



DREXEL UNIVERSITY

Urban Health
Collaborative

Dornsife School of Public Health

JULY 2018

ENVIRONMENTAL HEALTH IN SELECT U.S. CITIES

How do environmental policies impact health?

U.S. Department of Health and Human Services (DHHS) positions environmental as one of the objectives of Healthy People 2020.³ Urban environment affects health related quality of life (HRQoL) and can improve or exacerbate health disparities.³ Environmental risk factors such as carbon emission, climate change, increased amount of waste, overflowing landfills, water pollution, adversely affect population health. Environmental policies and interventions enacted at the city level have the power to improve population health and the overall quality of life. For example, road traffic safety polices can reduce pedestrian fatalities.



Results

This report describes environmental policies and programs identified during the first year of surveillance: March 2017 - February 2018. We found **over 35 environmental policy actions** among the four cities, Philadelphia, New York City, Washington DC, and Los Angeles. Results show cities are embarking on long-term initiatives, with 10-30 year goals, to create greater sustainability, including transitioning to clean energy (e.g., solar), reducing carbon emission and waste, and preserving clean water. Efforts are focused on **Waste & Recycling, Carbon Emission & Energy, Vision Zero, Solar Energy, Water Conservation, and Sustainable Cities**. These cities have set forth long-term, ambitious, high-level commitments, along with actionable, achievable short-term targets. They are implementing policies affecting all residents, and ones that focus specifically on low-income and disadvantaged communities to improve health equity overall. The next page summarizes the specific environmental policies identified by our surveillance thus far, in each of these six areas.

SIX FOCUS AREAS

Waste
&
Recycling

Carbon
Emission
& Energy

Vision
Zero

Solar
Energy

Sustainable
Cities

Water
Conservation

Waste & Recycling

Each year cities dispose approximately 1 ton of residential and commercial waste per resident. Cities are now embracing commitments to fully eliminate the use of landfills (Zero waste goal) and increase recycling by imposing mandates on businesses and apartment complexes: NYC Zero Waste (part of OneNYC): 2016-2030; Clean PHL & Zero Waste: 2016-2035; Zero Waste LA (2016-2035), RecycLA (2017-2025) & Sustainability City PLAN (2015-2032); Zero Waste DC & Sustainable DC: (2012-2032).

Did you know? Among the 10 largest cities in the US, **LA is the leader in waste diversion** – processing 76.4% of waste that would have gone to landfills, and it is also the **largest city to ban single-use plastic bags**.

Water Conservation

Fresh clean water is an invaluable and limited resource. Cities are finding innovative ways to conserve water by capturing rainwater for filtration or reuse, building green storm water infrastructures, and repairing and installing water-saving infrastructures in public facilities. **Philly's Green City Clean Waters (2011-36) is the first green-centric plan in the nation to be approved by the Environmental Protection Agency (EPA).**

Vision Zero

Vision Zero represents cities' commitment to reducing and eventually eliminating traffic deaths and serious injuries on streets. NYC was the first US city to adopt Vision Zero in 2014. LA, DC & Philly followed, and today all four cities have comprehensive action plans to achieve this vision.

Carbon Emission & Energy

Lack of national commitment to the 2015 Paris Agreement to limit global warming did not stop action at the local level. U.S. cities [more than 1 of these 4?] are stepping up to reduce carbon emission at the same level as the European Union participants of the Paris Agreement: 80% greenhouse emission reduction by 2050: NYC Roadmap to 80 x 50: 2016-2050; Powering Our Future: A Clean Energy Vision for Philadelphia (CEV): 2017-2050; Climate Ready DC: 2012-2050; Sustainability City pLAN: 2015-2035.

Did you know? NYC is the largest city in the world to commit to carbon reduction goal. It has also developed a green building plan, *One City Built to Last*, to improve the energy efficiency of NYC buildings by 2025.

Solar Energy

Production of electricity from alternative sources of energy, such as solar, generates clean energy and reduces pollution. Through public and private partnerships, cities are working to transition to solar energy, including in **low- and moderate-income neighborhoods**. **Over 10 initiatives and policy actions** have been enacted across the 4 selected cities in one year focused on increasing solar energy.

