CIMC Presentation to EEAC

April 2018

STRATEGIC ENERGY MANAGEMENT (SEM)

SEM Research and Outcomes

Thoroughly examined:

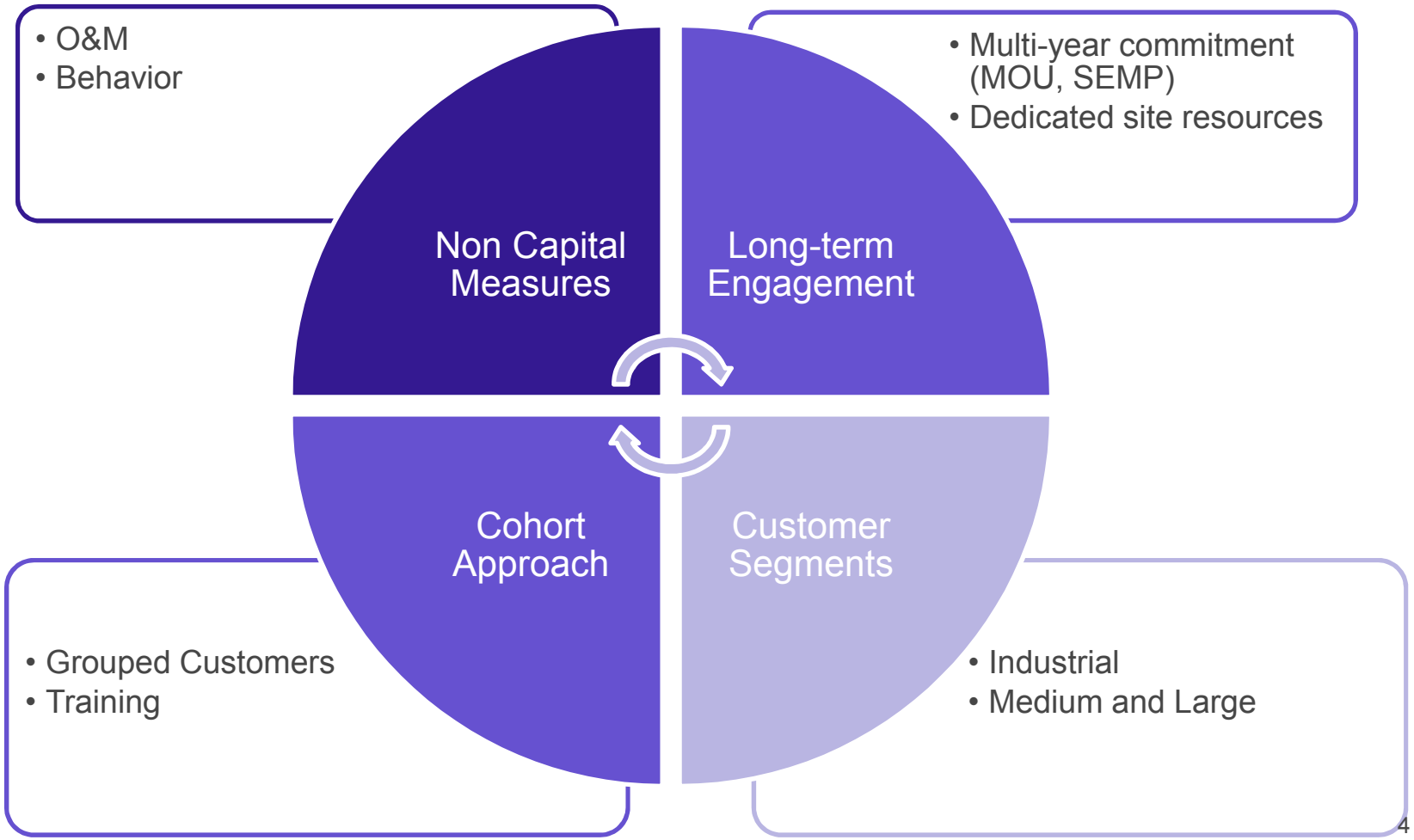
- Characteristics & performance of existing programs offered by various PAs throughout the country
- How this relates to current MA programs and customers, and the likely transferability to current market conditions in MA

