

March 11, 2013

**SNWA Rate
Examples**



March Meeting Goals

- **Review customer types for comparisons and select specific customer types for ongoing comparisons**
- **Review previous rate examples**
- **Review additional rate examples**
- **Discuss rate examples and appropriate next steps**

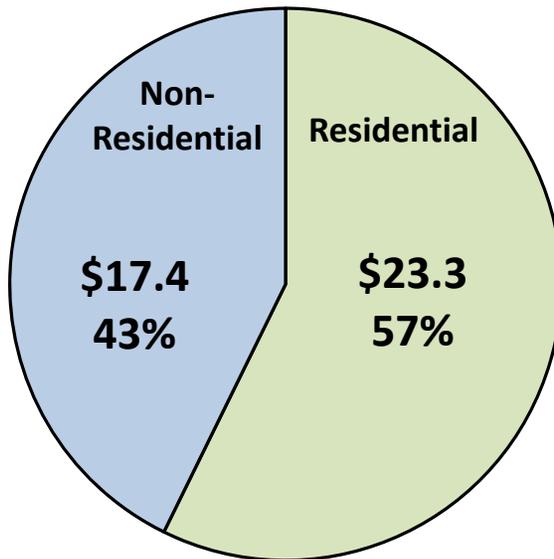
Outstanding Information Requests

LVVWD Revenue Comparison

(Before and After Infrastructure Charge Implementation)

September 2011

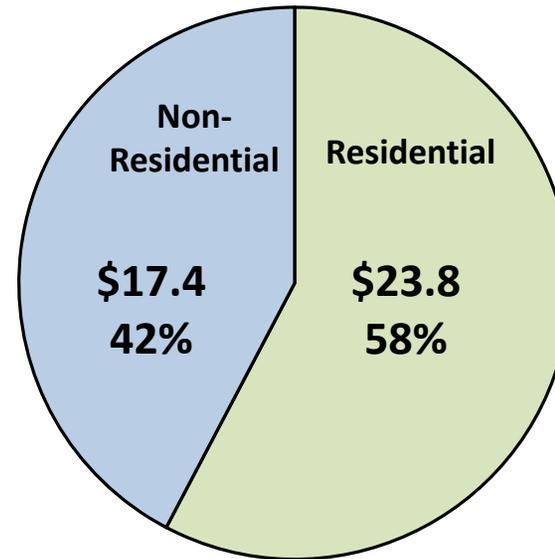
Before Infrastructure Charge



Volume Sold: 11.3 million gallons

September 2012

After Infrastructure Charge



Volume Sold: 10.2 million gallons

*Amounts in millions

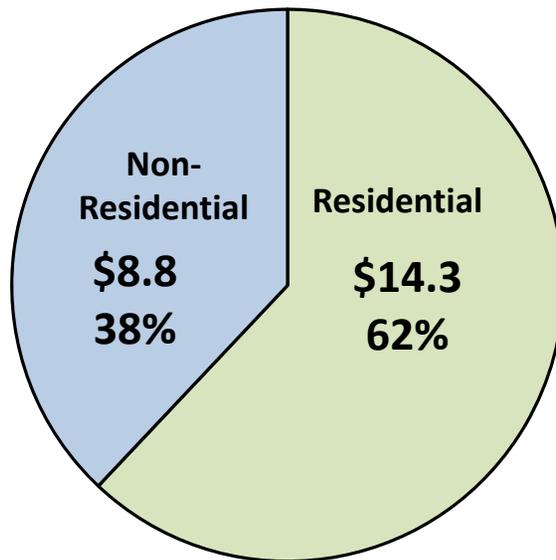
Outstanding Information Requests

LVVWD Revenue Comparison

(Before and After Infrastructure Charge Implementation)

November 2011

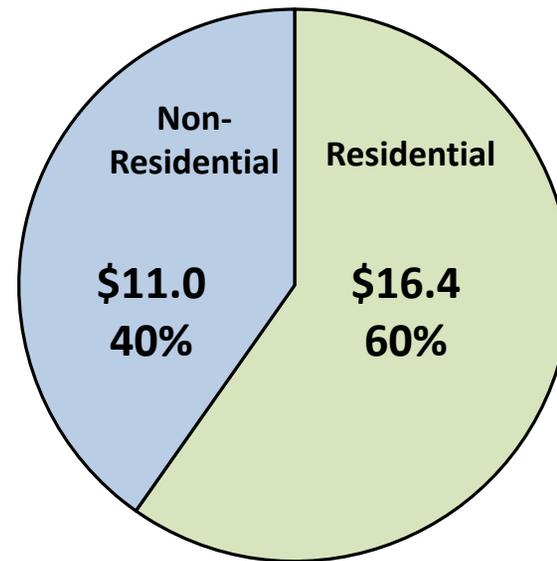
Before Infrastructure Charge



Volume Sold: 6.6 million gallons

November 2012

After Infrastructure Charge



Volume Sold: 6.5 million gallons

*Amounts in millions

Customer Information Challenges

There are limits in the ability to create “typical” bills for a group of customers.

- Customers are categorized by water use and land use codes
- Some customers do not have a specific land use code
For example: “non-profits” or “car washes”
- Customers within the same land use code can vary greatly in size and water use.
For example: Land Use Code #410-Schools includes public high schools (higher water use) and private daycare facilities (lower water use)
- Similar customers types may have different size meters and/or firelines.
For example: Restaurants may have different sized meters or may be stand alone or combined in a shopping center or other location.

Customer Type Comparisons

Customer Type	Typical Monthly Consumption (in 1,000 gallons)	Monthly Bill
RESIDENTIAL SAMPLES		
Single Family Residential: 5/8" meter	Median: 10 High: 28	\$34 \$109
Single Family Residential: 1" meter	Median: 35 High: 116	\$123 \$486
Single Family Residential: 1 1/2" meter	Median: 88 High: 243	\$305 \$935
Multi-Family Residential: 5/8" meter	Median: 14 High: 72	\$49 \$322
NON-RESIDENTIAL SAMPLES		
High Rise		
Restaurant		
Fast Food		
Golf Course*	32,799 (all services)	\$114,341
Park*	Median: 554 High: 4,581	\$2,057 \$16,050
Hotel / Casino		
High School*	3,080 (all services)	\$11,487

*Representative customer used

Customer Type Comparisons

Customer Type	Typical Monthly Consumption (in 1,000 gallons)	Monthly Bill
<i>NON-RESIDENTIAL SAMPLES, Continued</i>		
Retail Complex – Mall*	6,030 (all services)	\$25,365
Retail Complex* – Grocery store +small shops	626	\$2,426
Retail – standalone service		
Commercial High-rise		
Commercial Standalone		
Car Wash*	393	\$1,391
Religious*	30 (all services)	\$653
Non-profit*	270 (all services)	\$1,842
Commercial Laundry*	18,488 (all services)	\$66,198
Storage / Warehouse*	132	\$1,124
HOA Common Area*	1,208	\$5,215
Day Care*	113	\$410

*Representative customer used

Rate Impacts

Rate Impacts Vary by Size of Meter and Amount of Usage (Non-residential customer)

	Commodity Charge	Infrastructure Charge	Hybrid (50/50)
Small Meter Small Consumption	1	3	2
Small Meter Large Consumption	3	1	2
Large Meter Small Consumption	1	3	2
Large Meter Large Consumption	3	1	2

Relative impact

1 is lowest

3 is highest

Rate Scenario Review

- 1. Commodity Charge Increase**

- 2. Infrastructure Charge Increase**
 - a. No increase to firelines**
 - b. With increase to firelines**
 - c. Increase existing fireline charges by 3% inflation
 - d. Increase existing fireline charges by 3% inflation and gradual increases to the Infrastructure Charge beginning in 2014

- 3. Hybrid: Commodity Charge and Infrastructure Charge Increase**
 - a. No increase to firelines**
 - b. With increase to firelines**
 - c. Increase existing fireline charges by 3% inflation
 - d. Increase existing fireline charges by 3% inflation and gradual increases to Infrastructure Charge beginning 2014

EXAMPLE 1: Commodity Charge Increase

WHAT IT IS:

Increase to the Commodity Charge

WHAT IT WOULD DO:

Increase the customer's cost of water per thousand gallons. Beginning in 2016, the rate would be increased annually as needed to meet debt service obligations.

IMPACTS

- Commodity Charge
- Reliability Surcharge
- Infrastructure Charge
- Fireline Charge

EXAMPLE 1: Commodity Charge Increase

Fiscal Year (bold numbers in thousands)	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue Requirement without Price Elasticity	(\$12,372)	(\$12,182)	\$10,266	\$61,090	\$80,912	\$80,912	\$79,850	\$78,590	\$74,854
Additional Required Revenues due to Price Elasticity				\$1,438	\$2,609	\$2,599	\$2,545	\$2,488	\$2,342
Total Required Revenues	(\$12,372)	(\$12,182)	\$10,266	\$62,528	\$83,522	\$83,511	\$82,395	\$81,078	\$77,196
Additional Regional Commodity Charge				\$47,557	\$82,614	\$83,614	\$82,041	\$80,376	\$75,976
Implicit Additional Reliability Surcharge				\$531	\$922	\$933	\$915	\$897	\$848
Beginning Fund Balance with Revenue Adjustments	\$280,174	\$292,546	\$304,728	\$294,462	\$280,022	\$280,036	\$281,071	\$281,632	\$281,827
Ending Fund Balance with Revenue Adjustments	\$292,546	\$304,728	\$294,462	\$280,022	\$280,036	\$281,071	\$281,632	\$281,827	\$281,454
<i>Current Commodity Charge Level (per 1,000 Gallons)</i>	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30
<i>Additional Commodity Charge Level (per 1,000 Gallons)</i>	\$0.00	\$0.00	\$0.00	\$0.35	\$0.62	\$0.62	\$0.60	\$0.58	\$0.54
<i>Total Commodity Charge Level (per 1,000 Gallons)</i>	\$0.30	\$0.30	\$0.30	\$0.65	\$0.92	\$0.92	\$0.90	\$0.88	\$0.84

EXAMPLE 1: Commodity Charge Increase

Customer Type	Typical Monthly Consumption (in 1,000 gallons)	Monthly Bill (Current Rates)	Sample Bill 2016	Sample Bill 2017
RESIDENTIAL SAMPLES				
Single Family Residential: 5/8" meter	Median: 10	\$34	\$38	\$41
	High: 28	\$108	\$118	\$125
Retail Complex – Mall	6,030 (all services)	\$25,365	\$27,528	\$29,197
Commercial Laundry	18,488 (all services)	\$66,198	\$72,775	\$77,892
High School	3,080 (all services)	\$11,487	\$12,591	\$13,443

EXAMPLE 2A: Infrastructure Charge Increase

No change to fireline

WHAT IT IS:

Increase to the Infrastructure Charge (Fireline charges remain the same as today)

WHAT IT WOULD DO:

Increase all customers' Infrastructure Charge. Remove the \$5 constraint from single-family residential customers' infrastructure charge.

IMPACTS

- Commodity Charge
- Reliability Surcharge
- Infrastructure Charge
- Fireline Charge

EXAMPLE 2A: Infrastructure Charge Increase

No change to fireline

No restriction on residential rates. No additional charges to fire meters.

