



SBStat

Utility

Quarter 2 2018

Department Updates

Updates

- [Automated Merchant Systems](#) contract review
next steps
 1. Select utility billing system
 2. Determine whether AMS is an appropriate payment processor
 3. If not, give AMS notice of terminating current agreement
 4. Select new payment processor

South Bend Water Shutoffs

Center for Data Science and Public Policy



The Project

1. Quantify the scope of utility payment delinquency in South Bend
2. Characterize delinquent behavior, characteristics of delinquent accounts, and water shutoffs
3. Quantify impact of delinquency on city and residents
4. Motivate an intervention to decrease amount of delinquency

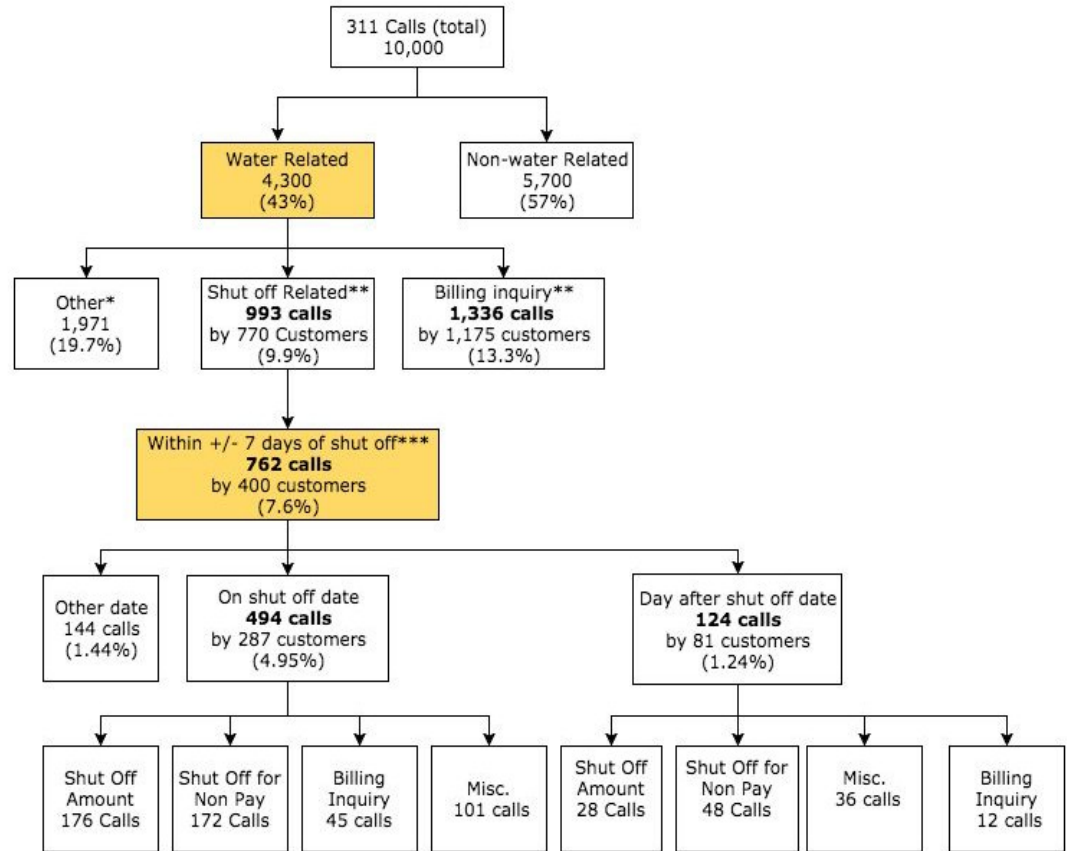
The Problem

- 5,489 accounts (11% of all accounts) had their water shut off at least once in 2016.
- Water shut offs are used as a lever for payment of a combined utility bill in cases of prolonged delinquency.
- 2016 figures: **8,076 water shut offs** total equivalent to **673** water shut offs every month

311 Calls

Every month, **2,329** calls are specifically about water shut offs or water billing inquiries.

