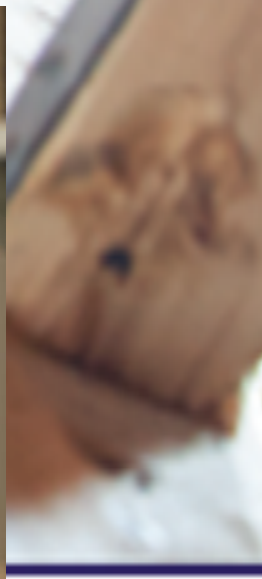


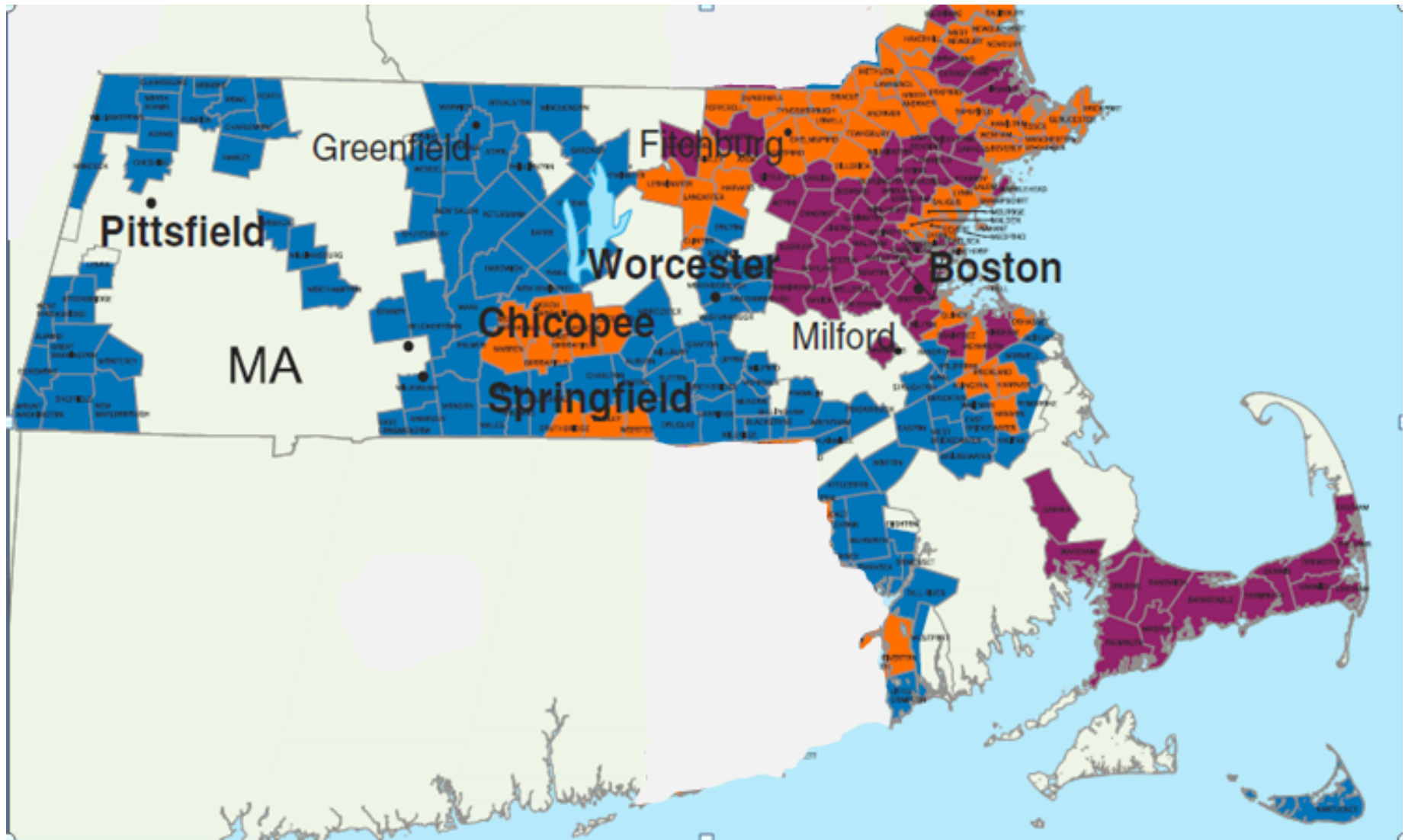
# How Now to Crash a Party:

improving customer and implementer satisfaction with automated workflow and better data

