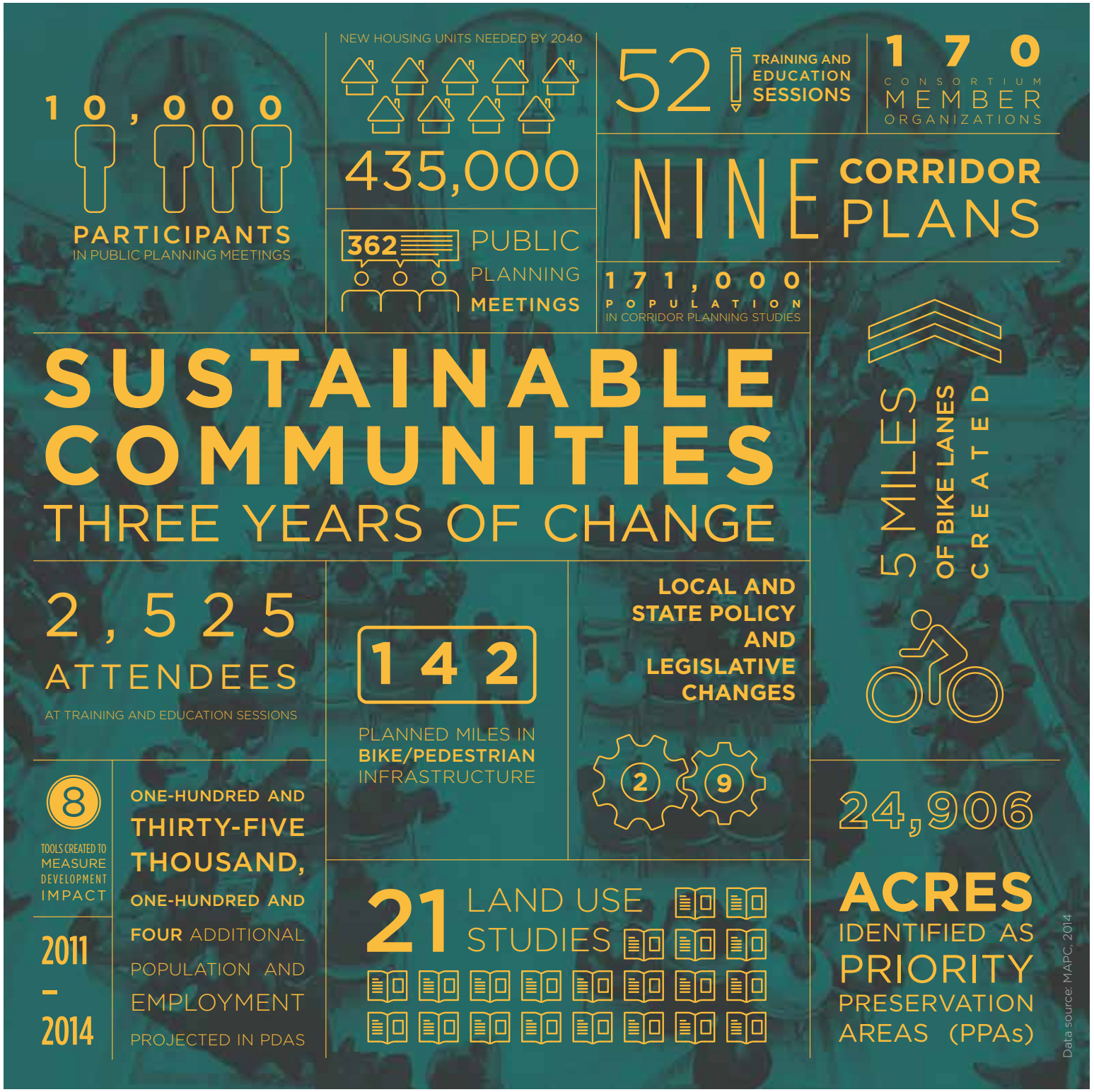
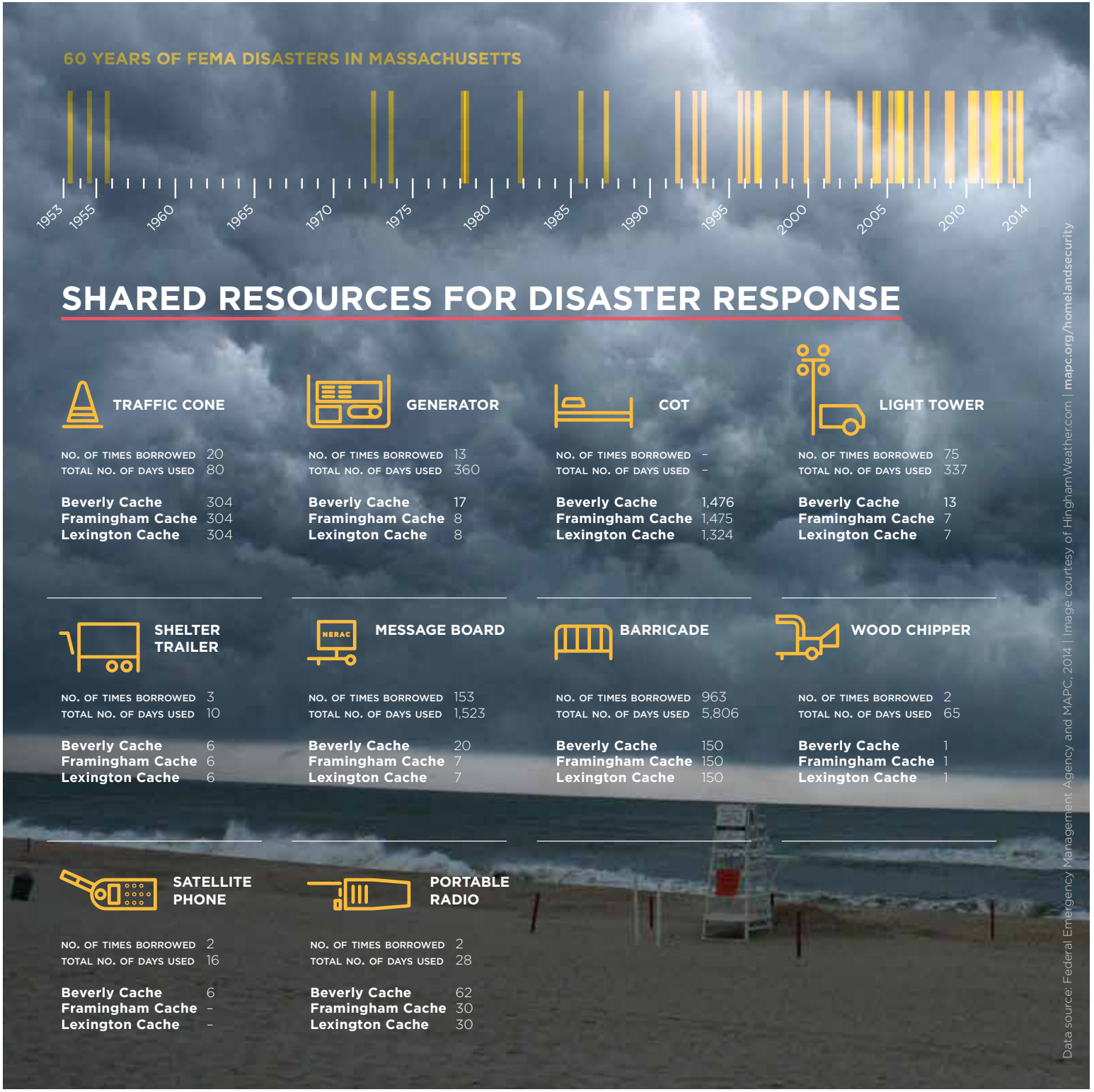
In October 2010, MAPC and our Sustainable Communities Consortium received a $4 million HUD Regional Planning Grant to help implement MetroFuture, the regional plan for Metro Boston, which was adopted in 2008. Activities under the grant included local planning projects, state and regional policy work, development of tools and data, and capacity building for local residents and leaders.

