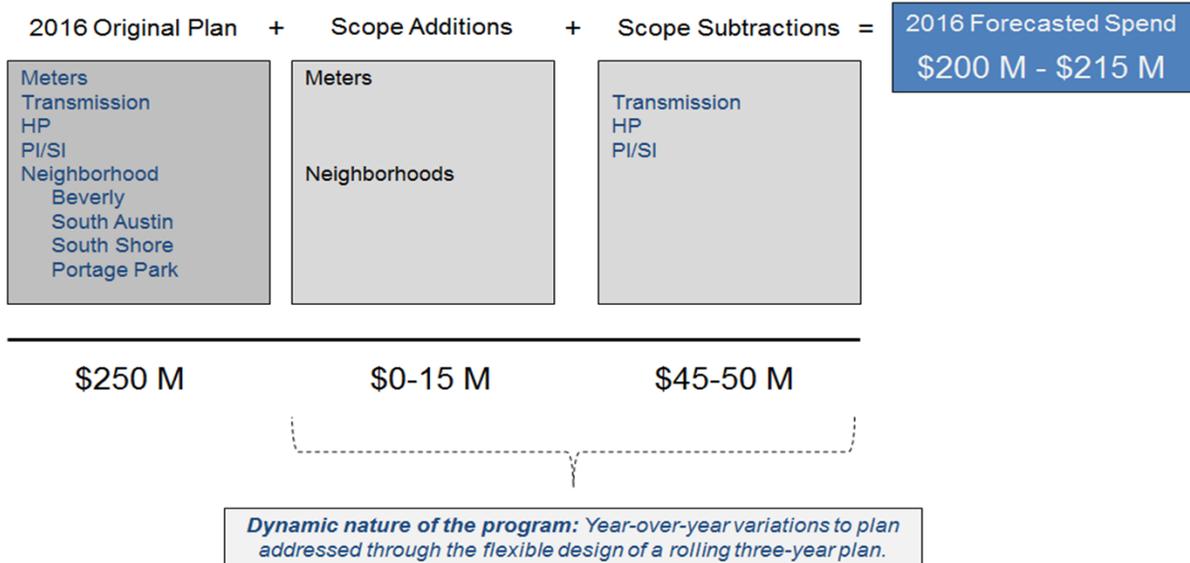


## System Modernization Program (SMP)

July 2016 Month-End Report<sup>1</sup>

Data Date:  
Month-end July, 2016  
Version History: 1.0

The 2016 plan has an original budget of \$250 million. Based on planning improvements, the current pace of construction, and scope changes, Peoples Gas expects actual spend to be between \$200-\$215 million. These variations are addressed by a rolling three year plan that provides flexibility to accommodate year-over-year fluctuations as a result of the dynamic nature of the program.



### Additional References

- Appendix A  
For a map of leaks discovered and closed in July 2016, refer to Appendix A.
- Appendix B  
For a breakdown of leaks discovered in reporting month by class type, refer to Appendix B. Location of leaks by street address is also provided within Appendix B.
- Appendix C  
For a breakdown of leaks repaired/resolved in reporting month by class type, refer to Appendix C. Location of leaks by street address is also provided within Appendix C.

### Sources

The data illustrated in this report is sourced from Peoples Gas' SMP Three-Year Plan as well as the 2016 Capital Construction baseline. The plan detailed in this report was developed in the fourth quarter of 2015.

The data in this report is not derived from Rider QIP filings, which are based on costs associated with plant in service.

1. During this reporting month, there was no activity in any new neighborhoods other than those identified in the Preliminary Report.

## System Modernization Program

### July 2016 Leaks and Labor Hours

Date:  
Month-end July, 2016  
Version History: 1.0

#### Emergency Replacement / Repair Work in Reporting Month<sup>1,2</sup>

2016 Month	Leaks Discovered	Leaks Repaired / Resolved
July	181	290

#### Internal and External Labor Hours<sup>3</sup>

Month	Actual Hours Worked		
	Contractor Hours <sup>4</sup>	PGL Hours <sup>5</sup>	Total Hours
Jul-16	76,224	39,842	116,066

1. Reference Appendix A for map of leaks discovered and repaired/resolved in July 2016.

2. For leaks discovered and repaired/resolved in this reporting month, reference Appendices B and C, respectively. The leaks are categorized by class type and include the location of leaks by street address.

3. Projected labor hours unavailable.

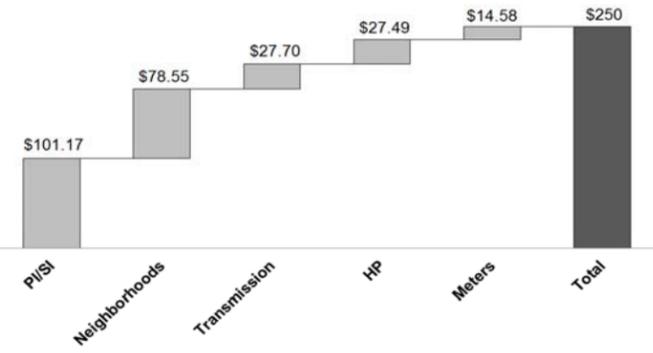
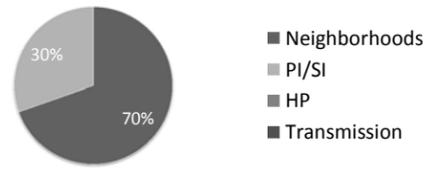
4. Contractor hours are comprised of actual hours worked for PGL projects (SMP and otherwise) by engineering consultants, construction contractors, and agency support staff mainly for field oversight and project management. The type of work performed by construction contractors includes main installment, services installment, retirement and restoration. See pages 3-8 for quantity of work performed in reporting month.