Did you know? Los Angeles has the most installed solar capacity of any US city.

Sustainability Plans

City governments expressed long-term commitments to create the most **sustainable, equitable and prosperous** cities in the nation. Community voices played a strong role in shaping these plans, which included elements of increasing employment & education opportunities, carbon emission reduction, increasing air and water quality and solar capacity, waste management, and greening initiatives:

- ✓ **OneNYC: Plan for a Strong & Just City (2015-2050)**
- ✓ **NextGeneration: NYC Housing Authority Sustainability Agenda (2016-2025)**
- ✓ **Greenworks Philadelphia (2009-2019+)**
- ✓ **Sustainable DC Plan (2012-2032)**
- ✓ **Sustainability City PLAN (2015-2032)**
- ✓ **Our LA2040 (2020-2040)**

Our first-year policy surveillance demonstrated that Los Angeles, New York City, Philadelphia, and Washington DC recognize environmental health as an urgent issue and are going above and beyond federal and state requirements to improve urban health through environmental policies and programs. These cities' efforts demonstrate that cities are using an equity lens when designing and implementing environmental plans and policies.

Low-income communities are often disadvantaged by environmental factors and are the last to benefit from innovative programs. Across the surveilled programs and policies, we have noticed an effort to create more equitable and stronger cities overall. Large-scale solar programs are being implemented across cities in moderate, and low-income households, as well as public housing (e.g.: [New York City Housing Authority \(NYCHA\) Large-Scale Solar Program \(2017-2025\)](#)). The District of Columbia's Solar for All Program (2016-2032) will provide benefits of solar electricity to 100,000 low-income households that are at or below 80% Area Median Income and reduce their energy bills by 50% by 2032. These programs also benefit local residents by providing them with employment opportunities. Reducing unemployment is one of the objectives of sustainable city plans, such as Greenworks Philadelphia, Sustainable DC, and [Sustainability City PLAN](#). Cities have also launched programs to reduce exposure of low-income communities to brownfield sites and convert land to safe and beneficial use. To find out more about the programs implements across cities, please see the Appendix section.

This type of surveillance and monitoring what cities are doing to improve environmental determinants of health can be helpful for cities looking to reproduce best practices.

Recommendations

1. We encourage cities to use **this environmental local policy and program surveillance project as a tool** to identify best practices that can be shared and replicated across cities. It can also help to find the gaps in policies and programs – what is not addressed but should be in the future.
2. We encourage **collaboration across agencies, city departments, researchers, advocacy groups, and other stakeholders**. Cross-sector collaboration can promote the fastest implementation of a program or policy, foster new ideas and broaden the impact of initiatives. In looking for environmental policies and programs, we found examples of cities establishing successful cross-agency and cross-city collaborations to improve environmental health. For example, housing and environmental agencies collaborated to create the New York City Housing Authority (NYCHA) Sustainability Agenda and environmental agencies and the school district collaborated to create the Los Angeles Unified School District (LAUSD) Sustainability Initiatives.
3. **Adopting feasible but impactful policies** may be a good place to start. Banning single-use plastic bags is a policy to consider for other cities. For cities that are considering more serious commitments, we encourage to look into Vision Zero, Zero Waste, 80/50 carbon reduction and develop long-term sustainability plans. The Appendix section of this report provides descriptions of large scale environmental policies and programs.

References

1. Public Health Law Research. (2015). Resources for Policy Surveillance: A report prepared for the Centers for Disease Control and Prevention Public Health Law Program. Retrieved from http://publichealthlawresearch.org/sites/default/files/uploaded_images/CombinedYear1Report_Feb2015.pdf
2. Institute of Medicine (2011). Committee on Public Health Strategies to Improve Health.
3. Office of Disease and Health Promotion (ODPHP). (2017). Environmental Health. *2020 Topic & Objectives*. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/environmental-health>