Fiscal Year (bold numbers in thousands)	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue Requirement without Price Elasticity	(\$12,372)	(\$12,182)	\$10,266	\$61,090	\$81,954	\$80,912	\$79,850	\$78,590	\$74,854
Additional Required Revenue due to Price Elasticity				\$912	\$1,588	\$1,572	\$1,557	\$1,534	\$1,458
Total Required Revenues	(\$12,372)	(\$12,182)	\$10,266	\$62,002	\$83,541	\$82,485	\$81,407	\$80,124	\$76,312
Revenues from Infrastructure Surcharge (1)				\$47,966	\$83,551	\$82,495	\$81,410	\$80,164	\$76,315
Beginning Fund Balance with Revenue Adjustments	\$280,174	\$292,546	\$304,728	\$294,462	\$280,426	\$280,435	\$280,446	\$280,449	\$280,489
Ending Fund Balance with Revenue Adjustments	\$292,546	\$304,728	\$294,462	\$280,426	\$280,435	\$280,446	\$280,449	\$280,489	\$280,492

Infrastructure Charge per Meter per Month

Residential - 5/8" & 3/4" meter sizes	\$5.00	\$5.00	\$5.00	\$10.99	\$15.34	\$15.12	\$14.90	\$14.65	\$14.07
Residential - 1" meter size	\$19.21	\$19.21	\$19.21	\$30.55	\$38.80	\$38.38	\$37.96	\$37.48	\$36.39
Residential - 1.5" meter size	\$38.41	\$38.41	\$38.41	\$61.09	\$77.58	\$76.74	\$75.91	\$74.94	\$72.77
Residential - 2" meter size	\$61.46	\$61.46	\$61.46	\$97.75	\$124.13	\$122.79	\$121.46	\$119.91	\$116.43
Residential - 3" meter size	\$122.90	\$122.90	\$122.90	\$195.48	\$248.23	\$245.56	\$242.90	\$239.80	\$232.84
Residential - 4" meter size	\$192.03	\$192.03	\$192.03	\$305.43	\$387.85	\$383.68	\$379.53	\$374.68	\$363.81
Residential - 6" meter size	\$384.05	\$384.05	\$384.05	\$610.85	\$775.69	\$767.34	\$759.04	\$749.35	\$727.61
Residential - 8" meter size and larger	\$614.47	\$614.47	\$614.47	\$977.35	\$1,241.09	\$1,227.73	\$1,214.45	\$1,198.94	\$1,164.16
Non-Residential - 5/8" & 3/4" meter sizes	\$19.05	\$19.05	\$19.05	\$25.04	\$29.39	\$29.17	\$28.95	\$28.70	\$28.12
Non-Residential - 1" meter size	\$36.08	\$36.08	\$36.08	\$47.42	\$55.67	\$55.25	\$54.83	\$54.35	\$53.26
Non-Residential - 1.5" meter size	\$72.16	\$72.16	\$72.16	\$94.84	\$111.33	\$110.49	\$109.66	\$108.69	\$106.52
Non-Residential - 2" meter size	\$115.45	\$115.45	\$115.45	\$151.74	\$178.12	\$176.78	\$175.45	\$173.90	\$170.42
Non-Residential - 3" meter size	\$230.90	\$230.90	\$230.90	\$303.48	\$356.23	\$353.56	\$350.90	\$347.80	\$340.84
Non-Residential - 4" meter size	\$360.79	\$360.79	\$360.79	\$474.19	\$556.61	\$552.44	\$548.29	\$543.44	\$532.57
Non-Residential - 6" meter size	\$721.57	\$721.57	\$721.57	\$948.37	\$1,113.21	\$1,104.86	\$1,096.56	\$1,086.87	\$1,065.13
Non-Residential - 8" meter size	\$1,154.50	\$1,154.50	\$1,154.50	\$1,517.38	\$1,781.12	\$1,767.76	\$1,754.48	\$1,738.97	\$1,704.19
Non-Residential - 10" and larger meter sizes	\$1,659.59	\$1,659.59	\$1,659.59	\$2,181.23	\$2,560.35	\$2,541.15	\$2,522.06	\$2,499.77	\$2,449.77
Non-Residential - 5/8" & 3/4" meter sizes Fire Meter	\$3.34	\$3.34	\$3.34	\$3.34	\$3.34	\$3.34	\$3.34	\$3.34	\$3.34
Non-Residential - 1" meter size Fire Meter	\$6.32	\$6.32	\$6.32	\$6.32	\$6.32	\$6.32	\$6.32	\$6.32	\$6.32
Non-Residential - 1.5" meter size Fire Meter	\$12.63	\$12.63	\$12.63	\$12.63	\$12.63	\$12.63	\$12.63	\$12.63	\$12.63
Non-Residential - 2" meter size Fire Meter	\$20.21	\$20.21	\$20.21	\$20.21	\$20.21	\$20.21	\$20.21	\$20.21	\$20.21
Non-Residential - 3" meter size Fire Meter	\$40.41	\$40.41	\$40.41	\$40.41	\$40.41	\$40.41	\$40.41	\$40.41	\$40.41
Non-Residential - 4" meter size Fire Meter	\$63.14	\$63.14	\$63.14	\$63.14	\$63.14	\$63.14	\$63.14	\$63.14	\$63.14
Non-Residential - 6" meter size Fire Meter	\$126.28	\$126.28	\$126.28	\$126.28	\$126.28	\$126.28	\$126.28	\$126.28	\$126.28
Non-Residential - 8" meter size Fire Meter	\$202.04	\$202.04	\$202.04	\$202.04	\$202.04	\$202.04	\$202.04	\$202.04	\$202.04
Non-Residential - 10" and larger meter sizes Fire Meter	\$290.43	\$290.43	\$290.43	\$290.43	\$290.43	\$290.43	\$290.43	\$290.43	\$290.43

(1) Additional to revenues from current Infrastructure Surcharge levels.

EXAMPLE 2A: Infrastructure Charge Increase

No change to fireline

Customer Type	Typical Monthly Consumption (in 1,000 gallons)	Monthly Bill (Current Rates)	Sample Bill 2016	Sample Bill 2017
RESIDENTIAL SAMPLES				
Single Family Residential: 5/8" meter	Median: 10	\$34	\$41	\$45
	High: 28	\$108	\$114	\$118
Retail Complex – Mall	6,030 (all services)	\$25,365	\$25,583	\$25,741
Commercial Laundry	18,488 (all services)	\$66,198	\$66,769	\$67,224
High School	3,080 (all services)	\$11,487	\$11,713	\$11,878

EXAMPLE 2B: Infrastructure Charge Increase

With increase to firelines

WHAT IT IS:

Increase to the Infrastructure Charge and increase to fireline charges.

WHAT IT WOULD DO:

Increase all customers' Infrastructure Charge. Remove the \$5 constraint from single-family residential customers' infrastructure charge. Increase fireline charges correspondingly.

IMPACTS

- Commodity Charge
- Reliability Surcharge
- Infrastructure Charge
- Fireline Charge

EXAMPLE 2B: Infrastructure Charge Increase

With increase to firelines

No restriction on residential rates. Includes additional charges to fire meters.

Fiscal Year (bold numbers in thousands)	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue Requirement without Price Elasticity	(\$12,372)	(\$12,182)	\$10,266	\$61,090	\$81,954	\$80,912	\$79,850	\$78,590	\$74,854
Additional Required Revenue due to Price Elasticity				\$834	\$1,452	\$1,439	\$1,426	\$1,406	\$1,338
Total Required Revenues	(\$12,372)	(\$12,182)	\$10,266	\$61,923	\$83,406	\$82,352	\$81,276	\$79,996	\$76,193
Revenues from Infrastructure Surcharge (1)				\$47,920	\$83,429	\$82,402	\$81,289	\$80,051	\$76,233
Beginning Fund Balance with Revenue Adjustments	\$280,174	\$292,546	\$304,728	\$294,462	\$280,458	\$280,481	\$280,531	\$280,544	\$280,599
Ending Fund Balance with Revenue Adjustments	\$292,546	\$304,728	\$294,462	\$280,458	\$280,481	\$280,531	\$280,544	\$280,599	\$280,640

Infrastructure Charge per Meter per Month

<i>Residential - 5/8" & 3/4" meter sizes</i>	\$5.00	\$5.00	\$5.00	\$10.48	\$14.46	\$14.27	\$14.07	\$13.85	\$13.33
<i>Residential - 1" meter size</i>	\$19.21	\$19.21	\$19.21	\$29.58	\$37.13	\$36.76	\$36.39	\$35.96	\$34.98
<i>Residential - 1.5" meter size</i>	\$38.41	\$38.41	\$38.41	\$59.14	\$74.24	\$73.50	\$72.76	\$71.91	\$69.95
<i>Residential - 2" meter size</i>	\$61.46	\$61.46	\$61.46	\$94.63	\$118.78	\$117.60	\$116.42	\$115.05	\$111.91
<i>Residential - 3" meter size</i>	\$122.90	\$122.90	\$122.90	\$189.24	\$237.53	\$235.17	\$232.82	\$230.07	\$223.80
<i>Residential - 4" meter size</i>	\$192.03	\$192.03	\$192.03	\$295.68	\$371.14	\$367.46	\$363.78	\$359.49	\$349.69
<i>Residential - 6" meter size</i>	\$384.05	\$384.05	\$384.05	\$591.34	\$742.27	\$734.90	\$727.55	\$718.96	\$699.36
<i>Residential - 8" meter size and larger</i>	\$614.47	\$614.47	\$614.47	\$946.14	\$1,187.62	\$1,175.82	\$1,164.07	\$1,150.32	\$1,118.96
<i>Non-Residential - 5/8" & 3/4" meter sizes</i>	\$19.05	\$19.05	\$19.05	\$24.53	\$28.51	\$28.32	\$28.12	\$27.90	\$27.38
<i>Non-Residential - 1" meter size</i>	\$36.08	\$36.08	\$36.08	\$46.45	\$54.00	\$53.63	\$53.26	\$52.83	\$51.85
<i>Non-Residential - 1.5" meter size</i>	\$72.16	\$72.16	\$72.16	\$92.89	\$107.99	\$107.25	\$106.51	\$105.66	\$103.70
<i>Non-Residential - 2" meter size</i>	\$115.45	\$115.45	\$115.45	\$148.62	\$172.77	\$171.59	\$170.41	\$169.04	\$165.90
<i>Non-Residential - 3" meter size</i>	\$230.90	\$230.90	\$230.90	\$297.24	\$345.53	\$343.17	\$340.82	\$338.07	\$331.80
<i>Non-Residential - 4" meter size</i>	\$360.79	\$360.79	\$360.79	\$464.44	\$539.90	\$536.22	\$532.54	\$528.25	\$518.45
<i>Non-Residential - 6" meter size</i>	\$721.57	\$721.57	\$721.57	\$928.86	\$1,079.79	\$1,072.42	\$1,065.07	\$1,056.48	\$1,036.88
<i>Non-Residential - 8" meter size</i>	\$1,154.50	\$1,154.50	\$1,154.50	\$1,486.17	\$1,727.65	\$1,715.85	\$1,704.10	\$1,690.35	\$1,658.99
<i>Non-Residential - 10" and larger meter sizes</i>	\$1,659.59	\$1,659.59	\$1,659.59	\$2,136.36	\$2,483.49	\$2,466.53	\$2,449.63	\$2,429.87	\$2,384.79
<i>Non-Residential - 5/8" & 3/4" meter sizes Fire Meter</i>	\$3.34	\$3.34	\$3.34	\$4.30	\$5.00	\$4.97	\$4.93	\$4.89	\$4.80
<i>Non-Residential - 1" meter size Fire Meter</i>	\$6.32	\$6.32	\$6.32	\$8.14	\$9.46	\$9.39	\$9.33	\$9.26	\$9.08
<i>Non-Residential - 1.5" meter size Fire Meter</i>	\$12.63	\$12.63	\$12.63	\$16.26	\$18.90	\$18.77	\$18.65	\$18.50	\$18.15
<i>Non-Residential - 2" meter size Fire Meter</i>	\$20.21	\$20.21	\$20.21	\$26.02	\$30.24	\$30.04	\$29.83	\$29.59	\$29.04
<i>Non-Residential - 3" meter size Fire Meter</i>	\$40.41	\$40.41	\$40.41	\$52.02	\$60.47	\$60.06	\$59.65	\$59.17	\$58.07
<i>Non-Residential - 4" meter size Fire Meter</i>	\$63.14	\$63.14	\$63.14	\$81.28	\$94.49	\$93.84	\$93.20	\$92.45	\$90.73
<i>Non-Residential - 6" meter size Fire Meter</i>	\$126.28	\$126.28	\$126.28	\$162.56	\$188.97	\$187.68	\$186.40	\$184.89	\$181.46
<i>Non-Residential - 8" meter size Fire Meter</i>	\$202.04	\$202.04	\$202.04	\$260.09	\$302.34	\$300.28	\$298.22	\$295.82	\$290.33
<i>Non-Residential - 10" and larger meter sizes Fire Meter</i>	\$290.43	\$290.43	\$290.43	\$373.87	\$434.62	\$431.65	\$428.69	\$425.23	\$417.34

(1) Additional to revenues from current Infrastructure Surcharge levels.

EXAMPLE 2B: Infrastructure Charge Increase

With increase to firelines

Customer Type	Typical Monthly Consumption (in 1,000 gallons)	Monthly Bill (Current Rates)	Sample Bill 2016	Sample Bill 2017
RESIDENTIAL SAMPLES				
Single Family Residential: 5/8" meter	Median: 10	\$34	\$40	\$44
	High: 28	\$108	\$113	\$117
Retail Complex – Mall	6,030 (all services)	\$25,365	\$25,673	\$25,897
Commercial Laundry	18,488 (all services)	\$66,198	\$66,856	\$67,376
High School	3,080 (all services)	\$11,487	\$11,809	\$12,045

EXAMPLE 3A: Increase Commodity Charge and Infrastructure Charge

No change to firelines

WHAT IT IS:

HYBRID. Increase to the Infrastructure Charge and the Commodity Charge to fund revenue shortfalls equally (50/50). No changes to existing fireline charges.

WHAT IT WOULD DO:

Increase all customers' Infrastructure Charge. Increase all customers' Commodity Charge. Remove the \$5 constraint from single-family residential customers' infrastructure charge. No impacts to fireline charges.