5. The type of work performed by Peoples Gas includes design, contract management, construction oversight, project management, and field work related to meter installation, main tie-ins, and retirement.

**System Modernization Program**  
2016 Summary

Data Date:  
Month-end July, 2016  
Version History: 1.0

All costs and quantities reflected within this report are capital only.

2016 Proposed Program Budget (\$M)		SMP 2016 Project Breakdown (July Month-End Actuals vs. Planned To Date)																							
		<b>1 Neighborhood Program (AMRP)<sup>1</sup></b>			<b>3 High Pressure (HP) Installation Program<sup>1,2,3</sup></b>																				
Neighborhood	Main Install	Actual-to-date	\$17.59 M	9.9 miles	\$1.78 M / mile	HP	Main Install	Actual-to-date	\$1.18 M	0.0 miles	Pending Qty														
		Planned-to-date	\$16.74 M	8.6 miles	\$1.96 M / mile			Planned-to-date	\$11.89 M	0.7 miles	\$17.84 M / mile														
	Main Retirement	Actual-to-date	\$2.94 M	20.2 miles	\$0.15 M / mile		Main Retirement	Actual-to-date	\$0.00 M	0.0 miles	Pending Qty														
		Planned-to-date	\$2.34 M	52.6 miles	\$0.04 M / mile			Planned-to-date	\$0.00 M	0.6 miles	N/A														
	Service Install	Actual-to-date	\$3.94 M	934 services	\$4,222 / service		Service Install	Actual-to-date	\$0.01 M	0 services	Pending Qty														
	Planned-to-date	\$4.31 M	1369 services	\$3,145 / service		Planned-to-date	\$0.04 M	0 services	N/A																
Service Retirement	Actual-to-date	\$3.52 M			Service Retirement	Actual-to-date	\$0.00 M																		
	Planned-to-date	\$3.10 M				Planned-to-date	\$0.00 M																		
Restoration	Actual-to-date	\$13.74 M			Restoration	Actual-to-date	\$0.02 M																		
	Planned-to-date	\$15.94 M				Planned-to-date	\$0.29 M																		
<b>Meters</b>		<b>2 Public Improvement (PI) / System Improvement (SI)<sup>1,4</sup></b>			<b>4 Transmission Upgrades<sup>1,2</sup></b>																				
<table border="1"> <thead> <tr> <th></th> <th>YTD Cost</th> <th>YTD Quantities</th> <th>\$ / Meter</th> </tr> </thead> <tbody> <tr> <td><b>Meter Install</b></td> <td><b>\$10.76 M</b></td> <td><b>7933 meters</b></td> <td><b>\$ 1,356</b></td> </tr> <tr> <td>Planned-to-date</td> <td>\$6.82 M</td> <td>6818 meters</td> <td>\$ 1,000</td> </tr> </tbody> </table> <p>Planned Meters Budget Distributed by Program</p> 			YTD Cost	YTD Quantities	\$ / Meter	<b>Meter Install</b>	<b>\$10.76 M</b>	<b>7933 meters</b>	<b>\$ 1,356</b>	Planned-to-date	\$6.82 M	6818 meters	\$ 1,000	PI / SI	Main Install	Actual-to-date	\$21.12 M	9.9 miles	\$2.14 M / mile	Transmission	Facility Installment	Actual-to-date	\$1.76 M	0.0 miles	TBD
	YTD Cost	YTD Quantities	\$ / Meter																						
<b>Meter Install</b>	<b>\$10.76 M</b>	<b>7933 meters</b>	<b>\$ 1,356</b>																						
Planned-to-date	\$6.82 M	6818 meters	\$ 1,000																						
	Planned-to-date	\$37.82 M	15.3 miles	\$2.47 M / mile		Planned-to-date	\$7.54 M	0.2 miles	N/A																
Main Retirement	Actual-to-date	\$3.13 M	7.4 miles	\$0.42 M / mile	Facility Retirement	Actual-to-date	\$0.00 M	0.0 miles	TBD																
	Planned-to-date	\$5.16 M	9.1 miles	\$0.57 M / mile		Planned-to-date	\$0.00 M	0.0 miles	N/A																
Service Install	Actual-to-date	\$3.02 M	797 services	\$3,795 / service	Restoration	Actual-to-date	\$0.01 M																		
	Planned-to-date	\$4.41 M	1392 services	\$3,167 / service		Planned-to-date	\$0.06 M																		
Service Retirement	Actual-to-date	\$0.92 M			Service Retirement	Actual-to-date	\$0.00 M																		
	Planned-to-date	\$1.37 M				Planned-to-date	\$0.00 M																		
Restoration	Actual-to-date	\$5.24 M			Restoration	Actual-to-date	\$0.01 M																		
	Planned-to-date	\$9.07 M				Planned-to-date	\$0.06 M																		

1. Cost per mile or cost per service are for a partial year and may not be indicative of program performance.  
 2. HP and Transmission work involve minimal amounts of main installation / replacement mileage; therefore, cost per mile metrics are not appropriate.  
 3. For HP, planned dollars include vault installations and projects without known footage at the time of plan development.  
 4. PI/SI work reflects revised bidding strategy for contract pricing.