On average, during a single month in 2016



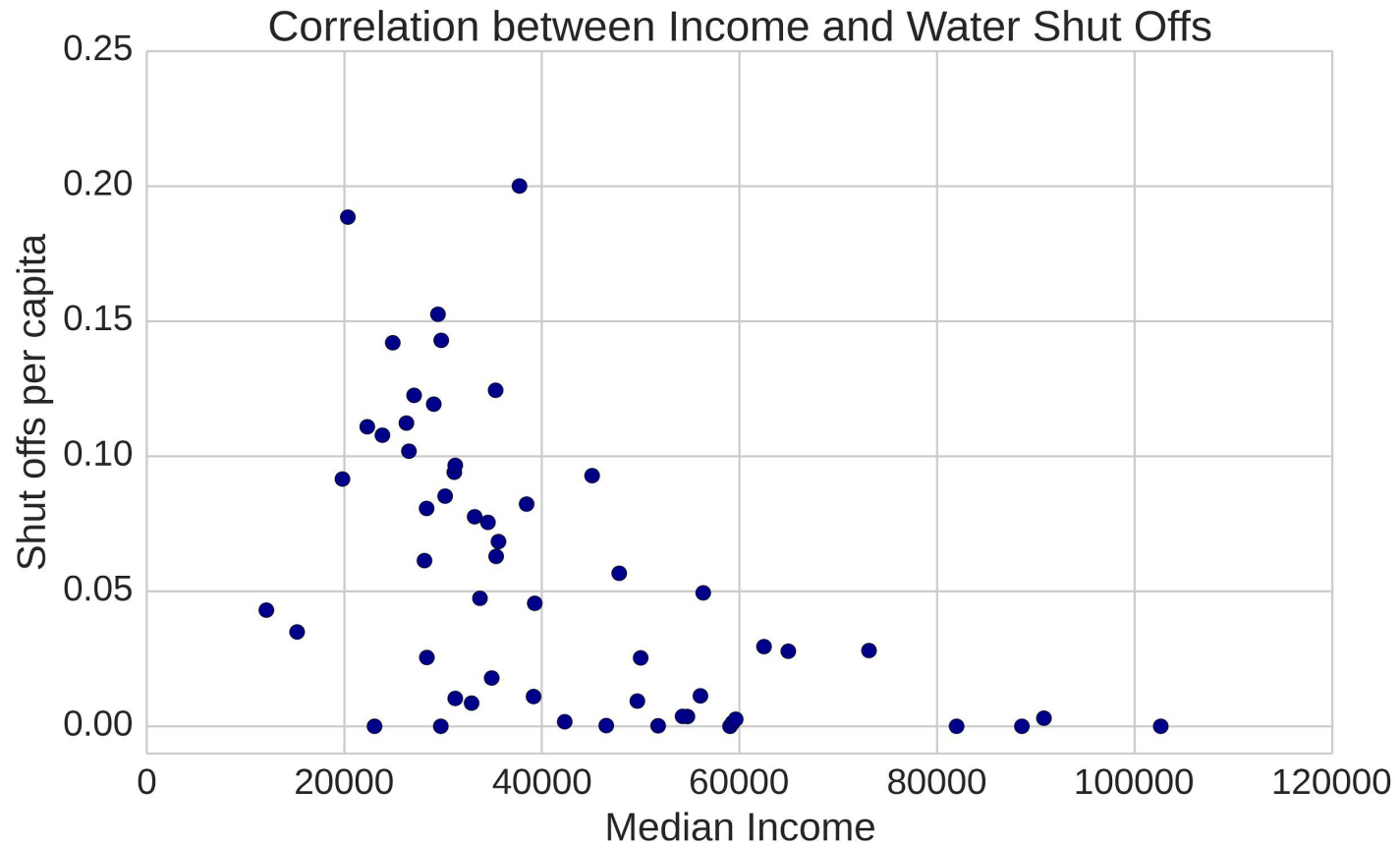
*Includes calls redirected to IVR, miscellaneous, etc.

**As categorized by the 311 call data records

***Based on the shut-off date in the utilities data records, not the work order data.

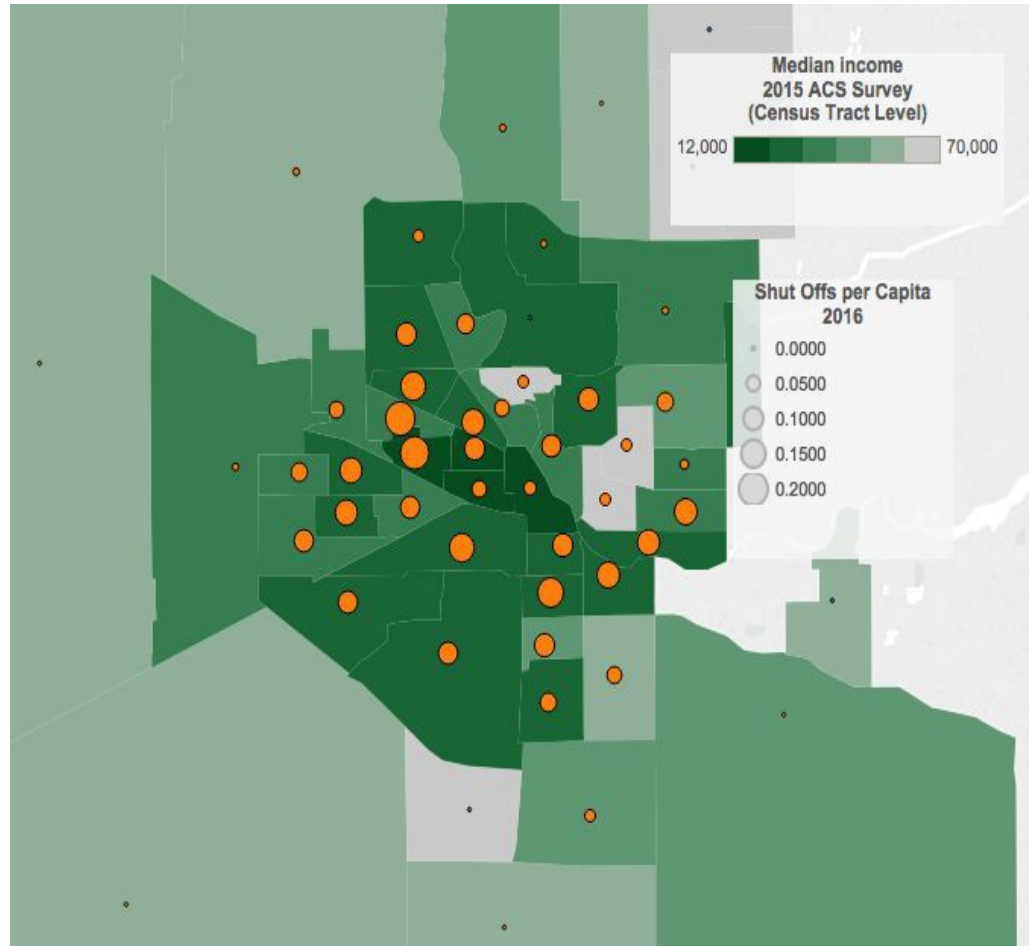
If one excludes calls that were transferred to IVR for billing, this number decreases to 718.

Who is affected?