IMPACTS

- Commodity Charge
- Reliability Surcharge
- Infrastructure Charge
- Fireline Charge

EXAMPLE 3A: Increase Commodity Charge and Infrastructure Charge

No change to firelines

Fiscal Year (bold numbers in thousands)	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue Requirement without Price Elasticity	(\$12,372)	(\$12,182)	\$10,266	\$61,090	\$81,954	\$80,912	\$79,850	\$78,590	\$74,854
Additional Required Revenues due to Price Elasticity				\$1,130	\$2,078	\$2,050	\$2,019	\$1,984	\$1,896
Total Required Revenues	(\$12,372)	(\$12,182)	\$10,266	\$62,219	\$84,031	\$82,962	\$81,870	\$80,574	\$76,750
Additional Regional Commodity Charge Revenue				\$20,536	\$41,813	\$41,007	\$40,161	\$39,273	\$38,389
Implicit Additional Reliability Surcharge Revenue				\$229	\$466	\$457	\$448	\$438	\$428
Fixed Charge per Meter Revenue				\$26,981	\$41,770	\$41,557	\$41,278	\$40,875	\$37,944
Total Additional Revenues				\$47,746	\$84,050	\$83,021	\$81,887	\$80,587	\$76,762
Beginning Fund Balance with Revenue Adjustments	\$280,174	\$292,546	\$304,728	\$294,462	\$279,988	\$280,007	\$280,066	\$280,083	\$280,096
Ending Fund Balance with Revenue Adjustments	\$292,546	\$304,728	\$294,462	\$279,988	\$280,007	\$280,066	\$280,083	\$280,096	\$280,108
<i>Additional Commodity Charge Level (per 1,000 Gallons)</i>	\$0.00	\$0.00	\$0.00	\$0.15	\$0.31	\$0.30	\$0.29	\$0.28	\$0.27
<i>Total Commodity Charge Level (per 1,000 Gallons)</i>	\$0.30	\$0.30	\$0.30	\$0.45	\$0.61	\$0.60	\$0.59	\$0.58	\$0.57
Infrastructure Charge per Meter per Month									
<i>Residential - 5/8" & 3/4" meter sizes</i>	\$5.00	\$5.00	\$5.00	\$8.37	\$10.17	\$10.10	\$10.02	\$9.92	\$9.51
<i>Residential - 1" meter size</i>	\$19.21	\$19.21	\$19.21	\$25.59	\$29.00	\$28.86	\$28.72	\$28.53	\$27.75
<i>Residential - 1.5" meter size</i>	\$38.41	\$38.41	\$38.41	\$51.16	\$57.99	\$57.70	\$57.42	\$57.04	\$55.49
<i>Residential - 2" meter size</i>	\$61.46	\$61.46	\$61.46	\$81.86	\$92.78	\$92.32	\$91.87	\$91.27	\$88.79
<i>Residential - 3" meter size</i>	\$122.90	\$122.90	\$122.90	\$163.69	\$185.54	\$184.61	\$183.72	\$182.52	\$177.55
<i>Residential - 4" meter size</i>	\$192.03	\$192.03	\$192.03	\$255.76	\$289.90	\$288.45	\$287.06	\$285.18	\$277.42
<i>Residential - 6" meter size</i>	\$384.05	\$384.05	\$384.05	\$511.50	\$579.78	\$576.89	\$574.11	\$570.35	\$554.83
<i>Residential - 8" meter size and larger</i>	\$614.47	\$614.47	\$614.47	\$818.39	\$927.64	\$923.00	\$918.57	\$912.55	\$887.71
<i>Non-Residential - 5/8" & 3/4" meter sizes</i>	\$19.05	\$19.05	\$19.05	\$22.42	\$24.22	\$24.15	\$24.07	\$23.97	\$23.56
<i>Non-Residential - 1" meter size</i>	\$36.08	\$36.08	\$36.08	\$42.46	\$45.87	\$45.73	\$45.59	\$45.40	\$44.62
<i>Non-Residential - 1.5" meter size</i>	\$72.16	\$72.16	\$72.16	\$84.91	\$91.74	\$91.45	\$91.17	\$90.79	\$89.24
<i>Non-Residential - 2" meter size</i>	\$115.45	\$115.45	\$115.45	\$135.85	\$146.77	\$146.31	\$145.86	\$145.26	\$142.78
<i>Non-Residential - 3" meter size</i>	\$230.90	\$230.90	\$230.90	\$271.69	\$293.54	\$292.61	\$291.72	\$290.52	\$285.55
<i>Non-Residential - 4" meter size</i>	\$360.79	\$360.79	\$360.79	\$424.52	\$458.66	\$457.21	\$455.82	\$453.94	\$446.18
<i>Non-Residential - 6" meter size</i>	\$721.57	\$721.57	\$721.57	\$849.02	\$917.30	\$914.41	\$911.63	\$907.87	\$892.35
<i>Non-Residential - 8" meter size</i>	\$1,154.50	\$1,154.50	\$1,154.50	\$1,358.42	\$1,467.67	\$1,463.03	\$1,458.60	\$1,452.58	\$1,427.74
<i>Non-Residential - 10" and larger meter sizes</i>	\$1,659.59	\$1,659.59	\$1,659.59	\$1,952.72	\$2,109.77	\$2,103.10	\$2,096.73	\$2,088.08	\$2,052.37
<i>Non-Residential - 5/8" & 3/4" meter sizes Fire Meter</i>	\$3.34	\$3.34	\$3.34	\$3.34	\$3.34	\$3.34	\$3.34	\$3.34	\$3.34
<i>Non-Residential - 1" meter size Fire Meter</i>	\$6.32	\$6.32	\$6.32	\$6.32	\$6.32	\$6.32	\$6.32	\$6.32	\$6.32
<i>Non-Residential - 1.5" meter size Fire Meter</i>	\$12.63	\$12.63	\$12.63	\$12.63	\$12.63	\$12.63	\$12.63	\$12.63	\$12.63
<i>Non-Residential - 2" meter size Fire Meter</i>	\$20.21	\$20.21	\$20.21	\$20.21	\$20.21	\$20.21	\$20.21	\$20.21	\$20.21
<i>Non-Residential - 3" meter size Fire Meter</i>	\$40.41	\$40.41	\$40.41	\$40.41	\$40.41	\$40.41	\$40.41	\$40.41	\$40.41
<i>Non-Residential - 4" meter size Fire Meter</i>	\$63.14	\$63.14	\$63.14	\$63.14	\$63.14	\$63.14	\$63.14	\$63.14	\$63.14
<i>Non-Residential - 6" meter size Fire Meter</i>	\$126.28	\$126.28	\$126.28	\$126.28	\$126.28	\$126.28	\$126.28	\$126.28	\$126.28
<i>Non-Residential - 8" meter size Fire Meter</i>	\$202.04	\$202.04	\$202.04	\$202.04	\$202.04	\$202.04	\$202.04	\$202.04	\$202.04
<i>Non-Residential - 10" and larger meter sizes Fire Meter</i>	\$290.43	\$290.43	\$290.43	\$290.43	\$290.43	\$290.43	\$290.43	\$290.43	\$290.43

EXAMPLE 3A: Increase Commodity Charge and Infrastructure Charge

No change to firelines

Customer Type	Typical Monthly Consumption (in 1,000 gallons)	Monthly Bill (Current Rates)	Sample Bill 2016	Sample Bill 2017
RESIDENTIAL SAMPLES				
Single Family Residential: 5/8" meter	Median: 10	\$34	\$40	\$43
	High: 28	\$108	\$116	\$122
Retail Complex – Mall	6,030 (all services)	\$25,365	\$26,415	\$27,469
Commercial Laundry	18,488 (all services)	\$66,198	\$69,337	\$72,558
High School	3,080 (all services)	\$11,487	\$12,087	\$12,660

EXAMPLE 3B: Increase Commodity Charge and Infrastructure Charge

With increase to firelines

WHAT IT IS:

HYBRID. Increase the Commodity Charge, Infrastructure Charge and fireline charges.

WHAT IT WOULD DO:

Increase all customers' Commodity Charge. Increase all customers' Infrastructure Charge. Remove the \$5 constraint from single-family residential customers' infrastructure charge. Increase fireline charges correspondingly.

IMPACTS

- Commodity Charge
- Reliability Surcharge
- Infrastructure Charge
- Fireline Charge