**Assumptions:**

2016 actuals to-date and associated metrics do not fully reflect new management changes and include significant carryover work from 2015 that Peoples Gas is executing under pre-existing contracts. Consequently, the metrics may not be indicative of current performance or predictors of future performance.

**System Modernization Program**  
*Neighborhood Program*

Data Date:  
Month-end July, 2016  
Version History: 1.0

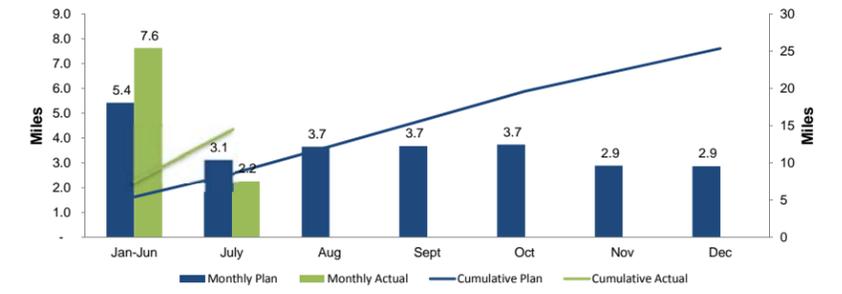
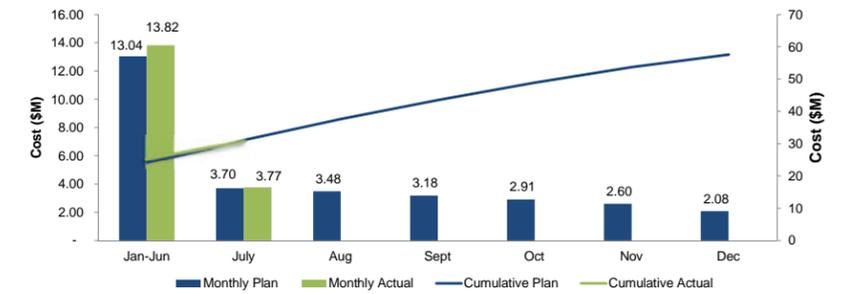
Neighborhood Replacement Program – Projects that Peoples Gas ranks, designs, and constructs based on the most at risk system components identified by the company’s neighborhood ranking tool . Neighborhood sequencing in the plan is also affected by coordination with other agencies as well as timeliness of permits and authorizations.

**Main Construction**

Main Construction - 2016 Projected vs Actual Cost (\$M)

Main Construction - 2016 Projected vs Actual Mileage

	Cost	Quantity	Unit Cost
Main Installation Actual-to-date	\$17.59 M	9.9 miles	\$1.78 M / mile
Planned-to-date	\$16.74 M	8.6 miles	\$1.96 M / mile
Main Retirement Actual-to-date	\$2.94 M	20.2 miles	\$0.15 M / mile
Planned-to-date	\$2.34 M	52.6 miles	\$0.04 M / mile



Activity	2016	Jan-Jun (\$M)	July (\$M)	Aug (\$M)	Sept (\$M)	Oct (\$M)	Nov (\$M)	Dec (\$M)	Total (\$M)
Main Installation	PLAN	13.04	3.70	3.48	3.18	2.91	2.60	2.08	30.99
	ACT	13.82	3.77	-	-	-	-	-	17.59
Main Retirement	PLAN	1.82	0.52	0.49	0.44	0.41	0.36	0.29	4.32
	ACT	1.93	1.01	-	-	-	-	-	2.94

Activity	2016	Jan-Jun (mi)	July (mi)	Aug (mi)	Sept (mi)	Oct (mi)	Nov (mi)	Dec (mi)	Total (mi)
Main Installation	PLAN	5.4	3.1	3.7	3.7	3.7	2.9	2.9	25.4
	ACT	7.6	2.2	-	-	-	-	-	9.9
Main Retirement	PLAN	41.1	11.5	10.0	9.5	5.2	4.6	4.6	86.5
	ACT	15.6	4.6	-	-	-	-	-	20.2

\*Graph representative of Main Installation costs only

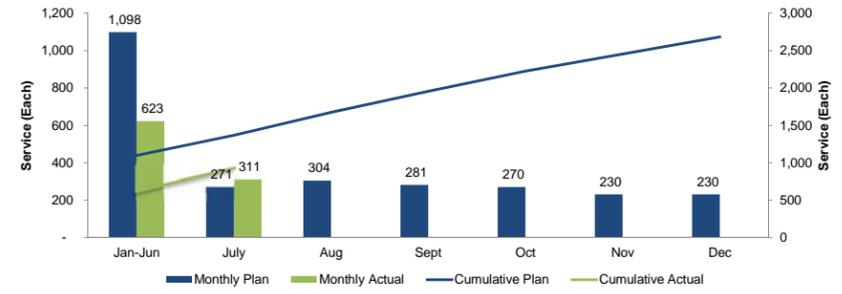
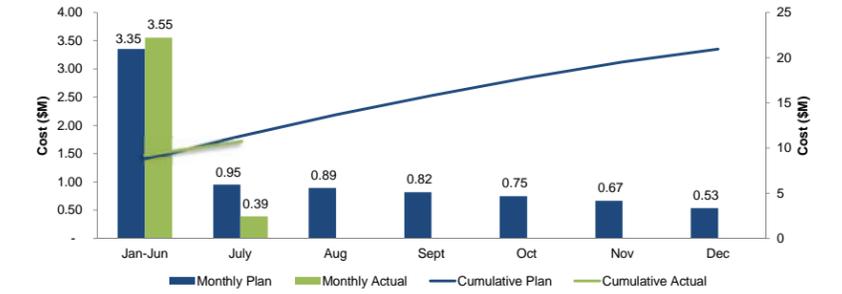
\*Graph representative of Main Installation mileage only

