

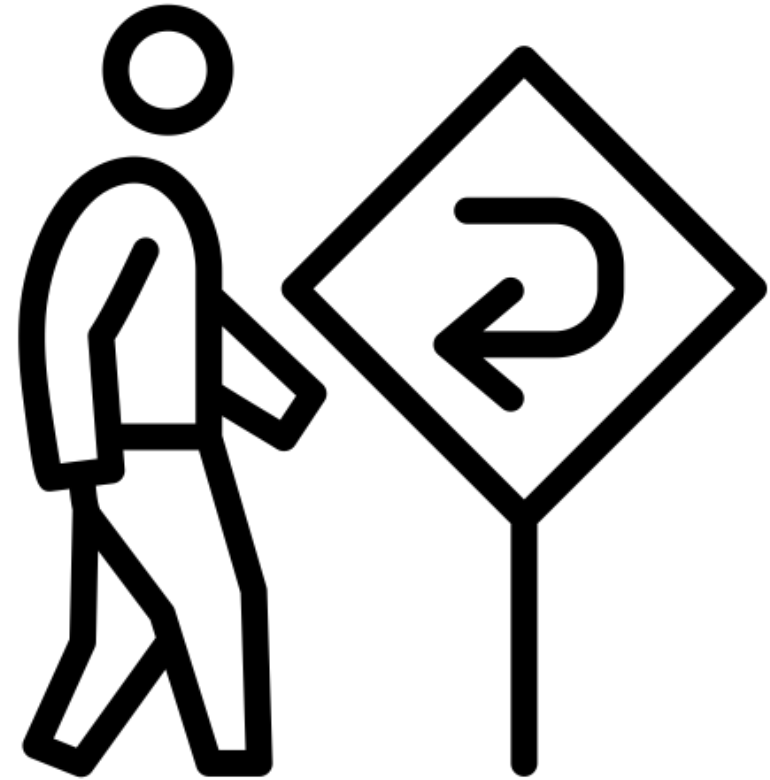
# **You Really Need to Open This:** **Using Behavioral Economics to Increase** **Property Tax Compliance**

**An Experiment in Local Government Innovation**

**Guilford County Government & The Sanford School of Public Policy**

# Behavioral Economics

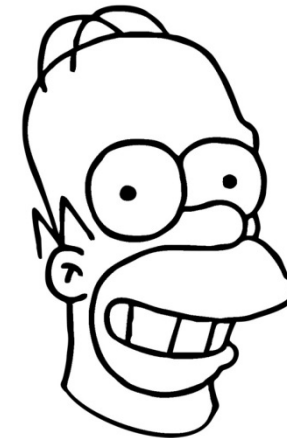
a method of **economic analysis** that applies **psychological insights** into **human behavior** to explain **economic decision-making**.



# People are Humans

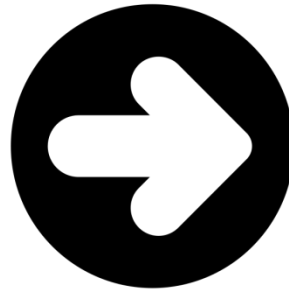
- ~~✗ Perfectly Rational~~
- ~~✗ Always Attentive~~
- ~~✗ Logically Infallible~~
- ~~✗ Completely Unbiased~~
- ~~✗ Epitomes of Self-Control~~