Mapping Shut Offs

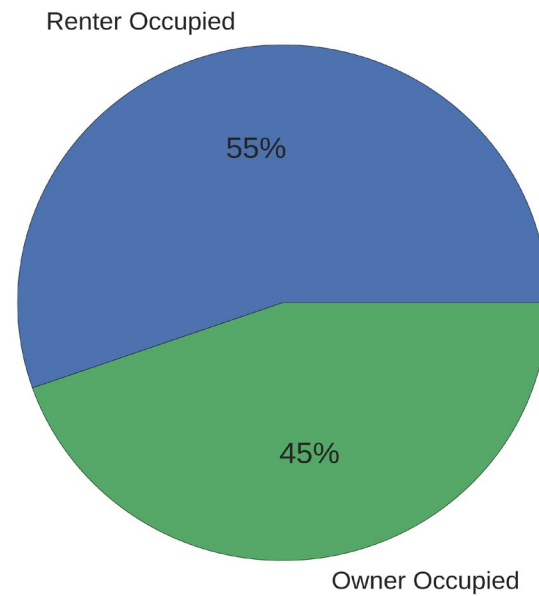
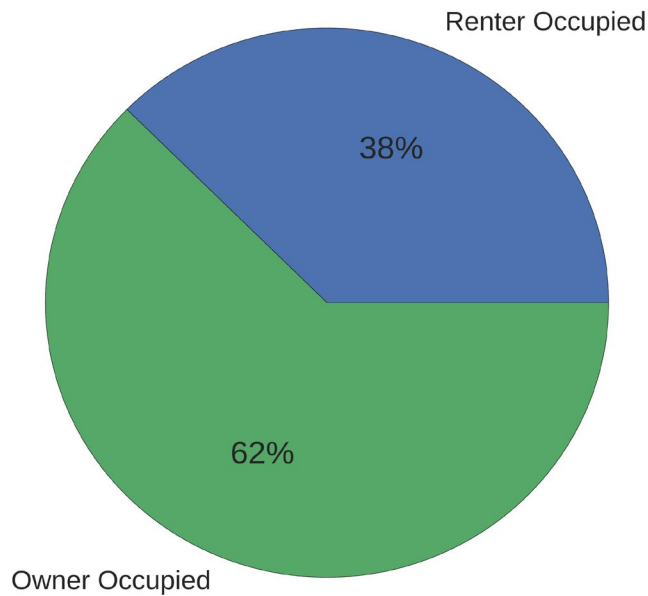
The median household income for the census tracts where accounts have water shut off, weighted by the number of such accounts, is **\$30,000**.