High Level Observations:

- There is no singular SEM program model
- SEM is a concept of continuous energy efficiency improvement through facility operations, maintenance and behavior changes
- Program adoption and samples are fairly limited and regional in nature (Bonneville, ETO, NEEA, Efficiency Vermont, AEP Ohio)
- Continuous and ongoing PA support appears necessary to maintain successes and savings achieved (persistence)

SEM- MA Program Matrix

Many elements of SEM are resident in current MA programs and/or go-to-market strategies

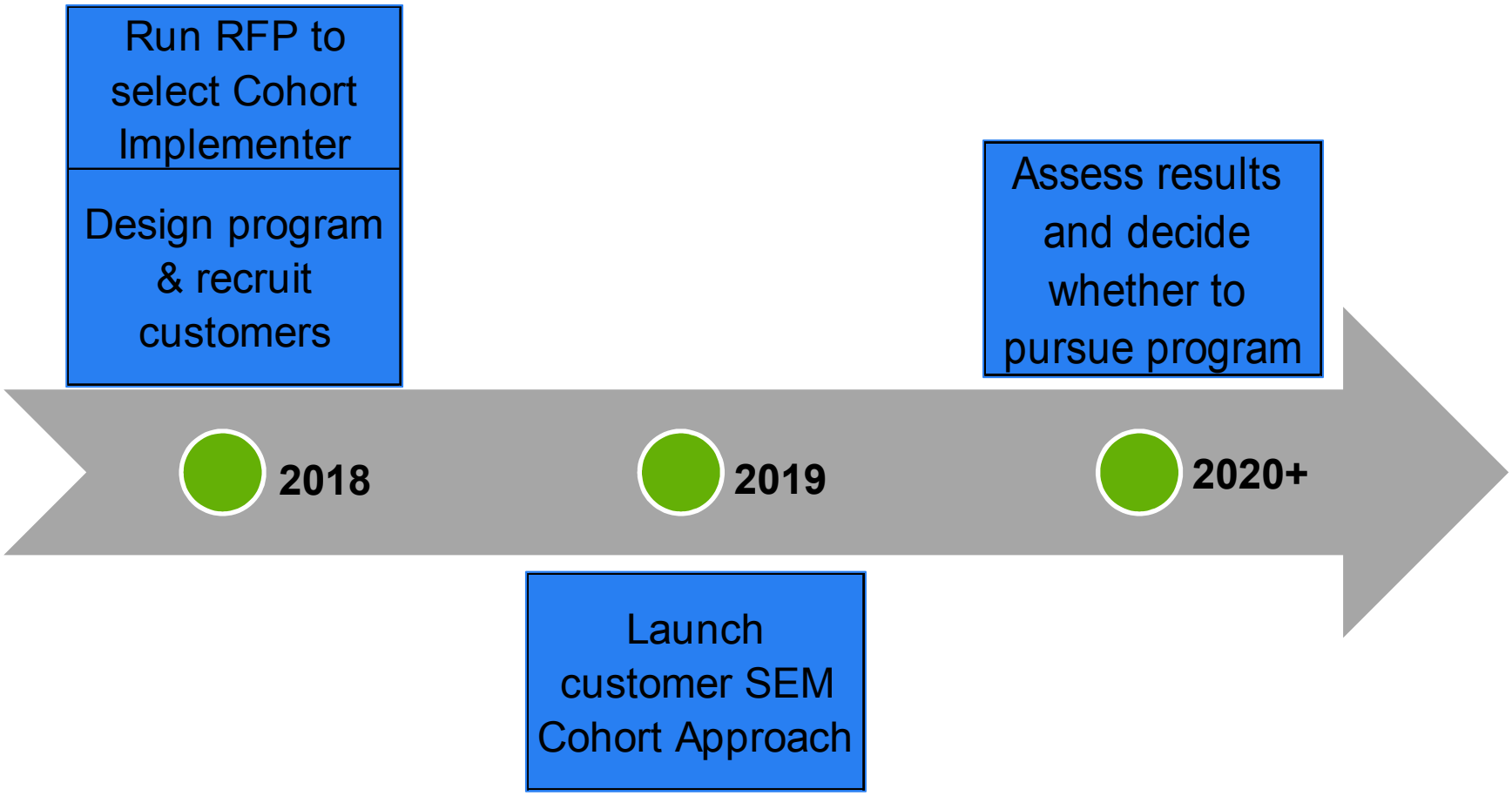


SEM Research and Outcomes

Determinations and learnings:

- Concerns over opportunity cost, applicability to MA customer base, scalability, savings methodology and persistence remain, however-
- There is value in creating a participation framework and program for achieving savings from non-capital measures, Operations & Maintenance (O&M) and expanding process and whole building Retrocommissioning (RCx) offerings
- Cohorts have both positive and negative attributes that warrant further examination of the approach

SEM Cohort Approach



Target gas and electric customers across industries and medium-to-large consumption bins

Program Design & Pathway

MA PAs coordinated to assess:

- Means to capture non-capital measures, including Operations and Maintenance (O&M)
- Effectiveness of the Pay-for-Performance (P4P) pathway in bringing value to customers and delivering savings of RCx measures

Redesign underway looking at, targeting 2018 launch

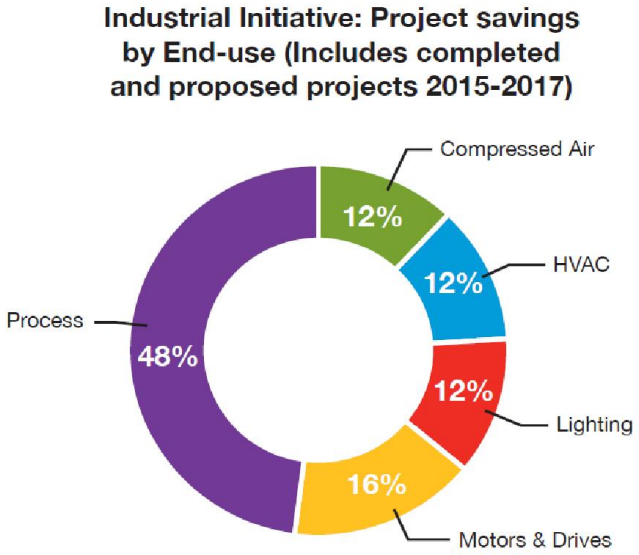
Measures Types	Pathway Options		
	Prescriptive Offerings	Comprehensive Program w/ Resource Support	P4P
Whole Building Retrocommissioning (WB-RCx)	✓	✓	
Process Retrocommissioning (P-RCx)	✓	✓	
Operations and Maintenance (O&M)	✓	✓	
Monitoring Based Commissioning (MBx)			✓

MARKET SEGMENTED DELIVERY: INDUSTRIAL INITIATIVE

Industrial & Process Initiative

MA PAs achieved successful expansion of market segment-focused delivery for process and industrial customers

- All PAs are coordinating with each other across overlapping territories and are engaged with vendor partners for the industrial and process end use-focused initiative



Note: Projects tend to be more complex (custom) with longer development times, sometimes pose potential business risk to customer, and with businesses who often face barriers unique to manufacturing customer types

Industrial Process Custom EEM

Natural Gas Measure

- Compression Molding Process Hot Water Loop- Heat Recovery
- Potential production impact, required many levels of internal approval to address quality, production and facilities risk
- Strong project economics but project had to be “sold” internally to overcome barriers
- Energy Savings: 85,000 therms/yr &1,196,000 lifetime therms

Combined Electric and Gas Measure

- High Efficiency DeWatering Press – Industrial Linen
- Customer overcame financing barriers in partnership with PA
- Energy Savings: 430,000 kWh/yr & 5,000,000 lifetime kWh, 56,000 therms/yr and 485,000 lifetime therms

Commercial Real Estate

Commercial Real Estate - Update

2016

- Identified targeted opportunities
- Traditional Direct install approach for small business tenants
- Example: Small Multi-Tenant Property Management
  - Metered Tenants served through small business
  - RTUs served through upstream
- Projects to evaluate

2017

- Extended approach to Property Managers
- Identified targeted list of CRE tenanted spaces
- Example:
- Mixed Retail & Office Space Management
  - Metered Tenants served through small business
  - Shared facilities served through large CI
  - 35 tenants, 7 projects completed
- Identified Barriers

