Nuclear Weapons and Massachusetts: The Case for Creating a Citizens' Commission

Cover image: Daderot, Wikimedia

About NuclearBan.US

NuclearBan.US was founded in September 2017 in the living room of legendary peace activist, Frances Crowe, in Northampton, MA. Frances Crowe served on the Advisory Board of NuclearBan.US until her death in 2019 at age 100. NuclearBan.US now has an office in Washington, DC, but remains strongly connected to its base in Western Massachusetts. NuclearBan.US is a member of Massachusetts Peace Action and the International Campaign to Abolish Nuclear Weapons (ICAN). ICAN won the Nobel Peace Prize in 2017 for its role in the Treaty on the Prohibition of Nuclear Weapons, which entered into force in January 2021.

Acknowledgements

This dossier was compiled and designed by Emma Pike, with contributions from Dr. Ira Helfand, Richard Krushnic, Rep. Jim McGovern, Timmon Wallis, Vicki Elson, Cole Harrison, and Jonathan King. Thanks also go to Dr. Robert Dodge of PSR Los Angeles, Lindsay Koshgarian of the National Priorities Project, and Susi Snyder of Don't Bank on the Bomb.

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Executive Summary

The Existential Threat of Nuclear Weapons to Massachusetts

• **Massachusetts is a target for nuclear attack.** Massachusetts is home to key nuclear weapons facilities that conduct essential work for the United States military's nuclear forces, including Draper Labs in Cambridge and Hanscom Air Force Base in Bedford.

• **A single nuclear weapon detonated anywhere in Massachusetts would have unparalleled humanitarian consequences, to which the state would be unable to respond.**

• Even if Massachusetts itself was not targeted, a nuclear attack elsewhere in the United States would have a devastating effect on the Commonwealth.

• Even a limited nuclear conflict outside of the United States could cause catastrophic global climate disruption, resulting in major temperature drops and widespread famine that would affect the people of Massachusetts.

• The U.S. plans to spend over $114,000 per minute on nuclear weapons over the next ten years. While we do not know exactly how much of MA taxpayers' money goes into nuclear weapons, we do know that **it is money that could be spent on improving the lives of Massachusetts citizens.**

Massachusetts is Involved in the Nuclear Weapons Business

• **The Treaty on the Prohibition of Nuclear Weapons (TPNW) prohibits the use, development, testing, production, stockpiling, maintenance, transfer, and deployment of nuclear weapons.**

• To understand how the treaty might affect Massachusetts in the short and medium-term, we should explore how this new treaty could affect the nuclear weapons business.

• We know that Massachusetts is home to key nuclear weapons facilities, which are potential targets for nuclear attack. We also know that many companies that are involved in the nuclear weapons business have locations in Massachusetts.

• **There are 26 major nuclear weapons contractors in the world. At least 13 of these have offices and/or production facilities in Massachusetts.**

• We do not know:

  • What other facilities in the state are currently in violation of the TPNW?

  • What other nuclear weapons related research is being conducted at universities in Massachusetts?

  • What other companies are involved in this work?

  • **What public and private institutions are investing in these companies?**

• These are crucial questions that need to be answered if Massachusetts is to take more seriously its responsibility for the safety and security of its citizens.

What Massachusetts Can Do to Respond

• There are many steps that the Commonwealth of Massachusetts can take to address the threat of nuclear weapons to its citizens. **It would be the job of a Citizens' Commission to look into these steps and make recommendations to the State Legislature.**

• Examples are: Passing resolutions, prohibiting nuclear weapons activities within the state, divesting from nuclear weapons companies, disqualifying bidders, and economic conversion.

• **Four other US states have already passed resolutions relative to the prohibition of nuclear weapons on the state level .**

• A number of towns, cities, and town meetings in Massachusetts have also passed similar resolutions, showing their desire for the state to take action to prohibit nuclear weapons.

• **Establishing a Citizens' Commission is an immediate and effective step that the state can take toward answering its citizens' call to action. It would fulfill both its fiduciary responsibilities and its duty to protect the lives and wellbeing of its citizens.**

• Passing the bill would not commit the state to any action, nor would it cost the state any money.

• The Citizens' Commission would simply engage in research and report back to the State House with recommendations, so that the state is able to make informed decisions on issues related to nuclear weapons.

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James P. McGovern
Member of Congress

January 26, 2022

Testimony of United States Congressman James P. McGovern before the Joint Committee on Public Safety and Homeland Security regarding H. Resolve 3688, providing for an investigation and study by a special commission relative to the existential threat posed by nuclear weapons to the Commonwealth of Massachusetts.

Good morning. Thank you, Chairman Timilty, Chairman González, and the esteemed members of the Joint Committee on Public Safety and Homeland Security for the opportunity to appear before you on a matter of great importance to the Commonwealth of Massachusetts, including the Second Congressional District, which I represent.

Massachusetts, the United States, and the world face two major existential threats: nuclear weapons and climate change. These are both issues that deserve our full, undivided attention, and that is why I am grateful that Representative Lindsay Sabadosa and her colleagues have introduced H. 3688 to establish a special commission to investigate the threat posed by nuclear weapons to the people of Massachusetts.

In June 2021, Senator Ed Markey and I introduced the Hastening Arms Limitations Talks or HALT Act in the United States Congress (H.R. 3837/S. 2019). Our bill recognizes the existential threat nuclear weapons pose, a fact that has motivated historic negotiations and treaties over the past several decades by the United States and governments that possess nuclear

weapons. It proposes to reduce and eliminate threats posed by nuclear weapons through a return to robust nuclear arms reduction negotiations and a prohibition of increases in the nuclear weapons stockpile. In addition, I have introduced legislation in the 116th Congress to support the goals of the international Treaty on the Prohibition of Nuclear Weapons, which went into effect one year ago.

Massachusetts has been the home and heart of national movements to control, disarm, and eliminate nuclear weapons. It was here in Massachusetts that the Nuclear Freeze movement started and grew into the largest peace movement in U.S. history. Over the past 40 years great progress has been made in limiting and reducing nuclear weapons through negotiations. And globally, a citizens' movement has led a majority of nations to come together and create the Nuclear Ban Treaty. But over the past few years, America's resolve on arms control and disarmament has wavered. The emergence of a new nuclear arms race, the replenishment of nuclear stockpiles under the guise of "modernization," and the specter of a catastrophic nuclear war, whether global or regional in scale, continues to become more and more possible.

This is why I so strongly support the special commission proposed by H. 3688. We need independent investigations, public engagement, and debate on how the threat posed by nuclear weapons impacts the Commonwealth and people of Massachusetts – how these weapons impact us right now, economically, socially, psychologically, and culturally; and heaven forbid, how they could impact us in the future should one of the many scenarios that could result in their use come to pass. Further, we need the participation and engagement of Massachusetts citizens in these investigations, and I would like to recognize the leadership of the Massachusetts Peace and Justice Network, Massachusetts Peace Action, Back from the Brink, and the International Campaign to Abolish Nuclear Weapons for their advocacy on these critical issues.

Seventy-five years ago, scientists created the Doomsday Clock to draw attention to the world-ending threat of nuclear weapons. The upside: We're still alive. But the ingredients for destruction are more numerous than even during the Cold War. Those early atomic scientists knew that nuclear weapons were the first human creation that could literally end civilization. I applaud the Committee for holding today's hearing in recognition of the seriousness of these issues, and it is my hope that the Committee will report this bill out favorably. Thank you for considering my testimony.

1. Introduction

Nuclear weapons are designed to destroy entire cities. If they were ever used on the state of Massachusetts, there would be a humanitarian catastrophe of unparalleled proportions, to which the state would be utterly unable to respond. Even while they are not used, they are consuming enormous amounts of public resources that could be better spent on the needs of people in this Commonwealth.

Massachusetts itself is deeply embedded in the nuclear weapons business, which contributes to its likelihood of being targeted for nuclear attack. Charles Stark Draper Laboratory in Cambridge is one of the principal centers for nuclear weapons research in the country. Major nuclear weapons contractors including General Dynamics, Raytheon, and Textron all have large facilities in Massachusetts. Hanscom Air Force Base in Bedford is a significant command and control center for U.S. nuclear forces.

These nuclear weapons facilities are part of what makes Massachusetts a major target in the event of nuclear war. They also provide jobs and income to the state, so any plan to remove Massachusetts from the nuclear weapons business needs to include ways to protect livelihoods, communities and local economies dependent on this business.

A Citizens Commission is needed to do research and hold hearings with local experts and residents across the state. It could then report back to the state government with recommendations for future legislation that reflects the needs of the people.

It has always been considered unethical to threaten the use of nuclear weapons, whether as an act of war or in retaliation for being attacked. Can there be any cause so great as to justify the slaughter of millions of people, destruction of entire cities and potentially of human civilization itself? These weapons are now not only immoral but also illegal.

The Treaty on the Prohibition of Nuclear Weapons was adopted by 122 countries in 2017 and entered into force on January 22, 2021. The United States has not yet signed this treaty, nor have the other nuclear powers. But under international law, nuclear weapons are now in the same category of prohibited weapons as chemical and biological weapons, landmines and cluster bombs. Sooner or later, the United States will have to comply with this global prohibition, and Massachusetts needs to prepare itself for that eventuality.

It is not necessary for legislators to support the abolition of nuclear weapons in order to support the establishment of a Citizens Commission. This commission would look more carefully into the threat posed by nuclear weapons on the Commonwealth of Massachusetts and the implications of the Treaty banning these weapons. It would report back to the state legislature, so that legislators can be better informed and thus better equipped to make decisions. The commission would cost Massachusetts taxpayers nothing, and requires no commitment from the state regarding their policy on nuclear weapons as such.

As this document will show, nuclear weapons are a significant and important issue with profound effects on the lives of the people of Massachusetts. The people want an investigation into how this issue affects their lives. While this document presents much of the relevant information that we do know, we do not have all the answers that we seek, and are left with at least as many questions. This is why we need this Citizens' Commission.

This is also a matter of basic democracy. Let it be a democratic decision whether or not a commission is formed to look into these issues for the state. We hope that you will read on to discover what we do know about the threat of nuclear weapons to Massachusetts, and gain insight into why the citizens of Massachusetts want and deserve a Citizens' Commission to look into these issues on their behalf.

2. The Threat of Nuclear Weapons to Massachusetts

Nuclear weapons are the greatest threat to public safety in the Commonwealth of Massachusetts. A single nuclear weapon detonated anywhere in Massachusetts would have humanitarian consequences of unparalleled proportions. A nuclear war, even a so-called "limited" nuclear war taking place far from our shores, could also have devastating consequences for the people of Massachusetts.