Disproportionate Effect on Renters

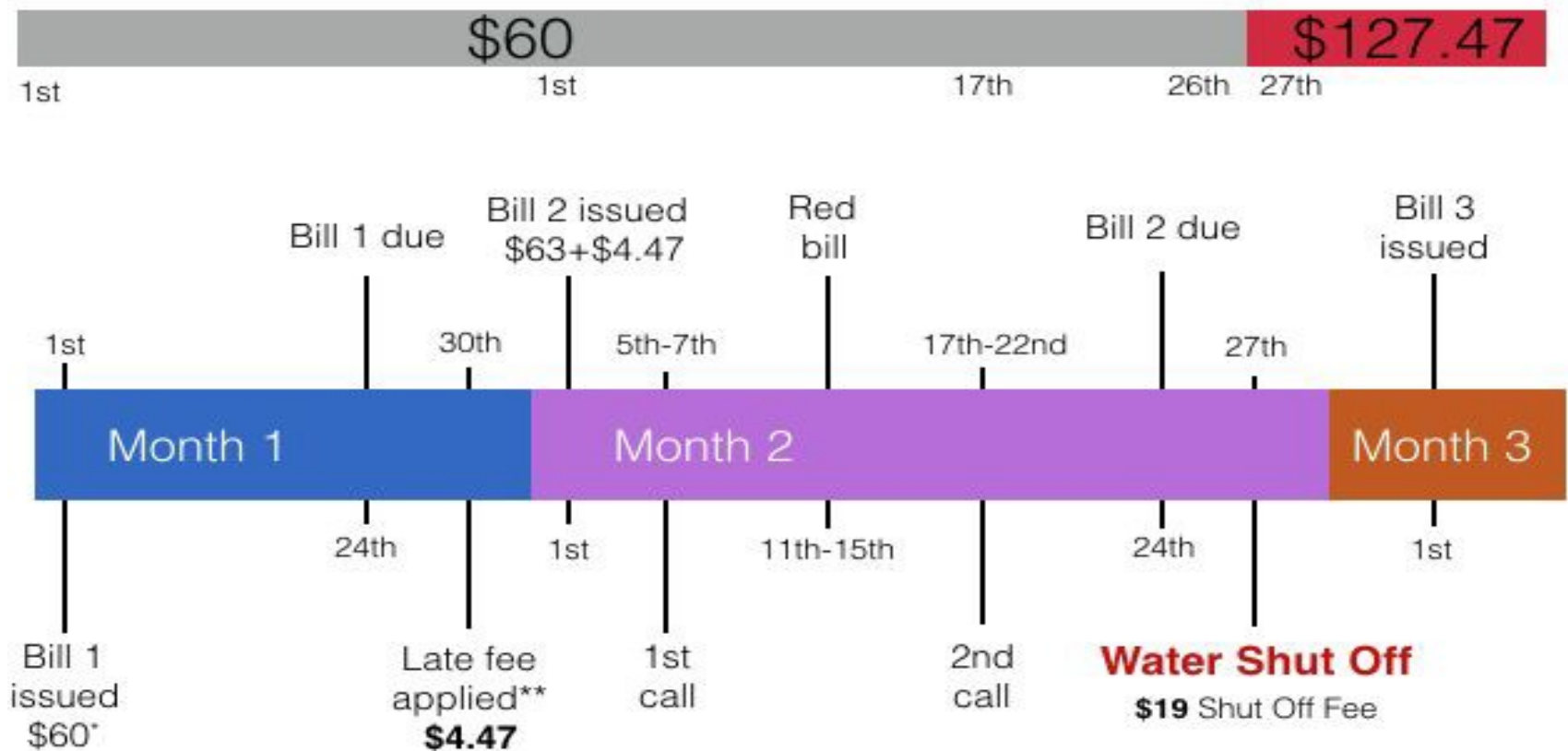
Housing Units in South Bend

Shut Offs in South Bend



Understanding the Billing and Shut Off Process

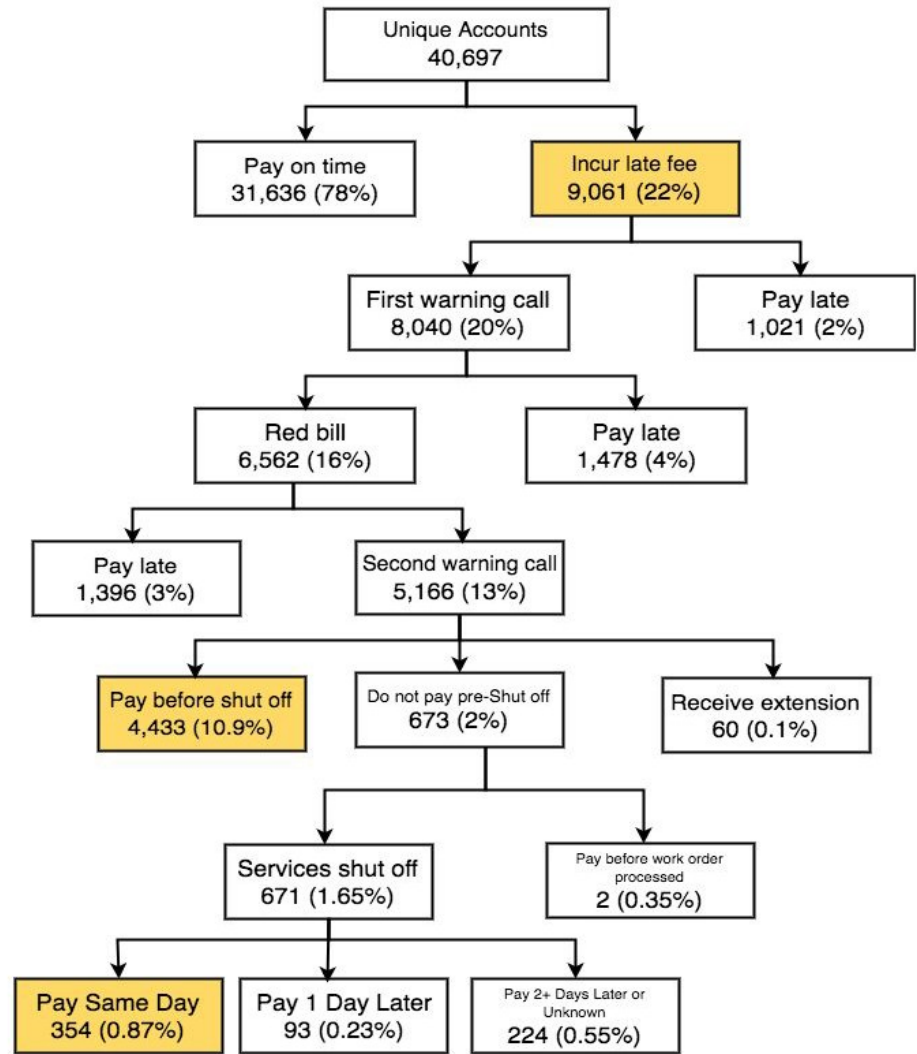
Amount due to avoid shut off



View of an Average Month

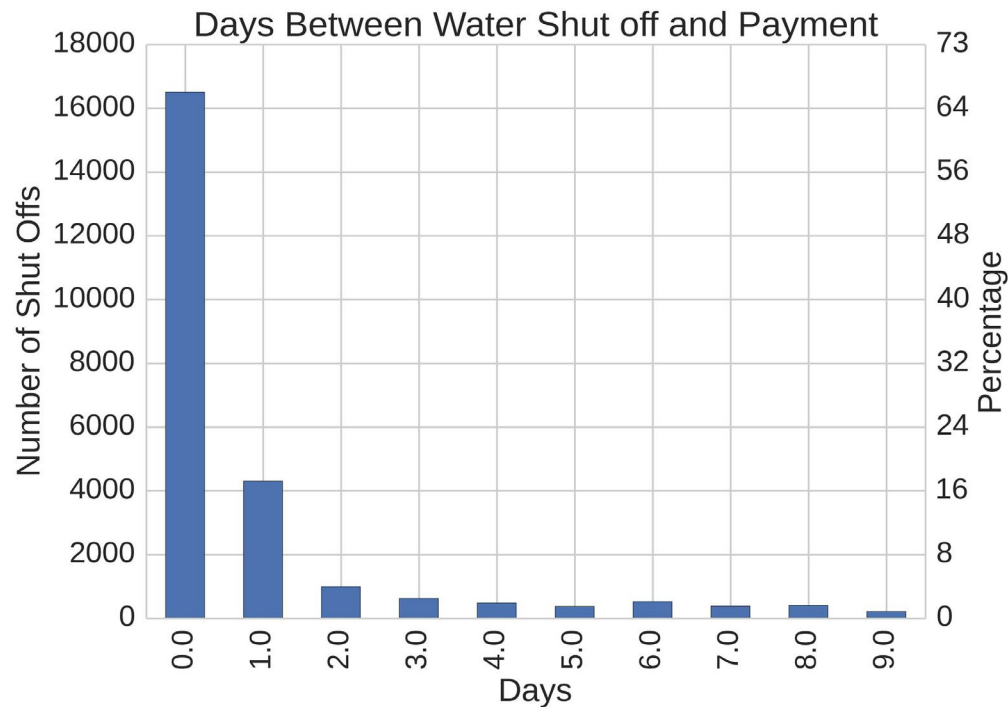
22% of all accounts incur a late fee on average in a given month, and **16%** of delinquent accounts also receive a red bill, meaning they do not pay for an additional two weeks after incurring the late fee.

On average, in a single month in 2016.....