**Service Construction**

Service Construction - 2016 Projected vs Actual Cost (\$M)

Service Construction - 2016 Projected vs Actual Services

	Cost	Quantity	Unit Cost
Service Installation Actual-to-date	\$3.94 M	934 services	\$4,222 / service
Planned-to-date	\$4.31 M	1369 services	\$3,145 / service
Service Retirement Actual-to-date	\$3.52 M		
Planned-to-date	\$3.10 M		



Activity	2016	Jan-Jun (\$M)	July (\$M)	Aug (\$M)	Sept (\$M)	Oct (\$M)	Nov (\$M)	Dec (\$M)	Total (\$M)
Service Installation	PLAN	3.35	0.95	0.89	0.82	0.75	0.67	0.53	7.97
	ACT	3.55	0.39	-	-	-	-	-	3.94
Service Retirement	PLAN	2.42	0.69	0.64	0.59	0.54	0.48	0.39	5.74
	ACT	2.56	0.96	-	-	-	-	-	3.52

Activity	2016	Jan-Jun (services)	July (services)	Aug (services)	Sept (services)	Oct (services)	Nov (services)	Dec (services)	Total (services)
Service Installation	PLAN	1,098	271	304	281	270	230	230	2,685
	ACT	623	311	-	-	-	-	-	934

\*Graph representative of Service Installation costs only

**Restoration**

Restoration - 2016 Projected vs Actual Spend (\$M)

	Cost
Restoration Actual-to-date	\$13.74 M
Planned-to-date	\$15.94 M

Activity	2016	Jan-Jun (\$M)	July (\$M)	Aug (\$M)	Sept (\$M)	Oct (\$M)	Nov (\$M)	Dec (\$M)	Total (\$M)
Restoration	PLAN	12.41	3.53	3.31	3.03	2.77	2.47	1.98	29.50
	ACT	13.16	0.58	-	-	-	-	-	13.74

**System Modernization Program**  
*Public Improvement (PI) / System Improvement (SI)*

Data Date:  
Month-end July, 2016  
Version History: 1.0

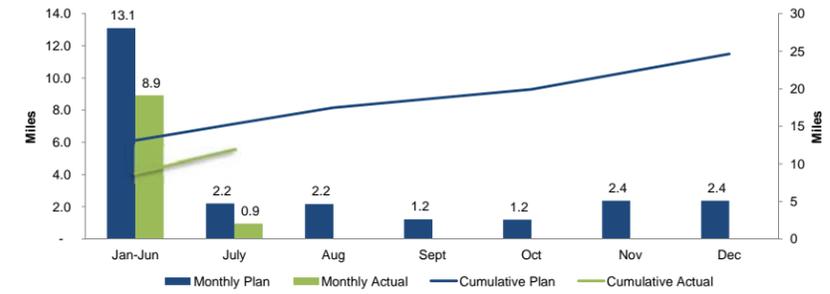
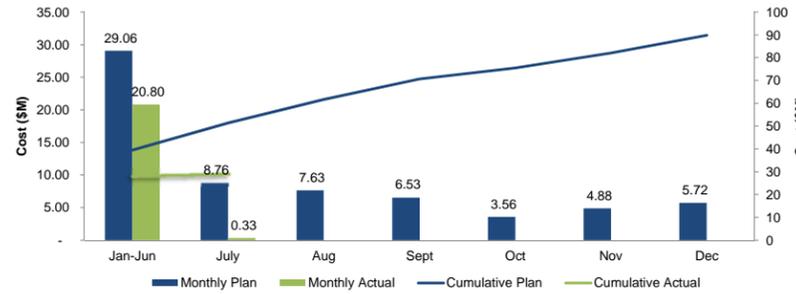
Projects similar to the Neighborhood Replacement Program, but other factors require the upgrade or relocation of existing vulnerable material. In most cases Peoples Gas is responding to a third party request to relocate or replace facilities due to conflicts with a PI project or addressing capacity or reliability concerns.

**Main Construction**

Main Construction - 2016 Projected vs Actual Cost (\$M)

Main Construction - 2016 Projected vs Actual Mileage

	Cost	Quantity	Unit Cost
Main Installation Actual-to-date	\$21.12 M	9.9 miles	\$2.14 M / mile
Planned-to-date	\$37.82 M	15.3 miles	\$2.47 M / mile
Main Retirement Actual-to-date	\$3.13 M	7.4 miles	\$0.42 M / mile
Planned-to-date	\$5.16 M	9.1 miles	\$0.57 M / mile



Activity	2016	Jan-Jun (\$M)	July (\$M)	Aug (\$M)	Sept (\$M)	Oct (\$M)	Nov (\$M)	Dec (\$M)	Total (\$M)
Main Installation	PLAN	29.06	8.76	7.63	6.53	3.56	4.88	5.72	66.15
	ACT	20.80	0.33	-	-	-	-	-	21.12
Main Retirement	PLAN	3.97	1.20	1.04	0.89	0.49	0.67	0.78	9.03
	ACT	2.84	0.30	-	-	-	-	-	3.13