EXAMPLE 3B: Increase Commodity Charge and Infrastructure Charge

With increase to firelines

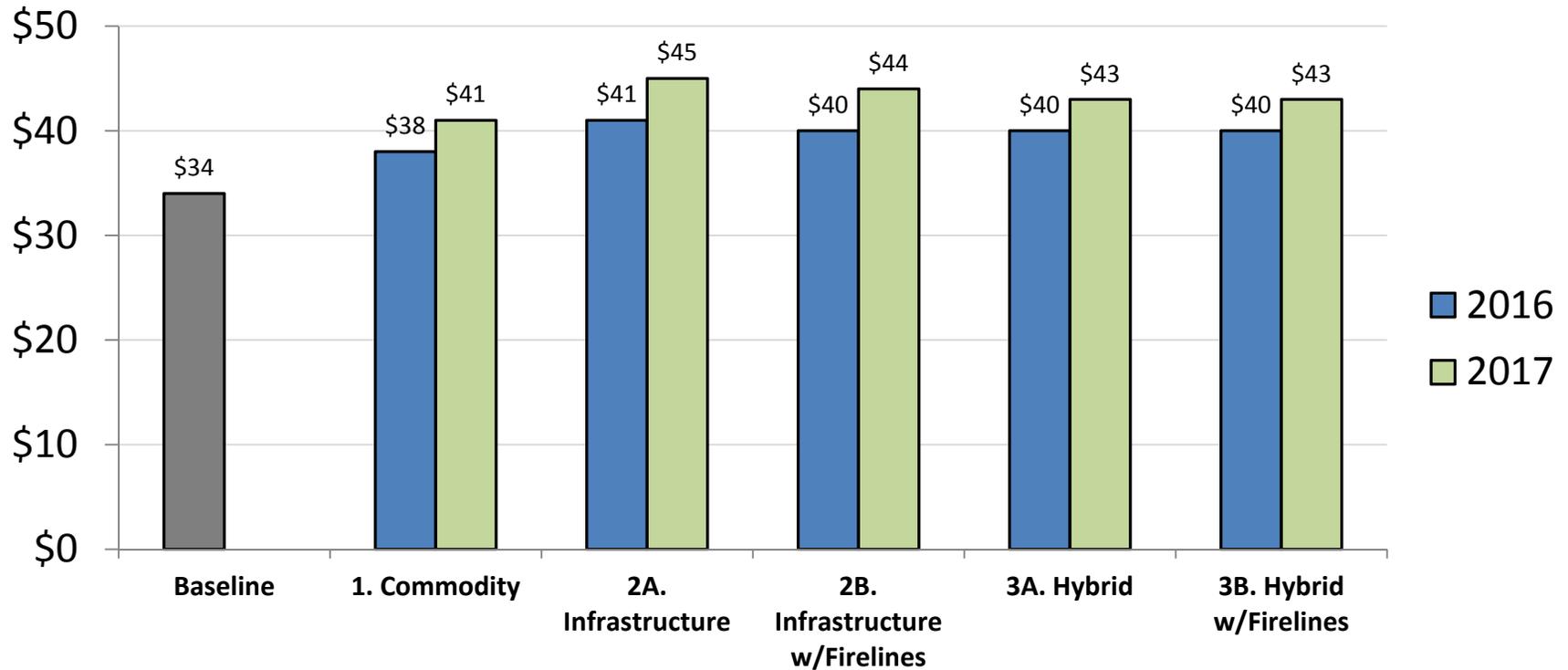
Fiscal Year (bold numbers in thousands)	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue Requirement without Price Elasticity	(\$12,372)	(\$12,182)	\$10,266	\$61,090	\$81,954	\$80,912	\$79,850	\$78,590	\$74,854
Additional Required Revenues due to Price Elasticity				1,130	2,078	2,050	2,019	1,984	1,896
Total Required Revenues	(\$12,372)	(\$12,182)	\$10,266	\$62,219	\$84,031	\$82,962	\$81,870	\$80,574	\$76,750
Additional Regional Commodity Charge Revenue				\$20,536	\$41,813	\$41,007	\$40,161	\$39,273	\$38,389
Implicit Additional Reliability Surcharge Revenue				\$229	\$466	\$457	\$448	\$438	\$428
Fixed Charge per Meter Revenue				\$27,005	\$41,790	\$41,515	\$41,301	\$40,889	\$37,971
Total Additional Revenues				\$47,770	\$84,070	\$82,979	\$81,910	\$80,600	\$76,788
Beginning Fund Balance with Revenue Adjustments	\$280,174	\$292,546	\$304,728	\$294,462	\$280,012	\$280,051	\$280,068	\$280,109	\$280,135
Ending Fund Balance with Revenue Adjustments	\$292,546	\$304,728	\$294,462	\$280,012	\$280,051	\$280,068	\$280,109	\$280,135	\$280,173
<i>Additional Commodity Charge Level (per 1,000 Gallons)</i>	\$0.00	\$0.00	\$0.00	\$0.15	\$0.31	\$0.30	\$0.29	\$0.28	\$0.27
<i>Total Commodity Charge Level (per 1,000 Gallons)</i>	\$0.30	\$0.30	\$0.30	\$0.45	\$0.61	\$0.60	\$0.59	\$0.58	\$0.57
Infrastructure Charge per Meter per Month									
<i>Residential - 5/8" & 3/4" meter sizes</i>	\$5.00	\$5.00	\$5.00	\$8.09	\$9.74	\$9.67	\$9.61	\$9.52	\$9.15
<i>Residential - 1" meter size</i>	\$19.21	\$19.21	\$19.21	\$25.05	\$28.18	\$28.05	\$27.93	\$27.77	\$27.06
<i>Residential - 1.5" meter size</i>	\$38.41	\$38.41	\$38.41	\$50.08	\$56.35	\$56.09	\$55.85	\$55.52	\$54.11
<i>Residential - 2" meter size</i>	\$61.46	\$61.46	\$61.46	\$80.13	\$90.16	\$89.75	\$89.37	\$88.84	\$86.58
<i>Residential - 3" meter size</i>	\$122.90	\$122.90	\$122.90	\$160.24	\$180.29	\$179.48	\$178.71	\$177.65	\$173.14
<i>Residential - 4" meter size</i>	\$192.03	\$192.03	\$192.03	\$250.37	\$281.69	\$280.43	\$279.22	\$277.57	\$270.52
<i>Residential - 6" meter size</i>	\$384.05	\$384.05	\$384.05	\$500.73	\$563.37	\$560.85	\$558.43	\$555.12	\$541.03
<i>Residential - 8" meter size and larger</i>	\$614.47	\$614.47	\$614.47	\$801.15	\$901.38	\$897.34	\$893.48	\$888.19	\$865.63
<i>Non-Residential - 5/8" & 3/4" meter sizes</i>	\$19.05	\$19.05	\$19.05	\$22.14	\$23.79	\$23.72	\$23.66	\$23.57	\$23.20
<i>Non-Residential - 1" meter size</i>	\$36.08	\$36.08	\$36.08	\$41.92	\$45.05	\$44.92	\$44.80	\$44.64	\$43.93
<i>Non-Residential - 1.5" meter size</i>	\$72.16	\$72.16	\$72.16	\$83.83	\$90.10	\$89.84	\$89.60	\$89.27	\$87.86
<i>Non-Residential - 2" meter size</i>	\$115.45	\$115.45	\$115.45	\$134.12	\$144.15	\$143.74	\$143.36	\$142.83	\$140.57
<i>Non-Residential - 3" meter size</i>	\$230.90	\$230.90	\$230.90	\$268.24	\$288.29	\$287.48	\$286.71	\$285.65	\$281.14
<i>Non-Residential - 4" meter size</i>	\$360.79	\$360.79	\$360.79	\$419.13	\$450.45	\$449.19	\$447.98	\$446.33	\$439.28
<i>Non-Residential - 6" meter size</i>	\$721.57	\$721.57	\$721.57	\$838.25	\$900.89	\$898.37	\$895.95	\$892.64	\$878.55
<i>Non-Residential - 8" meter size</i>	\$1,154.50	\$1,154.50	\$1,154.50	\$1,341.18	\$1,441.41	\$1,437.37	\$1,433.51	\$1,428.22	\$1,405.66
<i>Non-Residential - 10" and larger meter sizes</i>	\$1,659.59	\$1,659.59	\$1,659.59	\$1,927.94	\$2,072.02	\$2,066.22	\$2,060.66	\$2,053.06	\$2,020.64
<i>Non-Residential - 5/8" & 3/4" meter sizes Fire Meter</i>	\$3.34	\$3.34	\$3.34	\$3.88	\$4.17	\$4.16	\$4.15	\$4.14	\$4.07
<i>Non-Residential - 1" meter size Fire Meter</i>	\$6.32	\$6.32	\$6.32	\$7.35	\$7.89	\$7.87	\$7.85	\$7.82	\$7.70
<i>Non-Residential - 1.5" meter size Fire Meter</i>	\$12.63	\$12.63	\$12.63	\$14.68	\$15.77	\$15.73	\$15.69	\$15.63	\$15.38
<i>Non-Residential - 2" meter size Fire Meter</i>	\$20.21	\$20.21	\$20.21	\$23.48	\$25.24	\$25.17	\$25.10	\$25.00	\$24.61
<i>Non-Residential - 3" meter size Fire Meter</i>	\$40.41	\$40.41	\$40.41	\$46.95	\$50.46	\$50.32	\$50.18	\$49.99	\$49.21
<i>Non-Residential - 4" meter size Fire Meter</i>	\$63.14	\$63.14	\$63.14	\$73.35	\$78.84	\$78.61	\$78.40	\$78.11	\$76.88
<i>Non-Residential - 6" meter size Fire Meter</i>	\$126.28	\$126.28	\$126.28	\$146.70	\$157.67	\$157.22	\$156.80	\$156.22	\$153.76
<i>Non-Residential - 8" meter size Fire Meter</i>	\$202.04	\$202.04	\$202.04	\$234.71	\$252.25	\$251.55	\$250.87	\$249.94	\$246.00
<i>Non-Residential - 10" and larger meter sizes Fire Meter</i>	\$290.43	\$290.43	\$290.43	\$337.40	\$362.61	\$361.59	\$360.62	\$359.29	\$353.62

EXAMPLE 3B: Increase Commodity Charge and Infrastructure Charge

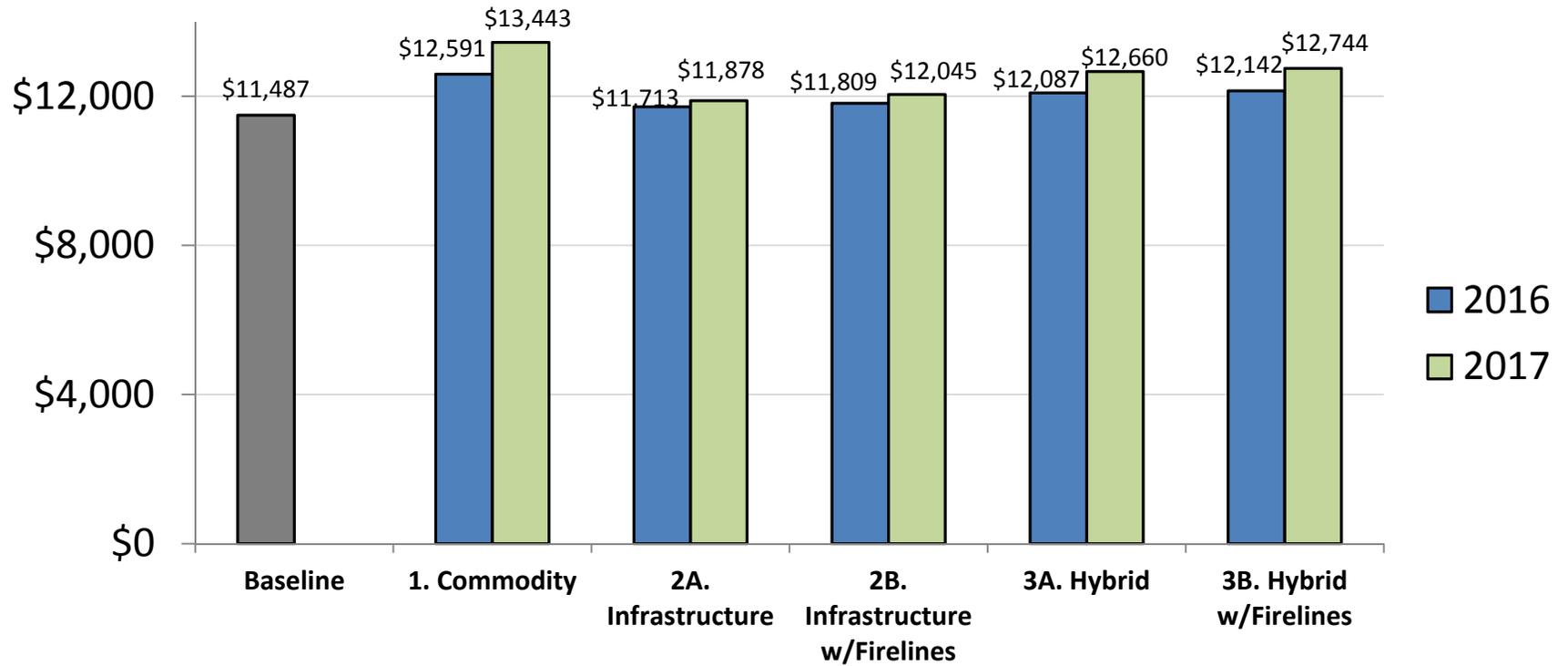
With increase to firelines

Customer Type	Typical Monthly Consumption (in 1,000 gallons)	Monthly Bill (Current rates)	Sample Bill 2016	Sample Bill 2017
RESIDENTIAL SAMPLES				
Single Family Residential: 5/8" meter	Median: 10	\$34	\$40	\$43
	High: 28	\$108	\$115	\$121
Retail Complex – Mall	6,030 (all services)	\$25,365	\$26,465	\$27,547
Commercial Laundry	18,488 (all services)	\$66,198	\$69,386	\$72,634
High School	3,080 (all services)	\$11,487	\$12,142	\$12,744

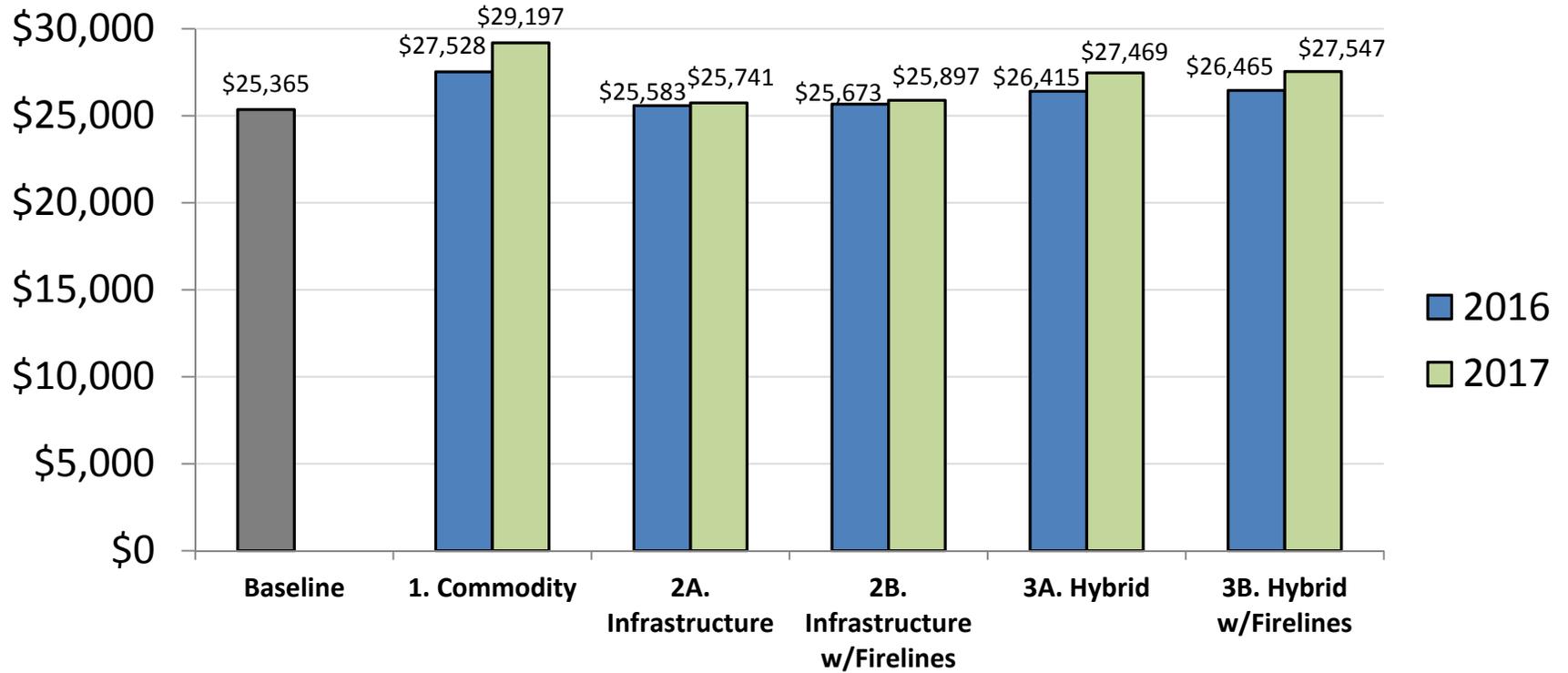
Impacts of Rate Examples on Single-Family Residential (Median Use)



