



INVESTING IN OUR CITY'S FUTURE

DIVESTING FROM ITS DESTRUCTION

NEW YORK CITY'S FINANCES AND NUCLEAR WEAPONS

A Report to New York City Comptroller Scott Stringer

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Cover photo: Hiroshima survivor Setsuko Thurlow at Aspirations
High School, East New York, 2013. Photo: Robert Croonquist.

EXECUTIVE SUMMARY



Torchlight procession celebrating ICAN's Nobel Peace Prize, Oslo, Norway December 2017. Photo: Ari Beser.

New York City must divest from nuclear weapons. The 2017 Treaty on the Prohibition of Nuclear Weapons (TPNW) shall, upon entering into force, establish a categorical ban on nuclear weapons. Providing financial assistance to those who develop, produce or possess nuclear weapons will constitute a violation of international law. As countries across the world sign and ratify the treaty, NYC can do its part by extracting our city's finances from those nuclear weapons enterprises that violate international norms and law.

A single nuclear detonation in New York City would have catastrophic humanitarian consequences. Improvised radioactive devices or “dirty bombs” also pose great risks to New Yorkers. Scientific and policy research has demonstrated conclusively that no national or city government’s emergency responses are prepared to respond adequately to the devastating effects of a single nuclear weapon.

New Yorkers have a long history of standing up to nuclear weapons. The 1982 rally for nuclear disarmament in Central Park remains the one of the largest demonstrations in U.S. history, where an estimated one million people gathered to demand the end of the arms race. At the same time, New York City has a legacy related to the development and harms of nuclear weapons, and accordingly has a special responsibility to take a leadership role in curbing their use and production. Divesting from nuclear weapons would align New York with the global majority

New Yorkers have a long history of standing up to nuclear weapons.

opposing nuclear weapons and with the International Campaign to Abolish Nuclear Weapons (ICAN), winner of the 2017 Nobel Peace Prize. As other cities in the U.S. and around the world are taking steps to support the TPNW and divest finances, New York City has an opportunity to lead. Divesting from nuclear weapons would complement New York City’s efforts

to impact other global existential threats, even as national policy steps away from progressive leadership – for example, New York City’s efforts to lead in combatting climate change, including its co-initiative with the city of London to divest from fossil fuels.¹

Research demonstrates that divestment from inhumane and controversial weapons can have a significant impact on their development, production and use. Research also shows that targeting socially responsible investments results in similar or slightly increased risk-return characteristics for investors.² A divestment policy would, for all NYC pension funds, instruct asset managers to review all existing holdings, exclude all financial links with companies involved in the production of nuclear weapons, cease new investments in such companies, initiate a phased divestment plan from such companies, recognize that the policy does not supersede the boards of New York City’s and New York State’s pension funds’ fiduciary responsibilities, and include a mechanism for regular review and engagement.

Council Member and Finance Committee Chair, Daniel Dromm, has called for NYC’s pension funds and finances to divest from nuclear weapons. His letter to the Comptroller seeking divestment has the support of a majority of City Council Members representing all five boroughs, including City Council Speaker Corey Johnson.

¹ De Blasio, Bill & Sadiq Khan, “As New York and London mayors, we call on all cities to divest from fossil fuels”, available at theguardian.com/commentisfree/2018/sep/10/london-new-york-cities-divest-fossil-fuels-bill-de-blasio-sadiq-khan, viewed on 2 October 2018.

² MSCI, “Pursuing ESG Standards and Diversification”, available at msci.com/www/blog-posts/pursuing-esg-standards-and/0694426662, viewed 29 August 2018.

We are requesting that Comptroller Scott Stringer:

- 1. Publicly acknowledge the letter from Council Member Daniel Dromm and 27 additional City Council Member signatories.**
- 2. Engage consultants to analyze the extent of our city's current investments in those companies involved in nuclear weapons activities prohibited under the treaty, including the development, production, and maintenance of nuclear weapons.**
- 3. Develop, implement and announce a policy to ensure that there will be no new investments in entities with any nuclear weapons activities.**
- 4. Develop, implement and announce a timely, strategic roadmap for divestment from our existing investments in entities engaged in any nuclear weapons activities.**
- 5. Redirect investments to fiscally responsible and ethically sound activities, including infrastructure and education initiatives.**
- 6. Endorse the ICAN Cities Appeal and align New York City with the Treaty on the Prohibition of Nuclear Weapons (TPNW), and publicly announce such endorsement.³**

New York City's finances need to be invested in improving the productivity, health and development of our city, rather than in weapons that risk our destruction.

³ ICAN, "Manchester endorses the ICAN Cities Appeal", available at aticanw.org/campaign-news/manchester-ican-cities-appeal, viewed on 1 December 2018.

1 NEW YORK CITY MUST DIVEST FROM THE NUCLEAR WEAPONS INDUSTRY



On July 7, 2017, 122 nations signed the Treaty on the Prohibition of Nuclear Weapons at UN Headquarters, NYC.
Photo: Seth Shelden.

Without a doubt, the most dangerous weapons in the world are nuclear. Not only do they cause unimaginable devastation immediately, but as recent research demonstrates,⁴ the “nuclear winter” that would result from even a “limited” nuclear war could cause global famine. Nine governments possess more than 14,000 nuclear weapons.

⁴ Scott, Jim, “Researchers to study environmental, human impacts of nuclear war”, CU Boulder Today, available at colorado.edu/today/2017/07/18/researchers-study-environmental-human-impacts-nuclear-war, viewed 2 October 2018.

Most of these are in the arsenals of the United States and Russia with thousands ready to launch in minutes. Every nuclear-armed state is “modernizing” its arsenal. This requires financial institutions’ investment in corporations that produce key components for nuclear weapons that could entirely destroy New York, by accident or design.

The TPNW, adopted by 122 governments at the United Nations here in New York City, shall, upon entering into force, establish the first categorical ban on nuclear weapons (similar to that on chemical and biological weapons). The Preamble describes nuclear weapons as “abhorrent to the principles of humanity and the dictates of public conscience.” The TPNW acknowledges the “unacceptable suffering of and harm caused to the victims” of nuclear weapons use and testing and has provisions establishing a new framework for international cooperation and assistance to assist victims and remediate contaminated environments.

The Preamble describes nuclear weapons as “abhorrent to the principles of humanity and the dictates of public conscience.”

Once the TPNW enters into force, a new element of international law will prohibit not only developing, producing and possessing nuclear weapons, but also providing financial support to those who develop, produce or possess nuclear

weapons. As countries across the world sign and ratify the treaty, NYC can do its part by extracting our city’s finances from those nuclear weapons enterprises that violate international norms and law against nuclear weapons.

The new treaty arose from an upswell of global moral outrage against nuclear weapons and those who produce and possess them, as evidenced by the role played by the International Campaign to Abolish Nuclear Weapons (ICAN). ICAN, which includes in its leadership and membership many New Yorkers, including the authors of this document, received the 2017 Nobel Peace Prize in recognition of our work to draw attention to the catastrophic humanitarian consequences of any use of nuclear weapons and for our efforts to advance the TPNW.

ICAN works in close partnership with physicians, scientists, educators and religious leaders, both in New York and around the world. In support of ICAN’s work, His Holiness Pope Francis stated on 10 April 2018 that nuclear weapons “create nothing but a false sense of security” and cannot “constitute the basis for peaceful coexistence between members of the human family, which must rather be inspired by an ethics of solidarity.” Indeed, Buddhist, Jewish, Christian and Muslim leaders have spoken out in asserting that nuclear weapons violate the moral and ethical core of the world’s religions and the World Council of Churches has urged countries to join the TPNW.

2 NUCLEAR WEAPONS ARE A THREAT TO NEW YORK CITY



Nagasaki, Japan, before and after August 9, 1945. Photo: Roger Williams University Archives and Special Collections/Digital Commons

A single nuclear detonation in New York City would have catastrophic humanitarian consequences. The atomic bombings of Hiroshima and Nagasaki, Japan, killed more than 200,000 people in 1945. *Hibakusha* – survivors of the Hiroshima and Nagasaki atomic bombings – continue to suffer diseases and experience mental health issues and social stigma associated with exposure to ionizing radiation. By comparison, modern nuclear weapons are more powerful by orders of magnitude than those early atomic bombs, while the current population of New York City is over 333 times larger than were the 1945 populations of those Japanese cities.



Students from Calhoun School measure radiation at the Baker and Williams Warehouses where uranium was stored for the Manhattan Project, Chelsea, 2013. Photo: Robert Croonquist.

There can be no doubt that a nuclear detonation in New York City would be catastrophic on an unprecedented scale.

Scientific and policy research in the last decade has demonstrated conclusively that no national or city government's emergency responses are prepared to cope effectively with the devastation of a single nuclear detonation.⁵ For these and other reasons, in November 2011, the Council of Delegates of the International Red Cross and Red Crescent Movement once again condemned nuclear weapons as incompatible with international humanitarian law. The resolution cited the 1996 Advisory Opinion of the International Court of Justice, which concluded that "nuclear weapons . . . have the potential to destroy all civilization and the entire ecosystem of the planet."⁶

Nuclear weapons are thus a public

policy issue – they are a threat to public health, sustainable development, the environment and first responders and emergency services, which would be overwhelmed by even one nuclear blast. It is incumbent on local governments of large metropolitan areas such as New York City to be proactive in contributing to nuclear disarmament.

This is also a New York story. The Manhattan Project was so named because of the institutions in our city that contributed to the creation of the nuclear bomb. New York City's deep ties to the dawn of the nuclear age are many, but best demonstrated by the prominent role of Columbia University physicists in the Manhattan Project. In the basement of the University's Pupin Hall, Enrico Fermi conducted the first fission experiments in the United States, confirming German success weeks earlier which led to Leo Szilard and other Columbia faculty to write a letter to President Roosevelt, also signed by Albert Einstein, requesting support for their research in a race against the Germans. Even the Columbia University football team was recruited to move tons of uranium in service to covert nuclear research.