Activity	2016	Jan-Jun (mi)	July (mi)	Aug (mi)	Sept (mi)	Oct (mi)	Nov (mi)	Dec (mi)	Total (mi)
Main Installation	PLAN	13.1	2.2	2.2	1.2	1.2	2.4	2.4	24.6
	ACT	8.9	0.9	-	-	-	-	-	9.9
Main Retirement	PLAN	6.7	2.4	2.3	1.8	1.8	2.3	2.3	19.5
	ACT	5.3	2.1	-	-	-	-	-	7.4

\*Graph representative of Main Installation costs only

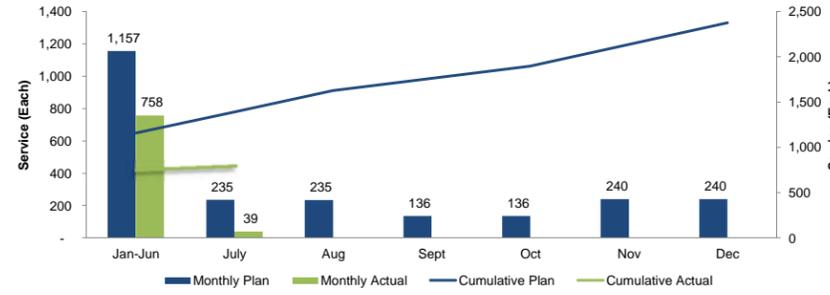
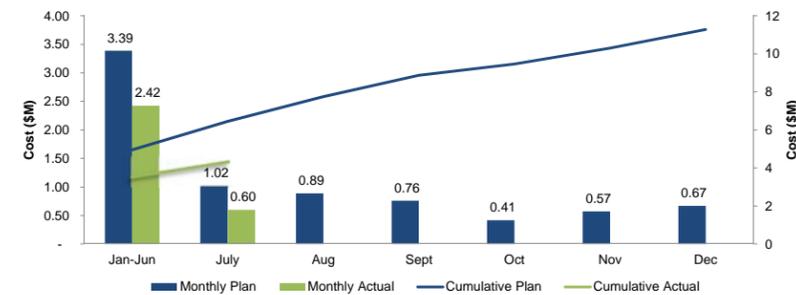
\*Graph representative of Main Installation mileage only

**Service Construction**

Service Construction - 2016 Projected vs Actual Cost (\$M)

Service Construction - 2016 Projected vs Actual Services

	Cost	Quantity	Unit Cost
Service Installment Actual-to-date	\$3.02 M	797 services	\$3,795 / service
Planned-to-date	\$4.41 M	1392 services	\$3,167 / service
Service Retirement Actual-to-date	\$0.92 M		
Planned-to-date	\$1.37 M		



Activity	2016	Jan-Jun (\$M)	July (\$M)	Aug (\$M)	Sept (\$M)	Oct (\$M)	Nov (\$M)	Dec (\$M)	Total (\$M)
Service Installment	PLAN	3.39	1.02	0.89	0.76	0.41	0.57	0.67	7.71
	ACT	2.42	0.60	-	-	-	-	-	3.02
Service Retirement	PLAN	1.05	0.32	0.28	0.24	0.13	0.18	0.21	2.39
	ACT	0.75	0.17	-	-	-	-	-	0.92

Activity	2016	Jan-Jun (services)	July (services)	Aug (services)	Sept (services)	Oct (services)	Nov (services)	Dec (services)	Total (services)
Service Installment	PLAN	1,157	235	235	136	136	240	240	2,378
	ACT	758	39	-	-	-	-	-	797

\*Graph representative of Service Installment costs only

**Restoration**

Restoration - 2016 Projected vs Actual Spend (\$M)

	Cost
Main Restoration Actual-to-date	\$5.24 M
Planned-to-date	\$9.07 M

Activity	2016	Jan-Jun (\$M)	July (\$M)	Aug (\$M)	Sept (\$M)	Oct (\$M)	Nov (\$M)	Dec (\$M)	Total (\$M)
Restoration	PLAN	6.97	2.10	1.83	1.57	0.85	1.17	1.37	15.86
	ACT	4.99	0.25	-	-	-	-	-	5.24

**System Modernization Program**  
**High Pressure (HP) Installation Program**

Data Date:  
Month-end July, 2016  
Version History: 1.0

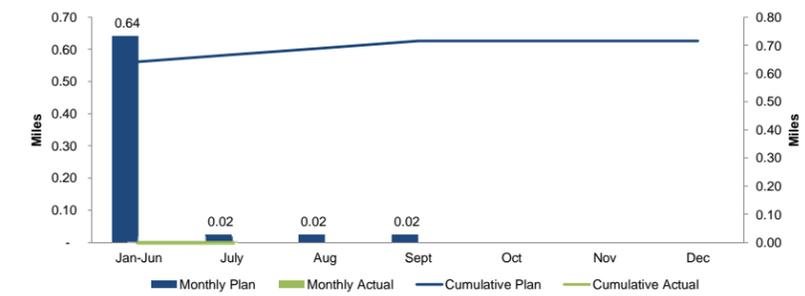
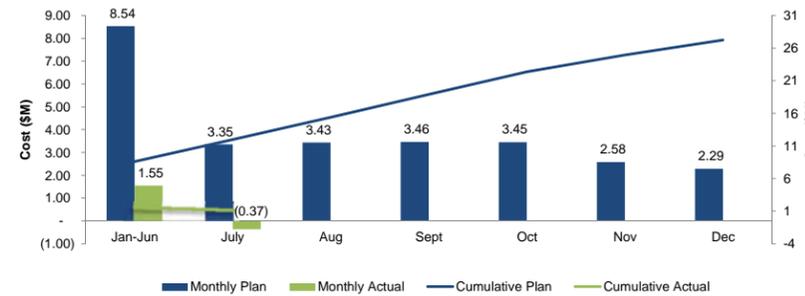
Projects that support the upgrade of low pressure (LP) distribution facilities to medium pressure (MP) facilities. The HP systems are required to provide an adequate supply of natural gas into the newly installed MP systems.