Massachusetts could face a humanitarian catastrophe as a result of the deliberate use of nuclear weapons in the battlefield, as has been threatened in Ukraine. It could also be the result of miscommunication or miscalculation on the part of nuclear armed nations that are facing off in a highly tense stand-off such as exists right now between the United States and Russia, or between North and South Korea, or between India and Pakistan.

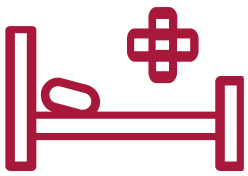
A nuclear catastrophe could also happen as a result of accident, faulty equipment, computer malfunction, human error, or cyber attack. The longer nuclear weapons exist, the greater the chances of something going wrong.

And even if nuclear weapons are never used, the astronomical cost of developing, producing and continuing to maintain these weapons is a diversion of public funds that are desperately needed to save lives and improve the wellbeing of the people of Massachusetts.

A Citizens' Commission is needed to investigate the true impact of nuclear weapons on the Commonwealth of Massachusetts, including the costs of maintaining these weapons that fall to Massachusetts taxpayers, and the opportunity costs of choosing to spend our tax dollars on weapons of mass destruction instead of on the needs of our citizens.

This dossier offers a glimpse of some of the costs, as well as some of the dangers inherent in the US reliance on nuclear weapons. But to properly research and investigate what the threat to Massachusetts really looks like requires the establishment of a Citizens' Commission.

1. Massachusetts as a Target



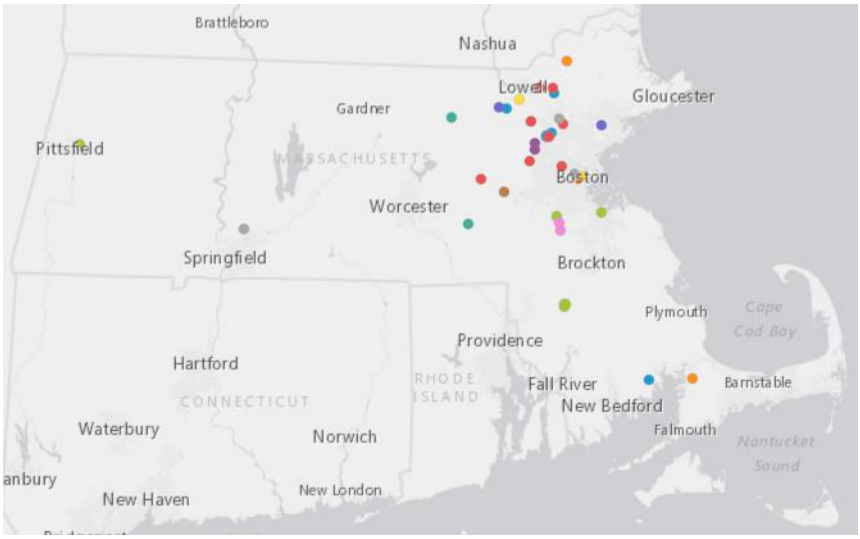
2. Humanitarian Consequences of a Nuclear Attack

3. Effects of a Global Nuclear War

4. Diversion of Public Resources

2.1 Possible targets in Massachusetts

Nuclear Weapons Companies in MA



Each dot represents the location of a company that is involved in the research of, development of, and/or manufacturing of parts for nuclear weapons. Any of these could be potential targets of a nuclear attack on Massachusetts. The next page looks at what would happen if just one of these, Draper Labs in Cambridge, were struck with a nuclear weapon. Map from NuclearBan.US.

Company name	Number of locations in MA
AECOM	2
BAE Systems	3
Jacobs Engineering	3
Leidos	2
General Dynamics	6
Honeywell	2
Lockheed Martin	7
Northrop Grumman	2
Raytheon Technologies	8
Charles Stark Draper Lab	1
Serco Group	1
Textron	1
Raytheon Technologies / United Technologies Corporation	2

	City	Population
1	Boston	675,647
2	Worcester	206,518
3	Springfield	155,929
4	Cambridge	118,403
5	Lowell	115,554
6	Brockton	105,643
7	Quincy	101,636
8	Lynn	101,636
9	New Bedford	101,079
10	Fall River	94,000

Populous MA Cities

To the left is a list of the ten most populous cities in Massachusetts, in order of population. These are also potential targets of a nuclear attack, as are port areas, airports, power plants and many other places of strategic importance in the event of war.

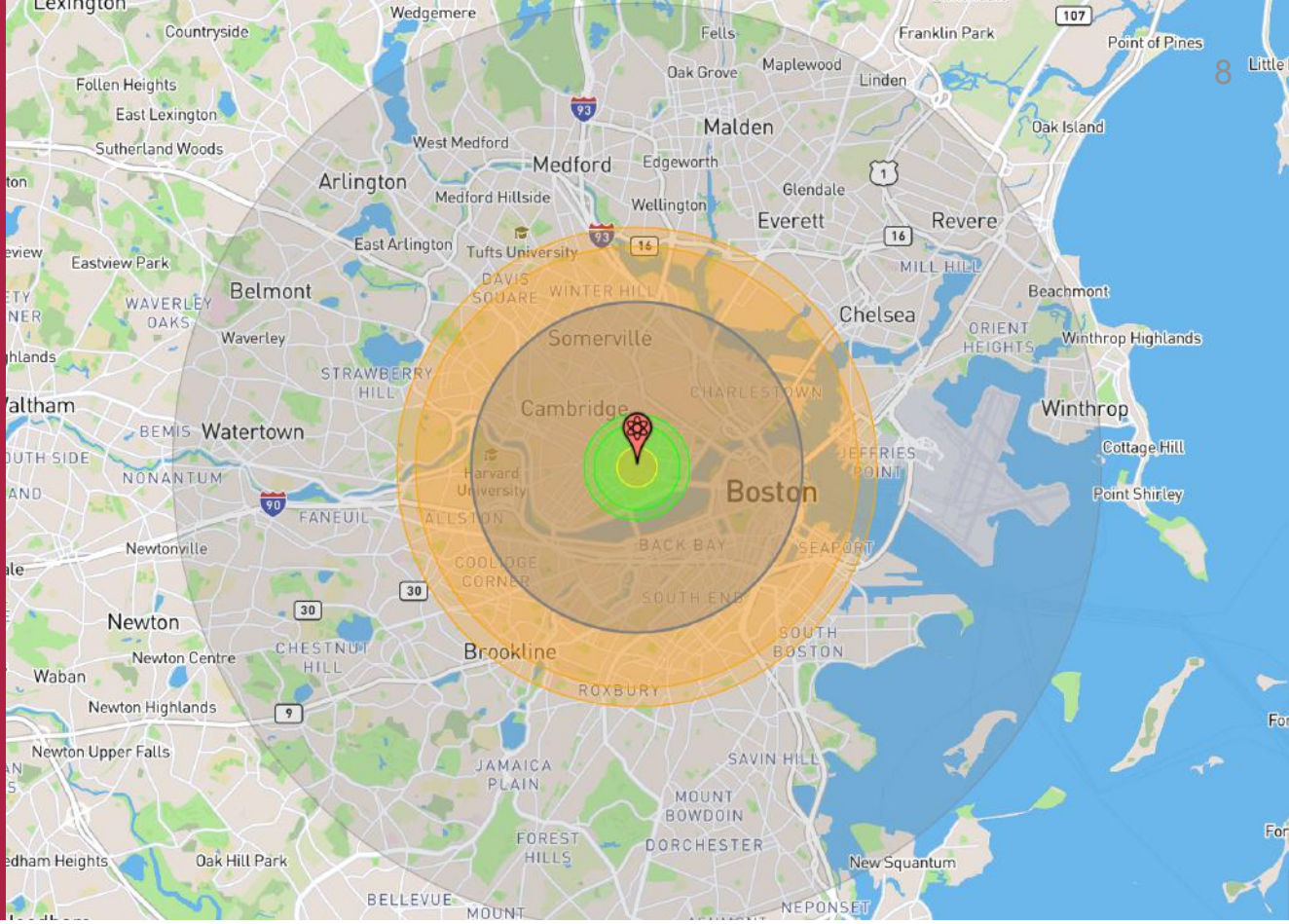
On subsequent pages, we look at the possible effects of a major nuclear attack on Boston and what that would mean. Due to their grossly indiscriminate nature, even a single nuclear weapon aimed at a military target is all but guaranteed to also kill civilians on a massive scale. The civilian fatalities and humanitarian consequences are that much more catastrophic when a nuclear weapon is targeted at a city.

Military Installations with Confirmed and Possible Nuclear Weapons Activity

Hanscom Air Force Base, primarily located in the town of Bedford with portions extending to Lincoln, Concord and Lexington, is home to the Nuclear Command, Control and Communications (NC3) Integration Directorate, and coordinates work to develop the system that would be used to coordinate U.S. nuclear forces in the event of a nuclear war. This makes it, and therefore Massachusetts, a highly likely target for other nuclear-armed countries. While we do know about Hanscom, we do not know what we do not know. What other activity is happening in our own backyards that could make Massachusetts a target for nuclear weapons? This is just one of the questions that a Citizens' Commission would investigate.

Military Installation	Location
Hanscom Air Force Base	Bedford, Lincoln, Concord, Lexington
Natick Soldier Systems Center	Natick
Joint Base Cape Cod	Buzzards Bay
Fort Devens	Ayer, Shirley
Westover Joint Air Reserve Base	Chicopee, Ludlow
Barnes Air National Guard Base	Westfield

Target: DRAPER LABS



The map above shows a simulation of a **100 kiloton** nuclear weapon being detonated at a height of **1 kilometer**, targeted at Charles Stark Draper Laboratory in Cambridge, MA. Image and data generated by Nuke Map (nuclearsecrecy.com/nukemap).

