

# Maps: How many drones are in your neighborhood?



By Matt Rocheleau

GLOBE STAFF AUGUST 16, 2016

Americans have registered nearly half a million drones with the federal government, including more than 9,000 in Massachusetts.

Through a registration system launched late last year, the Federal Aviation Administration requires both hobbyists and commercial drone users to sign up.

The agency recently released data listing the number of drones registered in cities and towns across the country.

The following maps show the number of recreational and commercial drones registered in each Massachusetts city and town.



#### Where hobbyist drones are in Massachusetts

This map shows, for each town and city statewide, the number of drones registered with the Federal Aviation Administration for recreational use, as of May 31. A total of 9,375 were registered statewide.

0 to 0 1 to 10 11 to 25 26 to 50 50 to 500

SOURCE: Federal Aviation Administration MATT ROCHELEAU / GLOBE STAFF

#### Where commercial drones are in Massachusetts

This map shows, for each town and city statewide, the number of drones registered with the Federal Aviation Administration for commercial or other non-hobbyist use, as of May 31. A total of 159 were registered.



**SOURCE: Federal Aviation Administration** MATT ROCHELEAU / GLOBE STAFF

#### As of the end of May, 461,120 recreational drones and 8,416 commercial-use drones had been

registered with the FAA, according to agency records. More than 99 percent said they were United States residents when they registered; the rest said they lived in US territories or foreign countries.

AirMap, a Calif.-based company that offers real-time airspace information to drone operators and other stakeholders including airports, studied and mapped the FAA's data on drone registrations.

"We've found that drones are where people are," said AirMap co-founder Greg McNeal. "The data shows that most drone registrations take place in densely populated areas."

According to McNeal, the data also highlights a challenge aviation regulators will have to grapple with.

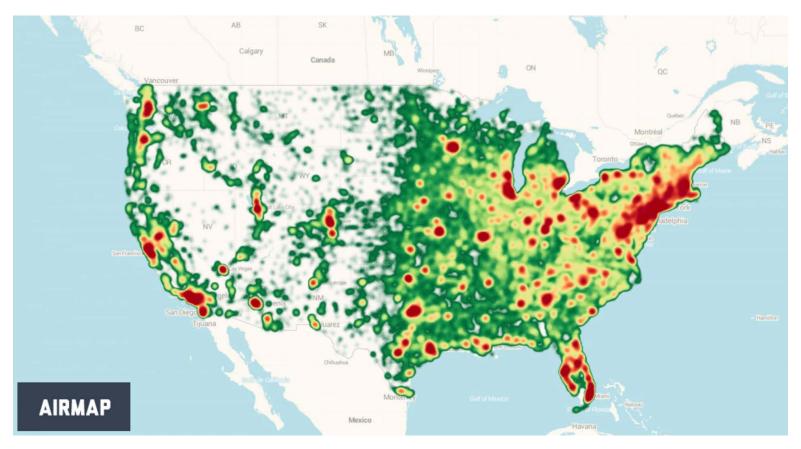
"Tens of thousands of operators will be looking to fly in controlled airspace and in populated areas," he said.

The FAA has been tracking <u>reports of near-collisions</u> between <u>manned aircraft and drones</u>, and working to establish new rules and guidelines to prevent crashes