**Main Construction**

Main Construction - 2016 Projected vs Actual Cost (\$M)

Main Construction - 2016 Projected vs Actual Mileage

	Cost	Quantity	Unit Cost
Main Installment Actual-to-date	\$1.18 M	0.0 miles	Pending Qty
Planned-to-date	\$11.89 M	0.7 miles	\$17.84 M / mile
Main Retirement Actual-to-date	\$0.00 M	0.0 miles	Pending Qty
Planned-to-date	\$0.00 M	0.6 miles	N/A <sup>1</sup>



Activity	2016	Jan-Jun (\$M)	July <sup>2</sup> (\$M)	Aug (\$M)	Sept (\$M)	Oct (\$M)	Nov (\$M)	Dec (\$M)	Total (\$M)
Main Installment	PLAN	8.54	3.35	3.43	3.46	3.45	2.58	2.29	27.09
	ACT	1.55	(0.37)	-	-	-	-	-	1.18
Main Retirement	PLAN	-	-	-	-	-	-	-	-
	ACT	-	0.00	-	-	-	-	-	0.00

Activity	2016	Jan-Jun (mi)	July (mi)	Aug (mi)	Sept (mi)	Oct (mi)	Nov (mi)	Dec (mi)	Total (mi)
Main Installment	PLAN	0.64	0.02	0.02	0.02	-	-	-	0.72
	ACT	-	-	-	-	-	-	-	-
Main Retirement	PLAN	0.19	0.38	0.38	0.38	-	-	-	1.32
	ACT	-	-	-	-	-	-	-	-

<sup>1</sup>Graph representative of Main Installment costs only

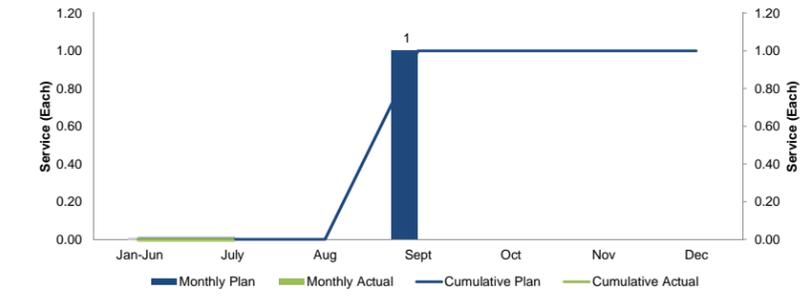
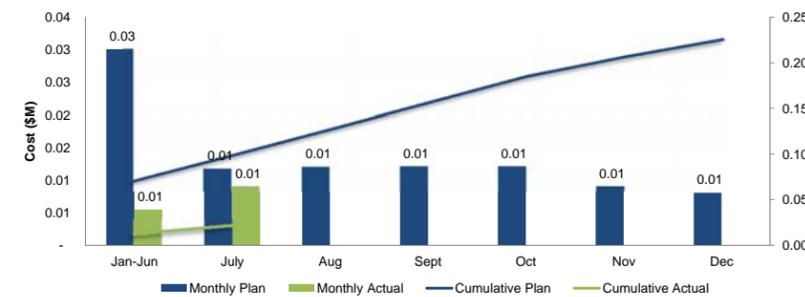
<sup>2</sup>Graph representative of Main Installment mileage only

**Service Construction**

Service Construction - 2016 Projected vs Actual Cost (\$M)

Service Construction - 2016 Projected vs Actual Services

	Cost	Quantity	Unit Cost
Service Installment Actual-to-date	\$0.01 M	0 services	Pending Qty
Planned-to-date	\$0.04 M	0 services	N/A
Service Retirement Actual-to-date	\$0.00 M	-	-
Planned-to-date	\$0.00 M	-	-



Activity	2016	Jan-Jun (\$M)	July (\$M)	Aug (\$M)	Sept (\$M)	Oct (\$M)	Nov (\$M)	Dec (\$M)	Total (\$M)
Service Installment	PLAN	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.10
	ACT	0.01	0.01	-	-	-	-	-	0.01
Service Retirement	PLAN	-	-	-	-	-	-	-	-
	ACT	-	-	-	-	-	-	-	-

Activity	2016	Jan-Jun (services)	July (services)	Aug (services)	Sept (services)	Oct (services)	Nov (services)	Dec (services)	Total (services)
Service Installment	PLAN	-	-	-	1	-	-	-	1
	ACT	-	-	-	-	-	-	-	-

<sup>1</sup>Graph representative of Service Installment costs only

**Restoration**

Restoration - 2016 Projected vs Actual Spend (\$M)

	Cost
Main Restoration Actual-to-date	\$0.02 M
Planned-to-date	\$0.29 M

Activity	2016	Jan-Jun (\$M)	July (\$M)	Aug (\$M)	Sept (\$M)	Oct (\$M)	Nov (\$M)	Dec (\$M)	Total (\$M)
Restoration	PLAN	0.09	0.04	0.04	0.04	0.04	0.03	0.02	0.29
	ACT	0.02	-	-	-	-	-	-	0.02

1. No planned-to-date cost associated with Main Retirement.  
2. July 2016 HP Main Installment actuals are negative due to accrual reversal.