- ✓ Irrational
- ✓ Biased
- ✓ Emotional
- ✓ Limited
- ✓ Distracted



# To B.E. or not to B.E...

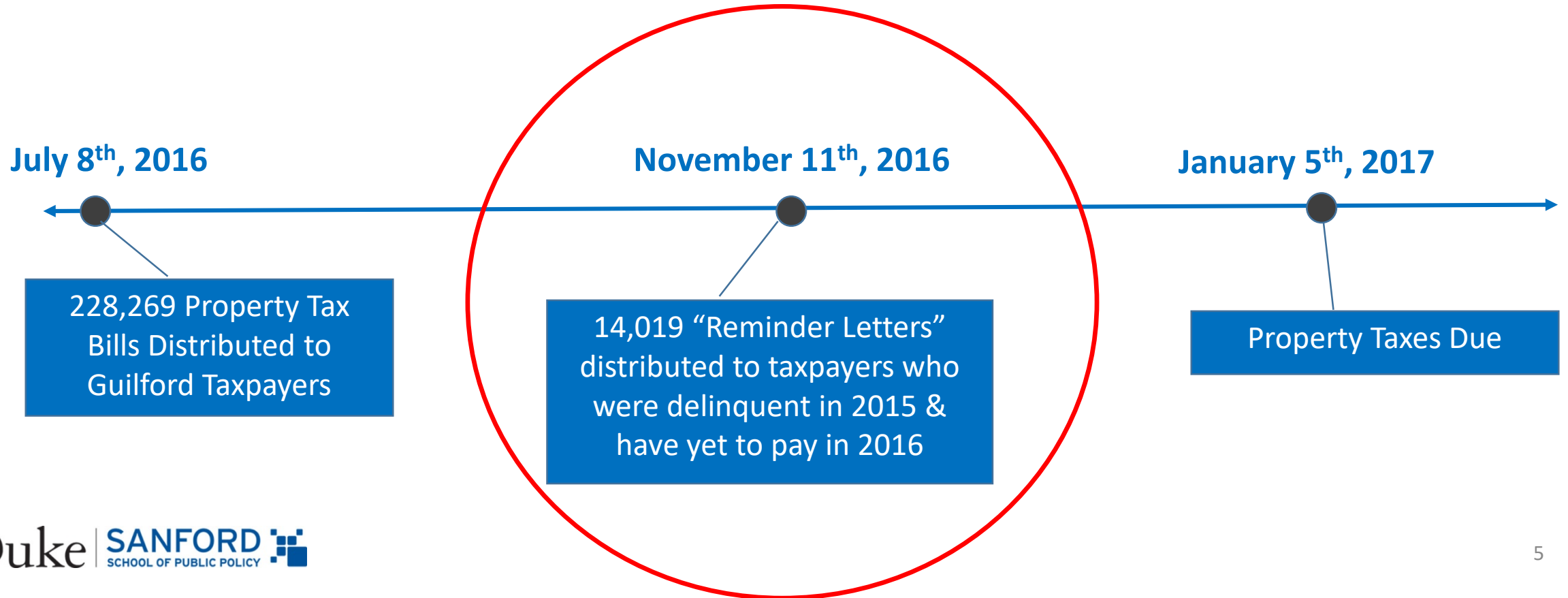
- **Government is a human endeavor**
- Governments are looking for **solutions** that are **low-cost, effective**, and **based in *real* human behavior**