APPENDIX

Sustainability Plans

NEW YORK CITY

OneNYC: The Plan for a Strong and Just City (2015-2050) - New York's long-term commitment to creating a just, equitable and sustainable city. To address the right problems, the plan uses 4 lenses to look at the future of NYC: **1. Growth; 2. Equity, 3. Sustainability, 4. Resilience.** The Sustainability Vision includes the following goals:

1. **80 x 50:** Greenhouse gas emissions will be 80 percent lower by 2050 than in 2005 - the largest city in the world to commit to this goal.
2. **Zero Waste:** NYC will send zero waste to landfills by 2030.
3. **Air Quality:** NYC will have the best air quality among all large U.S. cities by 2030.
4. **Brownfields:** NYC will clean contaminated land to address disproportionately high exposures in low-income communities and convert land to safe & beneficial use.
5. **Water Management:** NYC will mitigate neighborhood flooding and offer high-quality water services.
6. **Parks & Natural Resources:** All New Yorkers will benefit from useful, accessible, and beautiful open spaces.

NYC Local Law 84 (2013) prompted the creation of OneNYC. Under this law, a long-term plan considering population projections, housing, air quality, coastal protections, and other sustainability and resiliency factors is required every four years on Earth Day. This plan was developed after a thorough research and conversations with community members, collaborations with other agencies. This plan is built upon the PlaNYC plan, released in 2007.

NextGeneration: New York City Housing Authority (NYCHA) Sustainability Agenda (2016-2025) - is the NYCHA commitment to create sustainable homes by improving plumbing and ventilation, addressing mold, overheating, and power outages.

PHILADELPHIA

Greenworks Philadelphia (2009-2019+) - Philadelphia's sustainability plan. The 1st phase was completed in 2015. The program is in its 2nd phase: 2016-2019+. Greenworks Philadelphia has 8 visions for sustainable city for ALL Philadelphians:

7. Access to healthy, affordable, and sustainable **food and drinking water**;
8. **Healthy air** inside and outside;
9. **Clean energy & affordable energy**;
10. Preparedness for **climate change** and reduction of carbon pollution;
11. Parks, trees, storm water management, and healthy waterways;
12. **Access** to safe, affordable, and low carbon **transportation**;
13. Waste less and keep neighborhoods clean;
14. **Sustainability education, employment, and business opportunities.**

WASHINGTON, DC

Sustainable DC Plan (2012-2032) - Sustainable DC is the District of Columbia's major planning effort to make DC the most sustainable city in the nation. Community engagement has been the foundation of Sustainable DC. The plan establishes goals in the following areas: jobs & the economy, health & wellness, equity & diversity, climate & environment, built environment, energy, food, nature, transportation, waste & water. Some of the highlighted targets are:

- Cut unemployment by 50%
- Cut the citywide obesity rate by 50%
- Expose 100% of District residents to Sustainable DC events and initiatives in their neighborhood
- Reduce greenhouse gas emissions by 50%
- Retrofit 100% of existing commercial and multi-family buildings to achieve net-zero energy standards
- Cut citywide energy use by 50%
- 75% of residents live within ¼ mile of a community garden, farmers' market or healthy corner store
- Cover 40% of the District with a healthy tree canopy
- Increase use of public transit to 50% of all commuter trips; biking and walking to 25%
- Send zero solid waste to landfills per year and reduce total waste generation by 15%.
- Use 75% of the landscape to capture rainwater for filtration or reuse
- Decrease total water use by 40%

LOS ANGELES

Sustainability City Plan (2015-2032) - The pLAn is both a roadmap to achieve short-term results while setting the path to strengthen and transform our City in the decades to come. **Equity** is a foundation of this pLAn, which sets the course for a cleaner environment and a stronger economy. The pLAn is made up of short term (by 2017) and longer term (by 2025 and 2035) targets in **14 categories that will advance our environment, economy and equity.**

Our LA2040 (2020-2040) - For the **first time in a half-century**, the City of Los Angeles is undertaking a comprehensive update to its guiding vision, the General Plan. This initiative, OurLA2040, will result in a new 20-year citywide plan to be adopted in 2020, putting into place strong and visionary policies to help create a more prosperous, livable, and sustainable Los Angeles. **What is a General Plan?** The State of California and the Los Angeles City Charter require the City to create and adopt a General Plan. **The LA2040 Plan** elements include: 1. Urban Form and Land Use; 2. Environment; 3. Community; 4. Economy; 5. Open Space (e.g. Parks & Recreation); 6. Resilience.

