Nov 1-4, 2022 IEPEC San Diego, CA

DNV



EVERSURCE

Improving Equity in Energy Efficiency: Identifying Priority Areas for Investment

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Agenda

INTRODUCTION

Why look at equity in terms of geography | Principals of geographic analysis

ANALYTICAL APPROACHES

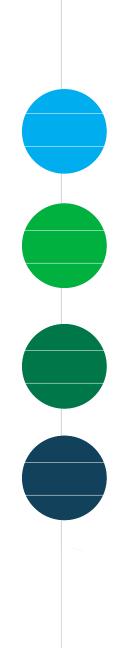
Hot spots | Community outreach metric | Mapping tool | Dashboard view

APPLICATIONS OF GEOGRAPHIC ANALYSIS

Defining and selecting geographic areas | Community First Partnership Program

CONCLUSIONS

Further efforts underway



Why Look At Equity In Terms Of Geography?









The Massachusetts Climate Act of 2021 defines Environmental Justice populations in terms of geography

Geographic areas with high concentrations of certain demographic characteristics tend to participate less in energy efficiency programs Geographic targeting helps with program design, delivery, tracking, reporting, and evaluation Geographic data and maps are intuitive and relatable to other information and experiences

Transparency

Use publicly available data and a clearly defined methodology

Principles for Geographic Analysis for Equity



Practicality

Several approaches may produce similar results; select one that can be repeatable and updated over time





Complementary

Geographic analysis complements onthe-ground efforts

Fallibility

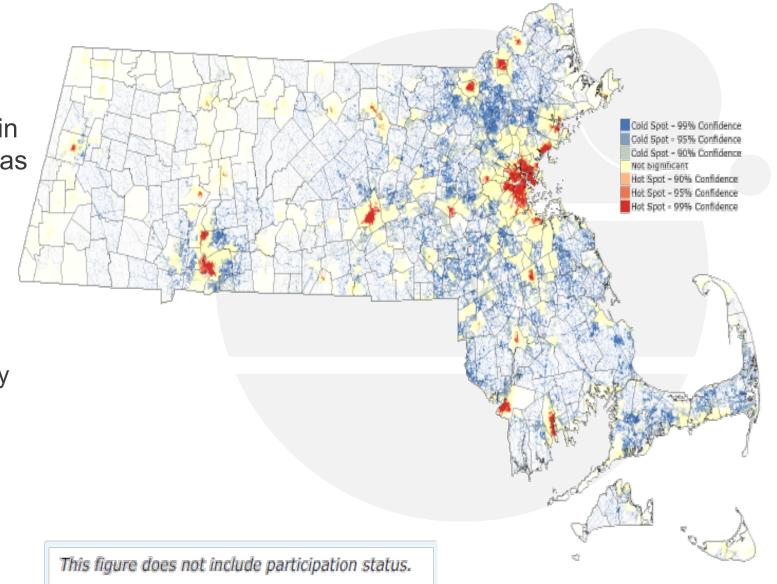
Don't assume that just because data is presented in a map it is right

Hot Spots

Certain demographic characteristics cluster together in the same urban geographic areas

Hot spots have high concentrations of:

- Moderate income households
- Renter occupied households
- Households that speak a primary language other than English
- Households in 5+ unit buildings
- Housing built before 1940



Community Outreach Metric

Identifies areas with key demographic characteristics and low past participation

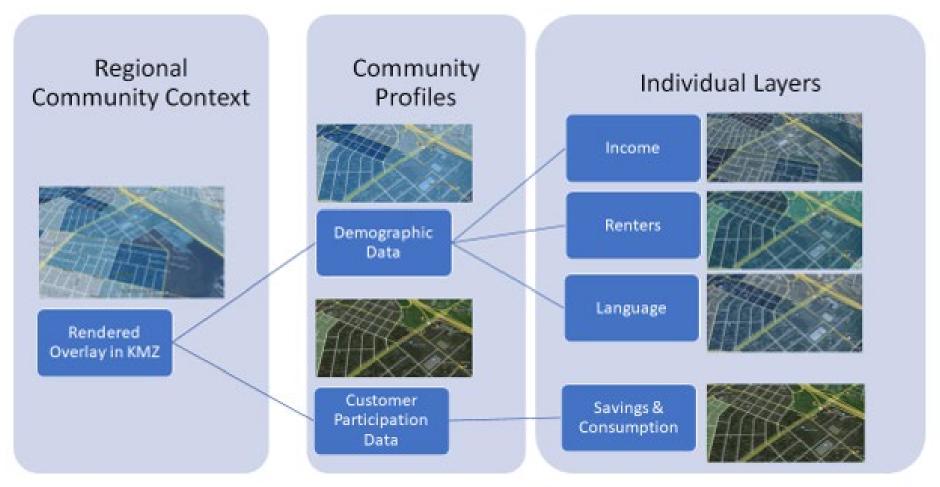
Sum(%renters,%moderate.income,%limited.english)