Nearly two dozen land use studies resulted in the adoption of mixed-use zoning districts around transit stations and in town centers, making way for hundreds of new homes and jobs. New research and regional plans are setting a new blueprint for future development and preservation, including the Regional Housing Plan, the Regional Climate Change Adaptation Strategy, and the State of Equity Policy Agenda. The Consortium also played a significant role in a number of legislative victories – notably securing a 3-cent increase in the gas tax for transportation infrastructure, and $50 million to address our water infrastructure capital investment needs. Most importantly, MAPC collaborated with hundreds of partners and engaged thousands of residents in talking about the future, broadening the movement to create a Greater Boston Region. For the complete report on Sustainable Communities projects and accomplishments, visit **mapc.org/metrofuture**.

MAPC **2015**



The Northeast Homeland Security Planning Region is responsible for security and disaster preparedness for 85 municipalities in Northeastern Massachusetts. Its governing body, the Northeast Homeland Security Regional Advisory Council (NERAC), is staffed by MAPC. In 2007, NERAC established three Regional Cache Sites in Beverly, Framingham, and Lexington, to provide municipalities with critical emergency response equipment necessary to restore infrastructure and care for residents during emergencies. More than $2.4 million has been invested into this system to provide resources that are too costly to be purchased and maintained by individual municipalities. The caches have been used numerous times by member municipalities responding to natural disasters such as hurricanes, floods, and blizzards. Municipalities have borrowed equipment to repair damage, assist the injured and displaced, and help return residents' lives to normal. Cache equipment has also been used to respond to other crisis situations, such as the Boston Marathon bombings in 2013.



SHARED RESOURCES FOR DISASTER RESPONSE

TRAFFIC CONE

NO. OF TIMES BORROWED	20
TOTAL NO. OF DAYS USED	80
Beverly Cache	304
Framingham Cache	304
Lexington Cache	304

GENERATOR

NO. OF TIMES BORROWED	13
TOTAL NO. OF DAYS USED	360
Beverly Cache	17
Framingham Cache	8
Lexington Cache	8

COT

NO. OF TIMES BORROWED	–
TOTAL NO. OF DAYS USED	–
Beverly Cache	1,476
Framingham Cache	1,475
Lexington Cache	1,324

LIGHT TOWER

NO. OF TIMES BORROWED	75
TOTAL NO. OF DAYS USED	337
Beverly Cache	13
Framingham Cache	7
Lexington Cache	7

SHELTER TRAILER

NO. OF TIMES BORROWED	3
TOTAL NO. OF DAYS USED	10
Beverly Cache	6
Framingham Cache	6
Lexington Cache	6

MESSAGE BOARD

NO. OF TIMES BORROWED	153
TOTAL NO. OF DAYS USED	1,523
Beverly Cache	20
Framingham Cache	7
Lexington Cache	7

BARRICADE

NO. OF TIMES BORROWED	963
TOTAL NO. OF DAYS USED	5,806
Beverly Cache	150
Framingham Cache	150
Lexington Cache	150

WOOD CHIPPER

NO. OF TIMES BORROWED	2
TOTAL NO. OF DAYS USED	65
Beverly Cache	1
Framingham Cache	1
Lexington Cache	1

SATELLITE PHONE

NO. OF TIMES BORROWED	2
TOTAL NO. OF DAYS USED	16
Beverly Cache	6
Framingham Cache	–
Lexington Cache	–

PORTABLE RADIO

NO. OF TIMES BORROWED	2
TOTAL NO. OF DAYS USED	28
Beverly Cache	62
Framingham Cache	30
Lexington Cache	30

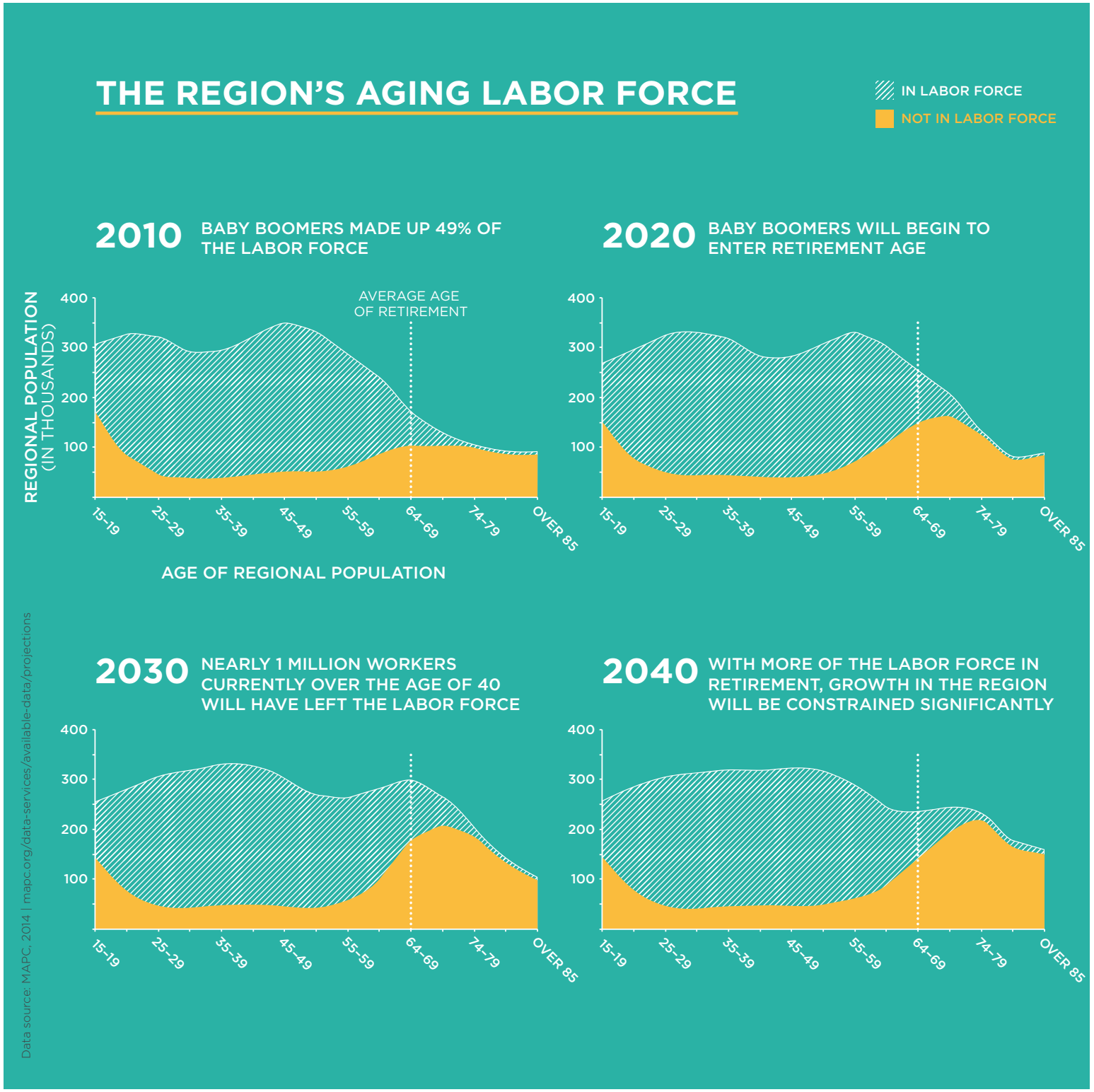
Data source: Federal Emergency Management Agency and MAPC, 2014 | Image courtesy of HinghamWeather.com | mapc.org/homelandsecurity