LA2040 Timeline: Research - **2016-2017**; Listening and Visioning - **2017-2018**; Plan Development - **2018-2019**; Adoption and Implementation - **2020**; Will result in 2020-2040 Plan

The Los Angeles Unified School District (LAUSD) Sustainability Initiatives (2008-ongoing) – LAUSD is committed to becoming the most sustainable school district in the nation. Six focus areas of the plan are:

- Energy Conservation
- Water Stewardship
- Awareness & Engagement
- High performance Schools
- Campus Ecology
- Waste Reduction

LAUSD has already installed **solar panels on 59 campuses and 5 administrative sites**. In total these panels capture 21 MW of solar capacity, which is enough energy to power over **3,300 homes for one year**.

Carbon Emission & Energy

In December 2015, **195 countries** signed the first universal global climate deal, Paris Agreement, which legally binded the countries to limit global warming. While the U.S. federal administration did not sign this deal, U.S. cities are stepping up to reduce carbon emission at the same level as the European Union participants of the Paris Agreement: 80% greenhouse emission reduction by 2050. (https://ec.europa.eu/clima/policies/international/negotiations/paris_en).

NEW YORK CITY

New York City's Roadmap to 80 x 50 (2016-2050) - NYC's plan to achieve reduction in greenhouse gas emissions 80 percent below 2005 levels by 2050.

NYC is the largest city in the world to commit to this goal. New York City's Roadmap to 80 x 50 utilizes 4 strategies to achieve the 80% reduction goal: **energy, building, transportation, and waste**. To achieve 80 x 50 the City must accelerate efforts to:

- Make buildings significantly more energy efficient;
- Replace many fossil fuel-based heating & hot water systems in buildings with renewable or high efficiency electric systems;
- Transition towards a renewables-based electric grid;
- Reduce the number of miles driven in New York City while replacing remaining vehicles to zero-emissions vehicles;
- Achieve the goal of Zero Waste to landfills.

****The feasibility of 80 x 50 was initially evaluated in New York City's Pathways to Deep Carbon Reductions report (Pathways, Dec 2013). This vision was announced in 2014 and in 2015 was included in One New York: The Plan for a Strong and Just City (OneNYC). This plan outlines how this vision will be achieved.**

One City Built to Last: Transforming New York City's Buildings for a Low-Carbon Future (2015-2025) - This green buildings plan is a commitment to improve the energy efficiency of NYC buildings by 2025.

This plan is aligned with **NYC's 80% greenhouse gas emission reduction by 2050** (below 2005 levels). In New York City, buildings are responsible for the overwhelming share of the emissions, accounting for **nearly three-quarters** of NYC's contribution to climate change.

The goal is to upgrade the buildings to make them more energy efficient and reduce these emissions. **Goals for 2025:**

- Complete efficiency improvements in every City-owned building that has significant energy use and install 100 MW of onsite renewable power.
- Implement leading edge performance standards for new construction that cost-effectively achieve highly efficient buildings
- Develop interim energy performance targets for existing buildings to be met through both voluntary reductions and new regulations
- 3,500 construction-related jobs, provide training for more than 7,000 building operators and staff, and generate \$8.5 billion in total cost savings for New Yorkers.

PHILADELPHIA

Powering Our Future: A Clean Energy Vision for Philadelphia (CEV) (2017-2050) - a long-term vision for a Philadelphia to **reduce carbon emissions 80 percent from 2006 levels by 2050** while emphasizing equity and health for all Philadelphians.

Building Energy Benchmarking Ordinance & Program (2012-2050) - A law that was put in place to achieve the 2050 80% carbon emission reduction goal. Requires large commercial and multifamily buildings 50,000 square feet and larger to report their energy and water usage annually to the City of Philadelphia.