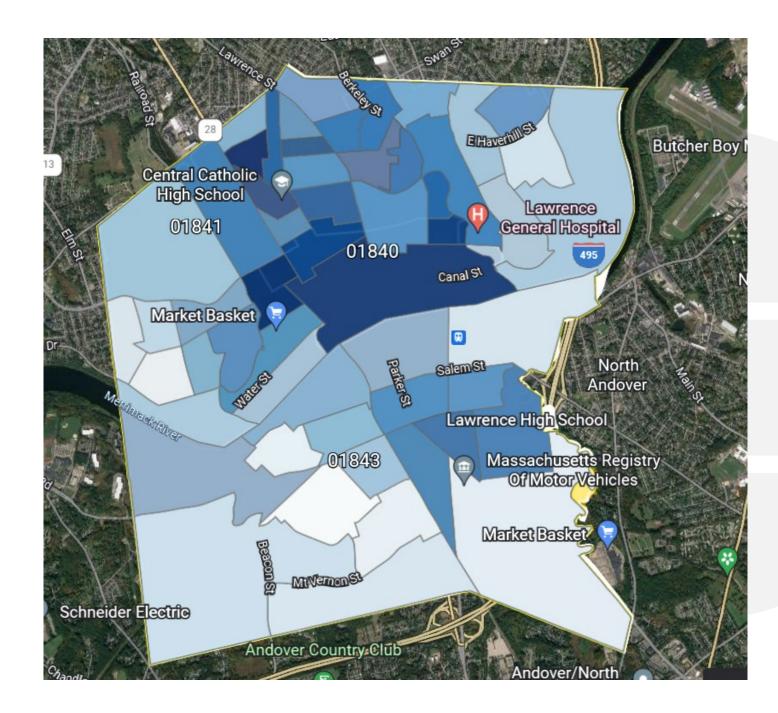
Account participation rate

Town	Renter %	Moderate Income %	Limited English %	Unweighted Account Level Participation Rate	Community Outreach Metric
Lawrence	70%	15%	25%	6%	18.57
Fall River	65%	17%	9%	6%	15.07
Fitchburg	48%	14%	5%	6%	11.96
Taunton	38%	17%	5%	5%	11.26
New Bedford	58%	16%	13%	8%	10.77
Chelsea	74%	17%	27%	11%	10.34
Everett	61%	20%	16%	9%	10.33