4

**System Modernization Program**  
*Transmission Upgrades*

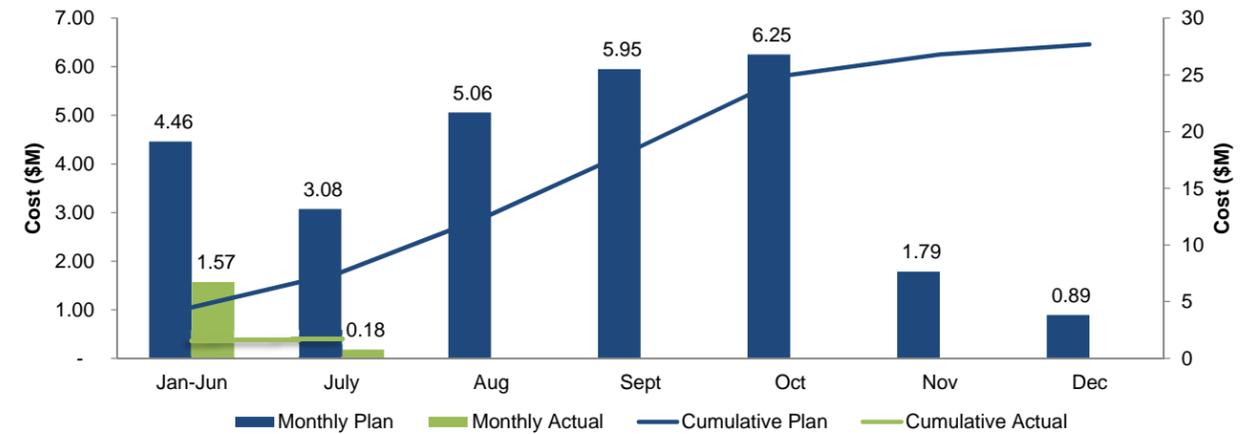
Data Date:  
Month-end July, 2016  
Version History: 1.0

Projects that address the replacement of high-risk HP transmission pipelines and associated facilities as well as establishing records and maximum allowable operating pressures.

**Facility Construction**

**Facility Construction - 2016 Projected vs Actual Spend (\$M)**

	Cost	Quantity	Unit Cost
Facility Installment Actual-to-date	\$1.76 M	0.0 miles	TBD
Planned-to-date	\$7.54 M	0.2 miles	N/A <sup>1</sup>
Facility Retirement Actual-to-date	\$0.00 M	0.0 miles	TBD
Planned-to-date	\$0.00 M	0.0 miles	N/A



Activity	2016	Jan-Jun (\$M)	July (\$M)	Aug (\$M)	Sept (\$M)	Oct (\$M)	Nov (\$M)	Dec (\$M)	Total (\$M)
Main Installment	PLAN	4.46	3.08	5.06	5.95	6.25	1.79	0.89	27.48
	ACT	1.57	0.18	-	-	-	-	-	1.76
Main Retirement	PLAN	-	-	-	-	-	-	-	-
	ACT	-	-	-	-	-	-	-	-

\*Graph representative of Facility Installment costs only

**Restoration**

**Restoration - 2016 Projected vs Actual Spend (\$M)**

	Cost
Restoration	\$0.01 M
Planned-to-date	\$0.06 M

Activity	2016	Jan-Jun (\$M)	July (\$M)	Aug (\$M)	Sept (\$M)	Oct (\$M)	Nov (\$M)	Dec (\$M)	Total (\$M)
Restoration	PLAN	0.04	0.02	0.04	0.05	0.05	0.01	0.01	0.22
	ACT	0.01	-	-	-	-	-	-	0.01

1. Under the 2016 transmission upgrades, unit cost is not an appropriate metric as the facilities being built are of disparate types and segments.

**System Modernization Program**

**Meters**

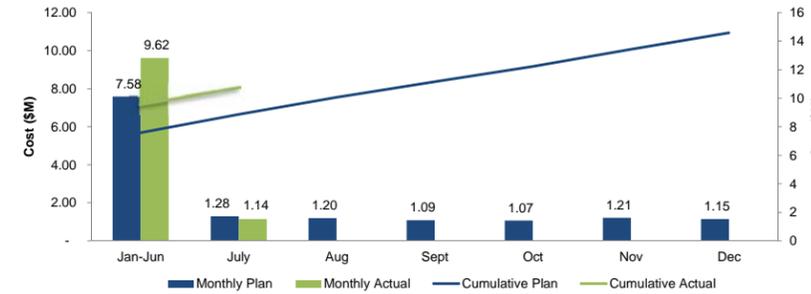
Data Date:  
Month-end July, 2016  
Version History: 1.0

**Meters**

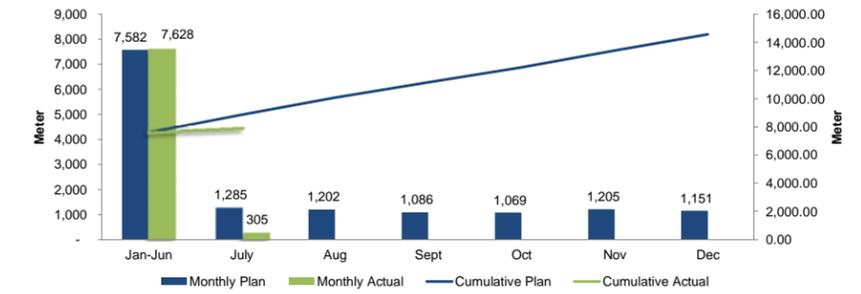
Meters - 2016 Projected vs Actual Cost (\$M)

