: Increase in Positive Outcomes in Employment Status: Other: Employed full or part time – Number (of all families)	1475	1475	3,021	Yes
SS#3: Increase in Positive Outcomes in Employment Status: Other: Employed full or part time – percentage (of all families)	28.61%	30%	35%	Yes

SS#3, Increase in Positive Outcomes in Employment Status: Other Enrolled in Education or training program <i>number</i> (of FSS participants)	101	55	41	No
SS#3, Increase in Positive Outcomes in Employment Status: Other (3 + 4): Enrolled in Education or training program <i>percentage</i> (of FSS participants)	22.54%	15%	7%	No
SS#4: Households Removed from Temporary Assistance for Needy Families (TANF): Number of households receiving TANF assistance (of all households) (decrease)	774	800	993	Yes

SS#5: Households Assisted by Services that Increase Self-Sufficiency: Number of households receiving services aimed to increase Self-sufficiency (FSS enrollment)	353	200	450	Yes
SS#6: Reducing Per Unit Subsidy Costs for Participating Households: Average amount of Section 8 Subsidy per household affected by this policy in dollars (HAP) (all households) (decrease)	\$466.24	\$575	\$497	Yes
SS#8: Households Transitioned to Self-sufficiency: Number of households transitioned to self-sufficiency (graduation)	12	50	29	No

HACP Metrics - HCV FSS

	2010	Benchmark	2017 Outcome	Benchmark Achieved?
FSS Participants	448	250	248	No
Families working (of FSS participants)	248	160	156	No
% of families working (FSS participants)	55%	75%	63%	No
# graduating	12	51	29	No
# with FSS escrow accounts	191	200	163	No

4. Modified Rent Policy for the Low Income Public Housing Program

Description

Requires that any non-elderly, able-bodied head of household who is not working to either participate in the Family Self-Sufficiency Program or pay a minimum rent of \$150.00 per month. Hardship exemptions are permitted. This policy provides additional incentives for families to work or prepare for work. HACP's objectives for this program include increased participation in the Family Self-Sufficiency Program, increased rent collections, and increased level of families working.

This activity was approved and implemented in 2008.

Changes and Modifications

No changes to this activity during this fiscal year.

Authorization

Section C. 11. of Attachment C

Section C. 3 of Attachment D

HACP may grant a hardship exemption from the rent, including the \$25.00 per month minimum required of those exempted from the \$150.00 minimum rent, under the following circumstances:

- When the family is awaiting an eligibility determination for a government assistance program;
- When the income of the family has decreased because of loss of employment;
- When a death has occurred in the family; and
- When other such circumstances occur that would place the family in dire financial straits such that they are in danger of losing housing. Such other circumstances will be considered and a determination made by the HACP.

HACP's modified rent policy was expected to have a number of positive impacts on the HACP and HACP residents, including, but not limited to, increased rent collections by the HACP, a changed environment where work by adults is the norm, an increased level of active participation in the HACP self-sufficiency program and, of course, added incentive for residents to become self-sufficient.

HACP established baseline measures in mid-2008 and mid-2009 as the full implementation of the policy was completed, and detailed information on the impact of the activity as compared against the benchmarks and outcome metrics are included below.

In addition to the baseline measures established in mid-2008 and mid-2009 as the full implementation of the policy was completed, HACP has some data dating to 2005 when the LIPH enhanced FSS program was established. LIPH data through 2017 from the Tracking at a Glance Software, Emphasys Elite, and internal reports are included in the tables below.

HACP Metrics - LIPH FSS

FSS Program Stats	Baseline 2005	Benchmark	2017 Outcome	Benchmark Achieved
FSS Participants	658	500	375	No
Number of families working (of FSS participants)	181	300	175	No
Percentage of families working (of FSS participants)	28%	65%	46%	No
# graduating from FSS	n/a	40	40	Yes
# of FSS participants with escrow accounts	29	251	132	No

	Baseline July 2008	Benchmark	Dec 2017	Benchmark Achieved?
HACP Rent Roll Amounts (\$)	\$685,682	\$645,000	\$706,742	Yes
HACP Rent collection amounts (\$)	\$612,027	\$665,200	\$628,787	No
Average Rent All Communities	\$198.88	\$225	\$257	Yes
Number of families working (reporting wage income)	713	730	508	No
Percentage of families working	22%	30%	51%	Yes

Data is collected via Emphasys Elite software, with periodic reports based on the tenant database.

HACP anticipated that this policy would result in increased rent roll and collections, increased participation in the FSS program, and increased number and percentage of families working. At this point of implementation, expected results have actualized and are generally in line with expected outcomes. In 2017, despite a decrease in FSS enrollment, HACP continued to see progress as a result of this initiative. The percentage of families working, both overall and among participants in the FSS program, increased and 40 participants graduated from the program. Average rents experienced a significant increase of 14 percent above the benchmark. FSS graduation totals and tightened pre-qualification criteria and reduced availability of training programs. HACP experienced decreases in overall program participation resulting in metrics below the benchmark for total number of escrow accounts, FSS graduation and participants enrolled in education or training programs.

Comparison of Outcome to Benchmarks

In the past several years the HACP portfolio has undergone extensive redevelopment. Many of the barrack style housing developments constructed in the 1940's have been demolished and replaced with PBV mixed finance or RAD communities. Properties include Addison Terrace, Allegheny Dwellings, the Glen Hazel community and Murray Towers. Removal of these units impacted HACP's ability to obtain new admissions to the program because it decreased the total number of potential new lease ups. The loss of the HACP GED coordinator and tutor significantly impacted the educational and training opportunities as well. HACP is now offering this service through a third-party provider and currently has several participants enrolled in outside GED classes. FSS staff continues to work with LIPH site management to better coordinate the lease up process for new admission. The goal is to ensure an FSS staff member is present at the initial leasing appointment to provide information about the FSS program and potentially attract the new resident. New admissions are essential in maintaining the FSS program. Developing a relationship with the new resident early in their tenancy will help to encourage them to join and eventually complete the program.

HACP remains committed to this effort and partnered with the University of Pittsburgh to evaluate HACP's rent policies and the FSS program. The study analyzes the effects of the modified rent policy and FSS program over the ten year span of the activity. HACP looks forward to the results and the development of a new activity that will further housing choice and increase self-sufficiency.

To more fully understand the impacts of this policy, HACP has also gathered the following

LIPH Rent Policy Impact Data	Baseline 2010	Benchmark	Outcome 2017
Item		Number	Number
Total non-disabled non-elderly families	1394	1,100	987
Number of families working (reporting wage income)	595	575	508
Percentage of non-disabled, non-elderly families working	43%	50%	51%
Number of families impacted (non-elderly non-disabled and rent less than \$150)	828	560	478
Number exempt due to disability (disabled, rent <\$150)	206	75	70
Number exempt due to elderly (age 62+, rent <\$150)	72	25	16
Number enrolling in FSS (not elderly, not disabled, Tenant Rent <= \$150 and enrolled in FSS)	353	375	197

Standard HUD Metrics – LIPH FSS				
Unit of Measure	Baseline	Benchmark	Outcome 2017	Benchmark Achieved
SS#1, additional: Increase in Household Income: Average Gross Income of all households	\$11,268	\$12,200	\$13,002	Yes
SS#2: Increase in Household Savings: Average amount of savings/escrow of households affected by this policy in dollars (increase).	1,772	\$2,700	\$3,409	Yes
SS#3: Increase in Positive Outcomes in Employment Status: Other: Employed Number (all households)	620	575	733	Yes
SS#3: Increase in Positive Outcomes in Employment Status: Other: Employed percentage (all households)	21.72%	22%	29%	Yes
SS#3 Increase in Positive Outcomes in Employment Status: Other: Enrolled in Education or Training program number (of FSS participants)	88	25	4	No
SS#3 Increase in Positive Outcomes in Employment Status: Other: Enrolled in Education or Training program percentage (of FSS participants)	14%	5%	1.06%	No
SS#4: Households Removed from Temporary Assistance for Needy Families (TANF): Number receiving TANF (all)	637	315	273	No
SS#5: Households Assisted by Services that Increase Self-Sufficiency: Number of households receiving Self-sufficiency services (FSS enrollment)	634	403	375	No
SS#7: Increase in Agency Rental Revenue: PHA Rental Revenue in dollars (increase)	\$626,041	\$656,166	\$706,742	Yes
SS#8: Households Transitioned to Self- Sufficiency: Number of households transitioned to self-sufficiency (graduation)	7	50	40	No

5. Revised Recertification Requirements Policy

Description

HACP may operate both the Low Income Public Housing Program and the Housing Choice Voucher Program with a recertification requirement modified to at least once every two years. Changes in income still must be reported, and standard income disregards continue to apply. This policy change reduces administrative burdens on the Authority, thereby reducing costs and increasing efficiency. HACP's objectives for this initiative are reduced staff time and thus reduced costs, and improved compliance with recertification requirements by tenants and the HACP.

This activity was approved and implemented in 2008 and 2009 for Low income Public Housing and Housing Choice Voucher programs respectively.

Changes and Modifications

No changes to this activity during this fiscal year.

Authorization

Section C. 4. of Attachment C (for public housing)

Section D.1. c. of Attachment C (for Housing Choice Voucher Program).

HACP has calculated the average time to process a recertification, the number of recerts completed annually, and the resulting costs, and has compared this to the same total calculations subsequent to the change in policy to measure the impact.

Re-certification Policy for HCV	Baseline 2010	Benchmark	Outcome 2017	Benchmark Achieved?
Number of Annual Recerts	2698	2650	3381	No
Number of interim Recerts	1889	2300	2245	Yes
Total Recerts	4596	4950	5626	No
Average cost per recert	\$53.63	53.63	53.63	n/a
Total estimated costs	\$246,483	\$265,468	\$301,722	No

Re-certification Policy for LIPH	2010	Benchmark	Outcome 2017	Benchmark Achieved?
Number of Annual Recerts	2,587	1,200	1,767	No
Number of interim Recerts	1,052	1,250	1,452	No
Total Recerts	3,639	2,450	3,219	No
Average cost per recert	\$53.63	53.63	\$53.63	n/a
Total estimated costs	\$195,159.57	\$131,393	\$172,635	No

Comparison of Outcome to Benchmarks

In 2017, HACP did not meet the agency and MTW standard benchmarks for its activity due to an increase in recertifications in the LIPH program as a result of Larimer/East Liberty relocation, ongoing relocation of Allegheny Dwellings redevelopment and the addition of Manchester commons into the LIPH portfolio. The Housing Choice Voucher program total certifications and time spent on the process also increased as a result of the biennial cycle. HACP also experienced an influx of new annuals spurred by the Bethesda Homewood community, a Project Based Rental Assistance (PBRA) development consisting of 106 occupied units. The property owner failed to meet Real Estate Assessment Center (REAC) standards resulting in the termination of the HAP contract with HUD Multifamily. HACP provided residents affected by the termination the opportunity to apply for tenant based vouchers and processed all applications received from Bethesda Homewood tenants. The property was recently purchased by a new owner and HACP remains committed to supporting these residents via the voucher program should they choose to utilize the option. Overall policy results are below expectation however the policy still reduces the total number of certifications that would result under an annual certification schedule.

This initiative also provides positive outcomes in accommodating HACP's majority population of elderly and disabled persons in both programs, whom often have fixed incomes from year to year. This policy alleviates some burden from the impediment of transportation and harsh climate in the City of Pittsburgh, particularly during the winter months when the elderly and disabled face additional burden when traveling.

HCV - HUD STANDARD METRICS – Cost Effectiveness- Estimates

Unit of measure	Baseline	Benchmark	2017	Benchmark
		Benchmark	Outcome	Achieved
CE#1: Agency Cost Savings: Total cost of task in dollars (decrease)	\$294,965	\$246,698	\$301,722	No
CE#2: Staff Time Savings: Total Time To Complete the Task in staff hours (decrease)	11,000	9,200	11,252	No

LIPH - HUD STANDARD METRICS – Cost Effectiveness -

Unit of measure	Baseline	Benchmark	2017	Benchmark
			Outcome	Achieved
CE#1: Agency Cost Savings: Total cost of task in dollars (decrease)	\$208,942.48	\$112,623	\$172,635	No
CE#2: Staff Time Savings: Total Time To Complete the Task in staff hours (decrease)	7,792 hours	4,200 hours	6,438 hours	No

Note: provided numbers do not account for fluctuations in program size.

6A. Operation of a combined Public Housing and Housing Choice Voucher Homeownership Program

Description

HACP operates a single Homeownership Program open to both Low Income Public Housing and Housing Choice Voucher Program households. This approach reduces administrative costs, expands housing choices for participating households, and provides incentives for families to pursue employment and self-sufficiency through the various benefits offered. By combining the programs, increased benefits are available to some families.

This activity was approved and implemented in 2007

Changes and Modifications

No changes to this activity during this fiscal year.

Authorization

Section B. 1. and D. 8. of Attachment C

Section B. 4. of Attachment D

Homeownership Statistics	2017 Total	LIPH 2017	HCV 2017	Eligible Non Resident Participant
Closings / Purchase	15	0	6	9
Sales Agreements	17	0	7	10
Pre-Approval Letters	36	2	8	22
Number of applicants completing homebuyers course & 1 st mortgage pre-approval)	36	0	8	22
Homebuyer Education Referrals	37	n/a	n/a	n/a
HACP funds for closing (total)	\$75,982	\$0	\$30,035	\$45,947
Average HACP 2nd mortgage amount*	\$31,549	\$0	\$39,237	\$21,940
Average Purchase price	\$84,093	\$0	\$86,583	\$82,433

Amount of non-HACP assistance**	\$0	\$0	\$15,719	\$28,771
Foreclosures	1	0	1	0

Assistance from other sources was as follows:

	2017
<u>Housing Choice Voucher Program Buyers:</u>	
Seller's assist	\$5,960
State	\$0
Dollar Bank 3-2-1	\$ 4,000
URA Soft-Second Mortgage	\$0
First Front Door	\$5,000
Bartko Foundation	0
Total	\$14,960
<u>LIPH Program Buyers:</u>	
Seller's assist	\$0
State	\$0
Dollar Bank 3-2-1	\$0
URA Soft-Second Mortgage	\$0
First Front Door	\$0
Bartko Foundation	\$0
Total	\$0

Foreclosure Prevention: One home went into foreclose in 2017. Marking the third occurrence in the program's history. In each instance the family refused multiple offers of assistance and the resources of the foreclosure prevention component of HACP's homeownership program.

Homeownership Soft-Second Mortgage Waiting List: This has not been established, as at no point have pre-approvals and closings combined approached our budgeted level.

HACP continued to see success with this program, with 15 families becoming homeowners in 2017 the largest group in program history. In addition, 36 new families continued to enroll in and complete the program, becoming prepared for future purchases. In recent years, Pittsburgh has experienced steady growth and demand for housing resulting in increased rental costs. Many applicants were eager to enter homeownership, as mortgage payments became comparable to the rising rental rates. As mentioned, HACP received approval through its 2017 annual plan to increase the maximum second soft mortgage amount to \$52,000 and closing cost assistance to \$8,000. With increased capacity to provide competitive assistance, HACP expects to experience continuous growth in the program.

HUD Standard Metrics - Cost Effectiveness - Homeownership				
Unit of Measurement	Baseline	Benchmark	2017 Outcome	Benchmark Achieved?
Number of recerts (reduced)	10/year	10	15	Yes
CE#1: Agency Cost Savings: Total cost of task in dollars (decrease) (recerts)	\$53.30	\$533.00	\$799.5	Yes
CE#2: Staff Time Savings: Total time to complete the task in staff hours (decrease) (recerts)	20	20	30	Yes
CE#4: Increase in Resources Leveraged: Amount of funds leveraged in dollars (increase)	0	\$0	\$0	Yes

HUD Standard Metrics - Housing Choice				
Unit of Measurement	Baseline	Benchmark	2017 Outcome	Benchmark Achieved?
HC#5: Number of households able to move to a better unit and/or neighborhood of opportunity	0	10	15	Yes

HC#6: Increase in Homeownership Opportunities: Number of households that purchased a home	0	10	15	Yes
HC#7: Households Assisted by Services that Increase Housing Choice: Number of households receiving services aimed at increasing housing choice	0	75	78	Yes

6B. Homeownership Program assistance to include soft-second mortgage assistance coupled with closing cost assistance, homeownership and credit counseling, and foreclosure prevention; expand eligibility to persons on the LIPH and HCV program waiting list or persons eligible but not on a wait list; establish a Homeownership Soft-second mortgage waiting list

Description

Initially approved in 2010, the following provisions of the HACP homeownership program are as follows for 2017:

- i. Provide soft-second mortgage financing for home purchases to eligible participants, calculated as follows: eligible monthly rental assistance x 12 months x 10 years, but in no case shall exceed \$52,000. The second mortgage is forgiven on a pro-rated basis over a ten year period.
- ii. Expand Homeownership Program eligibility to include persons on HACP's LIPH and Section 8 HCV waiting lists-who have received a letter of eligibility for those programs from the HACP or persons otherwise eligible but currently not on a wait list.
- iii. Establish a Homeownership Waiting List to assist in determining the order of eligibility for second mortgage Homeownership benefits.

This activity was initially approved and implemented in 2010 and revised in 2017.

Changes and Modifications

No changes to this activity during this fiscal year.

Authorization

Section B. 1.and D. 8 of Attachment C

Section B. 4. of Attachment D

This program continues successfully, reducing costs for the HACP, providing incentives for families to become self-sufficient homeowners, and expanding housing choices for eligible families. Program enrollment is steady, and as in prior years, only 3 foreclosures have taken place. Please see the program statistics under Section 4. A., above, for statistics, HUD Standard Metrics, and additional information on the results of this initiative.

7. Modified Housing Choice Voucher Program policy on maximum percent of Adjusted Monthly Income permitted

Description

HACP's operation of the Housing Choice Voucher Program allows flexibility in the permitted rent burden (affordability) for new tenancies. Specifically, the limit of 40% of Adjusted Monthly Income allowed for the tenant portion of rent is used as a guideline, not a requirement. HACP continues to counsel families on the dangers of becoming overly rent burdened, however, a higher rent burden may be acceptable in some cases. This policy increases housing choice for participating families by giving them the option to take on additional rent burden for units in more costly neighborhoods.

This activity was initially approved and implemented in 2001

Changes and Modifications

No changes to this activity during this fiscal year.

Authorization

Section D. 2. C. of Attachment C.

Section D. 1. b. of Attachment D.

In 2017, 12 families took advantage of this option furthering their ability to move to a residence of their choice. A decrease in residents choosing this option is due in part to the success rate payment standard which allows residents to utilize a payments standard at 119% of fair market rent (FMR) and reducing the burden on residents. HACP expects families to continue to exercise this option in coming years as an alternative payment standard methodology for the jurisdiction remains in development and market costs continue to steadily increase. This activity is a mechanism for residents to have greater geographic choice and fluctuates from year to year as housing cost, and preferences of families on the program change.

The total number of families exercising this option decrease and performed below the benchmark in 2017. This decrease is attributed to families utilizing the success rate payment standard of 119% of FMR as opposed to increasing their portion of rent. Also, the increase in rental costs within the jurisdiction require rent burdens much higher than 40% to enable participants to rent in high opportunity areas. The policy does provide a wider range of housing options in terms of rent prices but there remains a price barrier to access within the city. HACP as previously mentioned, is developing an alternative payment standard methodology that in conjunction with this initiative will further increase housing choice for HCV participants.

HUD Standard Metrics – Housing Choice

Unit of Measurement	Baseline	Benchmark	2017 Outcome	Benchmark Achieved
HC#1: Additional units made available: Number of new units made available to households at or below 80%AMI*	0	60	12	No
HC#5: Increase in Resident Mobility: Number of households able to move to a better unit and/or neighborhood of opportunity	0	60	12	No

* Note: Assumes the unit rented by a family at more than 40% of adjusted monthly income would not be affordable, and thus not available, to low income families.

Comparison of Outcome to Benchmarks

HACP did not meet the standard metrics for the above activity due to increases in housing cost particularly in low poverty neighborhoods. Families in the HCV program encountered difficulties finding units that fell within the current payment standard and did not exceed the 40 percent allowable rent burden. HACP has developed a local payment standard that if approved should broaden the housing options available to families that choose to utilize this activity.

8. Modified Payment Standard Approval

Description

HACP is authorized to establish Exception Payment Standards up to 120% of FMR (Fair Market Rent) without prior HUD approval. HACP has utilized this authority to establish an Exception Payment Standard at 120% of FMR as a Reasonable Accommodation for a person with disabilities. HACP has not utilized its authority to establish Exception Payment Standard Areas since 2007. Allowing the Authority to conduct its own analysis and establish Exception Payment Standards reduces administrative burdens on both the HACP and HUD (as no HUD submission and approval is required) while expanding housing choices for participating families.

In 2013, HACP received approval for a modification to this activity allowing HACP to establish an Exception Payment Standard of up to 120% of FMR for fully Accessible Units meeting the Requirements of the Uniform Federal Accessibility Standard (UFAS). This Exception Payment Standard can be used by tenants who require the features of a UFAS unit and locate such a unit on the open market; and may also be used by the HACP in the Project Based Voucher Program or other rehabilitation or new construction initiatives that create additional fully accessible UFAS units.

This activity was initially approved and implemented in 2004 and revised in 2013

Changes and Modifications

No changes to this activity during this fiscal year.

Authorization

Attachment C. Section D. 2. a.

In 2016, HACP constructed 10 UFAS units in Addison Redevelopment Phase II under this payment standard and few other families took advantage of this initiative, but those disabled families that did so had more choices in their search for an affordable home. Thirteen additional project based vouchers UFAS units were also be completed in 2016 as part of Larimer Redevelopment Phase I through the Choice Neighborhoods Implementation grant. In 2017, no additional UFAS units were completed however construction on several projects were initiated. UFAS units are included in all new developments and those new units will be reflected upon completion in the 2018 and 2019 annual reports.

Modified Payment Standard - HUD Standard Metrics – Housing Choice

Measure	Baseline	Benchmark	2017 Outcome	Benchmark Achieved?
HC#1: Additional Units made available: Number of new units made available for households at or below 80% of AMI	0	25	0	No
HC#2: Units of Housing Preserved: Number of housing units preserved for households at or below 80% of AMI	0	25	0	No
HC#4: Displacement Prevention: Number of households at or below 80% AMI that would lose assistance or need to move	0	25	0	No
HC#5: Increase in Resident Mobility: Number of households able to move to a better unit and/or neighborhood of opportunity	0	25	0	No

Comparison of Outcome to Benchmarks

HACP did not meet the MTW standard metrics listed above for this activity. Pittsburgh is comprised of mainly older housing stock which often requires significant investment to bring units to Housing Quality Standards. The cost of rehabilitation in addition to UFAS requirements are too costly for landlords at the current payment standard. HACP intends to remedy this obstacle through the implementation of a local payment standard that takes into account these costs.

HACP Measure:

Measure	Baseline	Benchmarks	2017 Outcome	Benchmark Achieved?
New Housing Units Available (New Construction)	0	7	0	No

Comparison of Outcome to Benchmarks

HACP did not meet the agency metric for new housing units developed for this activity. Delays in HACP's build schedule resulted in UFAS units for later phases of various redevelopment completed in 2018 Use of Block Grant Funding Authority for Development, Redevelopment, and Modernization.

9. Use of Block Grant Funding Authority via the Step Up to Market Financing Program

Description

HACP will expand its use of the Block Grant authority authorized in the Moving To Work Agreement to leverage debt to fund public housing redevelopment and modernization and affordable housing development and preservation. The goal is to address additional distressed properties in HACP's housing stock prior to the end of the current Moving To Work agreement in 2028, and increase the variety and quality of available affordable housing. Specifically, HACP will identify properties for participation in the Step Up To Market Program and will utilize one or more strategies, subject to any required HUD approvals, to achieve its development and redevelopment goals. This broad list of authorities, including but not limited to, the following, have been generally approved but must be specifically identified for each planned project in future submissions:

- i. Project basing HACP units without competitive process.
- ii. Determining a percentage of units that may be project-based at a development up to 100% of units and permitting the initiation of site work prior to execution of the Agreement to Enter Into a Housing Assistance Payments contract (AHAP).
- iii. Project basing units at levels not to exceed 150% of the FMR as needed to ensure viability of identified redevelopment projects. Actual subsidy levels will be determined on a property-by-property basis, and will be subject to a rent reasonableness evaluation for the selected site, and a subsidy layering review by HUD. When units are HACP-owned, the rent reasonableness evaluation will be conducted by an independent third party.
- iv. Extending Eligibility for project based units to families with incomes up to 80% of AMI.
- v. Establishing criteria for expending funds for physical improvements on PBV units that differ from the requirements currently mandated in the 1937 Act and implementing regulations. Any such alternate criteria will be included in an MTW Plan or Amendment submission for approval prior to implementation.
- vi. Establishing income targeting goals for the project based voucher program, and/or for specific project based voucher developments, that have a goal of promoting a broad range of incomes in project based developments.
- vii. Other actions as determined to be necessary to fund development and/or modernization subject to any required HUD approvals, including, but not limited to, combining financial investments permitted under Section 9 of the Act with Project Based Voucher Assistance permitted under Section 8 of the act, as identified in this section. HACP will follow HUD protocol and submit

mixed-finance development proposals to HUD for review and approval.

Acquisition of property without prior HUD approval as needed to take advantage of opportunities as they arise, with specific focus on parcels needed for site assembly for redevelopment and development projects. HACP will ensure that all HUD site acquisition requirements are met

Specific Strategies and Properties:

HACP and its partners have identified the following strategies that will leverage Low Income Housing Tax Credits and capital contributions by the HACP in order to complete the financing necessary for Addison Redevelopment Phases III and IV and Larimer/ East Liberty Redevelopment Phase II, III and IV, Allegheny Redevelopment, Investments in Homewood, Oak Hill Phase II, development of a new Northview Midrise Crawford Square Preservation, and projects identified through the Project Based Voucher Plus Gap competitive selection process (in 2016, the Elmer Williams Square and Miller Street Apartments projects were selected and have secured most required financing and approvals):

1. Project basing HACP units without competitive process (As authorized under Attachment C. Section B. Part 1. b. vi. and Part 1. c.; Attachment C. Section D. 7. a.. authorizing the HACP “to project-base Section 8 assistance at properties owned directly or indirectly by the agency that are not public housing, subject to HUD’s requirement regarding subsidy layering.”).
2. Determining a percentage of units that may be project based at a development, up to 100% of units and permitting the initiation of site work prior to execution of the Agreement to Enter into a Housing Assistance Payments contract (AHAP). (As authorized under Attachment C. Section B. Part 1. b. vi. (authorizing the provision of HCV assistance or project-based assistance alone or in conjunction with other private or public sources of assistance) and vii. (authorizing the use of MTW funds for the development of new units for people of low income); and Part 1. c. (authorizing these activities to be carried out by the Agency, of by an entity, agent, instrumentality of the agency or a partnership, grantee, contractor or other appropriate party or entity); Attachment C. Section D. 7. c. (authorizing the agency to adopt a reasonable policy for project basing Section 8 assistance) and Attachment D. Section D. 1. c. (authorizing HACP to determine property eligibility criteria).
3. Extending Eligibility for project based units to families with incomes up to 80% of AML. (As authorized under Attachment C. Section B. Part 1. b. vi. and Part 1. c.; Attachment C. Section D. 7. (authorizing the agency to establish a project based voucher program) and Attachment D. Section D. 1. a. (authorizing the agency to determine reasonable contract rents.).
4. Acquisition of property without prior HUD approval in order to complete site assembly for these projects. As authorized under Attachment C. Section C. 13. (authorizing the acquisition of sites without prior HUD approval). Site work for acquired properties will begin upon completion of environmental review and/or any required development approvals when necessary.

5. Combining Project Based Voucher Commitments with Low Income Housing Tax Credits and/or HACP Capital Investments and/or other financial resources to support the development, rehabilitation, or preservation of affordable housing units, as authorized under Attachment C., Section B. 1. b. (authorizing the use of MTW funds for any eligible activity under Section 9(d)(1), 9€(1) and Section 8(0) of the 1937 Act), and Attachment D. Section B. 1. (authorizing the acquisition, new construction, reconstruction or moderate or substantial rehabilitation of housing which may include financing and other related activities.)

HACP submitted full development proposal, including Rental Term Sheet, Pro Formas, Sources and Uses, schedules, and other detailed project information or local Non-traditional activity proposals as required based on each project's financing to HUD's Office of Public Housing Investments or other HUD office as directed for approval as part of the mixed finance approval process as per HUD's protocol, and will ensure completion of a subsidy layering review as required.

Local Non Traditional Development: Development, rehabilitation, and/or preservation through Project Based Vouchers plus Gap financing

In response to the growing demand for affordable housing, HACP developed the PBV plus GAP financing tool. Using this product HACP can issue PBV awards as well as capital investment to developers committed to the creation of additional affordable units within the city. In 2017 HACP will periodically issue Request for Proposals for Project Based Voucher Units with an option for additional HACP capital investments to close gaps in project financing. This initiative, which combines authorizations already permitted under Section 8 (PBV) and Section 9 (capital investments) will spur the development, rehabilitation, or preservation of high quality affordable housing units and will leverage other public and private investments in the construction, rehabilitation, and/or preservation of such units. This approach maximizes the impact of existing available resources, incentivizes leveraging of other public and private financial resources, and supports the completion of projects at lower cost to HACP than is possible through other strategies.

HACP has made one non-significant change to this section, adding the specific provision "permitting the initiation of site work prior to Execution of the Agreement to Enter Into a Housing Assistance Payments contract (AHAP)." into the description of this initiative, and into the specific authorizations section, in conjunction with the authorization to project base up to 100% of the units in a development. This change will streamline processes and expedite completion of replacement developments.

HACP submitted a full development proposal, including Rental Term Sheet, Pro Formas, Sources and Uses, schedules, Evidentiary documents, and other detailed project information to HUD's Office of Public Housing Investments or other HUD office as directed for approval as part of the mixed finance approval process as per HUD's protocol, and will ensure completion of a subsidy layering review. This process was completed and approved for Addison Phase III in 2016.

A. Relationship to Statutory Objectives

- This policy will expand housing choices for low and moderate income families by fostering the redevelopment of obsolete housing and replacing it with quality affordable housing including low income public housing units, and low income housing tax credit units; it will also provide expanded unit style options offering townhouses, as well as apartments where currently only walk-up apartments are available.
- This policy has the potential to improve the efficiency of federal expenditures by stabilizing the long term costs of operating and maintaining low-income housing properties, and leveraging other capital resources (low-income housing tax credits and private market debt, foundation grants, local government matching funds, etc.

B. Anticipated Impacts

- This policy is expected to allow the redevelopment of obsolete properties to continue at a reasonable pace, resulting in improved living conditions and quality of life for residents, reduced costs for the HACP, increases in leveraged resources, improvement and investment in surrounding neighborhoods, reduced crime at redeveloped properties, increased housing choices for assisted families.

In 2015, HACP submitted and received approval of full development proposal from HUD for Addison Phase II and Larimer/East Liberty Phase I, as per standard protocols, utilizing several elements authorized by this initiative. Construction was completed on all Addison Phase II units in 2016, and is fully occupied. Larimer/East Liberty Phase I construction was completed in 2016 as well and is nearing complete occupancy.

In 2016, a four percent low-income housing tax credit application was submitted for Larimer/East Liberty Phase II. The Addison Phase III low-income housing tax credit application submitted in 2015 were awarded in 2016 and financial closing was achieved soon after. HACP was able to complete the master planning processes for Allegheny Dwellings redevelopment which, once completed will yield 300 new units.

HACP also completed several notable projects including the acquisition and preservation of affordable housing in the jurisdiction. In partnership with the City of Pittsburgh HACP acquired 348 preexisting units of which 188 units will be Project Based through re-syndication. HACP found additional success through the acquisition of Manchester Commons, a former Hope VI development nearing the end of its affordability period. HACP completed the acquisition thus preserving the affordability of the units and adding 86 units to the Scattered Sites portfolio.

In 2017, HACP completed phase III of Addison Terrace redevelopment yielding 50 total units consisting of 37 project based voucher units and 19 market rate units. Initial lease ups soon followed, and the property is fully occupied.

HACP also secured disposition approval of several vacant lots as well as demolition approval of 278 units at Allegheny dwellings. HACP was able to complete the master planning processes for Allegheny Dwellings redevelopment which, once completed will yield 300 new units. The property is partial vacated and demolition of the first phase began in late 2017.

Comparison of Outcome to Benchmarks

HACP did not meet the agency metric for new housing units developed for this activity. Delays in HACP's build schedule resulted in moving unit completion dates to later phases of redevelopment.

HUD Standard Metrics - Housing Choice

Unit of Measurement	Baseline	Benchmark	2017 Outcome	Benchmark Achieved?
HC#1: Additional Units of Housing Made Available: Number of new units made available to households at or o below 80% AMI	0	100	37	No
HC#5: Increase in Resident Mobility: Number of households able to move to a better unit and/or neighborhood of opportunity	0	100	37	No
HC#6: Increase in Homeownership Opportunities: Number of households that purchased a home	0	10	15	Yes

Not Yet Implemented Activities

HACP does not currently have any approved but not yet implemented activities.