Estimated fatalities: 258,330

Estimated injuries: 464, 550

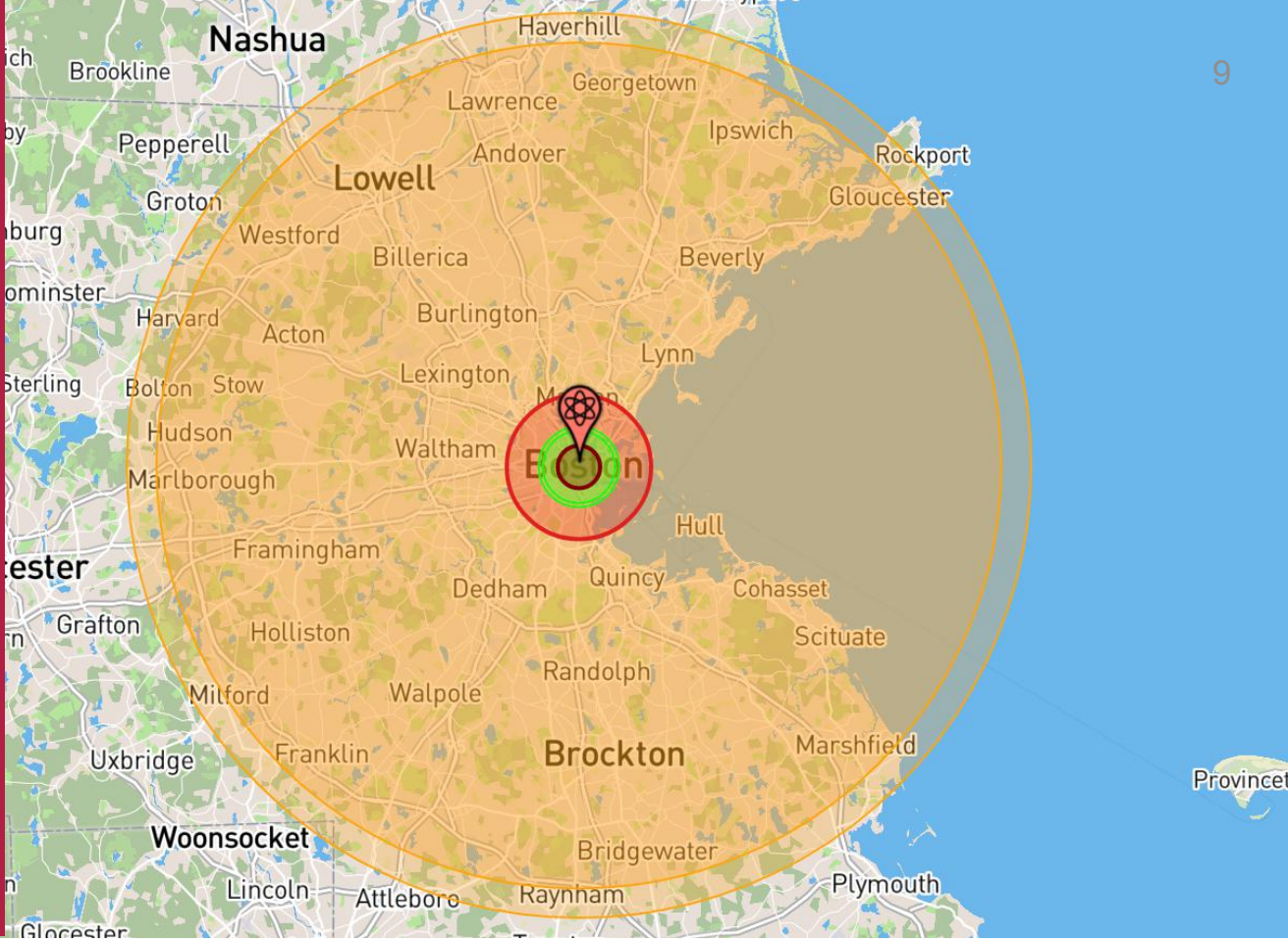
People in the inner green ring would receive a fatal radiation dose that would be incapacitating within five minutes, followed by death within four to six days. People in the outer green ring would receive a radiation dose that would be likely fatal within one month. Of those that would survive, 18% would eventually die of cancer as a result of exposure.

Within this radius, most buildings collapse, injuries are universal, and fatalities are widespread. Chances of fires starting and spreading in commercial and damaged buildings are extremely high. Little to no medical aid is available to respond to the resulting humanitarian crisis.

People within this area would receive third degree burns, which are often painless because they destroy the pain nerves. They can cause severe scarring and disablement, and can require amputation.

Within this radius, glass windows can be expected to break, which can cause injuries to those who go to a window after seeing the flash of the nuclear explosion (which travels faster than the pressure wave).

Target: BOSTON



The map above shows a simulation of a **20 megaton** nuclear weapon being detonated at a height of approximately **5 kilometers**, targeted at the city of Boston, MA. This is to show the likely effects of several warheads aimed at military and strategic targets in and around Boston (see text on following two pages). Image and data generated by Nuke Map (nuclearsecrecy.com/nukemap).

Estimated fatalities: 1,718,850 (over 1.7 million people)

Estimated injuries: 1,019,990 (over 1 million people)

Within this radius, the pressure is approximately that felt in a steam boiler on a locomotive. There is extreme damage to all civilian infrastructures, and damage even on "hardened" structures.

People in the inner green ring would receive a fatal radiation dose that would be incapacitating within five minutes, followed by death within four to six days.
People in the outer green ring would receive a radiation dose that would be likely fatal within one month. Of those that would survive, 18% would eventually die of cancer as a result of exposure.

Within this radius, heavily built concrete buildings are severely damaged or destroyed. Fatalities approach 100%.

People within this area would receive third degree burns, which are often painless because they destroy the pain nerves. They can cause severe scarring and disablement, and can require amputation.

2.2 Medical effects of a nuclear attack on Boston

By Dr. Ira Helfand

The map on the previous page does not show the full impact of a 20 megaton nuclear attack on the city of Boston. The bomb that destroyed Hiroshima was about 12.5 kilotons or 12.5 thousand tons of TNT, so a 20 megaton explosion would be roughly 1700 times more powerful. An attack on Boston today would involve not one 20 megaton bomb, but perhaps 10 or 15 smaller weapons. The total megatonnage would be less, but, because the explosive force would be spread out more efficiently across the metropolitan area, the actual destruction would be even greater than is described below. Still, it is much easier to conceptualize a single explosion, so the model used here will give an adequate approximation of the effects. However, the graphic does not include the deaths from a massive 16 mile wide firestorm that would result from this size of explosion. Everyone within 16 miles of ground zero would die, which is roughly 3.2 million people. Many beyond the firestorm would also die, and the number would be even greater during the day when many additional people come into the city from suburbs beyond 16 miles to work. So the total death toll would likely be more than four times the number shown on the previous page.

Within 1/1000th of a second, a fireball would form reaching out for two miles in every direction, four miles across. Temperatures would rise to 20 million degrees Fahrenheit, and everything - buildings, trees, cars, and people - would be vaporized.

4 miles

To a distance of 4 miles in every direction, the blast would produce pressures of 25 pounds per square inch and winds in excess of 650 miles per hour. Forces of this magnitude can destroy essentially anything that we build including reinforced concrete and steel structures. Even deep underground bomb shelters would be crushed.

6 miles

To a distance of six miles in every direction, the heat would still be intense enough to melt sheet metal.

10 miles

To a distance of 10 miles in every direction, the blast wave would create pressures of 7 to 10 pounds per square inch and winds of 200 miles per hour.

16 miles

To a distance of at least 16 miles in every direction, the heat would ignite all easily flammable materials - paper, cloth, wood, leaves, gasoline, heating oil - starting hundreds of thousands of fires. Fanned by blast winds still in excess of 100 miles per hour, these fires would merge into a giant firestorm more than 30 miles across and covering 800 square miles. Everything within this entire area would be consumed by flames. Temperatures would rise to 1400 degrees Fahrenheit. And everyone would die.

Beyond this great conflagration the destruction would continue.

21 miles

At 21 miles from ground zero, the blast would still produce pressures of two pounds per square inch, enough to shatter glass windows and turn each of them into hundreds of lethal missiles flying outward from the center at 100 miles per hour.

40 miles

Even as far as 40 miles from ground zero anyone who turned to gaze at the sudden flash of light would be blinded by retinal burns.

One million people would die instantly. Another million or more would suffer injuries from which they could not recover whatever medical care were available to them. Perhaps another million would suffer wounds from which they might recover if intensive medical care were available. In the entire metropolitan area there might be another 100,000 people with lesser injuries.

Burn victims

In the immediate post attack period, burns would constitute the most common and serious medical problem. Hundreds of thousands of people would have sustained major second and third degree burns, some from the direct effects of the heat flash on exposed skin, others injured in the thousands of fires that would rage on the periphery of the great firestorm. These people would need urgent and intensive medical therapy. It would not be available. In the entire United States, there are only 2000 special beds for burn patients. Even a major medical center like Boston has fewer than 100 burn beds and these would have been destroyed by the bomb. At best, a tiny fraction of the hundreds of thousands of burn patients would receive appropriate medical care. The rest would die.

Thousands of other injuries

In addition to these burn patients there would be many thousands of other injuries. People blinded by the flash or deafened when the pressure wave ruptured their ear drums. People with lungs collapsed by the tremendous pressures. People with stab wounds from flying debris. People with bones broken when they had been hurled through the air by the hurricane force winds or trapped under collapsing buildings.

2.3 Effects of a global nuclear war on Massachusetts

Even if Massachusetts itself was not targeted, a nuclear attack on the United States would have devastating consequences on the Commonwealth. An full-scale nuclear war between Russia and the US would almost certainly mean Russia launching 2000 warheads that are being kept night and day on hair trigger alert. Even if we were able to build a fantastically effective missile defense that could bring down 85% of these weapons, the remaining warheads would visit the destruction just described in relation to Boston on every major metropolitan area in the US.

100 million people would die in the first half hour and tens of millions would be fatally injured. Huge swaths of the country would be blanketed by radioactive fallout and the industrial, transportation and communication infrastructure which we all depend on would be destroyed. Those of us who survived the initial attack would inhabit a nightmare landscape compared to which the stone age would seem a paradise. And most of us would die in the succeeding months from radiation sickness, epidemic disease, exposure and starvation.

Climate effects of a nuclear conflict

In addition to the direct effects of nuclear war we must also consider the immense climate disruption caused by the large-scale use of nuclear weapons. When a nuclear attack causes a city to burn, enormous amounts of soot are lofted into the upper atmosphere. If all of the deployed weapons in the US and Russian arsenals were used against urban targets some 150 Tg (tera-grams or million tons) of soot would be generated, blocking out the sun and dropping temperatures across the planet an average of 18^0 F. In the interior regions of North America and Eurasia temperatures would drop 45 to 54^0 F. We have not seen temperatures this cold since the last Ice Age. In the temperate zones of the Northern Hemisphere there would be 3 years without a day free of frost—the temperature would drop below freezing every single day. Under those conditions the ecosystems which have evolved since the last Ice Age would collapse, food production would plummet and the vast majority of the human race would starve.

