



# Green Schoolyards

Transforming schools to make a life-changing difference



# Our mission

LAND FOR PEOPLE

The Trust for Public Land creates parks and protects land for people, ensuring **healthy, livable communities** for generations to come.





# The challenge

More than 1 in 3 Americans—**100 million people**—lack access to a park within a 10-minute walk of home.

We aim to change that.





# Context

The green schoolyards movement is taking hold across the world as a **recognized solution** to address **climate, equity, and health** challenges facing the 21st century. Green schoolyards represent the single greatest opportunity to improve park access for millions across the country.





# What is a green schoolyard?

**Green schoolyards** are open to the community after school hours and are designed by the school and surrounding neighborhood as **nature-rich hubs for community health and climate resilience.**



William Cramp School, Philadelphia

# What does a green schoolyard do?

## COOL

**Extreme heat is the number one weather-related killer.** Parks and trees are one of the most effective ways to combat extreme heat. A recent study in Baltimore, Maryland, and Washington, D.C., showed that on one of the hottest days last summer, **parks were as much as 17 degrees cooler than parts of the city lacking trees and green space.**

## ABSORB

Well-designed schoolyards can reduce flooding and protect water quality, **filtering as much as 95 percent of major pollutants** out of stormwater runoff. Research has also shown that schoolyard features, such as rain gardens, can **reduce stormwater runoff by as much as 90 percent.**

## CLEAN

Urban tree canopy **removes 711,000 metric tons of air pollution annually** and sequester more than **90 million metric tons of carbon.** That's the equivalent of removing more than 19 million cars from the road for one year. Urban trees also filter particulate matter, further cleaning the air.

# WHY we do it

## OUR COMMITMENT TO COMMUNITIES




# Core insight

**HEALTH** - Children spend an increasing amount of time on screens disconnected from nature and physical activity. This is resulting in depression, anxiety and increased rates of obesity.

**EQUITY** - Legacy inequities in income, health and educational outcomes perpetuate the cycle of poverty in many underserved urban communities. Past decisions have led to disparities in opportunities.

**CLIMATE** - Climate change is accelerating, and this is felt most significantly by vulnerable populations. People are suffering from the effects of urban heat islands, poor air and water quality, flooding, extreme heat, and sea level rise more than ever before.



An aerial photograph of a schoolyard in New York City. The yard is paved with asphalt and has a chain-link fence along its left and top edges. Outside the fence, several cars are parked along a street, and a row of brick buildings is visible. Inside the yard, there are colorful chalk drawings on the pavement, including a large, abstract shape in the center and two hopscotch grids on the right side. The text "Less than 1% percent of schoolyards are open to the public and designed with the green space and play features that schools and communities need." is overlaid in white on the left side of the yard.

Less than 1% percent of **schoolyards** are open to the public and designed with the green space and play features that schools and communities need.

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MS354K, New York, NY





By redesigning schoolyards — and making them green and accessible to the community after school and on weekends — we can put a great park within a 10-minute walk of more than 19 million people.

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LAND

MS354K, New York, NY



# Vision


Green schoolyards become the **standard practice across the country**, serving as a hub for **climate** resiliency, improved **health** and education, and **equitable community access to green space**.



# Our impact

- Created over **250 green schoolyards**
- Created **10 green schoolyard programs** and pilots across the country
- Developed toolkit of **best practices and resources**
- Connected more than **4 million people** within a 10-minute walk of a green schoolyard

**Allied Organizations** are also making an impact, including Green Schoolyards America, The Children & Nature Network and many other local organizations



EM Stanton School, Philadelphia



# The need for partnerships

**Public-Private Partnerships** between school districts and non-profits have been successful tools to drive implementation.

**Expand partnerships to increase impact.** Partners can include local park and recreation departments, water departments and other local organizations