2018

- Refined strategic framework
- Targeting high potential property owner / managers
  - B&C Class property portfolios
  - Low probability of planned fit-outs
  - Subject to BERDO Compliance
- Approach with strategic offering
- Broaden reach with refined initiative

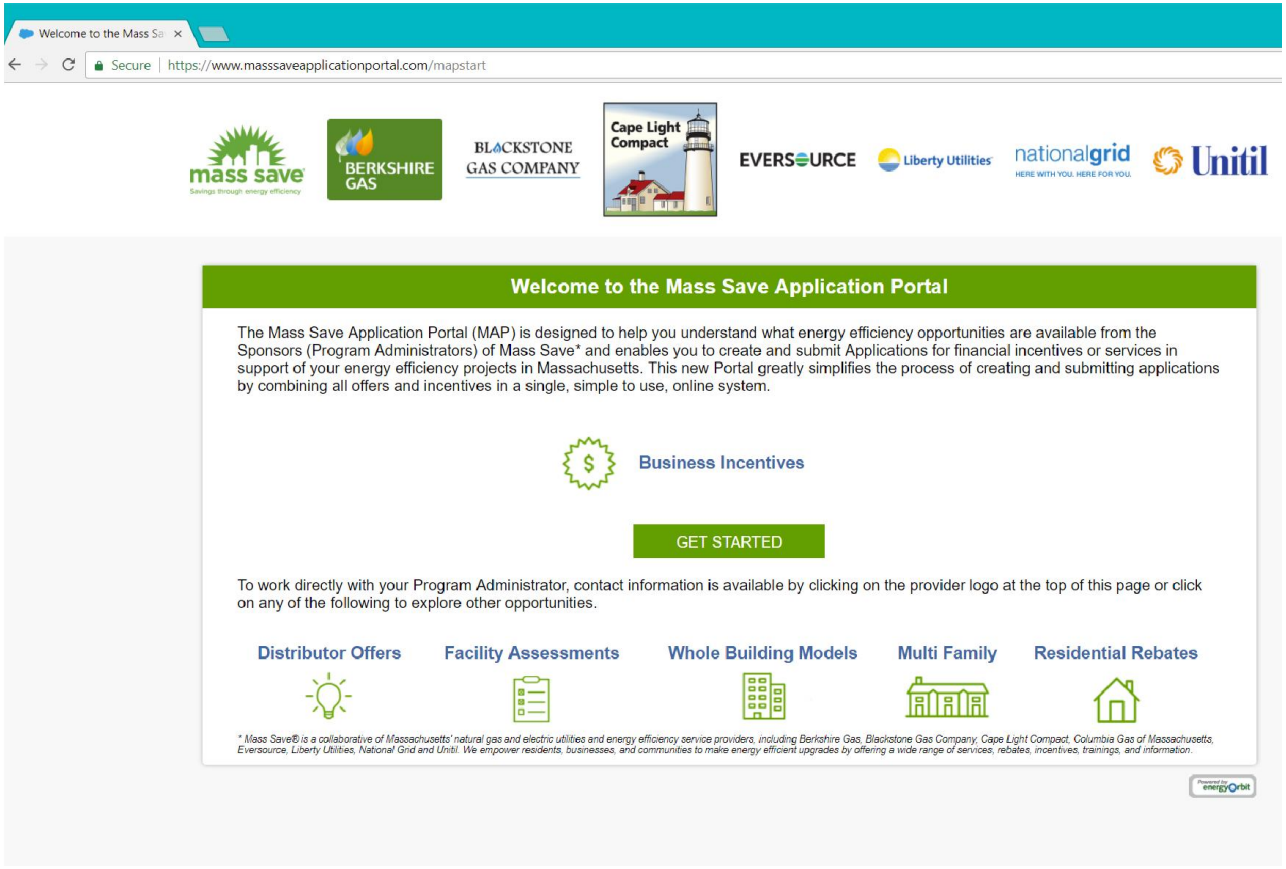
Commercial Real Estate – Strategic Framework

Landlord	Interested in upgrading property, but with high ROI target.
Property Manager	Primary responsibility is bridging tenant landlord relationship.
Tenant	Interested in appearance and building comfort. May be persuaded with energy savings and aesthetic benefits.