October 22, 2018



# National Grid Gas and Electric in MA



# Introduction

## MassSave Home Energy Services Program

A Home Performance with ENERGY STAR program

1. Market rate and moderate income customers
2. 40,000 to 50,000 home energy audits
3. ~15,000 weatherization jobs
4. Rebates for equipment and appliances
5. Three administrative vendors
6. 100+ independent contractors



**A One-Size-Fits-All Program Serving  
Rural, Suburban, and Urban Customers  
across Massachusetts**

# Previous world

## Mixing and matching systems

1. Outdated software patched together
2. Vendors using different software
3. Apples-to-oranges reporting
4. Manual double data-entry
5. No utility access to data
6. Paperwork filled out by hand

Inefficient processes, disjointedness, data problems



# Goals

## Enter the world of big data

1. Cloud-based real time data
2. All data entered in real time
3. All vendors, All contractors, All projects
4. Customer forms auto-generated
5. Paperless process
6. Better reporting and analytics



One system of record for everyone and everything



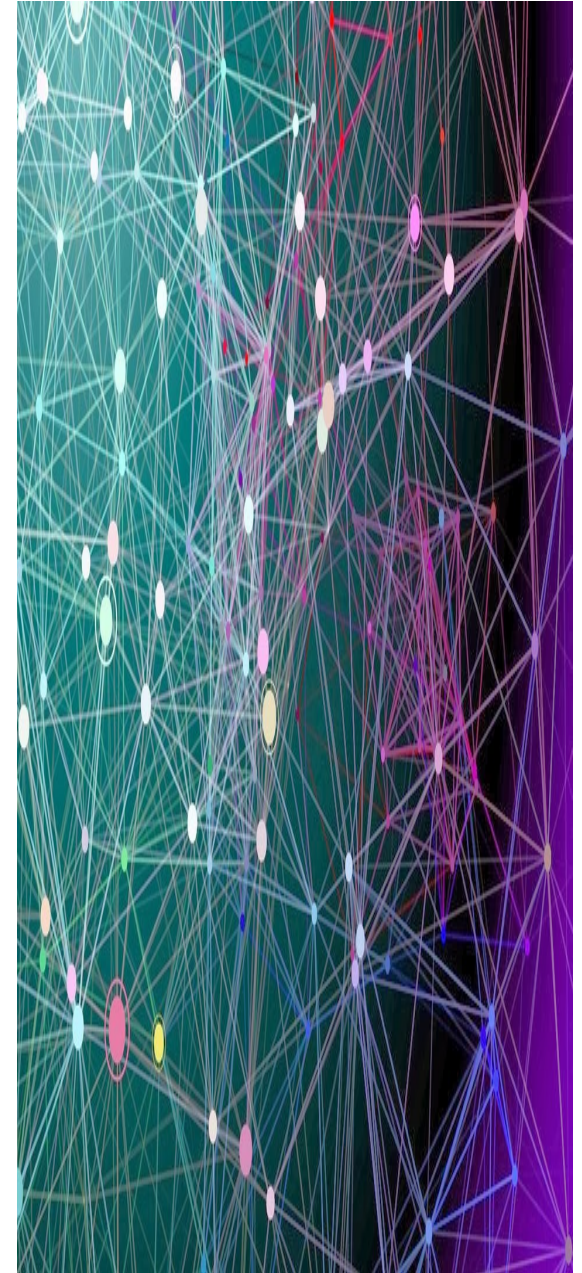
# Advantages

## Real-time accurate program snapshot

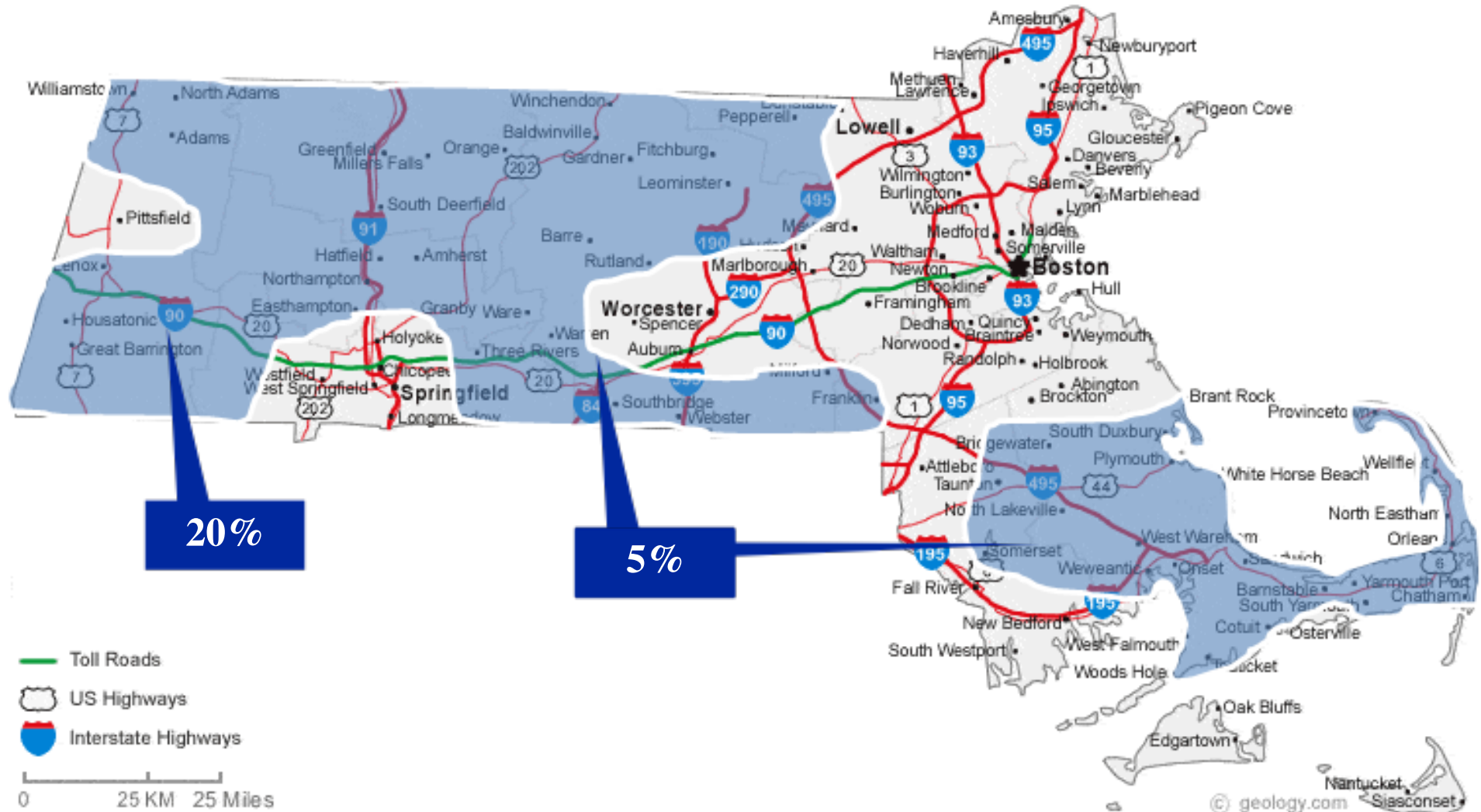
1. Immediate access to customer data
2. Better forecasting
3. Track program trends
4. Refine target marketing
5. Time savings

Intuitive, streamlined, efficient

**ENERGYSAVVY**



# Challenge – lack of reliable connectivity



# Possible solutions

## Collaborative effort with vendors and contractors

1. Offline tools
2. Signal boosters
3. Use customers' internet connections
4. Creative programming solutions





# Booster pilot

## Manufacturers claims – boosts cell signals up to 32x

1. Three contractors
2. Two kinds of signal boosters
  - a. Amplifiers
  - b. Antennae
3. Different carriers
  - a. Verizon
  - b. AT&T



## Mediocre results

# Final solutions

## A combination

1. Advanced web form logic
2. Worst areas – simplified offline spreadsheet
3. Import and auto-parse offline spreadsheet if necessary



# The final result – energy modeling tool

House Construction Details

Finished floor area (sq. ft.)