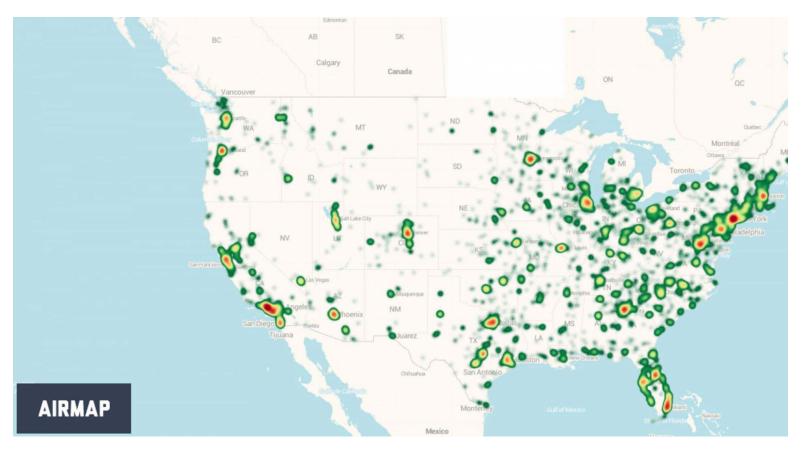


There have been dozens of sightings of drones by aircraft pilots in Massachusetts. Last week, the crew of a United Airlines flight traveling from Boston to Chicago spotted one about 10 miles northeast of the airport, the FAA said.

Maps: How many drones are in your neighborhood - The Boston Globe



The above heat map, provided by AirMap, shows the number of drones registered for recreational use around the United States.



The above heat map, provided by AirMap, shows the number of drones registered for commercial use around the United States.

https://www.bostonglobe.com/metro/2016/08/16/maps-how-many-drones-are-your-neighborhood/iGdj4W5kzazTurXLWclnNK/story.html[9/19/2016 8:30:34 PM]

Matt Rocheleau can be reached at matthew.rocheleau@globe.com. Follow him on Twitter @mrochele

Get Today's Headlines from the Globe in your inbox:

Privacy Policy

Stay updated, right in your news feed.

Most Popular in Metro ->



#### Cape Cod boaters spot great white off Sandy Neck Beach

The great white shark momentarily disappeared before jumping about 5 feet out of the water. MORE...



#### Discovery could provide insight into life 2,100 years ago

Experts from Greece and the Woods Hole Oceanographic Institution discovered a human skeleton aboard a shipwreck from 65 B.C. MORE...



# T could pour hundreds of millions into increasing Red Line capacity by 50 percent

An official said replacing 86 more cars — instead of overhauling them — and buying more vehicles could improve the quality of service. MORE...



# F. Gorham Brigham Jr., a mainstay among Boston banking executives, dies at 101

Mr. Brigham was the oldest living graduate of Harvard Business School and was described as "the classic Boston gentleman." MORE...



#### Can't wait to vote against [fill in blank here]? Your chance is soon.

The "Vote Early Boston" site on Boston.gov provides information on early voting, which runs Oct. 24 through Nov. 4. MORE...



#### Man charged in fatal restaurant crash in Newton is released

Bradford Casler pleaded not guilty to charges after he drove into a popular Newton pizza restaurant in March, killing two people. MORE...



#### Kelly Ayotte's foe isn't just Maggie Hassan. It's also history

If the US senator loses reelection, she'll be able pinpoint when it happened: when she won her first term. MORE...



#### 14-year-old killed by train was 'a true friend to people'

The ninth-grader was "a super-creative, super-smart kid," his family said as they continue grieving his death. MORE...



## Rejecting opioids, pain patients find relief with marijuana

But the world of medical marijuana bears little resemblance to usual medical care. MORE...



#### KEVIN CULLEN

#### Counting your fish — and your blessings

Travis Roy got a chance to go ocean fishing, despite being attached to a 600-pound motorized wheelchair. MORE...



# The great rabbit pardon of 2016

A Buddhist gardener felt sorry for rabbits being raised for slaughter at Codman Community Farms, so she bought them -135 rabbits in all. MORE...



#### In Colo., a look at life after marijuana legalization

In November, Massachusetts voters are likely to consider a ballot question legalizing recreational marijuana. MORE...



#### DEBATING QUESTION 3 | TUESDAY, 3 P.M.

#### Two sides of cage-free egg debate will face off

Representatives from the Humane Society and the New England Brown Egg Council will argue the merits of Question 3 Tuesday in a Globe-sponsored debate. MORE...



## Needing support from communities, builders pay for it

Local backing for a development project often comes with a price tag, bought as easily as lumber or drywall. MORE...