Limited nuclear war

Even a much more limited nuclear war, **for instance between India and Pakistan,** would cause catastrophic global climate disruption. As few as 250 100 kiloton bombs could generate 37 Tg. of soot, dropping temperatures 10^0 F and triggering massive crop failures and catastrophic world wide famine that would put hundreds of millions, possibly billions of people at risk.

So long as nuclear weapons exist, the possibility that they will be used exists. And the *probability* that they will be used is actually increasing with every day that passes. It therefore follows that the only way to reduce and eventually eliminate the risk that these weapons will sooner or later be used is to reduce and eventually eliminate the weapons themselves.

And since any use of nuclear weapons anywhere in the world has a potential impact on the citizens of Massachusetts, it is not enough to consider only the potential impact of a nuclear attack on Massachusetts itself. A Citizcns' Commission is needed to look at the potential impact on the people of Massachusetts of nuclear weapons used *anywhere in the world*.

A real and present danger

It is important that we understand that this is not just some theoretical scenario but a danger which is real and present. On January 25 1995 the US launched a weather rocket from Norway to study the northern lights. In accordance with international arrangements we notified the Russians in advance of this launch, but someone in Moscow failed to pass the notice on. The Russian military was not expecting the launch. Since the Russians know that the US always keeps nuclear missile submarines in the North Atlantic off the coast of Norway, when the launch was picked up on radar the they interpreted it as a possible missile attack. For the only time that we know of, the special briefcase that the Russian President carries at all times to order the response to nuclear attack was activated. President Yeltsin, a man with serious health and alcohol abuse problems, was given a series of options that ranged from doing nothing to launching a full scale attack on the US. And he was given about five minutes to decide. Russian and US nuclear forces are guided by the doctrine of launch on warning. If either side believes that they are under attack they are supposed to counter attack immediately and not wait for the other side's missiles to actually explode. We do not know exactly what happened in the Kremlin that morning. But Yeltsin, or someone acting for him, decided to wait, and in a few minutes it was clear that the blips on the radar screen were not moving towards Russia.

January 25, 1995 was an ordinary day, in a safer time than our own. There were no great crises anywhere in the world. And yet we came within five minutes of destroying ourselves. We simply can not count on being that lucky the next time.

2.4 Current Nuclear Spending

Nuclear weapons do not only kill and destroy by being dropped on a city. People die when resources needed for their health and survival are diverted to the production and maintenance of nuclear weapons. Communities and vital infrastructure are destroyed when resources needed to maintain them are instead used to fund nuclear weapons. These are the opportunity costs of nuclear weapons, and Massachusetts is already paying that price right now.

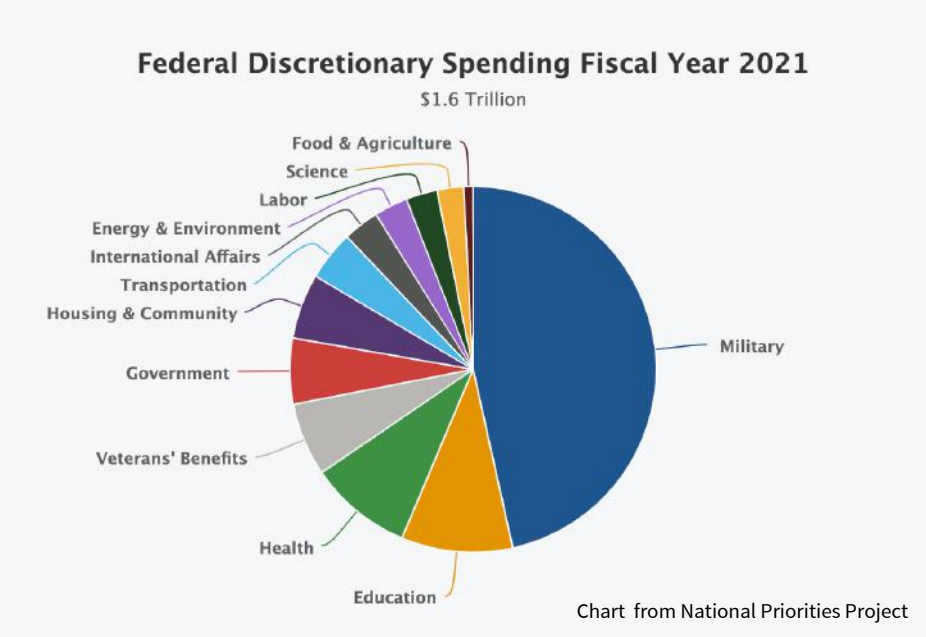


Chart from National Priorities Project

The pie chart above shows the breakdown of **United States** federal discretionary spending for FY2021. **Military spending made up 47%** of total spending, or **$752 billion**. That is **more than the next seven highest spending areas combined** - Education, Health, Veterans' Benefits, Government, Housing & Community, Transportation, and International Affairs.

According to fiscal year 2021 budget requests, the U.S. Department of Defense plans to spend a total of $634 billion between 2021 and 2030 on nuclear forces alone. However, this 10-year-total, calculated by the Congressional Budget Office (CBO) in 2021, is 28% higher than the CBO's previous most recent estimate of 10-year nuclear costs, calculated in 2019 at $494 billion for the 2019-2028 period. This means that it is very possible that the actual nuclear forces spending for the 2021-2030 period will exceed the projected $634 billion.

One major contributing factor to these costs is that current U.S. nuclear forces are approaching the end of their service life. This means that essentially all current nuclear weapons and delivery systems will need to either be refurbished or replaced entirely in order for the U.S. to maintain its current nuclear capabilities. This would of course divert enormous amounts of public resources away from the healthcare, education, housing, infrastructure, and other services that Americans rely on, many of which are already under-funded.

The U.S. plans to spend over $114,000 *per minute* on nuclear weapons over the next ten years

How much of this money will be coming from Massachusetts? And how much of it will be coming straight from your tax dollars? Finding answers to questions like these, and making those answers available to the public, are exactly the kinds of things that this proposed commission would do. The people of Massachusetts deserve to know where their hard-earned money is going, and they have the right to decide for themselves whether or not it is being used in a way that benefits them.

In the second year of a pandemic that has ravaged the world and has claimed, at the time of writing, more than 20,000 lives of the people of Massachusetts, almost $207 million of the City of Boston's annual budget was spent on nuclear weapons. If this is what Boston spent, what did the entire state of Massachusetts spend?

In 2021, the City of Boston alone spent an estimated $206,935,549 on nuclear weapons

Sources:
https://www.cbo.gov/publication/57240
https://www.psr-la.org/nuclear-costs

What could Massachusetts do with that money instead?

What is something that the state could provide that would improve the lives of **the people of Massachusetts**? What is it that the **people** are asking for? Whether it is affordable housing, access to quality healthcare, fairer wages, free public education, or something else, there are numerous ways in which federal and tax money that should be spent on improving the lives of Massachusetts citizens instead being spent on nuclear weapons. Here are just a few examples of the things that money could be used on instead.

Education

- Provide tuition-free public higher education
- Provide the modern infrastructure necessary for all students to access quality education
- Provide universal pre-kindergarten access

Healthcare

- Provide affordable, accessible, high quality healthcare for all
- Fund all COVID-19 prevention and recovery needs, both immediate and long-term

Infrastructure and Transportation

- Expand the MBTA's reach
- Reduce or even eliminate public transport fares
- Establish a regional bus transit system
- Fund affordable housing for all

Climate

- Develop and implement viable clean energy plans to transition MA to clean energy, heating and transportation
- Create more clean energy jobs
- Support sustainable development and infrastructure

3. How is MA involved in the nuclear weapons business?

We have looked so far at how nuclear weapons impact the citizens of Massachusetts and the catastrophic implications of these weapons ever being used. But how is Massachusetts actually implicated in this whole business?

The Treaty on the Prohibition of Nuclear Weapons does not just prohibit the *use* of nuclear weapons. It prohibits the development, testing, production, stockpiling, maintenance, transfer, and deployment of these weapons. It also prohibits anyone from assisting in any way with any of those activities. How does that impact the Commonwealth of Massachusetts and the people and communities who are involved in those activities?

Even if the United States does not any time soon sign or ratify this treaty, the fact that more and more other countries are doing so has a direct impact on the United States and on the state of Massachusetts.

It is now the law in Ireland, for instance, that anyone in Ireland found violating the terms of this treaty can be given up to a life sentence in prison. Switzerland, which is not even a party to this treaty yet, has already banned all public investments in any companies involved in the development, production or maintenance of nuclear weapons.

To understand how this treaty might affect Massachusetts in the short and medium-term, we must first understand how Massachusetts is implicated in the nuclear weapons business. We know from the list of potential targets in Massachusetts that there are key nuclear weapons facilities in this state, including Draper Labs in Cambridge and Hanscom Air Force Base in Bedford.

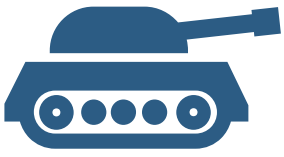
What other facilities in Massachusetts are currently in violation of the Treaty on the Prohibition of Nuclear Weapons? What nuclear weapons related research is being conducted at colleges and universities in Massachusetts? What companies are involved in this work?

And crucially, what public and private institutions are investing in these companies? There are 26 major nuclear weapons contractors in the world. At least 13 of these have offices and/or production facilities in Massachusetts. But which pension funds, trust funds, endowments, banks and other financial institutions have investments in these companies, and to what extent?

What are the fiduciary responsibilities for state pension funds and other public funds invested in companies that face increasing stigma and financial risk globally for their involvement in a prohibited industry? These are crucial questions that need answering if Massachusetts is to take more seriously its fiduciary responsibilities as well as its responsibilities for the safety and security of its citizens.