On-Hold Activities

HACP activities that could be considered as ‘on hold’ are actually subsets of implemented activities. There is only one, and it is as follows:

Exception Payment Standard Areas. Originally approved in 2004 as part of a larger approval on Exception Payment Standards, HACP suspended its Exception Payment Standard Area in 2007 in order to reduce costs and streamline administration. In response to changes in the local market, HACP plans to develop new payment standard methodologies to increase housing choices for voucher families in 2018.

Closed Out Activities

Since entering the Moving To Work Program in 2000, HACP has also instituted a number of Moving To Work initiatives that in 2018 no longer required specific Moving To Work Authority. Some of those initiatives are:

1. Establishment of Site Based Waiting Lists. Closed out in 2006, prior to execution of the Standard Agreement as Moving To Work authority was no longer required for this activity.
2. Establishment of a variety of local waiting list preferences, including a working/elderly/disabled preference and a special working preference for scattered site units. Closed out in 2008, prior to execution of the Standard Agreement as Moving To Work authority was no longer required for this activity.
3. Modified Rent Reasonableness Process. Closed out in 2008, prior to execution of the Standard Agreement as Moving To Work authority was no longer required for this activity.
4. Transition to Site Based Management and Asset Management, including Site Based Budgeting and Accounting. Closed out in 2005, prior to execution of the Standard Agreement as Moving To Work authority was no longer required for this activity.

Other Activities

Several activities that utilized Moving To Work Authority, but are not specified as specific initiatives waiving specific regulations, were previously included in the initiative section but no longer require that separate listing. They are as follows:

- Use of Block Grant Funding Authority to support Development and Redevelopment, Enhanced and Expanded Family Self-sufficiency and related programming, and the HACP MTW Homeownership Program.
 - Originally approved with the initial Moving To Work Program and expanded to include homeownership and resident service programs in subsequent years, HACP continues to use Moving To Work block grant funding to support its Moving To Work Initiatives. Additional information on the use of Single Fund block grant

authority is included in other sections of this MTW Plan, particularly Section V. on Sources and Uses of funds.

- Energy Performance Contracting.
 - Under HACP's Moving To Work Agreement, HACP may enter into Energy Performance Contracts (EPC) without prior HUD approval. HACP will continue its current EPC, executed in 2008, to reduce costs and improve efficient use of federal funds.
 - HACP's current EPC included installation of water saving measures across the authority, installation of more energy efficient lighting throughout the authority, and installation of geo-thermal heating and cooling systems at select communities. It was completed in 2010, with final payments made in 2011. Monitoring and Verification work began in 2011, with the first full Monitoring and Verification report completed for the 2012 year. HACP's objectives include realizing substantial energy cost savings. HACP reports on the EPC in the MTW Annual Report. See attached.
- Establishment of a Local Asset Management Program.
 - In 2004, prior to HUD's adoption of a site based asset management approach to public housing operation and management, HACP embarked on a strategy to transition its centralized management to more decentralized site-based management capable of using an asset management approach. During HACP's implementation, HUD adopted similar policies and requirements for all Housing Authorities. Specific elements of HACP's Local Asset Management Program were approved in 2010, as described in the Appendix, Local Asset Management Program. HACP will continue to develop and refine its Local Asset Management Program to reduce costs and increase effectiveness.

Section V. Sources and Uses of Funds

V.5.Report.Unspent MTW Funds

C. MTW Report: Commitment of Unspent Funds

In the table below, provide planned commitments or obligations of unspent MTW funds at the end of the PHA's fiscal year.

Account	Planned Expenditure	Obligated Funds	Committed Funds
8499	Gap Financing Supporting Project Based Vouchers	\$7,000,000	\$7,000,000
8499	Addison Phase IV	\$2,027,032	\$2,027,032
8499	Scattered Sites Acquisitions	\$8,151,259	\$8,151,259
8475	Vehicles	\$608,019	\$853,200
8460	Authority Wide Modernization	\$3,025,697	\$8,341,696
4520	Private Management	\$5,289,128	\$5,289,128
8408	Resident Services	\$2,168,664	\$2,378,561
8408	Protective Services	\$4,814,919	\$5,088,135
4520	Energy Performance Contract	\$2,841,002	\$2,841,002
Total Obligated or Committed Funds:		\$35,925,720	\$41,970,013

A. MTW Report: Sources and Uses of MTW Funds		
Actual Sources and Uses of MTW Funding for the Fiscal Year		
PHAs shall submit their unaudited and audited information in the prescribed FDS format through the Financial Assessment System - PHA (FASPHA), or its successor system		
Describe the Activities that Used Only MTW Single Fund Flexibility		
<p>HACP had budgeted its single fund flexibility from the HCVP and Low Income Public Housing programs to support the authority's Moving to Work initiatives and other activities. This included budgeting \$17,178,291 towards development, \$8,341,696 for modernization, protective services and resident services. During 2017 the Authority used \$15,113,712 from MTW Section 8 and Public Housing. The MTW funds used to support the private management sites totaled \$5,289,128. The amount of \$2,841,002 was used to support the Energy Performance Contract. Lastly, \$4,814,919 was spent on protective services, \$371,219 on homeownership and \$1,797,444 on resident services.</p>		
V.4.Report.Local Asset Management Plan		
B. MTW Report: Local Asset Management Plan		
Has the PHA allocated costs within statute during the plan year?	<input type="checkbox"/>	<input type="checkbox"/> NO
Has the PHA implemented a local asset management plan (LAMP)?	<input type="checkbox"/> Yes or	<input type="checkbox"/>
If the PHA is implementing a LAMP, it shall be described in an appendix every year beginning with the year it is proposed and approved. It shall explain the deviations from existing HUD requirements and should be updated if any changes are made to the LAMP.		
Has the PHA provided a LAMP in the appendix?	<input type="checkbox"/> Yes or	<input type="checkbox"/>

Section VI. Administrative

- A. Description of any HUD reviews, audits, or physical inspection issues that require action to address the issue.
- HACP takes appropriate action on any REAC identified Physical Condition issues.
 - HACP had no other HUD reviews or audits requiring action by HACP at the end of 2017.
- B. Results of PHA-directed evaluations of the demonstration.
- HACP secured the University of Pittsburgh to conduct an evaluation of its rent reform policy and an alternative payment standard methodology. Results of this study will be included in the 2018 annual report.
- C. Certification that HACP has met the statutory requirements of the MTW Demonstration.

HACP hereby certifies that it has met the Statutory Requirements of 1) assuring that at least 75% of the families assisted by the Agency are very low-income families; 2) continuing to assist substantially the same total number of eligible low-income families as would have been served absent the demonstration; and 3) maintaining a comparable mix of families by family size, as would have been served or assisted had the amounts not been used under the demonstration.

Local Asset Management Plan

A. B. C. Planned Sources and Uses of Funds (MTW, Non-MTW, State and Local)

Please see the charts at the end of this Chapter, which show sources and uses of MTW and non-MTW funds.

D. Deviations in Cost Allocation and Fee For Service Approach - Approach to Asset Management

In implementing its Moving To Work Initiatives, HACP's Local Asset Management Approach includes some deviations in cost allocation and fee for service approaches, as well as other variations to HUD asset management regulations. Because these all relate to accounting and sources and uses of funds, the information on HACP's Local Asset Management Program and Site Based Budgeting and Accounting is included in this section.

Approach to Asset Management

HACP followed HUD's guidelines and asset management requirements including AMP-based financial statements. HACP retained the HUD chart of accounts and the HUD crosswalk to the FDS. Under the local asset management program, HACP retained full authority to move its MTW funds and project cash flow among projects without limitation. The MTW single fund flexibility, after payment of all program expenses, was utilized to direct funds to the HACP development program, wherein HACP is working to redevelop its aging housing stock.

HACP's plan is consistent with HUD's ongoing implementation of project based budgeting and financial management, and project-based management. Operations of HACP sites were coordinated and overseen by Property Managers on a daily basis, who oversaw the following management and maintenance tasks: maintenance work order completion, rent collection, leasing, community and resident relations, security, unit turnover, capital improvements planning, and other activities to efficiently operate the site. HACP Property Managers received support in conducting these activities from the Central Office departments, including operations, human resources, modernization, Resident Self-Sufficiency, Finance, Public Safety and others.

HACP Property Managers developed and monitored property budgets with support from the HACP Finance staff. Budget training was held to support the budget development process. HACP continues to develop and utilize project-based budgets for all of its asset management projects (AMPs). Property managers have the ability to produce monthly income and expense statements and use these as tools to efficiently manage their properties. All direct costs were directly charged to the maximum extent possible to the AMPs.

HACP utilized a fee for Service and frontline methodology as outlined in 24 CFR 990 and in the HACP Operating Fund Rule binder, which describes the methodology used for allocating its expenses.

New Initiatives and Deviations from General Part 990 Requirements

During FY2017 the authority undertook the following initiatives to improve the effectiveness and efficiency of the Authority:

- ❖ HACP maintained the spirit of the HUD site based asset management model. It retained the COCC and site based income and expenses in accordance with HUD guidelines, but eliminated inefficient accounting and/or reporting aspects that yielded little or no value from the staff time spent or the information produced.
- ❖ HACP established and maintained an MTW cost center that held all excess MTW funds not allocated to the sites or to the voucher program. This cost center and all activity therein was reported under the newly created Catalog of Federal Domestic Assistance number for the MTW cost center. This cost center also held some of the large balance sheet accounts of the authority as a whole. Most notably most of the banking and investment accounts were maintained within the MTW cost center.
- ❖ The MTW cost center essentially represented a mini HUD. All subsidy dollars were initially received and resided in the MTW cost center. Funding was allocated annually to sites based upon their budgetary needs as represented and approved in their annual budget request. Sites were monitored both as to their performance against the budgets and the corresponding budget matrix. They were also monitored based upon the required PUM subsidy required to operate the property. HACP maintained a budgeting and accounting system that gave each property sufficient funds to support annual operations, including all COCC fee and frontline charges. Actual revenues included those provided by HUD and allocated by HACP based on annual property-based budgets. As envisioned, all block grants were deposited into a single general ledger fund.
- ❖ Site balance sheet accounts were limited to site specific activity, such as fixed assets, tenant receivables, tenant security deposits, unrestricted net asset equity, which were generated by operating surpluses, and any resulting due to/due from balances. Some

balance sheet items still reside in the MTW fund accounts, and include such things as workers compensation accrual, investments, A/P accruals, payroll accruals, payroll tax accruals, employee benefit accruals, Family Self-sufficiency escrow balances, etc. The goal of this approach was to minimize extraneous accounting, and reduce unnecessary administrative burden of performing monthly allocation entries for each, while maintaining fiscal integrity.

- ❖ All cash and investments remain in the MTW cost center during the year. Sites had a due to/due from relationship with the MTW cost center that represented cash until the authority performed its year-end accounting entries and allocated to each site a share of the cash and investments. This is a one-time entry each year for Financial Data Schedule presentation purposes and is immediately reversed on the first day of the next calendar year. This saves the authority the time and effort of breaking out the cash and investments monthly on the General Ledger.
- ❖ All frontline charges and fees to the central office cost center were reflected on the property reports, as required. The MTW ledger did not pay fees directly to the COCC. As allowable under the asset management model, however, any subsidy needed to pay legacy costs, such as pension or terminal leave payments, were transferred from the MTW ledger or the projects to the COCC.
- ❖ The Energy Performance Contract accounting was broken out to the sites. This included all assets, liabilities, debt service costs, and cost savings.
- ❖ No inventory exists on the books at the sites. A just in time inventory system has been implemented. This new inventory system has been operational and more efficient, both in time and expense.
- ❖ Central Operations staff, many of whom performed direct frontline services such as home ownership, self-sufficiency, and/or relocation, were frontlined appropriately to the low income public housing and/or Section 8 Housing Choice Voucher programs, as these costs are 100 percent low rent and/or Section 8.

- ❖ Actual Section 8 amounts needed for housing assistance payments and administrative costs were allotted to the Housing Choice Voucher program, including sufficient funds to pay asset management fees. Block grant reserves and their interest earnings were not commingled with Section 8 operations, enhancing the budget transparency. Section 8 program managers have become more responsible for their budgets in the same manner as public housing site managers.

- ❖ Information Technology costs were directly charged to the programs benefiting from them, e.g. the LIPH module cost was directly charged to AMPs; all indirect IT costs were charged to all cost centers based on a "per workstation" charge rather than a Fee for Service basis. This allowed for equitable allocation of the expense while saving time and effort on allocating out each invoice at the time of payment.

Flexible use of Phase in of Management Fees –

As a component of its local asset management plan, the Housing Authority of the City of Pittsburgh elected to make use of phase-in management fees for 2010 and beyond. The HUD prescribed management fees for the HACP are \$57.17 PUM. HACP proposed and received approval on the following phase-in schedule and approach:

Schedule of Phased-in Management Fees for HACP –

2008 (Initial Year of Project Based Accounting)	\$91.94
2009 (Year 2)	\$84.99
2010 (Year 3)	\$78.03
2011 (Year 4 and beyond)	\$78.03

The above numbers reflect 2011 dollars.

HACP has diligently worked to reduce its staffing and expenditure levels and reduce unnecessary COCC costs; it continues to do so, in an effort to cut costs further, in order to comply with the COCC cost provisions of the operating fund rule. It is also working to increase its management fee revenues in the COCC, through aggressive, and we believe, achievable, development and lease up efforts in both the public housing and leased housing programs. As such, HACP is continuing to lock in at current level phase in fees as approved in the 2017 Annual Plan. HACP, as indicated above, has made cuts to its COCC staffing, in virtually every department. It has reduced staff, reduced contractors, cut administration, and made substantial budget cuts to move toward compliance with the fee revenue requirements. Nevertheless, we are not yet able to meet the PUM fee revenue target until we grow our portfolio size. Fortunately, a major component of the HACP strategic plan is to grow its portfolio.

The phase in fee flexibility, coupled with HACP's planned growth in public housing occupancy and increases in voucher utilization, will enable HACP's COCC to become sustainable in the long term and fully compliant with the operating fund rule. It should also be noted that this fee flexibility will come from HACP's MTW funds, and will require no additional HUD funding. This flexibility is the essence of the MTW program, and will go a long way towards enabling HACP to successfully undertake and complete its aggressive portfolio restructuring efforts.

Use of Single Fund Flexibility

HACP had budgeted its single fund flexibility from the HCVP and Low Income Public Housing programs to support the authority's Moving to Work initiatives and other activities. This included budgeting \$17,178,291 towards development, \$8,341,696 for modernization, protective services and resident services. During 2017 the Authority used \$15,113,712 from MTW Section 8 and Public Housing. The MTW funds used to support the private management sites totaled \$5,289,128. The amount of \$2,841,002 was used to support the Energy Performance Contract. Lastly, \$4,814,919 was spent on protective services, \$371,219 on homeownership and \$1,797,444 on resident services.

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HACP - LIPH and Section 8 Occupancy 01/01/01 to 01/01/16

	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
LIPH Family	2460	2385	2402	2424	2452	2471	2434	2455	2491	2178	2203	2217
LIPH Elderly	1092	1078	1083	1097	1104	1112	1091	1097	1110	962	971	987
HCV Family	4501	4429	4473	4522	4548	4556	4533	4542	4565	4470	4500	4522
HCV Elderly	754	749	765	770	782	785	781	787	798	802	815	817
Total	8807	8641	8723	8813	8886	8924	8839	8881	8964	8412	8489	8543

Historical: HACP - LIPH and Section 8 Occupancy 01/01/01 to 01/01/16

	1/1/2001	1/1/2002	1/1/2003	1/1/2004	1/1/2005	1/1/2006	1/1/2007	1/1/2008	1/1/2009	1/1/2010	1/1/2011	1/1/2012	1/1/2013	1/1/2014	1/1/2015	1/1/2016
LIPH Family	3813	3489	3612	3573	3437	3280	3135	3017	2919	2879	2934	2766	2823	2859	2623	2653
LIPH Elderly	1433	1355	1313	1248	1219	1218	1269	1211	1195	1132	1100	1205	1182	1197	1167	1090
HCV Family	3440	3891	3973	4496	4786	6076	5649	4954	4651	4463	4538	4739	4431	4345	4267	4569
HCV Elderly	459	472	555	581	560	592	588	609	596	600	672	691	711	715	742	721
Totals	9145	9207	9453	9898	10002	11166	10641	9791	9361	9092	9244	9401	9147	9116	8799	9033

HCV Port - Outs Are Not Included Within These Totals Due to Unavailable Bedroom Sizes

Table A-1 – Unit Sizes of Households Served

LIPHEfficiency/1 BR	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	750	726	729	729	733	740	736	743	755	634	640	638	713
Elderly	781	771	774	784	790	798	778	778	785	682	692	705	760
Total	1531	1497	1503	1513	1523	1538	1514	1521	1540	1316	1332	1343	1473

LIPH2 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	737	693	700	722	738	748	737	749	769	660	672	677	717
Elderly	217	213	216	217	219	218	217	222	226	188	187	190	211
Total	954	906	916	939	957	966	954	971	995	848	859	867	928

LIPH3 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	752	748	753	752	759	760	743	743	746	677	683	690	734
Elderly	80	80	79	82	81	82	82	83	85	78	78	78	81
Total	832	828	832	834	840	842	825	826	831	755	761	768	815

LIPH4 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	190	188	189	190	191	193	189	190	191	178	179	183	188
Elderly	12	12	12	12	12	12	12	12	12	12	12	12	12
Total	202	200	201	202	203	205	201	202	203	190	191	195	200

LIPH5+ Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	31	30	31	31	31	30	29	30	30	29	29	29	30
Elderly	2	2	2	2	2	2	2	2	2	2	2	2	2
Total	33	32	33	33	33	32	31	32	32	31	31	31	32

LIPH All	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	2460	2385	2402	2424	2452	2471	2434	2455	2491	2178	2203	2217	2381
Elderly	1092	1078	1083	1097	1104	1112	1091	1097	1110	962	971	987	1065
Total	3552	3463	3485	3521	3556	3583	3525	3552	3601	3140	3174	3204	3446

HCV Efficiency/1 BR	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	1349	1325	1349	1357	1353	1352	1352	1356	1358	1349	1355	1368	1352
Elderly	563	557	576	579	589	591	598	605	618	629	640	641	599
Total	1912	1882	1925	1936	1942	1943	1950	1961	1976	1978	1995	2009	1951

HCV 2 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	1632	1622	1638	1658	1665	1670	1665	1670	1687	1644	1647	1648	1654
Elderly	155	158	155	156	158	158	149	148	146	140	141	140	150
Total	1787	1780	1793	1814	1823	1828	1814	1818	1833	1784	1788	1788	1804

HCV 3 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
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Table A-1 – Unit Sizes of Households Served

Family	1257	1235	1241	1254	1274	1277	1263	1261	1266	1228	1246	1247	1254
Elderly	31	29	29	30	30	31	30	30	30	29	30	32	30
Total	1288	1264	1270	1284	1304	1308	1293	1291	1296	1257	1276	1279	1284

HCV 4 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	220	207	205	212	216	216	214	215	212	211	212	215	213
Elderly	5	5	5	5	5	5	4	4	4	4	4	4	5
Total	225	212	210	217	221	221	218	219	216	215	216	219	217

HCV 5+ Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	43	40	40	41	40	41	39	40	42	38	40	44	41
Elderly	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	43	40	40	41	40	41	39	40	42	38	40	44	41

HCV All	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	4501	4429	4473	4522	4548	4556	4533	4542	4565	4470	4500	4522	4513
Elderly	754	749	765	770	782	785	781	787	798	802	815	817	784
Total	5255	5178	5238	5292	5330	5341	5314	5329	5363	5272	5315	5339	5297

HCV Port - Outs Are Not Included Within These Totals Due to Unavailable Bedroom Sizes

Total Efficiency/1 BR	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	2099	2051	2078	2086	2086	2092	2088	2099	2113	1983	1995	2006	2065
Elderly	1344	1328	1350	1363	1379	1389	1376	1383	1403	1311	1332	1346	1359
Total	3443	3379	3428	3449	3465	3481	3464	3482	3516	3294	3327	3352	3423

Total 2 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	2369	2315	2338	2380	2403	2418	2402	2419	2456	2304	2319	2325	2371
Elderly	372	371	371	373	377	376	366	370	372	328	328	330	361
Total	2741	2686	2709	2753	2780	2794	2768	2789	2828	2632	2647	2655	2732

Total 3 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	2009	1983	1994	2006	2033	2037	2006	2004	2012	1905	1929	1937	1988
Elderly	111	109	108	112	111	113	112	113	115	107	108	110	111
Total	2120	2092	2102	2118	2144	2150	2118	2117	2127	2012	2037	2047	2099

Total 4 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	410	395	394	402	407	409	403	405	403	389	391	398	401
Elderly	17	17	17	17	17	17	16	16	16	16	16	16	17
Total	427	412	411	419	424	426	419	421	419	405	407	414	417

Total 5+ Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	74	70	71	72	71	71	68	70	72	67	69	73	71

Table A-1 – Unit Sizes of Households Served

Elderly	2	2	2	2	2	2	2	2	2	2	2	2	2
Total	76	72	73	74	73	73	70	72	74	69	71	75	73

Total All	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	<i>Average</i>
Family	6961	6814	6875	6946	7000	7027	6967	6997	7056	6648	6703	6739	6894
Elderly	1846	1827	1848	1867	1886	1897	1872	1884	1908	1764	1786	1804	1849
Total	8807	8641	8723	8813	8886	8924	8839	8881	8964	8412	8489	8543	8744

Table A -2– Income of Households Served

Under 30%AMI	Jan-17		Feb-17		Mar-17		Apr-17		May-17		Jun-17		Jul-17		Aug-17		Sep-17		Oct-17		Nov-17		Dec-17	
LIPH	2641	74.4%	2562	74.0%	2578	74.0%	2603	73.9%	2699	75.9%	2727	76.1%	2692	76.4%	2712	76.4%	2755	76.5%	2428	77.3%	2453	77.3%	2478	77.3%
HCV	4579	78.3%	4519	77.9%	4571	77.6%	4628	77.4%	4851	80.5%	4860	80.4%	4875	80.4%	4872	80.2%	4890	79.8%	4815	79.5%	4835	79.1%	4837	78.7%
Total	7220	76.8%	7081	76.4%	7149	76.3%	7231	76.1%	7550	78.8%	7587	78.8%	7567	78.9%	7584	78.8%	7645	78.6%	7243	78.7%	7288	78.5%	7315	78.2%

30% to 50% AMI	Jan-17		Feb-17		Mar-17		Apr-17		May-17		Jun-17		Jul-17		Aug-17		Sep-17		Oct-17		Nov-17		Dec-17	
LIPH	619	17.4%	618	17.8%	619	17.8%	623	17.7%	564	15.9%	566	15.8%	554	15.7%	554	15.6%	563	15.6%	489	15.6%	489	15.4%	486	15.2%
HCV	1114	19.1%	1119	19.3%	1136	19.3%	1147	19.2%	992	16.5%	990	16.4%	997	16.4%	1015	16.7%	1038	16.9%	1049	17.3%	1074	17.6%	1096	17.8%
Total	1733	18.4%	1737	18.7%	1755	18.7%	1770	18.6%	1556	16.2%	1556	16.2%	1551	16.2%	1569	16.3%	1601	16.5%	1538	16.7%	1563	16.8%	1582	16.9%

51% to 80% AMI	Jan-17		Feb-17		Mar-17		Apr-17		May-17		Jun-17		Jul-17		Aug-17		Sep-17		Oct-17		Nov-17		Dec-17	
LIPH	232	6.5%	225	6.5%	227	6.5%	228	6.5%	231	6.5%	227	6.3%	215	6.1%	223	6.3%	221	6.1%	174	5.5%	184	5.8%	192	6.0%
HCV	150	2.6%	164	2.8%	178	3.0%	198	3.3%	181	3.0%	189	3.1%	184	3.0%	185	3.0%	188	3.1%	187	3.1%	194	3.2%	206	3.3%
Total	382	4.1%	389	4.2%	405	4.3%	426	4.5%	412	4.3%	416	4.3%	399	4.2%	408	4.2%	409	4.2%	361	3.9%	378	4.1%	398	4.3%

Over 80% AMI	Jan-17		Feb-17		Mar-17		Apr-17		May-17		Jun-17		Jul-17		Aug-17		Sep-17		Oct-17		Nov-17		Dec-17	
LIPH	60	1.7%	58	1.7%	61	1.8%	67	1.9%	62	1.7%	63	1.8%	64	1.8%	63	1.8%	62	1.7%	49	1.6%	48	1.5%	48	1.5%
HCV	2	0.0%	2	0.0%	4	0.1%	6	0.1%	5	0.1%	5	0.1%	6	0.1%	5	0.1%	9	0.1%	8	0.1%	10	0.2%	11	0.2%
Total	62	0.7%	60	0.6%	65	0.7%	73	0.8%	67	0.7%	68	0.7%	70	0.7%	68	0.7%	71	0.7%	57	0.6%	58	0.6%	59	0.6%

HCV Port - Outs Are Included in these totals

Table A-7--Income of Disabled Households Served

Under 30%AMI	Jan-17		Feb-17		Mar-17		Apr-17		May-17		Jun-17		Jul-17		Aug-17		Sep-17		Oct-17		Nov-17		Dec-17	
LIPH	1449	82.0%	1423	82.1%	1431	82.1%	1438	81.8%	1475	83.5%	1491	83.6%	1468	83.3%	1477	83.4%	1497	83.5%	1329	83.5%	1343	83.7%	1361	83.9%
HCV	2031	85.9%	2030	85.7%	2069	86.0%	2086	85.8%	2146	88.1%	2150	88.0%	2144	87.7%	2147	87.5%	2157	87.4%	2140	87.2%	2153	86.8%	2173	87.0%
Total	3480	84.2%	3453	84.2%	3500	84.4%	3524	84.2%	3621	86.2%	3641	86.1%	3612	85.9%	3624	85.8%	3654	85.8%	3469	85.7%	3496	85.6%	3534	85.8%

30% to 50% AMI	Jan-17		Feb-17		Mar-17		Apr-17		May-17		Jun-17		Jul-17		Aug-17		Sep-17		Oct-17		Nov-17		Dec-17	
LIPH	241	13.6%	234	13.5%	236	13.5%	241	13.7%	214	12.1%	216	12.1%	221	12.5%	220	12.4%	221	12.3%	194	12.2%	193	12.0%	189	11.7%
HCV	315	13.3%	320	13.5%	318	13.2%	326	13.4%	271	11.1%	273	11.2%	281	11.5%	288	11.7%	289	11.7%	292	11.9%	300	12.1%	302	12.1%
Total	556	13.5%	554	13.5%	554	13.4%	567	13.5%	485	11.5%	489	11.6%	502	11.9%	508	12.0%	510	12.0%	486	12.0%	493	12.1%	491	11.9%

51% to 80% AMI	Jan-17		Feb-17		Mar-17		Apr-17		May-17		Jun-17		Jul-17		Aug-17		Sep-17		Oct-17		Nov-17		Dec-17	
LIPH	63	3.6%	63	3.6%	64	3.7%	63	3.6%	64	3.6%	64	3.6%	59	3.3%	59	3.3%	59	3.3%	54	3.4%	54	3.4%	57	3.5%
HCV	19	0.8%	17	0.7%	17	0.7%	17	0.7%	20	0.8%	20	0.8%	19	0.8%	19	0.8%	19	0.8%	20	0.8%	23	0.9%	21	0.8%
Total	82	2.0%	80	2.0%	81	2.0%	80	1.9%	84	2.0%	84	2.0%	78	1.9%	78	1.8%	78	1.8%	74	1.8%	77	1.9%	78	1.9%

Over 80% AMI	Jan-17		Feb-17		Mar-17		Apr-17		May-17		Jun-17		Jul-17		Aug-17		Sep-17		Oct-17		Nov-17		Dec-17	
LIPH	14	0.8%	13	0.8%	13	0.7%	15	0.9%	13	0.7%	13	0.7%	14	0.8%	14	0.8%	16	0.9%	15	0.9%	15	0.9%	15	0.9%
HCV	0	0.0%	1	0.0%	1	0.0%	1	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	0.1%	2	0.1%	3	0.1%	3	0.1%
Total	14	0.3%	14	0.3%	14	0.3%	16	0.4%	13	0.3%	13	0.3%	14	0.3%	14	0.3%	18	0.4%	17	0.4%	18	0.4%	18	0.4%

Note: A Disabled Household is a public housing or HCV (Section 8) household in which the leaseholder has a verified SSI disability lowering rent payments. Disabled members of the family who are not the designated head of household are not included.

HCV Port - Outs Are Included in these totals

Table A-4-- Race / Ethnicity of Households Served

LIPH Family	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Black	2227	2157	2174	2196	2223	2240	2206	2226	2255	1954	1976	1991
White	185	182	182	182	184	184	185	186	190	179	183	182
Hispanic	34	31	31	31	30	32	27	27	28	29	28	28
Asian	5	5	5	5	5	5	5	5	5	5	5	5
Other	9	10	10	10	10	10	11	11	13	11	11	11
Total	2460	2385	2402	2424	2452	2471	2434	2455	2491	2178	2203	2217

LIPH Elderly	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Black	945	934	939	949	956	963	953	960	972	831	838	852
White	131	128	128	131	131	132	121	120	120	117	119	121
Hispanic	13	13	13	13	13	13	13	13	13	11	11	11
Asian	1	1	1	2	2	2	2	2	2	2	2	2
Other	2	2	2	2	2	2	2	2	3	1	1	1
Total	1092	1078	1083	1097	1104	1112	1091	1097	1110	962	971	987

LIPH Total	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Black	3172	3091	3113	3145	3179	3203	3159	3186	3227	2785	2814	2843
White	316	310	310	313	315	316	306	306	310	296	302	303
Hispanic	47	44	44	44	43	45	40	40	41	40	39	39
Asian	6	6	6	7	7	7	7	7	7	7	7	7
Other	11	12	12	12	12	12	13	13	16	12	12	12
Total	3552	3463	3485	3521	3556	3583	3525	3552	3601	3140	3174	3204

HCV Family	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Black	4166	4137	4197	4256	4286	4299	4322	4321	4351	4288	4322	4343
White	792	782	786	808	812	808	807	812	819	810	816	825
Hispanic	63	61	62	64	63	64	63	65	66	64	65	67
Asian	10	12	13	13	14	13	14	14	14	13	13	13
Other	25	27	28	28	29	29	27	27	25	26	25	25
Total	5056	5019	5086	5169	5204	5213	5233	5239	5275	5201	5241	5273

HCV Elderly	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Black	547	546	562	568	579	582	582	592	597	594	604	610
White	221	218	220	221	225	228	226	225	231	242	247	246
Hispanic	6	6	6	6	6	6	6	6	6	6	6	6
Asian	6	6	6	6	6	6	6	6	6	6	5	5
Other	9	9	9	9	9	9	9	9	10	10	10	10
Total	789	785	803	810	825	831	829	838	850	858	872	877

HCV Total	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Black	4713	4683	4759	4824	4865	4881	4904	4913	4948	4882	4926	4953
White	1013	1000	1006	1029	1037	1036	1033	1037	1050	1052	1063	1071
Hispanic	69	67	68	70	69	70	69	71	72	70	71	73
Asian	16	18	19	19	20	19	20	20	20	19	18	18
Other	34	36	37	37	38	38	36	36	35	36	35	35
Total	5845	5804	5889	5979	6029	6044	6062	6077	6125	6059	6113	6150

Total Family	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Black	6393	6294	6371	6452	6509	6539	6528	6547	6606	6242	6298	6334
White	977	964	968	990	996	992	992	998	1009	989	999	1007
Hispanic	97	92	93	95	93	96	90	92	94	93	93	95
Asian	15	17	18	18	19	18	19	19	19	18	18	18
Other	34	37	38	38	39	39	38	38	38	37	36	36
Total	7516	7404	7488	7593	7656	7684	7667	7694	7766	7379	7444	7490

Total Elderly	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Black	1492	1480	1501	1517	1535	1545	1535	1552	1569	1425	1442	1462
White	352	346	348	352	356	360	347	345	351	359	366	367
Hispanic	19	19	19	19	19	19	19	19	19	17	17	17
Asian	7	7	7	8	8	8	8	8	8	8	7	7
Other	11	11	11	11	11	11	11	11	13	11	11	11
Total	1881	1863	1886	1907	1929	1943	1920	1935	1960	1820	1843	1864

Total	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Black	7885	7774	7872	7969	8044	8084	8063	8099	8175	7667	7740	7796
White	1329	1310	1316	1342	1352	1352	1339	1343	1360	1348	1365	1374
Hispanic	116	111	112	114	112	115	109	111	113	110	110	112
Asian	22	24	25	26	27	26	27	27	27	26	25	25
Other	45	48	49	49	50	50	49	49	51	48	47	47
Total	9397	9267	9374	9500	9585	9627	9587	9629	9726	9199	9287	9354

*Tenants who self-identified as more than one race, are counted in both categories

Table A-5 – Unit Sizes Of Households Containing Disabled Residents

LIPH Efficiency/1 BR	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	584	568	571	571	575	584	585	588	597	535	539	537	570
Elderly	482	480	483	491	496	503	491	490	492	422	427	439	475
Total	1066	1048	1054	1062	1071	1087	1076	1078	1089	957	966	976	1044

LIPH2 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	231	220	224	228	229	233	231	231	236	216	221	220	227
Elderly	151	146	148	148	150	149	149	152	155	125	124	127	144
Total	382	366	372	376	379	382	380	383	391	341	345	347	370

LIPH3 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	209	209	212	211	210	209	202	203	204	194	193	197	204
Elderly	46	47	46	48	47	47	47	48	49	44	44	44	46
Total	255	256	258	259	257	256	249	251	253	238	237	241	251

LIPH4 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	45	45	41	41	41	42	40	40	41	38	39	40	41
Elderly	8	7	7	7	6	6	6	6	7	7	7	7	7
Total	53	52	48	48	47	48	46	46	48	45	46	47	48

LIPH5+ Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	10	10	11	11	11	10	10	11	11	10	10	10	10
Elderly	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	11	11	12	12	12	11	11	12	12	11	11	11	11

LIPH All	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	1079	1052	1059	1062	1066	1078	1068	1073	1089	993	1002	1004	1052
Elderly	688	681	685	695	700	706	694	697	704	599	603	618	673
Total	1767	1733	1744	1757	1766	1784	1762	1770	1793	1592	1605	1622	1725

The HACP uses the definitions of disabilities used by the Social Security Administration. All households counted in Table A-5 are public housing or HCV (Section 8) households in which the leaseholder has a verified SSI disability lowering rent payments. Members of the family with disabilities who are not the designated head of household are not included.