#### Big Papi gets an oceanic namesake

Add a 15-foot shark to the list of things fans have done to honor David Ortiz. MORE...



#### Two Mass. schools ranked among top 10 colleges in US

Move over Crimson; the Tigers are No. 1 on US News & World Report's 2017 university rankings. MORE...



#### Somerville to offer tours of Prospect Hill Tower

A ribbon-cutting ceremony to celebrate the re-opening of the tower will take place Tuesday. MORE...



#### 'I just saw cops rushing to the scene,' N.J. shootout witness says

Employees at the Linden Auto Body Shop in Linden, N.J., were sitting in their office when they suddenly heard gunshots. MORE...



# See the skeleton that researchers have discovered aboard an ancient Greek shipwreck

The skeleton was found on the Antikythera Shipwreck, a Greek ship from 65 B.C. MORE...



# Beer, politics, and a whole lot of tech talk at HUBweek

HUBweek organizers are grappling with how to ensure the annual festival does not cater solely to the business and academic elite. MORE...



## MBTA to subsidize Uber, Lyft rides for customers with disabilities

The first-of-its-kind partnership reflects a growing relationship between public agencies and ridefor-hire firms. MORE...



#### Families of murder victims seek help moving

There is no formal program to assist families of homicide victims who want to move because they fear for their own safety. MORE...

#### COLLEGE BOUND Do early birds catch the college acceptance?



Some high school seniors are better off nailing the fall grading period before they apply. MORE...



#### **Chasing Bayla**

Biologist Michael Moore had waited all day — really, all his life — for the whale to surface, the suffering giant he thought he could save, that science had to save. It had come down to this. MORE...



# Parents of Justina Pelletier sue Boston Children's Hospital

The teen spoke out at a press conference to announce a lawsuit against Boston Children's Hospital over her care. MORE...



#### 12/15/13 | FIRST OF TWO PARTS

#### A medical collision with a child in the middle

Justina Pelletier has a metabolic disease. Or does she? With her parents and Children's Hospital deadlocked, she was placed in state custody. MORE...



#### Cambridge aims to take pets out of pet stores

A proposed city ordinance would stop breeders from supplying animals to shops. MORE...

#### Allston shooting leaves victim fighting for life

A man was shot Sunday night on Linden Street, according to Boston police. MORE...

#### 'Mermaid' to go on display at Harvard museum — but she's no Ariel

The Peabody Museum's "FeeJee Mermaid" will be brought out to celebrate the institute's 150th



anniversary next month. MORE...



#### Our winters are getting shorter — and warmer

Scientists say the impending changes — a result of human-caused global warming — are deeply troubling and will have major impacts on ecosystems and economies. MORE...



#### At BLS, how furor unfolded behind the scenes

Concerns rose that the elite exam school was moving too slowly to address allegations about racism. MORE...



#### Charmian Carr, 73; portrayed Liesl in 'The Sound of Music'

Ms. Carr fully embraced audiences' reverence for the musical, frequently appearing at sing-a-long performances. MORE...



#### No immediate connection seen between NYC, N.J. blasts and Mass.

Transit Police Superintendent Richard Sullivan urged the public to "not succumb to fear." MORE...



# **Few options for domestic violence victims**

Like so many domestic violence victims, Wanda Rosa was powerless to separate herself from the abuser who murdered her. MORE...

#### Phillips Exeter sued over kicking out student who had sex



The N.H. school is being sued by the parents of a 15-year-old boy, saying it was wrong to withdraw their son after he had sex with another student. MORE...

#### Emerging scandal in evidence room puts hundreds of drug cases at risk

An audit revealed missing drugs, guns, and money from a Braintree evidence room, and cases may have to be thrown out. MORE...



#### Charter debate focuses on funding, equity issues

A charter school supporter accused officials of not adequately educating all students, during a tense debate Tuesday. MORE...