1. Companies

2. University Research



3. Military Installations

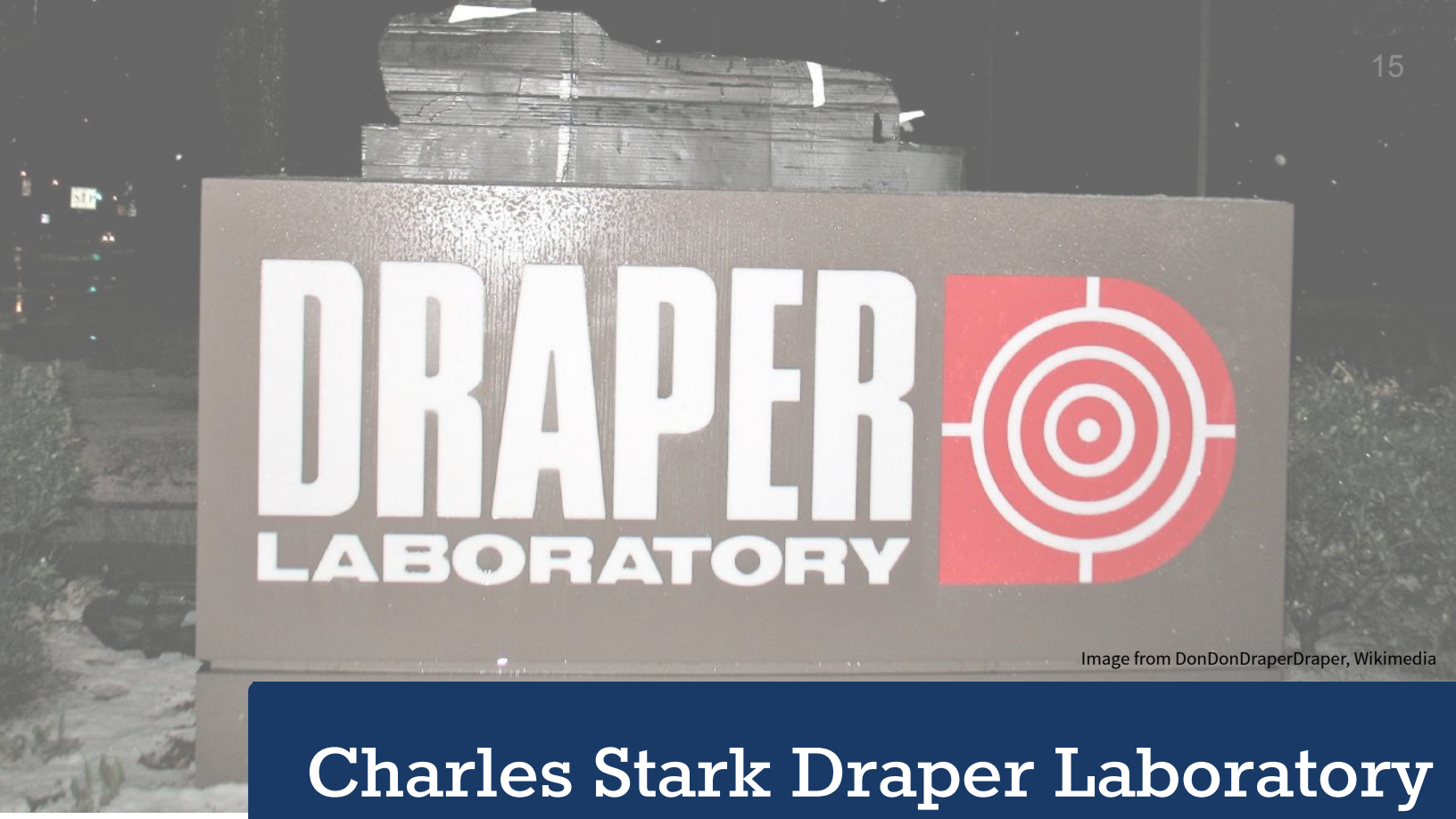


Image from DonDonDraperDraper, Wikimedia

Charles Stark Draper Laboratory

Cambridge, MA

- Designing and developing inertial guidance systems for strategic missile applications since the 1950s
- Primary contractor for the Trident nuclear intercontinental ballistic missiles carried on all nuclear missile submarines in the United States and the United Kingdom
- Prime contractor for the Trident Life Extension (LE) boost guidance through 2040
- According to the U.S. Department of Defense, the lab "posses the unique knowledge of the total Trident Guidance system including its design and use on the Trident II weapon system"
- At the time of writing, the lab has at least three outstanding contracts in relation to the Trident II (D5) nuclear armed missile, and several outstanding contracts with the U.S. for Trident-related components

Sources:
https://www.dontbankonthebomb.com/draper/
https://www.nuclearban.us/charles-stark-draper-lab/

Image from Aaron Hostutler, Wikimedia

Massachusetts Institute of Technology (MIT) Lincoln Laboratory

Lexington, MA

- Government-owned, funded by the United States Department of Defense
- Chartered for for research and development to apply advanced technology to issues of national security
- In 2019 received a contract modification increasing its multi-year contract to a total value of $9.6 billion
- Involved in work on ballistic missile defense systems and SATCOM systems for U.S. nuclear weapon forces
- Produces microelectronics necessary for maintaining nuclear stockpile
- Maintains staff presence at the Reagan Test Site in the Marshall Islands, a facility responsible for the tests of both ballistic missiles and missile defense systems

Source: https://www.icanw.org/schools_of_mass_destruction

Image from Nick Allen, Wikimedia

Hanscom Air Force Base

Bedford, MA

- Home to the Air Force Program Executive Office for Nuclear Command, Control and Communications (NC3)

- Executes a portfolio of 17 programs valued at $14B that provide survivable and endurable communications for the nuclear enterprise

- Responsible for integrating over 60 individual nuclear command and control communications systems that underpin and enable nuclear deterrent operations

Source: https://www.hanscom.af.mil/About-Us/Fact-Sheets/Display/Article/379461/hanscom-air-force-base/

Image from the United States Navy, Wikimedia

General Dynamics Mission Systems

Pittsfield MA

· Provides a range of engineering, development, and production activities to support to United States and United Kingdom Trident II Strategic Weapons Systems

· Involved in the guidance systems of the Trident II (D5) nuclear missiles of the US Navy

· Building new Columbia class nuclear armed submarines for the US Navy under a $16 billion 14-year contract through the year 2031

· In 2021, General Dynamics received a $104.2 million contract extension with the US Navy to develop, make and install fire-control systems for the Columbia/Dreadnought class of ballistic missile submarines

· Subsidiary, General Dynamics Mission Systems, is headquartered in Pittsfield, MA

Sources:
https://www.dontbankonthebomb.com/draper/
https://www.nuclearban.us/general-dynamics/
With thanks to Richard Krushnic

Image from David Monniaux, Wikimedia

Raytheon Technologies

Waltham MA

- Involved in the Minuteman III missile system for the US nuclear arsenal

- Involved in logistic support, installation and maintenance of Minuteman MEECN (Minimum Essential Emergency Communication Network) program and the MEECN program upgrade

- Is the prime contractor for US Air Force Long Range Standoff (LRSO) weapons system. In July 2021 Raytheon Technologies received a $2 billion, 6-year contract for continued development and manufacturing of this weapons system.

Sources:
https://www.dontbankonthebomb.com/draper/
https://www.nuclearban.us/general-dynamics/
With thanks to Richard Krushnic

4. What can MA do to respond?

There are many steps that the Commonwealth of Massachusetts can take to address the existential threat of nuclear weapons to its citizens. It would be the job of a Citizens' Commission to look into these possible steps and to make recommendations to the State Legislature.

Here we list just a few examples of steps that have already been taken by other states, and by cities and towns within MA.

1 Pass Resolutions

2 Prohibit Nuclear Weapons Activities Within the State

3 Divest from Nuclear Weapons Companies

4 Disqualification of Bidders

5 Economic Conversion

4.1 How other states are responding

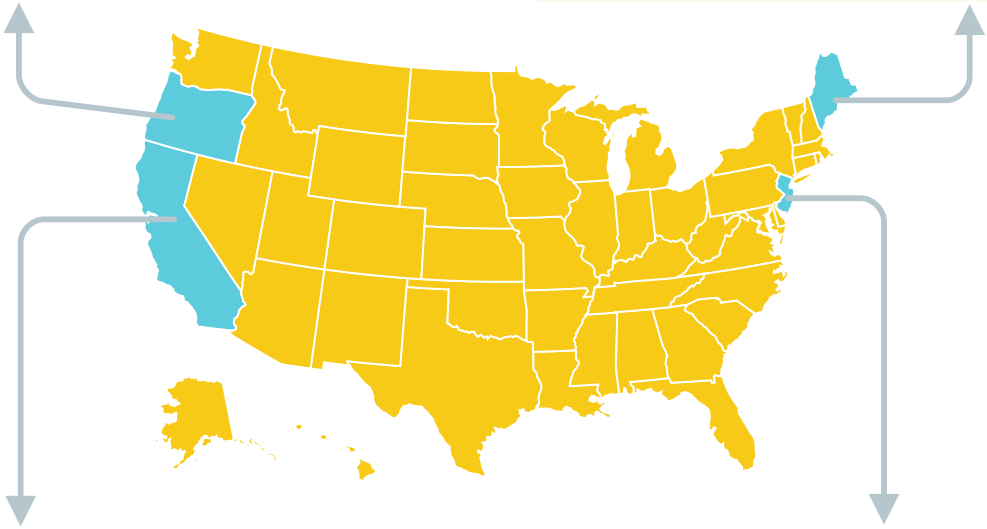
Back from the Brink is a US-based, grassroots organization leading the way in helping people across the country to organize around getting their towns, cities, counties, and states to adopt resolutions supporting its policy solutions for a world free of nuclear weapons. Below are the four states that have, as of the time of writing, have adopted Back from the Brink resolutions on the state level. Massachusetts has an opportunity now to do the same. See p. 27 for a list of the towns and cities in Massachusetts that have already passed similar resolutions.

Oregon

In June of 2019, Oregon's House of Representatives voted to approve Senate Joint Memorial 5 (SJM5), which urges Congress to lead a global effort to reduce the threat of nuclear war, making it the second state (after California) to pass such legislation in both chambers.

Maine Senate

In April of 2019, the Maine state senate approved the resolution Memorializing the President of the United States and the United States Congress to Lead a Global Effort to Prevent Nuclear War.



California

In August of 2018, the California state senate approved the resolution Assembly Joint Resolution 33 (AJR 33) calling for support for the Treaty on the Prohibition of Nuclear Weapons, make nuclear disarmament the centerpiece of our national security policy, and spearhead a global effort to prevent nuclear war.

New Jersey General Assembly

In May of 2019, the New Jersey General Assembly approved Assembly Resolution 230 urging the federal government to pursue a comprehensive range of measures to reduce the danger of nuclear war, and to join the Treaty on the Prohibition of Nuclear Weapons.

Source: https://preventnuclearwar.org/municipalities-and-states/

4.2 Pass a resolution

One way in which Massachusetts can respond to the threat of nuclear weapons is to join the states of California, Oregon, the New Jersey General Assembly, and the Maine Senate in passing a resolution on the prohibition of nuclear weapons. One such resolution that was submitted in January 2019 is Resolution S.2155 Relative to the Prohibition of Nuclear Weapons. This bill comes from Back from the Brink (see previous page), and puts pressure on U.S. Congress to de-alert nuclear forces, adopt a no-first-use policy, curb presidential first use, reverse nuclear weapons modernization, and engage in diplomacy toward nuclear disarmament. While this particular bill has been sent to study, there are plans to re-introduce it in a future session.