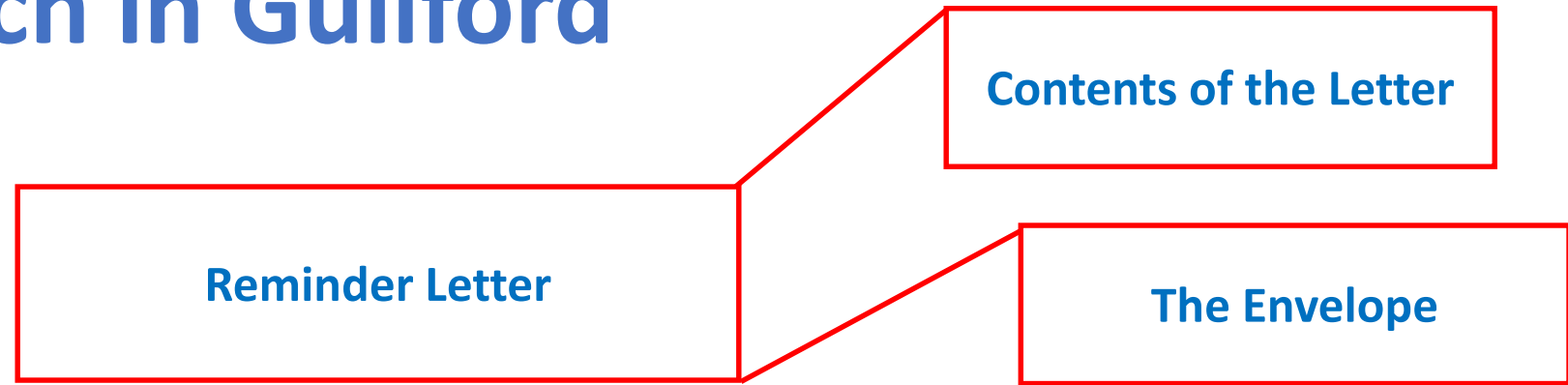
- B.E. experiments have shown that small changes in communication, choice architecture, and service delivery can have significant positive impacts

# The Problem in Guilford

Around 95% of Guilford's total property tax levy is successfully collected by the January 5<sup>th</sup> deadline



# Our Approach in Guilford



Control Group	Intervention Group One	Intervention Group Two
No intervention – received same letter and envelope as in previous years	Received an altered letter delivered in an unchanged envelope	Received an altered letter, and a handwritten note on the front the billing envelope.

# Proposed Alterations to the Letter

GUILFORD COUNTY TAX DEPARTMENT  
400 W MARKET STREET  
GREENSBORO NC 27401

**Guilford County Tax Department**

**CONTACT US**  
email: [taxdel@co.guilford.nc.us](mailto:taxdel@co.guilford.nc.us)  
Greensboro: (336) 641-3363  
High Point: (336) 641-7011  
For more information:  
[www.co.guilford.nc.us/taxfacts](http://www.co.guilford.nc.us/taxfacts)  
To Look Up Your Tax Bill:  
[taxweb.co.guilford.nc.us/publicwebaccess](http://taxweb.co.guilford.nc.us/publicwebaccess)  
To Look Up Your Real Estate Information:  
[taxweb.co.guilford.nc.us/CamaPublicAccess](http://taxweb.co.guilford.nc.us/CamaPublicAccess)

\*\*\*\*\*AUTO\*\*S-DIGIT 27025  
ISSUED: 05/25/15 1 1 1 1

www.officialpayments.com  
or  
1-877-757-7676  
disponible en español  
Official Payments, the service  
provider, charges a fee  
for this service.

Pay by Credit Card  
Discover  
MasterCard  
VISA

Date of Notice: 11/13/2015 [See reverse for Online Banking and Payment by Mail instructions.](#)

**FRIENDLY REMINDER**

Bill Number \_\_\_\_\_ Property Location \_\_\_\_\_ Amount Due \_\_\_\_\_

disponible en español  
Official Payments, the service  
provider, charges a fee  
for this service.

Date of Notice: 11/13/2015 [See reverse for Online Banking and Payment by Mail instructions.](#)

**FRIENDLY REMINDER**

Bill Number \_\_\_\_\_ Property Location \_\_\_\_\_ Amount Due \_\_\_\_\_

**THIS IS A FRIENDLY REMINDER**

Dear Taxpayer,  
You are receiving this tax statement as a friendly reminder informing you that the deadline to pay your 2015 property tax is January 5, 2016. Interest and enforced collections will begin on January 6, 2016. If you have any questions, please

# The Redesigned Letter

- Urgency / Saliency
- Social Norming / Peer Effects

www.uncmapayments.com  
or  
1-877-717-7679  
disponible en español  
Official Payments, the service  
for this service.  
Date of Notice: 11/13/2015  
See reverse for Online Banking and Payment by Mail instructions.