Municipal Energy Master Plan (2017-2050) - a roadmap to increase energy efficiency, renewable energy generation, and energy resiliency in municipal buildings and the built environment throughout Philadelphia. This plan is aligned CEV Philadelphia plan. **Goals:**

- Reduce carbon emission by 80% by 2050
- Reduce the City's built environment energy use 20 percent by 2030;
- Generate or purchase 100 percent of all electricity for the City's built environment from renewable resources by 2030;
- Maintain or reduce the City's built environment cost of energy.

WASHINGTON, DC

Climate Ready DC (2016-2050) - identifies 77 actions that the District will take to prepare for climate change, among which is cutting our greenhouse gas (GHG) emissions by 50% by 2032 and 80% by 2050.

LOS ANGELES

Sustainability City pLAn (2015-2035) - One of the goals is to reduce the carbon emission 45% below the 1990 levels by 2025, 60% by 2035 and **80% by 2050**.

SOLAR ENERGY

WASHINGTON, DC

District of Columbia's Solar for All Program (2016-2032) - the goal of this program is to provide the benefits of solar electricity to 100,000 low-income households that are at or below 80% Area Median Income and to reduce their energy bills by 50% (based on the 2016 residential rate class average) by 2032. The program is in its initial phase: 2017-2019.

The Renewable Portfolio Standard Expansion Amendment Act of 2016 – established the Solar for All Program in October 8, 2016. The goal of this Act is to expand DC's solar capacity, to increase the amount of solar generated within the District, and to provide the benefits of locally-generated solar energy to low-income households, small businesses, nonprofits, and seniors.

NEW YORK CITY

One City Built to Last: Transforming New York City's Buildings for a Low-Carbon Future (2015-2025) – among the goals of NYC energy efficiency plan is to grow solar energy capacity in public and private buildings by 2025: **250 megawatts (MW) for private sector** solar capacity and **100 MW for solar capacity on public sector**. In 2016, announced a new target of **1,000 MW by 2030** to support resiliency through power outages.

New York City Housing Authority (NYCHA) Large-Scale Solar Program (2017-2025) - first large-scale solar program at NYCHA. This program will serve low and moderate-income households, including residents of public housing. It will provide access to low-cost clean and employment opportunities in solar industry. The goal is goal is to power **6,600 households with solar energy by 2025** by installing **25 megawatts of solar capacity**.

NYC Solar Partnership (2006-present) - works to **expand access** to clean, reliable, and affordable solar energy for all New Yorkers and promote a robust marketplace for solar energy in New York City. To make solar energy more affordable, works to **reduce the cost of installing** - streamlining the permitting, interconnection and inspection processes. Led by Sustainable City University of New York (CUNY) in partnership with Mayor's Office of Sustainability, the NYC Economic Development Corporation, and the City University of New York (CUNY). Since 2014, funding is provided through *One City: Build to Last* to continue to reduce market barriers for solar; attract more solar energy companies to the city and create more jobs; and increase the city's installed solar capacity.

- **Shared Solar NYC Portal:** a program for connecting interested solar power customers with viable host sites built by trusted developers.
- **NY Solar Map:** a free, interactive map and analytics tool to help visitors to understand the potential for solar energy in New York State and New York City. This tool allows to see how much solar will fit on the of a particular building roof and how much money it can save, as well as solar statistics, including the local cost of solar, status of solar projects, and installed solar power to date.

Solarize NYC (2016-2025) – a citywide program to further **expand access to low-cost sustainable solar power** through **community group purchasing campaigns**. The successful

implementation of these campaigns will **lower the solar costs by 10-20 percent** and increase access to solar power in low-income and historically disadvantaged communities. Solarize campaigns include community outreach, education, simplified purchase processes, and bulk discounts. The program was Initiated by the NYC Solar Partnership and aligned with *One City: Build to Last* solar power goal - 250 megawatts (MW) for private sector solar capacity and 100 MW for solar capacity on public buildings by 2025.