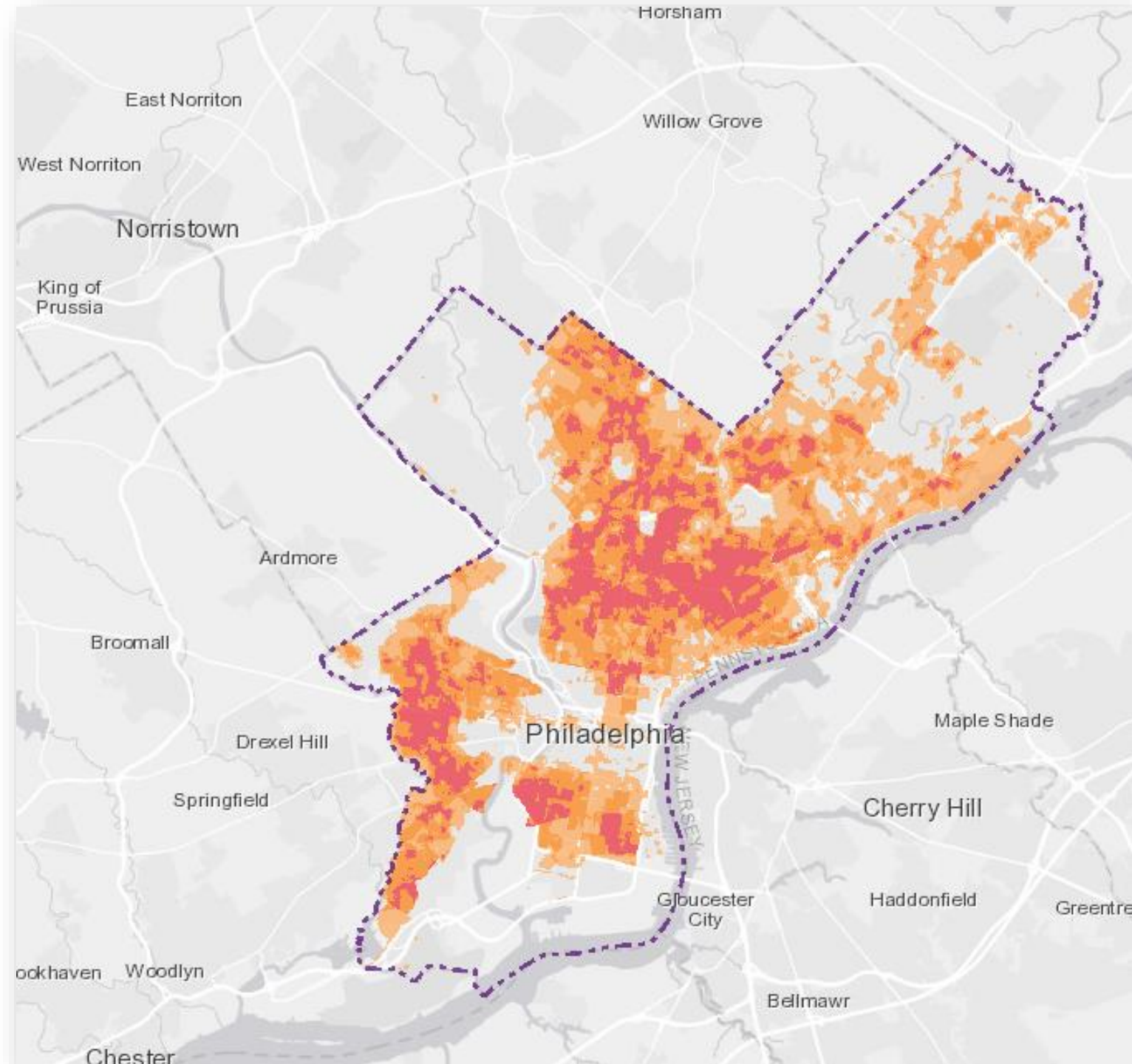
**Legal contracts** to officiate agreements, such as:

- Partner roles and responsibilities
- Funding
- Opening the schoolyard to the public after school hours
- Outlining who will be responsible for the design contracts, construction contracts, liability during and after construction
- Outlining who will be responsible for long term maintenance and operations

# Data-driven decision-making

We create **best-in class GIS based mapping** tools that we make publicly available

- These tools help pinpoint where green infrastructure can provide the most benefits.
- They include **health, climate, equity,** and green infrastructure suitability metrics to **help identify opportunities for multi-benefit projects.**







# Participatory design

Our participatory design process involves the students in the creation of the green schoolyard. Through this, students:

- Are **invested in the long-term success** of the schoolyard
- **Learn about environmental challenges** and **contribute to the solution**
- **Practice real life skills and civic engagement**, like budgeting, voting and presenting ideas
- Feel a sense of **pride and achievement**



# Multiple stakeholders

## Capital Team:

- Agency partners, non-profit partners, public funders, school district administrators, permitting agencies, landscape architects, design sub-consultants

## Use and Stewardship Team:

- Non-profit partner, school leader/principals, teachers, school custodians, students, parents, community leaders, local businesses, neighbors, out of school time providers