HCV Efficiency/1 BR	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	898	899	918	920	916	915	912	916	919	914	920	928	915
Elderly	435	429	440	444	452	453	461	466	477	487	494	493	461
Total	1333	1328	1358	1364	1368	1368	1373	1382	1396	1401	1414	1421	1376

HCV 2 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	403	397	400	400	402	405	402	404	405	395	399	400	401
Elderly	128	130	127	128	129	129	124	123	121	118	118	115	124
Total	531	527	527	528	531	534	526	527	526	513	517	515	525

HCV 3 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	207	203	203	204	202	203	199	200	199	188	194	196	200
Elderly	26	24	24	25	25	26	24	24	24	23	23	25	24
Total	233	227	227	229	227	229	223	224	223	211	217	221	224

HCV 4 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	50	49	49	52	53	52	48	48	48	48	49	49	50
Elderly	3	3	3	3	3	3	3	3	3	3	3	3	3
Total	53	52	52	55	56	55	51	51	51	51	52	52	53

HCV 5+ Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	6	6	6	7	7	8	6	7	7	7	7	9	7
Elderly	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	6	6	6	7	7	8	6	7	7	7	7	9	7

HCV All	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	1564	1554	1576	1583	1580	1583	1567	1575	1578	1552	1569	1582	1572
Elderly	592	586	594	600	609	611	612	616	625	631	638	636	613
Total	2156	2140	2170	2183	2189	2194	2179	2191	2203	2183	2207	2218	2184

HCV Port - Outs Are Not Included Within These Totals Due to Unavailable Bedroom Sizes

The HACP uses the definitions of disabilities used by the Social Security Administration. All households counted in Table A-5 are public housing or HCV (Section 8) households in which the leaseholder has a verified SSI disability lowering rent payments. Members of the family with disabilities who are not the designated head of household are not included.

Total Efficiency/1 BR	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	1482	1467	1489	1491	1491	1499	1497	1504	1516	1449	1459	1465	1484
Elderly	917	909	923	935	948	956	952	956	969	909	921	932	936
Total	2399	2376	2412	2426	2439	2455	2449	2460	2485	2358	2380	2397	2420

Total 2 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	634	617	624	628	631	638	633	635	641	611	620	620	628
Elderly	279	276	275	276	279	278	273	275	276	243	242	242	268
Total	913	893	899	904	910	916	906	910	917	854	862	862	896

Total 3 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	416	412	415	415	412	412	401	403	403	382	387	393	404
Elderly	72	71	70	73	72	73	71	72	73	67	67	69	71
Total	488	483	485	488	484	485	472	475	476	449	454	462	475

Total 4 Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	95	94	90	93	94	94	88	88	89	86	88	89	91
Elderly	11	10	10	10	9	9	9	9	10	10	10	10	10
Total	106	104	100	103	103	103	97	97	99	96	98	99	100

Total 5+ Bedroom	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	16	16	17	18	18	18	16	18	18	17	17	19	17
Elderly	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	17	17	18	19	19	19	17	19	19	18	18	20	18

Total All	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Average
Family	2643	2606	2635	2645	2646	2661	2635	2648	2667	2545	2571	2586	2624
Elderly	1280	1267	1279	1295	1309	1317	1306	1313	1329	1230	1241	1254	1285
Total	3923	3873	3914	3940	3955	3978	3941	3961	3996	3775	3812	3840	3909

The HACP uses the definitions of disabilities used by the Social Security Administration. All households counted in Table A-5 are public housing or HCV (Section 8) households in which the leaseholder has a verified SSI disability lowering rent payments. Members of the family with disabilities who are not the designated head of household are not included.

Americas M&V Services Team

Housing Authority of the City of Pittsburgh

Energy Cost Avoidance Report

Year 6 of 12 Energy Guarantee

September 2016 through August 2017



*Helping customers manage energy resources to
improve financial performance*

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Housing Authority of the City of Pittsburgh



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Program Overview

Measurement & Verification Services

Honeywell is pleased to provide this comprehensive report of your energy consumption. This report was processed using an industry-standard program based on proven and accepted engineering formulas for energy conservation and analysis.

Service Contract Number: 565-89-52029

Baseline Period: Calendar Yrs. 2004, 2005 & 2006

Guarantee Period: September 2011 - August 2023

Guarantee Term: 12 Years

Report Preparation By: Honeywell Energy Analysis Team

Contact: Larry Guzy, MVS
Karen Westlick, EA



Meters Included in Report

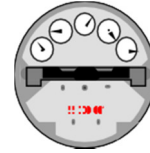


Buildings	Electric Acct #	Gas Acct #	Water Acct #
Addison Terrace		2-0000-481-2216	201881
		2-0000-387-0074	201882
			201883
Bedford Dwellings		0900608-210691	
		4578803-274077	
Arlington Heights	4000-004-642-001	0900608-196578	201494
Allegheny Dwellings		0900608-169042	201662
		0900608-315595	201663
		0900608-422918	
Northview Heights & High Rise	9000-001-979-001	0900608-116176	201693
			201694
Hamilton-Larimer		0900608-421814	202112
Pennsylvania-Bidwell		0900608-280359	125461
Pressley Street		0900608-210020	137061
			137062

Program Overview



Meters Included in Report



Buildings

Homewood North

Electric Acct

1000-538-716-001
2000-541-678-001
3000-538-693-001
4000-537-155-001
4000-538-691-001
5000-537-153-001
5000-538-717-001
5000-541-792-001
5000-542-549-001
6000-538-715-001
6001-055-907-001
7000-538-694-001
7000-541-679-001
8000-538-692-001
8000-538-736-001
8000-542-550-001
9000-537-154-001
9000-541-793-001
000-537-152-001
0000-538-718-001

Gas Acct

0900608-120956
0900608-137716
0900608-146749
0900608-183554
0900608-374664
2-0000-442-1893

Water Acct

165740
165741
211622
215886
215887
215888
1021-980
885-852
93033-88568
93035-88570
93037-88572
93817-980

Murray Towers

Mazza Pavillon (Brookline)

2-0000-387-03414
0900608-307611

190254
261244
24-0733625-0
24-0750368-5

Caliguiri Plaza (Allentown)

Morse Gardens

0900608-410310
0900608-200444

201368
102365
103336

D.A.P. Carrick Regency

0900608-389302

255656
24-0704817-8
24-0750415-4

Gualtieri Manor

1009-2775-001-7

281276
24-0725936-1

Finello Pavillion

2-0000-382-5003

Retrofit Highlights

- Lighting
- Water Conservation (showers, faucet aerators, toilets)
- Refrigerators
- Building Envelope
- Roofs and Insulation (attics)
- Limiting Thermostats
- Geothermal Heat Pump Systems
- New Boilers
- Adjust CFMs and New Ventilation Units
- Radiator Control Valves
- Ventilation Unit Heat Recovery
- Insulate Make up Air Ducts

Determination of Energy Savings

Theory of Energy Management

Energy conservation measures (ECM) include the installation of equipment or systems for the purpose of reducing energy use and/or costs. The cost of ECM implementation is recovered through the savings created by the ECM. The Federal Energy Management Program (F.E.M.P) of the U.S. Department of Energy and its Measurement and Verification Guidelines for Federal Energy Projects classify measurement and verification approaches as Options A, B, C, and D. The F.E.M.P. Guideline is based on the International Performance Measurement and Verification Protocol (I.P.M.V.P.).

Option A: Verification techniques determine savings by measuring the performance of a system before and after a retrofit, either through physical measurement or the use of manufacturer data, and multiplying the difference by an agreed-upon or stipulated factor, such as hours of operation.

Option B: Verification techniques are designed for projects where long-term continuous measurement of performance is desired. Metering is conducted on an individual system level, and the measured performance is compared with a baseline to determine savings.

Option C: Verification techniques involve utility whole building meter analysis, reviewing overall energy use, and identifying the effects of energy projects on a facility. Energy use before and after a retrofit project is compared to determine savings.

Option D: Computer models are developed that use calibrated simulations of baseline and post-installation energy use to measure savings.

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Methodology

Scope of Work

The following page details each ECM and the IPMVP methodology used

ECM	ECM Description	Post-Installation Option	Performance Period Option
1,2	Lighting	B (measured sample set)	A
6	Refrigerators	B (measured sample set)	A
10,11	Water Conservation (showers, faucet aerators, toilets)	B (measured sample set)	A (electric), A (gas & water at Mazza Pavilion) C (gas and water for remaining sites)
16	Building Envelope	A (visual inspection)	A for cooling, C for gas heating
18	Roofs and Insulation (attics)	A (visual inspection)	A for cooling, C for gas heating,
21	Limiting Thermostats	A (visual inspection)	A (tenant paid allowance sites), C (gas at frozen base sites)
26	Geothermal Heat Pump Systems	A (visual inspection)	C (electric and gas)
27	New Boilers	A (visual inspection)	C (gas)
29,30	Adjust CFMs and New Ventilation Units	A (visual inspection)	A (electric), C (gas)
31	Radiator Control Valves	A (visual inspection)	C (gas)
32	Ventilation Unit Heat Recovery	A (visual inspection)	A for electric, C for gas
37	Insulate Make up Air Ducts	A (visual inspection)	A (electric), C (gas)

Annual Guarantee Amount

The guarantee table below reflects Honeywell's annual guarantee, which will provide the housing authority the amount needed to cover the principal amount to be paid to a financial institution, the interest amount to be paid to a financial institution, and on-going M&V costs to be paid to Honeywell, for each performance year. The total shown is the cost of the project over the 12-year term.

Escalation Over Term		Savings					Amortization			P+I+Service = Honeywell Guarantee	Savings % Guaranteed by HW
		Energy	RBY	Total	M&V	Total	Interest	Principal	Balance		
		16.3%	0.0%								
0	Year 1	\$ 2,584,170	\$ -	\$ 2,584,170	\$ 72,342	\$ 72,342	\$ 1,191,039.78	\$ 1,320,788.22	\$ 25,171,724.12	\$ 2,584,170	92.59%
1	Year 2	\$ 2,653,236	\$ -	\$ 2,653,236	\$ 74,512	\$ 74,512	\$ 1,127,557.67	\$ 1,451,158.33	\$ 23,720,565.79	\$ 2,653,228	92.59%
2	Year 3	\$ 2,724,373	\$ -	\$ 2,724,373	\$ 76,747	\$ 76,747	\$ 1,057,907.42	\$ 1,589,712.58	\$ 22,130,853.21	\$ 2,724,367	92.59%
3	Year 4	\$ 2,797,645	\$ -	\$ 2,797,645	\$ 79,049	\$ 79,049	\$ 981,703.48	\$ 1,736,884.52	\$ 20,393,968.70	\$ 2,797,637	92.59%
4	Year 5	\$ 2,873,114	\$ -	\$ 2,873,114	\$ 81,420	\$ 81,420	\$ 898,539.46	\$ 1,893,152.54	\$ 18,500,816.15	\$ 2,873,112	92.59%
5	Year 6	\$ 2,950,848	\$ -	\$ 2,950,848	\$ 83,863	\$ 83,863	\$ 807,986.95	\$ 2,058,993.05	\$ 16,441,823.10	\$ 2,950,843	92.59%
6	Year 7	\$ 3,030,913	\$ -	\$ 3,030,913	\$ 86,379	\$ 86,379	\$ 709,594.70	\$ 2,234,929.30	\$ 14,206,893.80	\$ 3,030,903	92.59%
7	Year 8	\$ 3,113,381	\$ -	\$ 3,113,381	\$ 88,970	\$ 88,970	\$ 602,886.58	\$ 2,421,521.42	\$ 11,785,372.38	\$ 3,113,378	92.59%
8	Year 9	\$ 3,198,323	\$ -	\$ 3,198,323	\$ 91,639	\$ 91,639	\$ 487,360.92	\$ 2,619,319.08	\$ 9,166,053.30	\$ 3,198,319	92.59%
9	Year 10	\$ 3,285,813	\$ -	\$ 3,285,813	\$ 94,388	\$ 94,388	\$ 362,489.49	\$ 2,828,934.51	\$ 6,337,118.79	\$ 3,285,812	92.59%
10	Year 11	\$ 3,375,927	\$ -	\$ 3,375,927	\$ 97,220	\$ 97,220	\$ 227,715.76	\$ 3,050,984.24	\$ 3,286,134.55	\$ 3,375,920	92.59%
11	Year 12	\$ 3,468,745	\$ -	\$ 3,468,745	\$ 100,137	\$ 100,137	\$ 82,453.50	\$ 3,286,134.55	\$ -	\$ 3,468,725	92.58%
Total		\$ 36,056,488	\$ -	\$ 36,056,488	\$ 1,026,666	\$ 1,026,666	\$ 8,537,235.70	\$ 26,492,512.34		\$ 36,056,414	92.59%

Cost Avoidance Summary

Year 6 Savings

Option A Cost Avoidance	\$	356,922
Option C Cost Avoidance	\$	699,275
Adjustments	\$	2,127,119
Total Year 6 Savings	\$	3,183,315

Year 6 Savings

Year 6 Debt Service	\$	2,866,980
Year 6 M&V Service Cost	\$	83,863
Total Year 6 Energy Guarantee	\$	2,950,843

Net Results **\$ 232,472**

Percent of Plan 108%

Cumulative Results

TIME PERIOD		COST AVOIDANCE	ANNUAL GUARANTEE	AMOUNT RECONSOILED	NET RESULTS
Year 1	9/11 - 8/12	\$ 2,568,363	\$ 2,584,170	\$ 15,807	\$ -
Year 2	9/12 - 8/13	\$ 3,038,527	\$ 2,653,228		\$ 385,299
Year 3	9/13 - 8/14	\$ 3,151,588	\$ 2,724,367		\$ 427,221
Year 4	9/14 - 8/15	\$ 3,046,182	\$ 2,797,637		\$ 248,545
Year 5	9/15 - 8/16	\$ 2,985,075	\$ 2,873,112		\$ 111,963
Year 6	9/16 - 8/17	\$ 3,183,315	\$ 2,950,843		\$ 232,472
TOTAL		\$ 17,973,050	\$ 16,583,357	\$ 15,807	\$ 1,421,307

Energy Avoidance Summary by Site

Site	Project Number	Project Name	Cost Summary	Electrical		Natural Gas		Water		Total Energy Savings
				Yearly Energy Savings				Yearly Savings		
			Description of ECM	(KWH)	(\$)	(MCF)	(\$)	(Kgals)	(\$)	(\$)
1	PA 1-01	Addison Terrace	Retrofit Tenant Area Lighting	Building being rehabilitated						
1	PA 1-01	Addison Terrace	Retrofit Common Area Lighting							
1	PA 1-01	Addison Terrace	High Efficiency Refrigerators							
1	PA 1-01	Addison Terrace	Building Envelope							
1	PA 1-01	Addison Terrace	Option C Savings							

Rate Applied
Totals: 0 \$0.1138 \$0 0 \$23.035 \$0 \$10.746 \$0 \$0

2	PA 1-02	Bedford Dwellings	Retrofit Tenant Area Lighting	380,228	\$43,270		\$0		\$0	\$43,270
2	PA 1-02	Bedford Dwellings	Retrofit Common Area Lighting	106,355	\$12,103		\$0		\$0	\$12,103
2	PA 1-02	Bedford Dwellings	High Efficiency Refrigerators	28,516	\$3,245		\$0		\$0	\$3,245
2	PA 1-02	Bedford Dwellings	Building Envelope	3,075	\$350		\$0		\$0	\$350
2	PA 1-02	Bedford Dwellings	Option C Savings			19,060	\$439,059		\$0	\$439,059

Rate Applied
Totals: 518,174 \$0 \$58,968 19,060 \$23 \$439,059 \$11 \$0 \$498,027

3	PA 1-04	Arlington Heights	Option C Savings	(720,841)	(\$82,066)	6,191	\$142,608	6,842	\$73,532	\$134,074

Rate Applied
Totals: (720,841) \$0 (\$82,066) 6,191 \$23 \$142,608 6,842 \$11 \$73,532 \$134,074

4	PA 1-05	Allegheny Dwellings	Retrofit Tenant Area Lighting	295,457	\$33,623		\$0		\$0	\$33,623
4	PA 1-05	Allegheny Dwellings	Retrofit Common Area Lighting	31,790	\$3,618		\$0		\$0	\$3,618
4	PA 1-05	Allegheny Dwellings	High Efficiency Refrigerators	14,062	\$1,600		\$0		\$0	\$1,600
4	PA 1-05	Allegheny Dwellings	Water Conservations	222,931	\$25,370		\$0		\$0	\$25,370
4	PA 1-05	Allegheny Dwellings	Building Envelope	7,255	\$826		\$0		\$0	\$826
4	PA 1-05	Allegheny Dwellings	Option C Savings			7,887	\$181,684	8,881	\$95,434	\$277,119

Rate Applied
Totals: 571,495 \$0 \$65,036 7,887 \$23 \$181,684 8,881 \$11 \$95,434 \$342,155

Energy Avoidance Summary by Site

Site	Project Number	Project Name	Cost Summary	Electrical		Natural Gas		Water		Total Energy Savings
				Yearly Energy Savings				Yearly Savings		
			Description of ECM	(KWH)	(\$)	(MCF)	(\$)	(Kgals)	(\$)	(\$)
5	PA 1-09	Northview Heights	Option C Savings	(2,956,292)	(\$336,574)	29,967	\$690,301	(127,219)	(\$1,179,329)	(\$825,602)

Rate Applied
Totals: \$0 \$23 \$11
(2,956,292) (\$336,574) 29,967 \$690,301 (127,219) (\$1,179,329) (\$825,602)

7	PA 1-11	Hamilton-Larimer	Retrofit Tenant Area Lighting	41,936	\$4,772		\$0		\$0	\$4,772
7	PA 1-11	Hamilton-Larimer	Retrofit Common Area Lighting	32,079	\$3,651		\$0		\$0	\$3,651
7	PA 1-11	Hamilton-Larimer	High Efficiency Refrigerators	19,494	\$2,218		\$0		\$0	\$2,218
7	PA 1-11	Hamilton-Larimer	Option C Savings	0	\$0	(621)	(\$12,324)	397	\$4,270	(\$8,054)

Rate Applied
Totals: \$0 \$23 \$11
93,509 \$10,641 (621) (\$12,324) 397 \$4,270 \$2,587

8	PA 1-15	Pennsylvania-Bidwell	Retrofit Tenant Area Lighting	84,959	\$9,668		\$0		\$0	\$9,668
8	PA 1-15	Pennsylvania-Bidwell	Retrofit Common Area Lighting	15,929	\$1,813		\$0		\$0	\$1,813
8	PA 1-15	Pennsylvania-Bidwell	Building Envelope	3,688	\$420		\$0		\$0	\$420
8	PA 1-15	Pennsylvania-Bidwell	Option C Savings	0	\$0	1,212	\$27,929	2,002	\$21,515	\$49,444

Rate Applied
Totals: \$0 \$23 \$11
104,576 \$11,901 1,212 \$27,929 2,002 \$21,515 \$61,345

9	PA 1-17	Pressley Street	Retrofit Tenant Area Lighting	68,020	\$7,741		\$0		\$0	\$7,741
9	PA 1-17	Pressley Street	Retrofit Common Area Lighting	278,784	\$31,726		\$0		\$0	\$31,726
9	PA 1-17	Pressley Street	Building Envelope	4,321	\$492		\$0		\$0	\$492
9	PA 1-17	Pressley Street	Option C Savings	0	\$0	(510)	(\$10,143)	3,914	\$42,059	\$31,916

Rate Applied
Totals: \$0 \$23 \$11
351,125 \$39,958 (510) (\$10,143) 3,914 \$42,059 \$71,874

10	PA 1-20	Homewood North	Option C Savings	(648,271)	(\$73,773)	17,880	\$411,874	15,754	\$169,300	\$507,400

Rate Applied
Totals: \$0 \$23 \$11
(648,271) (\$73,773) 17,880 \$411,874 15,754 \$169,300 \$507,400

Energy Avoidance Summary by Site

Site	Project Number	Project Name	Cost Summary	Electrical		Natural Gas		Water		Total Energy Savings
				Yearly Energy Savings						
			Description of ECM	(KWH)	(\$)	(MCF)	(\$)	(Kgals)	(\$)	(\$)
11	PA 1-31	Murray Towers	Retrofit Tenant Area Lighting	46,433	\$5,284		\$0		\$0	\$5,284
11	PA 1-31	Murray Towers	Retrofit Common Area Lighting	67,034	\$7,628		\$0		\$0	\$7,628
11	PA 1-31	Murray Towers	Building Envelope	674	\$77		\$0		\$0	\$77
11	PA 1-31	Murray Towers	Roof Replacement with Added Insulation	146	\$17		\$0		\$0	\$17
11	PA 1-31	Murray Towers	New Ventilation Unit	13,243	\$1,507		\$0		\$0	\$1,507
11	PA 1-31	Murray Towers	New Ventilation Unit	3,842	\$437		\$0		\$0	\$437
11	PA 1-31	Murray Towers	Insulated Duct	212	\$24		\$0		\$0	\$24
11	PA 1-31	Murray Towers	Option C Savings	0	\$0	2,968	\$68,366	1,904	\$20,463	\$88,829

Rate Applied		\$0	\$23	\$11	
Totals:	131,585	\$14,974	2,968	\$68,366	\$103,803

12	PA 1-32	Glen Hazel Family	Retrofit Tenant Area Lighting	153,182	\$17,432		\$0		\$0	\$17,432
12	PA 1-32	Glen Hazel Family	Retrofit Common Area Lighting	0	\$0		\$0		\$0	\$0
12	PA 1-32	Glen Hazel Family	High Efficiency Refrigerators	34,071	\$3,877		\$0		\$0	\$3,877
12	PA 1-32	Glen Hazel Family	Water Conservations	0	\$0	840	\$19,341	1,797	\$19,308	\$38,649
12	PA 1-32	Glen Hazel Family	Limiting Thermostats	0	\$0	2,294	\$52,832			\$52,832

Rate Applied		\$0	\$23	\$11	
Totals:	187,253	\$21,309	3,133	\$72,173	\$112,790

13	PA 1-40	Mazza Pavilion	Retrofit Tenant Area Lighting	Building was rehabilitated						
13	PA 1-40	Mazza Pavilion	Retrofit Common Area Lighting							
13	PA 1-40	Mazza Pavilion	Building Envelope							
13	PA 1-40	Mazza Pavilion	Option C Savings							

Rate Applied		\$0	\$23	\$11	
Totals:	0	\$0	0	\$0	\$0

Energy Avoidance Summary by Site

Site	Project Number	Project Name	Cost Summary	Electrical		Natural Gas		Water		Total Energy Savings
				Yearly Energy Savings				Yearly Savings		
			Description of ECM	(KWH)	(\$)	(MCF)	(\$)	(Kgals)	(\$)	(\$)
14	PA 1-41	Caluguiri Plaza	Retrofit Tenant Area Lighting	53,296	\$6,065		\$0		\$0	\$6,065
14	PA 1-41	Caluguiri Plaza	Retrofit Common Area Lighting	30,311	\$3,449		\$0		\$0	\$3,449
14	PA 1-41	Caluguiri Plaza	Building Envelope	1,161	\$132		\$0		\$0	\$132
14	PA 1-41	Caluguiri Plaza	Limiting Thermostats	30,433	\$3,463		\$0		\$0	\$3,463
14	PA 1-41	Caluguiri Plaza	Option C Savings	0	\$0	566	\$13,214	(1,741)	(\$16,137)	(\$2,923)

Rate Applied
Totals: 115,201 \$0 \$13,110 566 \$23 \$13,214 (1,741) \$11 (\$16,137) \$10,187

15	PA 1-44	Finello Pavilion	Retrofit Tenant Area Lighting	24,773	\$2,819		\$0		\$0	\$2,819
15	PA 1-44	Finello Pavilion	Retrofit Common Area Lighting	17,579	\$2,000		\$0		\$0	\$2,000
15	PA 1-44	Finello Pavilion	Building Envelope	668	\$76		\$0		\$0	\$76
15	PA 1-44	Finello Pavilion	Limiting Thermostats	19,733	\$2,246		\$0		\$0	\$2,246
15	PA 1-44	Finello Pavilion	Option C Savings	0	\$0	(162)	(\$3,209)		\$0	(\$3,209)

Rate Applied
Totals: 62,753 \$0 \$7,141 (162) \$23 (\$3,209) 0 \$11 \$0 \$3,932

16	PA 1-45	Morse Gardens	Retrofit Tenant Area Lighting	7,332	\$834		\$0		\$0	\$834
16	PA 1-45	Morse Gardens	Retrofit Common Area Lighting	9,164	\$1,043		\$0		\$0	\$1,043
16	PA 1-45	Morse Gardens	Limiting Thermostats	19,469	\$2,216		\$0		\$0	\$2,216
16	PA 1-45	Morse Gardens	Option C Savings	0	\$0	332	\$7,636	685	\$7,362	\$14,998

Rate Applied
Totals: 35,965 \$0 \$4,093 332 \$23 \$7,636 685 \$11 \$7,362 \$19,091

17	PA 1-46	Carrick Regency	Retrofit Tenant Area Lighting	33,678	\$3,833		\$0		\$0	\$3,833
17	PA 1-46	Carrick Regency	Retrofit Common Area Lighting	53,933	\$6,138		\$0		\$0	\$6,138
17	PA 1-46	Carrick Regency	Building Envelope	1,170	\$133		\$0		\$0	\$133
17	PA 1-46	Carrick Regency	Limiting Thermostats	15,161	\$1,725		\$0		\$0	\$1,725
17	PA 1-46	Carrick Regency	Option C Savings	0	\$0	(110)	(\$2,192)	(276)	(\$2,555)	(\$4,747)

Rate Applied
Totals: 103,941 \$0 \$11,829 (110) \$23 (\$2,192) (276) \$11 (\$2,555) \$7,082

Energy Avoidance Summary by Site

Site	Project Number	Project Name	Cost Summary	Electrical		Natural Gas		Water		Total Energy Savings
				Yearly Energy Savings				Yearly Savings		
			Description of ECM	(KWH)	(\$)	(MCF)	(\$)	(Kgals)	(\$)	(\$)
18	PA 1-47	Gualtieri Manor	Retrofit Tenant Area Lighting	16,158	\$1,839		\$0		\$0	\$1,839
18	PA 1-47	Gualtieri Manor	Retrofit Common Area Lighting	33,036	\$3,759		\$0		\$0	\$3,759
18	PA 1-47	Gualtieri Manor	Limiting Thermostats	7,751	\$882		\$0		\$0	\$882
18	PA 1-47	Gualtieri Manor	Option C Savings	0	\$0	(60)	(\$1,186)	201	\$2,157	\$970

Rate Applied		\$0		\$23		\$11	
Totals:	56,945	\$6,480	(60)	(\$1,186)	201	\$2,157	\$7,451

Total ALL Sites:

(KWH)	(\$)	(MCF)	(\$)	(Water)	(\$)	Total Energy Savings
(1,992,884)	(\$226,972)	87,733	\$2,025,790	(86,859)	(\$742,621)	\$1,056,196

Utility Rate

The Rate table below outlines the rates applied throughout this report per the contractual agreement.