MAPC 2015

Demographic shifts over the coming decades will have profound implications for the region's workforce and our economic competitiveness. Baby Boomers – those born between 1945 and 1970 – made up 49% of the region's labor force in 2010. In coming decades, this population will be aging into its retirement years, depleting the supply of our most critical asset: a skilled, well-educated workforce. This anticipated wave of retirement is troubling because the current population of young adults is barely sufficient in size to fill the positions vacated by retiring Baby Boomers, much less provide the labor force required for robust economic growth.

If historical migration rates persist, the total labor force may grow by only 0.4% between 2010 and 2040, creating a substantial growth constraint. Fortunately, recent years have seen greater attraction and retention of young workers; if this continues, the region will see faster population growth and a substantially bigger labor force by 2040 – an additional 175,000 workers, enough to fuel job growth of nearly 7%. Of course, young workers can only move to the region and raise families if they can find attractive, affordable places to live, which is why increased housing production is a fundamental prerequisite for long-term economic growth.

THE REGION'S AGING LABOR FORCE



MAPC 2015

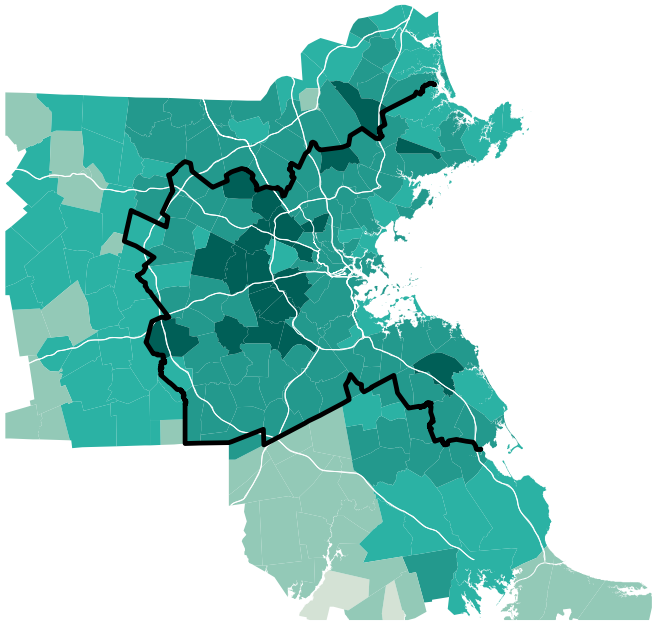
COMBINED HOUSING AND TRANSPORTATION COSTS

Location, location, location: Is this the only factor affecting housing affordability?

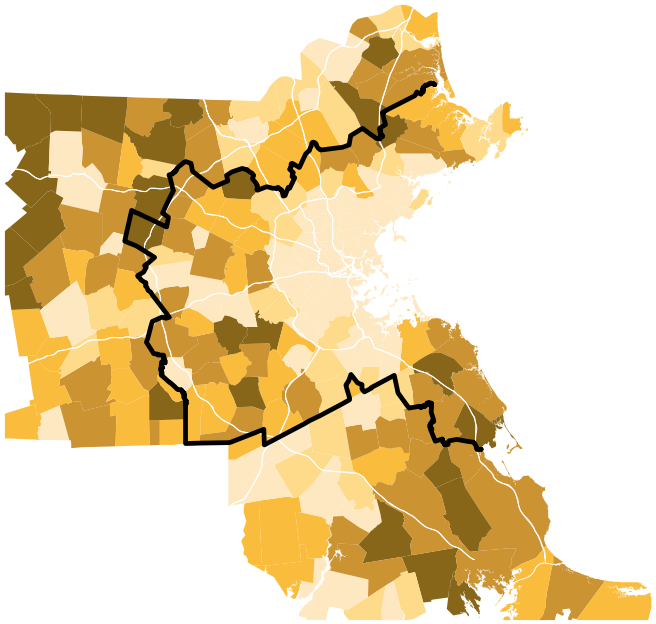
Housing costs tend to be lower in cities and towns more distant from the urban core, but living in these areas has hidden costs that are hard to predict. The cost of transportation in low-density areas far from job centers and transit is substantially higher than in destinations with non-car transportation options.

A household of two children and two adults earning a combined $65,000 per year (the statewide median) would likely spend a quarter of its income on transportation in remote areas, while the same family living in Cambridge or Boston would spend only 14% of its income on auto and transit costs – a difference of more than $7,000 annually.

Fortunately, a new tool from the Department of Housing and Urban Development can help home-seekers to gauge patterns of so-called "location affordability" more accurately. The lowest combined costs are in the Inner Core, where the average household pays less than half its income on housing and transportation. In some suburbs with high housing and transportation costs, this same household would pay nearly two thirds of its income on just these two budget items.



HOUSING COSTS



TRANSPORTATION COSTS

HOUSING COSTS

16–24% 25–28% 29–32% 33–36% 37–45%

TRANSPORTATION COSTS

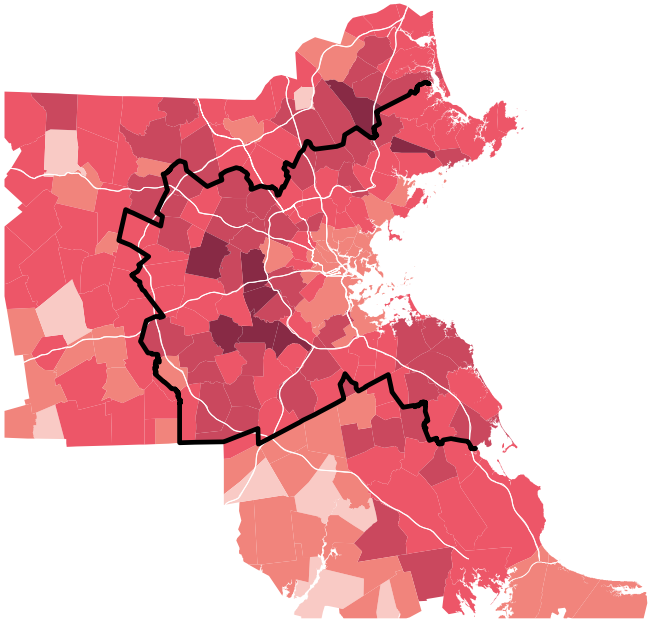
14–20% 20–21% 21–22% 22–23% 23–24%

HOUSING AND TRANSPORTATION COSTS

35–45% 36–50% 51–55% 56–60% 61–67%

2012 Costs as percent of Household Median Income

0 20 MILES



HOUSING AND TRANSPORTATION COSTS

Data source: US Department of Housing and Urban Development Location Affordability Portal, 2014. locationaffordability.info | mapc.org/TOD