#### Pair in Snapchat sex assault get 4-5 years in prison

The two were convicted of assault to rape, indecent assault and battery, and kidnapping in the attack that was carried out in the woods and shared on Snapchat. MORE...



# Milestone for Allston outreach: first student to attend Harvard

The university's Ed Portal opened in 2008 as a conduit to the community. MORE...



#### Howard E. Butt Jr., 89; left grocery empire for spiritual pursuits

Mr. Butt advocated a role for the laity in improving the world through personal renewal within the professions, the family, and the local church. MORE...

#### ADRIAN WALKER

#### Controversy again engulfs Roxbury Community College

YVONNE ABRAHAM



The firing of Keith McDermott, the longtime head of the Reggie Lewis Track and Athletic Center, has unleashed a controversy. MORE...



# I'm so sorry, Mitt Romney

I've been tough on you over the years, and I feel awful about it. Because now I see how bad bad can be. MORE...

#### Search: Boston buildings with lead service lines

More than 5,000 buildings citywide have lead service lines. Search here to see if your your address does. MORE...



#### Gay married man says Catholic school rescinded job offer

Matthew Barrett of Dorchester said Fontbonne Academy in Milton withdrew a job offer within two days after he listed his husband as emergency contact. MORE...



#### In rural Maine, a life of solitude and larceny

Christopher Knight told police that he went into the woods in 1986 and never looked back. He is now accused of scores of burglaries and thefts. MORE...



## Supporters of recreational use of marijuana fill the Common

Massachusetts voters will decide in November whether to legalize marijuana for recreational use. MORE...

## In Greater Boston, a lopsided geography of affordable housing



Relatively little subsidized housing has sprouted in places like Lexington. MORE...



#### MIT students get frank about race

The blog posts are part of an uncommonly honest discussion being fostered at the college about the tensions gripping the country. MORE...



## Let the debate begin, for candidates and cocktails

Three bars in Somerville are holding presidential debate events, complete with election-themed drinks. MORE...



#### Toxic algae blooms close several ponds

According to the state's department of public health, nine ponds were under a blue-green algae advisory last week. MORE...



#### ADRIAN WALKER

#### Developers buying community support is an insider game

Civic groups should not be able to take money from developers looking to buy support, much less solicit payment. MORE...

#### Man freed after getting head stuck in R.I. jetty while fetching phone

A man who got stuck head-first between two rocks on a Rhode Island jetty while trying to retrieve his cellphone has been rescued with the help of olive oil. MORE...

#### Rate of uninsured in Mass. reaches all-time low

The US Census reports 2.8 percent of residents had no health insurance in 2015, down from 4.4 percent in 2010. MORE...



#### Is The Country Club too exclusive even for Tom Brady?

Brady and Gisele Bundchen reportedly want to join the 133-year-old institution, which prizes privacy and discretion. MORE...



#### History rolled in on a yellow school bus

When rocks and jeers greeted some of the children, Boston's image was scarred forever. MORE...



#### Annie Dookhan, key figure in state lab scandal, released from prison

Annie Dookhan, who admitted to fabricating thousands of test results, has been granted parole, an official said. MORE...



#### Something new in the chill, salt air: Hope

The demise of the Grand Banks fishery left tens of thousands out of work, desperate, and angry, but there's been a renaissance. MORE...



#### Firm with spotty past regains state's car inspection contract

Applus Technologies Inc. was selected to provide testing equipment to more than 1,900 Mass. inspection stations. MORE...

#### State chemist may have affected more drug cases than previously known

Sonja Farak, allegedly addicted to the drugs she was hired to test, could have tampered with more



evidence than initially claimed, attorneys said. MORE...



#### For Republicans, Connolly is the Democrat of choice

In the mayoral matchup against Martin Walsh, a leader in the labor community, John Connolly is proving to be the preferred candidate of the GOP. MORE...



#### Father arraigned in New Bedford slaying

A prosecutor said Walter DaSilva was upset that his 19-year-old daughter did not visit him for Father's Day and that she was dating an older man. MORE...