Treaty on the Prohibition of Nuclear Weapons (TPNW)

The Treaty on the Prohibition of Nuclear Weapons (TPNW) entered into force on January 21st, 2022, and is the first legally binding international agreement to prohibit nuclear weapons.

For nations that are parties to the treaty, it prohibits the development, testing, production, stockpiling, transfer, use, and threat of use of nuclear weapons. While at the time of writing no nuclear powers have yet signed or ratified the treaty, it provides an important international legal precedent for the prohibition of nuclear weapons.

In the U.S. and around the world, however, hundreds of towns, cities, and even states have passed resolutions in support of the TPNW in an effort to show their elected officials that the people support the prohibition of nuclear weapons.

Resolution S.2155 Back from the Brink

WHEREAS, since the height of the Cold War, the United States and Russia have dismantled more than 50,000 nuclear warheads, but 14,500 of these weapons still exist and pose an intolerable risk to human survival; and
WHEREAS, ninety-five percent of these weapons are in the hands of the United States and Russia and the rest are held by seven other countries: China, France, Israel, India, North Korea, Pakistan, and the United Kingdom; and
WHEREAS, the use of even a tiny fraction of these weapons could cause worldwide climate disruption and global famine; for example, as few as 100 Hiroshima-sized bombs, small by modern standards, if used to attack urban industrial targets would put at least five million tons of soot into the upper atmosphere and cause climate disruption across the planet, cutting food production and putting two billion people at risk of starvation; and
WHEREAS, a large-scale nuclear war would kill hundreds of millions of people directly and cause unimaginable environmental damage and catastrophic climate disruption by dropping temperatures across the planet to levels not seen since the last ice age; under these conditions the vast majority of the human race would starve and it is possible we would become extinct as a species; and
WHEREAS, despite assurances that these arsenals exist solely to guarantee that they are never used, there have been many occasions when nuclear armed states have prepared to use these weapons, and war has been averted only at the last minute; and
WHEREAS, nuclear weapons do not possess some magical quality that prevents their use; and
WHEREAS, former Defense Secretary Robert McNamara said, speaking about the Cuban Missile Crisis, "It was luck that prevented nuclear war," yet our nuclear policy cannot be the hope that luck will continue; and
WHEREAS, the effects of climate change will place increased stress on communities around the world and intensify the likelihood of conflict, causing the danger of nuclear war will grow; and
WHEREAS, the planned expenditure of more than $1 trillion to enhance our nuclear arsenal will not only increase the risk of nuclear disaster but fuel a global arms race and divert crucial resources needed to assure the well-being of the American people and people all over the world; and
WHEREAS, there is an alternative to this march toward nuclear war: in July 2017, 122 nations called for the elimination of all nuclear weapons by adopting the Treaty on the Prohibition of Nuclear Weapons; now,
THEREFORE, BE IT RESOLVED that the General Court calls on our federal leaders to embrace the Treaty on the Prohibition of Nuclear Weapons and make nuclear disarmament the centerpiece of our national security policy; and be it further
RESOLVED, that the Legislature calls upon our federal leaders and our nation to spearhead a global effort to prevent nuclear war by renouncing the option of using nuclear weapons first, ending the President's sole, unchecked authority to launch a nuclear attack, taking U.S. nuclear weapons off hair-trigger alert, canceling the plan to replace its entire arsenal with enhanced weapons, and actively pursuing a verifiable agreement among nuclear-armed states to eliminate their nuclear arsenals; and be it further
RESOLVED, that the clerk of the senate transmit copies of this resolution to the President and Vice President of the United States, the Speaker and Minority Leader of the United States House of Representatives, the Majority and Minority Leaders of the United States Senate, and to each Senator and Representative from the commonwealth in the Congress of the United States, and to the governor of the commonwealth.

Sources:
https://preventnuclearwar.org/
https://www.un.org/disarmament/wmd/nuclear/tpnw/

4.3 Prohibit nuclear weapons activities

During the 1980s, many towns and cities across Massachusetts and throughout the United States and the world passed resolutions - but also legally-binding ordinances, by-laws and statutes - declaring themselves "nuclear-free zones" and prohibiting nuclear weapons related activities within their boundaries.

The town of Amherst, MA, passed such an ordinance at their town meeting in 1984, but it was "disapproved" by the MA Attorney General as going beyond the remit of the town's authority. Several other such ordinances, however, were left on the statute books and remain to this day as examples of what local communities in MA have done to try to address the threat of nuclear weapons. The town of Provincetown, MA, is such an example (see below).

Town of Provincetown

Office of the Town Clerk

Town Hall, 260 Commercial Street
Provincetown, Massachusetts 02657
Fax: 508-487-9560
Telephone: 508-487-7013

Article Number: 76

Date: March 12, 1984

Headline: By-Law Makes Provincetown a Nuclear-Free Zone

Ms. Rushmore moved: Whereas: Nuclear weapons threaten the survival of all humanity;
Whereas: The citizens of Provincetown at the April 1982 Town Meeting passed an article calling for a bilateral nuclear weapons freeze:
To see if the Town will declare itself a Nuclear Free Community by voting to enact the following By-Law:
We, the residents of Provincetown, as a step toward a nuclear-free Cape Cod, do hereby declare the Town of Provincetown to be a nuclear-free community, except as prohibited by specific act or acts of Congress.
Under this By-Law, no person, corporation or other nongovernmental agency within this town shall design, test, produce, deploy or store nuclear weapons. Research supporting the development, deployment, transport and delivery systems of nuclear weapons shall also be prohibited.
Definitions: Nuclear Weapon is to be defined to be any device in which the explosion results from the energy released by reactions involving atomic nuclei, either fusion, fission, or both, and includes the means of transporting, guiding, propelling or triggering the weapon, if and only if, such means is destroyed or rendered useless in the normal propelling, triggering or detonation of the weapons.
A component of a nuclear weapon is defined to be any device, of radioactive or nonradioactive material, the primary function of which is to contribute to the operation of a nuclear weapon.
Exclusions: Nothing in this article shall be construed to prohibit or regulate the following:
(1) Any activity not specifically described;
(2) The research and application of nuclear medicine;
(3) Use of fissionable materials, for basic research, smoke detectors, light-emitting watches and clocks, and other applications the primary purpose of which is NOT to work toward the development of nuclear weapons;
(4) AN research NOT involved in the design, manufacture of deployment of nuclear weapons or the transportation and delivery systems thereof.
Severability: If any section, subsection, paragraph, sentence or word of this ByLaw shall be held unconstitutional either on its face or as applied, the unconstitutionality of the Section, subsection, paragraph, sentence or word of the application thereof shall not affect other sections, subsections, paragraphs, sentences and words of this By-Law and the applications thereof, and to this end the sections, subsections, paragraphs, sentences and words of this By-Law are intended to be severable. So voted

4.4 Divest from nuclear weapons

In April, 2016, the City Council of Cambridge, MA, voted unanimously to divest nearly $1 billion of city pension funds from companies involved in nuclear weapons work. This was later blocked by the state pension board as being outside the authority of the City of Cambridge, so campaigners took the fight for divestment to the State House, where bills have been submitted for the state to divest its pension funds from nuclear weapons (see below).

Divestment from nuclear weapons, like divestment from fossil fuels, has become a major campaigning tool worldwide to put pressure on the companies that are directly profiting from these businesses - and using their profits to lobby Congress and ensure their lucrative businesses continue.

More than 100 financial institutions globally divested from the nuclear weapons industry in 2021. And the most recent divestment decision in the US has come from the City Council of New York, which voted in January 2022 to divest almost half a billion dollars from the nuclear weapons industry.

TEXT OF ORDERS – Cambridge City Council
Order-1 Mar 21, 2016 MAYOR SIMMONS

WHEREAS: Nations across the globe still maintain over 15,000 nuclear weapons, some of which are hundreds of times more powerful than those that obliterated Hiroshima and Nagasaki, and detonation of even a small fraction of these weapons could create a decade-long nuclear winter that could destroy most of the Earth's population; and

WHEREAS: The United States has plans to invest roughly one trillion dollars over the coming decades to upgrade its nuclear arsenal, which many experts believe actually increases the risk of nuclear proliferation, nuclear terrorism, and accidental nuclear war; and

WHEREAS: In a period where federal funds are desperately needed in communities like Cambridge in order to build affordable housing, improve public transit, and develop sustainable energy sources, our tax dollars are being diverted to and wasted on nuclear weapons upgrades that would make us less safe; and

WHEREAS: Investing in companies producing nuclear weapons implicitly supports this misdirection of our tax dollars; and

WHEREAS: Socially responsible mutual funds and other investment vehicles are available that accurately match the current asset mix of the City of Cambridge Retirement Fund while excluding nuclear weapons producers; and

WHEREAS: The City of Cambridge is already on record in supporting the abolition of nuclear weapons, opposing the development of new nuclear weapons, and calling on President Obama to lead the nuclear disarmament effort; now therefore be it

ORDERED: That the City Council go on record opposing investing funds from the Cambridge Retirement System in any entities that are involved in or support the production or upgrading of nuclear weapons systems; and be it further

ORDERED: That the City Manager be and hereby is requested to work with the Cambridge Peace Commissioner and other appropriate City staff to organize an informational forum on possibilities for Cambridge individuals and institutions to divest their pension funds from investments in nuclear weapons contractors; and be it further