MAPC 2015

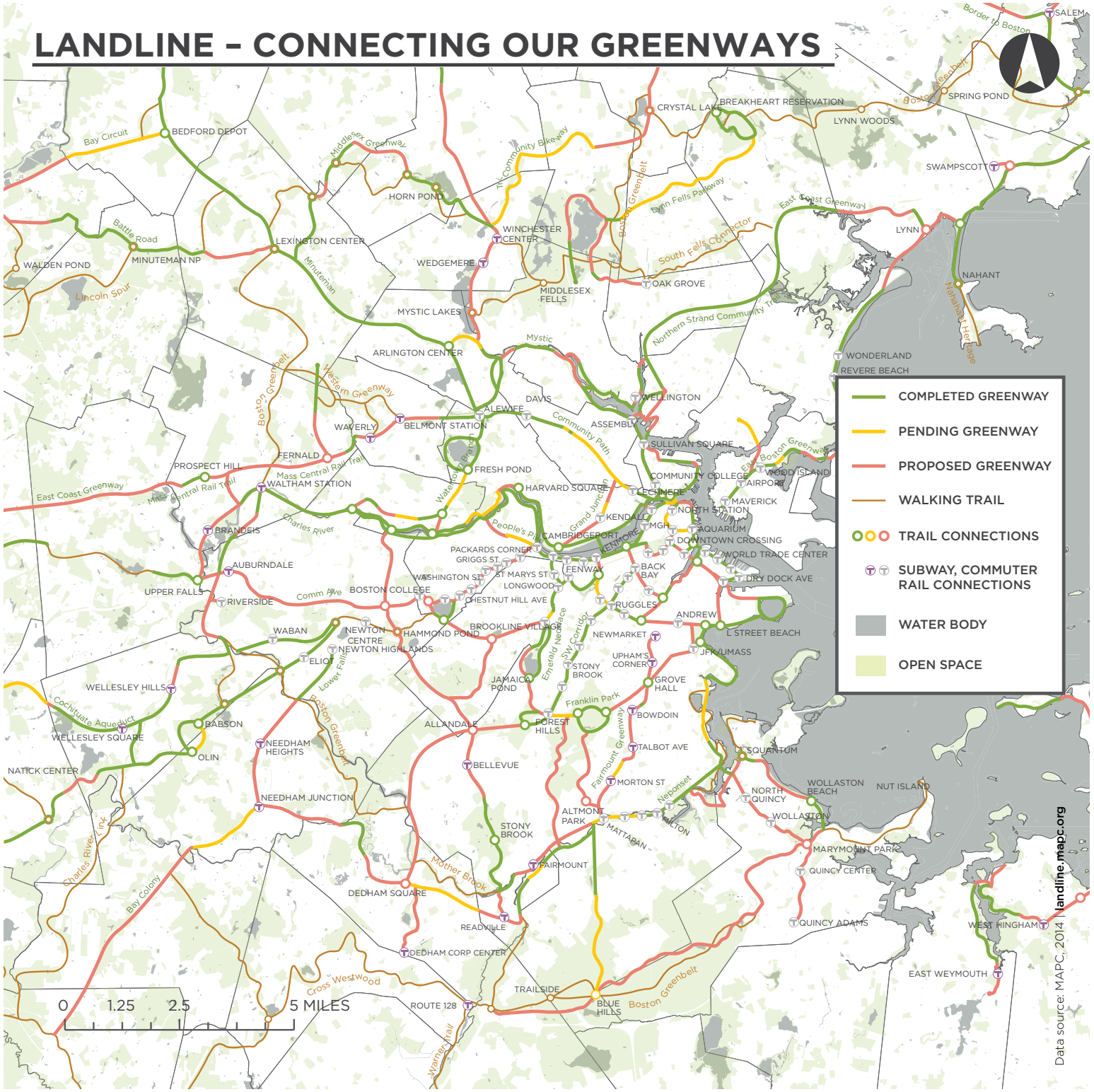
The MAPC region is filled with multi-use trails ready for residents to enjoy for exercise, commuting and recreation, but are often not connected to one another. Many were developed on the local level without an over-arching vision to connect trails in neighboring communities, or they may be difficult to find because they lack clear signage, maps and consistent upkeep. MAPC is working with a coalition of advocates to change that, by developing a vision for a fully linked system of accessible, visible routes called the LandLine system.

Under this vision, our region's "greenway corridors" will be unified into one simple branded network, with clearly marked signs on trails from Boston to Boxford, Belmont, and beyond. Political fragmentation has posed a significant barrier to coordinated development and completion of these greenways in the past, but the LandLine vision will help build momentum around fixing gaps, maintaining and improving existing trails, and expanding the network as it grows in popularity and use.

With a large-scale effort to align local planning with such a broad regional vision, our region's greenways will become safer and easier to find and use, so more walkers, joggers and cyclists can discover these abundant resources for the first time.