Barriers	Solutions
Tenants do not realized the direct savings in some situations,	Value proposition to tenant around savings and improved environment.
Landlords are hesitant to open leases to negotiations before the term,	Offer landlord small business incentives for savings passed to tenants.
Typical direct Install model requires access to off-site decision makers,	Strategic engagement with landlord and/or property manager.
Allocation of energy savings benefits can be challenging,	Necessitates shared savings approach or infrastructure investment.

Mass Save® Application Portal (MAP)

Mass Save Application Portal (MAP) is live!

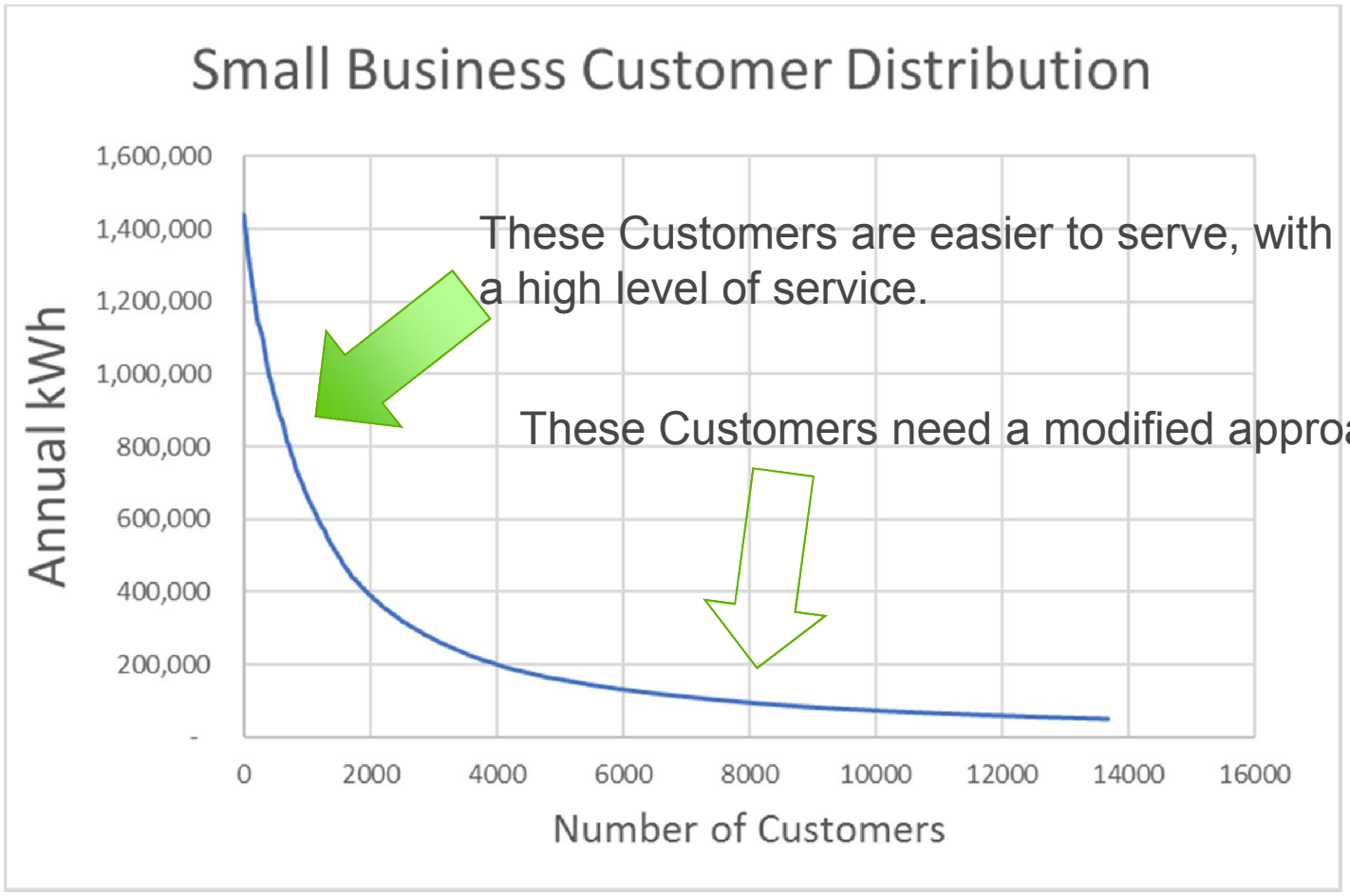


HIGHLIGHTS

- Soft launch in Q4 2017/Q1 2018
- New functionalities in May 2018
- Live demos at the Business Partner Open House in-person and webinar events

Main Streets

Main Streets



Main Street Tactics

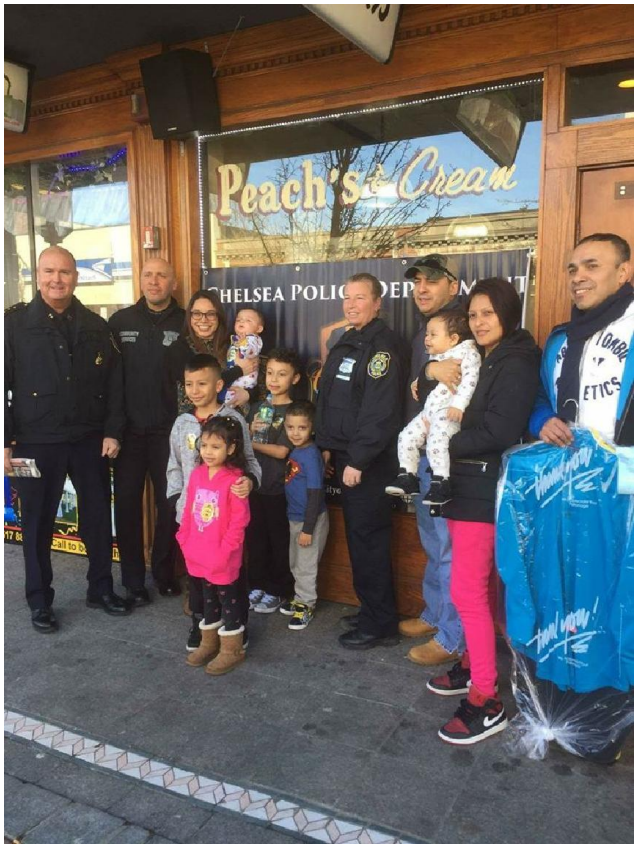
- Collaborative effort engaging across city/town, economic development, local Chambers, PA and turn-key business partner,
- Various coordinated marketing efforts,
- Identification of Main Street business types,
- Additional language translation,
- Enhanced incentives plus instant savings measures,
- Multiple touch points