#### Boat owner seeks to clarify record on Tsarnaev capture

David Henneberry said he's "not crazy" and would never have approached his boat if he thought bombing suspect Dzhokhar Tsarnaev was inside. MORE...



#### Charles Ogletree, Harvard law professor, says he has Alzheimer's

"You have to fight it; you have to address it," the Obama confidant said of his diagnosis. MORE...

#### Northeastern freshman dies of bacterial meningitis

University officials told students the 18-year-old from Wakefield had not been ill when on campus. MORE...

In Ghana, he's royalty. In Worcester, he's just Harry.

Harry Danso, a middle-aged middle manager at an endoscopy company, is also known as Nana



Awuah Panin III, a royal chief in his native country. MORE...

#### State fires chemist after probe casts doubt on credentials

Ousted state drug analyst Kate Corbett may have opened the door to new legal challenges after falsely testifying to her credentials in multiple court cases. MORE...



#### 'When you find my body, please call my husband,' missing hiker wrote

A hiker who died in 2013 after going off the Appalachian Trail in Maine kept a journal and apparently survived for at least 26 days. MORE...



#### How hard is it to give away a half-million dollars?

Twenty-five people or businesses have \$500,000 or more that's been waiting for them — in many cases for years — in a state account. MORE...



#### Dzhokhar Tsarnaev says he called brother to synchronize blasts

Tsarnaev told investigators he didn't care if his friends got hurt, according to court records unsealed Monday. MORE...



#### Tales of animal abuse emerge at Westport farm

Livestock had been living in deplorable conditions for months, probably years, police said. MORE...

#### Somerville's innovative new school plan garners a \$10 million grant

The grant will help to open a new high school that won't have grade levels or traditional courses. MORE...



#### The Marblehead healer with the magic touch

Nancy Torgove Clasby knows there may be skeptics who don't believe in alternative healing. MORE...

#### Workout booster contains banned stimulant, study finds

A popular sports supplement contains a banned substance derived from methamphetamine, according to tests conducted by Harvard Medical School researchers. MORE...



#### Mystery surrounds granite marker on Stoneham island

A weathered, granite monument bears three words that have baffled locals, history buffs, and reporters for more than a century. MORE...



#### SPOTLIGHT REPORT

#### Private schools, painful secrets

More than 200 victims. At least 90 legal claims. At least 67 private schools in New England. This is the story of hundreds of students sexually abused by staffers, and emerging from decades of silence

today. MORE...

GLOBE	SPECIAL	REPORT

# The struggle of Syrian migrants and refugees in Greece

Read More



#### How good is your child's school district? These numbers are a place to start

Data on spending per student, average class size, SAT scores, attendance rates, and more, are available from the state's Education Department. MORE...



#### Alaska sea ice shows effect of climate change

The Arctic ice is melting fast, the warmth tied to the emissions of modern life. But it is the ancient ways that are most at risk. MORE...

#### Teen stabbed six times in Melrose; suspects flee

The 17-year-old male was taken to Massachusetts General Hospital with non-life-threatening injuries. MORE...



#### STARTS & STOPS

#### Drivers of rental cars still liable for paying tolls on Tobin Bridge

Rental car companies have already figured this problem out — and they certainly won't be the ones stuck with the bill. MORE...



#### JFK: 50 YEARS LATER

## Robert F. Kennedy saw conspiracy in JFK's assassination

Robert F. Kennedy took on some of the Kennedy Administration's hardest tasks, ones that created dangerous foes, and after the assassination, RFK wondered if one of them had done it. MORE...



#### Data recorders found in rubble of Hanscom crash

The evidence could show why the Gulfstream IV failed to take off and shattered in a fiery crash that killed seven people. MORE...



#### Mini golf course closing, but iconic dinosaur staying putt

The looming orange T-Rex will stand as a reminder of the past amid a new development at the Saugus site. MORE...