MAPC 2015

LANDLINE – CONNECTING OUR GREENWAYS

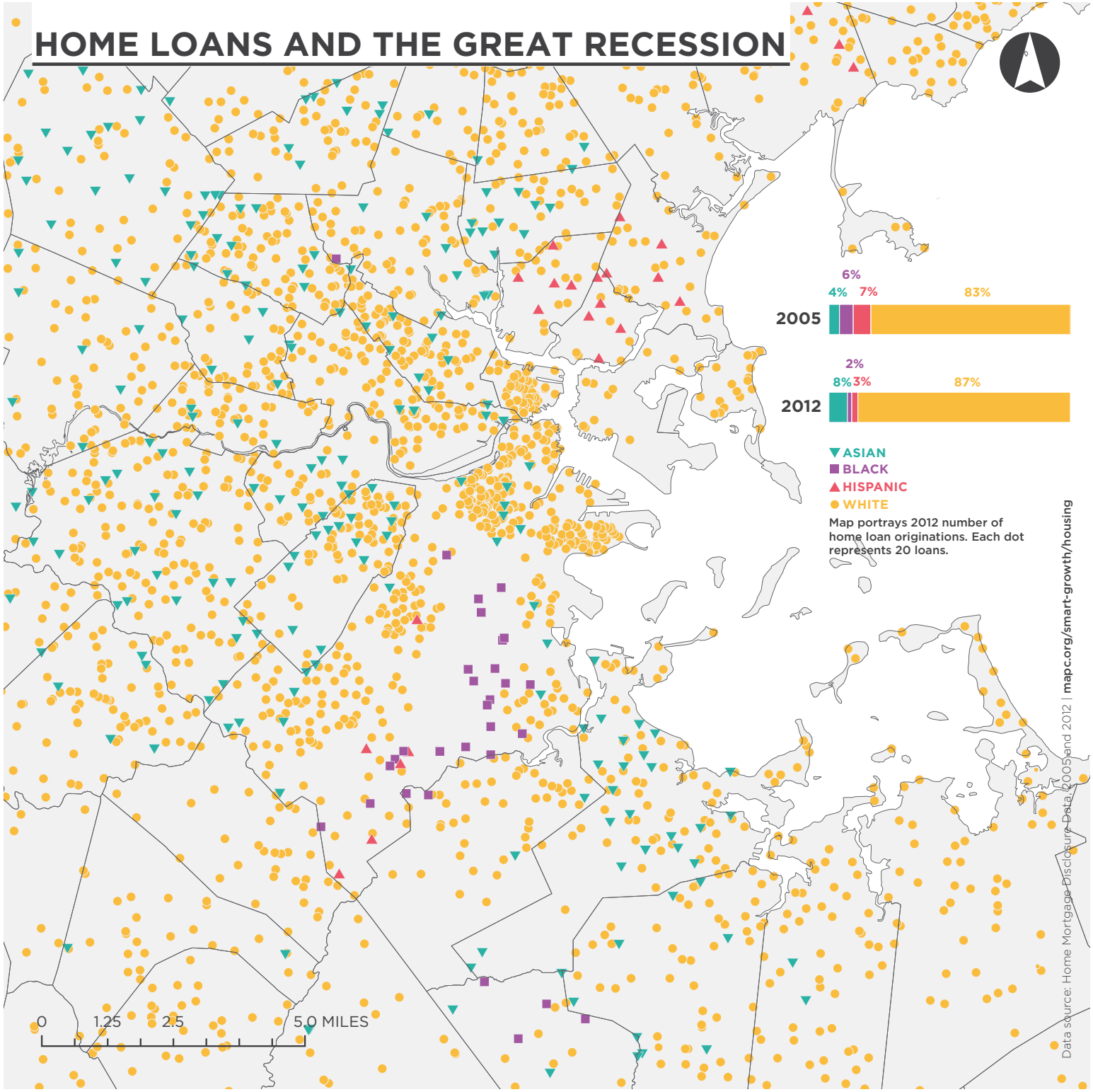


HOME LOANS AND THE GREAT RECESSION

While the mortgage meltdown of 2008 demonstrated a need to tighten lending, the pendulum has swung too far toward restricting credit, which disproportionately affects the ability of black and Hispanic borrowers to secure mortgages.

Data on new loan origination nationwide show that the share of loans made to black and Hispanic borrowers—often the victims of predatory lending—increased substantially from 2003 to 2006 and peaked alongside housing prices. This meant that as the market tanked and many owners lost home equity and value, black and Hispanic borrowers suffered higher rates of foreclosure. In the aftermath of the credit crisis, when housing prices softened, tight credit standards caused the share of loans to blacks and Hispanics to drop to pre-boom levels.

From 2007 to 2012, the share of new loans in Metro Boston made to blacks and Hispanics dropped from 13% to 6%, even as the total mortgage volume returned to pre-recession levels. In fact, the share of loans to black and Hispanic borrowers in Metro Boston is much lower than it was a decade prior, and the number of loans in predominately non-white areas like Roxbury and Dorchester has dropped considerably since 2007. Consequently, families in these areas face greater difficulty building wealth through home ownership.



MAPC 2015

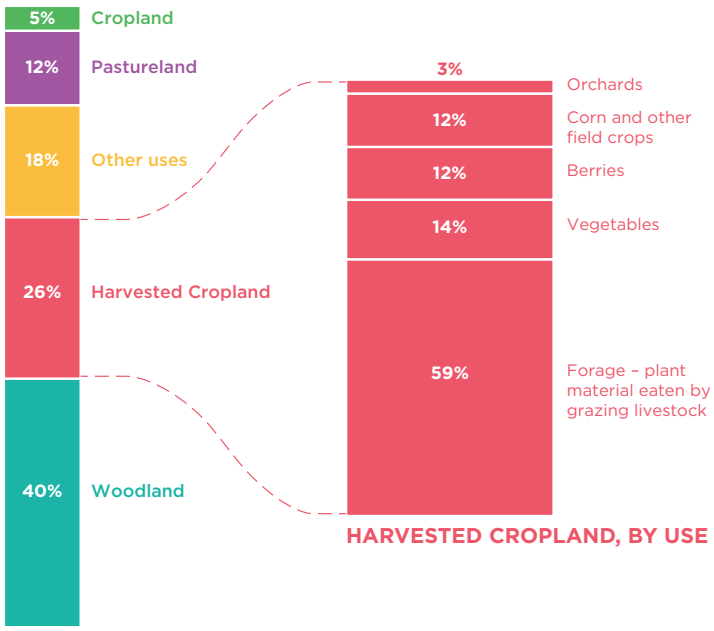
AGRICULTURAL LAND USES IN MASSACHUSETTS

Massachusetts is one of only 10 states in the nation that saw an increase in the number and acreage of farms between 2007 and 2012, with an increasingly diverse population that includes a high share of women and first-time farmers. All told, Massachusetts agricultural products brought $492 million in market value in 2012.

Massachusetts also pioneered the Community Supported Agriculture (CSA) model in America, connecting farm products to CSA "subscribers" who pay a lump sum seasonally to receive weekly "shares" of produce. We also have a strong network of farmers markets and a culture of buying local. Yet our agricultural sector faces serious challenges. The average farmer in Massachusetts is 55, which means we must build up a new generation if production is to continue growing. Our farms also tend to be very small, with two-thirds under 50 acres, creating economic challenges for farmers.

MAPC is working this year to strengthen the food system. Visit **mapc.org/mafoodplan** to learn more.