2508

Include ALL above grade conditioned spaces

Number of finished stories being modeled

1

Don't include basement or attic unless they are heated living space

Number of bedrooms

3

Number of occupants

2

House type \*

Single Family

What type of Single Family home? \*

Ranch

Year built

1951

Heating Information

+

Cooling Information

+

Thermostat

+

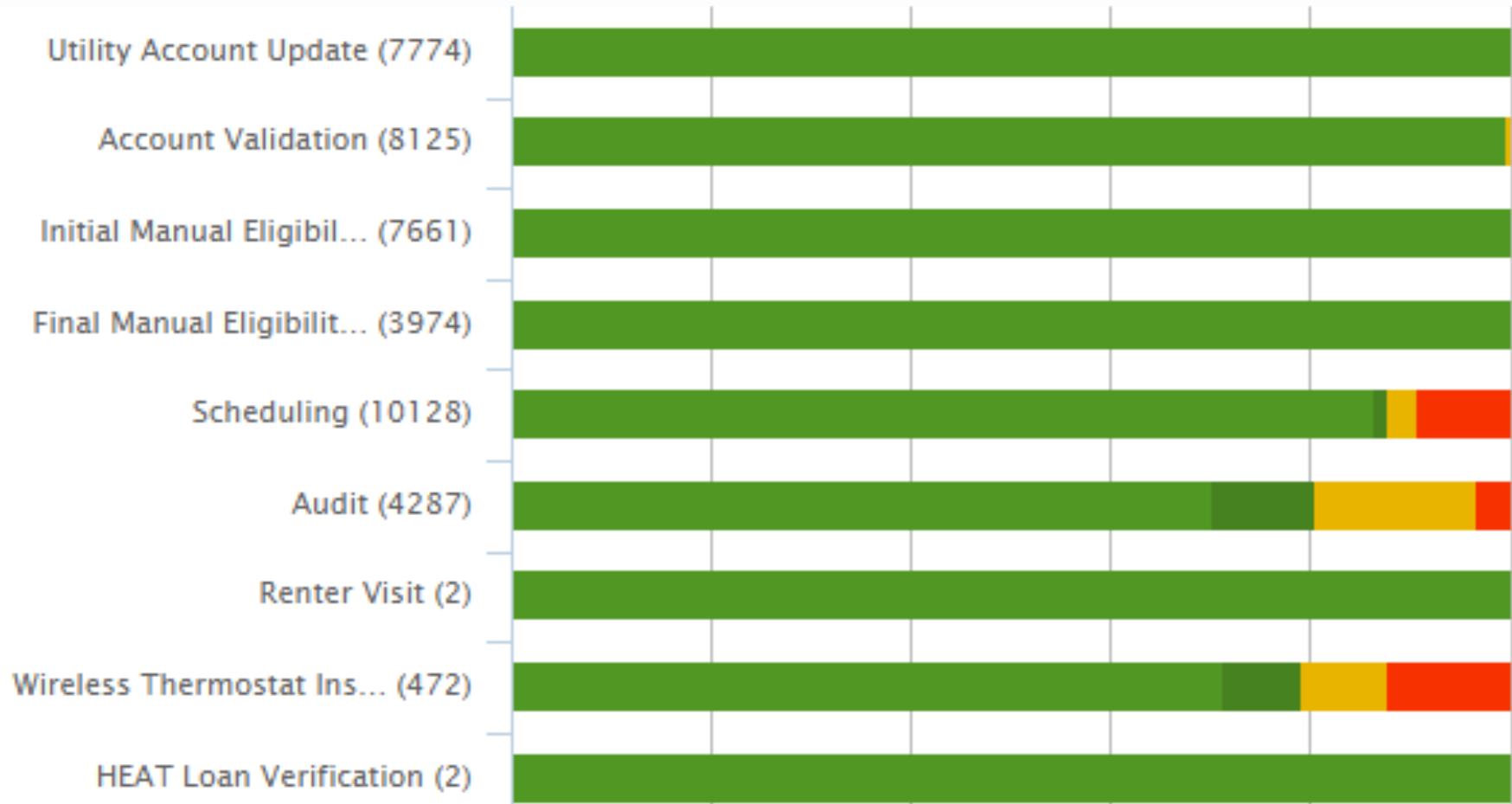
Duct & Distribution Information

+

Water Heating Information

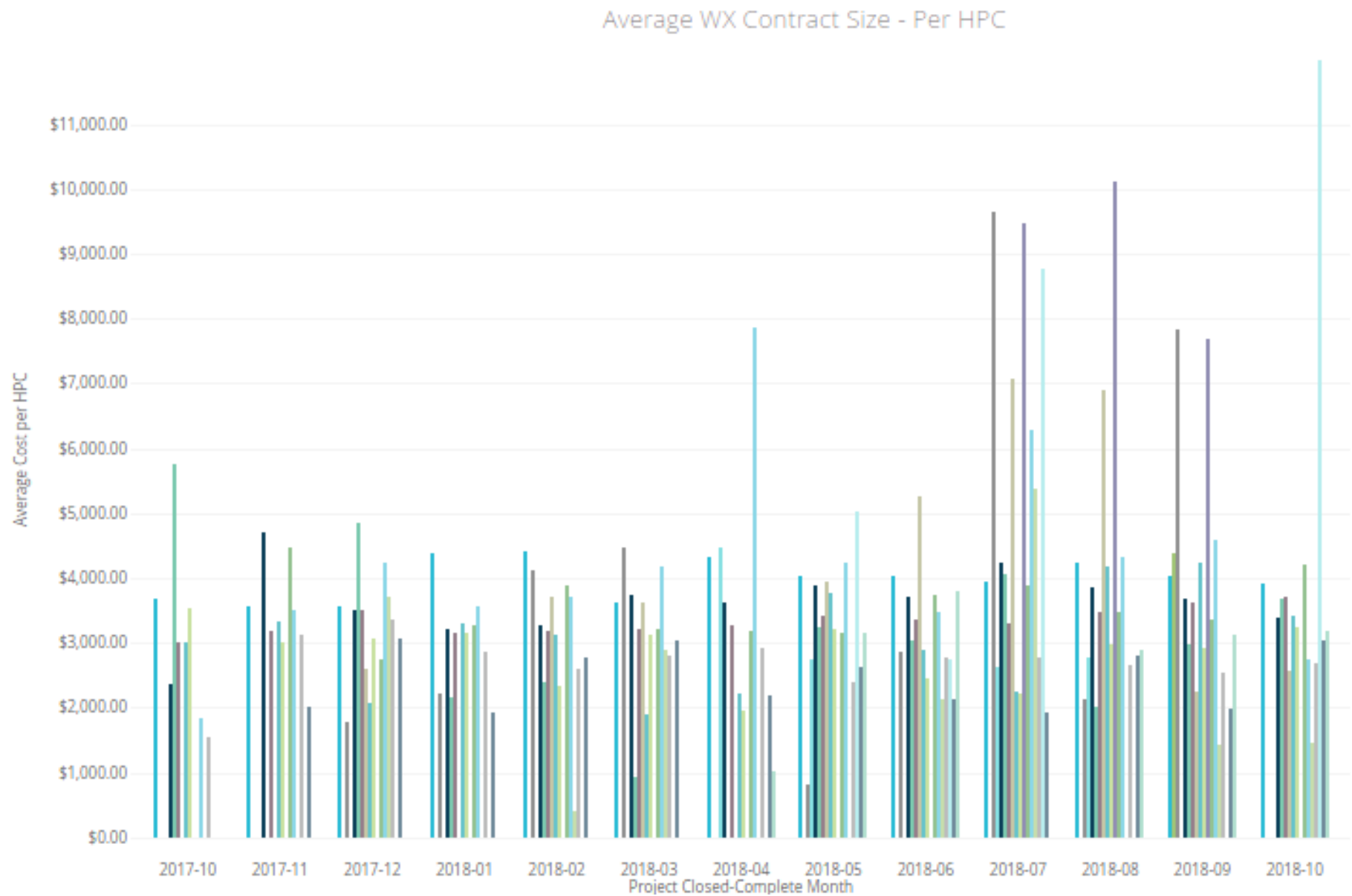
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## The final result – SLA tracking