By executive order in 1941, Roosevelt established the Office of Scientific Research and Development to begin top-secret work to develop the world's first atomic bombs. Ruled by offices on Broadway, the Manhattan Engineer District would oversee research at Los Alamos and later the "Atomic Cities" in Oakridge, Tennessee and Hanford, Washington. Still today, there are credible reports⁷ of ongoing radioactive contamination of the former site of the Staten Island

⁵ Borrie, John & Tim Cauley, 2014, "An Illusion of Safety: Challenges of Nuclear Weapon Detonations for United Nations Humanitarian Coordination and Response" available at undir.org/files/publications/pdfs/an-illusion-of-safety-en-611.pdf, viewed on 2 October 2018.

⁶ Council of Delegates of the International Red Cross and Red Crescent Movement, 26 November 2011, "Working towards the elimination of nuclear weapons background document," available at icrc.org/eng/assets/files/red-cross-crescent-movement/council-delegates-2011/council-delegates-2011-nuclear-weapons-report-eng.pdf, viewed on 29 September 2018.

⁷ Marlow, Scott, 14 August 2015, "Is Bayonne Bridge Project Unearthing Harmful Radiation?", available at bayonnelocal.com/uranium-still-contaminates-kill-van-kull-gateway-to-port-elizabeth, viewed on 2 October 2018.

uranium stockpile by the Bayonne Bridge which supplied 1,200 tons of high-grade uranium ore – a whopping two-thirds of the Manhattan Project’s uranium supply. The Baker and Williams Warehouses on West 20th Street in Chelsea also housed 300,000 pounds of uranium. The buildings were not fully remediated for unrestricted use until the 1993, and now house a number of art galleries and the Friends of the Highline offices.⁸ There are some 30 sites throughout the five boroughs where nuclear materials were stored or manufactured. These are detailed in the Wall Street Journal’s interactive database Waste Lands: America’s Forgotten Nuclear Legacy.⁹ For further information on New York’s often unacknowledged connection to nuclear weapons development see “Why They Call It the Manhattan Project” in the addenda.

Millions of people around the world already are victims of nuclear weapons production, use and testing, including many who live in New York City. In 2014, there were approximately 1,000 Japanese-American hibakusha. Some 195,000 American soldiers were deployed to radioactive zones during the occupation of Japan, and thousands of U.S. troops and civilian personnel participated in atmospheric nuclear weapons tests. Families of these “Atomic Veterans”, as well as atomic bomb survivors, struggle with cancers, heart disease, infertility and the multigenerational effects of radiation exposure. Between 1945 and 1996, nuclear weapons were tested 2,151 times in 15 countries (approximately half of

Millions of people around the world are potential victims of nuclear weapons use and testing, including many who live in New York City.

these tests were conducted by the United States), with fallout spreading around the world. The effects, particularly of atmospheric tests, are global. International Physicians for the Prevention of Nuclear War (IPPNW) estimates that “roughly 2.4 million people will eventually die as a result of the atmospheric nuclear tests conducted between 1945 and 1980, which were equal in force to 29,000 Hiroshima bombs.”¹⁰ In 2005, the Centers for Disease Control (CDC) used similar models to estimate that 22,000 Americans (in the continental US) would contract cancers as a result of fallout from both global and US atmospheric nuclear weapons testing between 1945 and 1974. That study likely underestimates the numbers, given that it did not evaluate residents of Hawaii and Alaska, which both were closer to U.S., British and French nuclear weapons tests in the Pacific region. A recent study at the University of Arizona has suggested that between 340,000 and 690,000 Americans died as a result of atmospheric

⁸ Wall Street Journal, “Waste Lands: America’s forgotten nuclear legacy”, available at projects.wsj.com/waste-lands/site/49-baker-and-williams-warehouses, viewed on 2 October 2018.

⁹ Wall Street Journal, “Waste Lands: America’s forgotten nuclear legacy”, available at projects.wsj.com/waste-lands/state/NY, viewed on 2 October 2018.

¹⁰ Robbins, Anthony, Arjun Makhijani & Katherine Yih, “Radioactive Heaven and Earth: The Health and Environmental Effects of Nuclear Weapons Testing In, On and Above the Earth, Report of the IPPNW International Commission to Investigate the Health and Environmental Effects of Nuclear Weapons Production and Institute for Energy and Environmental Research”, The Apex Press, New York, and Zed Books, London, 1991, p. 40. Available at ieer.org/wp/wp-content/uploads/1991/06/RadioactiveHeavenEarth1991.pdf. Further review of this and other estimates is available in: Tilman A. Ruff, “The humanitarian impact and implications of nuclear test explosions in the Pacific region”, International Review of the Red Cross 97, no. 899 (2015), p. 807.

tests from 1951 to 1973.¹¹ Neither study calculated the risk of venting and leeching of radioactive material from underground test sites in Alaska, Colorado, New Mexico, Nevada and Mississippi.¹² More than 35,000 Americans have been awarded compensation by the U.S. Department of Justice for exposure to radiation from nuclear weapons testing and supply chains.¹³

The New York Police Department (NYPD) has in place a system for detecting radiation in the city, to identify potential threats from nuclear weapons, improvised nuclear devices or radiological “dirty bombs” (which disperse radioactive material through a conventional explosion). The New York City Department of Health and Mental Hygiene’s Office of Radiological Health (ORH) also regulates nuclear material in the city, inhibiting its diversion to illicit uses. ORH’s website outlines the City’s emergency strategies for dealing with dirty bombs and improvised nuclear devices, as “serious threat[s] to life, health and safety.”¹⁴ The City thus already understands the threat posed to its citizens by nuclear and radiological weapons is real and ongoing. Dr. David Brenner of the Columbia Center for Radiological Research has stated that “[the] likelihood of a dirty bomb is really quite high.” In New York City, “It’s more a

question of when than whether we’ll have one. . . . One can imagine an enormous amount of disruption even if a very small dirty bomb were detonated.”¹⁵ The NYPD and ORH’s crucial efforts protecting the city from nuclear and radiological threats will be buttressed by the global legal and normative condemnation of such weapons of mass destruction, including the core prohibitions under the TPNW and localized efforts to divest from the nuclear weapons industry. The TPNW’s victim assistance and environmental remediation provisions also establish an institutional architecture for coordinating an international response to help New Yorkers, if they are ever subjected to such an attack.

New York City is on the target list of more than one nuclear-armed state. Just as crucially, recently declassified documents demonstrate that the history of U.S. nuclear weapons is one of horrifying accidents and close calls.¹⁶ It is the policy of the U.S. Navy to neither confirm nor deny whether their vessels are carrying nuclear weapons.¹⁷ It is therefore possible that U.S. Navy ships coming close to or even into the New York Harbor may be carrying nuclear weapons. This means that as New Yorkers, we may be just as at risk from our own nation’s nuclear arsenal as that of other countries or of non state actors.

¹¹ Fernholz, Tim, 21 December 2017, “US nuclear tests killed far more civilians than we knew”, Quartz, available at qz.com/1163140/us-nuclear-tests-killed-american-civilians-on-a-scale-comparable-to-hiroshima-and-nagasaki/, viewed on 21 December 2018.

¹² CDC, “Report on the Feasibility of a Study of the Health Consequences to the American Population from Nuclear Weapons Tests Conducted by the United States and Other Nations”. Washington DC, CDC & National Cancer Institute. Chapter 4.

¹³ US Department of Justice, 29 November 2018, “Radiation Exposure Compensation System: Awards to Date”, available at justice.gov/civil/awards-date-11302018, viewed on 30 November 2018.

¹⁴ ORH, 2018 “Radiological Incident”, available at <https://www1.nyc.gov/site/doh/health/emergency-preparedness/emergencies-radiological-nuclear-radiological-incident.page>, viewed on 30 November 2018; ORH, 2018, “Nuclear Incident: Improvised Nuclear Device (IND).” available at <https://www1.nyc.gov/site/doh/health/emergency-preparedness/emergencies-radiological-nuclear-incident.page> viewed on 30 November 2018.

¹⁵ “NYC’s Ring Of Protection – Tools In The Fight Against Dirty Bombs”, website CBS New York available at [newyork.cbslocal.com/2013/02/05/seen-at-11-nycs-ring-of-protection-tools-in-the-fight-against-dirty-bombs](https://www.cbsnews.com/2013/02/05/seen-at-11-nycs-ring-of-protection-tools-in-the-fight-against-dirty-bombs/), viewed on 30 November 2018.

¹⁶ Schlosser, Eric, 2014, *Command and Control*, London, Penguin Books.

¹⁷ Norris, Robert S. & Hans M. Kristensen, 2016, “Declassified: US nuclear weapons at sea during the Cold War, Bulletin of the Atomic Scientists,” 72:1, 58-61, DOI: 10.1080/00963402.2016.1124664.

3 NEW YORKERS OPPOSE INVESTING IN NUCLEAR WEAPONS



Anti-Nuclear March and Rally at Central Park, June 12, 1982. Photo: NYPR Commons & Preservation.

New Yorkers have a long history of standing up to nuclear weapons. In 1957, the National Committee for a SANE Nuclear Policy (now Peace Action) was established here in New York and soon became one of most prominent peace organizations in the United States. Many other organizations in NYC and around the world have followed their lead in support of nuclear abolition. The 1982 rally for nuclear disarmament in Central Park remains one of the largest demonstrations in U.S. history, where one million people gathered to demand the end of the arms race.

