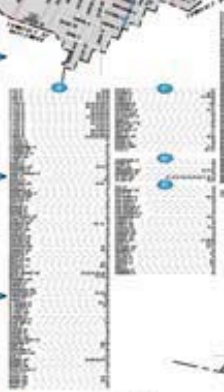
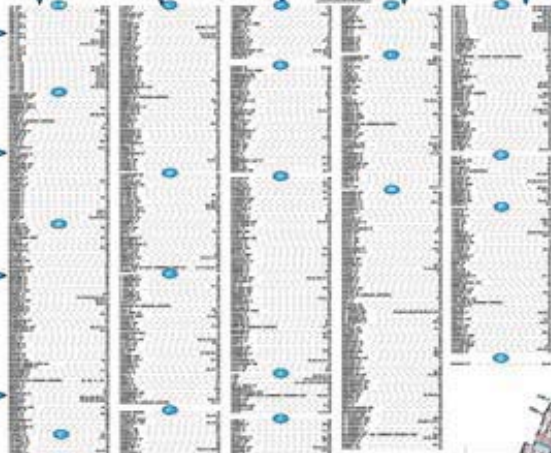
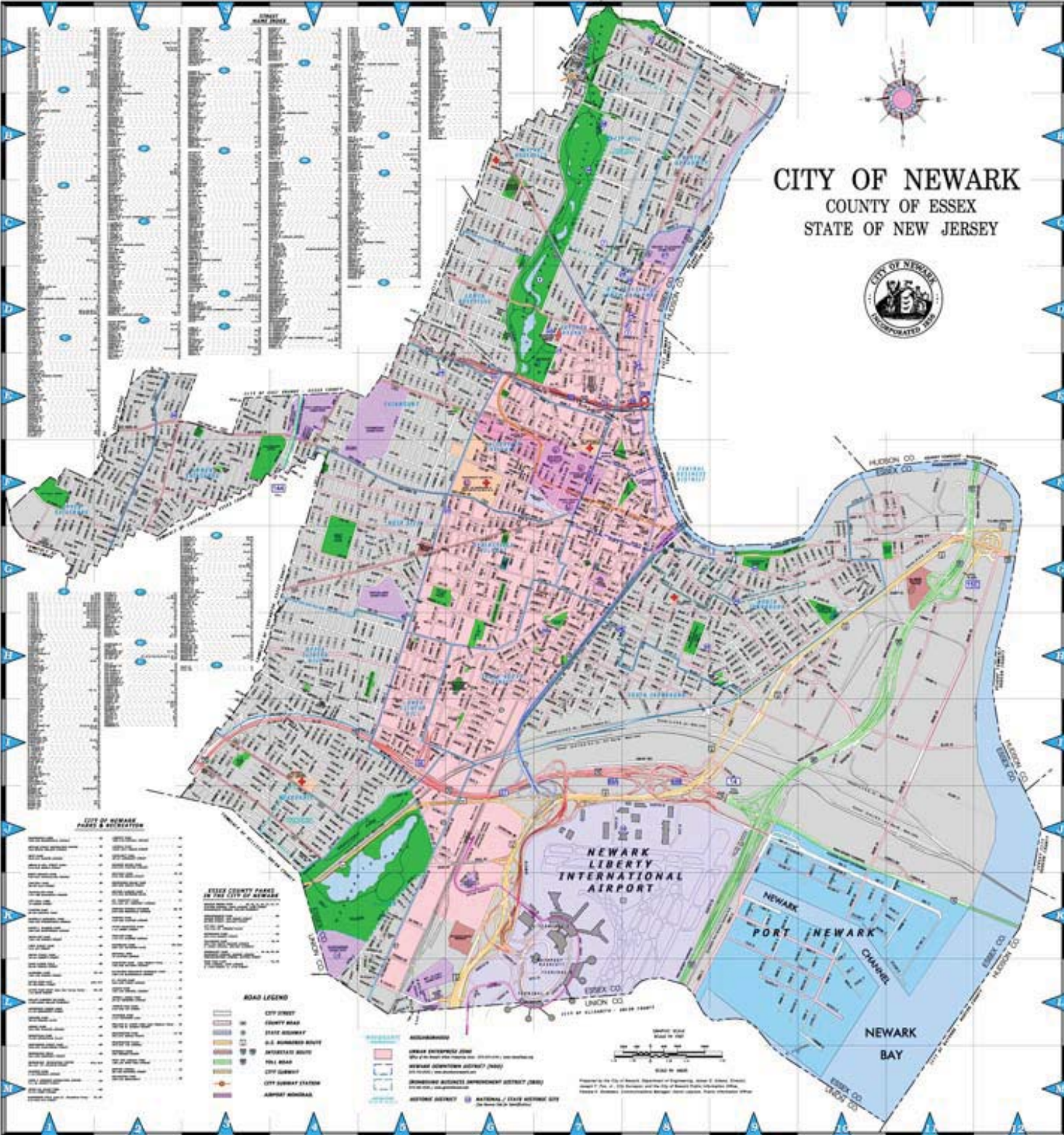