P.S. 32, Staten Island, New York



# Stewardship & Activation

**Start Early!** Put Community needs and ideas at the center of design.

**Plan Ahead!** Develop a stewardship plan early in the project development.

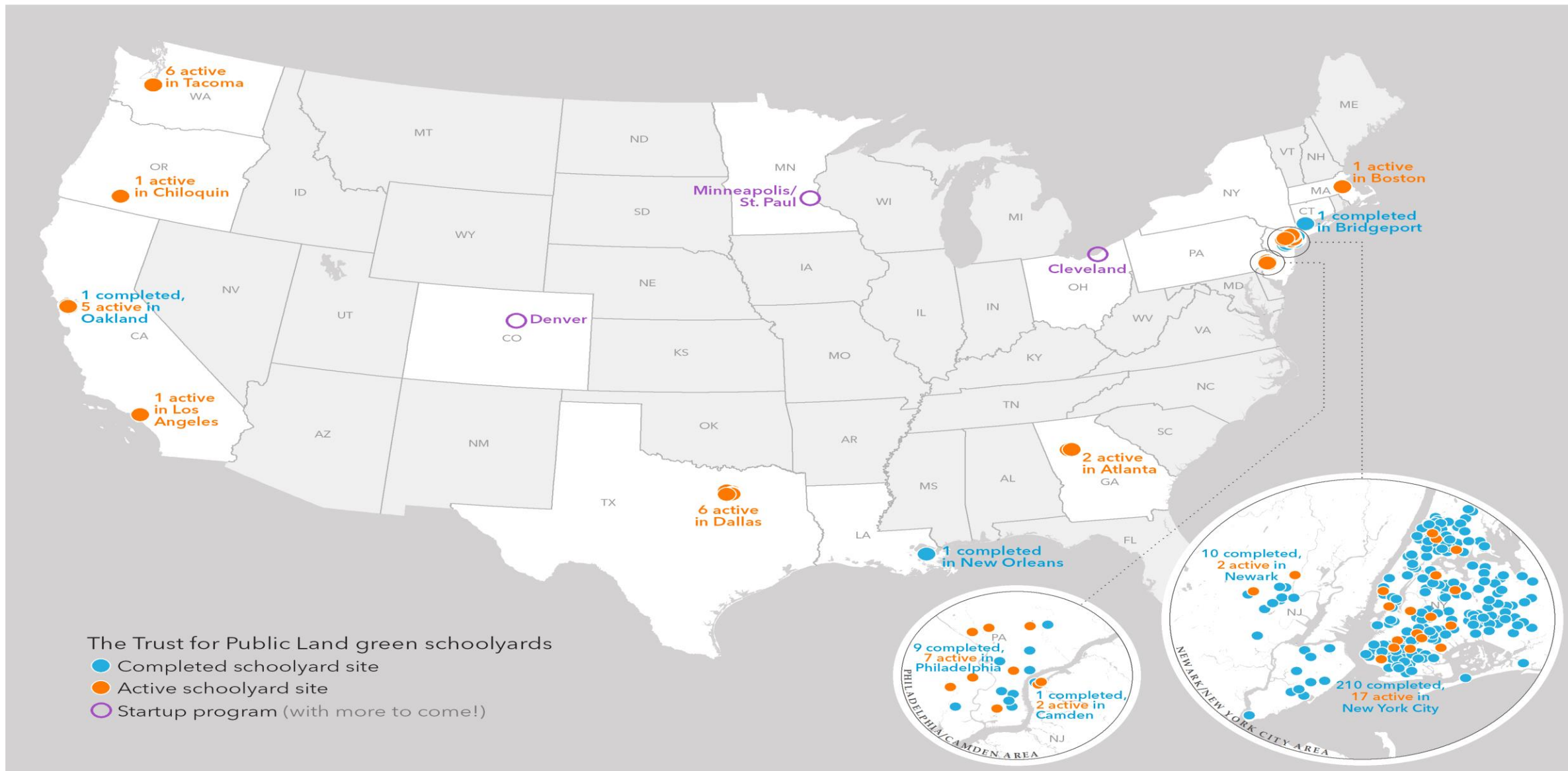
**Stay Active!** Help teachers, students, custodians and community members take care of and activate their schoolyard.