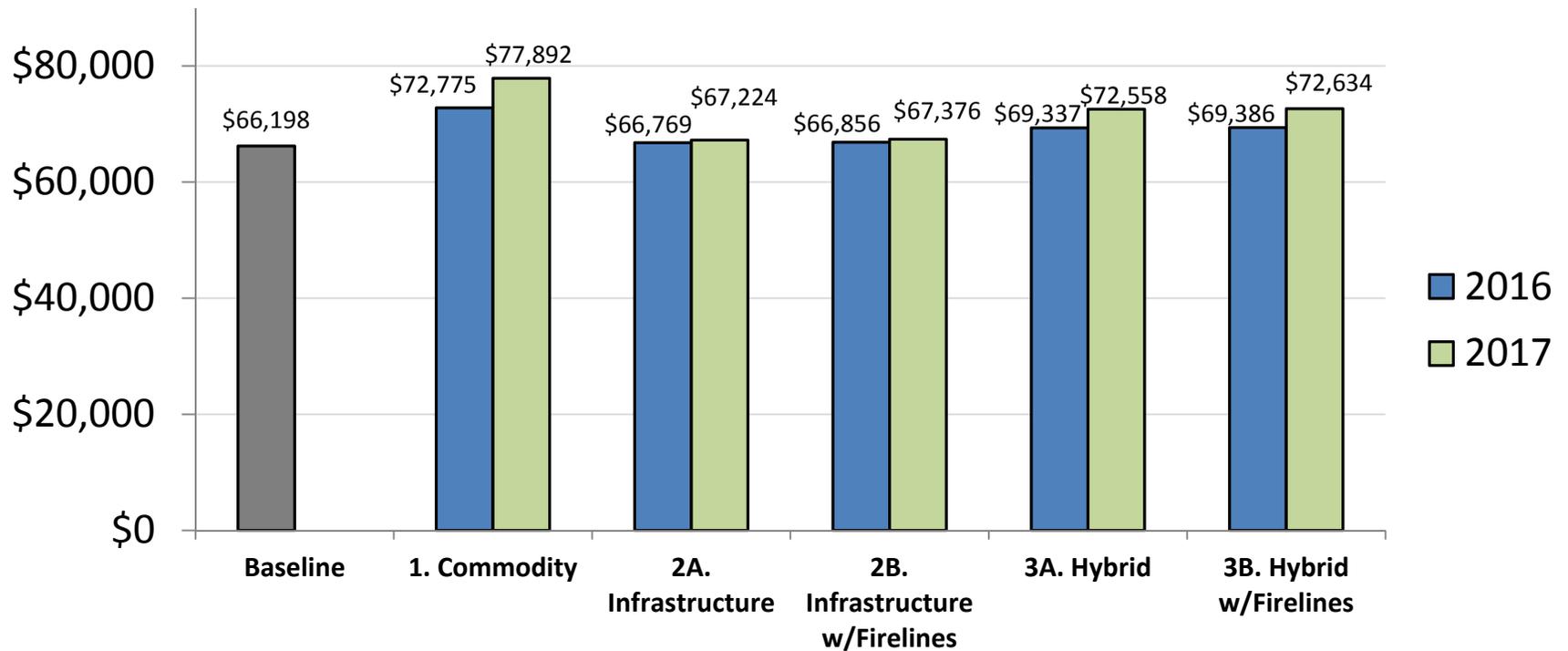
Impacts of Rate Examples on High School



Impacts of Rate Examples on Mall



Impacts of Rate Examples on Commercial Laundry



New Rate Examples

- **Adjusting Firelines to track with CPI (3%)**
- **Rate increases to begin 2014 to reduce the spike in 2016 and 2017**

Rate Scenario Review

1. **Commodity Charge Increase**

2. **Infrastructure Charge Increase**
 - a. No increase to firelines
 - b. With increase to firelines
 - c. Increase existing fireline charges by 3% inflation
 - d. Increase existing fireline charges by 3% inflation and gradual increases to the Infrastructure Charge beginning in 2014

3. **Hybrid: Commodity Charge and Infrastructure Charge Increase**
 - a. No increase to firelines
 - b. With increase to firelines
 - c. Increase existing fireline charges by 3% inflation
 - d. Increase existing fireline charges by 3% inflation and gradual increases to Infrastructure Charge beginning 2014

EXAMPLE 2C: Increase Infrastructure Charge

With increase to firelines by 3% annual inflation

WHAT IT IS:

Increase the Infrastructure Charge and fireline charges.

WHAT IT WOULD DO:

Increase all customers' Infrastructure Charge. Remove the \$5 constraint from single-family residential customers' infrastructure charge. Increase fireline charges to track with CPI increases.

IMPACTS

- Commodity Charge
- Reliability Surcharge
- Infrastructure Charge
- Fireline Charge

EXAMPLE 2C: Increase Infrastructure Charge

With increase to firelines by 3% annual inflation

Fiscal Year (bold numbers in thousands)	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue Requirement without Price Elasticity	(\$12,372)	(\$12,182)	\$10,266	\$60,667	\$81,091	\$79,593	\$78,056	\$76,346	\$72,120
Additional Required Revenue due to Price Elasticity				\$906	\$1,571	\$1,547	\$1,522	\$1,490	\$1,405
Total Required Revenues	(\$12,372)	(\$12,182)	\$10,266	\$61,573	\$82,662	\$81,140	\$79,578	\$77,836	\$73,526
Revenues from Infrastructure Surcharge (1)				\$47,646	\$82,722	\$81,181	\$79,596	\$77,849	\$73,539
Beginning Fund Balance with Revenue Adjustments	\$280,174	\$292,546	\$304,728	\$294,462	\$280,535	\$280,594	\$280,635	\$280,653	\$280,665
Ending Fund Balance with Revenue Adjustments	\$292,546	\$304,728	\$294,462	\$280,535	\$280,594	\$280,635	\$280,653	\$280,665	\$280,679

Infrastructure Charge per Meter per Month

<i>Residential - 5/8" & 3/4" meter sizes</i>	\$5.00	\$5.00	\$5.00	\$10.95	\$15.24	\$14.96	\$14.68	\$14.37	\$13.74
<i>Residential - 1" meter size</i>	\$19.21	\$19.21	\$19.21	\$30.48	\$38.59	\$38.07	\$37.54	\$36.96	\$35.77
<i>Residential - 1.5" meter size</i>	\$38.41	\$38.41	\$38.41	\$60.94	\$77.17	\$76.12	\$75.07	\$73.90	\$71.52
<i>Residential - 2" meter size</i>	\$61.46	\$61.46	\$61.46	\$97.50	\$123.47	\$121.79	\$120.11	\$118.24	\$114.43
<i>Residential - 3" meter size</i>	\$122.90	\$122.90	\$122.90	\$194.98	\$246.91	\$243.56	\$240.20	\$236.46	\$228.83
<i>Residential - 4" meter size</i>	\$192.03	\$192.03	\$192.03	\$304.65	\$385.79	\$380.55	\$375.31	\$369.47	\$357.54
<i>Residential - 6" meter size</i>	\$384.05	\$384.05	\$384.05	\$609.29	\$771.57	\$761.09	\$750.61	\$738.92	\$715.06
<i>Residential - 8" meter size and larger</i>	\$614.47	\$614.47	\$614.47	\$974.84	\$1,234.50	\$1,217.73	\$1,200.97	\$1,182.26	\$1,144.09
<i>Non-Residential - 5/8" & 3/4" meter sizes</i>	\$19.05	\$19.05	\$19.05	\$25.00	\$29.29	\$29.01	\$28.73	\$28.42	\$27.79
<i>Non-Residential - 1" meter size</i>	\$36.08	\$36.08	\$36.08	\$47.35	\$55.46	\$54.94	\$54.41	\$53.83	\$52.64
<i>Non-Residential - 1.5" meter size</i>	\$72.16	\$72.16	\$72.16	\$94.69	\$110.92	\$109.87	\$108.82	\$107.65	\$105.27
<i>Non-Residential - 2" meter size</i>	\$115.45	\$115.45	\$115.45	\$151.49	\$177.46	\$175.78	\$174.10	\$172.23	\$168.42
<i>Non-Residential - 3" meter size</i>	\$230.90	\$230.90	\$230.90	\$302.98	\$354.91	\$351.56	\$348.20	\$344.46	\$336.83
<i>Non-Residential - 4" meter size</i>	\$360.79	\$360.79	\$360.79	\$473.41	\$554.55	\$549.31	\$544.07	\$538.23	\$526.30
<i>Non-Residential - 6" meter size</i>	\$721.57	\$721.57	\$721.57	\$946.81	\$1,109.09	\$1,098.61	\$1,088.13	\$1,076.44	\$1,052.58
<i>Non-Residential - 8" meter size</i>	\$1,154.50	\$1,154.50	\$1,154.50	\$1,514.87	\$1,774.53	\$1,757.76	\$1,741.00	\$1,722.29	\$1,684.12
<i>Non-Residential - 10" and larger meter sizes</i>	\$1,659.59	\$1,659.59	\$1,659.59	\$2,177.62	\$2,550.87	\$2,526.78	\$2,502.68	\$2,475.78	\$2,420.91
<i>Non-Residential - 5/8" & 3/4" meter sizes Fire Meter</i>	\$3.34	\$3.34	\$3.34	\$3.44	\$3.54	\$3.65	\$3.76	\$3.87	\$3.99
<i>Non-Residential - 1" meter size Fire Meter</i>	\$6.32	\$6.32	\$6.32	\$6.51	\$6.70	\$6.91	\$7.11	\$7.33	\$7.55
<i>Non-Residential - 1.5" meter size Fire Meter</i>	\$12.63	\$12.63	\$12.63	\$13.01	\$13.40	\$13.80	\$14.22	\$14.64	\$15.08
<i>Non-Residential - 2" meter size Fire Meter</i>	\$20.21	\$20.21	\$20.21	\$20.82	\$21.44	\$22.08	\$22.75	\$23.43	\$24.13
<i>Non-Residential - 3" meter size Fire Meter</i>	\$40.41	\$40.41	\$40.41	\$41.62	\$42.87	\$44.16	\$45.48	\$46.85	\$48.25
<i>Non-Residential - 4" meter size Fire Meter</i>	\$63.14	\$63.14	\$63.14	\$65.03	\$66.99	\$68.99	\$71.06	\$73.20	\$75.39
<i>Non-Residential - 6" meter size Fire Meter</i>	\$126.28	\$126.28	\$126.28	\$130.07	\$133.97	\$137.99	\$142.13	\$146.39	\$150.78
<i>Non-Residential - 8" meter size Fire Meter</i>	\$202.04	\$202.04	\$202.04	\$208.10	\$214.34	\$220.77	\$227.40	\$234.22	\$241.25
<i>Non-Residential - 10" and larger meter sizes Fire Meter</i>	\$290.43	\$290.43	\$290.43	\$299.14	\$308.12	\$317.36	\$326.88	\$336.69	\$346.79

(1) Additional to revenues from current Infrastructure Surcharge levels.

EXAMPLE 2C: Increase Infrastructure Charge

With increase to firelines by 3% annual inflation

Customer Type	Typical Monthly Consumption (in 1,000 gallons)	Monthly Bill (Current Rates)	Sample Bill 2016	Sample Bill 2017
RESIDENTIAL SAMPLES				
Single Family Residential: 5/8" meter	Median: 10	\$34	\$41	\$45
	High: 28	\$108	\$114	\$118
Retail Complex – Mall	6,030 (all services)	\$25,365	\$25,593	\$25,760
Commercial Laundry	18,488 (all services)	\$66,198	\$66,779	\$67,243
School	3,080 (all services)	\$11,487	\$11,723	\$11,898

EXAMPLE 2D: Increase Infrastructure Charge – *New rates effective 2014*

With increase to firelines by 3% annual inflation

WHAT IT IS:

Increase the Infrastructure Charge for all customers. Increase fireline rates 3 percent annually. Gradual increases to domestic meter charges. Rate implementation in 2014.

WHAT IT WOULD DO:

Increase all customers' Infrastructure Charge. Smooth the increase to the Infrastructure Charge. Implement new rate immediately (2014) to reduce spike in 2016. Increase fireline charges 3 percent annually.