PHILADELPHIA

Municipal Energy Master Plan (2017-2050) - The Energy Master Plan assumes that the City will be able to cost-effectively install approximately **four megawatts (MW) of solar PV** on its buildings by 2030, though this number may be exceeded if market conditions improve.

Powering Our Future: A Clean Energy Vision for Philadelphia (CEV) (2017-2050) - this long-term vision to reduce carbon emission by 80% by 2050 has solar energy provisions. Philadelphia plans to complete the following **2 actions**:

- Study **solar photovoltaic (PV)** potential and track rooftop solar PV costs and benefits
- Explore opportunities for simplifying the Power Purchase Agreement process for solar PV systems on the City's smaller rooftops.
- Consider **solar hot water systems** for cost-effective implementation at City facilities.

Solarize Philly (April 2017-present) - A citywide program to help all Philadelphians go solar at home. Solarize Philly is a group buying program designed to bring down the price of solar energy. The more customers who sign a contract as part of Solarize Philly, the deeper the discounts for all participants. The goal is to **Solarize 500 Philadelphia rooftops**, more than doubling the number of solar installations in the city. As of March 2018:

- **2,200+ households signed up;**
- **186 contracts were signed;**
- **5kw** - average size of Philly Rowhouse installation
- **\$1,500** - average 1st year savings

The Philadelphia Energy Campaign (2016-2026) - this campaign was initiated to create jobs, strengthen communities, cut energy bills, and reduce Philadelphia's carbon emission by focusing on 4 sectors: City buildings, Schools, low and moderate income residential housing and small businesses. The main goals of the campaign are the following:

1. **Create Jobs:** The Campaign's **\$1 billion investment will create 10,000 jobs over 10 years**, and support job training and local, inclusive hiring.
2. **Strengthen Communities:** The Campaign seeks to preserve existing affordable housing, reduce household expenses for low and moderate-income residents, help small businesses keep their doors open, and support the City and School District to
3. **Cut Energy Bills:** The Campaign will drive energy efficiency projects that will **reduce building energy use by over 20%, collectively saving over \$200 million citywide.**
4. **Reduce Pollution and Support Public Health:** The Campaign will reduce carbon emissions and other environmental pollutants, improve public health through better indoor and outdoor conditions, and

reduce costs, address deferred maintenance and invest in buildings across our city.

support our City's efforts to mitigate and adapt to climate change.

LOS ANGELES

Sustainability City PLAN (2015-2032) – with 292 sunny days per year and the largest municipal utility in the country, Los Angeles is uniquely positioned to invest in solar energy. **Los Angeles has the most installed solar capacity of any American city** and is committed to further increasing it. The solar energy goals of Sustainability City PLAN include:

- Increase cumulative total megawatts (MW) of local solar photovoltaic (PV) power to **900-1,500MW by 2025 and 1,500-1,800 by 2035.**
- Increase cumulative total MW of energy storage capacity to at least **1,654 MW by 2025.**

Solar Rooftops program (2017-ongoing) - a Community Solar Program (CSP) to expand access to solar savings for qualified residential customers who otherwise may not be able to use solar because of the high cost of installing panels. If approved, customers can get a fixed roof lease payment from the LA Department of Water & Power (LADWP). LADWP will either issue a \$360 check per year, or a \$30 per month bill credit. The agreement is valid for **up to 20 years**. There are no upfront costs, annual fees, credit checks or maintenance costs for program participants. By increasing the amount of rooftop solar, LA also gets closer to LADWP achieving the state-mandated goal of 33 percent renewable energy by 2020.

Solar Incentive Program (SIP) (2000-2017) – this program helps home or business owners to offset the cost of a solar rooftop installation. The LA Department of Water & Power (LADWP) provides a one-time payment to customers who purchase or lease solar rooftop systems that generate power for their home or business while still being connected to the city's power grid. This way, when their system does not generate power (at night, for example) their electricity will be supplied directly by the power grid. When their system generates more power than they draw from the grid, the excess energy is reflected as a credit on their bill.