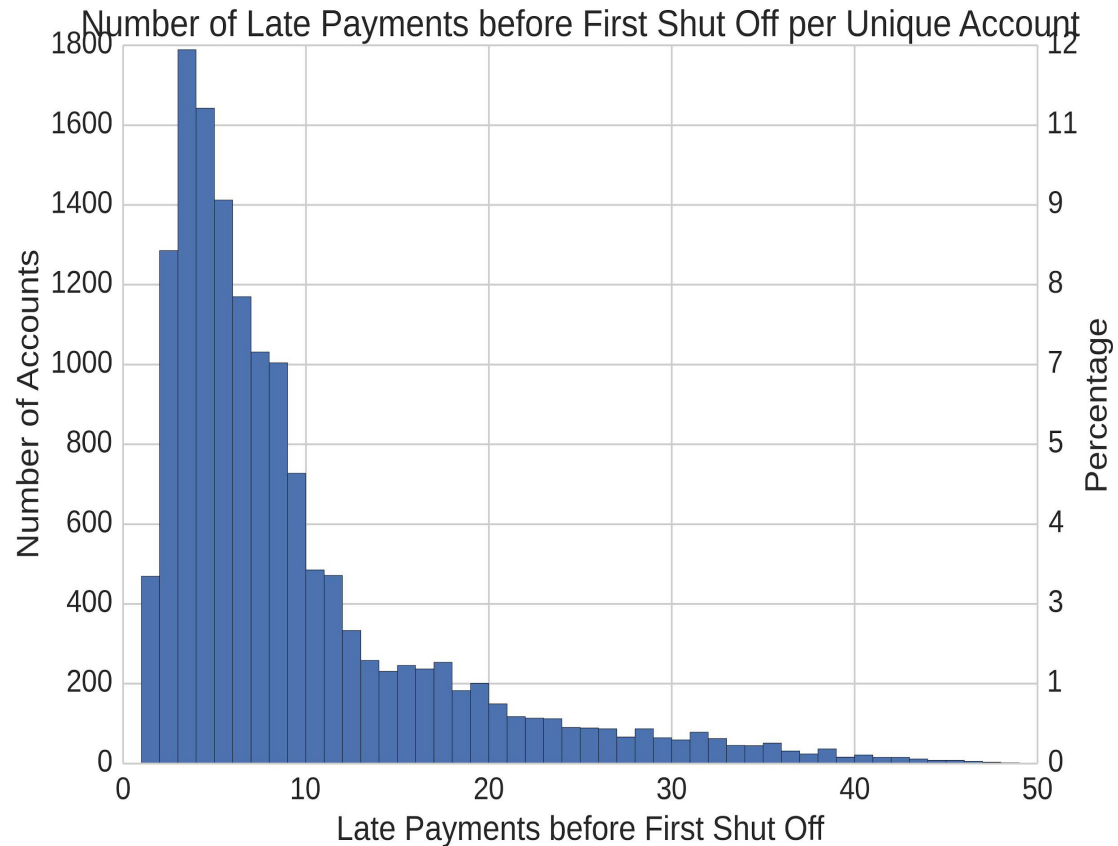
When do accounts pay?

- **66%** of delinquent accounts make a payment the same day that their water is shut off.



Understanding Payment Behavior

A “typical” delinquent account makes 6 late payments in the months prior to the first time it reaches the shut off point.



Understanding Payment Behavior

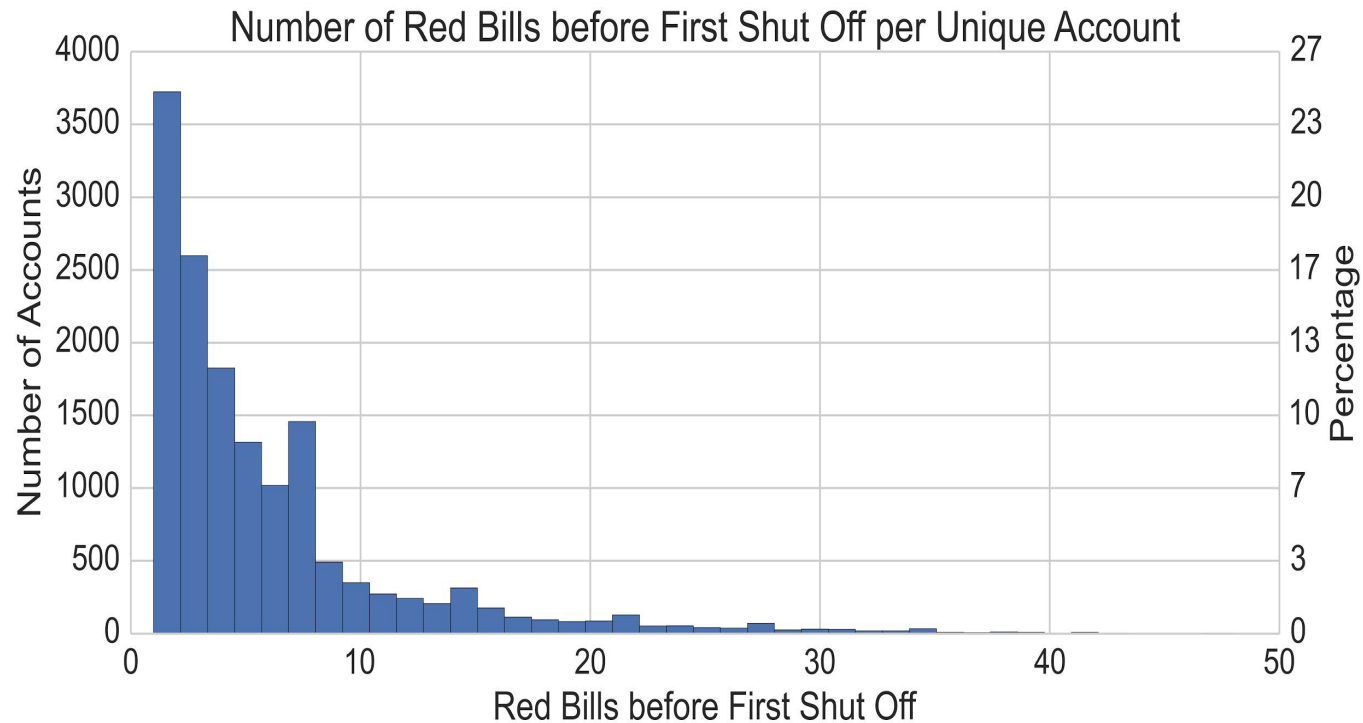
A “typical” delinquent account receives 4 red bills in the months prior to the first time it reaches the shut off point.