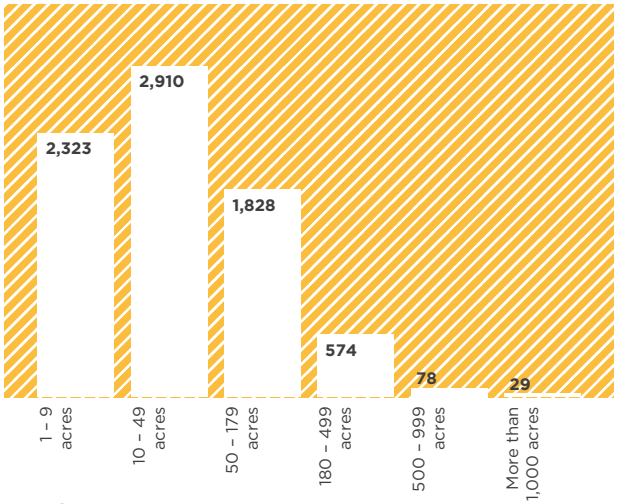
AGRICULTURAL PRODUCTS
MARKET SHARE



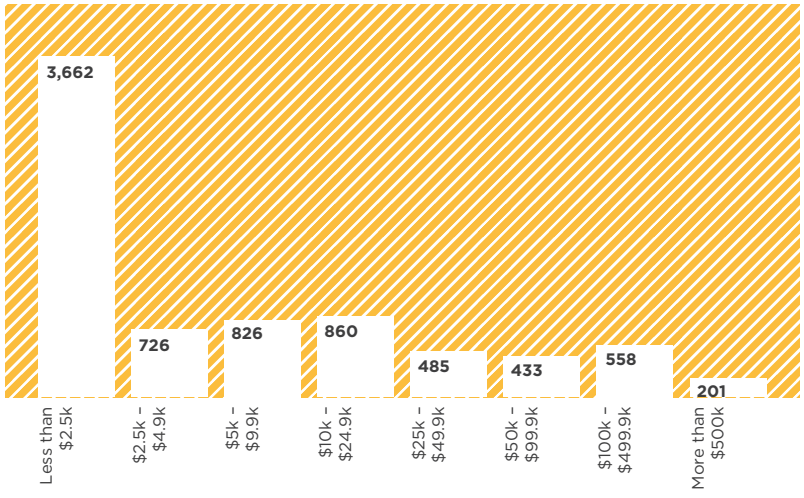
LAND IN FARMS, BY USE

Data source: USDA Census of Agriculture, 2012.

NUMBER OF FARMS



BY SIZE



BY VALUE

Complete Streets are streets designed for everyone: they are safe, convenient, and accessible for all users, from pedestrians to cyclists as well as transit riders and drivers. This also means that people of every age and mobility level find the streets easy to use, barrier-free, and comfortable. But Complete Streets aren't cookie-cutter. To be successful, they must be "context-sensitive," and designed to meet the needs of local residents as well as travelers and visitors. Several elements common to successful Complete Streets include sidewalks, crosswalks, bicycle lanes, improved lighting and street furniture, traffic calming measures, and improved signs.

Passing Complete Streets policies is one way for municipalities to ensure that roads are designed, constructed, operated, and maintained to provide safe and convenient access for everyone. In the MAPC region, Acton, Everett, Littleton, Maynard, Middleton, Reading, Salem, Somerville, and Stoughton have passed Complete Streets policies, and Littleton was recognized with a national award by the National Complete Streets Coalition for its innovative local policy. MAPC worked with most of these communities to help them develop Complete Streets programs. In addition, several larger cities in the region, including Boston and Cambridge, incorporate Complete Streets concepts into their planning. Learn more at **mapc.org/complete-streets-roll**.

DESIGNING COMPLETE STREETS

Drawings courtesy of Toole Design Group for Boston Complete Streets Design Guidelines, 2013 **bostoncompletestreets.org**

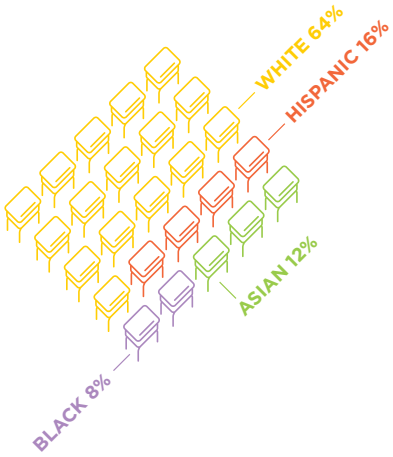
MAPC **2015**

In the region, as in the country as a whole, children of different racial and ethnic backgrounds attend schools that look strikingly different in composition. Children of all racial and ethnic groups tend to attend schools with a higher proportion of their own race and ethnicity than the region's overall enrollment would suggest.

Studies have shown that all students do better academically in integrated schools, although the effect is greatest on black children. There is also some evidence that children in diverse educational settings develop stronger critical thinking skills than those in more homogeneous learning environments, as they have to work harder to process a variety of social and cultural perspectives. Children who attend integrated schools at a young age are also less susceptible to exhibiting biases and stereotyping toward others, because they have increased opportunities for cross-racial and -ethnic relationships. Attending these schools can have life-long impacts; graduates strongly prefer to live in integrated neighborhoods as adults, and tend to highly value the diversity experienced in their education settings.

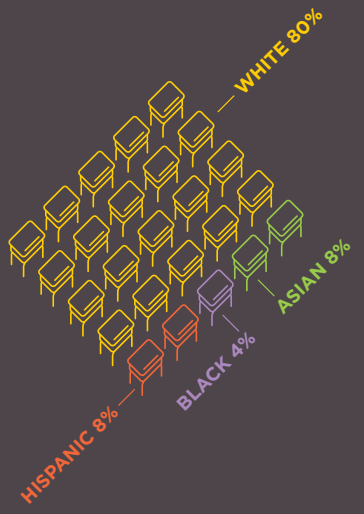
SCHOOL SEGREGATION IN THE REGION

If each primary school classroom of 25 matched the region's overall primary school enrollment, it would look like this:

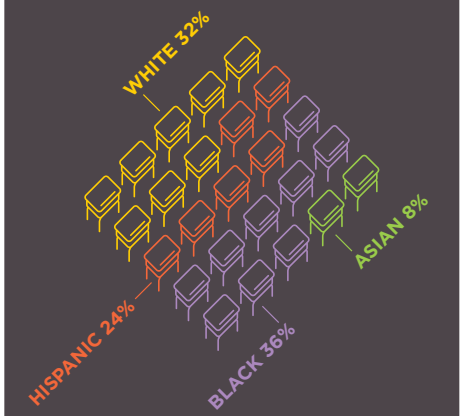


However, few students attend schools in classes that look like that. Rather, the racial and ethnic makeup of the average classroom varies widely in ways that are highly segregated by student race and ethnicity.

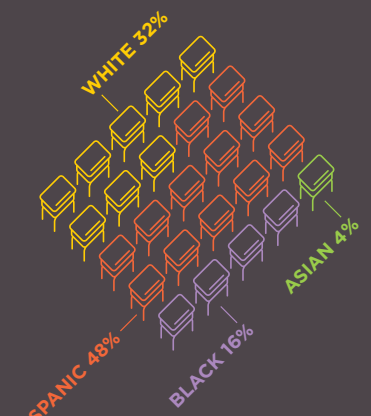
The region's average **WHITE** student attends school in a classroom that looks like this:



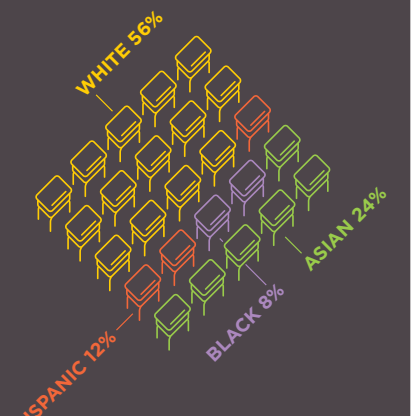
The region's average **BLACK** student attends school in a classroom that looks like this:



The region's average **HISPANIC** student attends school in a classroom that looks like this:



The region's average **ASIAN** student attends school in a classroom that looks like this:



Data source: Diversity Data Kids, 2010-2011 school year
diversitydatakids.org | Ayscue, J., Greenberg, A., Kursera, J., & Siengel-Hawley, G. (May 2013). Losing Ground: School Segregation in Massachusetts, Cambridge, MA Civil Rights Project

MAPC **2015**

Replacing inefficient streetlights with modern light-emitting diode (LED) lamps is a major strategy in the municipal toolkit for reducing energy consumption and cutting municipal costs. Street lighting constitutes a significant portion of municipal energy consumption and expenditures. By buying back streetlights from their utility provider, converting to energy-efficient fixtures, and procuring products and services in bulk, municipalities can save money and reduce greenhouse gas emissions.