# First green steps in Newark

1. Sustainability + Urban Design
2. Reasons for green
3. Implementation mechanisms

CITY OF NEWARK  
 COUNTY OF ESSEX  
 STATE OF NEW JERSEY



CITY OF NEWARK  
 WARD & DISTRICT

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ESSEX COUNTY WARDS  
 IN THE CITY OF NEWARK

ROAD LEGEND

- CITY STREET
- COUNTY ROAD
- STATE HIGHWAY
- U.S. HIGHWAY ROUTE
- INTERSTATE ROUTE
- TRAIL ROAD
- CITY HIGHWAY
- CITY AIRWAY STATION
- AIRPORT AIRMAIL

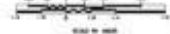
BOUNDARIES

- NEWARK INTERNATIONAL ZONE
- NEWARK ADVENTIST DISTRICT (ZAD)
- NEWARK BUSINESS IMPROVEMENT DISTRICT (ZBD)
- ADDITIONAL DISTRICT
- NATIONAL / ESSEX COUNTY CITY

NEWARK  
 LIBERTY  
 INTERNATIONAL  
 AIRPORT

NEWARK  
 PORT NEWARK  
 CHANNEL

NEWARK  
 BAY



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# Newark Sustainability Office

## History

- **2006 – Mayor Booker commits to sustainability during transition**
- **2008 – Green Future Summit brings hundreds of Newarkers together. Sustainability Officer hired**
- **2009 – Environmental Commission chartered. First major grants received**
- **2010 – Sustainability Office becomes official division of City government**
- **2012 – Sustainability Action Plan completed. Office fully staffed**

## History

**The Newark Sustainability Office works within municipal government and in partnership with the community to create a healthier environment, a stronger local economy, and more social well-being for current and future generations of Newarkers.**

The City of Newark

# SUSTAINABILITY ACTION PLAN



## Contents

PAGES	SECTION
1 – 9	INTRODUCTION
10 – 27	AIR QUALITY
28 – 47	ENERGY
48 – 65	RECYCLING AND MATERIALS MANAGEMENT
66 – 81	STORMWATER MANAGEMENT AND COMMUNITY GREENING
82 – 89	GREENHOUSE GAS EMISSIONS
90 – 103	HEALTHY FOOD ACCESS

# Air Quality

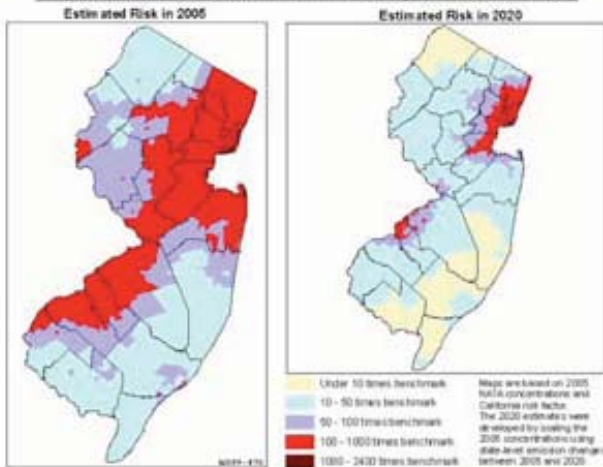


Poor air quality affects health and limits attractiveness of the city. Asthma rates in Newark are far higher than the State average.