Minimum: 1

Maximum: 48

Mean: 6.2

Median: 4



Disconnect Notice Trial



Disconnect Notice Trial Goal

- Increase the proportion of customers who pay their bill before shutoff
- Disconnect notice modified using behavioral insights
- Experiment impacted disconnect notices sent from January 3 through January 29, 2018, excluding January 9
- Half of recipients were sent the traditional notice and half were sent the experimental notice

Traditional and Experimental Notices

SOUTH BEND MUNICIPAL UTILITIES
125 WEST COLFAX AVENUE
SOUTH BEND, INDIANA 46601-1601
574.235.9236

Account Information

Account Number:
Service Address:

Billing Detail

Notice Date: 02/09/17
Disconnection Date on or after: 02/22/17
Total Amount Due Now: \$63.82
Pay by 02/22/17 to avoid additional fees

FINAL NOTICE BEFORE DISCONNECTION DUE TO NON-PAYMENT OF UTILITY BILL

According to our records, payment of your utility bill has not been received. To avoid additional charges and interruption of service, please make payment before the disconnection date noted above.

In the event your service is processed for disconnection, you must pay all fees and delinquent charges owed to the utility. Service will be restored within one working day following receipt of payment. Please contact the South Bend Water Works office at 574.233.0311 or 3-1-1 locally for questions about your account.

Total Payment Due now **\$63.82**

*Approved by the State Board of Accounts for the City of South Bend, 2013.



SOUTH BEND MUNICIPAL UTILITIES
125 WEST COLFAX AVENUE
SOUTH BEND, INDIANA 46601-1601
574.235.9236

ELECTRONIC SERVICE REQUESTED

Page #: [1/4] 20-03 Y

EBR0209A
2000000001 1/1



Account Detail

Account Number:
Service Address:
Total Amount Due:

INCLUDE STUB WITH PAYMENT



SOUTH BEND WATER WORKS
PO BOX 7125
SOUTH BEND, IN 46634-7125

000053905000046522000012878

SOUTH BEND MUNICIPAL UTILITIES
125 West Colfax Avenue
South Bend, IN 46601-1601
574.235.9236

ACCOUNT & BILLING INFORMATION

Account Name: <CUSTOMER NAME>
Account Number: <ACCOUNT #>
Service Address: <ADDRESS>
Notice Date: 01/19/2017

PAY BEFORE DEADLINE TO AVOID
DISCONNECTION OF WATER SERVICES **\$103.87**

PAYMENT DEADLINE
(PAY BY 5:00PM ON DATE LISTED) **07/05/17**

**PAY AFTER DEADLINE
TO RESTORE SERVICES \$195.34**

DISCONNECTION NOTICE

PAYMENT INFORMATION

You can now pay your bill online. Visit the website at www.southbendin.gov/utilitybillpay, or use one of the following payment methods:

Online Bill Pay: www.southbendin.gov/utilitybillpay
Pay by Phone: 574.235.9236
Walk-In Hours: Monday-Friday, 8:30am-5:00pm
Drive-Up Window: Monday-Friday, 8:00am-5:00pm

FINAL NOTICE BEFORE DISCONNECTION OF WATER SERVICE

This disconnection of service notice was sent because of an overdue balance on the account. If you choose not to respond to this letter, it will be taken as approval for disconnection. **All extensions and payment arrangements must be made in the Customer Service Office before 5:00pm on the payment deadline stated on this notice.**

No extensions or payment arrangements will be made after service has been disconnected. **Please note that if your services are disconnected, then an additional \$19 delinquency processing fee will be charged to your next billing cycle.** For bill payment and other services, you may call our 24/7 integrated voice response system at 574.235.9236.



SOUTH BEND MUNICIPAL UTILITIES
125 WEST COLFAX AVENUE
SOUTH BEND, IN 46601-1601
574.235.9236

ELECTRONIC SERVICE REQUESTED

703-0 DUPLICATE -

SD01031A
2000000001 1/1



CUSTOMER NAME
ADDRESS 1
ADDRESS 2

ACCOUNT INFORMATION

Account Number: <ACCOUNT #>
Service Address: <ADDRESS>
Amount Due: \$103.87

INCLUDE STUB WITH PAYMENT



SOUTH BEND WATER WORKS
PO BOX 7125
SOUTH BEND, IN 46634-7125

000028779000077262000019534

Disconnect Trial Outcome

- Approximately 6,700 notices sent overall
- Outcome measure: whether customers who received the test notice were more likely to pay before shutoff than those who received the traditional notice
- Findings: no statistically significant difference
- 268 accounts who received the experimental notice were shutoff compared to 282 accounts shutoff who received the traditional notice

Potential Explanations for Trial Outcome

- Experimental letter did not motivate individuals to pay
- Individuals receiving the experimental notice were unable to pay
- Individuals fail to open their disconnect notice
- The change in behavior was too small to measure in the current sample size

Payment Extensions

Utility Payment Extension Overview

- Utility allows an account up to 4 extensions per year
- Resident required to come into customer service office
- Customer service representatives inform residents of extension program
- Extension gives resident additional 10 days from shut off due date to make a payment