Utility Rate Escalation Table:

Guarantee Year	Gas Rate (MCF)	Agreed to Escalation	Water Rate (1000 gal)	Agreed to Escalation	Electricity Rate (kWh)	Agreed to Escalation
Year 1	\$19.8705		\$9.2700		\$0.1138	
Year 2	\$20.4666	3%	\$9.5481	3%	\$0.1138	0%
Year 3	\$21.0806	3%	\$9.8345	3%	\$0.1138	0%
Year 4	\$21.7130	3%	\$10.1296	3%	\$0.1138	0%
Year 5	\$22.3644	3%	\$10.4335	3%	\$0.1138	0%
Year 6	\$23.0354	3%	\$10.7465	3%	\$0.1138	0%
Year 7	\$23.7264	3%	\$11.0689	3%	\$0.1138	0%
Year 8	\$24.4382	3%	\$11.4009	3%	\$0.1138	0%
Year 9	\$25.1714	3%	\$11.7430	3%	\$0.1138	0%
Year 10	\$25.9265	3%	\$12.0952	3%	\$0.1138	0%
Year 11	\$26.7043	3%	\$12.4581	3%	\$0.1138	0%
Year 12	\$27.5054	3%	\$12.8318	3%	\$0.1138	0%

Option C Savings

Year 6 Option C Savings

		Electric Savings		Gas Savings		Water / Sewer Savings		Total Savings
HA Site #	Site Name	kWh	Annual Savings	MCF	Annual Savings	1000 Gal/yr.	Annual Savings	Savings/yr.
PA 1-01	Addison Terrance	Building rehabilitated						\$0
PA 1-02	Bedford Dwellings			19,060	\$439,059			\$439,059
PA 1-04	Arlington Heights	(720,841)	(\$82,066)	6,191	\$142,608	6,842	\$73,532	\$134,074
PA 1-05	Allegheny Dwellings			7,887	\$181,684	8,881	\$95,434	\$277,119
PA 1-09	Northview Heights	(2,956,292)	(\$336,574)	29,967	\$690,301	(127,219)	(\$1,179,329)	(\$825,602)
PA 1-11	Hamilton-Larimer			(621)	(\$12,324)	397	\$4,270	(\$8,054)
PA 1-15	Pennsylvania-Bidwell			1,212	\$27,929	2,002	\$21,515	\$49,444
PA 1-17	Pressley Street			(510)	(\$10,143)	3,914	\$42,059	\$31,916
PA 1-20	Homewood North	(648,271)	(\$73,773)	17,880	\$411,874	15,754	\$169,300	\$507,400
PA 1-31	Murray Tower			2,968	\$68,366	1,904	\$20,463	\$88,829
PA 1-40	Mazza Pavilion (Brookline)	Building rehabilitated						\$0
PA 1-41	Caliguiri Plaza (Allentown)			566	\$13,214	(1,741)	(\$16,137)	(\$2,923)
PA 1-44	Finello Pavilion (South Oakland)			(162)	(\$3,209)			(\$3,209)
PA 1-45	Morse Gardens			332	\$7,636	685	\$7,362	\$14,998
PA 1-46	Carrick Regency			(110)	(\$2,192)	(276)	(\$2,555)	(\$4,747)
PA 1-47	Gualtieri Manor			(60)	(\$1,186)	201	\$2,157	\$970
		(4,325,404)	(\$492,413)	84,600	\$1,953,617	(88,656)	(\$761,929)	\$699,275

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-01 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	3,582	3,225	3,453	3,991	4,311	4,445	4,984	7,448	4,464	6,169	2,985	3,457
YTD Use	3,582	6,807	10,260	14,251	18,562	23,007	27,991	35,439	39,903	46,072	49,057	52,514
Month \$	\$ 33,205	\$ 29,896	\$ 32,009	\$ 37,000	\$ 39,963	\$ 41,205	\$ 46,202	\$ 69,043	\$ 41,381	\$ 57,187	\$ 27,671	\$ 32,046
YTD \$	\$ 33,205	\$ 63,101	\$ 95,110	\$ 132,110	\$ 172,073	\$ 213,278	\$ 259,480	\$ 328,523	\$ 369,904	\$ 427,091	\$ 454,762	\$ 486,808
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.271	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270
YTD Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use												
YTD Use												
Month \$												
YTD \$												
BP Length												
HDD												
CDD												
Month Rate												
YTD Rate												

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use												
YTD Use												
Month \$												
YTD \$												
BP Length												
HDD												
CDD												
Month Rate												
YTD Rate												

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-	-	-	-	-	-	-	-	-	-	-	-
YTD Use	-	-	-	-	-	-	-	-	-	-	-	-
Month \$	-	-	-	-	-	-	-	-	-	-	-	-
YTD \$	-	-	-	-	-	-	-	-	-	-	-	-
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	-	-	-	-	-	-	-	-	-	-	-	-
YTD Use	-	-	-	-	-	-	-	-	-	-	-	-

Cost Avoidance

Month Use \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YTD \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-01 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	815	4,788	4,586	9,736	10,041	8,679	7,959	5,065	2,474	875	577	511
YTD Use	815	5,603	10,189	19,925	29,966	38,645	46,604	51,669	54,143	55,018	55,595	56,106
Month \$	\$ 16,195	\$ 95,140	\$ 91,127	\$ 193,461	\$ 199,521	\$ 172,457	\$ 158,150	\$ 100,645	\$ 49,160	\$ 17,387	\$ 11,465	\$ 10,154
YTD \$	\$ 16,195	\$ 111,335	\$ 202,462	\$ 395,923	\$ 595,444	\$ 767,901	\$ 926,051	#####	\$ 1,075,856	\$ 1,093,243	\$ 1,104,708	\$ 1,114,862
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	159	473	634	843	864	997	863	379	261	59	6	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.870	\$ 19.871
YTD Rate	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-	-	-	-	-	-	-	-	-	-	-	-
YTD Use	-	-	-	-	-	-	-	-	-	-	-	-
Month \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YTD \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-
Month Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YTD Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-	-	-	-	-	-	-	-	-	-	-	-
YTD Use	-	-	-	-	-	-	-	-	-	-	-	-
Month \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YTD \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-
Month Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YTD Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-	-	-	-	-	-	-	-	-	-	-	-
YTD Use	-	-	-	-	-	-	-	-	-	-	-	-
Month \$	-	-	-	-	-	-	-	-	-	-	-	-
YTD \$	-	-	-	-	-	-	-	-	-	-	-	-
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	-	-	-	-	-	-	-	-	-	-	-	-
YTD Use	-	-	-	-	-	-	-	-	-	-	-	-

Cost Avoidance

Month Use \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YTD \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-02 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	943	2,955	4,627	5,527	8,609	7,752	8,555	6,034	4,153	1,271	1,008	783
YTD Use	943	3,898	8,525	14,052	22,661	30,413	38,968	45,002	49,155	50,426	51,434	52,217
Month \$	\$ 18,738	\$ 58,718	\$ 91,948	\$ 109,823	\$ 171,066	\$ 154,037	\$ 169,993	\$ 119,899	\$ 82,523	\$ 25,256	\$ 20,030	\$ 15,559
YTD \$	\$ 18,738	\$ 77,456	\$ 169,404	\$ 279,227	\$ 450,293	\$ 604,330	\$ 774,323	\$ 894,222	\$ 976,745	\$ 1,002,001	\$ 1,022,031	\$ 1,037,590
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.871	\$ 19.871	\$ 19.872	\$ 19.870	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871
YTD Rate	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	1,366	2,944	5,495	7,861	8,385	6,372	6,758	3,090	2,605	1,413	1,169	1,407
YTD Use	1,366	4,311	9,805	17,667	26,052	32,424	39,182	42,272	44,876	46,289	47,458	48,866
Month \$	\$ 31,469	\$ 67,826	\$ 126,575	\$ 181,090	\$ 193,152	\$ 146,789	\$ 155,664	\$ 71,180	\$ 59,999	\$ 32,548	\$ 26,935	\$ 32,415
YTD \$	\$ 31,469	\$ 99,295	\$ 225,870	\$ 406,960	\$ 600,111	\$ 746,901	\$ 902,565	\$ 973,744	\$ 1,033,743	\$ 1,066,291	\$ 1,093,225	\$ 1,125,641
BP Length	31	28	32	30	32	29	30	29	32	30	29	34
HDD	16	250	579	916	977	717	764	265	181	28	-	5
CDD	159	22	4	-	-	1	2	14	51	161	261	187
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	598	1,654	3,631	4,924	5,160	4,131	4,276	2,340	1,751	731	606	3
YTD Use	598	2,252	5,883	10,807	15,967	20,098	24,374	26,714	28,465	29,196	29,802	29,805
Month \$	\$ 13,775	\$ 38,101	\$ 83,642	\$ 113,415	\$ 118,863	\$ 95,162	\$ 98,504	\$ 53,907	\$ 40,342	\$ 16,839	\$ 13,964	\$ 69
YTD \$	\$ 13,775	\$ 51,876	\$ 135,517	\$ 248,932	\$ 367,795	\$ 462,956	\$ 561,460	\$ 615,368	\$ 655,710	\$ 672,548	\$ 686,513	\$ 686,582
BP Length	31	28	32	30	32	29	30	29	32	30	29	34
HDD	16	250	579	916	977	717	764	265	181	28	-	5
CDD	159	22	4	-	-	1	2	14	51	161	261	187
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-56.2%	-43.8%	-33.9%	-37.4%	-38.5%	-35.2%	-36.7%	-24.3%	-32.8%	-48.3%	-48.2%	-99.8%
YTD Use	-56.2%	-47.8%	-40.0%	-38.8%	-38.7%	-38.0%	-37.8%	-36.8%	-36.6%	-36.9%	-37.2%	-39.0%
Month \$	-56.2%	-43.8%	-33.9%	-37.4%	-38.5%	-35.2%	-36.7%	-24.3%	-32.8%	-48.3%	-48.2%	-99.8%
YTD \$	-56.2%	-47.8%	-40.0%	-38.8%	-38.7%	-38.0%	-37.8%	-36.8%	-36.6%	-36.9%	-37.2%	-39.0%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	768	1,290	1,864	2,938	3,225	2,241	2,481	750	853	682	563	1,404
YTD Use	768	2,059	3,922	6,860	10,085	12,326	14,808	15,558	16,411	17,093	17,656	19,060

Cost Avoidance

Month Use \$	\$ 17,694	\$ 29,725	\$ 42,934	\$ 67,675	\$ 74,289	\$ 51,628	\$ 57,160	\$ 17,272	\$ 19,657	\$ 15,709	\$ 12,971	\$ 32,346
YTD \$	\$ 17,694	\$ 47,419	\$ 90,352	\$ 158,028	\$ 232,317	\$ 283,944	\$ 341,104	\$ 358,377	\$ 378,033	\$ 393,742	\$ 406,713	\$ 439,059

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-04Electric

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	53,333	57,067	60,000	64,823	55,994	53,667	57,000	51,533	51,133	51,067	62,867	56,533
YTD Use	53,333	110,400	170,400	235,223	291,217	344,884	401,884	453,417	504,550	555,617	618,484	675,017
Month \$	\$ 6,072	\$ 6,497	\$ 6,831	\$ 7,380	\$ 6,375	\$ 6,110	\$ 6,489	\$ 5,867	\$ 5,821	\$ 5,814	\$ 7,157	\$ 6,436
YTD \$	\$ 6,072	\$ 12,569	\$ 19,400	\$ 26,780	\$ 33,155	\$ 39,265	\$ 45,754	\$ 51,621	\$ 57,442	\$ 63,256	\$ 70,413	\$ 76,849
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114
YTD Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	55,294	66,400	68,546	61,308	54,629	55,194	52,960	56,276	48,045	54,398	63,669	54,480
YTD Use	55,294	121,695	190,241	251,549	306,178	361,372	414,332	470,608	518,654	573,051	636,720	691,200
Month \$	\$ 6,295	\$ 7,560	\$ 7,804	\$ 6,980	\$ 6,219	\$ 6,284	\$ 6,029	\$ 6,407	\$ 5,470	\$ 6,193	\$ 7,249	\$ 6,202
YTD \$	\$ 6,295	\$ 13,855	\$ 21,658	\$ 28,638	\$ 34,858	\$ 41,141	\$ 47,171	\$ 53,578	\$ 59,047	\$ 65,240	\$ 72,489	\$ 78,691
BP Length	31	36	34	30	30	29	29	33	29	31	32	30
HDD	5	300	711	964	945	688	676	254	127	25	-	18
CDD	194	25	-	-	-	1	2	26	49	215	254	135
Month Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114
YTD Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	98,238	109,698	144,029	163,210	159,404	133,934	130,504	98,683	84,011	95,928	105,473	88,930
YTD Use	98,238	207,936	351,965	515,174	674,578	808,512	939,016	1,037,700	1,121,710	1,217,638	1,323,111	1,412,042
Month \$	\$ 11,184	\$ 12,489	\$ 16,397	\$ 18,581	\$ 18,148	\$ 15,248	\$ 14,858	\$ 11,235	\$ 9,564	\$ 10,921	\$ 12,008	\$ 10,124
YTD \$	\$ 11,184	\$ 23,673	\$ 40,070	\$ 58,651	\$ 76,799	\$ 92,047	\$ 106,905	\$ 118,140	\$ 127,704	\$ 138,625	\$ 150,633	\$ 160,757
BP Length	31	36	34	30	30	29	29	33	29	31	32	30
HDD	5	300	711	964	945	688	676	254	127	25	-	18
CDD	194	25	-	-	-	1	2	26	49	215	254	135
Month Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114
YTD Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	77.7%	65.2%	110.1%	166.2%	191.8%	142.7%	146.4%	75.4%	74.9%	76.3%	65.7%	63.2%
YTD Use	77.7%	70.9%	85.0%	104.8%	120.3%	123.7%	126.6%	120.5%	116.3%	112.5%	107.8%	104.3%
Month \$	77.7%	65.2%	110.1%	166.2%	191.8%	142.7%	146.4%	75.4%	74.9%	76.3%	65.7%	63.2%
YTD \$	77.7%	70.9%	85.0%	104.8%	120.3%	123.7%	126.6%	120.5%	116.3%	112.5%	107.8%	104.3%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(42,943)	(43,298)	(75,483)	(101,902)	(104,774)	(78,740)	(77,544)	(42,407)	(35,966)	(41,530)	(41,804)	(34,450)
YTD Use	(42,943)	(86,241)	(161,724)	(263,626)	(368,400)	(447,140)	(524,684)	(567,091)	(603,057)	(644,587)	(686,391)	(720,841)

Cost Avoidance

Month Use \$	\$ (4,889)	\$ (4,929)	\$ (8,594)	\$ (11,601)	\$ (11,928)	\$ (8,964)	\$ (8,828)	\$ (4,828)	\$ (4,095)	\$ (4,728)	\$ (4,759)	\$ (3,922)
YTD \$	\$ (4,889)	\$ (9,818)	\$ (18,412)	\$ (30,013)	\$ (41,941)	\$ (50,906)	\$ (59,734)	\$ (64,562)	\$ (68,657)	\$ (73,385)	\$ (78,144)	\$ (82,066)

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-04 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	253	1,199	1,067	1,765	1,747	1,650	1,537	1,010	470	214	405	174
YTD Use	253	1,452	2,519	4,284	6,031	7,681	9,218	10,228	10,698	10,912	11,317	11,491
Month \$	\$ 5,027	\$ 23,825	\$ 21,202	\$ 35,072	\$ 34,714	\$ 32,786	\$ 30,541	\$ 20,069	\$ 9,339	\$ 4,252	\$ 8,048	\$ 3,457
YTD \$	\$ 5,027	\$ 28,852	\$ 50,054	\$ 85,126	\$ 119,840	\$ 152,626	\$ 183,167	\$ 203,236	\$ 212,575	\$ 216,827	\$ 224,875	\$ 228,332
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	214	535	694	905	926	1,053	925	439	313	92	11	3
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.870	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.870	\$ 19.871	\$ 19.870	\$ 19.870	\$ 19.869	\$ 19.872	\$ 19.868
YTD Rate	\$ 19.870	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	127	612	1,174	1,718	1,927	1,410	1,529	610	489	165	67	102
YTD Use	127	738	1,913	3,631	5,557	6,968	8,497	9,107	9,596	9,762	9,828	9,931
Month \$	\$ 2,923	\$ 14,088	\$ 27,054	\$ 39,574	\$ 44,378	\$ 32,484	\$ 35,230	\$ 14,063	\$ 11,261	\$ 3,805	\$ 1,540	\$ 2,353
YTD \$	\$ 2,923	\$ 17,011	\$ 44,065	\$ 83,639	\$ 128,018	\$ 160,502	\$ 195,732	\$ 209,795	\$ 221,056	\$ 224,861	\$ 226,401	\$ 228,754
BP Length	29	29	31	30	33	29	31	30	31	30	28	31
HDD	37	326	660	986	1,106	803	872	324	250	58	2	19
CDD	151	22	4	-	-	1	2	22	44	170	252	180
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	207	217	354	403	459	448	409	274	263	258	212	236
YTD Use	207	424	778	1,181	1,640	2,088	2,497	2,771	3,034	3,292	3,503	3,740
Month \$	\$ 4,768	\$ 4,999	\$ 8,155	\$ 9,288	\$ 10,571	\$ 10,324	\$ 9,415	\$ 6,302	\$ 6,068	\$ 5,934	\$ 4,879	\$ 5,443
YTD \$	\$ 4,768	\$ 9,767	\$ 17,922	\$ 27,209	\$ 37,780	\$ 48,105	\$ 57,519	\$ 63,822	\$ 69,889	\$ 75,823	\$ 80,702	\$ 86,145
BP Length	29	29	31	30	33	29	31	30	31	30	28	31
HDD	37	326	660	986	1,106	803	872	324	250	58	2	19
CDD	151	22	4	-	-	1	2	22	44	170	252	180
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	63.1%	-64.5%	-69.9%	-76.5%	-76.2%	-68.2%	-73.3%	-55.2%	-46.1%	56.0%	216.7%	131.4%
YTD Use	63.1%	-42.6%	-59.3%	-67.5%	-70.5%	-70.0%	-70.6%	-69.6%	-68.4%	-66.3%	-64.4%	-62.3%
Month \$	63.1%	-64.5%	-69.9%	-76.5%	-76.2%	-68.2%	-73.3%	-55.2%	-46.1%	56.0%	216.7%	131.4%
YTD \$	63.1%	-42.6%	-59.3%	-67.5%	-70.5%	-70.0%	-70.6%	-69.6%	-68.4%	-66.3%	-64.4%	-62.3%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(80)	395	820	1,315	4,468	962	1,121	337	225	(92)	(145)	(134)
YTD Use	(80)	314	1,135	2,450	3,917	4,879	6,000	6,337	6,562	6,470	6,325	6,191

Cost Avoidance

Month Use \$	\$ (1,845)	\$ 9,089	\$ 18,900	\$ 30,286	\$ 33,807	\$ 22,159	\$ 25,816	\$ 7,761	\$ 5,194	\$ (2,129)	\$ (3,339)	\$ (3,091)
YTD \$	\$ (1,845)	\$ 7,244	\$ 26,144	\$ 56,430	\$ 90,237	\$ 112,397	\$ 138,212	\$ 145,973	\$ 151,167	\$ 149,037	\$ 145,699	\$ 142,608

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-04 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	342	373	386	483	511	1,491	685	5,634	1,639	490	686	635
YTD Use	342	715	1,101	1,584	2,095	3,586	4,271	9,905	11,544	12,034	12,720	13,355
Month \$	\$ 3,170	\$ 3,458	\$ 3,578	\$ 4,478	\$ 4,737	\$ 13,822	\$ 6,350	\$ 52,227	\$ 15,194	\$ 4,542	\$ 6,359	\$ 5,886
YTD \$	\$ 3,170	\$ 6,628	\$ 10,206	\$ 14,684	\$ 19,421	\$ 33,243	\$ 39,593	\$ 91,820	\$ 107,014	\$ 111,556	\$ 117,915	\$ 123,801
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.269	\$ 9.271	\$ 9.269	\$ 9.271	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.269	\$ 9.270	\$ 9.269
YTD Rate	\$ 9.269	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	415	380	444	478	526	1,530	663	5,071	1,991	636	663	703
YTD Use	415	795	1,239	1,717	2,242	3,772	4,435	9,505	11,496	12,133	12,795	13,498
Month \$	\$ 4,456	\$ 4,083	\$ 4,777	\$ 5,132	\$ 5,649	\$ 16,438	\$ 7,124	\$ 54,491	\$ 21,395	\$ 6,836	\$ 7,123	\$ 7,555
YTD \$	\$ 4,456	\$ 8,540	\$ 13,316	\$ 18,449	\$ 24,098	\$ 40,535	\$ 47,659	\$ 102,151	\$ 123,546	\$ 130,382	\$ 137,505	\$ 145,060
BP Length	30	32	35	31	32	30	30	27	30	30	31	34
HDD	-	193	643	926	977	732	766	243	186	22	6	5
CDD	232	31	4	-	-	1	2	14	41	165	260	193
Month Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746
YTD Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	567	569	700	692	704	641	545	-	482	550	550	656
YTD Use	567	1,136	1,836	2,528	3,232	3,873	4,418	4,418	4,900	5,450	6,000	6,656
Month \$	\$ 6,093	\$ 6,115	\$ 7,523	\$ 7,437	\$ 7,566	\$ 6,889	\$ 5,857	\$ -	\$ 5,180	\$ 5,911	\$ 5,911	\$ 7,050
YTD \$	\$ 6,093	\$ 12,208	\$ 19,731	\$ 27,167	\$ 34,733	\$ 41,621	\$ 47,478	\$ 47,478	\$ 52,658	\$ 58,568	\$ 64,479	\$ 71,529
BP Length	30	32	35	31	32	30	30	27	30	30	31	34
HDD	-	193	643	926	977	732	766	243	186	22	6	5
CDD	232	31	4	-	-	1	2	14	41	165	260	193
Month Rate	\$ 10.746	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.746	\$ 10.747	\$ -	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.747
YTD Rate	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	36.7%	49.7%	57.5%	44.9%	33.9%	-58.1%	-17.8%	-100.0%	-75.8%	-13.5%	-17.0%	-6.7%
YTD Use	36.7%	43.0%	48.2%	47.3%	44.1%	2.7%	-0.4%	-53.5%	-57.4%	-55.1%	-53.1%	-50.7%
Month \$	36.7%	49.7%	57.5%	44.9%	33.9%	-58.1%	-17.8%	-100.0%	-75.8%	-13.5%	-17.0%	-6.7%
YTD \$	36.7%	43.0%	48.2%	47.3%	44.1%	2.7%	-0.4%	-53.5%	-57.4%	-55.1%	-53.1%	-50.7%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(152)	(189)	(256)	(214)	(178)	889	118	5,071	1,509	86	113	47
YTD Use	(152)	(341)	(597)	(811)	(990)	(101)	17	5,087	6,596	6,683	6,795	6,842

Cost Avoidance

Month Use \$	\$ (1,637)	\$ (2,031)	\$ (2,746)	\$ (2,304)	\$ (1,916)	\$ 9,549	\$ 1,267	\$ 54,491	\$ 16,216	\$ 926	\$ 1,212	\$ 505
YTD \$	\$ (1,637)	\$ (3,668)	\$ (6,414)	\$ (8,719)	\$ (10,635)	\$ (1,086)	\$ 181	\$ 54,673	\$ 70,888	\$ 71,814	\$ 73,026	\$ 73,532

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-05 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	173	828	1,700	2,652	3,391	2,598	3,244	1,336	921	134	80	157
YTD Use	173	1,001	2,701	5,353	8,744	11,342	14,586	15,922	16,843	16,977	17,057	17,214
Month \$	\$ 3,438	\$ 16,453	\$ 33,780	\$ 52,696	\$ 67,381	\$ 51,624	\$ 64,460	\$ 26,547	\$ 18,301	\$ 2,663	\$ 1,590	\$ 3,120
YTD \$	\$ 3,438	\$ 19,891	\$ 53,671	\$ 106,367	\$ 173,748	\$ 225,372	\$ 289,832	\$ 316,379	\$ 334,680	\$ 337,343	\$ 338,933	\$ 342,053
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	92	382	544	750	771	913	770	293	188	30	-	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.873	\$ 19.871	\$ 19.871	\$ 19.870	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.873	\$ 19.875	\$ 19.873
YTD Rate	\$ 19.873	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	76	756	1,846	3,138	3,093	2,337	2,548	757	529	95	52	62
YTD Use	76	831	2,677	5,815	8,907	11,244	13,792	14,549	15,078	15,173	15,225	15,287
Month \$	\$ 1,748	\$ 17,405	\$ 42,513	\$ 72,278	\$ 71,242	\$ 53,826	\$ 58,690	\$ 17,447	\$ 12,187	\$ 2,185	\$ 1,188	\$ 1,432
YTD \$	\$ 1,748	\$ 19,153	\$ 61,666	\$ 133,943	\$ 205,185	\$ 259,011	\$ 317,701	\$ 335,148	\$ 347,335	\$ 349,520	\$ 350,708	\$ 352,139
BP Length	31	28	32	31	31	29	31	30	30	30	29	33
HDD	6	204	517	891	878	661	721	204	138	12	-	1
CDD	159	22	4	-	-	1	2	22	44	161	261	185
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	26	378	1,040	1,589	1,643	1,374	769	385	195	1	-	-
YTD Use	26	404	1,444	3,033	4,676	6,050	6,819	7,204	7,399	7,400	7,400	7,400
Month \$	\$ 599	\$ 8,707	\$ 23,957	\$ 36,603	\$ 37,847	\$ 31,644	\$ 17,714	\$ 8,869	\$ 4,492	\$ 23	\$ -	\$ -
YTD \$	\$ 599	\$ 9,306	\$ 33,263	\$ 69,866	\$ 107,714	\$ 139,357	\$ 157,071	\$ 165,940	\$ 170,432	\$ 170,455	\$ 170,455	\$ 170,455
BP Length	31	28	32	31	31	29	31	30	30	30	29	33
HDD	6	204	517	891	878	661	721	204	138	12	-	1
CDD	159	22	4	-	-	1	2	22	44	161	261	185
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ -	\$ -
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-65.7%	-50.0%	-43.6%	-49.4%	-46.9%	-41.2%	-69.8%	-49.2%	-63.1%	-98.9%	-100.0%	-100.0%
YTD Use	-65.7%	-51.4%	-46.1%	-47.8%	-47.5%	-46.2%	-50.6%	-50.5%	-50.9%	-51.2%	-51.4%	-51.6%
Month \$	-65.7%	-50.0%	-43.6%	-49.4%	-46.9%	-41.2%	-69.8%	-49.2%	-63.1%	-98.9%	-100.0%	-100.0%
YTD \$	-65.7%	-51.4%	-46.1%	-47.8%	-47.5%	-46.2%	-50.6%	-50.5%	-50.9%	-51.2%	-51.4%	-51.6%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	50	378	806	1,549	1,450	963	1,779	372	334	94	52	62
YTD Use	50	427	1,233	2,782	4,231	5,194	6,973	7,346	7,680	7,773	7,825	7,887

Cost Avoidance

Month Use \$	\$ 1,149	\$ 8,697	\$ 18,556	\$ 35,674	\$ 33,395	\$ 22,182	\$ 40,976	\$ 8,578	\$ 7,695	\$ 2,162	\$ 1,188	\$ 1,432
YTD \$	\$ 1,149	\$ 9,846	\$ 28,403	\$ 64,077	\$ 97,472	\$ 119,654	\$ 160,630	\$ 169,208	\$ 176,903	\$ 179,065	\$ 180,253	\$ 181,684

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-05 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	821	680	613	831	1,120	678	415	1,364	558	1,490	845	906
YTD Use	821	1,501	2,114	2,945	4,065	4,743	5,158	6,522	7,080	8,570	9,415	10,321
Month \$	\$ 7,611	\$ 6,304	\$ 5,683	\$ 7,706	\$ 10,382	\$ 6,285	\$ 3,847	\$ 12,644	\$ 5,173	\$ 13,812	\$ 7,833	\$ 8,399
YTD \$	\$ 7,611	\$ 13,915	\$ 19,598	\$ 27,304	\$ 37,686	\$ 43,971	\$ 47,818	\$ 60,462	\$ 65,635	\$ 79,447	\$ 87,280	\$ 95,679
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.270	\$ 9.271	\$ 9.271	\$ 9.273	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.271	\$ 9.270	\$ 9.270	\$ 9.270
YTD Rate	\$ 9.270	\$ 9.270	\$ 9.271	\$ 9.271	\$ 9.271	\$ 9.271	\$ 9.271	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	828	724	813	841	686	846	442	1,139	714	1,106	1,064	795
YTD Use	828	1,552	2,365	3,206	3,893	4,739	5,181	6,321	7,035	8,141	9,205	10,000
Month \$	\$ 8,903	\$ 7,777	\$ 8,735	\$ 9,043	\$ 7,377	\$ 9,091	\$ 4,754	\$ 12,245	\$ 7,676	\$ 11,882	\$ 11,437	\$ 8,540
YTD \$	\$ 8,903	\$ 16,680	\$ 25,415	\$ 34,458	\$ 41,835	\$ 50,926	\$ 55,680	\$ 67,925	\$ 75,601	\$ 87,483	\$ 98,919	\$ 107,460
BP Length	30	32	38	30	19	31	29	30	29	28	30	28
HDD	2	264	723	945	588	838	810	290	189	37	8	-
CDD	194	22	4	-	-	-	1	13	44	131	222	189
Month Rate	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.747	\$ 10.746	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746
YTD Rate	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	191	161	196	-	97	25	19	-	-	430	-	-
YTD Use	191	352	548	548	645	670	689	689	689	1,119	1,119	1,119
Month \$	\$ 2,053	\$ 1,730	\$ 2,106	\$ -	\$ 1,042	\$ 269	\$ 204	\$ -	\$ -	\$ 4,621	\$ -	\$ -
YTD \$	\$ 2,053	\$ 3,783	\$ 5,889	\$ 5,889	\$ 6,931	\$ 7,200	\$ 7,404	\$ 7,404	\$ 7,404	\$ 12,025	\$ 12,025	\$ 12,025
BP Length	30	32	38	30	19	31	29	30	29	28	30	28
HDD	2	264	723	945	588	838	810	290	189	37	8	-
CDD	194	22	4	-	-	-	1	13	44	131	222	189
Month Rate	\$ 10.746	\$ 10.747	\$ 10.747	\$ -	\$ 10.747	\$ 10.747	\$ 10.747	\$ -	\$ -	\$ 10.747	\$ -	\$ -
YTD Rate	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-76.9%	-77.8%	-75.9%	-100.0%	-85.9%	-97.0%	-95.7%	-100.0%	-100.0%	-61.1%	-100.0%	-100.0%
YTD Use	-76.9%	-77.3%	-76.8%	-82.9%	-83.4%	-85.9%	-86.7%	-89.1%	-90.2%	-86.3%	-87.8%	-88.8%
Month \$	-76.9%	-77.8%	-75.9%	-100.0%	-85.9%	-97.0%	-95.7%	-100.0%	-100.0%	-61.1%	-100.0%	-100.0%
YTD \$	-76.9%	-77.3%	-76.8%	-82.9%	-83.4%	-85.9%	-86.7%	-89.1%	-90.2%	-86.3%	-87.8%	-88.8%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	637	563	617	841	589	821	423	1,139	714	676	1,064	795
YTD Use	637	1,200	1,817	2,658	3,248	4,069	4,492	5,632	6,346	7,022	8,086	8,881

Cost Avoidance

Month Use \$	\$ 6,850	\$ 6,047	\$ 6,629	\$ 9,043	\$ 6,335	\$ 8,822	\$ 4,550	\$ 12,245	\$ 7,676	\$ 7,261	\$ 11,437	\$ 8,540
YTD \$	\$ 6,850	\$ 12,897	\$ 19,526	\$ 28,569	\$ 34,903	\$ 43,726	\$ 48,275	\$ 60,520	\$ 68,196	\$ 75,457	\$ 86,894	\$ 95,434

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-09 Electric

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	341,938	352,979	383,458	443,435	381,698	375,752	371,218	327,657	363,217	368,472	380,818	374,790
YTD Use	341,938	694,917	1,078,375	1,521,810	1,903,508	2,279,260	2,650,478	2,978,135	3,341,352	3,709,824	4,090,642	4,465,432
Month \$	\$ 38,929	\$ 40,186	\$ 43,656	\$ 50,484	\$ 43,456	\$ 42,779	\$ 42,262	\$ 37,303	\$ 41,352	\$ 41,950	\$ 43,355	\$ 42,669
YTD \$	\$ 38,929	\$ 79,115	\$ 122,771	\$ 173,255	\$ 216,711	\$ 259,490	\$ 301,752	\$ 339,055	\$ 380,407	\$ 422,357	\$ 465,712	\$ 508,381
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114
YTD Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	330,483	385,520	379,811	468,424	351,401	391,032	330,029	366,781	269,484	368,472	380,818	374,790
YTD Use	330,483	716,003	1,095,814	1,564,238	1,915,639	2,306,671	2,636,700	3,003,481	3,272,964	3,641,436	4,022,254	4,397,044
Month \$	\$ 37,625	\$ 43,892	\$ 43,241	\$ 53,330	\$ 40,007	\$ 44,519	\$ 37,574	\$ 41,758	\$ 30,681	\$ 41,951	\$ 43,356	\$ 42,670
YTD \$	\$ 37,625	\$ 81,517	\$ 124,758	\$ 178,088	\$ 218,095	\$ 262,614	\$ 300,188	\$ 341,946	\$ 372,627	\$ 414,578	\$ 457,934	\$ 500,603
BP Length	29	33	29	34	28	30	28	33	23	30	31	31
HDD	33	335	648	1,175	790	683	641	272	90	28	-	5
CDD	121	25	-	-	-	1	2	26	40	170	270	169
Month Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114
YTD Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	491,576	513,872	676,478	1,070,451	729,037	725,979	650,083	492,236	355,520	494,099	604,465	549,541
YTD Use	491,576	1,005,448	1,681,926	2,752,377	3,481,414	4,207,393	4,857,476	5,349,712	5,705,231	6,199,331	6,803,795	7,353,336
Month \$	\$ 55,966	\$ 58,504	\$ 77,017	\$ 121,871	\$ 83,001	\$ 82,653	\$ 74,012	\$ 56,041	\$ 40,476	\$ 56,253	\$ 68,818	\$ 62,565
YTD \$	\$ 55,966	\$ 114,470	\$ 191,487	\$ 313,358	\$ 396,359	\$ 479,012	\$ 553,024	\$ 609,065	\$ 649,541	\$ 705,794	\$ 774,612	\$ 837,177
BP Length	29	33	29	34	28	30	28	33	23	30	31	31
HDD	33	335	648	1,175	790	683	641	272	90	28	-	5
CDD	121	25	-	-	-	1	2	26	40	170	270	169
Month Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114
YTD Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	48.7%	33.3%	78.1%	128.5%	107.5%	85.7%	97.0%	34.2%	31.9%	34.1%	58.7%	46.6%
YTD Use	48.7%	40.4%	53.5%	76.0%	81.7%	82.4%	84.2%	78.1%	74.3%	70.2%	69.2%	67.2%
Month \$	48.7%	33.3%	78.1%	128.5%	107.5%	85.7%	97.0%	34.2%	31.9%	34.1%	58.7%	46.6%
YTD \$	48.7%	40.4%	53.5%	76.0%	81.7%	82.4%	84.2%	78.1%	74.3%	70.2%	69.2%	67.2%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(161,094)	(128,352)	(296,667)	(602,027)	(377,636)	(334,947)	(320,054)	(125,455)	(86,036)	(125,627)	(223,647)	(174,751)
YTD Use	(161,094)	(289,445)	(586,113)	#####	#####	#####	(2,220,776)	(2,346,231)	(2,432,267)	(2,557,894)	(2,781,541)	(2,956,292)

Cost Avoidance

Month Use \$	\$ (18,340)	\$ (14,613)	\$ (33,776)	\$ (68,541)	\$ (42,994)	\$ (38,134)	\$ (36,438)	\$ (14,283)	\$ (9,795)	\$ (14,303)	\$ (25,462)	\$ (19,895)
YTD \$	\$ (18,340)	\$ (32,953)	\$ (66,729)	\$ (135,270)	\$ (178,263)	\$ (216,397)	\$ (252,835)	\$ (267,118)	\$ (276,914)	\$ (291,216)	\$ (316,678)	\$ (336,574)

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-09 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	1,194	3,730	5,635	9,143	10,940	9,587	9,357	5,211	3,527	1,684	1,130	1,100
YTD Use	1,194	4,924	10,559	19,702	30,642	40,229	49,586	54,797	58,324	60,008	61,138	62,238
Month \$	\$ 23,725	\$ 74,117	\$ 111,971	\$ 181,671	\$ 217,384	\$ 190,499	\$ 185,929	\$ 103,546	\$ 70,084	\$ 33,462	\$ 22,454	\$ 21,858
YTD \$	\$ 23,725	\$ 97,842	\$ 209,813	\$ 391,484	\$ 608,868	\$ 799,367	\$ 985,296	#####	\$ 1,158,926	\$ 1,192,388	\$ 1,214,842	\$ 1,236,700
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	111	412	574	781	802	941	801	321	211	38	2	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.870	\$ 19.871	\$ 19.871	\$ 19.870	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871
YTD Rate	\$ 19.870	\$ 19.870	\$ 19.871	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	1,083	3,479	6,163	10,342	10,209	7,893	8,398	3,311	2,549	1,097	815	1,989
YTD Use	1,083	4,562	10,725	21,067	31,276	39,170	47,568	50,880	53,429	54,525	55,340	57,330
Month \$	\$ 24,953	\$ 80,136	\$ 141,966	\$ 238,237	\$ 235,171	\$ 181,825	\$ 193,463	\$ 76,282	\$ 58,717	\$ 25,263	\$ 18,771	\$ 45,827
YTD \$	\$ 24,953	\$ 105,089	\$ 247,055	\$ 485,293	\$ 720,464	\$ 902,289	\$ 1,095,752	#####	\$ 1,230,750	\$ 1,256,014	\$ 1,274,785	\$ 1,320,612
BP Length	33	30	29	31	31	29	30	29	32	31	28	52
HDD	12	255	520	922	909	689	735	241	158	19	-	47
CDD	168	22	4	-	-	1	2	14	51	170	252	212
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	pr23.035