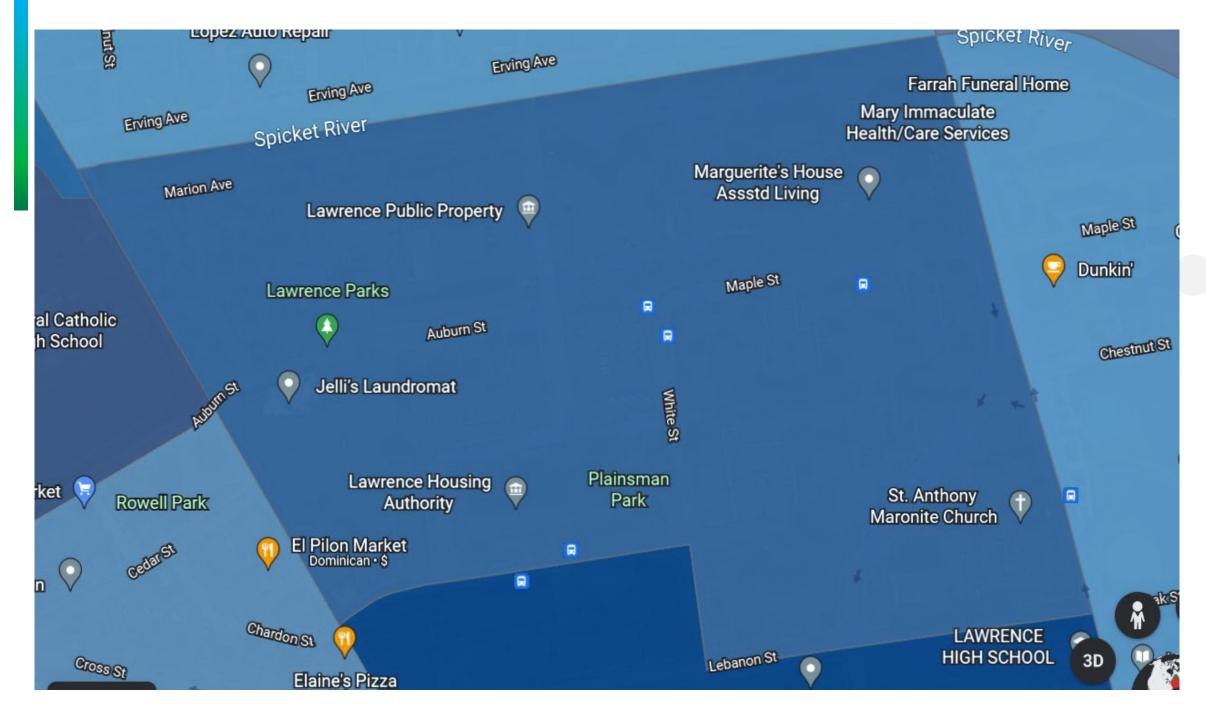
Mapping Tool

Tool for community partners identifies layers of demographic and participation data overlaid on a Google map to assist with targeting and outreach





	15000US250092512001
Block Group ID (Text)	15000US250092512001
Town	LAWRENCE
County	ESSEX
Active electric locations, 2020	117
Active electric accounts as of December, 2020	418
Unique electric location participation rate 2013 - 2019	16.1
Total 2013-2019 unique electric location participation rate ranking	Ranked number 53 out of 55 block groups for location participation
Active gas locations, 2020	64
Active gas accounts as of December, 2020	133
Unique gas location participation rate 2013 - 2019	4.55
Total 2013-2019 unique gas location participation rate ranking	Ranked number 47 out of 55 block groups for location participation
Percent of 2019 ACS households identified as English isolated	46.15
Block Group rank ordered by percent of english isolated households in 2019	Ranked number 7 out of 55 block groups for english isolated households



S Ш Т C 4 0 R 0 4 CA ANA

Lopez Auto Repair

Erving Ave Spicket River

Marion Ave Lawrence Public Property

Lawrence Parks

Catholic School

Jelli's Laundromat

Lawrence Housing Authority

Auburn St

Erving Ave

Rowell Park

AUG

El Pilon Market

Elaine's Pizza Pizza Takeout • \$

> St Mary's Elementary School

Plainsman

Park

Farrah Funeral Home

Mary Immaculate Health/Care Services

Marguerite's House Assstd Living

Dunkin

Ches

St. Anthony Maronite Church

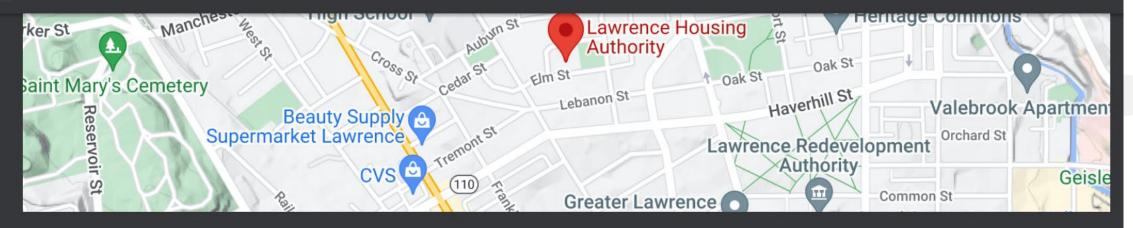
> LAWRENCE HIGH SCHOOL

Lebanon St

Maple St

John Breen Memorial Funeral Home

← Lawrence Housing Authority



\odot	Lawrence Housing Authority	, 353 Elm St, Lawrence, MA 01841
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- (978) 683-2751
- () <u>lawrencehousing.org</u>

Wednesday 9AM-5PM Thursday 9AM-5PM Friday 9AM-5PM Saturday Closed Sunday Closed Monday 9AM-5PM Tuesday 9AM-5PM