Pay by Credit Card  
MasterCard  
VISA  
Discover

**PAY NOW**

Bill Number	Property Location	Amount Due
<b>7 OUT OF 10 GUILFORD COUNTY RESIDENTS HAVE ALREADY PAID</b>		

Dear Taxpayer,  
You are receiving this tax statement as a friendly reminder informing you that the deadline to pay your 2016 property tax is January 5, 2017. Interest and enforced collections will begin on January 6, 2017. If you have any questions, please contact our office at 336-641-3363 and choose option #1.  
Thank you,  
Guilford County Tax Department

SEND PAYMENT TO:  
GUILFORD COUNTY  
PO BOX 71072  
CHARLOTTE, NC 28272-1072

FOR ASSISTANCE CALL:  
GREENSBORO: 336-641-3363  
HIGH POINT: 336-641-7911

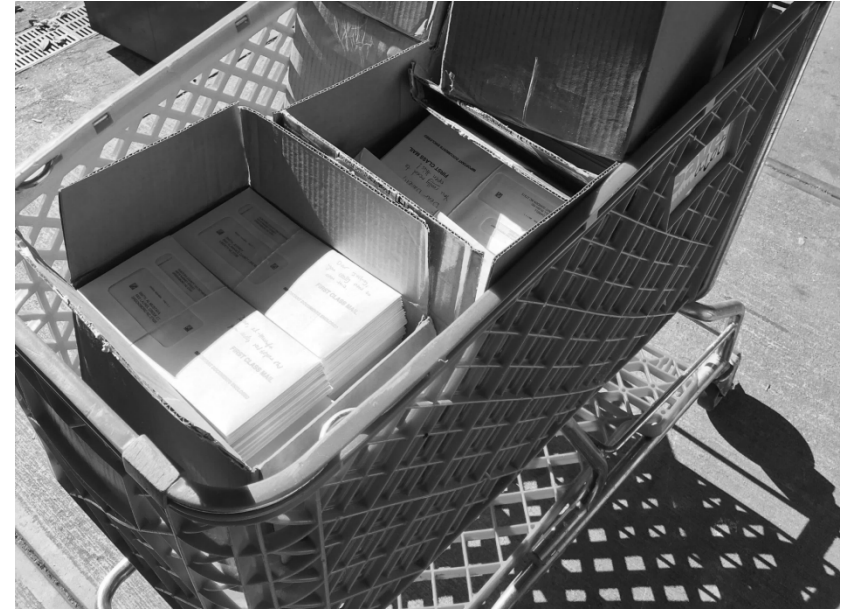
Note: If you have paid since 11/13/2015 please disregard this notice.  
RETAIN THIS PORTION FOR YOUR RECORDS. CHECK NO. \_\_\_\_\_ DATE PAID \_\_\_\_\_ AMOUNT PAID \_\_\_\_\_

FOLD ON PERFORATION, DETACH COUPON, AND RETURN IT WITH YOUR PAYMENT



# The Handwritten Note

- Urgency / Saliency
- Reciprocity



Dear (Name),  
You really need to  
open this.