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	1,292	1,716	2,465	3,484	3,614	3,045	3,129	2,100	1,856	1,360	1,168	2,134
YTD Use	1,292	3,008	5,473	8,957	12,571	15,616	18,745	20,845	22,700	24,060	25,228	27,363
Month \$	\$ 29,762	\$ 39,529	\$ 56,782	\$ 80,258	\$ 83,255	\$ 70,136	\$ 72,078	\$ 48,367	\$ 42,744	\$ 31,326	\$ 26,910	\$ 49,164
YTD \$	\$ 29,762	\$ 69,290	\$ 126,073	\$ 206,330	\$ 289,585	\$ 359,721	\$ 431,799	\$ 480,166	\$ 522,911	\$ 554,236	\$ 581,146	\$ 630,311
BP Length	33	30	29	31	31	29	30	29	32	31	28	52
HDD	12	255	520	922	909	689	735	241	158	19	-	47
CDD	168	22	4	-	-	1	2	14	51	170	252	212
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	19.3%	-50.7%	-60.0%	-66.3%	-64.6%	-61.4%	-62.7%	-36.6%	-27.2%	24.0%	43.4%	7.3%
YTD Use	19.3%	-34.1%	-49.0%	-57.5%	-59.8%	-60.1%	-60.6%	-59.0%	-57.5%	-55.9%	-54.4%	-52.3%
Month \$	19.3%	-50.7%	-60.0%	-66.3%	-64.6%	-61.4%	-62.7%	-36.6%	-27.2%	24.0%	43.4%	7.3%
YTD \$	19.3%	-34.1%	-49.0%	-57.5%	-59.8%	-60.1%	-60.6%	-59.0%	-57.5%	-55.9%	-54.4%	-52.3%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(209)	1,763	3,698	6,858	6,595	4,849	5,269	1,212	693	(263)	(353)	(145)
YTD Use	(209)	1,554	5,252	12,110	18,705	23,554	28,823	30,035	30,728	30,465	30,112	29,967

Cost Avoidance

Month Use \$	\$ (4,809)	\$ 40,607	\$ 85,184	\$ 157,980	\$ 151,917	\$ 111,689	\$ 121,385	\$ 27,914	\$ 15,973	\$ (6,063)	\$ (8,139)	\$ (3,337)
YTD \$	\$ (4,809)	\$ 35,799	\$ 120,983	\$ 278,962	\$ 430,879	\$ 542,568	\$ 663,953	\$ 691,867	\$ 707,840	\$ 701,777	\$ 693,638	\$ 690,301

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-09 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	2,204	1,345	1,282	1,042	3,317	4,498	1,743	3,344	3,386	1,507	1,890	1,744
YTD Use	2,204	3,549	4,831	5,873	9,190	13,688	15,431	18,775	22,161	23,668	25,558	27,302
Month \$	\$ 20,431	\$ 12,468	\$ 11,884	\$ 9,661	\$ 30,749	\$ 41,696	\$ 16,158	\$ 30,999	\$ 31,388	\$ 13,970	\$ 17,520	\$ 16,167
YTD \$	\$ 20,431	\$ 32,899	\$ 44,783	\$ 54,444	\$ 85,193	\$ 126,889	\$ 143,047	\$ 174,046	\$ 205,434	\$ 219,404	\$ 236,924	\$ 253,091
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.272	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270
YTD Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	2,338	1,318	1,523	1,510	3,907	3,823	1,851	3,005	3,218	1,457	1,829	1,878
YTD Use	2,338	3,657	5,180	6,689	10,596	14,419	16,270	19,275	22,493	23,949	25,778	27,657
Month \$	\$ 21,677	\$ 12,221	\$ 14,116	\$ 13,996	\$ 36,213	\$ 35,442	\$ 17,154	\$ 27,858	\$ 29,829	\$ 13,504	\$ 16,955	\$ 17,413
YTD \$	\$ 21,677	\$ 33,898	\$ 48,014	\$ 62,010	\$ 98,224	\$ 133,666	\$ 150,820	\$ 178,678	\$ 208,507	\$ 222,011	\$ 238,966	\$ 256,380
BP Length	33	29	36	34	33	29	28	27	30	29	30	33
HDD	9	241	657	1,074	1,014	670	641	192	172	26	-	13
CDD	206	22	4	-	-	1	2	26	40	170	262	177
Month Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270
YTD Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	13,619	11,817	14,749	13,694	13,623	12,180	11,787	11,923	12,368	12,316	14,106	12,694
YTD Use	13,619	25,436	40,185	53,879	67,502	79,682	91,469	103,392	115,760	128,076	142,182	154,876
Month \$	\$ 126,249	\$ 109,544	\$ 136,724	\$ 126,944	\$ 126,286	\$ 112,909	\$ 109,266	\$ 110,527	\$ 114,652	\$ 114,170	\$ 130,763	\$ 117,674
YTD \$	\$ 126,249	\$ 235,793	\$ 372,517	\$ 499,461	\$ 625,747	\$ 738,656	\$ 847,923	\$ 958,449	\$ 1,073,101	\$ 1,187,271	\$ 1,318,035	\$ 1,435,709
BP Length	33	29	36	34	33	29	28	27	30	29	30	33
HDD	9	241	657	1,074	1,014	670	641	192	172	26	-	13
CDD	206	22	4	-	-	1	2	26	40	170	262	177
Month Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270
YTD Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	482.4%	796.3%	868.6%	807.0%	248.7%	218.6%	537.0%	296.8%	284.4%	745.4%	671.2%	575.8%
YTD Use	482.4%	595.6%	675.8%	705.5%	537.1%	452.6%	462.2%	436.4%	414.7%	434.8%	451.6%	460.0%
Month \$	482.4%	796.3%	868.6%	807.0%	248.7%	218.6%	537.0%	296.8%	284.4%	745.4%	671.2%	575.8%
YTD \$	482.4%	595.6%	675.8%	705.5%	537.1%	452.6%	462.2%	436.4%	414.7%	434.8%	451.6%	460.0%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(11,281)	(10,499)	(13,226)	(12,184)	(9,717)	(8,357)	(9,936)	(8,918)	(9,150)	(10,859)	(12,277)	(10,816)
YTD Use	(11,281)	(21,779)	(35,005)	(47,190)	(56,906)	(65,263)	(75,199)	(84,117)	(93,267)	(104,127)	(116,404)	(127,219)

Cost Avoidance

Month Use \$	\$(104,572)	\$(97,323)	\$(122,608)	\$(112,948)	\$(90,072)	\$(77,467)	\$(92,112)	\$(82,669)	\$(84,823)	\$(100,666)	\$(113,808)	\$(100,261)
YTD \$	\$(104,572)	\$(201,895)	\$(324,503)	\$(437,451)	\$(527,524)	\$(604,991)	\$(697,102)	\$(779,771)	\$(864,594)	\$(965,260)	\$(1,079,068)	\$(1,179,329)

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-11 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	34	158	229	321	330	395	330	119	74	11	-	-
YTD Use	34	192	421	742	1,072	1,467	1,797	1,916	1,990	2,001	2,001	2,001
Month \$	\$ 676	\$ 3,140	\$ 4,550	\$ 6,376	\$ 6,557	\$ 7,849	\$ 6,557	\$ 2,365	\$ 1,470	\$ 174	\$ -	\$ -
YTD \$	\$ 676	\$ 3,816	\$ 8,366	\$ 14,742	\$ 21,299	\$ 29,148	\$ 35,705	\$ 38,070	\$ 39,540	\$ 39,714	\$ 39,714	\$ 39,714
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	76	354	514	719	740	885	739	266	165	25	-	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.882	\$ 19.873	\$ 19.869	\$ 19.863	\$ 19.870	\$ 19.871	\$ 19.870	\$ 19.874	\$ 19.865	\$ 15.818	\$ -	\$ -
YTD Rate	\$ 19.882	\$ 19.875	\$ 19.872	\$ 19.868	\$ 19.868	\$ 19.869	\$ 19.869	\$ 19.870	\$ 19.869	\$ 19.847	\$ 19.847	\$ 19.847

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	1	82	217	369	393	282	302	88	53	3	0	0
YTD Use	1	83	300	668	1,062	1,344	1,646	1,734	1,787	1,790	1,790	1,790
Month \$	\$ 18	\$ 1,622	\$ 4,306	\$ 7,318	\$ 7,805	\$ 5,604	\$ 5,998	\$ 1,741	\$ 1,051	\$ 58	\$ 1	\$ 1
YTD \$	\$ 18	\$ 1,640	\$ 5,946	\$ 13,264	\$ 21,070	\$ 26,673	\$ 32,671	\$ 34,413	\$ 35,463	\$ 35,522	\$ 35,522	\$ 35,523
BP Length	31	28	32	30	32	29	30	29	32	30	29	33
HDD	2	183	486	826	881	633	677	197	119	7	-	-
CDD	159	22	4	-	-	1	2	14	51	161	261	185
Month Rate	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847
YTD Rate	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	47	110	260	397	440	344	349	151	134	70	51	58
YTD Use	47	157	417	814	1,254	1,598	1,947	2,098	2,232	2,302	2,353	2,411
Month \$	\$ 933	\$ 2,183	\$ 5,160	\$ 7,879	\$ 8,733	\$ 6,827	\$ 6,927	\$ 2,999	\$ 2,652	\$ 1,397	\$ 1,006	\$ 1,151
YTD \$	\$ 933	\$ 3,116	\$ 8,276	\$ 16,156	\$ 24,888	\$ 31,716	\$ 38,642	\$ 41,641	\$ 44,293	\$ 45,690	\$ 46,696	\$ 47,847
BP Length	31	28	32	30	32	29	30	29	32	30	29	33
HDD	2	183	486	826	881	633	677	197	119	7	-	-
CDD	159	22	4	-	-	1	2	14	51	161	261	185
Month Rate	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847
YTD Rate	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847	\$ 19.847

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	4955.0%	34.6%	19.8%	7.7%	11.9%	21.8%	15.5%	72.2%	152.4%	2296.9%	146102.4%	146880.2%
YTD Use	4955.0%	90.0%	39.2%	21.8%	18.1%	18.9%	18.3%	21.0%	24.9%	28.6%	31.5%	34.7%
Month \$	4955.0%	34.6%	19.8%	7.7%	11.9%	21.8%	15.5%	72.2%	152.4%	2296.9%	146102.4%	146880.2%
YTD \$	4955.0%	90.0%	39.2%	21.8%	18.1%	18.9%	18.3%	21.0%	24.9%	28.6%	31.5%	34.7%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(46)	(28)	(43)	(28)	(47)	(62)	(47)	(63)	(81)	(67)	(51)	(58)
YTD Use	(46)	(74)	(117)	(146)	(192)	(254)	(301)	(364)	(445)	(512)	(563)	(621)

Cost Avoidance

Month Use \$	\$ (914)	\$ (561)	\$ (854)	\$ (561)	\$ (927)	\$ (1,224)	\$ (929)	\$ (1,257)	\$ (1,601)	\$ (1,339)	\$ (1,006)	\$ (1,150)
YTD \$	\$ (914)	\$ (1,476)	\$ (2,330)	\$ (2,891)	\$ (3,819)	\$ (5,042)	\$ (5,971)	\$ (7,228)	\$ (8,829)	\$ (10,168)	\$ (11,174)	\$ (12,324)

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-11 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	272	253	324	255	271	273	169	323	516	279	272	269
YTD Use	272	525	849	1,104	1,375	1,648	1,817	2,140	2,656	2,935	3,207	3,476
Month \$	\$ 2,521	\$ 2,345	\$ 3,003	\$ 2,365	\$ 2,512	\$ 2,531	\$ 1,567	\$ 2,994	\$ 4,783	\$ 2,586	\$ 2,521	\$ 2,494
YTD \$	\$ 2,521	\$ 4,866	\$ 7,869	\$ 10,234	\$ 12,746	\$ 15,277	\$ 16,844	\$ 19,838	\$ 24,621	\$ 27,207	\$ 29,728	\$ 32,222
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.268	\$ 9.269	\$ 9.269	\$ 9.275	\$ 9.269	\$ 9.271	\$ 9.272	\$ 9.269	\$ 9.269	\$ 9.269	\$ 9.268	\$ 9.271
YTD Rate	\$ 9.268	\$ 9.269	\$ 9.269	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	268	255	292	302	283	284	178	275	446	352	268	261
YTD Use	268	523	815	1,117	1,401	1,685	1,863	2,139	2,585	2,937	3,206	3,467
Month \$	\$ 2,877	\$ 2,738	\$ 3,142	\$ 3,249	\$ 3,045	\$ 3,057	\$ 1,918	\$ 2,957	\$ 4,798	\$ 3,788	\$ 2,885	\$ 2,809
YTD \$	\$ 2,877	\$ 5,615	\$ 8,757	\$ 12,006	\$ 15,051	\$ 18,107	\$ 20,025	\$ 22,982	\$ 27,780	\$ 31,567	\$ 34,453	\$ 37,262
BP Length	30	30	30	33	33	30	28	30	30	30	30	30
HDD	-	136	434	993	959	834	773	303	211	43	8	-
CDD	222	48	8	-	-	-	1	13	44	134	234	206
Month Rate	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746
YTD Rate	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-	-	-	-	2,650	-	420	-	-	-	-	-
YTD Use	-	-	-	-	2,650	2,650	3,070	3,070	3,070	3,070	3,070	3,070
Month \$	\$ -	\$ -	\$ -	\$ -	\$ 28,478	\$ -	\$ 4,514	\$ -	\$ -	\$ -	\$ -	\$ -
YTD \$	\$ -	\$ -	\$ -	\$ -	\$ 28,478	\$ 28,478	\$ 32,992	\$ 32,992	\$ 32,992	\$ 32,992	\$ 32,992	\$ 32,992
BP Length	30	30	30	33	33	30	28	30	30	30	30	30
HDD	-	136	434	993	959	834	773	303	211	43	8	-
CDD	222	48	8	-	-	-	1	13	44	134	234	206
Month Rate	\$ -	\$ -	\$ -	\$ -	\$ 10.746	\$ -	\$ 10.746	\$ -	\$ -	\$ -	\$ -	\$ -
YTD Rate	\$ -	\$ -	\$ -	\$ -	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-100.0%	-100.0%	-100.0%	-100.0%	835.3%	-100.0%	135.4%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%
YTD Use	-100.0%	-100.0%	-100.0%	-100.0%	89.2%	57.3%	64.8%	43.6%	18.8%	4.5%	-4.2%	-11.5%
Month \$	-100.0%	-100.0%	-100.0%	-100.0%	835.3%	-100.0%	135.4%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%
YTD \$	-100.0%	-100.0%	-100.0%	-100.0%	89.2%	57.3%	64.8%	43.6%	18.8%	4.5%	-4.2%	-11.5%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	268	255	292	302	(2,367)	284	(242)	275	446	352	268	261
YTD Use	268	523	815	1,117	(1,249)	(965)	(1,207)	(931)	(485)	(133)	136	397

Cost Avoidance

Month Use \$	\$ 2,877	\$ 2,738	\$ 3,142	\$ 3,249	\$ (25,433)	\$ 3,057	\$ (2,596)	\$ 2,957	\$ 4,798	\$ 3,788	\$ 2,885	\$ 2,809
YTD \$	\$ 2,877	\$ 5,615	\$ 8,757	\$ 12,006	\$ (13,428)	\$ (10,371)	\$ (12,967)	\$ (10,010)	\$ (5,212)	\$ (1,424)	\$ 1,461	\$ 4,270

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-15 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	130	592	842	1,616	1,863	1,852	1,666	948	855	232	337	304
YTD Use	130	722	1,564	3,180	5,043	6,895	8,561	9,509	10,364	10,596	10,933	11,237
Month \$	\$ 2,583	\$ 11,763	\$ 16,731	\$ 32,106	\$ 37,019	\$ 36,800	\$ 33,104	\$ 18,837	\$ 16,989	\$ 4,610	\$ 6,696	\$ 6,041
YTD \$	\$ 2,583	\$ 14,346	\$ 31,077	\$ 63,183	\$ 100,202	\$ 137,002	\$ 170,106	\$ 188,943	\$ 205,932	\$ 210,542	\$ 217,238	\$ 223,279
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	92	382	544	750	771	913	770	293	188	30	-	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.869	\$ 19.870	\$ 19.871	\$ 19.868	\$ 19.871	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.871	\$ 19.869	\$ 19.872
YTD Rate	\$ 19.869	\$ 19.870	\$ 19.870	\$ 19.869	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	169	535	1,131	1,804	1,904	1,438	1,502	549	414	185	142	170
YTD Use	169	703	1,835	3,639	5,542	6,980	8,483	9,032	9,445	9,631	9,772	9,942
Month \$	\$ 3,887	\$ 12,317	\$ 26,058	\$ 41,560	\$ 43,849	\$ 33,119	\$ 34,608	\$ 12,657	\$ 9,525	\$ 4,271	\$ 3,262	\$ 3,910
YTD \$	\$ 3,887	\$ 16,204	\$ 42,262	\$ 83,822	\$ 127,671	\$ 160,790	\$ 195,398	\$ 208,055	\$ 217,580	\$ 221,851	\$ 225,113	\$ 229,023
BP Length	30	28	31	31	32	30	30	31	29	31	27	32
HDD	6	204	510	864	913	674	708	204	138	12	-	1
CDD	151	22	4	-	-	1	2	26	40	170	244	188
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	128	445	1,043	1,418	1,400	1,382	1,353	631	440	177	150	163
YTD Use	128	573	1,616	3,034	4,434	5,816	7,169	7,800	8,240	8,417	8,567	8,730
Month \$	\$ 2,949	\$ 10,251	\$ 24,026	\$ 32,664	\$ 32,250	\$ 31,835	\$ 31,167	\$ 14,538	\$ 10,126	\$ 4,086	\$ 3,448	\$ 3,755
YTD \$	\$ 2,949	\$ 13,199	\$ 37,225	\$ 69,889	\$ 102,139	\$ 133,974	\$ 165,141	\$ 179,678	\$ 189,805	\$ 193,891	\$ 197,340	\$ 201,094
BP Length	30	28	31	31	32	30	30	31	29	31	27	32
HDD	6	204	510	864	913	674	708	204	138	12	-	1
CDD	151	22	4	-	-	1	2	26	40	170	244	188
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-24.2%	-16.8%	-7.8%	-21.4%	-26.5%	-3.9%	-9.9%	14.9%	6.3%	-4.3%	5.7%	-4.0%
YTD Use	-24.2%	-18.5%	-11.9%	-16.6%	-20.0%	-16.7%	-15.5%	-13.6%	-12.8%	-12.6%	-12.3%	-12.2%
Month \$	-24.2%	-16.8%	-7.8%	-21.4%	-26.5%	-3.9%	-9.9%	14.9%	6.3%	-4.3%	5.7%	-4.0%
YTD \$	-24.2%	-18.5%	-11.9%	-16.6%	-20.0%	-16.7%	-15.5%	-13.6%	-12.8%	-12.6%	-12.3%	-12.2%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	41	90	88	386	504	56	149	(82)	(26)	8	(8)	7
YTD Use	41	130	219	605	1,108	1,164	1,314	1,232	1,206	1,214	1,206	1,212

Cost Avoidance

Month Use \$	\$ 939	\$ 2,066	\$ 2,032	\$ 8,896	\$ 11,599	\$ 1,284	\$ 3,441	\$ (1,880)	\$ (601)	\$ 184	\$ (186)	\$ 155
YTD \$	\$ 939	\$ 3,005	\$ 5,037	\$ 13,933	\$ 25,532	\$ 26,816	\$ 30,257	\$ 28,377	\$ 27,775	\$ 27,960	\$ 27,774	\$ 27,929

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-15 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	379	407	375	390	335	340	361	454	331	400	299	502
YTD Use	379	786	1,161	1,551	1,886	2,226	2,587	3,041	3,372	3,772	4,071	4,573
Month \$	\$ 3,513	\$ 3,773	\$ 3,476	\$ 3,620	\$ 3,105	\$ 3,152	\$ 3,346	\$ 4,209	\$ 3,068	\$ 3,708	\$ 2,772	\$ 4,654
YTD \$	\$ 3,513	\$ 7,286	\$ 10,762	\$ 14,382	\$ 17,487	\$ 20,639	\$ 23,985	\$ 28,194	\$ 31,262	\$ 34,970	\$ 37,742	\$ 42,396
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.269	\$ 9.270	\$ 9.269	\$ 9.282	\$ 9.269	\$ 9.271	\$ 9.269	\$ 9.271	\$ 9.269	\$ 9.270	\$ 9.271	\$ 9.271
YTD Rate	\$ 9.269	\$ 9.270	\$ 9.270	\$ 9.273	\$ 9.272	\$ 9.272	\$ 9.271	\$ 9.271	\$ 9.271	\$ 9.271	\$ 9.271	\$ 9.271

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	397	391	379	377	337	366	340	430	341	363	307	384
YTD Use	397	788	1,167	1,544	1,881	2,246	2,586	3,016	3,357	3,720	4,027	4,411
Month \$	\$ 4,264	\$ 4,206	\$ 4,071	\$ 4,051	\$ 3,617	\$ 3,930	\$ 3,656	\$ 4,617	\$ 3,663	\$ 3,898	\$ 3,299	\$ 4,132
YTD \$	\$ 4,264	\$ 8,470	\$ 12,541	\$ 16,592	\$ 20,209	\$ 24,139	\$ 27,795	\$ 32,412	\$ 36,075	\$ 39,973	\$ 43,272	\$ 47,404
BP Length	30	30	30	30	30	31	29	30	29	29	28	29
HDD	2	209	528	905	879	838	810	290	189	37	8	-
CDD	206	22	4	-	-	-	1	13	44	134	206	202
Month Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747
YTD Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	257	239	281	158	275	253	217	-	-	236	241	252
YTD Use	257	496	777	935	1,210	1,463	1,680	1,680	1,680	1,916	2,157	2,409
Month \$	\$ 2,762	\$ 2,568	\$ 3,020	\$ 1,698	\$ 2,955	\$ 2,719	\$ 2,332	\$ -	\$ -	\$ 2,536	\$ 2,590	\$ 2,708
YTD \$	\$ 2,762	\$ 5,330	\$ 8,350	\$ 10,048	\$ 13,003	\$ 15,722	\$ 18,054	\$ 18,054	\$ 18,054	\$ 20,590	\$ 23,180	\$ 25,888
BP Length	30	30	30	30	30	31	29	30	29	29	28	29
HDD	2	209	528	905	879	838	810	290	189	37	8	-
CDD	206	22	4	-	-	-	1	13	44	134	206	202
Month Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ -	\$ -	\$ 10.747	\$ 10.747	\$ 10.747
YTD Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-35.2%	-38.9%	-25.8%	-58.1%	-18.3%	-30.8%	-36.2%	-100.0%	-100.0%	-34.9%	-21.5%	-34.5%
YTD Use	-35.2%	-37.1%	-33.4%	-39.4%	-35.7%	-34.9%	-35.0%	-44.3%	-50.0%	-48.5%	-46.4%	-45.4%
Month \$	-35.2%	-38.9%	-25.8%	-58.1%	-18.3%	-30.8%	-36.2%	-100.0%	-100.0%	-34.9%	-21.5%	-34.5%
YTD \$	-35.2%	-37.1%	-33.4%	-39.4%	-35.7%	-34.9%	-35.0%	-44.3%	-50.0%	-48.5%	-46.4%	-45.4%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	140	152	98	219	62	113	123	430	341	127	66	132
YTD Use	140	292	390	609	671	783	906	1,336	1,677	1,804	1,870	2,002

Cost Avoidance

Month Use \$	\$ 1,502	\$ 1,638	\$ 1,051	\$ 2,353	\$ 662	\$ 1,212	\$ 1,324	\$ 4,617	\$ 3,663	\$ 1,362	\$ 709	\$ 1,424
YTD \$	\$ 1,502	\$ 3,140	\$ 4,191	\$ 6,544	\$ 7,206	\$ 8,417	\$ 9,741	\$ 14,358	\$ 18,021	\$ 19,383	\$ 20,091	\$ 21,515

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-17 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	154	553	1,282	2,169	2,447	2,198	2,177	1,062	572	216	143	129
YTD Use	154	707	1,989	4,158	6,605	8,803	10,980	12,042	12,614	12,830	12,973	13,102
Month \$	\$ 3,060	\$ 10,988	\$ 25,476	\$ 43,099	\$ 48,623	\$ 43,676	\$ 43,258	\$ 21,103	\$ 11,366	\$ 4,292	\$ 2,841	\$ 2,563
YTD \$	\$ 3,060	\$ 14,048	\$ 39,524	\$ 82,623	\$ 131,246	\$ 174,922	\$ 218,180	\$ 239,283	\$ 250,649	\$ 254,941	\$ 257,782	\$ 260,345
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	63	326	484	688	709	857	709	243	144	20	-	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.870	\$ 19.870	\$ 19.872	\$ 19.870	\$ 19.870	\$ 19.871	\$ 19.870	\$ 19.871	\$ 19.871	\$ 19.870	\$ 19.867	\$ 19.868
YTD Rate	\$ 19.870	\$ 19.870	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	101	554	1,372	2,312	2,466	1,778	1,901	588	390	111	98	101
YTD Use	101	655	2,027	4,339	6,805	8,583	10,483	11,071	11,461	11,572	11,670	11,772
Month \$	\$ 2,013	\$ 11,011	\$ 27,254	\$ 45,936	\$ 48,995	\$ 35,329	\$ 37,769	\$ 11,685	\$ 7,748	\$ 2,206	\$ 1,945	\$ 2,013
YTD \$	\$ 2,013	\$ 13,023	\$ 40,277	\$ 86,213	\$ 135,208	\$ 170,537	\$ 208,306	\$ 219,991	\$ 227,739	\$ 229,944	\$ 231,890	\$ 233,902
BP Length	30	28	32	30	32	29	30	29	32	30	29	30
HDD	-	166	455	796	849	605	648	177	102	4	-	-
CDD	151	22	4	-	-	1	2	14	51	161	261	176
Month Rate	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870
YTD Rate	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	162	667	1,475	2,351	2,374	1,866	1,946	713	435	156	137	-
YTD Use	162	829	2,304	4,655	7,029	8,895	10,841	11,554	11,989	12,145	12,282	12,282
Month \$	\$ 3,219	\$ 13,253	\$ 29,308	\$ 46,715	\$ 47,172	\$ 37,078	\$ 38,667	\$ 14,167	\$ 8,644	\$ 3,100	\$ 2,722	\$ -
YTD \$	\$ 3,219	\$ 16,472	\$ 45,781	\$ 92,495	\$ 139,667	\$ 176,745	\$ 215,412	\$ 229,579	\$ 238,223	\$ 241,323	\$ 244,045	\$ 244,045
BP Length	30	28	32	30	32	29	30	29	32	30	29	30
HDD	-	166	455	796	849	605	648	177	102	4	-	-
CDD	151	22	4	-	-	1	2	14	51	161	261	176
Month Rate	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ -
YTD Rate	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	59.9%	20.4%	7.5%	1.7%	-3.7%	4.9%	2.4%	21.2%	11.6%	40.5%	39.9%	-100.0%
YTD Use	59.9%	26.5%	13.7%	7.3%	3.3%	3.6%	3.4%	4.4%	4.6%	4.9%	5.2%	4.3%
Month \$	59.9%	20.4%	7.5%	1.7%	-3.7%	4.9%	2.4%	21.2%	11.6%	40.5%	39.9%	-100.0%
YTD \$	59.9%	26.5%	13.7%	7.3%	3.3%	3.6%	3.4%	4.4%	4.6%	4.9%	5.2%	4.3%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(61)	(113)	(103)	(39)	92	(88)	(45)	(125)	(45)	(45)	(39)	101
YTD Use	(61)	(174)	(277)	(316)	(224)	(312)	(358)	(483)	(528)	(573)	(612)	(510)

Cost Avoidance

Month Use \$	\$ (1,206)	\$ (2,243)	\$ (2,055)	\$ (779)	\$ 1,823	\$ (1,748)	\$ (898)	\$ (2,483)	\$ (896)	\$ (894)	\$ (777)	\$ 2,013
YTD \$	\$ (1,206)	\$ (3,449)	\$ (5,504)	\$ (6,283)	\$ (4,460)	\$ (6,208)	\$ (7,106)	\$ (9,588)	\$ (10,484)	\$ (11,379)	\$ (12,155)	\$ (10,143)

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-17 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	244	346	400	452	318	557	489	763	585	695	572	866
YTD Use	244	590	990	1,442	1,760	2,317	2,806	3,569	4,154	4,849	5,421	6,287
Month \$	\$ 2,262	\$ 3,207	\$ 3,708	\$ 4,194	\$ 2,948	\$ 5,163	\$ 4,533	\$ 7,073	\$ 5,423	\$ 6,443	\$ 5,302	\$ 8,028
YTD \$	\$ 2,262	\$ 5,469	\$ 9,177	\$ 13,371	\$ 16,319	\$ 21,482	\$ 26,015	\$ 33,088	\$ 38,511	\$ 44,954	\$ 50,256	\$ 58,284
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.270	\$ 9.269	\$ 9.270	\$ 9.279	\$ 9.270	\$ 9.269	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.271	\$ 9.269	\$ 9.270
YTD Rate	\$ 9.270	\$ 9.269	\$ 9.270	\$ 9.273	\$ 9.272	\$ 9.271	\$ 9.271	\$ 9.271	\$ 9.271	\$ 9.271	\$ 9.271	\$ 9.271

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	323	323	389	387	357	530	498	695	612	591	605	668
YTD Use	323	646	1,035	1,423	1,779	2,309	2,807	3,503	4,115	4,706	5,311	5,980
Month \$	\$ 3,473	\$ 3,468	\$ 4,182	\$ 4,164	\$ 3,835	\$ 5,695	\$ 5,351	\$ 7,473	\$ 6,578	\$ 6,353	\$ 6,506	\$ 7,183
YTD \$	\$ 3,473	\$ 6,942	\$ 11,123	\$ 15,287	\$ 19,123	\$ 24,818	\$ 30,169	\$ 37,642	\$ 44,219	\$ 50,572	\$ 57,078	\$ 64,261
BP Length	30	30	30	27	31	31	30	30	30	27	30	28
HDD	2	235	525	829	908	858	814	290	195	32	8	-
CDD	194	22	4	-	-	-	1	13	44	131	222	189
Month Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.747
YTD Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-	-	-	255	466	479	-	-	-	-	444	422
YTD Use	-	-	-	255	721	1,200	1,200	1,200	1,200	1,200	1,644	2,066
Month \$	\$ -	\$ -	\$ -	\$ 2,740	\$ 5,008	\$ 5,148	\$ -	\$ -	\$ -	\$ -	\$ 4,771	\$ 4,535
YTD \$	\$ -	\$ -	\$ -	\$ 2,740	\$ 7,748	\$ 12,896	\$ 12,896	\$ 12,896	\$ 12,896	\$ 12,896	\$ 17,667	\$ 22,202
BP Length	30	30	30	27	31	31	30	30	30	27	30	28
HDD	2	235	525	829	908	858	814	290	195	32	8	-
CDD	194	22	4	-	-	-	1	13	44	131	222	189
Month Rate	\$ -	\$ -	\$ -	\$ 10.746	\$ 10.747	\$ 10.746	\$ -	\$ -	\$ -	\$ -	\$ 10.746	\$ 10.746
YTD Rate	\$ -	\$ -	\$ -	\$ 10.746	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-100.0%	-100.0%	-100.0%	-34.2%	30.6%	-9.6%	-100.0%	-100.0%	-100.0%	-100.0%	-26.7%	-36.9%
YTD Use	-100.0%	-100.0%	-100.0%	-82.1%	-59.5%	-48.0%	-57.3%	-65.7%	-70.8%	-74.5%	-69.0%	-65.4%
Month \$	-100.0%	-100.0%	-100.0%	-34.2%	30.6%	-9.6%	-100.0%	-100.0%	-100.0%	-100.0%	-26.7%	-36.9%
YTD \$	-100.0%	-100.0%	-100.0%	-82.1%	-59.5%	-48.0%	-57.3%	-65.7%	-70.8%	-74.5%	-69.0%	-65.4%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	323	323	389	132	(109)	51	498	695	612	591	161	246
YTD Use	323	646	1,035	1,168	1,058	1,109	1,607	2,303	2,915	3,506	3,667	3,914

Cost Avoidance

Month Use \$	\$ 3,473	\$ 3,468	\$ 4,182	\$ 1,423	\$ (1,172)	\$ 548	\$ 5,351	\$ 7,473	\$ 6,578	\$ 6,353	\$ 1,735	\$ 2,648
YTD \$	\$ 3,473	\$ 6,942	\$ 11,123	\$ 12,547	\$ 11,374	\$ 11,922	\$ 17,273	\$ 24,746	\$ 31,324	\$ 37,676	\$ 39,411	\$ 42,059