IMPACTS

- Commodity Charge
- Reliability Surcharge
- Infrastructure Charge
- Fireline Charge

EXAMPLE 2D: Increase Infrastructure Charge – *New rates effective 2014*

With increase to firelines by 3% annual inflation

Fiscal Year (bold numbers in thousands)	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue Requirement without Price Elasticity	(\$12,372)	(\$12,182)	\$10,266	\$60,667	\$81,091	\$79,593	\$78,056	\$76,346	\$72,120
Additional Required Revenue due to Price Elasticity		\$302	\$606	\$914	\$1,228	\$1,329	\$1,344	\$1,360	\$1,375
Total Required Revenues	(\$12,372)	(\$11,880)	\$10,872	\$61,581	\$82,320	\$80,922	\$79,401	\$77,706	\$73,495
Revenues from Infrastructure Surcharge (1)		\$15,799	\$31,792	\$48,054	\$64,645	\$69,700	\$70,312	\$71,039	\$71,942
Beginning Fund Balance with Revenue Adjustments	\$280,174	\$292,546	\$320,225	\$341,146	\$327,619	\$309,944	\$298,722	\$289,633	\$282,966
Ending Fund Balance with Revenue Adjustments	\$292,546	\$320,225	\$341,146	\$327,619	\$309,944	\$298,722	\$289,633	\$282,966	\$281,412

Infrastructure Charge per Meter per Month

Residential - 5/8" & 3/4" meter sizes	\$5.00	\$7.00	\$9.00	\$11.00	\$13.00	\$13.55	\$13.55	\$13.55	\$13.55
Residential - 1" meter size	\$19.21	\$23.00	\$26.79	\$30.58	\$34.37	\$35.41	\$35.41	\$35.41	\$35.41
Residential - 1.5" meter size	\$38.41	\$45.99	\$53.57	\$61.14	\$68.72	\$70.80	\$70.80	\$70.80	\$70.80
Residential - 2" meter size	\$61.46	\$73.59	\$85.71	\$97.83	\$109.95	\$113.28	\$113.28	\$113.28	\$113.28
Residential - 3" meter size	\$122.90	\$147.15	\$171.39	\$195.63	\$219.87	\$226.54	\$226.54	\$226.54	\$226.54
Residential - 4" meter size	\$192.03	\$229.91	\$267.79	\$305.67	\$343.55	\$353.97	\$353.97	\$353.97	\$353.97
Residential - 6" meter size	\$384.05	\$459.81	\$535.57	\$611.33	\$687.09	\$707.92	\$707.92	\$707.92	\$707.92
Residential - 8" meter size and larger	\$614.47	\$735.69	\$856.90	\$978.11	\$1,099.32	\$1,132.66	\$1,132.66	\$1,132.66	\$1,132.66
Non-Residential - 5/8" & 3/4" meter sizes	\$19.05	\$21.05	\$23.05	\$25.05	\$27.05	\$27.60	\$27.60	\$27.60	\$27.60
Non-Residential - 1" meter size	\$36.08	\$39.87	\$43.66	\$47.45	\$51.24	\$52.28	\$52.28	\$52.28	\$52.28
Non-Residential - 1.5" meter size	\$72.16	\$79.74	\$87.32	\$94.89	\$102.47	\$104.55	\$104.55	\$104.55	\$104.55
Non-Residential - 2" meter size	\$115.45	\$127.58	\$139.70	\$151.82	\$163.94	\$167.27	\$167.27	\$167.27	\$167.27
Non-Residential - 3" meter size	\$230.90	\$255.15	\$279.39	\$303.63	\$327.87	\$334.54	\$334.54	\$334.54	\$334.54
Non-Residential - 4" meter size	\$360.79	\$398.67	\$436.55	\$474.43	\$512.31	\$522.73	\$522.73	\$522.73	\$522.73
Non-Residential - 6" meter size	\$721.57	\$797.33	\$873.09	\$948.85	\$1,024.61	\$1,045.44	\$1,045.44	\$1,045.44	\$1,045.44
Non-Residential - 8" meter size	\$1,154.50	\$1,275.72	\$1,396.93	\$1,518.14	\$1,639.35	\$1,672.69	\$1,672.69	\$1,672.69	\$1,672.69
Non-Residential - 10" and larger meter sizes	\$1,659.59	\$1,833.84	\$2,008.08	\$2,182.32	\$2,356.56	\$2,404.48	\$2,404.48	\$2,404.48	\$2,404.48
Non-Residential - 5/8" & 3/4" meter sizes Fire Meter	\$3.34	\$3.34	\$3.34	\$3.44	\$3.54	\$3.65	\$3.76	\$3.87	\$3.99
Non-Residential - 1" meter size Fire Meter	\$6.32	\$6.32	\$6.32	\$6.51	\$6.70	\$6.91	\$7.11	\$7.33	\$7.55
Non-Residential - 1.5" meter size Fire Meter	\$12.63	\$12.63	\$12.63	\$13.01	\$13.40	\$13.80	\$14.22	\$14.64	\$15.08
Non-Residential - 2" meter size Fire Meter	\$20.21	\$20.21	\$20.21	\$20.82	\$21.44	\$22.08	\$22.75	\$23.43	\$24.13
Non-Residential - 3" meter size Fire Meter	\$40.41	\$40.41	\$40.41	\$41.62	\$42.87	\$44.16	\$45.48	\$46.85	\$48.25
Non-Residential - 4" meter size Fire Meter	\$63.14	\$63.14	\$63.14	\$65.03	\$66.99	\$68.99	\$71.06	\$73.20	\$75.39
Non-Residential - 6" meter size Fire Meter	\$126.28	\$126.28	\$126.28	\$130.07	\$133.97	\$137.99	\$142.13	\$146.39	\$150.78
Non-Residential - 8" meter size Fire Meter	\$202.04	\$202.04	\$202.04	\$208.10	\$214.34	\$220.77	\$227.40	\$234.22	\$241.25
Non-Residential - 10" and larger meter sizes Fire Meter	\$290.43	\$290.43	\$290.43	\$299.14	\$308.12	\$317.36	\$326.88	\$336.69	\$346.79

(1) Additional to revenues from current Infrastructure Surcharge levels.

EXAMPLE 2D: Increase Infrastructure Charge – *New rates effective 2014*

With increase to firelines by 3% annual inflation

Customer Type	Typical Monthly Consumption (in 1,000 gallons)	Monthly Bill (Current Rates)	Sample Bill 2016	Sample Bill 2017
RESIDENTIAL SAMPLES				
Single Family Residential: 5/8" meter	Median: 10	\$34	\$41	\$43
	High: 28	\$108	\$114	\$116
Retail Complex – Mall	6,030 (all services)	\$25,365	\$25,595	\$25,679
Commercial Laundry	18,488 (all services)	\$66,198	\$66,785	\$67,009
School	3,080 (all services)	\$11,487	\$11,725	\$11,814

EXAMPLE 3C: Increase Infrastructure Charge and Commodity Charge

With increase to firelines by 3% annual inflation

WHAT IT IS:

HYBRID. Increase to the Commodity Charge and the Infrastructure Charge to fund revenue shortfalls equally (50/50). Increase existing fireline charges by 3 percent annually.

WHAT IT WOULD DO:

Increase all customers' Commodity Charge. Increase all customers' Infrastructure Charge. Remove the \$5 constraint from single-family residential customers' infrastructure charge. Increase daily fireline charges 3 percent annually.

IMPACTS

- Commodity Charge
- Reliability Surcharge
- Infrastructure Charge
- Fireline Charge

EXAMPLE 3C: Increase Infrastructure Charge and Commodity Charge

With increase to firelines by 3% annual inflation

Fiscal Year (bold numbers in thousands)	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue Requirement without Price Elasticity	(\$12,372)	(\$12,182)	\$10,266	\$60,667	\$81,091	\$79,593	\$78,056	\$76,346	\$72,120
Additional Required Revenues due to Price Elasticity				\$1,123	\$2,046	\$2,024	\$1,985	\$1,939	\$1,826
Total Required Revenues	(\$12,372)	(\$12,182)	\$10,266	\$61,791	\$83,137	\$81,617	\$80,041	\$78,285	\$73,946
Additional Regional Commodity Charge Revenue				\$20,539	\$40,497	\$41,033	\$40,194	\$39,315	\$37,029
Implicit Additional Reliability Surcharge Revenue				\$229	\$452	\$458	\$448	\$439	\$413
Fixed Charge per Meter Revenue				\$26,669	\$42,241	\$40,174	\$39,454	\$38,548	\$36,515
Total Additional Revenues				\$47,438	\$83,189	\$81,666	\$80,097	\$78,302	\$73,957
Beginning Fund Balance with Revenue Adjustments	\$280,174	\$292,546	\$304,728	\$294,462	\$280,109	\$280,161	\$280,210	\$280,266	\$280,282
Ending Fund Balance with Revenue Adjustments	\$292,546	\$304,728	\$294,462	\$280,109	\$280,161	\$280,210	\$280,266	\$280,282	\$280,293
<i>Additional Commodity Charge Level (per 1,000 Gallons)</i>	\$0.00	\$0.00	\$0.00	\$0.15	\$0.30	\$0.30	\$0.29	\$0.28	\$0.26
<i>Total Commodity Charge Level (per 1,000 Gallons)</i>	\$0.30	\$0.30	\$0.30	\$0.45	\$0.60	\$0.60	\$0.59	\$0.58	\$0.56
Infrastructure Charge per Meter per Month									
<i>Residential - 5/8" & 3/4" meter sizes</i>	\$5.00	\$5.00	\$5.00	\$8.33	\$10.23	\$9.93	\$9.80	\$9.64	\$9.34
<i>Residential - 1" meter size</i>	\$19.21	\$19.21	\$19.21	\$25.52	\$29.10	\$28.54	\$28.29	\$28.00	\$27.43
<i>Residential - 1.5" meter size</i>	\$38.41	\$38.41	\$38.41	\$51.03	\$58.19	\$57.06	\$56.56	\$55.98	\$54.85
<i>Residential - 2" meter size</i>	\$61.46	\$61.46	\$61.46	\$81.64	\$93.11	\$91.30	\$90.50	\$89.57	\$87.76
<i>Residential - 3" meter size</i>	\$122.90	\$122.90	\$122.90	\$163.26	\$186.19	\$182.57	\$180.98	\$179.12	\$175.49
<i>Residential - 4" meter size</i>	\$192.03	\$192.03	\$192.03	\$255.09	\$290.92	\$285.26	\$282.77	\$279.87	\$274.20
<i>Residential - 6" meter size</i>	\$384.05	\$384.05	\$384.05	\$510.17	\$581.83	\$570.51	\$565.53	\$559.73	\$548.39
<i>Residential - 8" meter size and larger</i>	\$614.47	\$614.47	\$614.47	\$816.26	\$930.92	\$912.80	\$904.84	\$895.55	\$877.42
<i>Non-Residential - 5/8" & 3/4" meter sizes</i>	\$19.05	\$19.05	\$19.05	\$22.38	\$24.28	\$23.98	\$23.85	\$23.69	\$23.39
<i>Non-Residential - 1" meter size</i>	\$36.08	\$36.08	\$36.08	\$42.39	\$45.97	\$45.41	\$45.16	\$44.87	\$44.30
<i>Non-Residential - 1.5" meter size</i>	\$72.16	\$72.16	\$72.16	\$84.78	\$91.94	\$90.81	\$90.31	\$89.73	\$88.60
<i>Non-Residential - 2" meter size</i>	\$115.45	\$115.45	\$115.45	\$135.63	\$147.10	\$145.29	\$144.49	\$143.56	\$141.75
<i>Non-Residential - 3" meter size</i>	\$230.90	\$230.90	\$230.90	\$271.26	\$294.19	\$290.57	\$288.98	\$287.12	\$283.49
<i>Non-Residential - 4" meter size</i>	\$360.79	\$360.79	\$360.79	\$423.85	\$459.68	\$454.02	\$451.53	\$448.63	\$442.96
<i>Non-Residential - 6" meter size</i>	\$721.57	\$721.57	\$721.57	\$847.69	\$919.35	\$908.03	\$903.05	\$897.25	\$885.91
<i>Non-Residential - 8" meter size</i>	\$1,154.50	\$1,154.50	\$1,154.50	\$1,356.29	\$1,470.95	\$1,452.83	\$1,444.87	\$1,435.58	\$1,417.45
<i>Non-Residential - 10" and larger meter sizes</i>	\$1,659.59	\$1,659.59	\$1,659.59	\$1,949.67	\$2,114.48	\$2,088.44	\$2,077.00	\$2,063.64	\$2,037.58
<i>Non-Residential - 5/8" & 3/4" meter sizes Fire Meter</i>	\$3.34	\$3.34	\$3.34	\$3.44	\$3.54	\$3.65	\$3.76	\$3.87	\$3.99
<i>Non-Residential - 1" meter size Fire Meter</i>	\$6.32	\$6.32	\$6.32	\$6.51	\$6.70	\$6.91	\$7.11	\$7.33	\$7.55
<i>Non-Residential - 1.5" meter size Fire Meter</i>	\$12.63	\$12.63	\$12.63	\$13.01	\$13.40	\$13.80	\$14.22	\$14.64	\$15.08
<i>Non-Residential - 2" meter size Fire Meter</i>	\$20.21	\$20.21	\$20.21	\$20.82	\$21.44	\$22.08	\$22.75	\$23.43	\$24.13
<i>Non-Residential - 3" meter size Fire Meter</i>	\$40.41	\$40.41	\$40.41	\$41.62	\$42.87	\$44.16	\$45.48	\$46.85	\$48.25
<i>Non-Residential - 4" meter size Fire Meter</i>	\$63.14	\$63.14	\$63.14	\$65.03	\$66.99	\$68.99	\$71.06	\$73.20	\$75.39
<i>Non-Residential - 6" meter size Fire Meter</i>	\$126.28	\$126.28	\$126.28	\$130.07	\$133.97	\$137.99	\$142.13	\$146.39	\$150.78
<i>Non-Residential - 8" meter size Fire Meter</i>	\$202.04	\$202.04	\$202.04	\$208.10	\$214.34	\$220.77	\$227.40	\$234.22	\$241.25
<i>Non-Residential - 10" and larger meter sizes Fire Meter</i>	\$290.43	\$290.43	\$290.43	\$299.14	\$308.12	\$317.36	\$326.88	\$336.69	\$346.79

EXAMPLE 3C: Increase Infrastructure Charge and Commodity Charge

With increase to firelines by 3% annual inflation

Customer Type	Typical Monthly Consumption (in 1,000 gallons)	Monthly Bill (Current Rates)	Sample Bill 2016	Sample Bill 2017
RESIDENTIAL SAMPLES				
Single Family Residential: 5/8" meter	Median: 10	\$34	\$40	\$43
	High: 28	\$108	\$115	\$122
Retail Complex – Mall	6,030 (all services)	\$25,365	\$26,425	\$27,432
Commercial Laundry	18,488 (all services)	\$66,198	\$68,401	\$72,404
School	3,080 (all services)	\$11,487	\$12,098	\$12,655

EXAMPLE 3D: Increase Infrastructure Charge and Commodity Charge – Rate implementation in 2014

With increase to firelines by 3% annual inflation

WHAT IT IS:

HYBRID. Increase to the Commodity Charge, Infrastructure Charge and fireline charges. Fireline charges to increase 3 percent annually. Rate increases to begin in 2014.