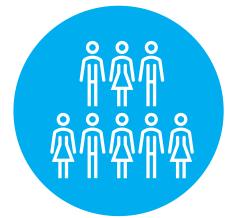
Dashboard View

https://viewer.dnv.com/macustomerprofile

Town/city	DPU assigned block group Program Administrator *	Accounts	Locations	Consumption (therms)	Participating accounts	Participating locations	Total savings (therms)	Cumulative location participation rate (since 2013)
	EGMA	23,319	13,450	17,414,104	750	683	168,617	14.3%
15000US250092501001	EGMA	124	*	23,201				
15000US250092501002	EGMA	333	*	106,639	*	*	7,040	2.9%

Town/city	DPU assigned block group Program Administrator *	Accounts	Locations	Consumption (therms)	Participating accounts	Participating locations	Total savings (therms)	Cumulative location participation rate (since 2013)	% Population savings achieved	Environmental Justice Community status	Ratio <5 Unit Buildings	Percent Renter Occupied Units	Ratio Limited English proficiency Households
	EGMA	23,319	13,450	17,414,104	750	683	168,617	14.3%	0.8%	Yes	72.7%	70.3%	28.3%
15000US250092501001	EGMA	124	*	23,201						Yes	0.0%	100.0%	40.19
15000US250092501002	EGMA	333	*	106,639	*	*	7,040	2.9%	6.6%	Yes	1.9%	98.0%	40.5%
15000US250092502001	EGMA	746	499	656,393	*	*	2,450	10.4%	0.3%	Yes	90.5%	43.2%	13.89
10000320092002002		4/0	205	412,100			025			ies	100.076	05.570	15.07
15000US250092502003	EGMA	723	527	611,391	*	*	9,527	10.8%	2.3%		95.3%	47.3%	8.9%
15000US250092503001	EGMA	371	197	297,126	*	*	1,590	13.7%	0.3%		58.1%	85.4%	37.29
15000US250092503002	EGMA	268	138	192,652	*	*	298	2.2%	0.2%		94.3%	83.0%	28.7
15000US250092504001	EGMA	432	214	353,769	*	*	2,846	10.3%	0.7%	Yes	95.6%	73.2%	22.85
15000US250092504002	EGMA	454	264	351,855	*	*	593	7.2%	0.1%		80.6%	68.9%	40.3
15000US250092504003	EGMA	175	*	125,066	*	*	150	5.2%	0.1%	Yes	29.2%	90.3%	52.25
15000US250092505001	EGMA	408	235	379,901	*	*	982	7.7%	0.2%	Yes	94.9%	78.3%	17.19
15000US250092505002	EGMA	263	121	211,614	*	*	1,126	10.7%	0.4%		94.6%	69.0%	47.65
15000US250092505003	EGMA	526	260	393,425	*	*	1,331	10.8%	0.3%	Yes	87.1%	69.6%	29.45
15000US250092506001	EGMA	516	250	453,043	*	*	600	12.0%	0.1%	Yes	91.0%	71.2%	33.1
15000US250092506002	EGMA	376	220	338,641	*	*	2,522	9.1%	0.6%	Yes	87.0%	50.8%	23.8
15000US250092506003	EGMA	418	282	395,168	*	*	3,069	9.9%	0.6%	Yes	100.0%	61.3%	54.2
15000US250092506004	EGMA	476	302	404,677	*	*	1,152	8.9%	0.2%	Yes	96.3%	42.9%	36.0
15000US250092507001	EGMA	757	401	572,530	*	*	1,087	9.0%	0.1%	Yes	84.6%	76.3%	23.4
15000US250092507002	EGMA	422	189	330,757	*	*	3,360	9.5%	0.9%	Yes	77.1%	71.6%	26.5
15000US250092507003	EGMA	638	297	458,672	*	*	1,160	8.4%	0.2%	Yes	87.9%	57.6%	50.4
15000US250092508001	EGMA	581	351	515,442	*	*	2,916	11.4%	0.5%	Yes	96.4%	56.2%	6.7
15000US250092508002	EGMA	586	337	455,114	*	*	1,172	8.9%	0.2%		67.0%	69.0%	14.19
15000US250092508003	EGMA	453	279	312,028	*	*	1,567	13.3%	0.4%	Yes	71.2%	82.4%	13.8
15000US250092508004	EGMA	385	255	291,418	*	*	4,402	14.9%	1.2%	Yes	100.0%	47.4%	6.4
15000US250092508005	EGMA	323	241	239,859	*	*	2,530	16.2%	0.9%	Yes	72.8%	43.6%	46.0
15000US250092509001	EGMA	353	145	238,420	*	*	1,378	6.9%	0.4%	Yes	95.3%	87.4%	47.6
15000US250092509002	EGMA	294	114	197,575	*	*	1,025	10.5%	0.4%	Yes	22.9%	94.1%	46.1
15000US250092510001	EGMA	576	288	381,112	*	*	3,314	37.5%	0.7%	Yes	60.0%	83.8%	32.1