**Stewardship—creating the champions who will help the schoolyard thrive—is essential to success!**



Where we work now





# Green schoolyards

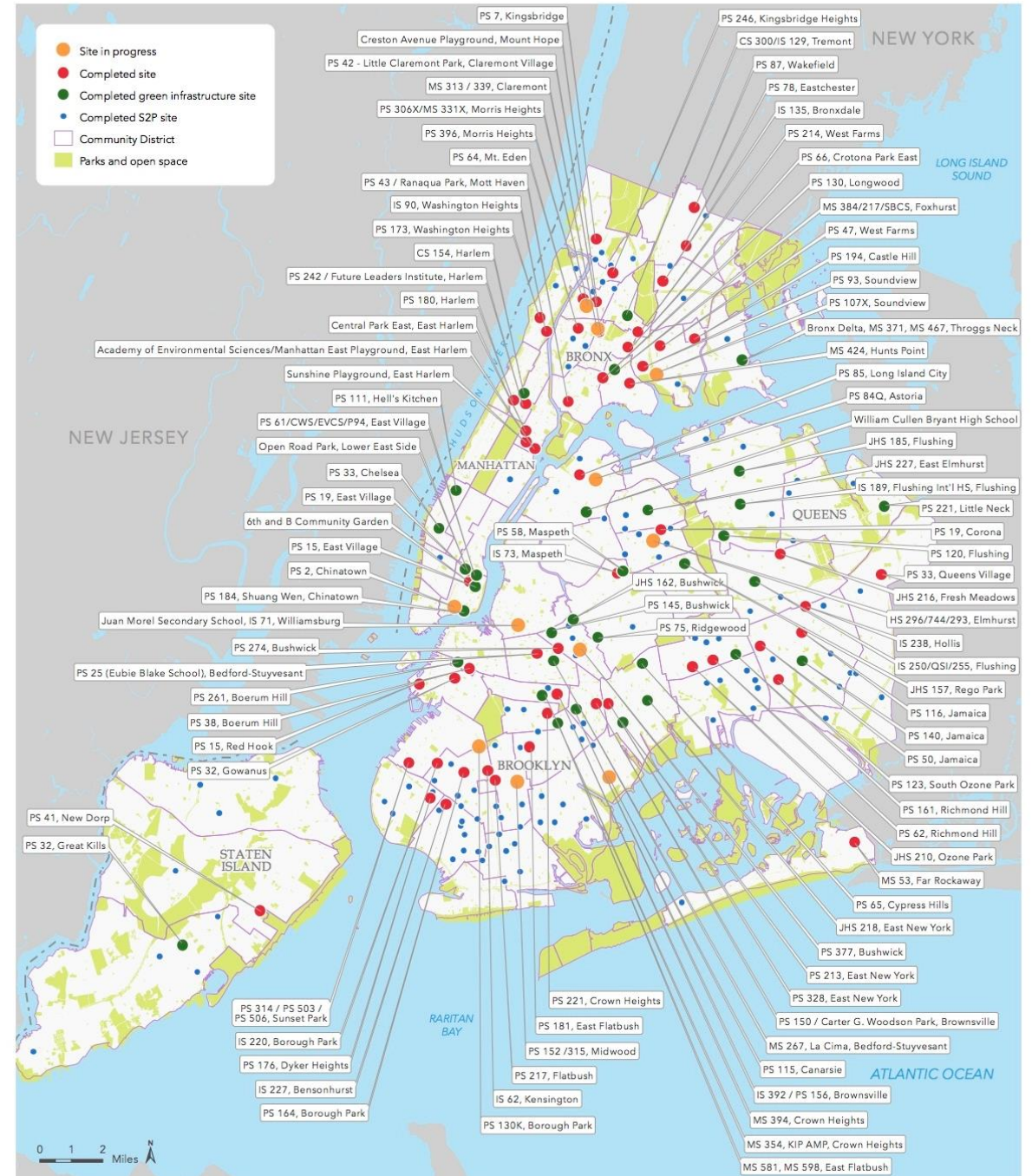
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# New York City, NY

Since 1996, the New York City Playgrounds Program has transformed **over 200 asphalt schoolyards** into green community parks, and:

- Placed **4,000,000+ New Yorkers** within a 10-minute walk of a park
- Planted over **3,600 trees**
- Capture **19,000,000 gallons of stormwater** annually
- Involved over **6,800 students** in the design process





# Before

Piagentini and Jones  
Education  
Complex, Throgs Neck,  
Bronx (Winter 2017)





# After

Piagentini and Jones  
Education  
Complex, Throgs Neck,  
Bronx (Fall 2017)