#### Second boater in high-speed crash in Taunton has died

Stephen Joy, 67, of Bangor, Maine, died Thursday in Providence, authorities said. MORE...



# It just got harder to get into Harvard

Harvard University accepted a slim 5.2 percent of applicants to the Class of 2020 — the lowest number ever offered admission at the college. MORE...



# UMass Amherst cuts ties with Bill Cosby

The university joined a number of other colleges that have distanced themselves from the entertainer. MORE...

## Political Happy Hour: Sept. 19, 2016

Political Happy Hour: Curt Schilling's change of heart | Katherine who? | Jeb! MORE...



#### Could \$22.3m budget gap threaten UMass Boston's growth?

Several construction projects have been plagued by unexpected setbacks that will cost the university extra millions. MORE...

## Strange visitor from the South (a manatee) is spotted off Cape Cod

At least a half-dozen sightings have been reported since mid-August of a manatee that probably

```
Maps: How many drones are in your neighborhood - The Boston Globe
```



ambled up the East Coast from Florida. MORE...



#### EVAN HOROWITZ Why counting cards in blackjack can tip the odds

Blackjack is a game where the only winning strategy is to play smart, play long, and play deliberately. MORE...



#### Climate change could be even worse for Boston than previously thought

A new report commissioned by the city says seas could rise more than 10 feet by the end of the century. MORE...



# Families gather at 35th South Boston Vietnam Memorial ceremony

More than 200 people came, including the families of many who are honored at the monument. MORE...

#### Bedford seeks help in anti-Semitic incidents

School officials are coping with a recent series of anti-Semitic incidents involving elementary school children. MORE...

#### Braintree private school headmaster arrested on sex charges

Steven Bliss, 46, of Braintree, allegedly offered to engage in sex with a Worcester detective for money, police said. MORE...



# Columbus Day now Indigenous Peoples' Day in Cambridge

The City Council voted unanimously to change the holiday's name. MORE...



#### As Mark Wahlberg seeks a pardon, some aren't ready to forgive

To those who remember the havoc Wahlberg wreaked, his request to erase his teenage offenses from the record is infuriating. MORE...



## Firefighter recalls friend on anniversary of Hotel Vendome fire

Simon "Dan" Condon can still clearly remember turning to speak to his best friend just moments before the building collapsed 43 years ago. MORE...



#### Mass. may raise tobacco age to 21 from 18

The state Senate is poised to pass the bill, which would catapult Mass. to the forefront of national efforts against underage smoking. MORE...



#### Petitioners say judge should lose job over sex assaulter's probation

Judge Thomas Estes recently sentenced a teenager to probation for sexually assaulting two classmates in April. MORE...

#### **Top 10 Trending Articles**

Most Viewed	Most Commented	Most Shared		
The fight isn't going Clinton's way				
NYC bomb suspect charged with attempte	d murder			
Why do so many veterinarians commit sui	cide?			

Cape Cod boaters spot great white off Sandy Neck Beach

Suspect was fixture in family's business and, lately, a 'differ...

#### Panicked liberals are petrified

#### Learn More

A triumphant Sunday bodes well for Red Sox and Patriots SIGN UP FOR NEWSLETTERS

Five things to know about Jacoby Brissett	
MY ACCOUNT	CONTACT
MANAGE MY ACCOUNT <b>Trump has three paths to get to 270 electoral votes</b> DOWNLOAD CUSTOMER SERVICE APP	HELP
DOWNLOAD CUSTOMER SERVICE APP	FAQS
	GLOBE NEWSROOM
Great white named after 'Big Papi'	ADVERTISE
SOCIAL	MORE
FACEBOOK	EPAPER
TWITTER	NEWS IN EDUCATION
GOOGLE+	ARCHIVES
	PRIVACY POLICY
	TERMS OF SERVICE
	TERMS OF PURCHASE
	YOUR AD CHOICES
	WORK AT BOSTON GLOBE MEDIA
© 2016 BOSTON	GLOBE MEDIA PARTNERS, LLC