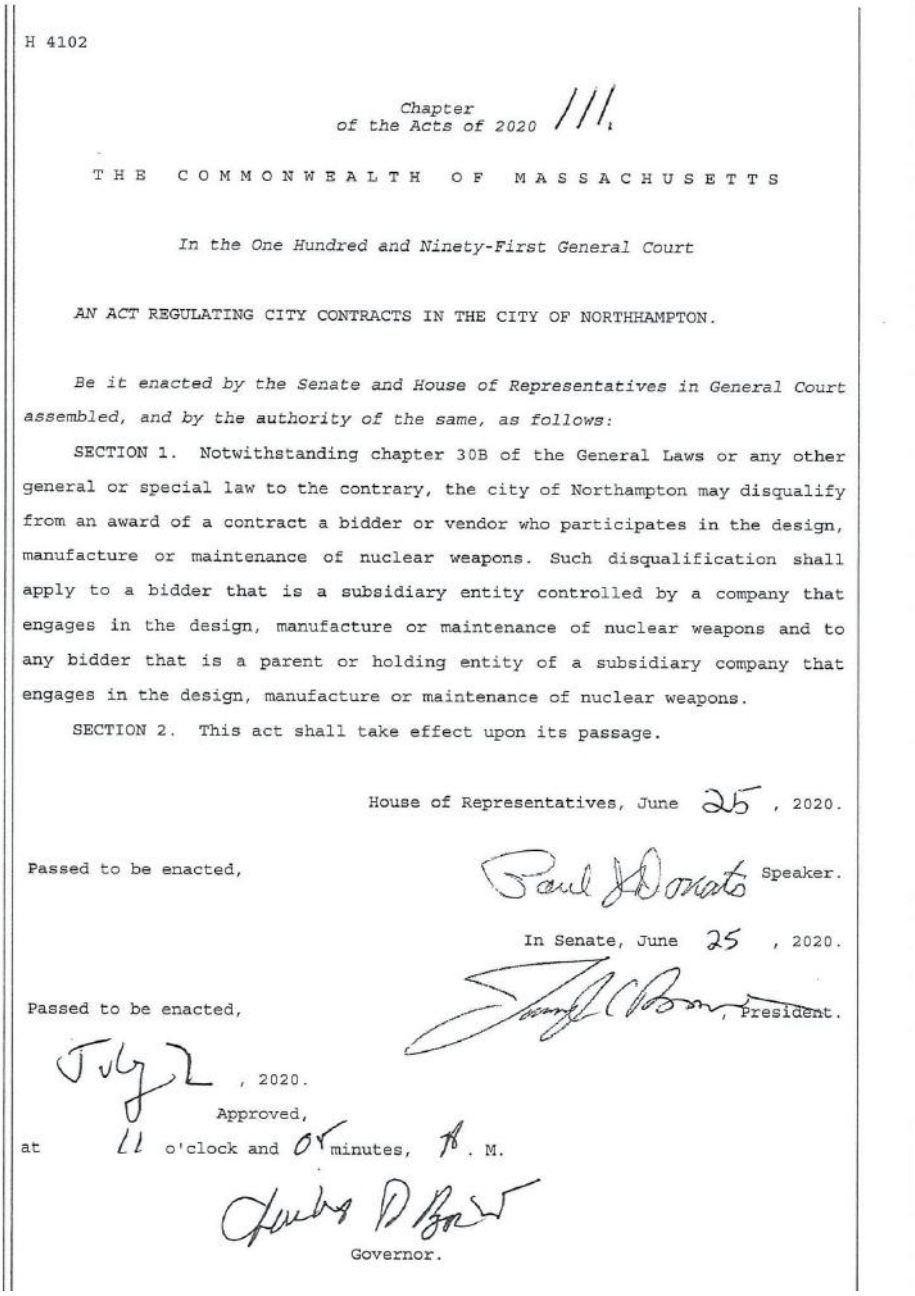
ORDERED: That the City Manager be and hereby is requested to work with the Board of the Cambridge Retirement System and other appropriate City staff to ensure divestment from all companies involved in production of nuclear weapons systems, and in entities investing in such companies, and the City Manager is requested to report back to the City Council about the implementation of said divestment in a timely manner.

Source: https://www.dontbankonthebomb.com/perilous-profiteering/

4.5 Disqualification of bidders

The Treaty on the Prohibition of Nuclear Weapons prohibits any and all "assistance" to the continued development and production of nuclear weapons. Divestment is one way to stop assisting the companies involved in this business. Another is to refuse to do business with them, including the awarding of city or state contracts to such companies. Cities like Oakland, California, have had regulations in place for over 35 years which prohibit city contracts with companies involved in the nuclear weapons business.

Northampton, MA, filed a "home rule petition" with the state house in 2018 to be allowed to bypass strict state rules governing the awarding of city contracts. This petition was signed into law by Governor Baker on July 2, 2020, (see below) authorizing Northampton to disqualify bidders to city contracts if they are involved in the nuclear weapons business. This now sets a precedent for other cities and towns in Massachusetts to follow the Northampton example.



H 4102

Chapter 111
of the Acts of 2020

THE COMMONWEALTH OF MASSACHUSETTS

In the One Hundred and Ninety-First General Court

AN ACT REGULATING CITY CONTRACTS IN THE CITY OF NORTHHAMPTON.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Notwithstanding chapter 30B of the General Laws or any other general or special law to the contrary, the city of Northampton may disqualify from an award of a contract a bidder or vendor who participates in the design, manufacture or maintenance of nuclear weapons. Such disqualification shall apply to a bidder that is a subsidiary entity controlled by a company that engages in the design, manufacture or maintenance of nuclear weapons and to any bidder that is a parent or holding entity of a subsidiary company that engages in the design, manufacture or maintenance of nuclear weapons.

SECTION 2. This act shall take effect upon its passage.

House of Representatives, June 25, 2020.

Passed to be enacted, Paul J. Donato Speaker.

In Senate, June 25, 2020.

Passed to be enacted, President.

July 2, 2020.

Approved,

at 11 o'clock and 05 minutes, A. M.

Governor.

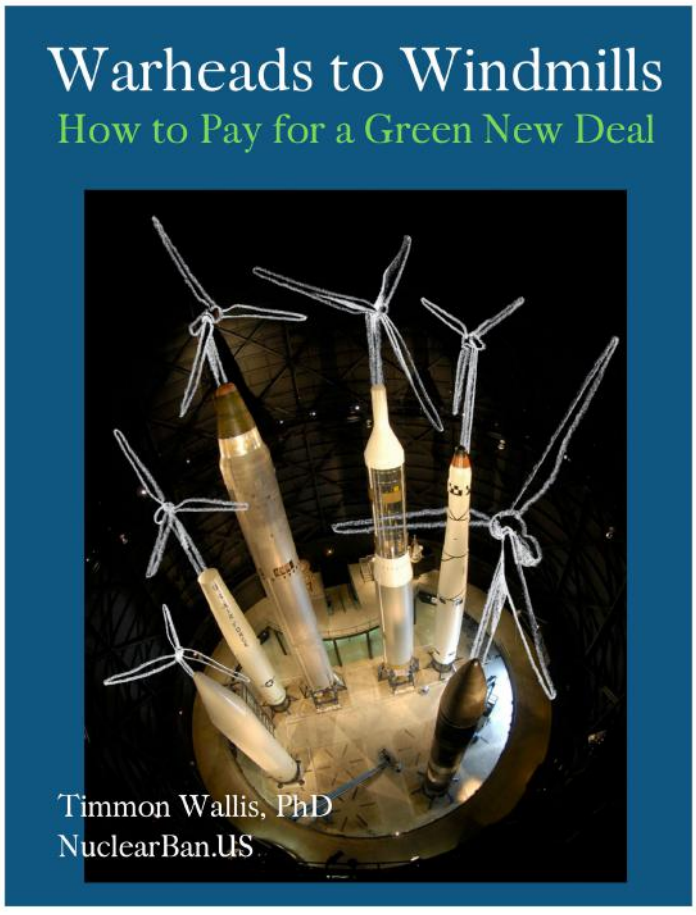
4.6 Economic conversion

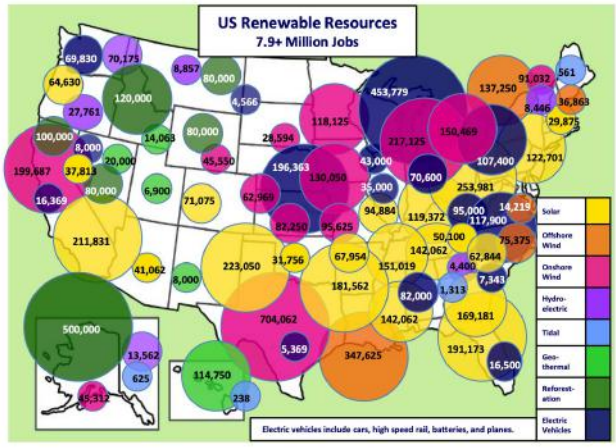
Because Massachusetts is involved in the nuclear weapons business, moving away from this involvement will require responsible action to be taken to do so in such a way that does not compromise the livelihoods of Massachusetts citizens who may rely on the jobs that these companies provide. Nuclear weapons companies employ thousands of people and bring millions of dollars of federal contracts to the state. But those dollars and those jobs are urgently needed to address climate change and other pressing social needs. The Citizens' Commission will look into how this transition may take place.

With the entry into force of the Treaty on the Prohibition of Nuclear Weapons and growing global support for it, sooner or later, jobs and income from the nuclear weapons industry may no longer be viable options for people in Massachusetts. Given this context, the Citizens' Commission will have an important job of ensuring economic conversion that is advantageous to the state before such a situation arises.

Massachusetts , like many other states, has experience of closing military bases and factories that no longer serve their purpose and devising economic conversion plans to find alternative employment, retrain workers, and support local infrastructure. When, sooner or later, nuclear weapons become obsolete, similar plans will need to be made.

Warheads to Windmills: How to Pay for a Green New Deal explores a national plan for converting jobs in the nuclear weapons industry directly to jobs that address the climate crisis. The report identifies 2,600 civilian jobs in Massachusetts that are directly connected to the nuclear weapons business and maps those to 29,875 jobs in the state that are needed for building and installing solar equipment. This is one example of the way in which skills used for nuclear weapons jobs can be transferred to jobs that are needed to address the climate crisis and other pressing social needs.





4.7 Cities & towns in MA want the state to take action

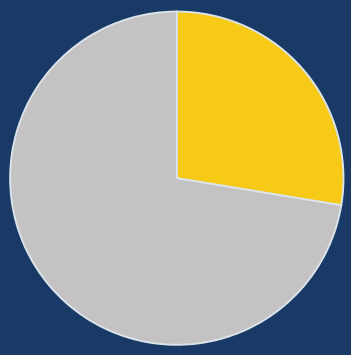
Across Massachusetts, the largest cities as well as the smallest towns have spoken out to call for action on the threat posed to their communities by the threat of nuclear weapons. The cities of Boston, Worcester and Springfield have all now passed city council resolutions calling for the US government to take the steps necessary to pull us “back from the brink” of nuclear war. Smaller towns and medium-sized cities all across the state have not only called on the federal government to take action, but **have also specifically called on the State House to pass the bill calling for a Citizens’ Commission** to investigate the threat posed by nuclear weapons to the citizens of this state.