Extension Form

Example
South Bend Water Works - Extension Form

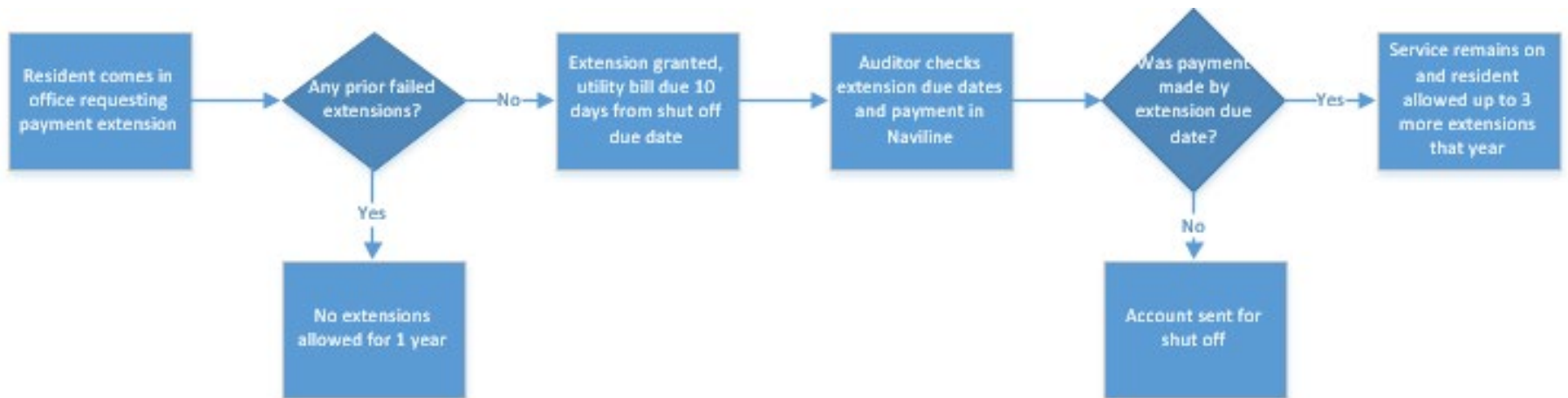
Date 5-21-18 Account No. [REDACTED] Cy/Rt 04-03
Name [REDACTED]
Pay Promised \$ 68.56 By 5 / 31 / 18 Clerk DP
Signature [Signature]
Remarks 1st Ext due by 5/31/18

Payment must be made in the office by 5:00 p.m. -not in the drop box.

Failure to keep the terms of the agreement will result in disconnection of water service.