The Sustainability Office is leading an effort to monitor air quality at the neighborhood level and to reduce diesel emissions from idling trucks.



**Estimated Diesel Particulate Risk in New Jersey from Mobile Sources**



The Green and Healthy Homes Initiative (GHHI) coordinates and leverages existing weatherization and Healthy Homes resources to produce better outcomes.



# Materials Management



**Rather than paying for disposal via incineration or landfill, in some cases, entities can save money, generate revenue, and support job creation by re-purposing that waste with a Newark-based business.**



**Organics, electronics, and construction material offer examples of waste products with viable secondary markets.**

**Newark already hosts businesses such as Carpetcycle, Citilog, and Grease Lightning as well as pilot projects at Beth Israel Hospital and Weequahic High School.**



**Support for Made In Newark “upcycling” businesses will grow the market for secondary materials and help Newarkers turn waste into wealth.**


# Healthy Food Access: Farmers' Markets






The USDA awarded BCDC a \$90k grant to create a high-profile marketing campaign to promote farmers' markets. The markets will serve as incubators for local and regional food enterprises.

Farmers' markets will be able to accept SNAP, WIC, and other food assistance program payments, expanding customer base. Incentive programs such as Wholesome Wave double federal nutrition benefits, further expanding purchasing power of customers.

As a result, farmers markets attract and retain more vendors, grow customer base for produce, and increase fresh food budgets for residents.



**Real Food Nourishing Newark: Farm Fresh Produce Markets**

Tuesdays	Wednesdays	Thursdays
 <p><b>Cortland Street Farmer's Market</b> Time: 9 am - 5 pm 29-31 Cortland Street Accepts SNAP, WIC and SFMNP Hosted by Ironbound Community Corporation Family Success Center-East</p>	 <p><b>The Commons Farmers' Market</b> Time: 11:30 am - 3 pm Washington Park (across from Main Newark Public Library) Accepts WIC and SFMNP</p>	 <p><b>Newark Downtown District Farmers' Market</b> Time: 11 am - 3 pm PSE&amp;G Plaza (Raymond Blvd. near Broad Street) Accepts WIC and SFMNP</p>
 <p><b>UMDNJ Auxiliary Farmers' Market</b> Time: 10 am - 3 pm 12th St. btw Bergen Avenue &amp; Norfolk St. Accepts WIC and SFMNP</p>		 <p><b>Newark Beth Israel Hospital Market</b> 201 Lyons Avenue Time: 1 - 4 pm Accepts WIC and SFMNP</p>
<b>Plus Newark-grown produce sold 5 days a week!</b>		
 <p><b>Tuesdays, Wednesdays, &amp; Thursdays 11 am- 5:30 pm</b> 32 Prince Street* Newark Youth Farm Stand Greater Newark Conservancy Accepts SNAP, WIC, SFMNP *more locations throughout Newark</p>		 <p><b>Tuesdays, Wednesdays, Thursdays, Fridays 1-4 pm &amp; Sat. 12-3</b> The Beth Garden on Lyons Ave. across the hospital Garden State Urban Farms Accepts WIC and SFMNP</p>

# Healthy Food Access: Healthy Corner Stores



Building on BCDC's Fresh Food Initiative pilot program, the Sustainability Office is working with Newark Public Schools and surrounding corner stores to increase fresh food demand and nutrition education. BCDC will support the NJ Partnership for Healthy Kids' (NJPHK) healthy corner store/bodega initiative to increase healthy food inventory and measure impact on sales and food acquisition behavior. NJPHK results will influence replication in other wards throughout the City of Newark.



## Reyes Supermarket

- 6-16 Norfolk Street
- Will add Whole Wheat Pasta and Rice
- Will Add low sodium nuts
- Good Conversion Potential for refrigeration and baskets.
- Small space, limited options to store more products.