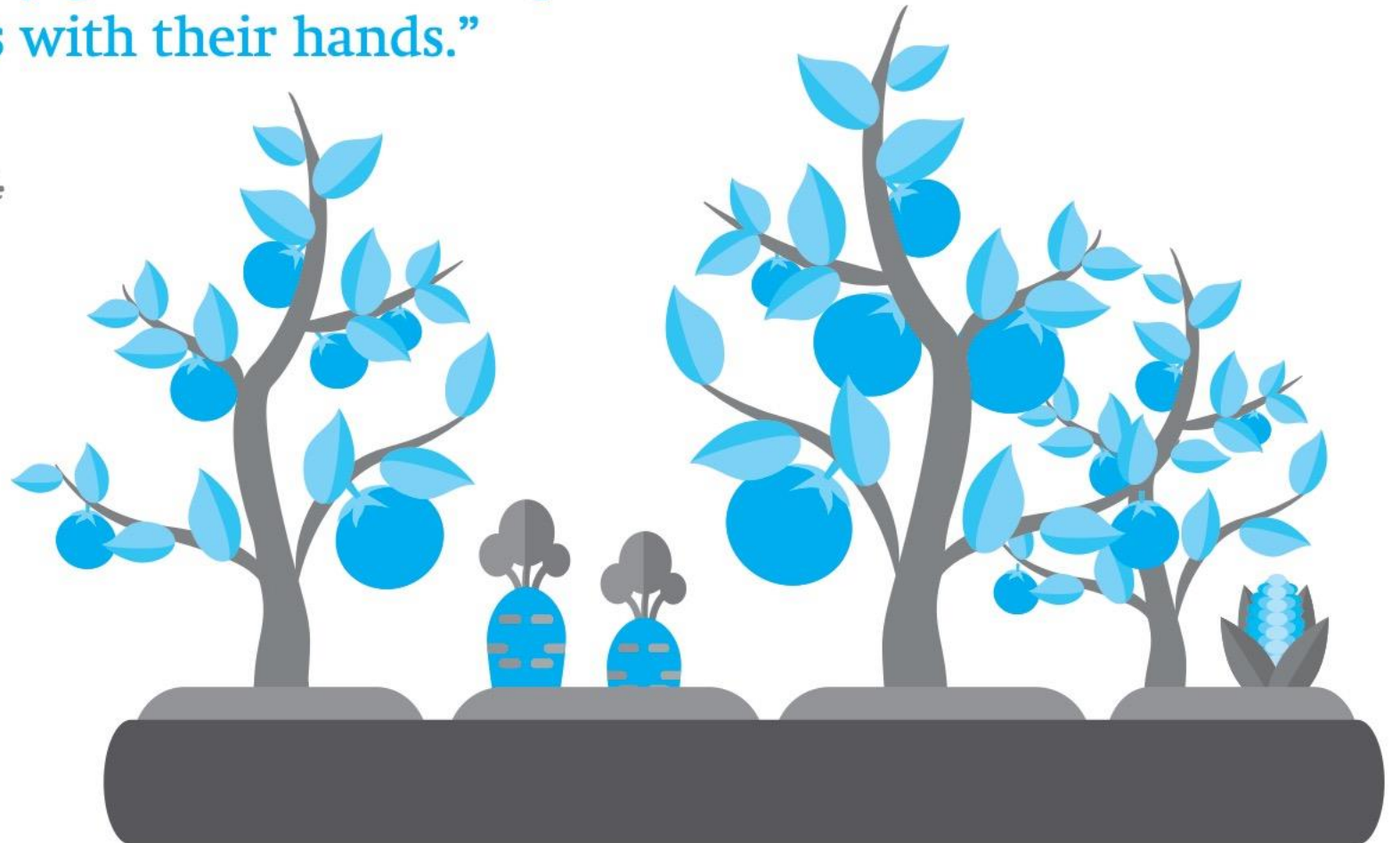


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“Every year, we have a Gardening Club. Students, who usually live in cramped apartments, get an opportunity to work outdoors, with their hands, planting, weeding, pruning and mulching. They get to learn about plant life and love working outdoors with their hands.”

BILL DOBRANSKI,  
PROGRAM DIRECTOR AT IS 73Q.



**94%** have noticed positive changes in the community since the playground renovation.



**97%** have seen more school clubs, extracurricular activities, and events held in their new playground.



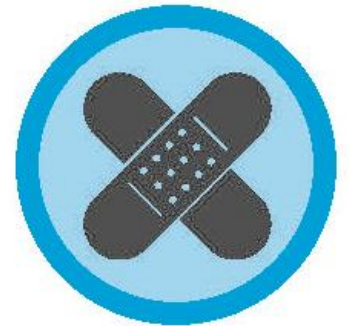
**97%** have noticed the community using the playground after school hours and during weekends and summer breaks.



**97%** say that recess and/or PE classes are held outside more often since the renovation.



**87%** report fewer injuries in the schoolyard since the renovation.



Source: Survey of school staff at NYC green schoolyards



# Newark, NJ

Over 25 years, the Newark Green, Healthy Schoolyards Program has worked with eight school communities on nine projects. The nine schoolyards projects together capture **400,000 gallons of stormwater annually.**

The multiple benefits of Green, Healthy Schoolyards has been brought to:

- **5,000 students** and;
- **95,000 residents** in the City of Newark



Lafayette Street School, Newark, NJ



# Philadelphia, PA

8-year public-private partnership with the School District of Philadelphia, the Philadelphia Water Department and local partners.

Our 16 completed and pipeline projects will:

- **Connect 200,000** people to a quality park within a 10-minute walk
- **Manage 20 million gallons** of stormwater annually
- Provide **localized cooling** through increased tree canopy
- Expand **environmental education**
- Drive impact to **underserved communities**



William Cramp School, Philadelphia, PA



# Philadelphia, PA

Heavy rainstorms create runoff that overburdens aging stormwater infrastructure causing combined sewer overflows.

We create rain gardens in our **green schoolyards** that manage stormwater and double as nature learning centers.



# Philadelphia, PA

At the John Patterson School in Philadelphia, the principal noted that the **behavioral climate has changed because of the schoolyard**, which opened January 5, 2018.