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-20 Electric

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	84,432	73,196	70,953	76,009	90,147	75,593	74,397	70,170	66,203	70,897	83,634	91,172
YTD Use	84,432	157,628	228,581	304,590	394,737	470,330	544,727	614,897	681,100	751,997	835,631	926,803
Month \$	\$ 9,612	\$ 8,333	\$ 8,078	\$ 8,654	\$ 10,263	\$ 8,606	\$ 8,470	\$ 7,989	\$ 7,537	\$ 8,071	\$ 9,522	\$ 10,380
YTD \$	\$ 9,612	\$ 17,945	\$ 26,023	\$ 34,677	\$ 44,940	\$ 53,546	\$ 62,016	\$ 70,005	\$ 77,542	\$ 85,613	\$ 95,135	\$ 105,515
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114
YTD Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	79,900	70,870	79,090	78,574	87,857	77,094	66,588	68,136	73,206	74,913	77,729	95,661
YTD Use	79,900	150,770	229,860	308,434	396,290	473,385	539,973	608,109	681,315	756,227	833,956	929,617
Month \$	\$ 9,093	\$ 8,065	\$ 9,000	\$ 8,942	\$ 9,998	\$ 8,773	\$ 7,578	\$ 7,754	\$ 8,331	\$ 8,525	\$ 8,846	\$ 10,886
YTD \$	\$ 9,093	\$ 17,158	\$ 26,158	\$ 35,100	\$ 45,098	\$ 53,871	\$ 61,449	\$ 69,203	\$ 77,534	\$ 86,059	\$ 94,904	\$ 105,790
BP Length	30	30	33	30	31	30	28	30	33	30	28	33
HDD	76	324	821	1,016	885	722	544	210	89	8	-	57
CDD	68	25	-	-	-	1	5	23	81	233	210	129
Month Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114
YTD Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	92,691	96,610	157,780	198,197	174,846	166,120	175,589	91,894	95,507	126,200	104,155	98,300
YTD Use	92,691	189,301	347,082	545,279	720,125	886,244	1,061,833	1,153,726	1,249,233	1,375,433	1,479,588	1,577,889
Month \$	\$ 10,548	\$ 10,994	\$ 17,955	\$ 22,555	\$ 19,897	\$ 18,904	\$ 19,982	\$ 10,457	\$ 10,869	\$ 14,362	\$ 11,853	\$ 11,187
YTD \$	\$ 10,548	\$ 21,542	\$ 39,498	\$ 62,053	\$ 81,950	\$ 100,855	\$ 120,837	\$ 131,294	\$ 142,163	\$ 156,524	\$ 168,377	\$ 179,564
BP Length	30	30	33	30	31	30	28	30	33	30	28	33
HDD	76	324	821	1,016	885	722	544	210	89	8	-	57
CDD	68	25	-	-	-	1	5	23	81	233	210	129
Month Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114
YTD Rate	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114	\$ 0.114

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	16.0%	36.3%	99.5%	152.2%	99.0%	115.5%	163.7%	34.9%	30.5%	68.5%	34.0%	2.8%
YTD Use	16.0%	25.6%	51.0%	76.8%	81.7%	87.2%	96.6%	89.7%	83.4%	81.9%	77.4%	69.7%
Month \$	16.0%	36.3%	99.5%	152.2%	99.0%	115.5%	163.7%	34.9%	30.5%	68.5%	34.0%	2.8%
YTD \$	16.0%	25.6%	51.0%	76.8%	81.7%	87.2%	96.6%	89.7%	83.4%	81.9%	77.4%	69.7%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(12,792)	(25,740)	(78,690)	(119,623)	(86,989)	(89,025)	(109,000)	(23,758)	(22,301)	(51,288)	(26,426)	(2,639)
YTD Use	(12,792)	(38,531)	(117,222)	(236,845)	(323,834)	(412,859)	(521,860)	(545,617)	(567,918)	(619,206)	(645,632)	(648,271)

Cost Avoidance

Month Use \$	\$ (1,456)	\$ (2,929)	\$ (8,955)	\$ (13,613)	\$ (9,899)	\$ (10,131)	\$ (12,404)	\$ (2,704)	\$ (2,538)	\$ (5,837)	\$ (3,007)	\$ (300)
YTD \$	\$ (1,456)	\$ (4,385)	\$ (13,340)	\$ (26,953)	\$ (36,852)	\$ (46,983)	\$ (59,388)	\$ (62,091)	\$ (64,629)	\$ (70,466)	\$ (73,473)	\$ (73,773)

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-20 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	212	867	1,714	3,700	4,290	4,764	4,436	2,036	1,058	461	146	159
YTD Use	212	1,079	2,793	6,493	10,783	15,547	19,983	22,019	23,077	23,538	23,684	23,843
Month \$	\$ 4,213	\$ 17,228	\$ 34,059	\$ 73,522	\$ 85,247	\$ 94,665	\$ 88,148	\$ 40,457	\$ 21,024	\$ 9,161	\$ 2,901	\$ 3,159
YTD \$	\$ 4,213	\$ 21,441	\$ 55,500	\$ 129,022	\$ 214,269	\$ 308,934	\$ 397,082	\$ 437,539	\$ 458,563	\$ 467,724	\$ 470,625	\$ 473,784
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	53	300	454	657	678	829	679	221	125	16	-	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.873	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.872	\$ 19.870	\$ 19.868
YTD Rate	\$ 19.873	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	91	921	2,488	4,413	4,707	3,349	3,589	975	580	97	85	117
YTD Use	91	1,012	3,500	7,913	12,621	15,969	19,558	20,533	21,113	21,209	21,294	21,412
Month \$	\$ 2,100	\$ 21,211	\$ 57,315	\$ 101,662	\$ 108,431	\$ 77,142	\$ 82,672	\$ 22,450	\$ 13,353	\$ 2,227	\$ 1,964	\$ 2,696
YTD \$	\$ 2,100	\$ 23,311	\$ 80,626	\$ 182,288	\$ 290,719	\$ 367,861	\$ 450,533	\$ 472,983	\$ 486,336	\$ 488,563	\$ 490,527	\$ 493,223
BP Length	31	28	32	30	32	29	30	29	32	30	29	35
HDD	-	149	424	766	817	578	620	158	86	2	-	3
CDD	159	22	4	-	-	1	2	14	51	161	261	187
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	202	217	350	384	408	344	338	272	303	252	210	251
YTD Use	202	419	769	1,153	1,561	1,905	2,243	2,515	2,819	3,070	3,280	3,532
Month \$	\$ 4,653	\$ 4,999	\$ 8,062	\$ 8,846	\$ 9,398	\$ 7,924	\$ 7,786	\$ 6,270	\$ 6,987	\$ 5,798	\$ 4,835	\$ 5,791
YTD \$	\$ 4,653	\$ 9,652	\$ 17,714	\$ 26,560	\$ 35,958	\$ 43,882	\$ 51,668	\$ 57,939	\$ 64,925	\$ 70,723	\$ 75,558	\$ 81,350
BP Length	31	28	32	30	32	29	30	29	32	30	29	35
HDD	-	149	424	766	817	578	620	158	86	2	-	3
CDD	159	22	4	-	-	1	2	14	51	161	261	187
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	121.6%	-76.4%	-85.9%	-91.3%	-91.3%	-89.7%	-90.6%	-72.1%	-47.7%	160.3%	146.1%	114.8%
YTD Use	121.6%	-58.6%	-78.0%	-85.4%	-87.6%	-88.1%	-88.5%	-87.8%	-86.7%	-85.5%	-84.6%	-83.5%
Month \$	121.6%	-76.4%	-85.9%	-91.3%	-91.3%	-89.7%	-90.6%	-72.1%	-47.7%	160.3%	146.1%	114.8%
YTD \$	121.6%	-58.6%	-78.0%	-85.4%	-87.6%	-88.1%	-88.5%	-87.8%	-86.7%	-85.5%	-84.6%	-83.5%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(111)	704	2,138	4,029	4,299	3,005	3,251	702	276	(155)	(125)	(134)
YTD Use	(111)	593	2,731	6,760	11,060	14,064	17,315	18,018	18,294	18,139	18,014	17,880

Cost Avoidance

Month Use \$	\$ (2,553)	\$ 16,213	\$ 49,253	\$ 92,816	\$ 99,032	\$ 69,218	\$ 74,886	\$ 16,179	\$ 6,367	\$ (3,571)	\$ (2,871)	\$ (3,095)
YTD \$	\$ (2,553)	\$ 13,659	\$ 62,912	\$ 155,728	\$ 254,760	\$ 323,978	\$ 398,865	\$ 415,044	\$ 421,410	\$ 417,840	\$ 414,969	\$ 411,874

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-20 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	1,363	821	1,139	1,023	1,287	907	1,340	1,219	3,533	1,488	1,179	1,018
YTD Use	1,363	2,184	3,323	4,346	5,633	6,540	7,880	9,099	12,632	14,120	15,299	16,317
Month \$	\$ 12,635	\$ 7,611	\$ 10,559	\$ 9,482	\$ 11,930	\$ 8,408	\$ 12,422	\$ 11,300	\$ 32,751	\$ 13,794	\$ 10,929	\$ 9,437
YTD \$	\$ 12,635	\$ 20,246	\$ 30,805	\$ 40,287	\$ 52,217	\$ 60,625	\$ 73,047	\$ 84,347	\$ 117,098	\$ 130,892	\$ 141,821	\$ 151,258
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.269	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270
YTD Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	1,363	859	1,134	990	1,287	907	1,340	1,219	3,533	1,488	1,141	1,056
YTD Use	1,363	2,222	3,356	4,346	5,633	6,540	7,880	9,099	12,632	14,120	15,261	16,317
Month \$	\$ 14,647	\$ 9,231	\$ 12,187	\$ 10,639	\$ 13,831	\$ 9,747	\$ 14,400	\$ 13,100	\$ 37,967	\$ 15,991	\$ 12,261	\$ 11,349
YTD \$	\$ 14,647	\$ 23,878	\$ 36,065	\$ 46,704	\$ 60,535	\$ 70,282	\$ 84,682	\$ 97,782	\$ 135,750	\$ 151,741	\$ 164,002	\$ 175,351
BP Length	30	32	30	30	31	28	31	30	31	30	30	32
HDD	16	289	574	952	942	683	781	249	180	28	-	5
CDD	151	22	4	-	-	1	2	22	44	170	262	177
Month Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.747
YTD Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	55	38	79	34	25	32	34	38	41	65	62	60
YTD Use	55	94	172	206	231	263	297	335	376	441	503	563
Month \$	\$ 596	\$ 413	\$ 844	\$ 365	\$ 269	\$ 344	\$ 364	\$ 408	\$ 438	\$ 698	\$ 666	\$ 645
YTD \$	\$ 596	\$ 1,009	\$ 1,853	\$ 2,218	\$ 2,487	\$ 2,831	\$ 3,195	\$ 3,603	\$ 4,041	\$ 4,739	\$ 5,406	\$ 6,051
BP Length	30	32	30	30	31	28	31	30	31	30	30	32
HDD	16	289	574	952	942	683	781	249	180	28	-	5
CDD	151	22	4	-	-	1	2	22	44	170	262	177
Month Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.746
YTD Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-95.9%	-95.5%	-93.1%	-96.6%	-98.1%	-96.5%	-97.5%	-96.9%	-98.8%	-95.6%	-94.6%	-94.3%
YTD Use	-95.9%	-95.8%	-94.9%	-95.3%	-95.9%	-96.0%	-96.2%	-96.3%	-97.0%	-96.9%	-96.7%	-96.5%
Month \$	-95.9%	-95.5%	-93.1%	-96.6%	-98.1%	-96.5%	-97.5%	-96.9%	-98.8%	-95.6%	-94.6%	-94.3%
YTD \$	-95.9%	-95.8%	-94.9%	-95.3%	-95.9%	-96.0%	-96.2%	-96.3%	-97.0%	-96.9%	-96.7%	-96.5%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	1,308	821	1,056	956	1,262	875	1,306	1,181	3,492	1,423	1,079	996
YTD Use	1,308	2,128	3,184	4,140	5,402	6,277	7,583	8,764	12,256	13,679	14,758	15,754

Cost Avoidance

Month Use \$	\$ 14,052	\$ 8,818	\$ 11,343	\$ 10,274	\$ 13,562	\$ 9,403	\$ 14,036	\$ 12,692	\$ 37,529	\$ 15,292	\$ 11,595	\$ 10,703
YTD \$	\$ 14,052	\$ 22,869	\$ 34,213	\$ 44,486	\$ 58,048	\$ 67,451	\$ 81,488	\$ 94,179	\$ 131,709	\$ 147,001	\$ 158,596	\$ 169,300

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-31 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	64	467	738	1,111	1,151	1,444	1,160	333	168	15	-	-
YTD Use	64	531	1,269	2,380	3,531	4,975	6,135	6,468	6,636	6,651	6,651	6,651
Month \$	\$ 1,262	\$ 9,288	\$ 14,664	\$ 22,088	\$ 22,868	\$ 28,696	\$ 23,054	\$ 6,608	\$ 3,341	\$ 297	\$ -	\$ -
YTD \$	\$ 1,262	\$ 10,550	\$ 25,214	\$ 47,302	\$ 70,170	\$ 98,866	\$ 121,920	\$ 128,528	\$ 131,869	\$ 132,166	\$ 132,166	\$ 132,166
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	34	250	395	595	616	773	621	178	90	8	-	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.719	\$ 19.889	\$ 19.870	\$ 19.881	\$ 19.868	\$ 19.873	\$ 19.874	\$ 19.844	\$ 19.887	\$ 19.800	\$ -	\$ -
YTD Rate	\$ 19.719	\$ 19.868	\$ 19.869	\$ 19.875	\$ 19.873	\$ 19.873	\$ 19.873	\$ 19.871	\$ 19.872	\$ 19.872	\$ 19.872	\$ 19.872

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	1	243	695	1,479	1,302	948	1,017	216	116	1	1	1
YTD Use	1	243	939	2,418	3,720	4,668	5,685	5,901	6,017	6,018	6,019	6,019
Month \$	\$ 15	\$ 5,587	\$ 16,021	\$ 34,071	\$ 30,003	\$ 21,828	\$ 23,420	\$ 4,985	\$ 2,683	\$ 15	\$ 16	\$ 15
YTD \$	\$ 15	\$ 5,602	\$ 21,623	\$ 55,694	\$ 85,697	\$ 107,525	\$ 130,945	\$ 135,930	\$ 138,613	\$ 138,628	\$ 138,644	\$ 138,658
BP Length	30	31	31	33	29	29	29	31	31	29	32	29
HDD	-	130	372	792	697	507	544	116	62	-	-	-
CDD	151	22	4	-	-	1	2	26	40	170	278	159
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	59	143	286	605	452	480	354	294	116	125	74	65
YTD Use	59	202	488	1,093	1,545	2,025	2,379	2,673	2,789	2,914	2,987	3,052
Month \$	\$ 1,359	\$ 3,294	\$ 6,588	\$ 13,936	\$ 10,412	\$ 11,057	\$ 8,155	\$ 6,775	\$ 2,665	\$ 2,873	\$ 1,693	\$ 1,486
YTD \$	\$ 1,359	\$ 4,653	\$ 11,241	\$ 25,178	\$ 35,590	\$ 46,647	\$ 54,801	\$ 61,576	\$ 64,241	\$ 67,114	\$ 68,807	\$ 70,293
BP Length	30	31	31	33	29	29	29	31	31	29	32	29
HDD	-	130	372	792	697	507	544	116	62	-	-	-
CDD	151	22	4	-	-	1	2	26	40	170	278	159
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	8959.6%	-41.0%	-58.9%	-59.1%	-65.3%	-49.3%	-65.2%	35.9%	-0.7%	19708.2%	10480.7%	10145.6%
YTD Use	8959.6%	-16.9%	-48.0%	-54.8%	-58.5%	-56.6%	-58.1%	-54.7%	-53.7%	-51.6%	-50.4%	-49.3%
Month \$	8959.6%	-41.0%	-58.9%	-59.1%	-65.3%	-49.3%	-65.2%	35.9%	-0.7%	19708.3%	10480.7%	10145.7%
YTD \$	8959.6%	-16.9%	-48.0%	-54.8%	-58.5%	-56.6%	-58.1%	-54.7%	-53.7%	-51.6%	-50.4%	-49.3%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(58)	100	409	874	850	468	663	(78)	1	(124)	(73)	(64)
YTD Use	(58)	41	451	1,325	2,175	2,643	3,306	3,228	3,229	3,105	3,032	2,968

Cost Avoidance

Month Use \$	\$ (1,344)	\$ 2,293	\$ 9,433	\$ 20,134	\$ 19,591	\$ 10,771	\$ 15,266	\$ (1,790)	\$ 18	\$ (2,858)	\$ (1,677)	\$ (1,471)
YTD \$	\$ (1,344)	\$ 949	\$ 10,382	\$ 30,516	\$ 50,107	\$ 60,878	\$ 76,144	\$ 74,354	\$ 74,372	\$ 71,514	\$ 69,837	\$ 68,366

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-31 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	341	267	258	267	255	181	382	411	97	491	325	381
YTD Use	341	608	866	1,133	1,388	1,569	1,951	2,362	2,459	2,950	3,275	3,656
Month \$	\$ 3,161	\$ 2,475	\$ 2,392	\$ 2,471	\$ 2,364	\$ 1,678	\$ 3,541	\$ 3,810	\$ 899	\$ 4,552	\$ 3,013	\$ 3,532
YTD \$	\$ 3,161	\$ 5,636	\$ 8,028	\$ 10,499	\$ 12,863	\$ 14,541	\$ 18,082	\$ 21,892	\$ 22,791	\$ 27,343	\$ 30,356	\$ 33,888
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.270	\$ 9.270	\$ 9.271	\$ 9.255	\$ 9.271	\$ 9.271	\$ 9.270	\$ 9.270	\$ 9.268	\$ 9.271	\$ 9.271	\$ 9.270
YTD Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.267	\$ 9.267	\$ 9.268	\$ 9.268	\$ 9.268	\$ 9.268	\$ 9.269	\$ 9.269	\$ 9.269

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	401	-	301	284	245	240	282	375	267	259	431	324
YTD Use	401	401	703	987	1,232	1,472	1,754	2,129	2,396	2,655	3,086	3,410
Month \$	\$ 4,312	\$ -	\$ 3,238	\$ 3,052	\$ 2,634	\$ 2,583	\$ 3,028	\$ 4,033	\$ 2,873	\$ 2,783	\$ 4,631	\$ 3,481
YTD \$	\$ 4,312	\$ 4,312	\$ 7,550	\$ 10,602	\$ 13,237	\$ 15,819	\$ 18,848	\$ 22,880	\$ 25,753	\$ 28,536	\$ 33,167	\$ 36,648
BP Length	37	-	35	33	29	32	30	29	28	32	31	29
HDD	38	-	398	862	953	923	755	486	195	78	8	-
CDD	151	-	25	-	-	-	1	5	23	81	243	212
Month Rate	\$ 10.747	\$ -	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.747
YTD Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	156	-	176	156	139	161	149	145	131	158	135	-
YTD Use	156	156	332	488	627	788	937	1,082	1,213	1,371	1,506	1,506
Month \$	\$ 1,676	\$ -	\$ 1,891	\$ 1,676	\$ 1,494	\$ 1,730	\$ 1,601	\$ 1,558	\$ 1,408	\$ 1,698	\$ 1,451	\$ -
YTD \$	\$ 1,676	\$ 1,676	\$ 3,568	\$ 5,244	\$ 6,738	\$ 8,468	\$ 10,069	\$ 11,628	\$ 13,036	\$ 14,733	\$ 16,184	\$ 16,184
BP Length	37	-	35	33	29	32	30	29	28	32	31	29
HDD	38	-	398	862	953	923	755	486	195	78	8	-
CDD	151	-	25	-	-	-	1	5	23	81	243	212
Month Rate	\$ 10.747	\$ -	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.747	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ -
YTD Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-61.1%	-	-41.6%	-45.1%	-43.3%	-33.0%	-47.1%	-61.4%	-51.0%	-39.0%	-68.7%	-100.0%
YTD Use	-61.1%	-61.1%	-52.7%	-50.5%	-49.1%	-46.5%	-46.6%	-49.2%	-49.4%	-48.4%	-51.2%	-55.8%
Month \$	-61.1%	-	-41.6%	-45.1%	-43.3%	-33.0%	-47.1%	-61.4%	-51.0%	-39.0%	-68.7%	-100.0%
YTD \$	-61.1%	-61.1%	-52.7%	-50.5%	-49.1%	-46.5%	-46.6%	-49.2%	-49.4%	-48.4%	-51.2%	-55.8%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	245	-	125	128	106	79	133	230	136	101	296	324
YTD Use	245	245	371	499	605	684	817	1,047	1,183	1,284	1,580	1,904

Cost Avoidance

Month Use \$	\$ 2,636	\$ -	\$ 1,347	\$ 1,375	\$ 1,141	\$ 852	\$ 1,427	\$ 2,475	\$ 1,465	\$ 1,085	\$ 3,180	\$ 3,481
YTD \$	\$ 2,636	\$ 2,636	\$ 3,983	\$ 5,358	\$ 6,499	\$ 7,351	\$ 8,778	\$ 11,253	\$ 12,718	\$ 13,803	\$ 16,983	\$ 20,463

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-40 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	64	213	291	390	401	466	400	168	114	23	2	-
YTD Use	64	277	568	958	1,359	1,825	2,225	2,393	2,507	2,530	2,532	2,532
Month \$	\$ 1,281	\$ 4,226	\$ 5,775	\$ 7,766	\$ 7,965	\$ 9,265	\$ 7,955	\$ 3,337	\$ 2,257	\$ 449	\$ 38	\$ -
YTD \$	\$ 1,281	\$ 5,507	\$ 11,282	\$ 19,048	\$ 27,013	\$ 36,278	\$ 44,233	\$ 47,570	\$ 49,827	\$ 50,276	\$ 50,314	\$ 50,314
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 20.016	\$ 19.840	\$ 19.845	\$ 19.913	\$ 19.863	\$ 19.882	\$ 19.888	\$ 19.863	\$ 19.798	\$ 19.522	\$ 19.000	\$ -
YTD Rate	\$ 20.016	\$ 19.881	\$ 19.863	\$ 19.883	\$ 19.877	\$ 19.878	\$ 19.880	\$ 19.879	\$ 19.875	\$ 19.872	\$ 19.871	\$ 19.871

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use												
YTD Use												
Month \$												
YTD \$												
BP Length												
HDD												
CDD												
Month Rate												
YTD Rate												

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use												
YTD Use												
Month \$												
YTD \$												
BP Length												
HDD												
CDD												
Month Rate												
YTD Rate												

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-	-	-	-	-	-	-	-	-	-	-	-
YTD Use	-	-	-	-	-	-	-	-	-	-	-	-
Month \$	-	-	-	-	-	-	-	-	-	-	-	-
YTD \$	-	-	-	-	-	-	-	-	-	-	-	-
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	-	-	-	-	-	-	-	-	-	-	-	-
YTD Use	-	-	-	-	-	-	-	-	-	-	-	-

Cost Avoidance

Month Use \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YTD \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-40 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	179	112	78	110	75	100	130	95	107	192	89	59
YTD Use	179	291	369	479	554	654	784	879	986	1,178	1,267	1,326
Month \$	\$ 1,659	\$ 1,038	\$ 723	\$ 1,022	\$ 695	\$ 927	\$ 1,205	\$ 881	\$ 992	\$ 1,780	\$ 825	\$ 547
YTD \$	\$ 1,659	\$ 2,697	\$ 3,420	\$ 4,442	\$ 5,137	\$ 6,064	\$ 7,269	\$ 8,150	\$ 9,142	\$ 10,922	\$ 11,747	\$ 12,294
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.268	\$ 9.268	\$ 9.269	\$ 9.291	\$ 9.267	\$ 9.270	\$ 9.269	\$ 9.274	\$ 9.271	\$ 9.271	\$ 9.270	\$ 9.271
YTD Rate	\$ 9.268	\$ 9.268	\$ 9.268	\$ 9.273	\$ 9.273	\$ 9.272	\$ 9.272	\$ 9.272	\$ 9.272	\$ 9.272	\$ 9.272	\$ 9.271

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use												
YTD Use												
Month \$												
YTD \$												
BP Length												
HDD												
CDD												
Month Rate												
YTD Rate												

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use												
YTD Use												
Month \$												
YTD \$												
BP Length												
HDD												
CDD												
Month Rate												
YTD Rate												

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-	-	-	-	-	-	-	-	-	-	-	-
YTD Use	-	-	-	-	-	-	-	-	-	-	-	-
Month \$	-	-	-	-	-	-	-	-	-	-	-	-
YTD \$	-	-	-	-	-	-	-	-	-	-	-	-
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	-	-	-	-	-	-	-	-	-	-	-	-
YTD Use	-	-	-	-	-	-	-	-	-	-	-	-

Cost Avoidance

Month Use \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YTD \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-41 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	68	224	445	748	745	727	635	272	142	90	39	63
YTD Use	68	292	737	1,485	2,230	2,957	3,592	3,864	4,006	4,096	4,135	4,198
Month \$	\$ 1,351	\$ 4,451	\$ 8,842	\$ 14,869	\$ 14,804	\$ 14,446	\$ 12,618	\$ 5,405	\$ 2,822	\$ 1,788	\$ 775	\$ 1,252
YTD \$	\$ 1,351	\$ 5,802	\$ 14,644	\$ 29,513	\$ 44,317	\$ 58,763	\$ 71,381	\$ 76,786	\$ 79,608	\$ 81,396	\$ 82,171	\$ 83,423
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	53	300	454	657	678	829	679	221	125	16	-	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.868	\$ 19.871	\$ 19.870	\$ 19.878	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.873	\$ 19.867	\$ 19.872	\$ 19.873
YTD Rate	\$ 19.868	\$ 19.870	\$ 19.870	\$ 19.874	\$ 19.873	\$ 19.873	\$ 19.872	\$ 19.872	\$ 19.872	\$ 19.872	\$ 19.872	\$ 19.872

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	41	193	413	744	793	570	622	172	123	42	37	45
YTD Use	41	235	648	1,391	2,185	2,755	3,376	3,548	3,671	3,712	3,750	3,795
Month \$	\$ 969	\$ 4,508	\$ 9,649	\$ 17,371	\$ 18,528	\$ 13,307	\$ 14,517	\$ 4,007	\$ 2,876	\$ 970	\$ 875	\$ 1,062
YTD \$	\$ 969	\$ 5,477	\$ 15,126	\$ 32,497	\$ 51,025	\$ 64,331	\$ 78,848	\$ 82,855	\$ 85,731	\$ 86,701	\$ 87,576	\$ 88,638
BP Length	31	31	29	30	32	29	31	28	33	30	28	34
HDD	-	165	408	766	817	578	632	146	86	2	-	-
CDD	159	22	4	-	-	1	2	14	51	170	252	187
Month Rate	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354
YTD Rate	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	51	179	354	595	576	457	455	197	139	78	67	82
YTD Use	51	230	584	1,179	1,755	2,212	2,667	2,864	3,002	3,081	3,148	3,230
Month \$	\$ 1,191	\$ 4,180	\$ 8,267	\$ 13,896	\$ 13,452	\$ 10,673	\$ 10,626	\$ 4,596	\$ 3,239	\$ 1,829	\$ 1,560	\$ 1,915
YTD \$	\$ 1,191	\$ 5,371	\$ 13,639	\$ 27,534	\$ 40,986	\$ 51,659	\$ 62,285	\$ 66,881	\$ 70,120	\$ 71,949	\$ 73,509	\$ 75,424
BP Length	31	31	29	30	32	29	31	28	33	30	28	34
HDD	-	165	408	766	817	578	632	146	86	2	-	-
CDD	159	22	4	-	-	1	2	14	51	170	252	187
Month Rate	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354
YTD Rate	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354	\$ 23.354

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	23.0%	-7.3%	-14.3%	-20.0%	-27.4%	-19.8%	-26.8%	14.7%	12.6%	88.6%	78.3%	80.3%
YTD Use	23.0%	-1.9%	-9.8%	-15.3%	-19.7%	-19.7%	-21.0%	-19.3%	-18.2%	-17.0%	-16.1%	-14.9%
Month \$	23.0%	-7.3%	-14.3%	-20.0%	-27.4%	-19.8%	-26.8%	14.7%	12.6%	88.6%	78.3%	80.3%
YTD \$	23.0%	-1.9%	-9.8%	-15.3%	-19.7%	-19.7%	-21.0%	-19.3%	-18.2%	-17.0%	-16.1%	-14.9%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(10)	14	59	149	217	113	167	(25)	(16)	(37)	(29)	(37)
YTD Use	(10)	5	64	212	430	543	709	684	668	632	602	566

Cost Avoidance

Month Use \$	\$ (222)	\$ 328	\$ 1,381	\$ 3,476	\$ 5,076	\$ 2,634	\$ 3,891	\$ (589)	\$ (363)	\$ (859)	\$ (685)	\$ (853)
YTD \$	\$ (222)	\$ 106	\$ 1,487	\$ 4,962	\$ 10,038	\$ 12,672	\$ 16,563	\$ 15,974	\$ 15,611	\$ 14,752	\$ 14,067	\$ 13,214

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-41 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	271	251	323	253	269	271	167	321	514	277	270	267
YTD Use	271	522	845	1,098	1,367	1,638	1,805	2,126	2,640	2,917	3,187	3,454
Month \$	\$ 2,512	\$ 2,327	\$ 2,994	\$ 2,341	\$ 2,494	\$ 2,512	\$ 1,548	\$ 2,976	\$ 4,765	\$ 2,568	\$ 2,503	\$ 2,475
YTD \$	\$ 2,512	\$ 4,839	\$ 7,833	\$ 10,174	\$ 12,668	\$ 15,180	\$ 16,728	\$ 19,704	\$ 24,469	\$ 27,037	\$ 29,540	\$ 32,015
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.269	\$ 9.271	\$ 9.269	\$ 9.253	\$ 9.271	\$ 9.269	\$ 9.269	\$ 9.271	\$ 9.270	\$ 9.271	\$ 9.270	\$ 9.270
YTD Rate	\$ 9.269	\$ 9.270	\$ 9.270	\$ 9.266	\$ 9.267	\$ 9.267	\$ 9.268	\$ 9.268	\$ 9.269	\$ 9.269	\$ 9.269	\$ 9.269

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	268	267	358	258	277	285	162	289	447	340	272	293
YTD Use	268	534	892	1,151	1,427	1,712	1,874	2,163	2,609	2,949	3,221	3,514
Month \$	\$ 2,481	\$ 2,471	\$ 3,320	\$ 2,394	\$ 2,565	\$ 2,643	\$ 1,498	\$ 2,678	\$ 4,140	\$ 3,148	\$ 2,522	\$ 2,718
YTD \$	\$ 2,481	\$ 4,953	\$ 8,273	\$ 10,666	\$ 13,231	\$ 15,874	\$ 17,372	\$ 20,050	\$ 24,190	\$ 27,338	\$ 29,861	\$ 32,579
BP Length	30	32	35	31	32	30	30	27	28	32	31	34
HDD	-	193	643	926	977	732	766	243	182	27	6	5
CDD	232	31	4	-	-	1	2	14	41	165	260	193
Month Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270
YTD Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	406	484	514	435	444	415	409	369	386	453	446	494
YTD Use	406	890	1,404	1,839	2,283	2,698	3,107	3,476	3,862	4,315	4,761	5,255
Month \$	\$ 3,764	\$ 4,487	\$ 4,765	\$ 4,033	\$ 4,116	\$ 3,847	\$ 3,792	\$ 3,421	\$ 3,578	\$ 4,200	\$ 4,135	\$ 4,580
YTD \$	\$ 3,764	\$ 8,251	\$ 13,016	\$ 17,048	\$ 21,164	\$ 25,012	\$ 28,803	\$ 32,224	\$ 35,802	\$ 40,002	\$ 44,137	\$ 48,716
BP Length	30	32	35	31	32	30	30	27	28	32	31	34
HDD	-	193	643	926	977	732	766	243	182	27	6	5
CDD	232	31	4	-	-	1	2	14	41	165	260	193
Month Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270
YTD Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	51.7%	81.6%	43.5%	68.5%	60.5%	45.6%	153.1%	27.7%	-13.6%	33.4%	63.9%	68.5%
YTD Use	51.7%	66.6%	57.3%	59.8%	60.0%	57.6%	65.8%	60.7%	48.0%	46.3%	47.8%	49.5%
Month \$	51.7%	81.6%	43.5%	68.5%	60.5%	45.6%	153.1%	27.7%	-13.6%	33.4%	63.9%	68.5%
YTD \$	51.7%	66.6%	57.3%	59.8%	60.0%	57.6%	65.8%	60.7%	48.0%	46.3%	47.8%	49.5%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(138)	(217)	(156)	(177)	(167)	(130)	(247)	(80)	61	(113)	(174)	(201)
YTD Use	(138)	(356)	(512)	(688)	(856)	(986)	(1,233)	(1,313)	(1,253)	(1,366)	(1,540)	(1,741)

Cost Avoidance

Month Use \$	\$ (1,283)	\$ (2,015)	\$ (1,445)	\$ (1,639)	\$ (1,551)	\$ (1,205)	\$ (2,293)	\$ (743)	\$ 562	\$ (1,052)	\$ (1,612)	\$ (1,861)
YTD \$	\$ (1,283)	\$ (3,298)	\$ (4,743)	\$ (6,382)	\$ (7,933)	\$ (9,138)	\$ (11,431)	\$ (12,174)	\$ (11,612)	\$ (12,664)	\$ (14,276)	\$ (16,137)