Meters - 2016 Projected vs Actual Meter Count

	Cost	Quantity	Unit Cost
Meters Actual-to-date	\$10.76 M	7933 meters	\$1,356 / meter
Planned-to-date	\$8.87 M	8867 meters	\$1,000 / meter



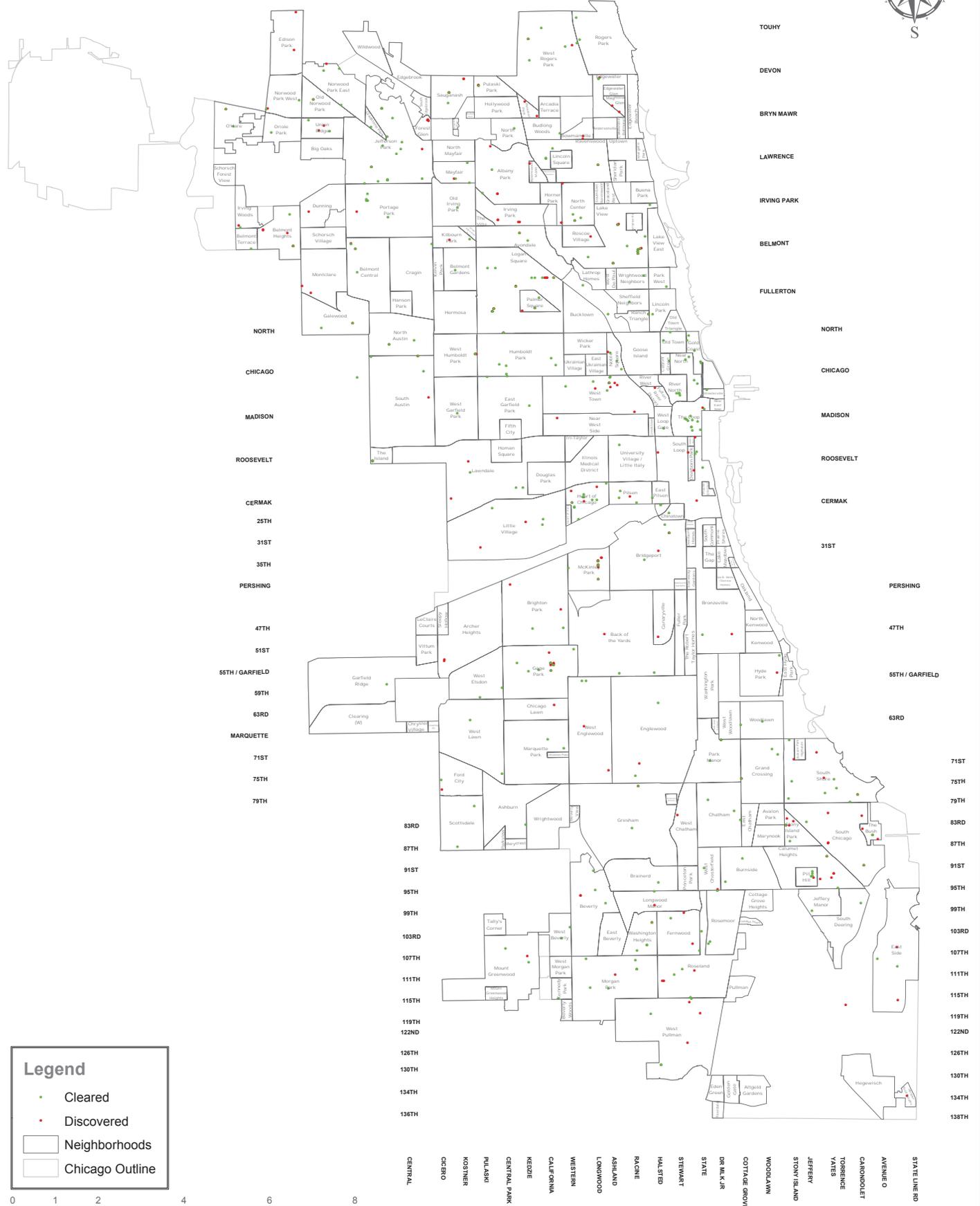
Activity	2016	Jan-Jun (\$M)	July (\$M)	Aug (\$M)	Sept (\$M)	Oct (\$M)	Nov (\$M)	Dec (\$M)	Total (\$M)
Meters	PLAN	7.58	1.28	1.20	1.09	1.07	1.21	1.15	14.58
	ACT	9.62	1.14	-	-	-	-	-	10.76



Activity	2016	Jan-Jun (meters)	July (meters)	Aug (meters)	Sept (meters)	Oct (meters)	Nov (meters)	Dec (meters)	Total (meters)
Main Installment	PLAN	7,582	1,285	1,202	1,086	1,069	1,205	1,151	14,579
	ACT	7,628	305	-	-	-	-	-	7,933

# Peoples Gas - July 2016 Leaks

## Appendix A



**APPENDIX B**  
**PUBLIC VERSION**

**APPENDIX C**  
**PUBLIC VERSION**