City of Chelsea Main Street – 2017

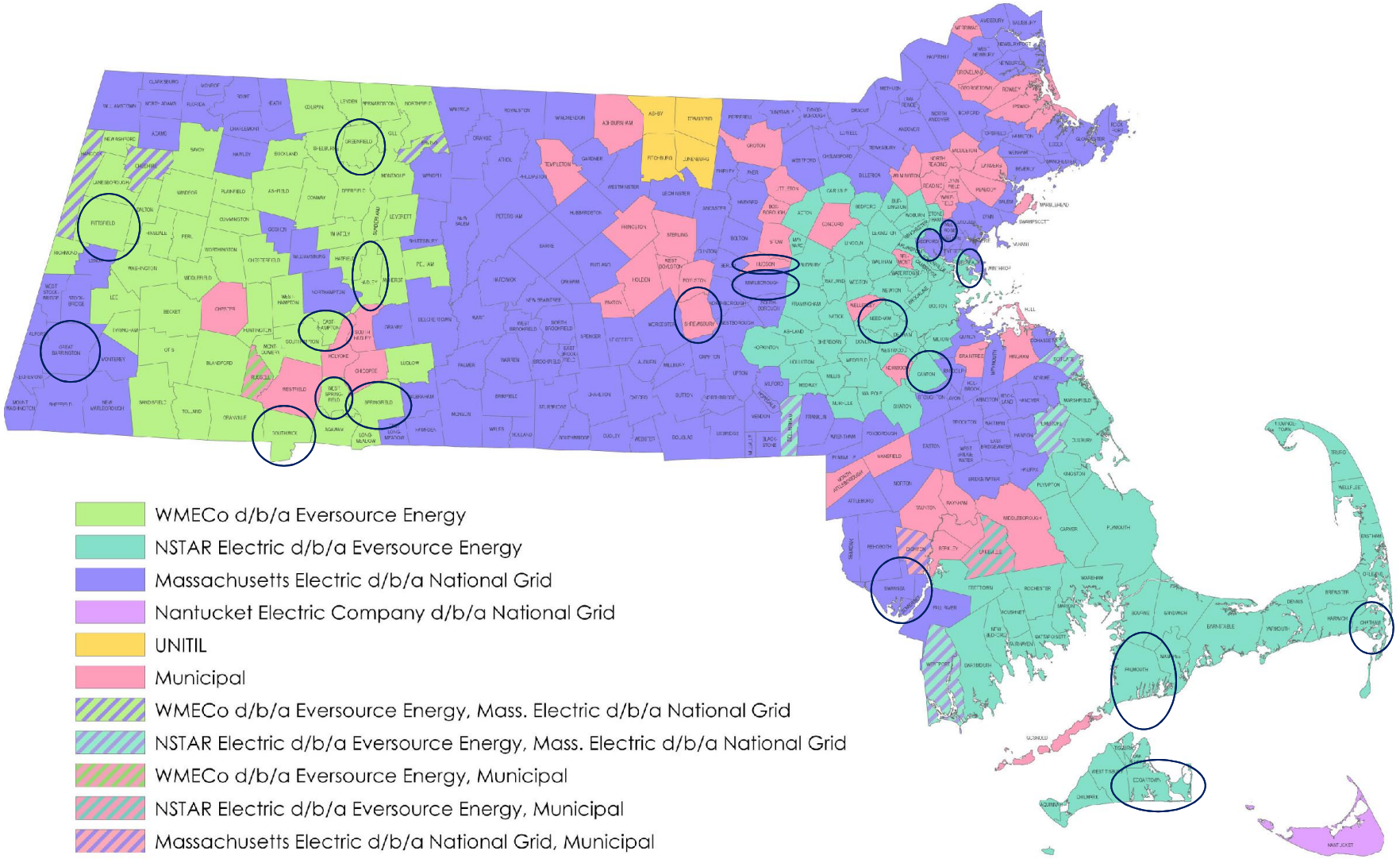
- Engaged with city economic development office to define target areas
- Dedicated a team of auditors and turn-key implementers over a series of days
- Predominantly lighting systems/controls and prescriptive gas measures
- Enhanced incentive structure
- 80 customer projects
- Eversource: 850,000 kWh annual savings
- National Grid: 1,855 therm annual savings
- Average project size: 10,700 kWh Savings
- Average Project Cost: $5,700
- 82% Hit Rate

Main Streets Participant

- Peach's and Cream Bakery
- Business type: retail store front in Chelsea, MA
  - Retail space size: 1,000 sq.ft.
  - Implementation turn-key services by AECOM
  - LED Lighting fixtures with enabled controls
  - Domestic Hot Water – Aerators
  - 2,273 kWh Annual Savings
  - 102 Therm Annual Savings
  - $1,414 Incentive



Communities



Results

Benefits

- Awareness of PA programs efforts targeting the community
- Appealing to Main Street businesses as well as local residents
- Aligns with city/town economic development goals and efforts
- Proactive effort directed to hard to reach
- Collaborative effort with town officials, chambers, and PA
- Allows for direct access to expertise and technology for micro small customers