WHAT IT WOULD DO:

Increase all customers' Commodity Charge and Infrastructure Charge. Remove the \$5 constraint from single-family residential customers' infrastructure charge, but step into rates would be gradual. Fireline charges would increase 3 percent annually. Rate implementation to begin in 2014 to reduce spike in 2016.

IMPACTS

- Commodity Charge
- Reliability Surcharge
- Infrastructure Charge
- Fireline Charge

EXAMPLE 3D: Increase Infrastructure Charge and Commodity Charge – Rate implementation in 2014

With increase to firelines by 3% annual inflation

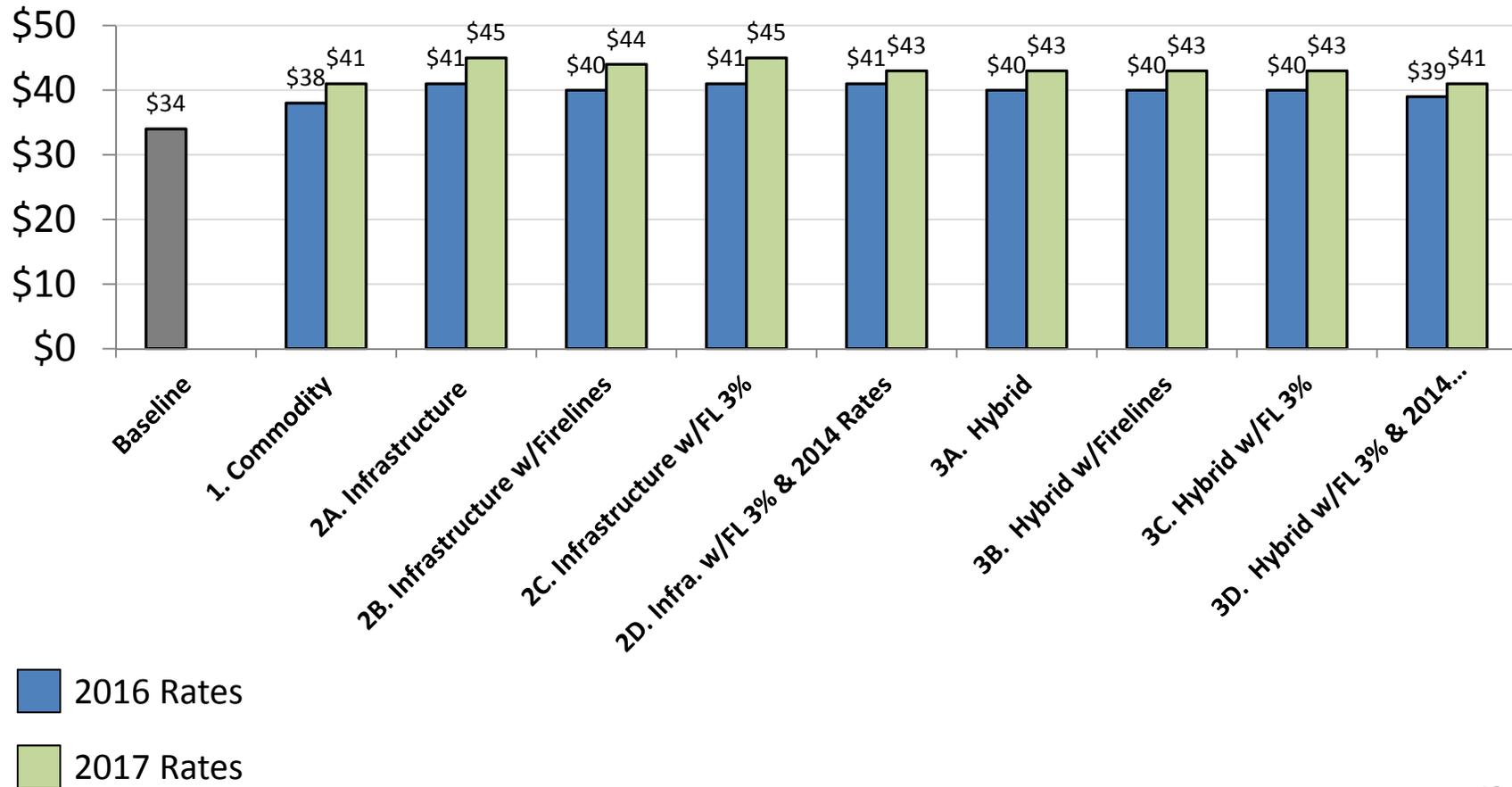
Fiscal Year (bold numbers in thousands)	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue Requirement without Price Elasticity	(\$12,372)	(\$12,182)	\$10,266	\$60,667	\$81,091	\$79,593	\$78,056	\$76,346	\$72,120
Additional Required Revenues due to Price Elasticity		\$414	\$949	\$1,073	\$1,443	\$1,789	\$1,810	\$1,831	\$1,851
Total Required Revenues	(\$12,372)	(\$11,768)	\$11,215	\$61,740	\$82,534	\$81,382	\$79,867	\$78,177	\$73,972
Additional Regional Commodity Charge Revenue		\$6,911	\$13,750	\$20,564	\$27,400	\$35,766	\$36,188	\$36,600	\$37,006
Implicit Additional Reliability Surcharge Revenue		\$77	\$153	\$229	\$306	\$399	\$404	\$408	\$413
Fixed Charge per Meter Revenue		\$7,902	\$15,897	\$24,030	\$32,323	\$36,686	\$37,008	\$37,391	\$37,866
Total Additional Revenues		\$14,890	\$29,800	\$44,823	\$60,029	\$72,851	\$73,599	\$74,400	\$75,285
Beginning Fund Balance with Revenue Adjustments	\$280,174	\$292,546	\$319,204	\$337,789	\$320,872	\$298,367	\$289,836	\$283,568	\$279,791
Ending Fund Balance with Revenue Adjustments	\$292,546	\$319,204	\$337,789	\$320,872	\$298,367	\$289,836	\$283,568	\$279,791	\$281,104
<i>Additional Commodity Charge Level (per 1,000 Gallons)</i>	\$0.00	\$0.05	\$0.10	\$0.15	\$0.20	\$0.26	\$0.26	\$0.26	\$0.26
<i>Total Commodity Charge Level (per 1,000 Gallons)</i>	\$0.30	\$0.35	\$0.40	\$0.45	\$0.50	\$0.56	\$0.56	\$0.56	\$0.56
Infrastructure Charge per Meter per Month									
<i>Residential - 5/8" & 3/4" meter sizes</i>	\$5.00	\$6.00	\$7.00	\$8.00	\$9.00	\$9.50	\$9.50	\$9.50	\$9.50
<i>Residential - 1" meter size</i>	\$19.21	\$21.11	\$23.00	\$24.90	\$26.79	\$27.74	\$27.74	\$27.74	\$27.74
<i>Residential - 1.5" meter size</i>	\$38.41	\$42.20	\$45.99	\$49.78	\$53.57	\$55.46	\$55.46	\$55.46	\$55.46
<i>Residential - 2" meter size</i>	\$61.46	\$67.53	\$73.59	\$79.65	\$85.71	\$88.74	\$88.74	\$88.74	\$88.74
<i>Residential - 3" meter size</i>	\$122.90	\$135.03	\$147.15	\$159.27	\$171.39	\$177.45	\$177.45	\$177.45	\$177.45
<i>Residential - 4" meter size</i>	\$192.03	\$210.97	\$229.91	\$248.85	\$267.79	\$277.26	\$277.26	\$277.26	\$277.26
<i>Residential - 6" meter size</i>	\$384.05	\$421.93	\$459.81	\$497.69	\$535.57	\$554.51	\$554.51	\$554.51	\$554.51
<i>Residential - 8" meter size and larger</i>	\$614.47	\$675.08	\$735.69	\$796.29	\$856.90	\$887.20	\$887.20	\$887.20	\$887.20
<i>Non-Residential - 5/8" & 3/4" meter sizes</i>	\$19.05	\$20.05	\$21.05	\$22.05	\$23.05	\$23.55	\$23.55	\$23.55	\$23.55
<i>Non-Residential - 1" meter size</i>	\$36.08	\$37.98	\$39.87	\$41.77	\$43.66	\$44.61	\$44.61	\$44.61	\$44.61
<i>Non-Residential - 1.5" meter size</i>	\$72.16	\$75.95	\$79.74	\$83.53	\$87.32	\$89.21	\$89.21	\$89.21	\$89.21
<i>Non-Residential - 2" meter size</i>	\$115.45	\$121.52	\$127.58	\$133.64	\$139.70	\$142.73	\$142.73	\$142.73	\$142.73
<i>Non-Residential - 3" meter size</i>	\$230.90	\$243.03	\$255.15	\$267.27	\$279.39	\$285.45	\$285.45	\$285.45	\$285.45
<i>Non-Residential - 4" meter size</i>	\$360.79	\$379.73	\$398.67	\$417.61	\$436.55	\$446.02	\$446.02	\$446.02	\$446.02
<i>Non-Residential - 6" meter size</i>	\$721.57	\$759.45	\$797.33	\$835.21	\$873.09	\$892.03	\$892.03	\$892.03	\$892.03
<i>Non-Residential - 8" meter size</i>	\$1,154.50	\$1,215.11	\$1,275.72	\$1,336.32	\$1,396.93	\$1,427.23	\$1,427.23	\$1,427.23	\$1,427.23
<i>Non-Residential - 10" and larger meter sizes</i>	\$1,659.59	\$1,746.72	\$1,833.84	\$1,920.96	\$2,008.08	\$2,051.64	\$2,051.64	\$2,051.64	\$2,051.64
<i>Non-Residential - 5/8" & 3/4" meter sizes Fire Meter</i>	\$3.34	\$3.34	\$3.34	\$3.44	\$3.54	\$3.65	\$3.76	\$3.87	\$3.99
<i>Non-Residential - 1" meter size Fire Meter</i>	\$6.32	\$6.32	\$6.32	\$6.51	\$6.70	\$6.91	\$7.11	\$7.33	\$7.55
<i>Non-Residential - 1.5" meter size Fire Meter</i>	\$12.63	\$12.63	\$12.63	\$13.01	\$13.40	\$13.80	\$14.22	\$14.64	\$15.08
<i>Non-Residential - 2" meter size Fire Meter</i>	\$20.21	\$20.21	\$20.21	\$20.82	\$21.44	\$22.08	\$22.75	\$23.43	\$24.13
<i>Non-Residential - 3" meter size Fire Meter</i>	\$40.41	\$40.41	\$40.41	\$41.62	\$42.87	\$44.16	\$45.48	\$46.85	\$48.25
<i>Non-Residential - 4" meter size Fire Meter</i>	\$63.14	\$63.14	\$63.14	\$65.03	\$66.99	\$68.99	\$71.06	\$73.20	\$75.39
<i>Non-Residential - 6" meter size Fire Meter</i>	\$126.28	\$126.28	\$126.28	\$130.07	\$133.97	\$137.99	\$142.13	\$146.39	\$150.78
<i>Non-Residential - 8" meter size Fire Meter</i>	\$202.04	\$202.04	\$202.04	\$208.10	\$214.34	\$220.77	\$227.40	\$234.22	\$241.25
<i>Non-Residential - 10" and larger meter sizes Fire Meter</i>	\$290.43	\$290.43	\$290.43	\$299.14	\$308.12	\$317.36	\$326.88	\$336.69	\$346.79

EXAMPLE 3D: Increase Infrastructure Charge and Commodity Charge – Rate implementation in 2014