# The Test Plan

## Control Group

- Unaltered Envelope, Last Year's Letter

## Intervention One

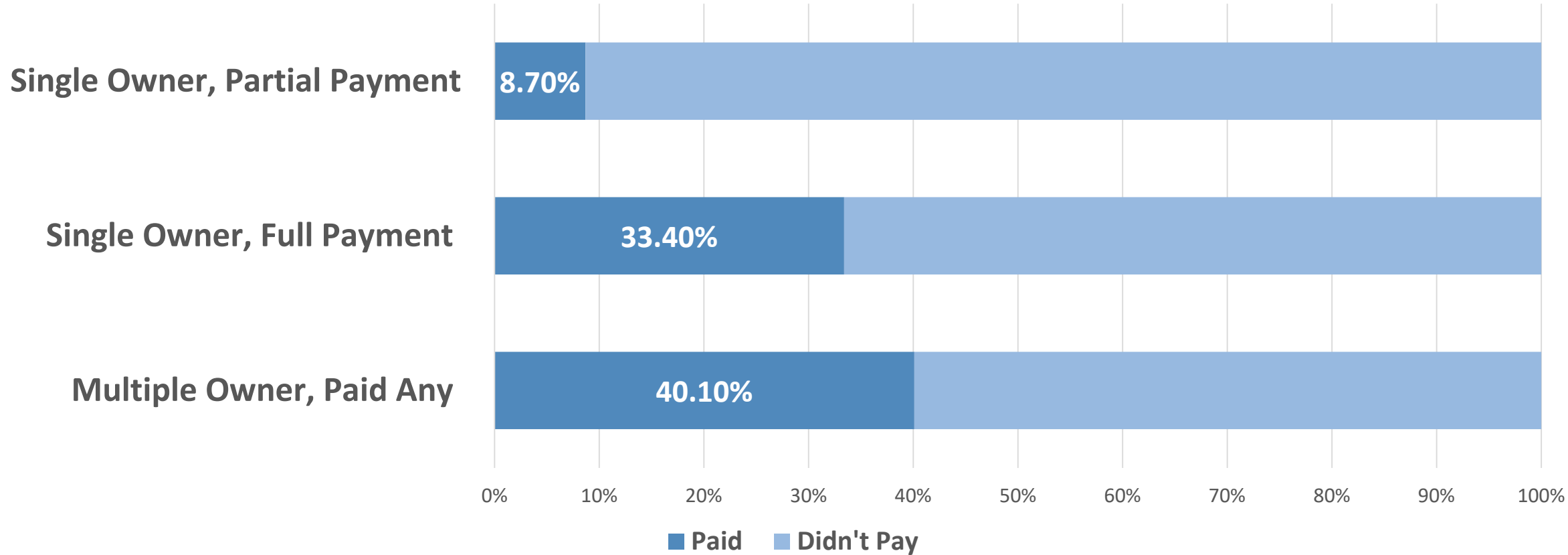
- Unaltered Envelope, Revised Letter

## Intervention Two

- Handwritten Note on Envelope, Revised Letter

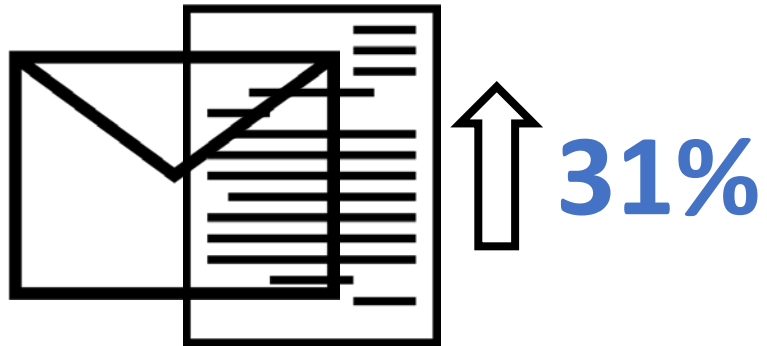
# The Baseline

## Control Group Payment Rates

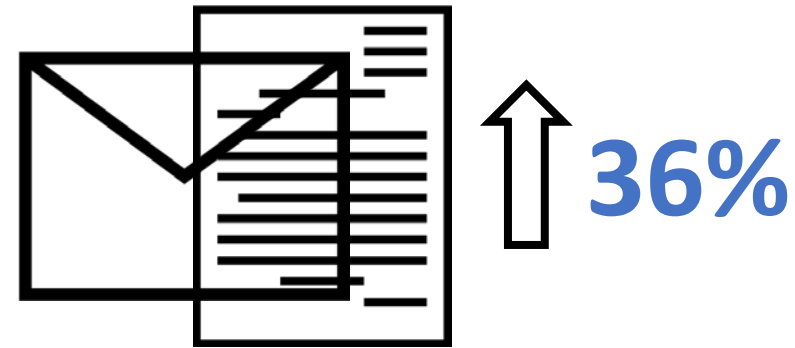
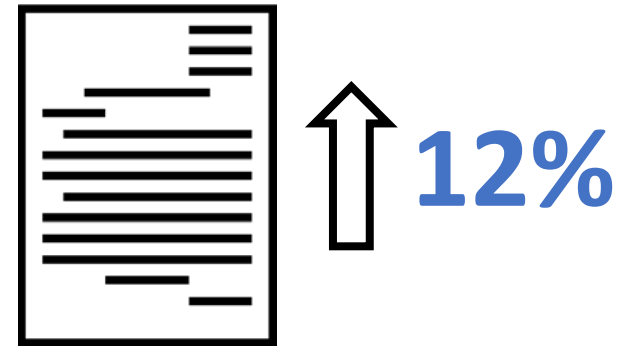


# Intervention Effects: Single Property Owners

Likelihood of *full payment*

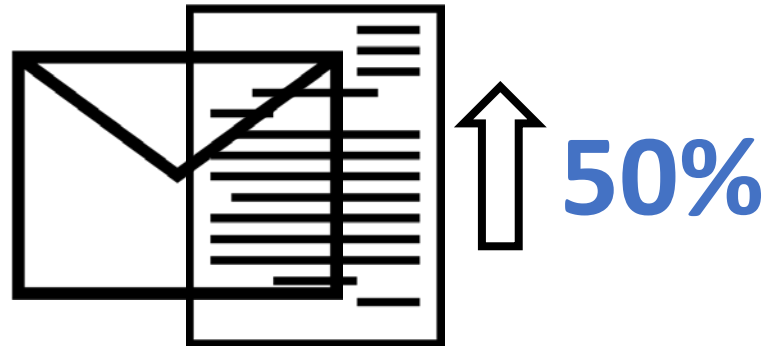


Likelihood of *full or partial payment*



# Intervention Effects: Multiple Property Owners

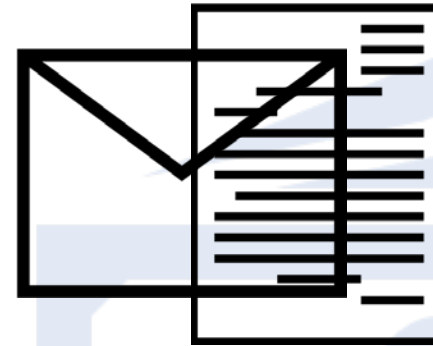
Likelihood of *full or partial payment*



# Cost Savings

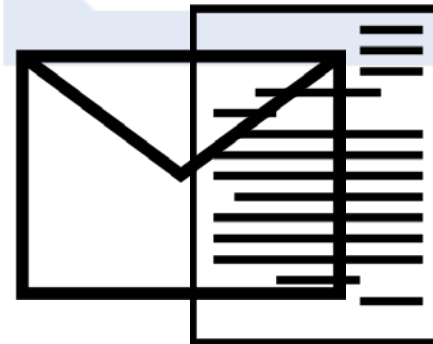
Per the tax office, the collection costs for a single unpaid bill average around \$150.

Real Cost Savings



**\$44,000**

Extrapolated to Every Group



**\$132,000**

# Recommended Reading

- **Test, Learn Adapt: Developing Public Policy with Randomized Control Trials – The Behavioral Insights Team**
- **BIT's Update Report**
- **Nudge – Sunstein & Thaler**
- **Predictably Irrational – Ariely**
- **Thinking, Fast and Slow – Kahneman**
- **The Undoing Project – Lewis**

# Contact

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**Ryan Smith**  
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**Jason Jones**  
[jjones6@myguilford.com](mailto:jjones6@myguilford.com)