Our elected officials have reflected these sentiments too. Congresswoman Bella Abzug and Congressman Ted Weiss were strong proponents of ending the arms race with Russia in the 1970s and 1980s. The New York City Council has repeatedly reaffirmed its commitment maintaining the city as a Nuclear Free Zone and specifically called for a ban on nuclear weapons into the New York Harbor. City Council resolutions dating back to the 1950s call for abolition. For instance, in 1999, the City Council reaffirmed their declaration of New York as a Nuclear Free Zone, describing nuclear arsenals as “extraordinarily costly, costing tens of billions of dollars per year”, money better spent “rebuilding the infrastructure of our cities, supporting the health and welfare of our citizens, and protecting and enhancing the quality of the environment” (Res. 878-1999). There is an archive of relevant Council Resolutions on Pace University’s International Disarmament Institute website.¹⁸

A majority of City Council members want to fulfill the commitments expressed in these resolutions. In September 2018, 27 Council Members have signed City Council Finance Chair Daniel Dromm’s letter to Comptroller Scott Stringer requesting that we “align our city’s financial power with our progressive values” and divest New York City’s pension funds from investments in companies profiting from nuclear weapons.

In September 2018, 27 Council Members have signed City Council Finance Chair Daniel Dromm’s letter to Comptroller Scott Stringer requesting that we “align our city’s financial power with our progressive values” and divest New York City’s pension funds from investments in companies profiting from nuclear weapons.

¹⁸ *International Disarmament Institute News*, “New York City Council Resolutions on Nuclear Weapons”, available at disarmament.blogs.pace.edu/nyc-nuclear-archive/new-york-city-council-resolutions-on-nuclear-weapons, viewed on 2 October 2018.

4 HOW DIVESTMENT CAN WORK FOR NEW YORK CITY



Activists from Rise and Resist join NYC ICAN campaigners on Brighton Beach, May 20, 2018. Photo: Robert Croonquist.

Research demonstrates that divestment from inhumane and controversial weapons can have a significant impact on their development, production and use. The treaties banning landmines and cluster munitions have resulted in many financial institutions divesting from these weapons, leading the private sector to redirect investments in other ways. As a result, the mass production and international trade in these weapons has largely halted despite the U.S. not joining the applicable treaties. This demonstrates that local institutions play a significant role in stigmatizing inhumane weapons through building norms and redirecting finances.

Our campaign applauds New York based Amalgamated Bank for their public refusal to invest its money in weapons manufacturers. Amalgamated is part of a movement among financial institutions, internationally, to support the TPNW. To divest from nuclear weapons would align New York City with a global majority that supports nuclear disarmament and the treaty.¹⁹

A growing number of cities and states have passed measures condemning nuclear weapons and are aligning themselves with the TPNW's values. The California State Legislature,²⁰ Los Angeles City Council,²¹ Ojai, California²² and Amherst, Massachusetts²³ have all endorsed the Back From the Brink campaign. ICAN has recently launched a Cities Appeal endorsed by Los Angeles; Baltimore; Melbourne, Freemantle and Sydney, Australia; Manchester, UK; and Toronto, Canada.²⁴ Mayors for Peace, a decades-old initiative of the mayors of Hiroshima and Nagasaki currently boasts 7,675 cities in 163 countries and territories committed to "rais[ing] international public awareness regarding the need to abolish nuclear weapons and contribut[ing] to the realization of genuine and lasting world peace by working to eliminate starvation and poverty, assist refugees fleeing local conflict, support human rights, protect the environment, and solve

the other problems that threaten peaceful coexistence within the human family."²⁵

Currently, Mayor de Blasio and London's Mayor Sadiq Khan are joining forces to take action on climate change.²⁶ Divestment from fossil fuels and nuclear weapons should find easy support in this alliance. According to Maureen Sullivan, the director of the Pentagon's environmental program, "The US Department of Defence is one of the world's worst polluters. Its footprint dwarfs that of any corporation: 4,127 installations spread across 19 million acres of American soil.... [comprising] some 39,000 contaminated sites." Although the nuclear weapons enterprise in the US is under the auspices of the Department of Energy, the DOD has long been considered at the top tier of global CO2 emissions.

Not only is the US military-industrial complex the biggest emitter of CO2, but both nuclear weapons and climate change pose dangers and risks that extend far beyond human history on the planet, due to long-lived radioactivity from nuclear weapons manufacture and the permanent changes that have occurred due to melting ice and rising seas. Divestment from nuclear weapons should be seen as complimentary to any New York – London fossil fuel divestment initiative.

¹⁹ ICAN, "Positions on the treaty", available at [icanw.org/why-a-ban/positions](https://www.icanw.org/why-a-ban/positions), viewed 1 December 2018.

²⁰ Nuclear Age Peace Foundation, "California Assembly Joint Resolution 33 – Full Text", available at wagingpeace.org/california-assembly-joint-resolution-33-full-text, viewed 2 October 2018.

²¹ Back From the Brink: The Call To Prevent Nuclear War, accessible at "Los Angeles City Council Resolution", Available at clkrep.lacity.org/online/docs/2018/18-0002-s94_reso_07-31-2018.pdf, viewed 2 October 2018.

²² Don't Bank on the Bomb, "City of Ojai City Council Resolution 18-10", available at dontbankonthebomb.com/wp-content/uploads/2018/04/18-10-Nuclear-Free-Zone.pdf, viewed 2 October 2018.

²³ Back From the Brink: The Call To Prevent Nuclear War, "Town of Amherst Unanimously Passes Nuclear Weapons Resolution", available at preventnuclearwar.org/updates/2018/5/21/town-of-amherst-unanimously-passes-nuclear-weapons-resolution, viewed 2 October 2018.

²⁴ ICAN, "Los Angeles, Sydney and Toronto join new ICAN Cities Appeal", available at [icanw.org/campaign-news/los-angeles-sydney-and-toronto-join-new-ican-cities-appeal](https://www.icanw.org/campaign-news/los-angeles-sydney-and-toronto-join-new-ican-cities-appeal), viewed 1 December 2018.

²⁵ Mayors for Peace, "Mission Statement", available at mayorsforpeace.org/english/outlines/index.html, viewed on 2 October 2018.

²⁶ De Blasio, Bill and Sadiq Khan (2018, September 10). As New York and London mayors, we call on all cities to divest from fossil fuels. The Guardian. Retrieved from [theguardian.com/commentisfree/2018/sep/10/london-new-york-cities-divest-fossil-fuels-bill-de-blasio-sadiq-khan](https://www.theguardian.com/commentisfree/2018/sep/10/london-new-york-cities-divest-fossil-fuels-bill-de-blasio-sadiq-khan)

Don't Bank on the Bomb provides excellent analysis of financial institutions that include nuclear weapons as part of their controversial weapons policies.

A divestment effort would need to be guided by the creation of a policy that would:

- a. Exclude all financial links with companies involved in the production of nuclear weapons.
- b. Instruct all asset managers to follow the policy by:
 - i. reviewing all existing holdings;
 - ii. ceasing any new direct or indirect investments in excluded entities; and
 - iii. initiating a phased divestment plan from excluded entities, to be completed within a specified timeframe.
- c. Recognize that the policy does not supersede the boards of New York City's and New York State's pension funds' fiduciary responsibilities to its members.
- d. Require asset managers to implement negative screening criteria applicable to

direct as well as indirect holdings.

- i. So-called commingled funds should be instructed to remove the listed companies from the asset portfolio.
- e. Apply to all NYC-related pension funds (the current five, but also any future established fund).
- f. Include a mechanism for regular review and engagement.

Establishing such a policy would not require reinventing the wheel. The research project Don't Bank on the Bomb provides excellent analysis of financial institutions that include nuclear weapons as part of their controversial weapons policies. For a checklist of what constitutes a good policy, see: dontbankonthebomb.com/checklist-for-a-good-policy. For a list of outstanding financial institution policies, see: dontbankonthebomb.com/2018-hof.

A few funds, although this is less common, have stand-alone nuclear weapons policies like the New Zealand Superannuation Fund.²⁷ The most comprehensive policies meet a number of criteria, including:

- a. Exclusion of the entire company, not merely, for example, investments in project finance. Examples of financial institutions that do this include Achmea,²⁸ Crédit Agricole,²⁹ Danske Bank,³⁰ Nordea³¹ and Rabobank.³²
- b. Exclusion of companies involved

²⁷ New Zealand Superannuation Fund, "Investment in companies associated with nuclear weapons", p.2, December 2008, available at www.nzsuperfund.co.nz/sites/default/files/documents-sys/Public%20Report%20Nuclear%20Weapons%2012%20Dec%20Final%20V3.pdf, viewed 23 September 2018.

²⁸ Achmea, "Uitsluitingsbeleid", website Achmea (www.achmea.nl/duurzaam-ondernemen/verantwoord-beleggen/uitsluitingsbeleid/Paginas/default.aspx), viewed 23 September 2018.

²⁹ Crédit Agricole, "Nos Positions en détails", available at credit-agricole.com/responsable-et-engage/une-strategie-rse-creatrice-de-valeur-pour-le-groupe-credit-agricole-et-de-bien-commun-pour-nos-parties-prenantes/nos-positions/nos-positions-en-details, viewed 23 September 2018.

³⁰ Danske Bank, "Arms and defence", June 2018, website Danske Bank (danskebank.com/-/media/danske-bank-com/file-cloud/2017/5/danske-bank-position-statement-arms-and-defence--la=da.pdf), viewed 23 September 2018.

³¹ Nordea, "Responsible Investments Policy" October 2017, p.4, available at nordea.com/Images/33-227926/RI_Policy_OCTOBER_2017.pdf, viewed 23 September 2018.

³² Rabobank, "Sustainability Policy Framework", April 2018, pp.18, 58-59, 84, available at rabobank.com/en/images/sustainability-policy-framework.pdf, viewed 23 September 2018.