- Over the course of the **2016-17 school year**, there were **35 suspensions**
- There were **27 suspensions** from just **September-January in 2017-18**
- **Since the January 2018 opening** of the new schoolyard, there have been **0 suspensions**



John Patterson School, Philadelphia, PA



# Oakland, CA

Partnership with Oakland Unified School District and Green Schoolyards America to **transform asphalt schoolyards in underserved communities**. The proposed schoolyards will **capture roughly 800,000 gallons of stormwater annually**.

We will accomplish the following goals over the next 3 years:

- Build pilot projects
- Support Joint Use
- Develop policy and guidelines
- Professional development
- Develop sustainable funding



Markham School, Oakland, CA



# Camden, NJ

Camden is one of the most economically distressed cities in the United States. **Social and environmental justice motivate our work here.**

Our Parks for People Camden Program works **360 degrees to address climate and health discrepancies** through the co-creation of green schoolyards and other public spaces. Our first completed project and two in progress will:

- Place **14,500 people within a 10-minute walk** of a park, 70% of whom are low-income and 80% minorities
- Capture **6,100,000 gallons of stormwater** each year



# New Orleans, LA

We created a pilot green schoolyard in New Orleans at the Paul Habans Charter.

Before the redesign, any rainstorm would inundate their concrete playground and flood the property, preventing students from using the site. Now, native plants in the rain gardens **collect the first 1.25 inches of rainfall, reducing stormwater run-off**, and allowing the site to be used with more frequency.



Paul Habans Charter, New Orleans, LA

# Boston, MA

We formed a partnership with Boston Parks and Recreation Department and Boston Public Schools to begin to transform a dated playground into a new public park.

- Joint-use agreement allows existing playground to close Boston's largest park-access gap
- New green schoolyard will put 4,913 people within a 10-minute walk of a park
- Land ownership and stewardship will transfer from school to parks department
- Project made Boston the second major U.S. city to put 100% of its residents within a 10-minute walk of a park