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-44 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	60	114	213	197	300	233	129	149	67	61	29	42
YTD Use	60	174	387	584	884	1,117	1,246	1,395	1,462	1,523	1,552	1,594
Month \$	\$ 1,192	\$ 2,265	\$ 4,232	\$ 3,919	\$ 5,961	\$ 4,630	\$ 2,563	\$ 2,961	\$ 1,331	\$ 1,212	\$ 576	\$ 835
YTD \$	\$ 1,192	\$ 3,457	\$ 7,689	\$ 11,608	\$ 17,569	\$ 22,199	\$ 24,762	\$ 27,723	\$ 29,054	\$ 30,266	\$ 30,842	\$ 31,677
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	243	566	724	936	957	1,081	956	469	339	112	17	7
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.867	\$ 19.868	\$ 19.869	\$ 19.893	\$ 19.870	\$ 19.871	\$ 19.868	\$ 19.872	\$ 19.866	\$ 19.869	\$ 19.862	\$ 19.881
YTD Rate	\$ 19.867	\$ 19.868	\$ 19.868	\$ 19.877	\$ 19.874	\$ 19.874	\$ 19.873	\$ 19.873	\$ 19.873	\$ 19.873	\$ 19.872	\$ 19.873

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	43	98	194	253	239	180	178	88	76	35	26	40
YTD Use	43	141	335	588	827	1,006	1,184	1,273	1,349	1,384	1,410	1,449
Month \$	\$ 846	\$ 1,956	\$ 3,858	\$ 5,025	\$ 4,745	\$ 3,568	\$ 3,536	\$ 1,756	\$ 1,518	\$ 690	\$ 513	\$ 790
YTD \$	\$ 846	\$ 2,802	\$ 6,660	\$ 11,685	\$ 16,430	\$ 19,998	\$ 23,535	\$ 25,291	\$ 26,808	\$ 27,498	\$ 28,011	\$ 28,801
BP Length	29	29	33	31	31	29	29	30	32	30	29	32
HDD	90	372	837	1,142	1,071	781	773	317	248	46	6	63
CDD	121	25	-	-	-	1	2	26	50	223	241	139
Month Rate	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870
YTD Rate	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	48	89	180	294	262	229	164	142	53	72	28	50
YTD Use	48	137	317	611	873	1,102	1,266	1,408	1,460	1,532	1,561	1,611
Month \$	\$ 954	\$ 1,768	\$ 3,577	\$ 5,842	\$ 5,206	\$ 4,550	\$ 3,259	\$ 2,820	\$ 1,043	\$ 1,431	\$ 562	\$ 999
YTD \$	\$ 954	\$ 2,722	\$ 6,299	\$ 12,141	\$ 17,347	\$ 21,897	\$ 25,155	\$ 27,975	\$ 29,018	\$ 30,449	\$ 31,011	\$ 32,011
BP Length	29	29	33	31	31	29	29	30	32	30	29	32
HDD	90	372	837	1,142	1,071	781	773	317	248	46	6	63
CDD	121	25	-	-	-	1	2	26	50	223	241	139
Month Rate	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870
YTD Rate	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	12.7%	-9.6%	-7.3%	16.3%	9.7%	27.5%	-7.9%	60.6%	-31.3%	107.5%	9.6%	26.4%
YTD Use	12.7%	-2.8%	-5.4%	3.9%	5.6%	9.5%	6.9%	10.6%	8.2%	10.7%	10.7%	11.1%
Month \$	12.7%	-9.6%	-7.3%	16.3%	9.7%	27.5%	-7.9%	60.6%	-31.3%	107.5%	9.6%	26.4%
YTD \$	12.7%	-2.8%	-5.4%	3.9%	5.6%	9.5%	6.9%	10.6%	8.2%	10.7%	10.7%	11.1%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(5)	9	14	(41)	(23)	(49)	14	(54)	24	(37)	(2)	(11)
YTD Use	(5)	4	18	(23)	(46)	(96)	(82)	(135)	(111)	(149)	(151)	(162)

Cost Avoidance

Month Use \$	\$ (108)	\$ 187	\$ 282	\$ (817)	\$ (461)	\$ (982)	\$ 278	\$ (1,064)	\$ 475	\$ (741)	\$ (49)	\$ (209)
YTD \$	\$ (108)	\$ 80	\$ 361	\$ (455)	\$ (916)	\$ (1,898)	\$ (1,621)	\$ (2,684)	\$ (2,210)	\$ (2,951)	\$ (3,000)	\$ (3,209)

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-45 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	80	162	288	498	486	428	461	152	137	187	67	53
YTD Use	80	242	530	1,028	1,514	1,942	2,403	2,555	2,692	2,879	2,946	2,999
Month \$	\$ 1,590	\$ 3,219	\$ 5,723	\$ 9,892	\$ 9,657	\$ 8,505	\$ 9,160	\$ 3,020	\$ 2,722	\$ 3,716	\$ 1,331	\$ 1,053
YTD \$	\$ 1,590	\$ 4,809	\$ 10,532	\$ 20,424	\$ 30,081	\$ 38,586	\$ 47,746	\$ 50,766	\$ 53,488	\$ 57,204	\$ 58,535	\$ 59,588
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	92	382	544	750	771	913	770	293	188	30	-	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.875	\$ 19.870	\$ 19.872	\$ 19.863	\$ 19.870	\$ 19.871	\$ 19.870	\$ 19.868	\$ 19.869	\$ 19.872	\$ 19.866	\$ 19.868
YTD Rate	\$ 19.875	\$ 19.872	\$ 19.872	\$ 19.868	\$ 19.869	\$ 19.869	\$ 19.869	\$ 19.869	\$ 19.869	\$ 19.869	\$ 19.869	\$ 19.869

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	73	176	293	464	494	371	403	160	136	74	66	75
YTD Use	73	249	542	1,006	1,500	1,871	2,274	2,434	2,570	2,644	2,709	2,785
Month \$	\$ 1,682	\$ 4,061	\$ 6,745	\$ 10,677	\$ 11,388	\$ 8,544	\$ 9,287	\$ 3,680	\$ 3,134	\$ 1,694	\$ 1,514	\$ 1,734
YTD \$	\$ 1,682	\$ 5,744	\$ 12,489	\$ 23,166	\$ 34,555	\$ 43,099	\$ 52,386	\$ 56,066	\$ 59,200	\$ 60,895	\$ 62,409	\$ 64,142
BP Length	31	31	29	30	32	29	31	29	32	30	29	33
HDD	6	230	492	856	913	661	721	204	138	12	-	1
CDD	159	22	4	-	-	1	2	14	51	170	255	184
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	71	132	242	365	394	325	337	172	147	86	98	85
YTD Use	71	203	445	810	1,204	1,529	1,866	2,038	2,185	2,270	2,368	2,453
Month \$	\$ 1,636	\$ 3,041	\$ 5,575	\$ 8,408	\$ 9,076	\$ 7,487	\$ 7,763	\$ 3,964	\$ 3,375	\$ 1,970	\$ 2,264	\$ 1,949
YTD \$	\$ 1,636	\$ 4,676	\$ 10,251	\$ 18,659	\$ 27,735	\$ 35,221	\$ 42,984	\$ 46,948	\$ 50,323	\$ 52,293	\$ 54,557	\$ 56,506
BP Length	31	31	29	30	32	29	31	29	32	30	29	33
HDD	6	230	492	856	913	661	721	204	138	12	-	1
CDD	159	22	4	-	-	1	2	14	51	170	255	184
Month Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035
YTD Rate	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035	\$ 23.035

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-2.8%	-25.1%	-17.4%	-21.3%	-20.3%	-12.4%	-16.4%	7.7%	7.7%	16.3%	49.5%	12.4%
YTD Use	-2.8%	-18.6%	-17.9%	-19.5%	-19.7%	-18.3%	-17.9%	-16.3%	-15.0%	-14.1%	-12.6%	-11.9%
Month \$	-2.8%	-25.1%	-17.4%	-21.3%	-20.3%	-12.4%	-16.4%	7.7%	7.7%	16.3%	49.5%	12.4%
YTD \$	-2.8%	-18.6%	-17.9%	-19.5%	-19.7%	-18.3%	-17.9%	-16.3%	-15.0%	-14.1%	-12.6%	-11.9%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	2	44	51	99	100	46	66	(12)	(10)	(12)	(33)	(9)
YTD Use	2	46	97	196	296	342	408	396	385	373	341	332

Cost Avoidance

Month Use \$	\$ 47	\$ 1,021	\$ 1,171	\$ 2,269	\$ 2,312	\$ 1,058	\$ 1,524	\$ (284)	\$ (240)	\$ (275)	\$ (750)	\$ (215)
YTD \$	\$ 47	\$ 1,067	\$ 2,238	\$ 4,508	\$ 6,820	\$ 7,878	\$ 9,402	\$ 9,118	\$ 8,877	\$ 8,602	\$ 7,852	\$ 7,636

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-45 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	203	229	215	186	240	245	184	645	259	174	249	207
YTD Use	203	432	647	833	1,073	1,318	1,502	2,147	2,406	2,580	2,829	3,036
Month \$	\$ 1,882	\$ 2,123	\$ 1,993	\$ 1,724	\$ 2,225	\$ 2,271	\$ 1,706	\$ 5,979	\$ 2,401	\$ 1,613	\$ 2,308	\$ 1,919
YTD \$	\$ 1,882	\$ 4,005	\$ 5,998	\$ 7,722	\$ 9,947	\$ 12,218	\$ 13,924	\$ 19,903	\$ 22,304	\$ 23,917	\$ 26,225	\$ 28,144
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.271	\$ 9.271	\$ 9.270	\$ 9.269	\$ 9.271	\$ 9.269	\$ 9.272	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.269	\$ 9.271
YTD Rate	\$ 9.271	\$ 9.271	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	202	231	252	188	244	259	178	581	273	201	240	226
YTD Use	202	434	686	874	1,119	1,377	1,555	2,136	2,409	2,610	2,850	3,076
Month \$	\$ 2,174	\$ 2,487	\$ 2,712	\$ 2,024	\$ 2,625	\$ 2,780	\$ 1,914	\$ 6,238	\$ 2,938	\$ 2,159	\$ 2,580	\$ 2,426
YTD \$	\$ 2,174	\$ 4,661	\$ 7,373	\$ 9,397	\$ 12,022	\$ 14,802	\$ 16,715	\$ 22,954	\$ 25,891	\$ 28,051	\$ 30,631	\$ 33,057
BP Length	30	32	35	31	32	30	30	27	28	32	31	33
HDD	-	193	643	926	977	732	766	243	182	27	6	5
CDD	232	31	4	-	-	1	2	14	41	165	260	191
Month Rate	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.747
YTD Rate	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	211	212	209	182	204	213	216	-	197	210	310	227
YTD Use	211	423	632	814	1,018	1,231	1,447	1,447	1,644	1,854	2,164	2,391
Month \$	\$ 2,268	\$ 2,278	\$ 2,246	\$ 1,956	\$ 2,192	\$ 2,289	\$ 2,321	\$ -	\$ 2,117	\$ 2,257	\$ 3,331	\$ 2,439
YTD \$	\$ 2,268	\$ 4,546	\$ 6,792	\$ 8,748	\$ 10,940	\$ 13,229	\$ 15,550	\$ 15,550	\$ 17,667	\$ 19,924	\$ 23,255	\$ 25,695
BP Length	30	32	35	31	32	30	30	27	28	32	31	33
HDD	-	193	643	926	977	732	766	243	182	27	6	5
CDD	232	31	4	-	-	1	2	14	41	165	260	191
Month Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ -	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.747
YTD Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	4.3%	-8.4%	-17.2%	-3.4%	-16.5%	-17.7%	21.3%	-100.0%	-27.9%	4.5%	29.1%	0.5%
YTD Use	4.3%	-2.5%	-7.9%	-6.9%	-9.0%	-10.6%	-7.0%	-32.3%	-31.8%	-29.0%	-24.1%	-22.3%
Month \$	4.3%	-8.4%	-17.2%	-3.4%	-16.5%	-17.7%	21.3%	-100.0%	-27.9%	4.5%	29.1%	0.5%
YTD \$	4.3%	-2.5%	-7.9%	-6.9%	-9.0%	-10.6%	-7.0%	-32.3%	-31.8%	-29.0%	-24.1%	-22.3%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(9)	19	43	6	40	46	(38)	581	76	(9)	(70)	(1)
YTD Use	(9)	11	54	60	101	146	108	689	765	756	686	685

Cost Avoidance

Month Use \$	\$ (94)	\$ 209	\$ 466	\$ 68	\$ 433	\$ 491	\$ (408)	\$ 6,238	\$ 821	\$ (97)	\$ (751)	\$ (13)
YTD \$	\$ (94)	\$ 115	\$ 581	\$ 649	\$ 1,082	\$ 1,573	\$ 1,165	\$ 7,403	\$ 8,224	\$ 8,127	\$ 7,375	\$ 7,362

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-46 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	29	99	278	415	489	488	363	130	88	17	36	24
YTD Use	29	128	406	821	1,310	1,798	2,161	2,291	2,379	2,396	2,432	2,456
Month \$	\$ 576	\$ 1,967	\$ 5,524	\$ 8,256	\$ 9,717	\$ 9,697	\$ 7,213	\$ 2,583	\$ 1,749	\$ 338	\$ 715	\$ 477
YTD \$	\$ 576	\$ 2,543	\$ 8,067	\$ 16,323	\$ 26,040	\$ 35,737	\$ 42,950	\$ 45,533	\$ 47,282	\$ 47,620	\$ 48,335	\$ 48,812
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	16	184	312	502	523	689	534	120	50	2	-	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.862	\$ 19.869	\$ 19.871	\$ 19.894	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.869	\$ 19.875	\$ 19.882	\$ 19.861	\$ 19.875
YTD Rate	\$ 19.862	\$ 19.867	\$ 19.869	\$ 19.882	\$ 19.878	\$ 19.876	\$ 19.875	\$ 19.875	\$ 19.875	\$ 19.875	\$ 19.875	\$ 19.875

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	33	82	238	471	502	349	384	87	60	32	30	43
YTD Use	33	115	353	824	1,326	1,675	2,059	2,147	2,206	2,238	2,268	2,311
Month \$	\$ 653	\$ 1,631	\$ 4,725	\$ 9,357	\$ 9,980	\$ 6,942	\$ 7,629	\$ 1,737	\$ 1,190	\$ 631	\$ 589	\$ 863
YTD \$	\$ 653	\$ 2,283	\$ 7,008	\$ 16,365	\$ 26,346	\$ 33,288	\$ 40,917	\$ 42,654	\$ 43,844	\$ 44,476	\$ 45,065	\$ 45,928
BP Length	31	28	32	30	32	29	31	28	33	30	28	41
HDD	-	74	286	616	657	447	493	81	35	-	-	-
CDD	159	22	4	-	-	1	2	14	51	170	252	191
Month Rate	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871
YTD Rate	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	39	99	228	395	457	367	372	199	123	52	37	54
YTD Use	39	138	366	761	1,218	1,585	1,957	2,156	2,279	2,331	2,368	2,422
Month \$	\$ 775	\$ 1,967	\$ 4,531	\$ 7,849	\$ 9,081	\$ 7,293	\$ 7,392	\$ 3,952	\$ 2,446	\$ 1,027	\$ 733	\$ 1,073
YTD \$	\$ 775	\$ 2,742	\$ 7,273	\$ 15,122	\$ 24,203	\$ 31,496	\$ 38,888	\$ 42,840	\$ 45,286	\$ 46,314	\$ 47,047	\$ 48,120
BP Length	31	28	32	30	32	29	31	28	33	30	28	41
HDD	-	74	286	616	657	447	493	81	35	-	-	-
CDD	159	22	4	-	-	1	2	14	51	170	252	191
Month Rate	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871
YTD Rate	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	18.8%	20.7%	-4.1%	-16.1%	-9.0%	5.0%	-3.1%	127.6%	105.5%	62.7%	24.4%	24.3%
YTD Use	18.8%	20.1%	3.8%	-7.6%	-8.1%	-5.4%	-5.0%	0.4%	3.3%	4.1%	4.4%	4.8%
Month \$	18.8%	20.7%	-4.1%	-16.1%	-9.0%	5.0%	-3.1%	127.6%	105.5%	62.7%	24.4%	24.3%
YTD \$	18.8%	20.1%	3.8%	-7.6%	-8.1%	-5.4%	-5.0%	0.4%	3.3%	4.1%	4.4%	4.8%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	(6)	(17)	10	76	45	(18)	12	(111)	(63)	(20)	(7)	(11)
YTD Use	(6)	(23)	(13)	63	108	90	102	(9)	(73)	(93)	(100)	(110)

Cost Avoidance

Month Use \$	\$ (122)	\$ (337)	\$ 194	\$ 1,508	\$ 899	\$ (350)	\$ 237	\$ (2,216)	\$ (1,256)	\$ (396)	\$ (144)	\$ (210)
YTD \$	\$ (122)	\$ (459)	\$ (265)	\$ 1,243	\$ 2,143	\$ 1,792	\$ 2,029	\$ (187)	\$ (1,442)	\$ (1,838)	\$ (1,982)	\$ (2,192)

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-46 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	173	111	184	174	153	370	165	262	179	714	208	168
YTD Use	173	284	468	642	795	1,165	1,330	1,592	1,771	2,485	2,693	2,861
Month \$	\$ 1,604	\$ 1,029	\$ 1,706	\$ 1,616	\$ 1,418	\$ 3,430	\$ 1,530	\$ 2,429	\$ 1,659	\$ 6,619	\$ 1,928	\$ 1,557
YTD \$	\$ 1,604	\$ 2,633	\$ 4,339	\$ 5,955	\$ 7,373	\$ 10,803	\$ 12,333	\$ 14,762	\$ 16,421	\$ 23,040	\$ 24,968	\$ 26,525
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.272	\$ 9.270	\$ 9.272	\$ 9.287	\$ 9.268	\$ 9.270	\$ 9.273	\$ 9.271	\$ 9.268	\$ 9.270	\$ 9.269	\$ 9.268
YTD Rate	\$ 9.272	\$ 9.271	\$ 9.271	\$ 9.276	\$ 9.274	\$ 9.273	\$ 9.273	\$ 9.273	\$ 9.272	\$ 9.272	\$ 9.271	\$ 9.271

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	178	102	192	175	154	362	173	250	191	696	237	157
YTD Use	178	281	473	647	801	1,163	1,336	1,585	1,776	2,472	2,709	2,866
Month \$	\$ 1,651	\$ 950	\$ 1,782	\$ 1,618	\$ 1,425	\$ 3,353	\$ 1,603	\$ 2,316	\$ 1,768	\$ 6,452	\$ 2,199	\$ 1,457
YTD \$	\$ 1,651	\$ 2,600	\$ 4,382	\$ 6,000	\$ 7,425	\$ 10,778	\$ 12,381	\$ 14,697	\$ 16,465	\$ 22,916	\$ 25,116	\$ 26,572
BP Length	31	28	33	31	31	28	31	29	32	30	33	29
HDD	12	237	596	953	940	698	783	265	181	28	-	5
CDD	168	22	4	-	-	1	2	14	51	161	287	159
Month Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270
YTD Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	152	137	160	141	146	132	384	357	438	398	365	332
YTD Use	152	289	449	590	736	868	1,252	1,609	2,047	2,445	2,810	3,142
Month \$	\$ 1,409	\$ 1,270	\$ 1,483	\$ 1,307	\$ 1,353	\$ 1,224	\$ 3,560	\$ 3,309	\$ 4,060	\$ 3,690	\$ 3,384	\$ 3,078
YTD \$	\$ 1,409	\$ 2,679	\$ 4,162	\$ 5,469	\$ 6,823	\$ 8,047	\$ 11,606	\$ 14,916	\$ 18,976	\$ 22,666	\$ 26,049	\$ 29,127
BP Length	31	28	33	31	31	28	31	29	32	30	33	29
HDD	12	237	596	953	940	698	783	265	181	28	-	5
CDD	168	22	4	-	-	1	2	14	51	161	287	159
Month Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270
YTD Rate	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270	\$ 9.270

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-14.6%	33.7%	-16.7%	-19.2%	-5.0%	-63.5%	122.1%	42.9%	129.7%	-42.8%	53.9%	111.2%
YTD Use	-14.6%	3.0%	-5.0%	-8.8%	-8.1%	-25.3%	-6.3%	1.5%	15.3%	-1.1%	3.7%	9.6%
Month \$	-14.6%	33.7%	-16.7%	-19.2%	-5.0%	-63.5%	122.1%	42.9%	129.7%	-42.8%	53.9%	111.2%
YTD \$	-14.6%	3.0%	-5.0%	-8.8%	-8.1%	-25.3%	-6.3%	1.5%	15.3%	-1.1%	3.7%	9.6%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	26	(35)	32	34	8	230	(211)	(107)	(247)	298	(128)	(175)
YTD Use	26	(8)	24	57	65	295	84	(24)	(271)	27	(101)	(276)

Cost Avoidance

Month Use \$	\$ 242	\$ (320)	\$ 298	\$ 311	\$ 71	\$ 2,130	\$ (1,957)	\$ (993)	\$ (2,293)	\$ 2,762	\$ (1,185)	\$ (1,621)
YTD \$	\$ 242	\$ (79)	\$ 220	\$ 530	\$ 602	\$ 2,731	\$ 774	\$ (219)	\$ (2,512)	\$ 251	\$ (934)	\$ (2,555)

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-47 Gas

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	31	91	174	164	267	251	192	106	54	27	28	23
YTD Use	31	122	296	460	727	978	1,170	1,276	1,330	1,357	1,385	1,408
Month \$	\$ 616	\$ 1,808	\$ 3,457	\$ 3,260	\$ 5,305	\$ 4,988	\$ 3,815	\$ 2,106	\$ 1,073	\$ 537	\$ 556	\$ 457
YTD \$	\$ 616	\$ 2,424	\$ 5,881	\$ 9,141	\$ 14,446	\$ 19,434	\$ 23,249	\$ 25,355	\$ 26,428	\$ 26,965	\$ 27,521	\$ 27,978
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	34	250	395	595	616	773	621	178	90	8	-	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 19.871	\$ 19.868	\$ 19.868	\$ 19.878	\$ 19.869	\$ 19.873	\$ 19.870	\$ 19.868	\$ 19.870	\$ 19.889	\$ 19.857	\$ 19.870
YTD Rate	\$ 19.871	\$ 19.869	\$ 19.868	\$ 19.872	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871	\$ 19.871

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	35	69	148	280	235	192	170	60	50	33	32	32
YTD Use	35	104	252	532	767	959	1,129	1,189	1,239	1,271	1,303	1,335
Month \$	\$ 693	\$ 1,377	\$ 2,938	\$ 5,569	\$ 4,671	\$ 3,812	\$ 3,378	\$ 1,187	\$ 988	\$ 649	\$ 628	\$ 631
YTD \$	\$ 693	\$ 2,069	\$ 5,008	\$ 10,576	\$ 15,247	\$ 19,059	\$ 22,437	\$ 23,624	\$ 24,612	\$ 25,261	\$ 25,889	\$ 26,520
BP Length	32	29	31	34	29	31	29	30	32	30	29	29
HDD	-	130	392	836	699	543	476	93	51	-	-	1
CDD	145	22	4	-	-	1	2	26	50	214	243	142
Month Rate	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870
YTD Rate	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	30	83	156	264	236	225	170	94	55	29	26	27
YTD Use	30	113	269	533	769	994	1,164	1,258	1,313	1,342	1,367	1,394
Month \$	\$ 596	\$ 1,649	\$ 3,100	\$ 5,246	\$ 4,689	\$ 4,471	\$ 3,378	\$ 1,864	\$ 1,087	\$ 578	\$ 513	\$ 536
YTD \$	\$ 596	\$ 2,245	\$ 5,345	\$ 10,590	\$ 15,280	\$ 19,750	\$ 23,128	\$ 24,992	\$ 26,079	\$ 26,657	\$ 27,170	\$ 27,706
BP Length	32	29	31	34	29	31	29	30	32	30	29	29
HDD	-	130	392	836	699	543	476	93	51	-	-	1
CDD	145	22	4	-	-	1	2	26	50	214	243	142
Month Rate	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870
YTD Rate	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870	\$ 19.870

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-13.9%	19.8%	5.5%	-5.8%	0.4%	17.3%	-0.0%	57.0%	10.0%	-11.0%	-18.3%	-14.9%
YTD Use	-13.9%	8.5%	6.7%	0.1%	0.2%	3.6%	3.1%	5.8%	6.0%	5.5%	4.9%	4.5%
Month \$	-13.9%	19.8%	5.5%	-5.8%	0.4%	17.3%	-0.0%	57.0%	10.0%	-11.0%	-18.3%	-14.9%
YTD \$	-13.9%	8.5%	6.7%	0.1%	0.2%	3.6%	3.1%	5.8%	6.0%	5.5%	4.9%	4.5%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	5	(14)	(8)	16	(1)	(33)	0	(34)	(5)	4	6	5
YTD Use	5	(9)	(17)	(1)	(2)	(35)	(35)	(69)	(74)	(70)	(64)	(60)

Cost Avoidance

Month Use \$	\$ 97	\$ (272)	\$ (161)	\$ 323	\$ (18)	\$ (659)	\$ 0	\$ (676)	\$ (99)	\$ 71	\$ 115	\$ 94
YTD \$	\$ 97	\$ (176)	\$ (337)	\$ (14)	\$ (33)	\$ (691)	\$ (691)	\$ (1,368)	\$ (1,467)	\$ (1,396)	\$ (1,281)	\$ (1,186)

Meter Detail Report

Reference: Actual usage and costs for past Year.

Baseline: Current usage and costs based upon historic patterns of Unit use.

SimActual: Actual usage and calculated costs for current Year.

Meter: PA 1-47 Water

Reference

	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006	Aug 2006
Month Use	147	105	139	95	66	84	202	111	174	128	146	132
YTD Use	147	252	391	486	552	636	838	949	1,123	1,251	1,397	1,529
Month \$	\$ 1,363	\$ 973	\$ 1,283	\$ 881	\$ 612	\$ 779	\$ 1,873	\$ 1,029	\$ 1,613	\$ 1,187	\$ 1,353	\$ 1,224
YTD \$	\$ 1,363	\$ 2,336	\$ 3,619	\$ 4,500	\$ 5,112	\$ 5,891	\$ 7,764	\$ 8,793	\$ 10,406	\$ 11,593	\$ 12,946	\$ 14,170
BP Length	30	31	30	31	31	28	31	30	31	30	31	31
HDD	134	442	604	812	833	969	832	349	236	47	4	-
CDD	12	-	-	-	-	-	-	-	42	83	263	266
Month Rate	\$ 9.272	\$ 9.267	\$ 9.230	\$ 9.274	\$ 9.273	\$ 9.274	\$ 9.272	\$ 9.270	\$ 9.270	\$ 9.273	\$ 9.267	\$ 9.273
YTD Rate	\$ 9.272	\$ 9.270	\$ 9.256	\$ 9.259	\$ 9.261	\$ 9.263	\$ 9.265	\$ 9.266	\$ 9.266	\$ 9.267	\$ 9.267	\$ 9.267

Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	132	100	142	97	67	112	191	121	158	146	-	280
YTD Use	132	231	373	470	537	649	840	960	1,118	1,264	1,264	1,544
Month \$	\$ 1,413	\$ 1,073	\$ 1,525	\$ 1,042	\$ 716	\$ 1,205	\$ 2,048	\$ 1,298	\$ 1,694	\$ 1,565	\$ -	\$ 3,010
YTD \$	\$ 1,413	\$ 2,486	\$ 4,011	\$ 5,053	\$ 5,769	\$ 6,974	\$ 9,022	\$ 10,320	\$ 12,014	\$ 13,579	\$ 13,579	\$ 16,589
BP Length	29	28	33	35	28	28	34	28	30	33	-	62
HDD	38	290	714	1,194	780	647	727	201	93	9	-	57
CDD	92	25	-	-	-	1	5	23	50	250	-	352
Month Rate	\$ 10.746	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.747	\$ -	\$ 10.746
YTD Rate	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747

SimActual

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	54	109	77	126	69	52	64	292	134	150	-	216
YTD Use	54	163	240	366	435	487	551	843	977	1,127	1,127	1,343
Month \$	\$ 580	\$ 1,171	\$ 827	\$ 1,354	\$ 742	\$ 559	\$ 688	\$ 3,138	\$ 1,440	\$ 1,612	\$ -	\$ 2,321
YTD \$	\$ 580	\$ 1,752	\$ 2,579	\$ 3,933	\$ 4,675	\$ 5,234	\$ 5,921	\$ 9,059	\$ 10,499	\$ 12,111	\$ 12,111	\$ 14,433
BP Length	29	28	33	35	28	28	34	28	30	33	-	62
HDD	38	290	714	1,194	780	647	727	201	93	9	-	57
CDD	92	25	-	-	-	1	5	23	50	250	-	352
Month Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.747	\$ 10.747	\$ -	\$ 10.746
YTD Rate	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.747	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746	\$ 10.746

SimActual vs. Baseline

	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017
Month Use	-58.9%	9.2%	-45.7%	29.9%	3.6%	-53.6%	-66.4%	141.7%	-15.0%	3.0%	-	-22.9%
YTD Use	-58.9%	-29.5%	-35.7%	-22.2%	-19.0%	-25.0%	-34.4%	-12.2%	-12.6%	-10.8%	-10.8%	-13.0%
Month \$	-58.9%	9.2%	-45.7%	29.9%	3.6%	-53.6%	-66.4%	141.7%	-15.0%	3.0%	-	-22.9%
YTD \$	-58.9%	-29.5%	-35.7%	-22.2%	-19.0%	-25.0%	-34.4%	-12.2%	-12.6%	-10.8%	-10.8%	-13.0%
BP Length	-	-	-	-	-	-	-	-	-	-	-	-
HDD	-	-	-	-	-	-	-	-	-	-	-	-
CDD	-	-	-	-	-	-	-	-	-	-	-	-

Use Avoidance

Month Use	78	(9)	65	(29)	(2)	60	127	(171)	24	(4)	-	64
YTD Use	78	68	133	104	102	162	289	117	141	137	137	201

Cost Avoidance

Month Use \$	\$ 833	\$ (99)	\$ 698	\$ (312)	\$ (26)	\$ 646	\$ 1,360	\$ (1,840)	\$ 254	\$ (46)	\$ -	\$ 689
YTD \$	\$ 833	\$ 734	\$ 1,432	\$ 1,120	\$ 1,094	\$ 1,740	\$ 3,100	\$ 1,261	\$ 1,515	\$ 1,468	\$ 1,468	\$ 2,157

Option A Savings

This section of the report provides Housing Authority of the City of Pittsburgh with a breakdown of the savings achieved from the Option A ECMs.

Annual cost avoidance is calculated based on the stipulated & one-time reconciliation.