Illustration by Amber Cooper-Davies.

in any key aspects of nuclear weapons, including but not limited to development, production, maintenance, trade, modernization and specifically-designed delivery systems.

c. Exclusion of all companies involved in nuclear weapons production, irrespective of their country of origin's status in the Non-Proliferation Treaty or the TPNW. Examples of financial institutions that do this include ASN Bank,³³ A.R.S.,³⁴ Commerzbank³⁵ and Government Pension Fund-Global (Norway),³⁶ among others.

d. Transparency in the definition of relevant terms. A good example is the policy of BNP Paribas.³⁷ BNP defines a nuclear weapon as "a device that is capable of releasing nuclear energy in an uncontrolled manner and which has a group of characteristics that are appropriate for use for warlike purposes." This definition is drawn from the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco). A more recent definition is found in the 1985

South Pacific Nuclear Free Zone Treaty, wherein nuclear explosive device means any nuclear weapon or other explosive device capable of releasing nuclear energy, irrespective of the purpose for which it could be used.

e. Addressing all asset management activities. Examples include the policies of, for example, DNB³⁸ (Norway's largest bank), de Volksbank³⁹ (Netherlands) and Co-operative Bank⁴⁰ (UK). DNB is a large bank that provides both private and commercial financial services, including asset management, investment banking and corporate banking. These policies demonstrate that mainstream banks can and do choose to create strong policies on nuclear weapons that include all of their financial products, even index funds and assets managed by external managers.

f. A divestment strategy that has the capacity to update its exclusion list, in the event that a holding previously not involved with nuclear weapons later decides to become involved in their production. Nearly all financial institutions using exclusion lists, such as KLP,⁴¹ are an example of this.

g. Specificity as to the scope and application of the policy. A good example of a policy appropriately clarifying what activities are prohibited is the policy of Aegon,⁴² a global insurance company (operating as TransAmerica in the US). Even though the policy contains significant loopholes, it explicitly discusses the application of the policy to the different asset categories, external asset managers and the engagement/divestment strategy.



New York Nuclear Weapons Divestment Campaign educational initiative aboard the Mystic Whaler with Hudson River Sloop Clearwater, May 19, 2017. Photo: Ari Beser.

³³ ASN Bank, "ASN Bank Human Rights Policy Paper", March 2018, p. 10, available at <https://www.asnbank.nl/web/file?uuid=a0b81384-29de-4a36-ae75-ac5641412caf&owner=6916ad14-918d-4ea8-80ac-f71f0ff1928e&contentid=703>, viewed 23 September 2018.

³⁴ a.s.r., "Socially Responsible Investment (SRI) Policy", p. 6, 2013, available at asrnl.com/media/3044/sri-policy-asr.pdf, viewed 23 September 2018.

³⁵ Commerzbank, "Positions and Directives", available at www.commerzbank.com/en/nachhaltigkeit/nachhaltigkeitsstandards/positionen_und_richtlinien/positionen_und_richtlinien.html, viewed 23 September 2018.

³⁶ Norwegian Ministry of Finance, "Ethical Guidelines for the Government Petroleum Fund", 11 May 2004, website Norwegian Ministry of Finance (statsbudsjettet.no/Revidert-2004/English/?pid=49866#hopp), viewed 23 September 2018.

³⁷ BNP Paribas, "Corporate Social Responsibility Sector Policy - Defence", p.8, available at group.bnpparibas/uploads/file/csr_sector_policy_defence_final_2017_en_v_3.pdf, viewed 23 September 2018.

³⁸ DNB, "DNB Corporate Social Responsibility Report 2014", p.22, available at dnb.no/portalfront/nedlast/no/om-oss/samfunnsansvar/2014/Corporate-social-responsibility-report-2014.pdf, viewed 23 May 2018,

³⁹ ACTIAM, "Exclusions", available at actiam.nl/en/sustainability/exclusions, viewed 23 September 2018.

⁴⁰ The Co-operative Bank, "Ethical Policy", available at www.co-operativebank.co.uk/assets/html/bank/ebooks/ethical-policy/index.html, viewed 23 September 2018.

⁴¹ KLP, "Exclusion and dialogue with companies", available at english.klp.no/about-klp/corporate-responsibility-and-responsible-investments/exclusion-and-dialogue), viewed 23 September 2018.

⁴² "Aegon N.V. Responsible Investment", available at aegon.com/contentassets/16821f44646a469c8f713ff183cc2513/aegon-responsible-investment-policy-2018.pdf, viewed 4 October 2018.

5 NEW YORK CITY MUST ADOPT AN EXCLUSION LIST



Illustration by Amber Cooper-Davies.

The process of creating an exclusion list is both necessary and feasible. A number of financial institutions and large pension funds use exclusion lists to ensure their investment universe does not include any companies associated with the production of nuclear weapons. Exclusion lists are a well-established practice, and can be replicated for New York City.

Asset managers sometimes claim that, because they buy and sell shares and bonds in many companies, they do not have the means to check quickly and cost-effectively whether these companies are nuclear weapons producers. Close cooperation and information sharing with financial institutions with comprehensive policies, NGOs and non-financial or Socially Responsible Investment (SRI) advisors can create clear and updated lists of those companies that

produce nuclear weapons.

There are a number of research companies that consult on and produce reports on exclusion lists from any industry – from tobacco companies to nuclear weapons producers. The following lists research providers most frequently used to develop nuclear weapon producer exclusion lists, together with the financial institutions that use their services.

RESEARCH PROVIDER	USED BY	WEBSITE
VIGEO - EIRIS	ASN Bank, ASR, Co-operative Bank, FRR, Generali, PenSam, The Future Fund	vigeo-eiris.com
INSTITUTIONAL SHAREHOLDER SERVICES INC.	Achmea, APG, Aviva, BPCE Group, Danske Bank, HSBC, KBC, Laegernes, Pensionskasse, LBBW, Lloyds Banking Group, Nordea, Nykredit, Pensioenfondsfonds APF, SEB, Sparinvest, Stichting, Pensioenfondsfonds APF, Swedbank, Swedish Pension Fund AP7	issgovernance.com
GES	Alecta, AMF, DNB, Fonds de Compensation de la Sécurité Sociale SICAV-FIS, KLP, PFA, Swedbank, Swedish Pension Fund AP7	gesinternational.com
MSCI	Aegon, Folksam, New Zealand Superannuation Fund, Nykredit, Pensioenfondsfonds Zorg en Welzijn (PfZW), PGGM, Van Lanschot	msci.com

Some financial institutions choose to engage more than one research provider. Other financial institutions, rather than generating their own lists, rely on publicly available lists – most frequently the Norwegian Government Pension funds exclusion lists (used by the Government Pension Fund Norway, Swedish Pension funds AP1-4 and VDK Spaarbank). Others prefer to work with an inclusion list that allows investment in companies that have successfully met all social responsibility criteria.

Each of these research providers will produce custom reports based on the client's specifications. In defining its specifications and research criteria, and in ensuring that its funds are not profiting from the production of nuclear weapons, New York City should exclude:

- a. Companies involved in the development, testing, production, manufacture, acquisition, possession or stockpiling of nuclear weapons or other

nuclear explosive devices or related technology, parts, products or services.

- b. Companies involved in the foregoing activities in relation to warheads, or other elements specifically designed to carry nuclear capable delivery systems, such as missiles.

- c. Companies involved in developing "dual use" (military and civilian) technology, excluding technology that is not specifically designed for nuclear warfare, but can be adapted or configured for nuclear weapons production.

- d. State-owned companies and universities engaged in the development of nuclear weapons.



Illustration by Amber Cooper-Davies.

6 A CALL TO COMPTROLLER STRINGER TO DIVEST FROM NUCLEAR DESTRUCTION



New York City Comptroller Scott Stringer. Photo: Wikimedia Commons.

Comptroller Stringer, this initiative builds on a long history of New Yorkers expressing moral outrage and deep concern for the safety of ourselves, our families, our city and the world, all of which are threatened by nuclear weapons. Over the years, New Yorkers have expressed our deep concern through City Council resolutions, civic initiatives and marching in the streets.

There is a long history of New York City taking a stand on ethical issues, human rights and environmental problems when we have felt national institutions are moving too slowly. New York City is committed to pursuing the United Nations Sustainable Development Goals (SDGs), for example, and we are actively divesting from fossil fuels because of their direct threat to our city. Nuclear weapons threaten the very existence of New York City with equal or greater catastrophic consequences.

Taking action on divestment from nuclear weapons has the support of Daniel Dromm, Chair of the New York City Council Finance Committee, who has tremendous responsibility, both financial and ethical, as a steward of our city's resources. Council Member Dromm's call has support from a majority of City Council Members representing all five boroughs, including City Council Speaker Corey Johnson.

New York City's money needs to be invested in improving the productivity, health and development of our city, rather than in weapons that risk our destruction. Let us instead invest in a caring economy, technology and human capital that reflect our progressive values, not in those that produce the potential for our ultimate demise.

Comptroller Stringer, we understand the challenge we are laying before you, but we also recognize it as a gift, and an opportunity, to find creative avenues to achieve greatness in the arena of 21st century challenges. As your cousin Bella Abzug did in paving the way for your generation to rise to the occasion, and to saving our democracy from demagoguery, you too can make your mark.

We appreciate the chance to work with you directly, in lieu of launching a public campaign. We are offering you an

New York City's money needs to be invested in improving the productivity, health and development of our city, rather than in weapons that risk our destruction.

opportunity, as a man we respect for your intelligence and integrity, to divest NYC finances from nuclear weapons producers, as you are already creating a roadmap for fossil fuel divestment. Divesting from nuclear weapons producers will send a signal to the world that New Yorkers refuse to benefit from the threat of global annihilation.