Defining Areas of Interest



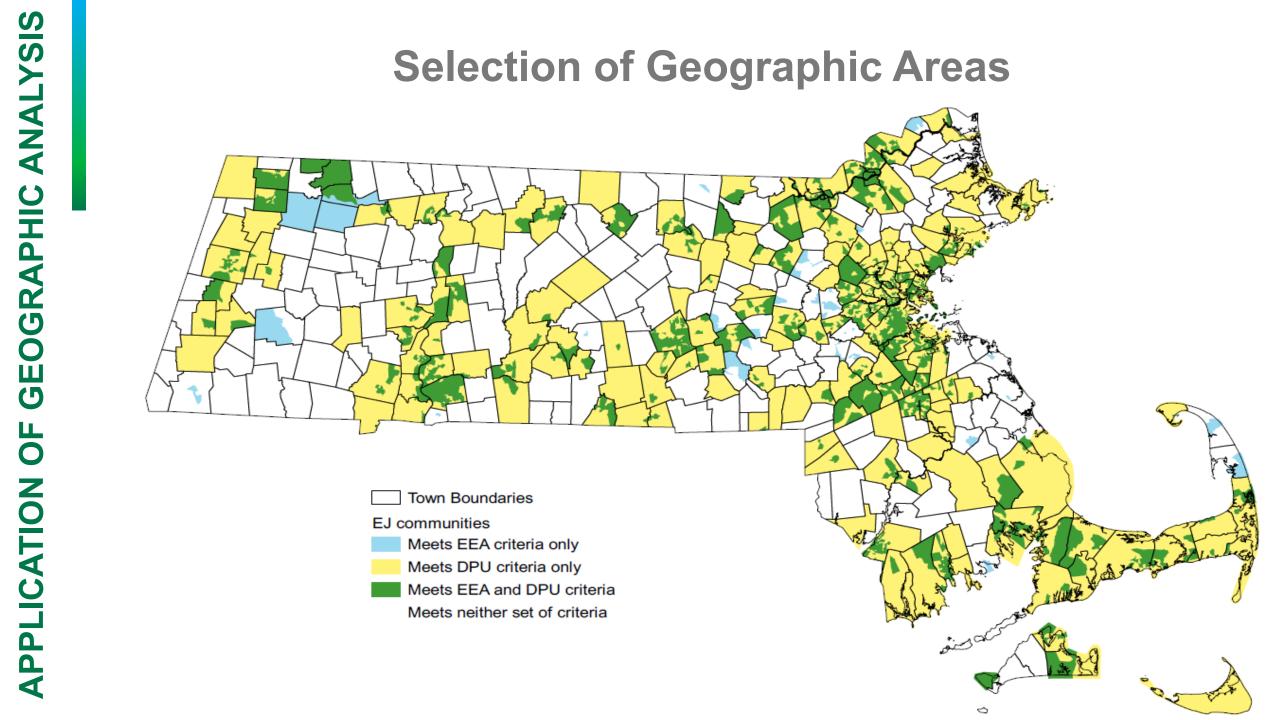
State EEA Definition

- 1) AMI is not more than 65% of the statewide AMI,
- 2) Minorities comprise 40% or more of the population,
- 25% or more of the households lack
 English language proficiency



DPU Targeted Municipalities

- 1) Served by an electric and/or gas PA.
- 2) Contains at least one EJ population as defined by the State EEA definition.
- 3) Has a historically low participation



Community First Partnership



Partner with municipalities and non-profit community organizations

Target areas with lower participation and renters/non-English speakers/moderate income/small business

Include stronger connections to municipal governments and community organizations



Support community-led outreach

Establish a two-way communication channel for municipalities and local organizations

Further Efforts Underway







Develop methods for better identification of renters Providing **no-cost weatherization** to targeted moderate income census blocks to mitigate

impact of future

rate increases

cost Lar on to Pla erate ider sus gate lan

Language Access Plan and study to identify contractors that serve language isolated customers

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