MAPC has helped 16 cities and towns to procure a contractor to complete LED streetlight retrofits, with five more in the works for 2015. Completed retrofits included Arlington, Chelsea, Natick, Sharon, Winchester and Woburn, with Somerville soon to follow. Together, these seven municipalities are replacing approximately 15,000 streetlights with LEDs. These projects are expected to save approximately 5.5 million pounds of carbon dioxide equivalent emissions annually. The remaining nine communities are currently contracting with the selected vendor to start the retrofit process. For more information, visit **mapc.org/clean-energy**.

MAPC **2015**

FINANCIAL AND ENVIRONMENTAL BENEFITS OF LED STREETLIGHTS

Switching out one existing streetlight with one **LED Streetlight** annually yields...

151 KWH* OF REDUCED ENERGY
$22.59 IN COST SAVINGS
167 LBS REDUCED GREENHOUSE GASES

* **KWH** = The kilowatt hour is a unit of energy equal to 1,000 watt-hours, or 3.6 megajoules

SAMPLE NUMBERS BY MUNICIPALITY

ARLINGTON
2,038 Lights

492,577 KWH per year of reduced energy
$62,087 per year in cost savings
544,541 LBS reduced greenhouse gases

CHELSEA
1,623 Lights

496,987 KWH per year of reduced energy
$74,548 per year in cost savings
551,155 LBS reduced greenhouse gases

NATICK
2,393 Lights

544,915 KWH per year of reduced energy
$81,737 per year in cost savings
604,066 LBS reduced greenhouse gases

SHARON
1,644 Lights

310,470 KWH per year of reduced energy
$47,912 per year in cost savings
343,921 LBS reduced greenhouse gases

WINCHESTER
1,668 Lights

254,318 KWH per year of reduced energy
$49,947 per year in cost savings
282,191 LBS reduced greenhouse gases

WOBURN
1,992 Lights

771,906 KWH per year of reduced energy
$115,786 per year in cost savings
855,393 LBS reduced greenhouse gases

SOMERVILLE
4,296 Lights†

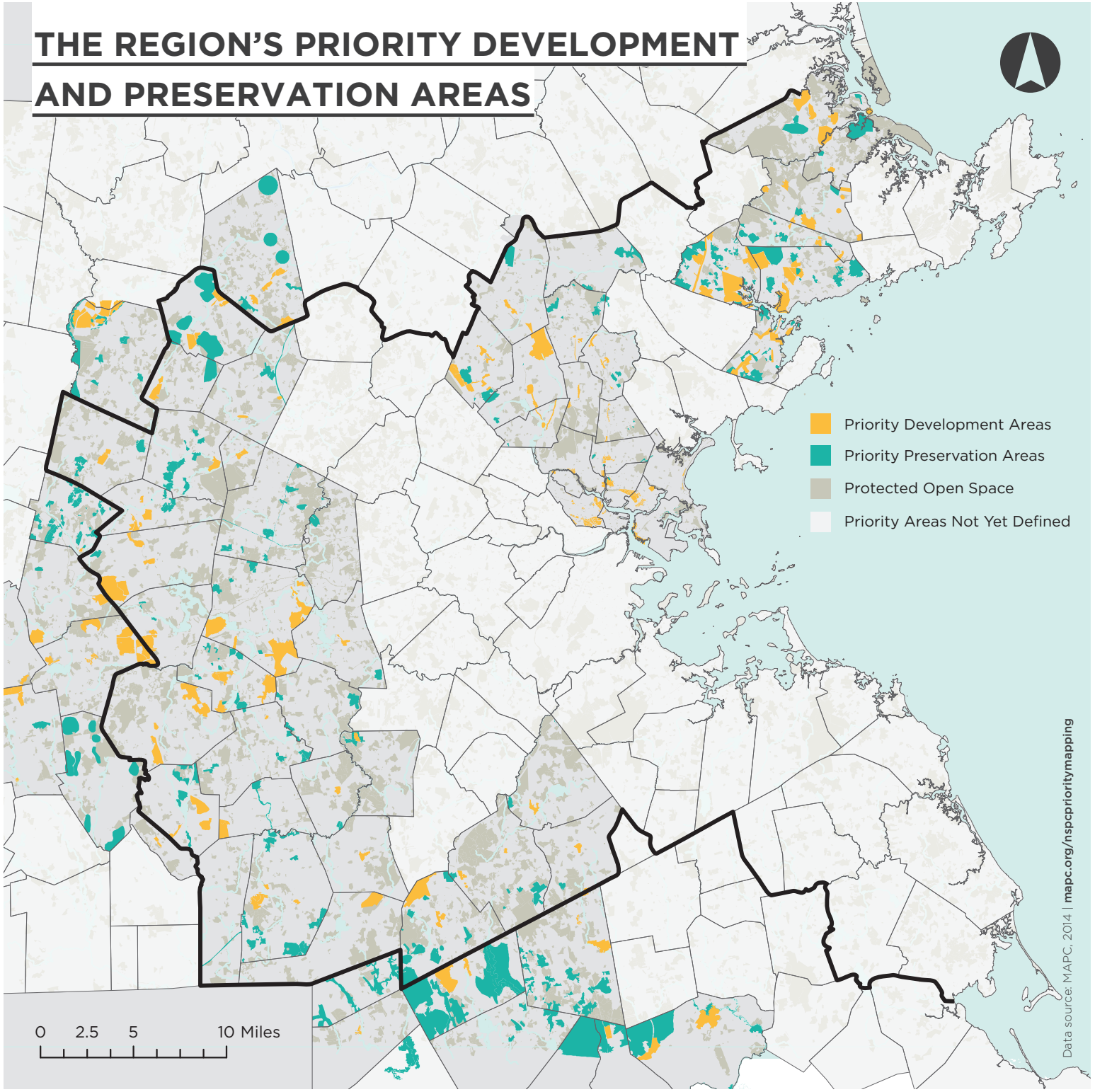
2,103,132 KWH per year of reduced energy
$315,470 per year in cost savings
2,327,788 LBS reduced greenhouse gases

†retrofit 2015

THE REGION'S PRIORITY DEVELOPMENT AND PRESERVATION AREAS

Priority development areas (PDAs) and priority preservation areas (PPAs) are a tool for ensuring that growth happens in a way that is consistent with smart growth principles. It also gives community residents the opportunity to help guide development, rather than waiting to react to development proposals. MAPC and nearby Regional Planning Agencies have helped 90 cities and towns to develop PDAs and PPAs through an interactive process that involves community residents and municipal officials. The Commonwealth's Executive Office of Housing and Economic Development and Executive Office of Energy and Environmental Affairs are typically involved in reviewing the PDAs and PPAs to determine which ones are of statewide significance. These areas then receive preference in the distribution of state infrastructure and open space funds – a real incentive for municipalities to participate in this process.