Accordingly, we call upon you to take the following actions:

- a. Publicly acknowledge the letter to you from Council Member Daniel Dromm and 27 additional City Council member signatories.
- b. Direct consultants to analyze the extent of our city's current investments in those companies engaging in nuclear weapons activities, including the development, production, and maintenance of nuclear weapons.
- c. Develop, implement and announce a policy to ensure that there will be no new investments in entities with any nuclear weapons activities.
- d. Develop, implement and announce a timely, strategic roadmap for divestment from our existing investments in entities involved in any nuclear weapons activities.

e. Redirect investments to fiscally responsible and ethically sound activities, including infrastructure and education initiatives.

f. Endorse the ICAN Cities Appeal and align New York City with the Treaty on the Prohibition of Nuclear Weapons, and publicly announce such endorsement.



Ban The Bomb, Nuclear Ban Treaty Negotiations, United Nations, New York. Photo: Clare Conboy.



"Our struggle is about reversing the trends of social, economic, political, and ecological crisis – a global nervous breakdown! Our struggle is about creating sustainable lives and attainable dreams."

BELLA ABZUG

LETTER TO COMPTROLLER SCOTT STRINGER
from Daniel Dromm, NYC City Council Finance Chair



**THE COUNCIL
OF
THE CITY OF NEW YORK**

August 20, 2018

Hon. Scott Stringer
New York City Comptroller
1 Centre Street
New York, NY 10007

Dear Comptroller Stringer:

We are writing to request that New York City's pension funds and finances divest from banks, financial institutions, and corporations that profit from nuclear weapons production. A fiscal responsibility study should precede divestment.

Under your leadership, our city has already divested from coal and oil. Now it is time to address the continued and growing nuclear threat. Trump's nuclear posture dangerously lowers the threshold for nuclear weapons use while increasing the likelihood of an accidental launch. At the same time, 122 United Nations member states voted to adopt the Treaty on the Prohibition of Nuclear Weapons.

As countries across the world sign and ratify the treaty, it is time to extract our city's finances from banks and companies that make money from the renewed nuclear arms race. There is precedence as just this past January, the largest pension fund in the Netherlands, ABP, divested from companies that produce nuclear weapons. The 2018 report from Don't Bank on the Bomb (<https://www.dontbankonthebomb.com/2018-report>) contains the latest information on banks and corporations that profit from nuclear weapons.

Your commitment to aligning our city's financial power with our progressive values is an inspiration. In this same spirit, we request that you make a public announcement that NYC will take steps to prevent investment in companies linked to the production of nuclear weapons. Our divestment would send a clear signal to financial institutions and corporations around the world that hard-working New Yorkers refuse to derive monetary benefit from this sordid and arguably illegal industry.

Sincerely,

A handwritten signature in black ink, appearing to be "CJ".

Corey Johnson
Speaker

A handwritten signature in black ink, appearing to be "Dromm".

Daniel Dromm
Chair, Committee on Finance



Margaret Chin
District 1




Carlina Rivera
District 2



Keith Powers
District 4



Ben Kallos
District 5



Helen Rosenthal
District 6



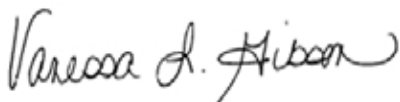
Diana Ayala
District 8



Bill Perkins
District 9



Ydanis Rodriguez
District 10



Vanessa L. Gibson
District 16



Paul Vallone
District 19



Costa Constantinides
District 22



Jimmy Van Bramer
District 26



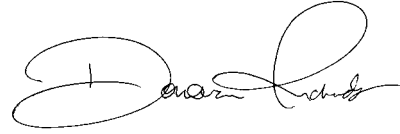
I. Daneek Miller
District 27



Adrienne E. Adams
District 28



Karen Koslowitz
District 29



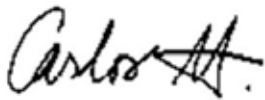
Donovan J. Richards
District 31



Stephen T. Levin
District 33



Antonio Reynoso
District 34



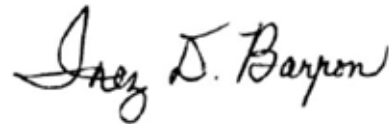
Carlos Menchaca
District 38



Brad Lander
District 39



Alicka Ampry-Samuel
District 41



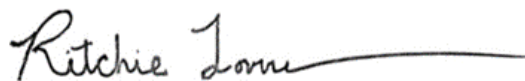
Inez D. Barron
District 42



Justin Brannan
District 43



Jumaane D. Williams
District 45



Ritchie Torres
District 15



Deborah Rose
District 49

FACING THE REALITY OF NUCLEAR RISK

The Humanitarian Impact of Nuclear Weapons on Health, the Environment and Medical Infrastructure

Excerpted from the IPPNW Campaign Tool Kit and IPPNW Campaign Kit

The International Committee of the Red Cross—the world’s premier medical-humanitarian organization—first called for nuclear weapons to be banned in September 1945, mere weeks after the atomic bombings of Hiroshima and Nagasaki. Red Cross doctors, including Ken Takeuchi and Marcel Junod, were among the first to witness the suffering and devastation in those two cities, and advised the states parties to the Geneva Conventions in 1950 that the “inevitable consequence [of nuclear weapons] is extermination, pure and simple.”

In November 2011, the Council of Delegates of the International Red Cross and Red Crescent Movement once again condemned nuclear weapons as incompatible with international humanitarian law. The resolution cited the 1996 advisory opinion of the International Court of Justice, which concluded that “nuclear weapons . . . have the potential to destroy all civilization and the entire ecosystem of the planet.”

In 1984, at the height of the Cold War between the US and the former Soviet Union, the World Health Organization concluded that doctors and scientists “have both the right and the duty to draw attention in the strongest possible terms to the catastrophic results that would follow from any use of nuclear weapons.”

In 1998 and again in 2008, the World Medical Association condemned nuclear weapons and called on the governments of the world to work for their elimination.

When facing the reality of nuclear risk, one must consider the immediate effect on human beings, the natural world and far reaching effects of radiation on future generations.

Physical Trauma and Burns

Nuclear weapons have extreme blast and burn effects that kill people and destroy infrastructure on a scale and with an intensity that puts them in a class of their own compared with any other weapons.

The heat wave from a nuclear detonation incinerates everything combustible in its path, including human flesh. Firestorms consume all remaining oxygen, suffocating everyone who managed to take refuge from the flames themselves.

The blast wave and associated overpressures and hurricane-force winds collapse all but the strongest buildings, destroy roads and transportation systems, and turn objects (including human victims) into missiles that amplify the damage, until nothing remains but rubble.

An electromagnetic pulse disrupts the electricity supply grid and electronic equipment and systems, including computers, medical equipment and satellite communications.

These levels of destruction, which are more extreme than produced by any other weapon, cannot be limited to military targets or to combatants.

The evidence

At the instant of detonation a nuclear weapon produces temperatures of tens of million degrees Celsius—comparable to temperatures in the core of the Sun. Depending on the size and yield of the weapon, the heat generated

by the fireball incinerates everything it touches. Ground temperatures at the hypocenter (ground zero) of the 15-kiloton atomic detonation over Hiroshima were between 3,000 and 4,000 degrees Celsius (5,400 to 7,200 degrees Fahrenheit). The heat from the 21-kiloton Nagasaki blast reached 3,900 degrees Celsius (7,000 degrees F). These temperatures—comparable to those found on the surface of the Sun—are produced by no other weapon ever created.

The impacts of this heat are extreme and far reaching. A Hiroshima-size bomb burns naked skin up to 3.5 km (2.2 mi) away, and chars wood up to 3 km (1.9 mi) away.

Nearly half the energy from a nuclear weapon is released in the form of a blast wave, which travels at supersonic speed, creating overpressures that kill people, level reinforced concrete structures, destroy transportation systems, factories, and commercial buildings, and reduce houses to debris. Depending on the height of burst, a 10-20 kiloton nuclear detonation can produce overpressures at the center of the blast greater than 140 kilopascals (kPa) (20 pounds per square inch, psi). This is enough to destroy all but the skeletons of reinforced concrete structures. At 1 km (0.6 miles) from ground zero, over-pressures of about 70 kPa (10 psi) will destroy all wood and brick buildings.

In a densely populated area, immediate injuries include tens or hundreds of thousands of burns, many of them third degree. These occur on top of many thousands of crush injuries, ruptured organs (particularly lungs), fractured skulls, and compound fractures due to collapsed buildings and blast-induced "missile" impact on human bodies. A significant number of people would be deafened due to ruptured eardrums. Many people would be temporarily blinded by the initial ash. Viewing the fireball with the naked eye can cause permanent damage, including retinal burns and scars.

Following a nuclear war, the effects of combined injuries—burns, traumatic wounds and radiation exposure—would be synergistic, turning injuries that would not be serious on their own into ones that are serious or life-threatening. In Hiroshima, more than 70%

of those injured had combined injuries. In the absence of effective and timely medical care following a nuclear war, many would die of injuries, including radiation exposure, from which they would recover if they had access to care. In Hiroshima, many died of radiation doses which were only about half of those which would be fatal under normal circumstances.

Nuclear weapons generate winds many times stronger than a Category 5 hurricane. The 21-kilo- ton atomic bomb detonated over Nagasaki produced winds of more than 600 miles per hour. The intense heat and winds combine to start firestorms that can cover several square miles. The radius of total destruction in Nagasaki was about 1.6 km (1 mile).

An "airburst" nuclear detonation produces an electromagnetic pulse, which interacts with cables and antennas to generate high voltages. This EMP effect disables communications and power systems, including computer networks, radio transmissions, and satellites.

Radiation

Nuclear weapons produce ionizing radiation, which kills or sickens those exposed, contaminates the environment, and has long-term health consequences for those who do not die right away.

Acute radiation sickness can cause death within hours, days, or weeks; those who recover may remain ill for months or even years.

Lower doses of ionizing radiation can cause leukemia, thyroid cancer, and many other cancers, even many years after exposure. Increased risk of cancer persists for the lifetime of those exposed.