Waste & Recycling

PHILADELPHIA

Clean PHL (Philadelphia): Zero Starts with One - the Zero Waste and Litter Cabinet (2016-2035) - On December 20, 2016 Mayor Kenney signed Executive Order 13-16 declaring a Vision Zero objective and creating a Zero Waste and Litter Cabinet. The objective is to reach **Philadelphia's goal of Zero Waste by 2035**. To achieve this goal, Philadelphia will reduce waste generation and increase waste diversion by 90 percent by 2035 (based on 2015 waste totals), with the remaining 10 percent utilized as waste to energy.

The Zero Waste and Litter Cabinet is an interdepartmental effort to continually reduce the waste entering landfills or conventional incinerators, combat litter, and enhance the cleanliness of streets and public spaces.

LOS ANGELES

RecycLA program (part of Zero Waste LA) (2017-2025) - A public-private partnership that will, for the first time in the history of the City, offer customer-friendly and efficient waste and recycling services to all commercial and industrial businesses, institutions, and large multifamily buildings. RecycLA is part of the effort to help California meet its **75 percent recycling goal and a landfill-free L.A.** The program requires recycling at 80,000 city businesses and multi-family apartment buildings, where recycling had previously been voluntary and spotty at best. RecycLA will extend recycling opportunities to everyone in the City, and will ensure stronger customer service, predictable and protected rates, and much needed infrastructure and equipment improvements.

LA Zero Waste Plan: Solid Waste Integrated Resources Plan (SWIRP) (2016-2035) – this plan, most commonly known as the City’s Zero Waste Plan, lays out a long-term plan through 2030 for the City’s solid waste programs, policies and environmental infrastructure. SWIRP proposes an approach for the City to achieve a **goal of 90 percent diversion by 2025**. Planning efforts for SWIRP began in 2006 to develop an approach for the City to achieve a goal of 70 percent diversion by 2013 and 90 percent diversion by 2025. These targeted diversion rates would be implemented through an enhancement of existing policies and programs, implementation of new policies and programs, and the development of future facilities to meet the City’s recycling and solid waste infrastructure needs over a 20-year planning period.

Sustainability City PLAN (2015-2032) – waste and recycling commitments are important components of this plan: 90% landfill diversion by 2025 and **95% by 2035**. In 2013-2014, LA diverted 76.4% of waste that would end up in landfills, making it the leader among the 10 largest cities in the US.

LA aims to increase proportion of waste products and recyclable commodities **reused locally**:

➤ **2025:** by 25%

➤ **2035:** by 50%

Los Angeles also encourages innovative expansion of waste diversion by retrofitting City Asphalt Plant 1 to produce **at least 50% recycled content asphalt**.

NEW YORK CITY

OneNYC: The Plan for a Strong and Just City (2015-2050) –part of this plan is NYC’s **Zero Waste goal** to send **no waste to landfills** by 2030. NYC will also address the brownfields problem by cleaning contaminated land, especially in highly exposed low-income communities, and converting land to safe & beneficial use.

WASHINGTON, DC

Sustainable DC Plan (2012-2032) – the plan includes targets for sending zero **solid waste to landfills** per year and reducing total waste generation by 15%.

Water Conservation

NEW YORK CITY

[Water for Future Program \(2010-2021\)](#) - A \$2.1 billion initiative to ensure clean, reliable, and safe drinking water for nine million New Yorkers for decades to come. The program has two main elements: 1. Repair leaks in the **Delaware Aqueduct**—which supplies roughly half of the city’s daily drinking water needs; 2. Supplement the city’s water supply during the temporary shutdown of the aqueduct.

[NYC Water Demand Management Plan \(2015-2021\)](#) - identifies **six key strategies** for managing water demand in New York City in light of the Water for the Future program, and details **21 specific initiatives** to be implemented over the next years in order to achieve targeted water demand reductions.

[NYC - Municipal Water Efficiency Program \(2012-19\)](#) - a seven-year initiative to retrofit plumbing fixtures in city schools, parks, playgrounds, firehouses, and universities. This program **generates over 9 million gallons of water savings per day** in more than 2,000 city properties.