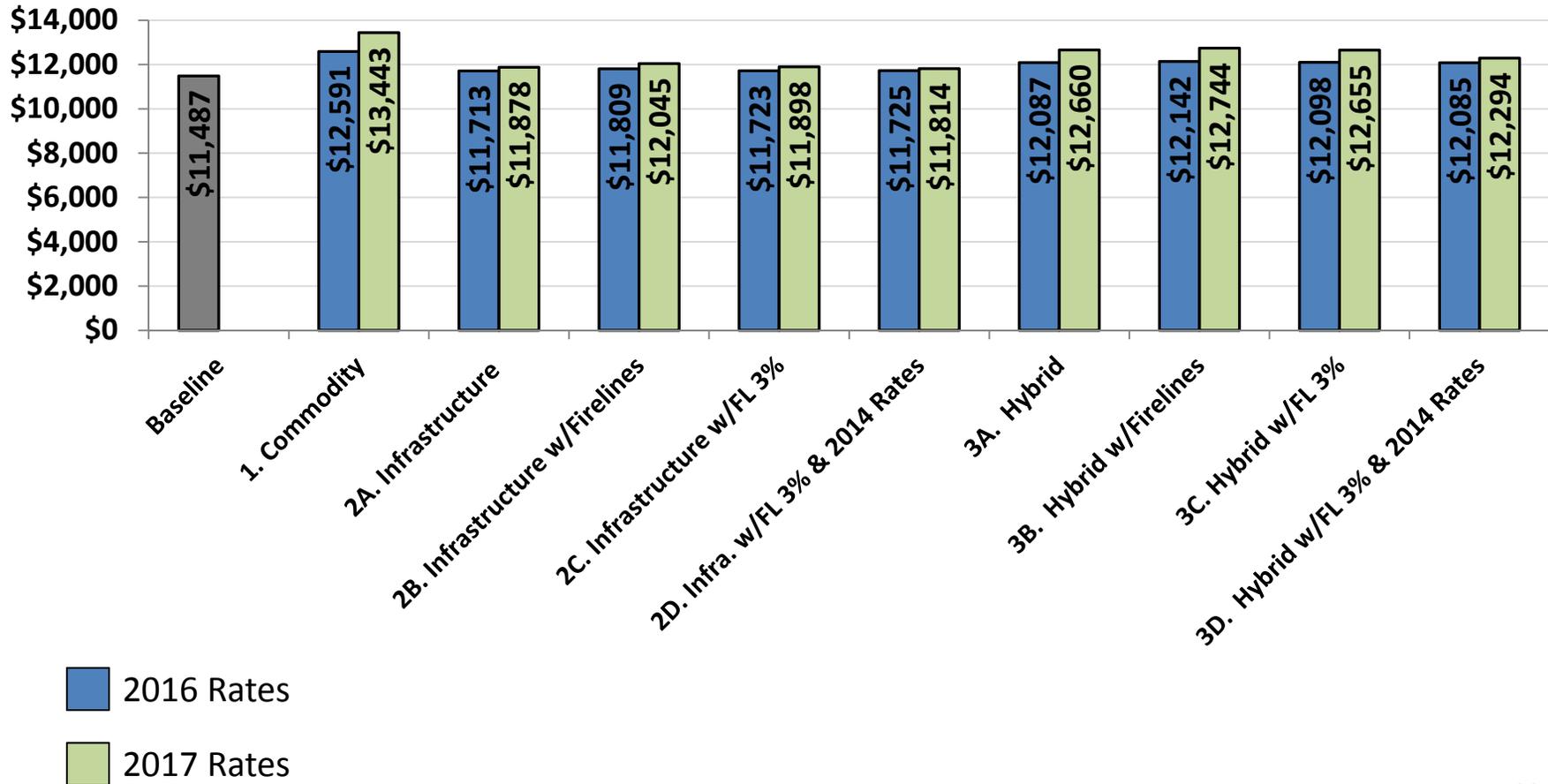
With increase to firelines by 3% annual inflation

Customer Type	Typical Monthly Consumption (in 1,000 gallons)	Monthly Bill (Current Rates)	Sample Bill 2016	Sample Bill 2017
RESIDENTIAL SAMPLES				
Single Family Residential: 5/8" meter	Median: 10	\$34	\$39	\$41
	High: 28	\$108	\$115	\$118
Retail Complex – Mall	6,030 (all services)	\$25,365	\$26,413	\$26,770
Commercial Laundry	18,488 (all services)	\$66,198	\$69,314	\$70,381
School	3,080 (all services)	\$11,487	\$12,085	\$12,294

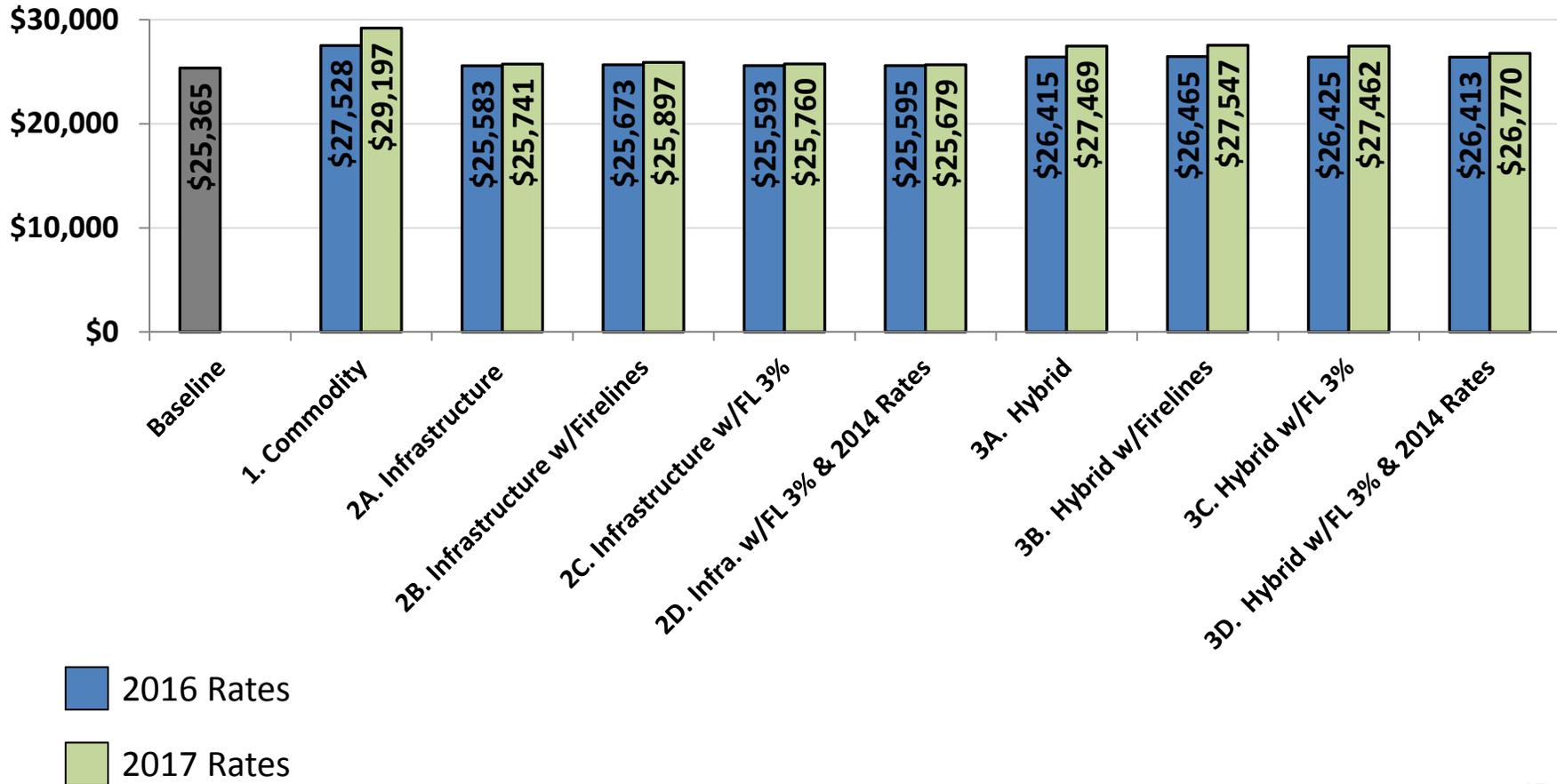
Impacts of Rate Examples on Single-Family Residential (Median Use)



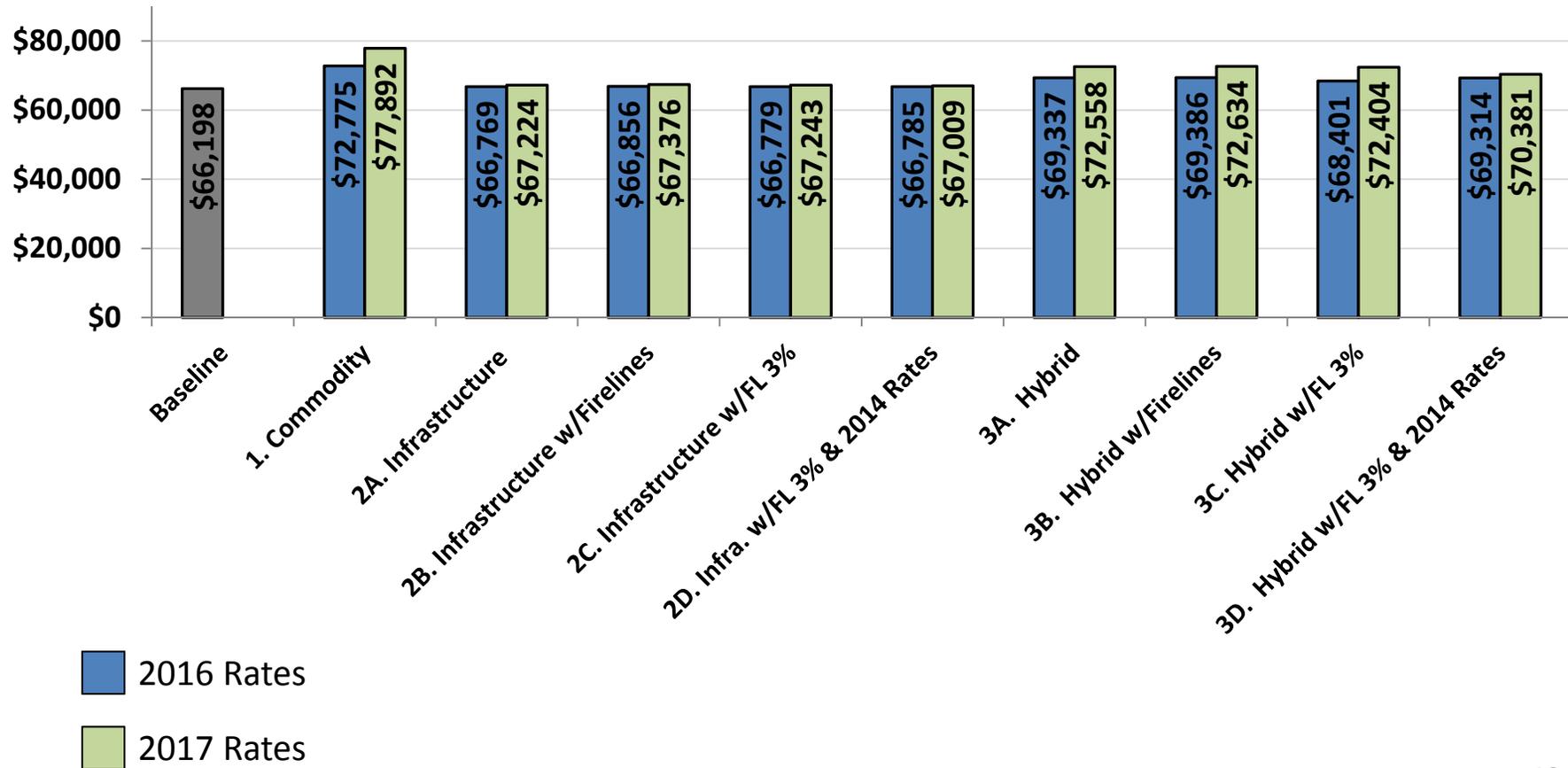
Impacts of Rate Examples on High School



Impacts of Rate Examples on Mall



Impacts of Rate Examples on Commercial Laundry





Rate Scenario Review

- 1. Commodity Charge Increase**

- 2. Infrastructure Charge Increase**
 - a. No increase to firelines**
 - b. With increase to firelines**
 - c. Increase existing fireline charges by 3% inflation**
 - d. Increase existing fireline charges by 3% inflation and gradual increases to the Infrastructure Charge beginning in 2014**

- 3. Hybrid: Commodity Charge and Infrastructure Charge Increase**
 - a. No increase to firelines**
 - b. With increase to firelines**
 - c. Increase existing fireline charges by 3% inflation**
 - d. Increase existing fireline charges by 3% inflation and gradual increases to Infrastructure Charge beginning 2014**