Radiation exposure also causes birth defects and genetic damage. Subsequent generations can suffer both because of genetic damage they inherited, as well as exposure to radioactivity from lingering radioactive contamination and fallout.

A dose of radiation lethal for a human being can contain no more energy than the heat in a single sip of hot tea or coffee.

There is no antidote to radiation exposure and no way to hasten the pace of physical decay which is innate to each different radioisotope.

Exposure to dangerous ionizing radiation has become a persistent global problem because of continuing fallout from atmospheric tests and contamination of land and water around the former test sites, nuclear weapons production facilities, and radioactive waste storage sites.

Radiation poses a particular problem for physicians and other first responders, who jeopardize their own health and safety by entering contaminated areas in the attempt to find and treat survivors.

Accumulating evidence is demonstrating greater health harm for a given dose of radiation than previously understood.

The evidence

Radioactive materials are dispersed by wind, and spread through surface and groundwater and ocean currents. Some are preferentially taken up by living things and concentrated up the food chain. Strontium-90, for example, is handled by the body like calcium (concentrated in bones and teeth), while cesium-137 and -134 are handled by organisms like potassium (concentrated inside most cells). These can be recycled in living things until they physically decay away, depending on their half-life.

Exposure to the initial burst of neutrons and gamma rays, to the radioactivity these induce in materials that are not normally radioactive, and to radioisotopes from the fallout produced by the detonation, all can cause acute radiation syndrome—also known as radiation sickness. The source of exposure can also be radiation releases from nuclear power plant disasters such as Chernobyl or Fukushima, or any other external exposure to high energy X-rays, gamma rays, and neutrons capable of penetrating to internal organs. Nuclear facilities such as power reactors and especially spent reactor fuel pools, if attacked by nuclear or other weapons, could release large amounts of long-lived radioactive isotopes. As demonstrated by the 2011

Fukushima nuclear disaster, disruption of water and power supplies, crucial to continuous cooling of spent fuel pools and reactors, can also cause severe and extensive radioactive contamination.

Symptoms of acute radiation sickness include destruction of bone marrow; irreparable gastrointestinal damage and dehydration; uncontrolled internal bleeding; extreme susceptibility to infection; hair loss; and central nervous system dysfunction.

Ionizing radiation is uniquely biologically damaging not because it contains especially large amounts of energy, but because that energy is delivered in large packets, to which the large complex molecules like DNA that define our make-up, are especially vulnerable. Up to half of those exposed to whole body doses greater than 1-2 Gy develop nausea, vomiting, and fatigue. Doses greater than 3 Gy will cause hemorrhaging and infectious diseases, including pneumonia, enterocolitis, and sepsis, due to lowered white blood cell levels. Without complex medical care, 95-100% of those receiving acute doses of more than 6 Gy will die within 2-4 weeks. Even with care, 50-100% will die. Still higher doses kill everyone exposed in a matter of days. [*A Gray (Gy) is a standard measure of the absorbed dose of radiation.*]

Doses over 100 millisievert (mSv) produce acute dose-related damage especially to the rapidly dividing cells of the body including:

- the bone marrow which produces red cells (causing anemia), white cells (causing increased vulnerability to infections) and platelets (causing internal and external bleeding)
- germ cells (causing sterility)
- the lining of the gut (causing vomiting, diarrhea and hemorrhaging)
- hair loss

At high doses, central nervous system dysfunction causes seizures and coma. Such doses can also produce longer term damage to specific organs, including cataracts of the eyes, radiation burns and scarring of the skin, and permanent sterility. They can also cause

birth defects and mental retardation for fetuses exposed in their mother's womb. These doses also increase the risk of chronic diseases, particularly cardiovascular disease (including heart attacks and strokes), but also others, including respiratory and gastrointestinal diseases.

All radiation doses increase the risk of many different types of cancer (leukemia and thyroid cancer being among the earliest to appear). Cancers begin to increase several years after exposure, and the heightened risk persists throughout the lifetime of those exposed. The increased risk is proportional to the dose, but there is no dose below which there is no increased risk. Accumulating evidence suggest that increase in non-cancer chronic diseases such as cardiovascular disease is also elevated at low radiation doses. Overall radiation-related mortality is estimated to be about double that due to cancer.

Infants and young children are 3-4 times more sensitive to these effects than adults, and women overall have a 40% higher risk of radiation-associated cancer than men. While no increase in genetic diseases in children of those exposed to radiation has yet been confirmed in humans, such effects have been proven in a wide variety of other animals and can be expected in humans. Radiation does cause transmissible genetic damage in all types of living things.

Exposures to lower doses of ionizing radiation, while they do not normally have acute effects, can cause leukemia, thyroid cancer, and cancers of the stomach, lung, liver, colon, bladder, breast, ovary, and skin. Other long-term effects include birth defects, chromosomal damage, miscarriages, and increased infant mortality among those exposed in utero.

Exposure to dangerous ionizing radiation has become a persistent global problem because of continuing fallout from atmospheric tests and contamination of land and water around the former test sites. Researchers have estimated that more than two million excess cancer deaths will have been caused by the end of this century by exposure to global radioactive fallout from atmospheric nuclear test explosions.

Nuclear Famine and Nuclear Winter

A limited, regional nuclear conflict involving only 100 Hiroshima-size nuclear weapons would severely disrupt the global climate and agriculture for two decades or more.

The resulting food shortages would place at least two billion people at risk of starvation. The effects would hit hardest the people who are currently most affected by food insecurity, even if they are distant from the region of conflict; but no region would be spared.

The massive arsenals held by the US and Russia could destroy Earth's fundamental ecosystems, on which all life depends.

These findings have profound implications. Use of nuclear weapons by any nation, with uncontrollable risks of escalation, would be suicidal. And not only the bloated arsenals of Russia and the US, but also the arsenals of UK, France, China, Israel, India and Pakistan pose an unparalleled global threat.

The evidence

Starting in 2007, scientists began to study the climate effects of a limited, regional nuclear war using only 100 Hiroshima-size warheads against large cities. The firestorms resulting from a nuclear war between India and Pakistan using 100 Hiroshima-size weapons—the example used in the computer models—would inject five teragrams (5 Tg, 5 million tons) of smoke into the stratosphere, where it spreads globally.

The most recent studies using the most sophisticated Earth system model show average global temperatures dropping 1.6°C in the 5th year, still 1.1°C cooler after 10 years, and not yet returned to baseline after 26 years. Global rainfall would decrease by around 10%, with local and regional decreases of 30-40% or more in temperate, grain-growing regions of North America and Eurasia. In particular annual rainfall would be reduced by 20-80% over the Asian monsoon region, including the Middle East, South Asia and SE Asia, on which food supplies for over 1.5 billion people crucially depend. Similar large reductions would occur in the Amazon region and southern Africa.

Growing seasons would be shorter by up to 40 frost-free days in the world's most important grain-producing areas. Even assuming temperature decline peaking at 1.25°C, less than the most detailed recent model suggests, US maize (corn) and soybean production would drop 15-20% in the first five years, and 10% in the next five years. Chinese maize, rice, and winter wheat production would drop 15-40% in the first five years, and 10-25% in the next five years. These are conservative estimates. They do not factor in the likely extensive disruptions to inputs to agriculture, such as seed, fertilizer, pesticides, machinery and fuel; disruption to transport and trade; workforce reductions and refugee flows; nor agricultural land taken out of production or food discarded because of radioactive contamination. Research remains to be done on crop losses in other regions. There is every reason to believe, however, that other regions across the world would be similarly impacted.

825 million people in the world are chronically malnourished today; several hundred million more are highly dependent on food imports. This means more than one billion people, primarily in the global South, would face starvation from a nuclear-war-induced famine. More than a billion people in China would also face severe food insecurity, meaning the endangered population could exceed two billion globally—more than one quarter of the people in the world. Pending data from other regions likely to be similarly affected, it can be expected that the number of people around the world who would starve to death following a regional nuclear war would be substantially greater.

Famines, however, are not simply related to decline in food produced. Historically, famines have occurred even with very modest declines in food production, because of panic, food hoarding and soaring price of food. For example in the Bengal famine of 1943, food production was actually higher than in 1941 when there was no famine.

Malnourished people have impaired immune function and resistance to disease. All famines are inevitably accompanied by epidemics of infectious diseases. Famines are also potent triggers of social unrest and violent conflict,

both within and between nations. These factors are likely to significantly increase the toll of food shortages and famine induced by a regional nuclear war, especially as the effects would be both widespread and prolonged over many years.

In addition to the direct agricultural impacts, stratospheric ozone depletion would result in large increases in ultraviolet (UV) radiation—30 to 100% increases in summer outside the tropics, endangering human and animal health, and further damaging crops and marine ecosystems

A war involving the massive American and Russian arsenals would produce 50-150 million tons of smoke and soot. Global average temperature would decrease by -10°C—temperatures not seen on Earth since the coldest point in the last ice age some 18,000 years ago. For three years there would not be a single frost-free day in the temperate regions of the Northern Hemisphere.

Agriculture would stop, human civilization would be extinguished, ecosystems would collapse, and many species, perhaps our own, would become extinct.

Doctors Can't Help

Doctors and health care workers would be killed or severely injured along with the general population;

Hospitals, clinics, and other medical facilities would be destroyed, and rendered unusable;

Medicines, blood for transfusions, diagnostic equipment, and all other essential supplies would be unavailable;

There would be no water, no electricity, no transportation, no communication systems;

Roads would be impassable and the terrain would be unrecognizable;

Corpses would be everywhere strewn among the injured and dying;

Surviving doctors and nurses would be unable to find, let alone treat, other survivors;

Dangerous levels of radiation would prevent doctors and other emergency responders from entering affected areas in search of survivors.