ECM #	ECM Description	kWh	kWh \$	MCF	MCF \$	Water	Water \$	Total \$
1	Retrofit Tenant Area Lighting	1,729,869	\$ 137,180					\$ 137,180
2	Retrofit Common Area Lighting	884,399	\$ 76,928					\$ 76,928
6	High Efficiency Refrigerators	96,142	\$ 10,941					\$ 10,941
10, 11	Water Conservation	222,931	\$ 25,370	840	\$ 19,341	1,797	\$ 19,308	\$ 64,019
16	Building Envelope Improvements	22,012	\$ 2,505					\$ 2,505
18	Roof Replacement and/or Added Insulation	146	\$ 17					\$ 17
21	Limiting Thermostats	92,546	\$ 10,532	2,294	\$ 52,832			\$ 63,363
30	Replace Rooftop Ventilations Units	13,243	\$ 1,507					\$ 1,507
32	Ventilation Unit Heat Recovery	3,842	\$ 437					\$ 437
37	Insulate Make Up Air Duct on Roof	212	\$ 24					\$ 24
Total		3,065,343	\$ 265,441	3,133	\$ 72,173	1,797	\$ 19,308	\$ 356,922

Lighting Savings

ECM: Interior Tenant Area Lighting Retrofit

HA Site #	Site Name	Proposed Savings		As Installed Savings		Difference	
		Electric kWh	Electric \$	Electric kWh	Electric \$	Electric kWh	Electric \$
PA 1-02	Bedford Dwellings	280,238	\$ 31,891	380,228	\$ 43,270	99,990	\$ 11,379
PA 1-04	Arlington Heights						
PA 1-05	Allegheny Dwellings	293,553	\$ 33,406	295,457	\$ 33,623	1,904	\$ 217
PA 1-09	Northview Heights*						
PA 1-09H	Northview High Rise*						
PA 1-11	Hamilton-Larimer	36,147	\$ 4,114	41,936	\$ 4,772	5,789	\$ 659
PA 1-15	Pennsylvania-Bidwell	84,245	\$ 9,587	84,959	\$ 9,668	714	\$ 81
PA 1-17	Pressley Street	82,441	\$ 9,382	68,020	\$ 7,741	-14,421	\$ (1,641)
PA 1-20	Homewood North*						
PA 1-31	Murray Tower	26,150	\$ 2,976	46,433	\$ 5,284	20,283	\$ 2,308
PA 1-32	Glen Hazel Family	162,295	\$ 18,469	153,182	\$ 17,432	-9,113	\$ (1,037)
PA 1-40	Mazza Pavilion (Brookline)						
PA 1-41	Caliguiri Plaza (Allentown)	42,285	\$ 4,812	53,296	\$ 6,065	11,011	\$ 1,253
PA 1-44	Finello Pavilion (South Oakland)	20,869	\$ 2,375	24,773	\$ 2,819	3,904	\$ 444
PA 1-45	Morse Gardens	2,572	\$ 293	7,332	\$ 834	4,760	\$ 542
PA 1-46	Carrick Regency	26,293	\$ 2,992	33,678	\$ 3,833	7,385	\$ 840
PA 1-47	Gualtieri Manor	13,122	\$ 1,493	16,158	\$ 1,839	3,036	\$ 345
		1,493,088	\$ 169,913	1,729,869	\$ 137,180	236,781	\$ 26,946

ECM: Interior Common Area Lighting Retrofit

HA Site #	Site Name	Proposed Savings		As Installed Savings		Difference	
		Electric kWh	Electric \$	Electric kWh	Electric \$	Electric kWh	Electric \$
PA 1-02	Bedford Dwellings	194,663	\$ 22,153	106,355	\$ 12,103	-88,308	\$ (10,049)
PA 1-04	Arlington Heights						
PA 1-05	Allegheny Dwellings	273,650	\$ 31,141	31,790	\$ 3,618	-241,860	\$ (27,524)
PA 1-09	Northview Heights*						
PA 1-09H	Northview High Rise*						
PA 1-11	Hamilton-Larimer	6,905	\$ 786	32,079	\$ 3,651	25,174	\$ 2,865
PA 1-15	Pennsylvania-Bidwell	39,943	\$ 4,546	15,929	\$ 1,813	-24,014	\$ (2,733)
PA 1-17	Pressley Street	213,553	\$ 24,302	278,784	\$ 31,726	65,231	\$ 7,423
PA 1-20	Homewood North*						
PA 1-31	Murray Tower	98,968	\$ 11,263	67,034	\$ 7,628	-31,934	\$ (3,634)
PA 1-32	Glen Hazel Family	0	\$ -	0	\$ -	0	\$ -
PA 1-40	Mazza Pavilion (Brookline)						
PA 1-41	Caliguiri Plaza (Allentown)	28,301	\$ 3,221	30,311	\$ 3,449	2,010	\$ 229
PA 1-44	Finello Pavilion (South Oakland)	33,577	\$ 3,821	17,579	\$ 2,000	-15,998	\$ (1,821)
PA 1-45	Morse Gardens	10,159	\$ 1,156	9,164	\$ 1,043	-995	\$ (113)
PA 1-46	Carrick Regency	41,723	\$ 4,748	53,933	\$ 6,138	12,210	\$ 1,389
PA 1-47	Gualtieri Manor	58,996	\$ 6,714	33,036	\$ 3,759	-25,960	\$ (2,954)
		1,306,960	\$ 148,732	884,399	\$ 76,928	-422,561	\$ (48,087)

Cost per kWh

\$0.1138

* Buildings are Opt C, therefore savings not included in lighting savings totals

High Efficiency Refrigerators

The table below shows a summary of the proposed number of high efficiency refrigerators and their locations along with the actual installed number and locations of the refrigerators.

Locations	# of Proposed Installations	# of Actual Installations
Addison Terrace	61	75
Bedford Dwellings	51	45
Allegheny Dwellings	29	40
Northview Heights	65	72
Hamilton-Larimer	30	0
Glen Hazel Family	69	70
Totals	305	302

HA Site #	Site Name	% of Units Occupied	Existing Refrig. Code #	Quan.	Existing Refrigerators		New Refrigerators			Annual Electric Savings
					Annual kWh	Annual Cost	Refrig. Code #	Annual kWh	Annual Cost	
PA 1-02	Bedford Dwellings	93.1%	10	18	11,696	\$ 1,331	1	6,468	\$ 736	5,228
PA 1-02	Bedford Dwellings	93.1%	12	8	10,360	\$ 1,179	1	2,875	\$ 327	7,485
PA 1-02	Bedford Dwellings	93.1%	13	25	24,787	\$ 2,821	1	8,984	\$ 1,022	15,803
PA 1-05	Allegheny Dwellings	92.9%	14	17	12,588	\$ 1,433	1	6,097	\$ 694	6,491
PA 1-05	Allegheny Dwellings	92.9%	13	12	11,874	\$ 1,351	1	4,303	\$ 490	7,570
PA 1-09	Northview Heights*	83.6%	4	30	20,247	\$ 2,304	1	9,685	\$ 1,102	10,563
PA 1-09	Northview Heights*	83.6%	5	7	7,095	\$ 807	1	2,260	\$ 257	4,836
PA 1-09	Northview Heights*	83.6%	6	28	26,930	\$ 3,065	1	9,039	\$ 1,029	17,891
PA 1-11	Hamilton-Larimer	93.3%	8	3	2,859	\$ 325	1	1,081	\$ 123	1,778
PA 1-11	Hamilton-Larimer	93.3%	11	27	27,443	\$ 3,123	1	9,727	\$ 1,107	17,716
PA 1-32	Glen Hazel Family	96.9%	1	61	51,234	\$ 5,830	1	22,810	\$ 2,596	28,424
PA 1-32	Glen Hazel Family	96.9%	2	1	1,138	\$ 130	1	374	\$ 43	764
PA 1-32	Glen Hazel Family	96.9%	3	7	7,500	\$ 854	1	2,618	\$ 298	4,883
		88.6%		305	206,394	23,488		83,737	9,529	96,142

Electrical Savings - kWh **96,142**
 Electrical Savings - \$ **\$ 10,941**

* Building is Opt C, therefore savings not included in refrigerator savings total

Water Conservation Savings

ECM: Low Flow Faucet Restrictors & Shower Heads

HA Site #	Site Name	Annual Savings				Savings % of Total			
		Natural Gas - MCF	Electric - kWh	Water - Mgals	Sewer - Mgals	Natural Gas - MCF	Electric - kWh	Water - Mgals	Sewer - Mgals
PA 1-01	Addison Terrace	3,958	0	8,469	8,469	7.05%	0.00%	16.13%	0.00%
PA 1-04	Arlington Heights	919	0	1,967	1,967	8.00%	0.00%	14.73%	0.00%
PA 1-05	Allegheny Dwellings	0	222,931	3,011	3,011	0.00%	9.64%	29.17%	0.00%
PA 1-09	Northview Heights	3,550	0	7,596	7,596	6.34%	0.00%	30.91%	0.00%
PA 1-09H	Northview High Rise	355	0	759	759	5.70%	0.00%	27.81%	0.00%
PA 1-11	Hamilton-Larimer	268	0	574	574	13.43%	0.00%	16.52%	0.00%
PA 1-15	Pennsylvania-Bidwell	433	0	928	928	3.86%	0.00%	20.28%	0.00%
PA 1-17	Pressley Street	533	0	1,141	1,141	4.07%	0.00%	18.14%	0.00%
PA 1-20	Homewood North	1,222	0	2,614	2,614	5.12%	0.00%	16.02%	0.00%
PA 1-31	Murray Towers	196	0	418	418	2.94%	0.00%	11.45%	0.00%
PA 1-32	Glen Hazel Family	840	0	1,797	1,797	6.35%	0.00%	16.30%	0.00%
PA 1-40	Mazza Pavilion (Brookline)	89	0	190	190	3.51%	0.00%	14.35%	0.00%
PA 1-41	Caliguiri Plaza (Allentown)	341	0	730	730	8.12%	0.00%	21.13%	0.00%
PA 1-45	Morse Gardens	227	0	485	485	7.56%	0.00%	15.98%	0.00%
PA 1-46	Carrick Regency	198	0	424	424	8.06%	0.00%	14.81%	0.00%
PA 1-47	Gualtieri Manor	96	0	205	205	6.82%	0.00%	13.44%	0.00%
		1,194	222,931	2,556	2,556	0.42%	0.98%	1.59%	0.00%

ECM	Electric Savings kWh	Electric Savings Dollars	Water Savings Mgal	Water Savings Dollars	Natural Gas Savings MCF	Natural Gas Savings Dollars
Low Flow Aerators & Showerheads	222,931	\$25,370	1,797	\$19,308	840	\$19,341
Total	222,931	\$25,370	1,797	\$19,308	840	\$19,341

Building Envelope Savings

HA Site #	Site Name	Annual Savings				Savings % of Total			
		Electric - kWh	Natural Gas - MCF	Water - Mgals	Sewer - Mgals	Natural Gas - MCF	Electric - kWh	Water - Mgals	Sewer - Mgals
PA 1-01	Addison Terrace	17,919	1,676			2.99%	0.42%		
PA 1-02	Bedford Dwellings	3,075	288			0.55%	0.10%		
PA 1-04	Arlington Heights	3,829	358			3.12%	0.57%		
PA 1-05	Allegheny Dwellings	7,255	636			3.70%	0.31%		
PA 1-09H	Northview High Rise	585	63			1.02%	0.13%		
PA 1-15	Pennsylvania-Bidwell	3,688	345			3.07%	0.55%		
PA 1-17	Pressley Street	4,321	539			4.11%	0.30%		
PA 1-20	Homewood North*	7,904	739			3.10%	0.85%		
PA 1-31	Murray Towers	674	56			0.84%	0.16%		
PA 1-40	Mazza Pavilion (Brookline)		0			0.00%	0.00%		
PA 1-41	Caliguiri Plaza (Allentown)	1,161	131			3.12%	0.14%		
PA 1-44	Finello Pavilion (South Oakland)	668	65			4.08%	0.14%		
PA 1-46	Carrick Regency	1,170	132			5.37%	0.18%		
		44,345				0.00%	0.19%		

HA Site #	Site Name	Present Annual Heating Usages		CFM Saved	Calculated Annual Savings				
		MCFs	KWhs		Htg. Eff.	Gas MCFs	Htg.kWh	EER	Clg.kWh
PA 1-02	Bedford Dwellings	41,774	-	1,471	75%	288	-	9	3,075
PA 1-04	Arlington Heights	9,308	-	1,831	75%	358	-	9	
PA 1-05	Allegheny Dwellings	16,009	-	3,470	80%	636	-	9	7,255
PA 1-09H	Northview High Rise*	4,979	-	280	65%	63	-	9	
PA 1-15	Pennsylvania-Bidwell	9,326	-	1,764	75%	345	-	9	3,688
PA 1-17	Pressley Street	11,137	-	2,755	75%	539	-	12	4,321
PA 1-20	Homewood North*	20,267	-	3,780	75%	739	-	9	
PA 1-31	Murray Towers	5,388	-	323	85%	56	-	9	674
PA 1-40	Mazza Pavilion (Brookline)		-	82	83%	-	-	10	
PA 1-41	Caliguiri Plaza (Allentown)	3,527	-	740	83%	131	-	12	1,161
PA 1-44	Finello Pavilion (South Oakland)	1,291	-	355	80%	65	-	10	668
PA 1-46	Carrick Regency	2,235	-	746	83%	132	-	12	1,170
	Total	234,896	-			5,028	-		22,012

*MCF Saved Calcs $\text{MCF/yr.} = \text{cfm} \times \text{Ca} \times \text{DDh} \times 24 / 1030000 / \text{Eh}$

*kWh Saved Calcs $\text{Heating kWh/yr.} = \text{dcfm} \times \text{Ca} \times \text{DDh} \times 24 / 3413 / \text{Eh}$
 $\text{Cooling kWh/yr.} = \text{dcfm} \times \text{Ca} \times \text{DDc} \times 24 / 3413 / \text{Ec}$

Where: **dcfm**= Change in Infiltration Rate, Cu. Ft./ Min.
Eh= Heating Efficiency
EER= Energy Efficiency Ratio, Btu/kWh
DDh= Heating Degree Days per Year
DDc= Cooling Degree Days per Year
Ca= Heat capacity factor for air

Area	Electrical Savings kWh	Electrical Savings \$	Natural Gas Savings MCF	Natural Gas Savings \$	Total \$
Building Envelope	22,012	\$2,505	Option C Savings		\$2,505

* Buildings are Opt C, therefore savings not included in building envelope savings totals

Roof Replacement and Added Insulation Savings

HA Site #	Site Name	Annual Savings		Savings % of Total	
		Natural Gas - MCF	Electric - kWh	Natural Gas - MCF	Electric - kWh
PA 1-02	Bedford Dwellings	0	0	0.00%	0.00%
PA 1-04	Arlington Heights	123		1.07%	0.20%
PA 1-09	Northview Heights*	425	4,548	0.76%	0.11%
PA 1-20	Homewood North*	219	2,336	0.92%	0.25%
PA 1-31	Murray Towers	12	146	0.18%	0.03%
		779	146		

***Heating MBH Saved Calcs**

Roof MBH/yr.= $DDh \times 24 / 1000 \times A \times dU$

Facade MBH/yr.= $DDh \times 24 / 1000 \times A \times dU$

***Cooling MBH Saved Calcs**

Roof MBH/yr.= $DDc \times 24 / 1000 \times A \times dU$

Facade MBH/yr.= $DDc \times 24 / 1000 \times A \times dU$

Where:

DDh= Heating Degree Days per Year

DDc= Cooling Degree Days per Year

dU= Change in Heat Transmission (U) Value

A= Total Area, sf

Area	Electric kWh Saved	Electric \$ Saved	Natural Gas Saved MCF	Natural Gas \$ Saved	Total \$
All Areas	146	\$17	Option C Savings		\$17

* Buildings are Opt C, therefore savings not included in roof replacement savings totals

Limiting Thermostats Proposed Savings

HA Site #	Site Name	Annual Savings		Savings % of Total	
		Natural Gas - MCF	Electric - kWh	Natural Gas - MCF	Electric - kWh
PA 1-04	Arlington Heights	1,194	14,973	10.39%	2.22%
PA 1-09	Northview Heights	5,678	88,252	10.14%	2.20%
PA 1-11	Hamilton-Larimer	318	0	15.89%	0.00%
PA 1-20	Homewood North	1,715	0	7.19%	0.00%
PA 1-32	Glen Hazel Family*	2,294	0	17.35%	0.00%
PA 1-40	Mazza Pavilion (Brookline)		0	0.00%	0.00%
PA 1-41	Caliguiri Plaza (Allentown)	893	30,433	21.27%	3.73%
PA 1-44	Finello Pavilion (South Oakla	452	19,733	28.34%	4.02%
PA 1-45	Morse Gardens	835	19,469	27.84%	3.39%
PA 1-46	Carrick Regency	755	15,161	30.74%	2.33%
PA 1-47	Gualtieri Manor	453	7,751	32.14%	2.68%
		2,294	92,546	0.81%	0.47%

* All sites are Opt C, Gas except Glen Hazel Family, therefore the savings above are only for Glen Hazel Family, Option A

HA Site #	Site Name	Present Modified* Gas Heating MCF/yr	Present Modified* Electric Cooling kWh/yr	% of Cooling Controlled by Tenant Tstats	Indoor Temp. Heating	Indoor Temp. Cooling	Gas Savings MCF/yr	Electric Clg Savings kWh/yr
PA 1-04	Arlington Heights	9,486	62,618	100%	75	74	1,194	14,973
PA 1-09	Northview Heights	48,596	397,647	100%	75	74	6,118	95,085
PA 1-11	Hamilton-Larimer	1,893	19,858	0%	76	74	318	0
PA 1-20	Homewood North	20,429	76,634	0%	74	74	1,715	0
PA 1-32	Glen Hazel Family*	10,931	186,049	0%	77	74	2,294	0
PA 1-40	Mazza Pavilion (Brookline)	2,082	33,545	0%	77	74	437	0
PA 1-41	Caliguiri Plaza (Allentown)	3,547	165,286	77%	78	74	893	30,433
PA 1-44	Finello Pavilion (South Oakla	1,346	98,241	84%	80	74	452	19,733
PA 1-45	Morse Gardens	2,487	119,734	68%	80	74	835	19,469
PA 1-46	Carrick Regency	2,250	91,887	69%	80	74	755	15,161
PA 1-47	Gualtieri Manor	1,348	55,891	58%	80	74	453	7,751

Heating Degree Days @ 60=	4606	Cooling Degree Days @ 70=	292
Heating Degree Days @ 65=	5829	Cooling Degree Days @ 65=	726
DD/Deg.F=	245	DD/Deg.F=	87
% reduction per Deg.F=	4%	% reduction per Deg.F=	12%
Target indoor Temp.=	72	Target indoor Temp.=	76

Area	Electrical Savings kWh	Electrical Savings \$	Natural Gas Savings MCF	Natural Gas Savings \$	Total \$
All Areas	92,546	\$10,532	2,294	\$52,832	\$63,363

Replace Ventilation Units, New Chiller & Insulate Duct Savings

ECM: Replace Existing Gas Fired Rooftop Corridor Ventilation Units

HA Site #	Site Name	Annual Savings		Savings % of Total	
		Natural Gas - MCF	Electric - kWh	Natural Gas - MCF	Electric - kWh
PA1-31	Murray Towers	103	13,243	1.55%	3.06%
PA 1-40	Mazza Pavilion (Brookline)	60	6,445	2.35%	2.72%
	Totals	163	19,688	0.06%	0.09%

HA Site #	Site Name	CFM	Current Ventilation Units		New Ventilation Units		Cooling kW per Ton	kWh per Year*
			Heating Efficiency	MCF per Year*	Heating Efficiency	MCF per Year*		
PA1-31	Murray Towers	8,445	0.75	1,652	0.80	1,548	1	13,243
PA 1-40	Mazza Pavilion (Brookline)	4,110	0.75	804	0.81	744	1	
	Totals	12,555		2,456		2,293		13,243

*MCF per Year Calcs $\text{MCF/yr.} = \text{cfm} \times \text{Ca} \times \text{H} \times \text{dT} / \text{Eh} / 1030000$

*kWh per Year Calcs $\text{kWh/yr.} = \text{cfm} \times \text{Ca} \times \text{Ec} \times \text{H} \times \text{dT} / 12000$

Where:

- Ca= Heat capacity factor for air
- dT= Change in Temperature, Deg.F
- cfm= Airflow Cubic Feet per Minute
- H= Hours of Operation at Design Capacity per Year
- Eh= Heating Efficiency
- Ec= Cooling Efficiency, kW/Ton

ECM: Insulate Exterior Duct Runs of Make Up Air Handling Unit

HA Site #	Site Name	Annual Savings		Savings % of Total	
		Natural Gas - MCF	Electric - kWh	Natural Gas - MCF	Electric - kWh
PA1-31	Murray Towers	20	212	0.31%	0.05%

MAU Heating Temp: 85
MAU Cooling Temp: 70
Heating Efficiency: 70.0%
EER: 10

HA Site #	Site Name	Total Surface Area Sq.Ft.	Present U-Factor	Current MCFs	Current kWh	New U-Factor	Heating MCFs Saved	Cooling kWhs Saved
PA1-31	Murray Towers	100	1	23	236	0	21	212

*MCF Saved Calcs $\text{MCF/yr.} = \text{A} \times \text{dU} \times \text{H} \times \text{dT} / \text{Bmcf} / \text{Eh}$

*kWh Saved Calcs $\text{kWh/yr.} = \text{A} \times \text{dU} \times \text{H} \times \text{dT} / \text{K} / \text{EER}$

Where:

- dU= Change in Heat Transmission (U) Value
- H= Equivalent Hours of Operation at Design Capacity per Year
- A= Total SF of Duct Surface
- dT= Change in Temperature, Deg.F
- EER= Energy Efficiency Ratio, MBtu/kWh
- Eh= Heating Efficiency
- Bmcf= Btus per MCF of natural gas= 1,040,000
- K= Watts per Kilowatt= 1000

ECM Number	Electrical Savings kWh	Electrical Savings \$	Natural Gas Savings MCF	Natural Gas Savings \$	Total \$
30 New Unit	13,243	\$1,507	Option C Savings		\$1,507
32 Heat Recovery / New Chiller*	3,842	\$437			\$437
37 Insulate Duct	212	\$24			\$24

*Note: As per change order 1, the new chiller's potential to save is estimated to be the same as the originally proposed heat recovery savings. The original proposed savings are shown.

Adjustment Summary

Adjustment 1 - Elimination of Mazza Pavilion	\$28,047
Adjustment 2 - Elimination of Heat Pump Units	\$132,077
Adjustment 3 - Temporary elimination of Addison Terrace	\$371,785
Adjustment 4 - Limiting Thermostats	\$180,702
Adjustment 5 - Northview Heights Excess Water Use	\$1,414,509
	<u><u>\$2,127,119</u></u>

Adjustment Detail

3. Temporary Closure of Addison Terrace

Discussion:

During 2013 Addison Terrace was removed from use due to a rehabilitation project.

This change required that the affect of that elimination be noted as an adjustment to savings.

The following values are adjustments to comply with that requirement. Savings are based on 2011-12 demonstrated performance

Addison Terrace	Electric Savings	\$88,451
	Gas Savings	\$275,643
	Water Savings	<u>\$7,691</u>
	Total Savings	<u><u>\$371,785</u></u>

4. Limiting Thermostats Adjustment

	Gas Savings (MCF)	Savings Adjustment (\$)
Northview Heights	5,678	\$126,986
Arlington Heights	1,194	\$26,706
Gualtieri Manor	453	\$10,121
Carrick Regency	755	<u>\$16,889</u>
Total	7,325	<u><u>\$180,702</u></u>

5. Northview Heights Excess Water Use Resulting in Reduced Gas and Water Savings Due to Legionella High Temperature Water Purge

	Water Savings (kGal)	Savings Adjustment (\$)
Northview Heights (Water)	8,355	\$1,414,509

Building Utilities Baselines

		Natural Gas - MCF			Electric - kWh			Water - Mgal			Total	
HA Site #	Site Name	MCF/yr.	Cost/yr.	\$ per MCF	kWh/yr.	Cost/yr.	\$ per kWh	Mgal/yr.	Cost/yr.	\$ per Mgal	Cost/yr.	AMP #
PA 1-01	Addison Terrace	56,106	\$ 1,114,862	\$ 19.87	4,288,267	\$ 488,211	\$ 0.11	52,514	\$ 486,808	\$ 9.27	\$ 2,089,881	1
PA 1-02	Bedford Dwellings	52,217	\$ 1,037,590	\$ 19.87	3,209,330	\$ 365,376	\$ 0.11	-	\$ -	\$ -	\$ 1,402,966	2
PA 1-04	Arlington Heights	11,491	\$ 228,332	\$ 19.87	675,017	\$ 76,849	\$ 0.11	13,355	\$ 123,801	\$ 9.27	\$ 428,982	4
PA 1-05	Allegheny Dwellings	17,214	\$ 342,053	\$ 19.87	2,312,239	\$ 263,244	\$ 0.11	10,321	\$ 95,679	\$ 9.27	\$ 700,975	5
PA 1-09	Northview Heights	56,014	\$ 1,113,030	\$ 19.87	4,018,889	\$ 457,543	\$ 0.11	24,572	\$ 227,782	\$ 9.27	\$ 1,798,355	9
PA 1-09H	Northview High Rise	6,224	\$ 123,670	\$ 19.87	446,543	\$ 50,838	\$ 0.11	2,730	\$ 25,309	\$ 9.27	\$ 199,817	9
PA 1-11	Hamilton-Larimer	1,999	\$ 39,716	\$ 19.87	143,352	\$ 16,320	\$ 0.11	3,476	\$ 32,222	\$ 9.27	\$ 88,259	11
PA 1-15	Pennsylvania-Bidwell	11,237	\$ 223,279	\$ 19.87	667,553	\$ 76,000	\$ 0.11	4,573	\$ 42,396	\$ 9.27	\$ 341,674	15
PA 1-17	Pressley Street	13,102	\$ 260,345	\$ 19.87	1,439,800	\$ 163,918	\$ 0.11	6,287	\$ 58,284	\$ 9.27	\$ 482,547	17
PA 1-20	Homewood North	23,843	\$ 473,784	\$ 19.87	926,803	\$ 105,515	\$ 0.11	16,317	\$ 151,258	\$ 9.27	\$ 730,556	20
PA 1-31	Murray Towers	6,651	\$ 132,166	\$ 19.87	433,333	\$ 49,334	\$ 0.11	3,656	\$ 33,888	\$ 9.27	\$ 215,388	31
PA 1-32	Glen Hazel Family	13,222	\$ 262,732	\$ 19.87	1,128,794	\$ 128,511	\$ 0.11	11,021	\$ 102,168	\$ 9.27	\$ 493,411	10
PA 1-40	Mazza Pavilion (Brookline)	2,532	\$ 50,314	\$ 19.87	236,747	\$ 26,953	\$ 0.11	1,326	\$ 12,294	\$ 9.27	\$ 89,560	40
PA 1-41	Caliguiri Plaza (Allentown)	4,198	\$ 83,423	\$ 19.87	814,918	\$ 92,777	\$ 0.11	3,454	\$ 32,015	\$ 9.27	\$ 208,216	41
PA 1-44	Finello Pavilion (South Oakland)	1,594	\$ 31,677	\$ 19.87	491,377	\$ 55,942	\$ 0.11	-	\$ -	\$ -	\$ 87,619	44
PA 1-45	Morse Gardens	2,999	\$ 59,588	\$ 19.87	574,185	\$ 65,370	\$ 0.11	3,036	\$ 28,144	\$ 9.27	\$ 153,101	45
PA 1-46	Carrick Regency	2,456	\$ 48,812	\$ 19.87	650,483	\$ 74,056	\$ 0.11	2,861	\$ 26,525	\$ 9.27	\$ 149,392	46
PA 1-47	Gualtieri Manor	1,408	\$ 27,980	\$ 19.87	288,945	\$ 32,896	\$ 0.11	1,529	\$ 14,170	\$ 9.27	\$ 75,046	47
		284,508	\$ 5,653,351	\$ 19.87	22,746,575	\$ 2,589,654	\$ 0.114	161,029	\$ 1,492,741	\$ 9.27	\$ 9,735,745	

Natural Gas Cost: \$19.8706 per MCF
 Electric Cost: \$0.1138 per Kwh
 WaterCost: \$9.2700 Per Mgal.
 Combined Water/Sewer: \$9.2700 Per Mgal.

ECM: Water Conservation & Lighting

			Lighting (Bath & Kitchen)	Kitchen	Bathroom	Shower	WC
Qty	Site	Unit		1.5 GPM	0.5 GPM	2.0 GPM	1.6 GPF
1	Northview Heights	1003	x	x	x	2.5	1.28
2	Northview Heights	611	x	R	x	2.5	R
3	Northview Heights	501	x	x	x	2.5	1.00
4	Northview Heights	861	x	x	1.2	2.5	1.28
5	Northview Heights	867	x	x	1.2	2.5	1.28
6	Northview Heights	1325	x	2.2	x	x	x
7	Northview Heights	1330	x	1.5	x	None	x
8	Northview Heights	743	x	x	1.5	2.5	1.28
9	Northview Heights	1325	x	x	1.5	R	1.28
10	Northview Heights	406	x	x	x	None	1.28
11	Northview Heights	359	x	x	x	R	1.00
12	same as above (Bath #2)	359			x	None	x
13	Carrick	2A	x	R	1.5	x	x
14	Carrick	7H	x	2.2	1.5	2.5	1.28
15	Carrick	4E	x	x	1.5	1.5	x
16	Carrick	4D	x	x	x	2.5	x
17	Murray Towers	201	x	x	x	x	x
18	Murray Towers	801	x	x	1.5	x	1.28
19	Murray Towers	611	x	x	1.5	2.5	1.28
20	Murray Towers	502	x	x	1.5	None	1.28
21	Pressley	218	x	x	x	1.5	1.28
22	Pressley	515	x	x	x	2.5	1.28
23	Pressley	1312	x	R	1.5	x	1.28
24	Caliguiri Plaza	1109	x	x	x	1.5	1.28
25	Caliguiri Plaza	411	x	x	x	1.5	1.28
26	Caliguiri Plaza	311	x	x	1.5	1.5	x
27	Caliguiri Plaza	207	x	x	x	1.5	x
28	Arlington	610	x	R	R	R	R
29	Arlington	630	x	x	1.5	None	1.28
30	Arlington	544	No Access				
Notes: 1- x - Proper fixture still in place and operating. 2- R - Fixture removed.							

ECM: Limiting Thermostats

	Site	Unit #	Occ Heat	Limit Heat	Occ Cool	Limit Cool	Current Temp
1	Northview Heights	861	81	81	Off	Off	81
2	Northview Heights	867	70	77	Off	Off	70
3	Northview Heights	743	74	74	Off	Off	74
4	Northview Heights	1325	76	76	Off	Off	76
5	Northview Heights	1330	70	78	Off	Off	70
6	Northview Heights	406	77	77	Off	Off	58***
7	Northview Heights	359	78	78	Off	Off	78
8	Carrick	7H	73	80	Off	Off	73
9	Carrick	4E	69	78	Off	Off	70
10	Carrick	4D	77	80	Off	Off	77
11	Arlington	610	72	82	Off	Off	72
12	Arlington	630	74	85	Off	Off	74
13	Arlington	544	No Access				
14	Caliguiri Plaza	1109	76	76	Off	Off	76
15	Caliguiri Plaza	411	78	78	Off	Off	78
16	Caliguiri Plaza	311	73	73	Off	Off	75
17	Caliguiri Plaza	207	73	82	Off	Off	79
Notes: 1- In some units, the tenants were reported, in past years, to be calling Honeywell tech support to get directions on bypassing the lock on the digital thermostats. 2- Some tenants acquire a doctor's note to gain full control of thermostat. *** Window open							

ECM: Miscellaneous

ECM Description	Notes
Windows & Air Sealing	Installation is in place and there are no issues with this ECM.
Refrigerators	No issues reported
Geothermal Heat Pumps	**Allentown/Arlington - cold weather emergency heat utility pole fuse trips
Radiator Valves	No issues reported

** This should be discussed with the utility; load may have been added to the utility feeder

Glossary of Terms

actual cost	Actual energy cost taken directly from utility bill.
actual savings	Savings derived through the Metrix™ program; baseline less actual costs. Positive actual savings indicate utility costs have been reduced after adjusting for weather and other variables in dollars.
balance point	(HtgDD), the outdoor temperature below which space heating is required or (ClgDD), the outdoor temperature above which space cooling is required.
baseline	The adjusted, tuned pre-retrofit bills (usually 1 year) used to compare to post-installation usage in order to calculate savings.
baseline cost	Cost calculated for the baseline using current rates.
billed dollars	Amount billed from utility company.
bill matching	Adjustment made by Metrix™ to account for differing number of days in the billing period before calculating cost avoidance.
cost avoidance	The difference between the baseline cost and the actual or SimActual cost in dollars.
degree-day	Unit representing one degree of difference between the balance point selected and the average temperature during one day.
EER	Energy Efficiency Ratio of cooling equipment defined as the cooling effect in BTU's divided by the power use in watts
guarantee period	Time period specified in contract for which Honeywell will guarantee energy savings.
guarantee year	Number identifying for which year the review is performed based on the number of years the guarantee is in effect.
guaranteed savings	Those savings Honeywell promises the customer through the use of maintenance programs, retrofits, upgrades and energy management systems.

Glossary of Terms

HVAC	Industry standard abbreviation for Heating, Ventilating and Air Conditioning.
HtgDD/ClgDD	HtgDD = Heating degree-days ClgDD = Cooling degree-days
kW	Kilowatt - a unit of electrical power, equal to 1000 watts.
kWh	Kilowatt hours - a unit of electrical energy or work, equal to that done by one kilowatt acting for one hour.
modification	An allowance for changes in the facility which affect utility usage that occur while tracking the performance of a meter. Modifications correct both the actual and baseline usage and cost for meters.
pre-installation	Time period (start month and stop month, typically one year's time) that is used as a benchmark for comparison which consists of all energy bills applicable to the retrofit.
R^2	A measure of how well the independent variable in a regression can explain changes in the dependent variable. An $R^2 = "1.0"$ indicates a perfect correlation.
rate tariff	Actual amount the utility company charges per unit of energy or demand; used by Metrix TM to calculate utility costs for the SimActual & Baseline scenarios.
reference year	The actual usage for designated baseline period.
review period	Time period for which savings are reported.
runtime adjustment	Adjustment made for those hours equipment has run beyond the operating hours specified in the contract.
simactual	The total cost for the billing period as calculated by Metrix TM .
weather adjustment	Adjustment made by Metrix TM for weather variations using degree days.

Report Delivery Receipt

Honeywell has presented the Cost Avoidance Review for Housing Authority of the City of Pittsburgh; Contract No. 40105935. This report details energy savings results for Year 6 and indicates cost avoidance of \$3,183,315 for the year, as compared to the energy guarantee per the contract of \$2,950,843.

Please sign below to acknowledge receipt of this report. Your signature does not indicate acceptance of the results. If the results are not agreed upon, Housing Authority of the City of Pittsburgh has forty-five (45) days from the delivery date of this report to provide a detailed explanation and request for action, in writing, to Honeywell International Inc., Energy Analysis, 4263 Monroe Street, Toledo, Ohio 43606. Otherwise, the cost avoidance results will be deemed accepted.

Received by:

Name (please print)

Signature

Date

Presented by:

Signature

Date