LOS ANGELES

[One Water LA 2040 Plan \(2017-2040\)](#) - One Water LA is a collaborative approach to develop an integrated framework for managing the City’s water resources, watersheds, and water facilities in an environmentally, economically, and socially beneficial manner.

[Sustainability City PLAN \(2015-2032\)](#) – in 2017, Los Angeles has already reduced average per capita portable water use by 20% and established **Water Cabinet to implement key aspects of local water policy**. Its long-term objective include to reduce the purchase of imported water by 50% by 2025 and by 2035 to source 50% of water locally and reduce average per capita water use by 25%.

PHILADELPHIA

[Green City Clean Waters \(2011-2036\)](#) - Philadelphia's plan to reduce storm water pollution. It is **the first green-centric plan** in the U.S. to gain acceptance from the Environmental Protection Agency (EPA) and Pa. Dept. of Environmental Protection. “**Greened Acres**” refers to the volume of stormwater managed with green tools. The EPA and Philadelphia agreed to specific goals to be achieved by 2036 and by 2106 (1st 5 years) Philadelphia had to show that it could build 744 Greened Acres. In 2016 Philadelphia **exceeded this goal** by establishing **837.7 of Greened Acres**. Philadelphia also reduced pollution from stormwater runoff and combined sewer overflows **by more than 1.5 billion gallons annually**.

[Greenworks Philadelphia \(2009-2019+\)](#) – outlines the vision for all Philadelphians to have access to healthy, affordable, and sustainable food and drinking water.

WASHINGTON, DC

[Sustainable DC Plan \(2012-2032\)](#) – the plan includes targets to make **ALL District waterways fishable and swimmable** and use **75% of landscape to capture rainwater for filtration or reuse**. Additionally, DC aims to protect and restore wetlands, waterways, and aquatic ecosystems. By 2032, the city plans to decrease total water use by 40%.

Vision Zero

NEW YORK CITY

NYC Vision Zero (2014 – ongoing) - outlines **63 separate initiatives** that the Mayor's Office and a number of City agencies are undertaking **to reduce the number of pedestrian fatalities and serious injuries on our streets**. As of winter 2018, the Vision Zero Task Force has added an **additional 88 new initiatives**.

PHILADELPHIA

Philadelphia Vision Zero (2016-2030) – emerged from the **Executive Order 11-16**, which set a target of **zero traffic-related deaths by 2030**. Philadelphia Vision Zero task force worked on creating the action plan for this vision.

According to PennDOT, in Philadelphia, **4 children every day are reported to be involved in traffic crashes** and approximately 100 people are killed each year in traffic crashes.

By adopting Vision Zero, **the City of Philadelphia rejects the status quo that traffic crashes are “accidents.”** Instead, Philadelphia views traffic crashes as preventable incidents that can—and will—be systematically addressed.

WASHINGTON, DC

DC Vision Zero (2015-2024) - zero fatalities or serious injuries on our roads, because no loss of life is acceptable. **Goals:**

- **Create Safe Streets** - urban design improvements and green infrastructure that enhance the public realm, and provide community amenities;
- **Protect Vulnerable Users** - to serve people walking, wheeling, and biking, the District's sidewalk and bicycle networks must be properly designed;
- **Prevent Dangerous Driving** - through legislation and rule making, Vision Zero will ensure that penalties for dangerous driving are appropriate, and programs to correct this behavior are effective.
- **Be Transparent & Responsive** - regular geospatial analysis of crash data by mode, enforcement data by violation type, and other factors, all published in a central, easy-to-find location on the Vision Zero website.

The District's FY16 budget created a Vision Zero Fund with **\$500,000 as an initial down payment**.

LOS ANGELES

Vision Zero Los Angeles (2015-2025) - Vision Zero is working in partnership with the City of Los Angeles to **end all traffic deaths and serious injuries by 2025**. Focus on improvements on streets on the City's **High-Injury Network**. Current projects have additional priority to streets where fatal or severe injury collisions have involved **older adults and children**, as well as collisions that occur in **communities with negative health outcomes**.