In the aftermath of a nuclear war, these conditions would be multiplied many times over, in many places. In addition

All forms of international travel, including planes and trains, would likely be disrupted for an indeterminate time;

Electronic communications could fail worldwide as a result of EMP effects;

The global economy would be severely impacted, creating financial impediments to an organized humanitarian response.

The fact is, a meaningful medical and humanitarian response to aid the immediate survivors of the use of nuclear weapons is impossible. Facing multiple injuries, an unrecognizable world, and most of the normal supports and essentials of life gone, few of those with more than minor injuries are likely to survive even the immediate aftermath. And no humanitarian response could undo even a small part of the terrible destruction and cataclysmic scale of death and injury inflicted.

The evidence

The atomic bombings of Hiroshima and Nagasaki killed most of the physicians and health workers in both cities, destroyed hospitals and clinics, and decimated medical resources. The heavily damaged Red Cross hospital in Hiroshima had no functioning laboratory equipment and was unable to provide blood transfusions; 600 of the 1,000 victims brought there on the first day died immediately.

During the critical hours and days following the bombings, physicians who arrived in Hiroshima and Nagasaki had to work without equipment, blood supplies, medicines, and other resources needed for effective treatment. There was no electric power, no water, no transportation or communication systems; the surroundings were unrecognizable.

One of the foremost experts on the medical

effects of nuclear war, Dr. Jack Geiger, has explained the insuperable obstacles to mounting a medical response:

“Estimates of the ratios of surviving physicians to seriously injured victims vary from 1:350 to 1:1,700. If we assume a ratio of 1:1000, and imagine that every surviving physician would find all the wounded with no loss of time, spend only 15 minutes per patient on every aspect of diagnosis and treatment, and work 18 hours a day, it would still be 8 to 16 days before every surviving patient would be seen for the first time. Most of the victims, obviously, would die . . .

Many physicians and patients would never find each other because of their fear of radiation exposure, because streets filled with rubble would make travel impossible, because victims would be trapped deep within wrecked buildings . . . There will be no communications system, no transportation network, no electricity, no water supply. Ambulances and other emergency vehicles would be non-existent . . . Medical care would be overwhelmed by the consequences of a single thermonuclear weapon, let alone a substantial nuclear exchange. There can be no adequate medical response to a thermonuclear attack.”

The World Health Organization published an authoritative study—Effects of Nuclear War on Health and Health Services—in 1984. The study evaluated the “catastrophic results [that] would follow from any use of nuclear weapons,” and concluded that “no health service in any area of the world would be capable of dealing adequately with the hundreds of thousands of people seriously injured by blast, heat or radiation from even a single 1-megaton bomb . . . the only approach to the treatment of the health effects of nuclear explosions is primary prevention of such explosions, that is, the primary prevention of atomic war.” A second edition, published in 1987, added that “after a major nuclear war famine and diseases would be widespread and social systems around the world would be disrupted . . . It is obvious that the health services in the world could not alleviate the situation in any significant way.”

WHY THEY CALL IT THE MANHATTAN PROJECT

New York Times, 30 October 2007

By WILLIAM J. BROAD

By nature, code names and cover stories are meant to give no indication of the secrets concealed. "Magic" was the name for intelligence gleaned from Japanese ciphers in World War II, and "Overlord" stood for the Allied plan to invade Europe.

Many people assume that the same holds true for the Manhattan Project, in which thousands of experts gathered in the mountains of New Mexico to make the world's first atom bomb.

Robert S. Norris, a historian of the atomic age, wants to shatter that myth.

In "The Manhattan Project" (Black Dog & Leventhal), published last month, Dr. Norris writes about the Manhattan Project's Manhattan locations. He says the borough had at least 10 sites, all but one still standing. They include warehouses that held uranium, laboratories that split the atom, and the project's first headquarters – a skyscraper hidden in plain sight right across from City Hall.

"It was supersecret," Dr. Norris said in an interview. "At least 5,000 people were coming and going to work, knowing only enough to get the job done."

Manhattan was central, according to Dr. Norris, because it had everything: lots of military units, piers for the import of precious ores, top physicists who had fled Europe and ranks of workers eager to aid the war effort. It even had spies who managed to steal some of the project's top secrets.

"The story is so rich," Dr. Norris enthused. "There's layer upon layer of good stuff,

interesting characters."

Still, more than six decades after the project's start, the Manhattan side of the atom bomb story seems to be a well-preserved secret.

Dr. Norris recently visited Manhattan at the request of The New York Times for a daylong tour of the Manhattan Project's roots. Only one site he visited displayed a public sign noting its role in the epochal events. And most people who encountered his entourage, which included a photographer and videographer, knew little or nothing of the atomic labors in Manhattan.

"That's amazing," Alexandra Ghitelman said after learning that the buildings she had just passed on inline skates once held tons of uranium destined for atomic weapons. "That's unbelievable."

While shock tended to be the main reaction, some people hinted at feelings of pride. More than one person said they knew someone who had worked on the secret project, which formally got under way in August 1942 and three years later culminated in the atomic bombing of Japan. In all, it employed more than 130,000 people.

Dr. Norris is also the author of "Racing for the Bomb" (Steerforth, 2002), a biography of Gen. Leslie R. Groves, the project's military leader. As his protagonist had done during the war, Dr. Norris works in Washington. At the Natural Resources Defense Council, he studies and writes about the nation's atomic facilities.

Dr. Norris began his day of exploration by taking the train to New York from Washington, coming into Pennsylvania Station just as General Groves had done dozens of times

during the war to visit project sites.

"Groves didn't want the job," Dr. Norris remarked outside the station. "But his foot hit the accelerator and he didn't let up for 1,000 days."

For tour assistance, Dr. Norris brought along his own books as well as printouts from "The Traveler's Guide to Nuclear Weapons," a CD by James M. Maroncelli and Timothy L. Karpin that features little-known history of the nation's atom endeavors.

We headed north to the childhood home of J. Robert Oppenheimer, the eccentric genius whom General Groves hired to run the project's scientific side as well as its sprawling New Mexico laboratory. Last year, a biography of Oppenheimer, "American Prometheus" (Knopf, 2005), won the Pulitzer Prize.

"One of the most famous scientists of the 20th century," Dr. Norris noted, got his start "walking these streets" and attending the nearby Ethical Culture School.

Oppenheimer and his parents lived at 155 Riverside Drive, an elegant apartment building at West 88th Street. The superintendent, Joe Gugulski, said the family lived on the 11th floor, overlooking the Hudson River.

"One of my tenants read the book," Mr. Gugulski told us. "So I looked it up." To his knowledge, Mr. Gugulski added, no other atomic tourists had visited the building.

The Oppenheims decorated their apartment with original artwork by Picasso, Rembrandt, Renoir, Van Gogh and Cézanne, according to "American Prometheus." His mother encouraged young Robert to paint.

By the late 1930s and early 1940s, blocks away at Columbia University, scientists were laboring to split the atom and release its titanic energies. We made our way across campus – with difficulty because of protests over the visit of President Mahmoud Ahmadinejad of Iran, which is widely suspected of harboring its own

bomb program.

Dr. Norris noted that the Manhattan Project led to "many of our problems today."

The Pupin Physics Laboratories housed the early atom experiments, Dr. Norris said. But the tall building, topped by observatory domes, has no plaque in its foyer describing its nuclear ties.

Passing students and pedestrians answered "no" and "kind of" when asked if they knew of the atom breakthroughs at Pupin Hall. Dr. Norris said the Manhattan Project, at its peak, employed 700 people at Columbia. At one point, the football team was recruited to move tons of uranium. That work, he said, eventually led to the world's first nuclear reactor.

After lunch, we headed to West 20th Street just off the West Side Highway. The block, on the fringe of Chelsea, bristled with new galleries, and Kingdom Hall of Jehovah's Witnesses. On its north side, three tall buildings once made up the Baker and Williams Warehouses, which held tons of uranium.

Two women taking a cigarette break said they had no idea of their building's atomic past. "It's horrible," said one.

Dr. Norris's "Traveler's Guide" fact sheet said the federal government in the late 1980s and early 1990s cleaned the buildings of residual uranium. Workers removed more than a dozen drums of radioactive waste, according to the Department of Energy in Washington. "Radiological surveys show that the site now meets applicable requirements for unrestricted use," a federal document said in 1995.

We moved to Manhattan's southern tip and worked our way up Broadway along the route known as the Canyon of Heroes, the scene of many ticker-tape parades amid the skyscrapers.

At 25 Broadway, we visited a minor but important site – the Cunard Building. Edgar Sengier, a Belgian with an office here, had his

company mine about 1,200 tons of high-grade uranium ore and store it on Staten Island in the shadow of the Bayonne Bridge. Though a civilian, he knew of the atomic possibilities and feared the invading Germans might confiscate his mines.

Dr. Norris said General Groves, on his first day in charge, sent an assistant to buy all that uranium for a dollar a pound – or \$2.5 million. “The Manhattan Project was off to a flying start,” he said, adding that the Belgian entrepreneur in time supplied two-thirds of all the project’s uranium.

We walked past St. Paul’s Chapel and proceeded to the soaring grandeur of the Woolworth Building, once the world’s tallest, at 233 Broadway.

A major site, it housed a front company that devised one of the project’s main ways of concentrating uranium’s rare isotope – a secret of bomb making. On the 11th, 12th and 14th floors, the company drew on the nation’s scientific best and brightest, including teams from Columbia.

Dr. Norris said the front company’s 3,700 employees included Klaus Fuchs, a Soviet spy. “He was a substantial physicist in his own right,” Dr. Norris said. “He contributed to the American atom bomb, the Soviet atom bomb and the British atom bomb.”

So how did the Manhattan Project get its name, and why was Manhattan chosen as its first headquarters?

Dr. Norris said the answer lay at our next stop, 270 Broadway. There, at Chambers Street, on the southwest corner, we found a nondescript building overlooking City Hall Park.