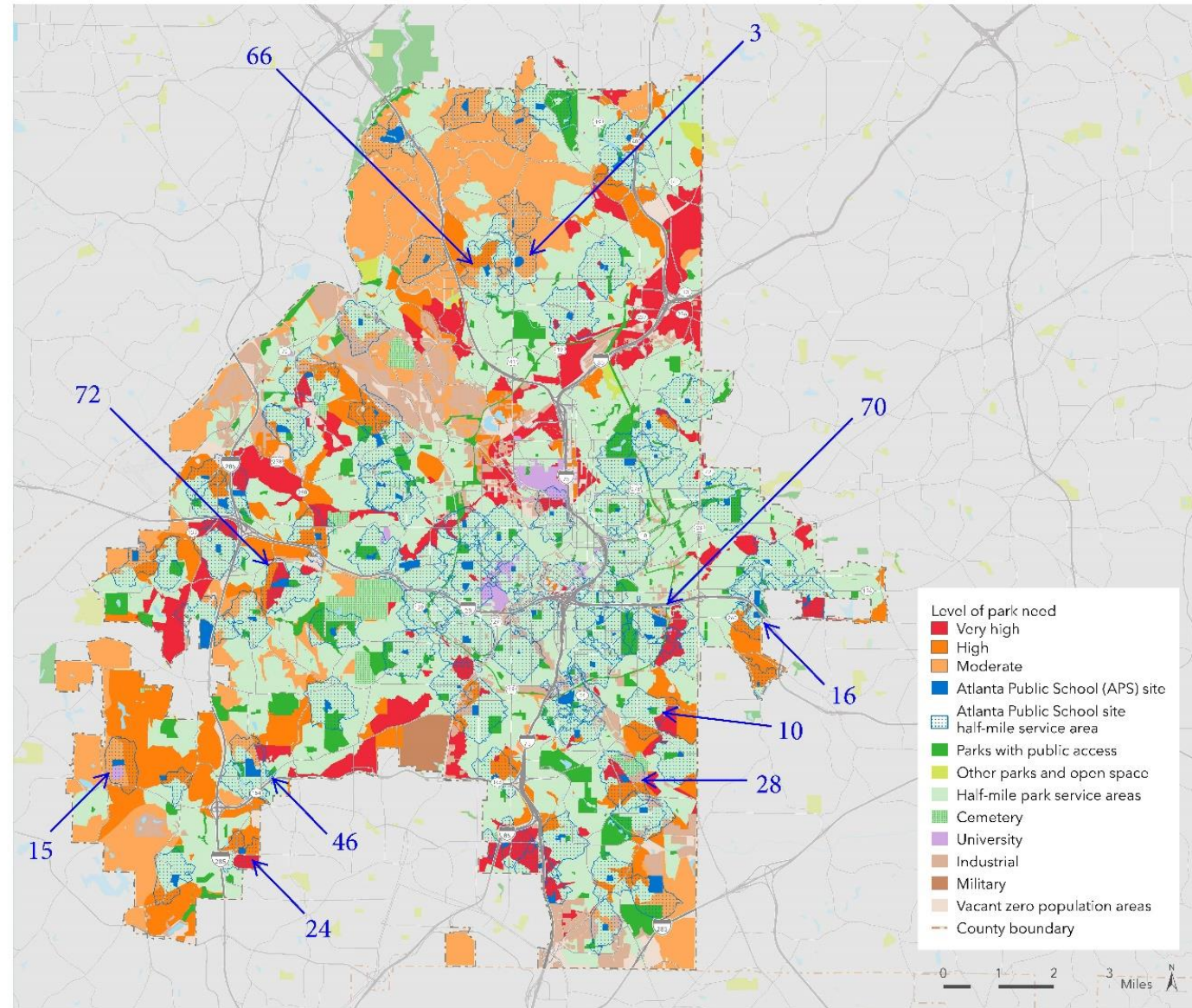




# Atlanta, GA

**29% of residents do not** live within a 10-minute walk of a park. Over the course of three years, **we will help close the gap by transforming 10 Atlanta Schoolyards.**

The Trust for Public Land has partnered with Atlanta Public Schools, Urban Land Institute Atlanta, and Park Pride to improve schoolyards and make them accessible to the public when schools are closed.







# Dallas, TX

The Texas Trees Foundation (TTF) and The Trust for Public Land partnered with Dallas ISD and the Dallas Park and Recreation Department to combine two very successful initiatives: TTF's Cool School Program and our 10-minute walk into the **"Cool Schools Community Parks" initiative**.

Texas Trees Foundation and The Trust for Public Land have secured **\$6.1 million in philanthropic support** to complete **20 green schoolyards by 2022**.

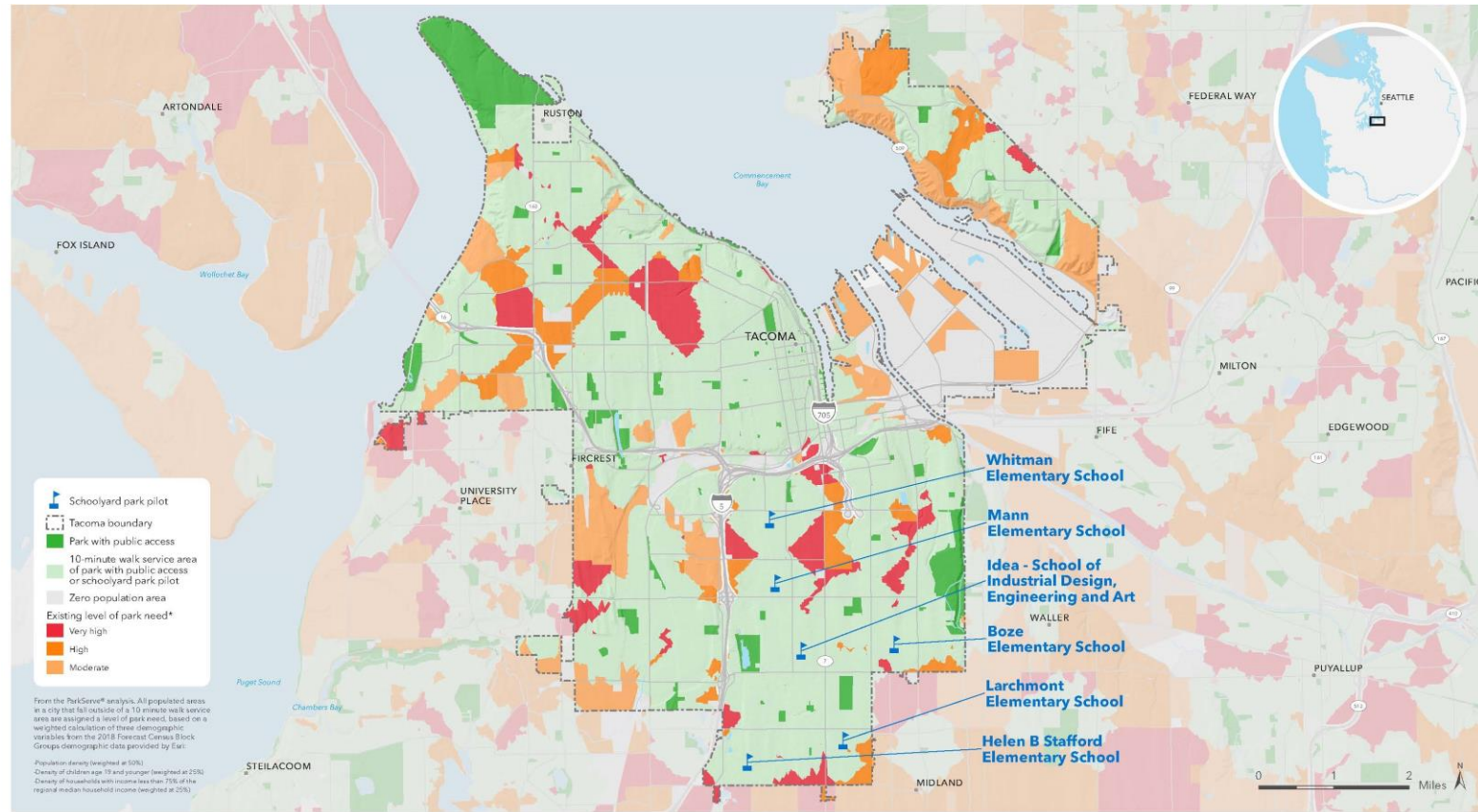


# Tacoma, WA

Tacoma has the **greatest number of residents without close-to-home access** to parks in the state of Washington.