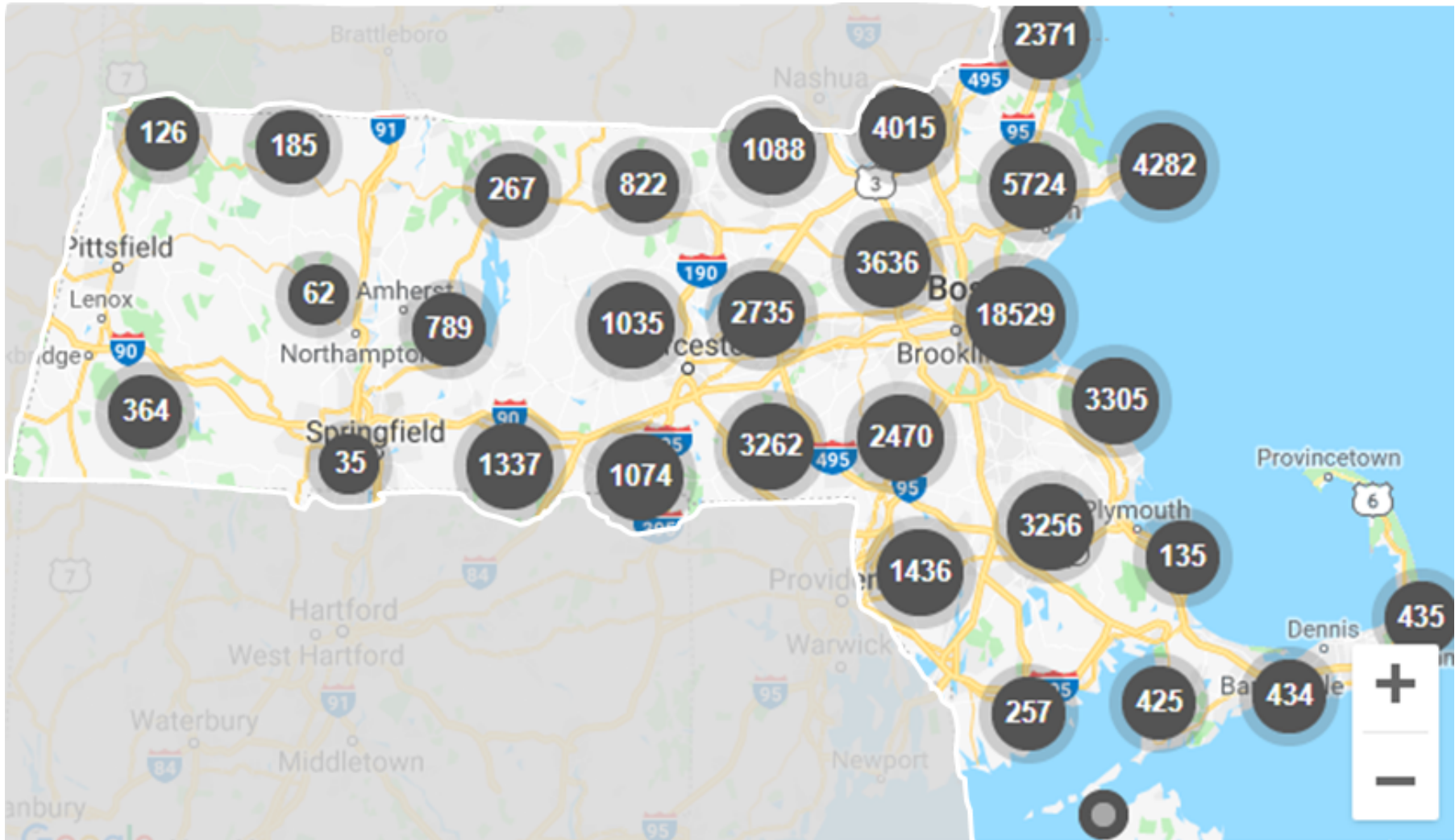




# The final result - reporting



## The final result - analytics



# The final result – quality assurance

Combustion safety

☐ Pass ☐ Conditional Pass

☐ Fail ☒ N/A

Exterior assessment

☐ Pass ☐ Conditional Pass

☐ Fail ☒ N/A

Basement walls/ceiling assessment

☐ Pass ☐ Conditional Pass

☐ Fail ☒ N/A

Wall assessment

☐ Pass ☐ Conditional Pass

☐ Fail ☒ N/A

Attic assessment

☐ Pass ☐ Conditional Pass

☐ Fail ☒ N/A

## The final result – customer satisfaction

How satisfied were you with the contractor's explanation of the work to be performed?



Satisfied

Did the contractor answer all your questions? If no, please explain in the comments section.



Yes

How satisfied were you with how well the contractor cleaned up following the installation of insulation and/or air sealing?



Satisfied

How well did the energy efficiency improvements you made to your home meet your expectations?



Well

Would you recommend this contractor to a friend or family member?



Yes



# Presenter



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## **Greg Krantz**

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Greg Krantz is the lead program manager for National Grid's MassSave Home Energy Services Program – a Home Performance with ENERGY STAR program serving over 40,000 customers annually with energy audits and weatherization. Greg has over 20 years of management experience in the homebuilding and energy efficiency industries and holds multiple industry certifications. He is also a journalist and has written articles covering the areas of energy efficiency and real estate.