It was here, Dr. Norris said, that the Army Corps of Engineers had its North Atlantic Division, which built ports and airfields. When the Corps got the responsibility of making the atom bomb, it put the headquarters in the same building, on the 18th floor.

“That way he didn’t need to reinvent the wheel,” Dr. Norris said of General Groves. “He used what he had at his fingertips – the entire Corps of Engineers infrastructure.”

Dr. Norris added that the Corps at that time included “extraordinary people, the best and brightest of West Point.”

In time, the office at 270 Broadway ran not only atom research and materials acquisition but also the building of whole nuclear cities in Tennessee, New Mexico and Washington State.

The first proposed name for the project, Dr. Norris said, was the Laboratory for the Development of Substitute Materials. But General Groves feared that would draw undo attention.

Instead, General Groves called for the bureaucratically dull approach of adopting the standard Corps procedure for naming new regional organizations. That method simply noted the unit’s geographical area, as in the Pittsburgh Engineer District.

So the top-secret endeavor to build the atom bomb got the most boring of cover names: the Manhattan Engineer District, in time shortened to the Manhattan Project. Unlike other Corps districts, however, it had no territorial limits. “He was nuts about not attracting attention,” Dr. Norris said.

Manhattan’s role shrank as secretive outposts for the endeavor sprouted across the country and quickly grew into major enterprises. By the late summer of 1943, little more than a year after its establishment, the headquarters of the Manhattan Project moved to Oak Ridge, Tenn.

Despite this dispersal, Dr. Norris said, scientists and businesses in Manhattan, including The New York Times, continued to aid the atomic project.

In April 1945, General Groves traveled to the newspaper’s offices on West 43rd Street. He asked that a science writer, William L. Laurence, be allowed to go on leave to report

on a major wartime story involving science.

As early as 1940, before wartime secrecy, Mr. Laurence had reported on the atomic breakthroughs at Pupin Hall.

Now, Dr. Norris said, Mr. Laurence went to work for the Manhattan Project and became the only reporter to witness the Trinity test in the New Mexican desert in July 1945, and, shortly thereafter, the nuclear bombing of Japan.

The atomic age, Mr. Laurence wrote in the first article of a series, began in the New Mexico desert before dawn in a burst of flame that illuminated “earth and sky for a brief span that seemed eternal.”

In Manhattan, the one location that has memorialized its atomic connection had nothing to do with making or witnessing the bomb, but rather with managing to survive its fury.

The spot is on Riverside Drive between 105th and 106th Streets. There, in a residential neighborhood, in front of the New York Buddhist Church, is a tall statue of a Japanese Buddhist monk, Shinran Shonin, who lived in the 12th and 13th centuries. In peasant hat and sandals, holding a wooden staff, the saint peers down on the sidewalk.

The statue survived the atomic bombing of Hiroshima, standing a little more than a mile from ground zero. It was brought to New York in 1955. The plaque calls the statue “a testimonial to the atomic bomb devastation and a symbol of lasting hope for world peace.”

The statue stands a few blocks from Columbia University, where much of the bomb program began.

“I wonder how many New Yorkers know about it,” Dr. Norris said of the statue, “and know the history.”

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NEW YORK CITY COUNCIL RESOLUTIONS

THE COUNCIL

April 26, 1983

Res. No. 364

Resolution calling upon the Council of the City of New York to prohibit the production, transport, storage or deployment of nuclear weapons within the City and proclaiming the City a Nuclear Weapons Free Zone.

By Council Member Gerges; also Council Members Dryfoos, Eisland, Friedlander, Greitzer, Katzman, Leffler, Maloney, Messinger, Michels, Pinkett, Alter, Foster and Lisa—

Whereas, The development and production of nuclear weapons continues at a horrifying rate; and,

Whereas, The discussion of nuclear weapons and nuclear war is no longer concerned with hypothetical moral debate, but strategic planning; and,

Whereas, A too great proportion of our society views the issue of nuclear weapons and nuclear war as a discussion of fantasy, ignoring the very real potential for utter destruction; and,

Whereas, There exists a stunning trend within the halls of power of this nation and other nations to deal with nuclear war planning as a realistic, viable option in international political negotiation; and

Whereas, The City of New York is the host city to the United Nations which is committed to brotherhood and peaceful, equitable advancement of mankind; and

Whereas, The City Council of New York has committed itself to the tandem notions of Jobs With Peace and a Nuclear Freeze by resolution; and,

Whereas, Many proponents of these two ideals waver in their commitment, proving the urgent need to strengthen these ideals within the community of the people of the City of New York; and,

Whereas, Common discourse treats nuclear weapons and nuclear war as wagering chips for international politics instead of as the instruments of the most horrible death for which they were designed and intended; and,

Whereas, The continent of Antarctica has enjoyed the designation of a nuclear weapons free zone since 1959; South America and outer space have been so designated since 1967 and as of 1971 the ocean floors have been likewise proclaimed; and,

Whereas, A most basic human logic demands to include more vastly populated areas of our world as nuclear weapons free zones; and,

Whereas, Mankind's creation of nuclear weapons and ability for nuclear war is the most profound and powerful knowledge ever possessed by the human mind; and,

Whereas, This profundity demands the attention and concerns of every citizen of every country and every legislative body on every level of government on the planet Earth; therefore be it,

Resolved, That the Council of the City of New York, on behalf of the people of the City of New York, and with a most humble respect and deep concern for the people of the entire world, hereby prohibits the production, transport, storage, placement or deployment of nuclear weapons within the territorial limits of the City of New York, and proclaims and designates the City of New York a Nuclear Weapons Free Zone.

Adopted.

THE COUNCIL

January 22, 1986

Res. No. 41

Resolution declaring that no ship be permitted to bring Nuclear Missiles into the Harbor of New York.

By Council Member Friedlander; also Council Members DiBrienza, Foster, Greitzer, Horwitz, Maloney, Messinger and Michels.

Whereas, Responding to requests by New York elected officials, the United States Navy has proposed to establish a naval base on Staten Island for its seven-ship Surface Action Group, including the U.S.S. Iowa; and

Whereas, The U.S.S. Iowa carries a minimum of 32 "Tomahawk" cruise missiles equipped with nuclear warheads which are 16 times more powerful than the Hiroshima bomb; and

Whereas, The U.S. Department of Defense admits to over 30 nuclear weapons accidents between 1950 and 1980 and the presence of the cruise missiles provides a potential threat of such accidents and the release of radioactive material; and

Whereas, The U.S. Coast Guard Casualty Review Branch reported that (between 1976 and 1980) 609 large accidents occurred in New York Harbor, many involving freighters and tankers, creating a serious possibility of nuclear accidents; and

Whereas, A naval nuclear Surface Action Group in New York Harbor, which is surrounded by a dense population of over 20 million, could create a nuclear catastrophe by accident or by hostile military action; and

Whereas, The potential danger of nuclear warheads is supposedly justified by the exaggerated claims of \$500 million a year in economic benefits for the City (probably closer to \$90 million after construction is completed) and 9000 new jobs (probably closer to 1000 direct civilian jobs); and

Whereas, The financial costs to New Yorkers will be substantial, for example, Port Authority pledges \$15 million for pier reconstruction; NYC Housing Partnership has pledged to help steer federal housing grants to Staten Island for military housing; and out of state military personnel living at the base pay no city or state income taxes while receiving fire, police, sanitation and other services; and

Whereas, The danger of nuclear weapons aboard naval vessels in New York Harbor far outweighs any minimal economic benefits; and

Whereas, Precedent has been set by the U.S. Government's agreement with Japan not to bring any nuclear missiles on naval ships into their harbors; now, therefore, be it

Resolved, That the Council of the City of New York declares that no ship be permitted to bring nuclear missiles into the Harbor of New York.

Referred to the Committee on Economic Development.

The Council

1999

Res. No. 878

Resolution declaring the City of New York a Nuclear Weapon Free Zone and support the further development of Nuclear Weapon Free Zones throughout the world.

By Council Members Foster and Eldridge

Whereas, Nuclear weapons pose a continuing threat to civilization, the human species, and the structure and stability of life itself; and

Whereas, Cities have been primary targets of nuclear weapons throughout the Nuclear Age and remain vulnerable to the massive destructive effects of nuclear weapons; and

Whereas, The development and maintenance of nuclear arsenals are extraordinarily costly, costing tens of billions of dollars per year, and such resources could be far better utilized for rebuilding the infrastructure of our cities, supporting the health and welfare of our citizens, and protecting and enhancing the quality of the environment; and

Whereas, The five declared nuclear weapons states (United States, Russia, United Kingdom, France and China) promised at the Non-Proliferation Treaty Review and Extension Conference in May 1995 to pursue "systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating these weapons"; and

Whereas, The International Court of Justice ruled unanimously in July 1996, "There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament on all its aspects under strict and effective international control"; and

Whereas, Retired U.S. General Lee Butler, once responsible for all US strategic nuclear forces, has called nuclear weapons "inherently dangerous, hugely expensive, militarily inefficient and morally indefensible"; and

Whereas, The end of the Cold War has provided an unparalleled opportunity to end the nuclear weapons era, which would be a gift to children everywhere and to all future generations; now, therefore, be it

Resolved, That the Council of the City of New York calls for all nuclear weapons to be taken off alert status, for all nuclear warheads to be separated from their delivery vehicles, and for the nuclear weapon states to agree to unconditional no first use of these weapons; and, be it further

Resolved, The Council of the City of New York calls upon the governments of all nuclear weapons states to begin negotiations immediately on a Nuclear Weapons Convention to prohibit and eliminate all nuclear weapons early in the next century, and to complete these negotiations by the year 2000; and, be it further

Resolved, That the Council of the City of New York declares that the city be a Nuclear Weapon Free Zone and support the further development of Nuclear Weapon Free Zones throughout the world.

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