And in at least seven town meetings in Massachusetts, entire communities have come out to debate the issue of nuclear weapons and have voted in favor of taking action, not just at the state and federal level, but even at the local level. Communities which banned their town from having anything to do with nuclear weapons during the Cold War have been renewing that commitment for the 21st century.

This includes commitments to divest city funds from companies involved in the development, production or maintenance of nuclear weapons, as well as refusals to award city contracts with those companies. Towns and cities in Massachusetts, like Northampton, Cambridge and Easthampton, have taken the lead nationally in calling for divestment from nuclear weapons as well as from fossil fuels.

Amherst
Belchertown
Boston
Brookline
Cambridge
Chesterfield
Conway
Cummington
Easthampton
Goshen
Leverett
Montague
Needham
Newton
Northampton
Plainfield
Shutesbury
Somerville
Springfield
Wendell
Williamsburg
Windsor
Worcester

Towns in MA make up more than a quarter of the total of towns in the U.S. that have passed nuclear weapons resolutions



Massachusetts Towns 27.6%

Rest of the United States 72.4%

Image: Romain Dancre, Unsplash

Nuclear Weapons Commission
Resolve to Establish a Citizens Commission

What does the bill do? This bill would establish a Citizens Commission to explore how Massachusetts as a state can address the existential threat posed by nuclear weapons to the citizens of Massachusetts. The Commission would report back to the State Legislature with recommendations for further action.

What is the threat to MA from nuclear weapons? Hanscom Air Force Base near Lexington is a nuclear command and control center. Draper Labs in Cambridge designs the guidance systems for US nuclear missiles. These are key targets for a nuclear attack on the United States, as are Boston as a major city and port, Logan airport and many other facilities in Massachusetts. Even if Massachusetts was not directly attacked by nuclear weapons, a nuclear war involving the United States would have a catastrophic impact on every single person in the state. And even if the United States was not involved, a nuclear war anywhere in the world could potentially affect the global climate, food supplies and basic infrastructure across the whole planet.

Why is this a state issue? Nuclear weapons, like climate change, pose an existential threat to the citizens of this state, along with everyone else on the planet. States like Massachusetts can step up to the plate and show some leadership by taking what steps a state *can* take in these circumstances. It is also a responsible and prudent step for any state to be looking into how an international treaty might affect jobs, communities and the economy of the state, even if the federal government has not yet signed it.

What is the UN Treaty? The 2017 UN Treaty on the Prohibition of Nuclear Weapons was adopted by 122 countries at the United Nations in 2017. It outlaws everything to do with nuclear weapons, and entered into force on January 22, 2021, after 50 countries had ratified it. As of April 1, 2022, 60 countries have so far ratified the Treaty.

What is the US position on this Treaty? The federal government boycotted the Treaty negotiations and has declared it has no intention of signing the Treaty. However, the US signed and ratified the Non-Proliferation Treaty in 1970, which commits the US to working with the other nuclear armed nations “in good faith” and “at an early date” to eliminate its nuclear weapons.

What would the Commission do? The Commission would meet to conduct research, gather evidence and testimony, and produce a report on the implications and effects of treaty alignment by the state on jobs and the economy, including state investments and contracts. The Commission’s report would include a clear recommendation to state legislators on how best to address the threat to Massachusetts.

How would the Commission be appointed? The Commission would consist of 11 Massachusetts residents. Massachusetts Peace Action, as the state-wide network of citizens concerned with this issue, would nominate 10 people for the Commission, from which the Governor would select six. Additionally, the Governor, Secretary of the Commonwealth, Attorney General, Speaker of the House, and Senate President would each nominate one person.

Who would be on the Commission? The appointees to the Commission would have a range of geographical, political, and demographic backgrounds. Anyone could publicly apply, but the bill prohibits anyone involved, or previously involved, in the production or maintenance of nuclear weapons from being appointed to the Commission.

How would other Massachusetts residents be involved? The Commission will hold public hearings at five different locations across the state to solicit expert testimony and public comments. The Commission’s results would be publicly available. Massachusetts residents would be able to offer their views and ideas to the Commission as they relate to nuclear weapons and the conversion of jobs and industries to meet the challenge of climate change and other pressing social needs.

What are the financial implications of this Resolve? This Resolve costs the Commonwealth no money and does not commit the Commonwealth to taking any specific action, apart from appointing a group of people to engage in more discussion, study and research before reporting back to the State House with a recommendation.

How is Massachusetts connected with nuclear weapons? Apart from Hanscom Air Force Base, a number of companies operating in Massachusetts, including Raytheon, Textron,

General Dynamics and Honeywell, are directly involved in producing and maintaining nuclear weapons in other parts of the country. State pension funds and other state funds are invested in these and other nuclear weapons companies. And state contracts are awarded to these companies.

What are possible implications of aligning MA with the Treaty? Nuclear weapons companies employ thousands of people and bring millions of dollars of federal contracts into the state. But those dollars and those jobs are urgently needed to address climate change and other pressing social needs. The Citizens Commission will look at how such a transition might take place, given that sooner or later, jobs and income from the nuclear weapons business may no longer be available.

What is the timescale for all this? The Bill calls for the Citizens Commission to complete its report and submit it to the State Legislature no later than July 31, 2024. This assumes the Bill would be passed into law by December 31, 2022 and that the Commission would begin its work no later than July 1, 2023. Hearings would take place in the fall of 2023, and the report drafted in the spring of 2024. This is a realistic timeline, given the urgency of this issue.

Why should this Bill be given priority? These are important and also controversial issues. A number of bills have already been presented to the State House and "sent to study." The time has come for more discussion, dialogue, study and research in order to arrive at the best decision for the people of Massachusetts. This Bill does no more than set up a process for doing just that. It is a sensible, prudent and responsible approach to take.

Establishing a Special Commission to study the threat of nuclear weapons to the Commonwealth of Massachusetts would answer the questions raised in this report and make recommendations to guide the state forward on the best path for the safety and security of the people of Massachusetts.

Appendix

H.3688 / S.1555 Resolve providing for an investigation and study by special commission relative to the existential threat posed by nuclear weapons to the commonwealth of Massachusetts

HOUSE DOCKET, NO. 455 FILED ON: 1/22/2021

HOUSE . . . . . No. 3688

By Ms. Sabadosa of Northampton, a petition (accompanied by resolve, House, No. 3688) of Lindsay N. Sabadosa and others for an investigation by a special commission (including members of the General Court) relative to the threat posed by nuclear weapons to the citizens of the Commonwealth. Veterans and Federal Affairs.

The Commonwealth of Massachusetts

In the One Hundred and Ninety-Second General Court
(2021-2022)

Resolve providing for an investigation and study by a special commission relative to the existential threat posed by nuclear weapons to the commonwealth of Massachusetts.

Resolved, that there shall be a special citizens commission to investigate and report on what measures may be necessary and appropriate to protect the citizens of the commonwealth from the existential threat posed by nuclear weapons and to contribute towards the total elimination of these weapons from all countries in line with the Treaty on the Prohibition of Nuclear Weapons.

The citizens commission shall investigate measures and make recommendations to the general court that may include, but are not limited to, the divestment of funds under the control of the commonwealth from companies involved in the development, production or maintenance of nuclear weapons; the disqualification of a bidder or vendor involved in the development, production or maintenance of nuclear weapons from an award of a state contract; and other financial or legal measures that may assist or encourage the transition from nuclear weapons-related jobs and activities taking place within the commonwealth to jobs and activities that instead address the climate crisis and other pressing social needs.

The citizens commission shall consist of 11 United States citizens who are residents of Massachusetts: 1 of whom shall be appointed by the speaker of the house of representatives;1 of whom shall be appointed by the senate president; 1 of whom shall be appointed by the secretary of the commonwealth; 1 of whom shall be appointed by the attorney general; and 7 of whom shall be appointed by the governor, of whom 6 shall be selected by the governor from a group of 10 individuals nominated by Massachusetts Peace Action, Inc.; provided, however, that all appointments shall be made from a list of applicants who have publicly applied to the commission for such appointment. The governor's office shall post all applications on a webpage, established for the public knowledge and oversight of the appointment to and operation of the commission. No person may be appointed to the commission who is a current or former employee of any company or military installation involved in the development, production or maintenance of nuclear weapons.

An application to serve on the commission shall state: (i) the intent of the applicant to comply with and advance the policy established by this resolve; (ii) the applicant's qualifications and interest in serving on the commission; (iii) the city or town in which the applicant resides; and (iv) the employment of the applicant, if employed. The governor shall post the appointment opportunity on the official website of the commonwealth within 30 days of the effective date of this resolve. All applications for service on the commission shall be submitted within 30 days of the posting of the appointment opportunity.

All appointments shall be made no sooner than 90 days and no later than 120 days after the effective date of this resolve. In making appointments to the commission, the speaker of the house of representatives, senate president, secretary of the commonwealth, attorney general and governor shall consider the range of expertise needed on the commission and shall seek to ensure

that the commission reflects a range of geographical and demographic backgrounds. Appointees to the commission shall serve without compensation.

The commission shall convene for its first meeting not later than 30 days after the appointment of the final member of the commission. Members of the commission shall, at their first meeting, elect a chair or co-chairs, as the members of the commission may decide by majority vote. The commission shall meet on a regular basis to research and to gather evidence, testimony and advice in the manner that the members of the commission determine is most conducive to achieving the objectives of this resolve; provided, however, that commission proceedings and activities shall be subject to the open meeting law established by sections 18 to 25, inclusive, of chapter 30A of the General Laws and shall be considered public records as defined in clause Twenty-sixth of section 7 of chapter 4 of the General Laws; and, provided further, that all residents of Massachusetts have a reasonable opportunity to offer their views and ideas related to the policies herein to the commission.

The commission shall hold at least 5 public hearings in different parts of the commonwealth to inform citizens and legislators about humanitarian consequences to the commonwealth resulting from the use of nuclear weapons and implications of the entry into force of Treaty on the Prohibition of Nuclear Weapons, including but not limited to how jobs, technologies and industries within the commonwealth currently devoted to nuclear weapons shall be affected.

The commission shall report the results of its investigation and study and its recommendations, if any, together with drafts of legislation necessary to carry its recommendations into effect, by filing the same with the clerk of the house of representatives and the clerk of the senate, with copies to the governor, lieutenant governor, attorney general and all members of the Massachusetts federal congressional delegation, on or before July 31, 2024. The report may include recommendations for specific legislation aimed at reducing the involvement of private companies and public institutions within the commonwealth in the design, manufacture or maintenance of nuclear weapons and increasing their involvement in the global effort to address the climate emergency and to meet other pressing social needs.