Process Map Extensions



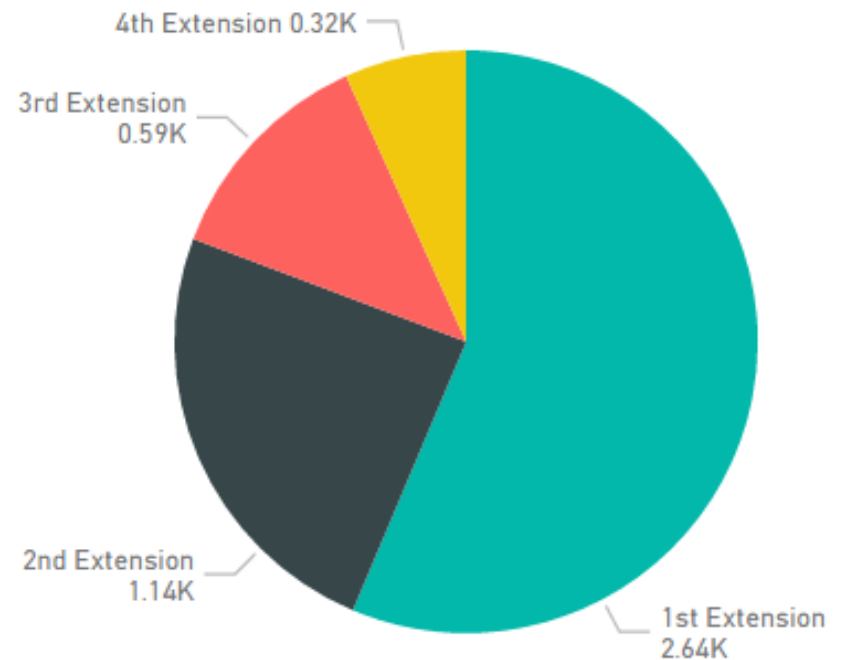
Extensions

Data is from Jan. 2017 through Apr. 2018

Total Extensions

4711

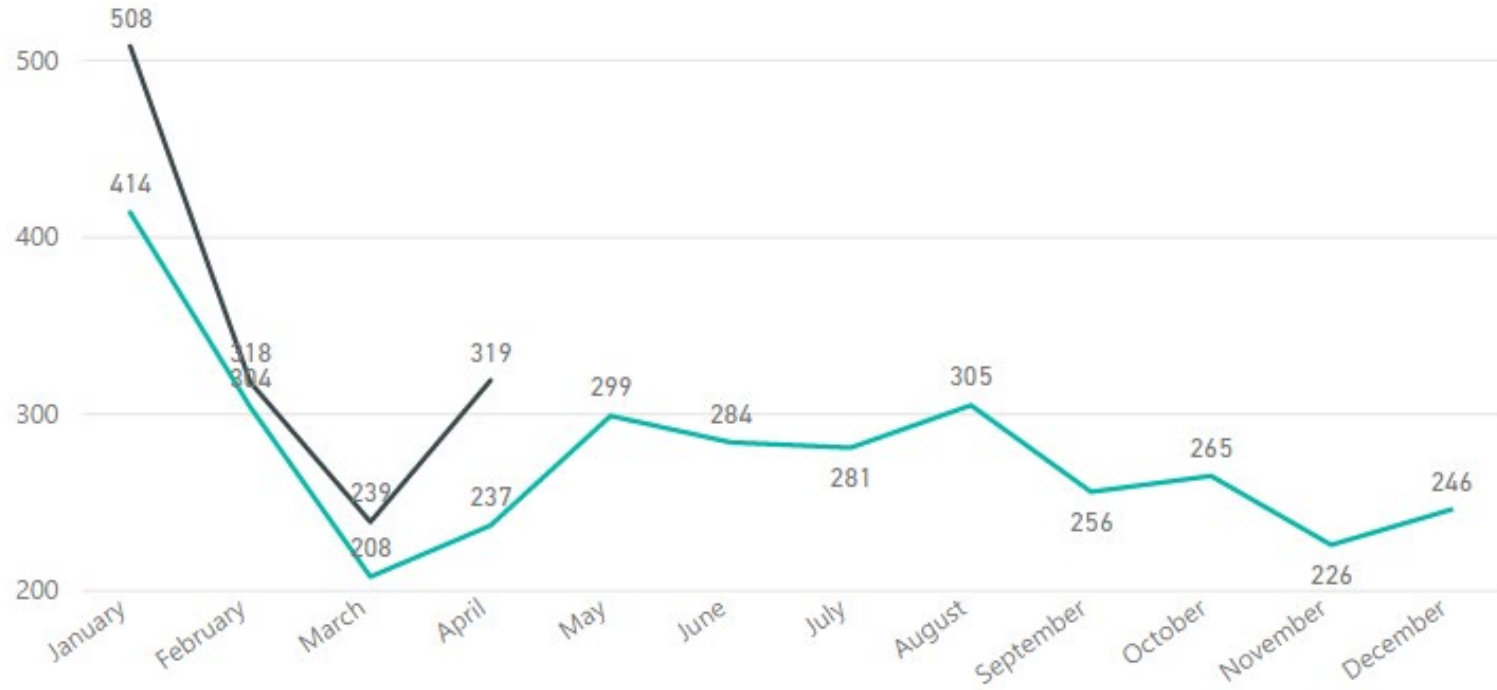
Number of Extensions



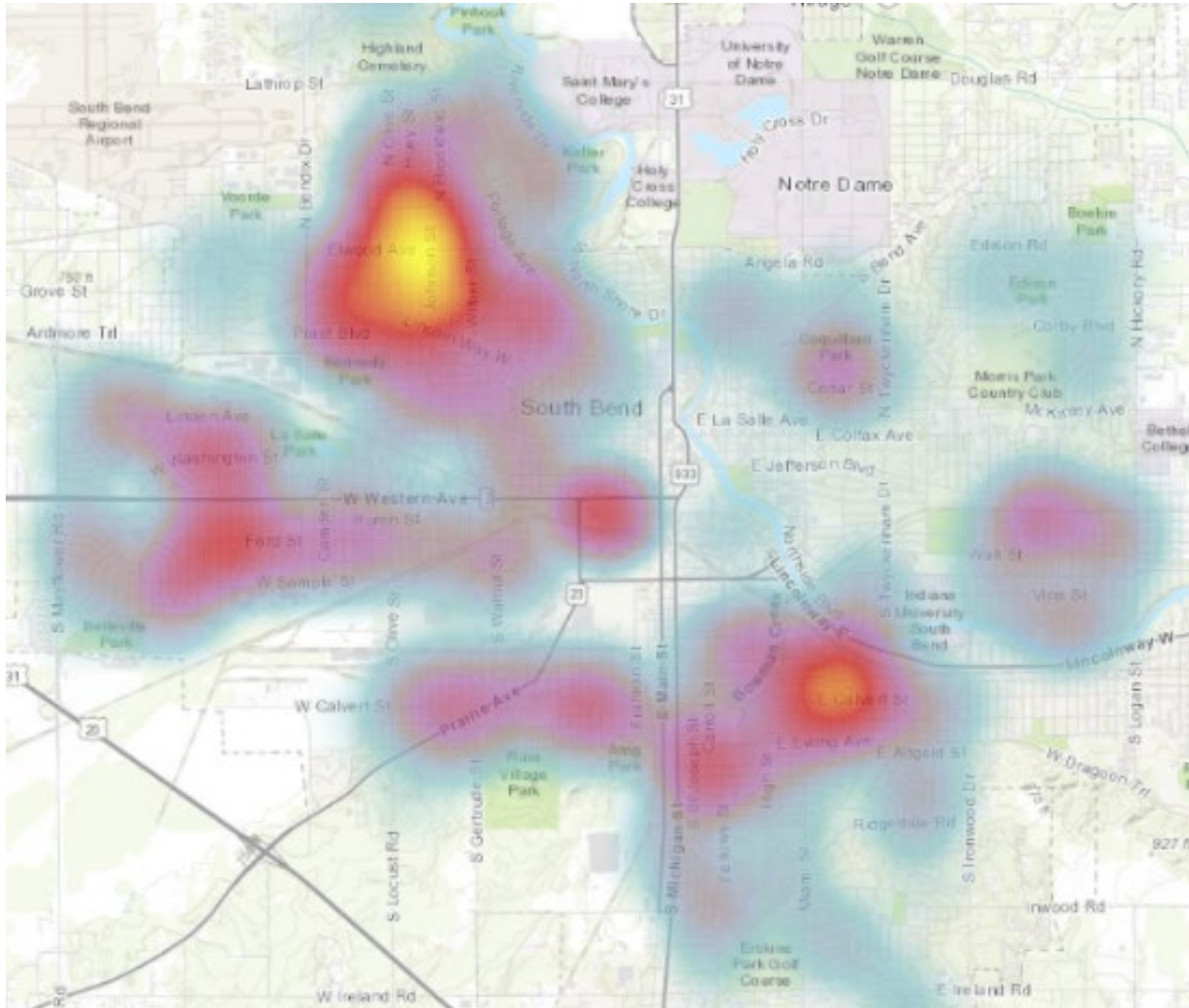
Extensions

Count of Extensions by Month

MISC_DATA_YEAR ● 17 ● 18



Extensions Heat Map



Payments

- 3,929 payments within 30 days of date extension given
- 32% of payments are on time
- 68% payments exceed 10 day extension period
- Average number of days when resident pays extension= 13.7

Potential Projects

Project 1: Extension Communication

- Communicate extensions in other methods
- What may be the best method to reach residents who could benefit from an extension?
- Potential to trial different forms of communication

Project 2: Actions from Shutoff Study

- Test a proactive approach to target at-risk residents identified in study
- Inform at-risk residents of extension program or other services in the city that help people in need
- Decide when to intervene