In partnership with **Seattle Children's Hospital** and the **University of Washington**, we will study the impacts of green schoolyards on **community health, academic performance, and social cohesion**.

Our pilot program will create **six green schoolyards** over a three-year period.



## Level of park need and schoolyard park pilots

TACOMA, WASHINGTON

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# Los Angeles, CA

According to an analysis conducted by The Trust for Public Land, greening and shared use of schoolyards would benefit Los Angeles more than any other city in the United States. The potential for green schoolyards in LA include:

- Providing **more than 19 million people** with a green, open space within a 10-minute walk
- Capturing **1.6 billion gallons** of stormwater annually

To realize this incredible potential to drastically improve the quality of life for millions of Angelenos, we are striving to make green schoolyards the standard practice in LA.





# St. Paul, MN

In St. Paul, we've recently launched our “**Healthy Community Schoolyards**” program in partnership with Blue Cross Blue Shield of Minnesota. The program will focus on:

- **Transforming schoolyards** through community engagement to yield **equitable health and climate outcomes**

We will develop a pilot schoolyard at Maxfield Elementary in partnership with community groups, watershed organizations, and the municipal government.

Within the next five years, **we aim to complete at least five schoolyards**, and to secure partnerships with multiple school districts.



Maxfield Elementary, St. Paul, MN

National scale





# Over the next five years we will...

Work with elected leaders and public agencies to:

- **Build awareness** of the public benefits of green schoolyards
- **Increase federal funding** for green schoolyards
- Ensure the **Department of Education recognizes** green schoolyards as a solution for reducing suspensions
- Fortify the Environmental Protection Agency's **recognition of green schoolyards as a solution** to reducing sewer overflows and heat island impacts
- **Advocate for green schoolyard funding** to be directed where it is needed most: in **under-resourced school districts**

A young child with dark hair is peeking through a circular hole in a bright blue playground structure. The structure has several other circular holes and green frog-shaped grips. In the background, there is a green artificial turf field, a chain-link fence, and a house under a clear blue sky.

# Over the next five years we will...

Offer data and insight :

- **GIS mapping to pinpoint underserved neighborhoods** that will benefit most from a green schoolyard program, turning complex data into **actionable and relevant insights** and **driving investments to low-income communities**
- **Implement evaluation protocols** to demonstrate that green schoolyards are a key contributor to community health, social equity, and climate resilience





# Over the next five years we will...

## Leverage public financing:

- Develop and advocate for **ballot measures to unlock state and local funding** for more green schoolyards
- Develop and advocate for **shared-use agreements to expand park access** by making school district land available to the public



# Over the next five years we will...

Develop new green schoolyards in 20 communities, and:

- **Collaborate with partners** to forge collective impact models that **quantify our impact** on community health, equity, and climate resilience
- Engage the sustainable design community to develop public-facing **best practice design standards** for green schoolyards
- **Support the capacity of school districts** to implement green schoolyards through the distribution of **resources and best practices**
- Demonstrate evidence-based approaches to design that **shift power, resources, and decision-making to neighborhood communities**





# One size does not fit all

Recognizing that every city has unique resources and challenges, we will deploy green schoolyard programs to work in a variety of implementation tracks.

1. **Full Scope** – Comprehensive involvement from site selection through stewardship
2. **Inspire and Support** – Provide technical assistance to cities and school districts
3. **Hybrid** – We're available as needed by local school districts



# Evaluation

Data will inform the development of best practice standards. Our field work will be a laboratory for increasing positive impact on communities.

- **Consistent measures of success** will track climate and health impacts
- **Standard baseline data** will be collected for each project before and after
- Green schoolyard programs will be paired with **research institutions** to evaluate long-term impacts





# Our Impact





# Call to action

Join us to **realize** the power of green schoolyards to create healthier and more resilient communities that move our society forward.

- **Imagine** what green schoolyards would mean in your community
- Use your creative power to **inspire** positive change
- **Advocate** for Joint Use Agreements
- **Talk** to elected officials and School Districts in your community about the value of green schoolyards





Thank you!

[www.tpl.org/schoolyards](http://www.tpl.org/schoolyards)