PDAs, which are capable of supporting increased development or redevelopment, are chosen in part based on their access to transportation and other infrastructure. PPAs deserve special protection due to their environmental, historical, or cultural significance. We look forward to helping all of the remaining communities in our region to designate PDAs and PPAs in 2015 and beyond.



MAPC 2015

BUDGETING TO MEET FAMILIES' BASIC NEEDS

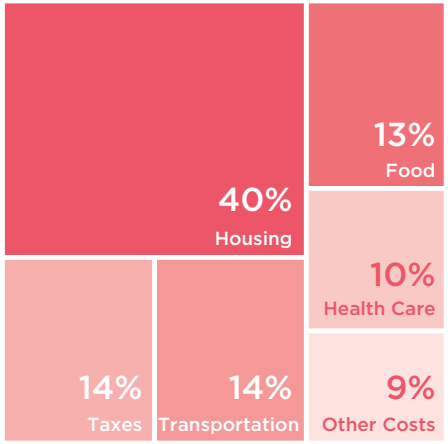
The cost of living in Massachusetts is higher than in other parts of the country. One way to estimate the cost of living is to calculate a "basic needs budget" for different family compositions. This includes the cost of food, child care, health care, housing, transportation, taxes, and other necessities, such clothing, personal care products, and housekeeping supplies.

Depending on the family composition, a basic needs budget can vary dramatically. Families with small children incur child care costs that make up a significant proportion of the family's budget. Conversely, single adults without children are expected to pay a much larger percentage on housing.

An estimate of a family's basic needs budget can be used to determine a family's living wage. In a Massachusetts family with two working adults and two children, both must each earn $17.03 per hour, or a combined $69,797 annually, to meet the family's basic needs. By contrast, the state's minimum wage in 2014 was $8 an hour. Compared to the rest of the country, Massachusetts has the fourth highest disparity between its living wage and its minimum wage in the country.

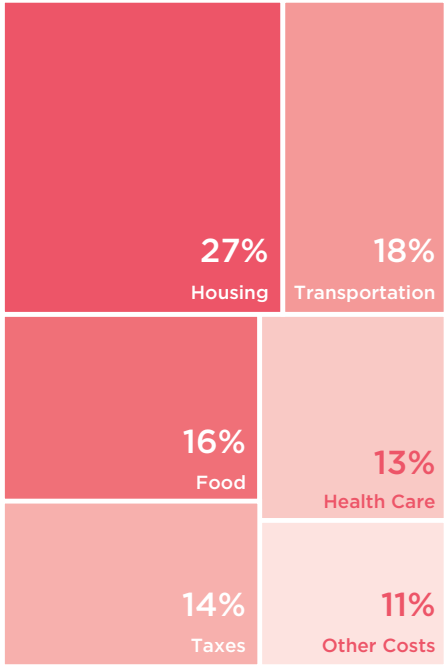
1 ADULT

$26,095 ANNUALLY
$12.55 PER HOUR



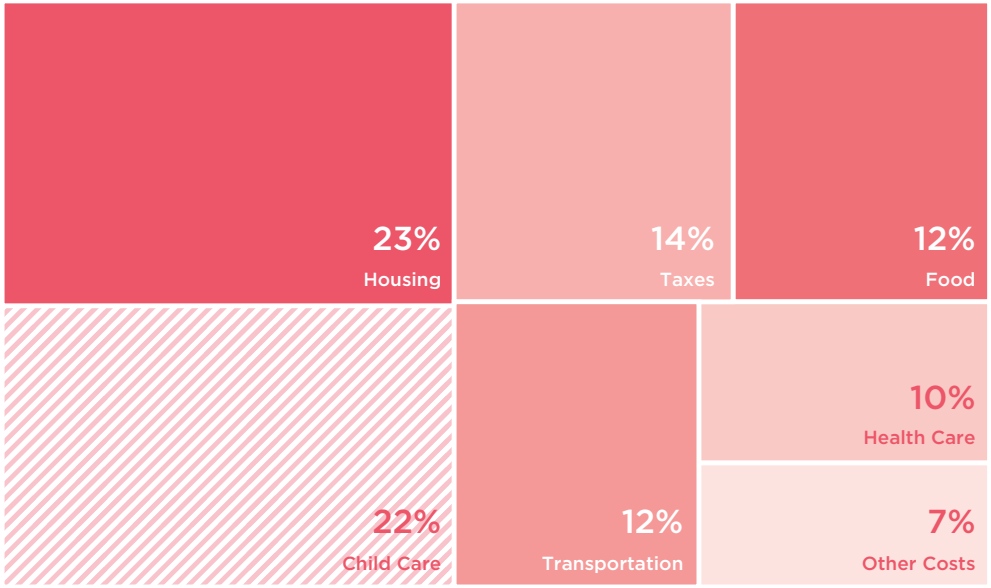
2 ADULTS

$38,557 ANNUALLY
$9.27 PER HOUR



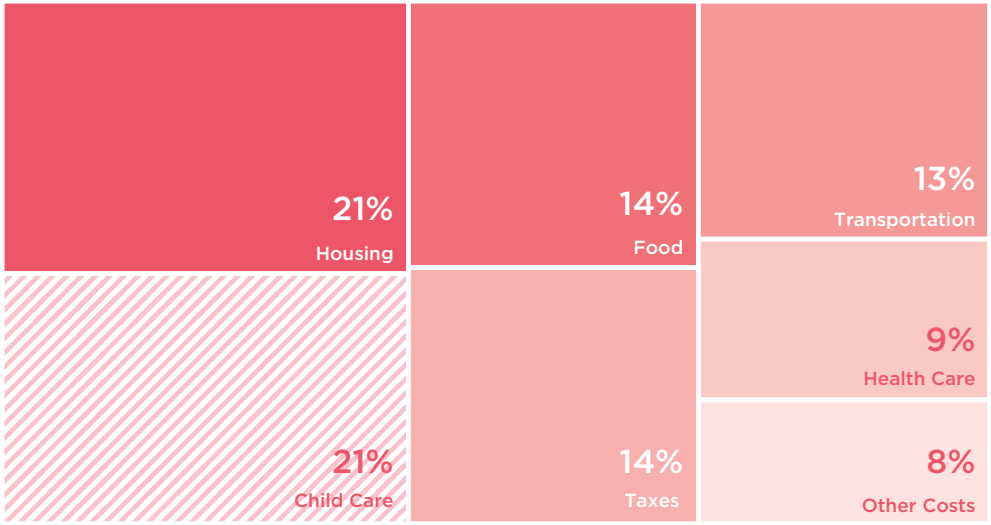
1 ADULT, 2 CHILDREN

$65,057 ANNUALLY
$31.28 PER HOUR



2 ADULTS, 2 CHILDREN

$69,797 ANNUALLY
$16.78 PER HOUR



Data source: Living Wage Calculator, 2014 **livingwage.mit.edu** | **mapc.org/poverty**