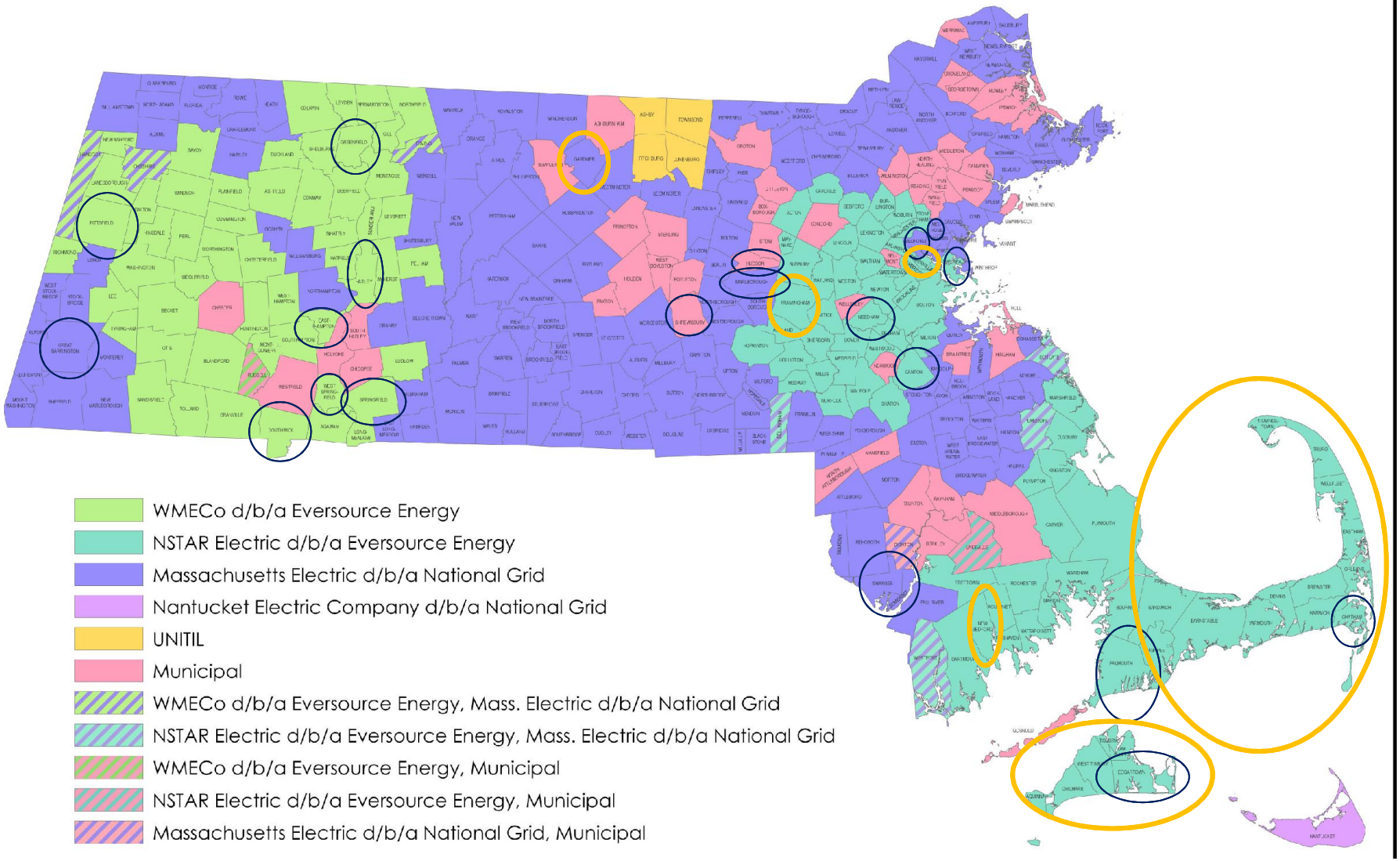
Considerations

- Resource intensive and required significant planning
- Handful of communities at a time
- MLP efforts limited to natural gas technology
- Varying community requirements and needs

What's next?

- Continued coordination between gas and electric PAs on identified communities
- Ensure that gas technology is implemented to ensure comprehensive benefits
- Expand gas only Main Streets
- Broaden the Main Streets efforts beyond traditional to achieve economies of scale
  - Example: Industrial park "main streets"
- Identify Main Street innovation opportunities
  - Example: Cape Elizabeth Chamber of Commerce and Chambers for Innovation
- Continual evolution on service to "small" customers

Communities – Planned Efforts in Yellow



Thank you

mass save

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GAS

BLACKSTONE
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EVERSOURCE

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