# Healthy Food Access: Urban Agriculture

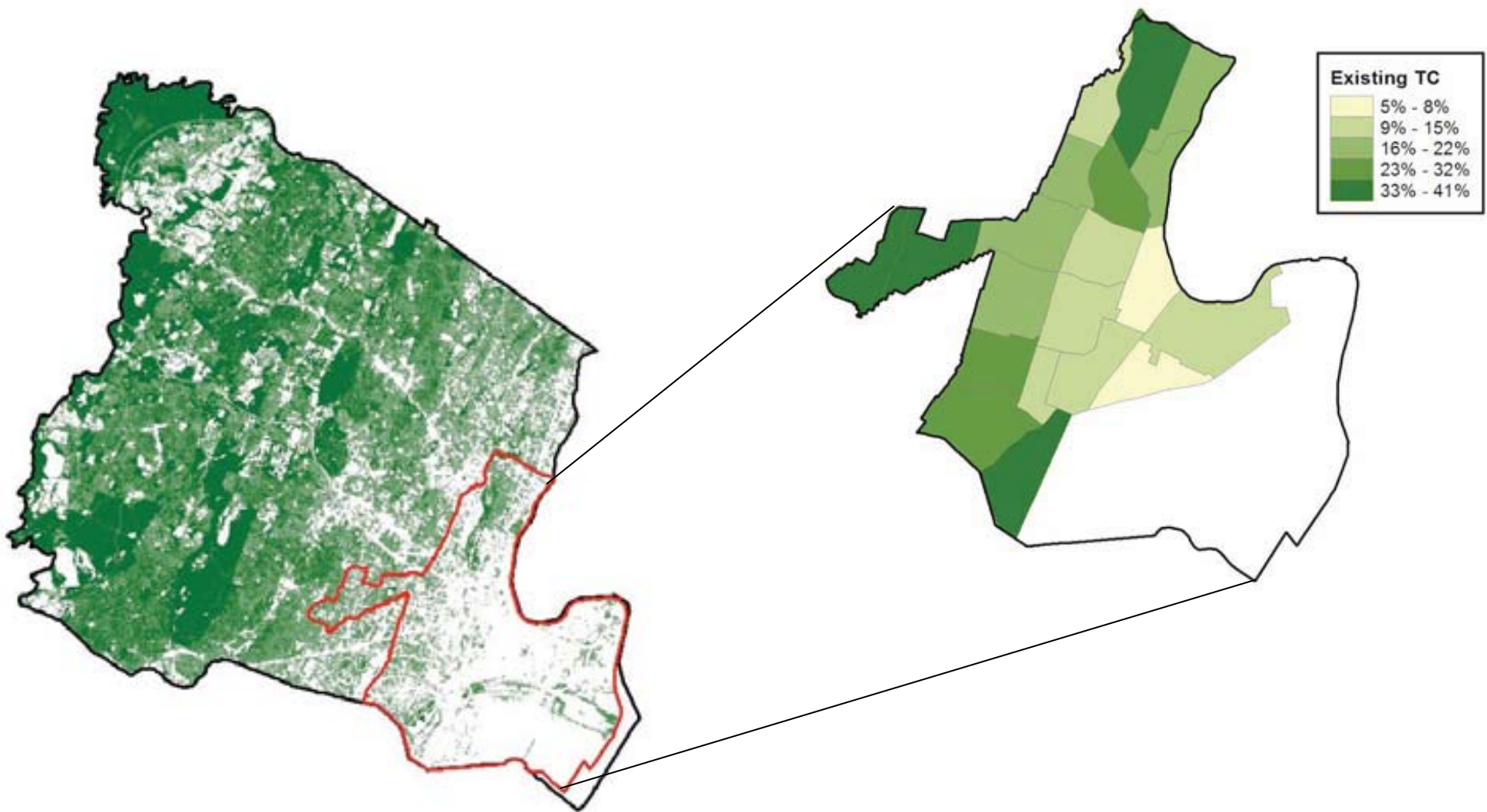


**Stimulating urban agriculture is strategy for revitalizing vacant city-owned properties, increasing food access, and promoting local enterprises.**

**The Sustainability Office is vetting and supporting non-profit and for-profit urban agriculture ventures to promote the creation of a more sustainable and economically viable local food system for the City of Newark.**

**Technologies such as greenhouses, hoop houses, hydroponic, aeroponic, and aquaponic systems indoors and on rooftops can extend the city's capacity to produce food, shorten the food supply chain and create jobs.**



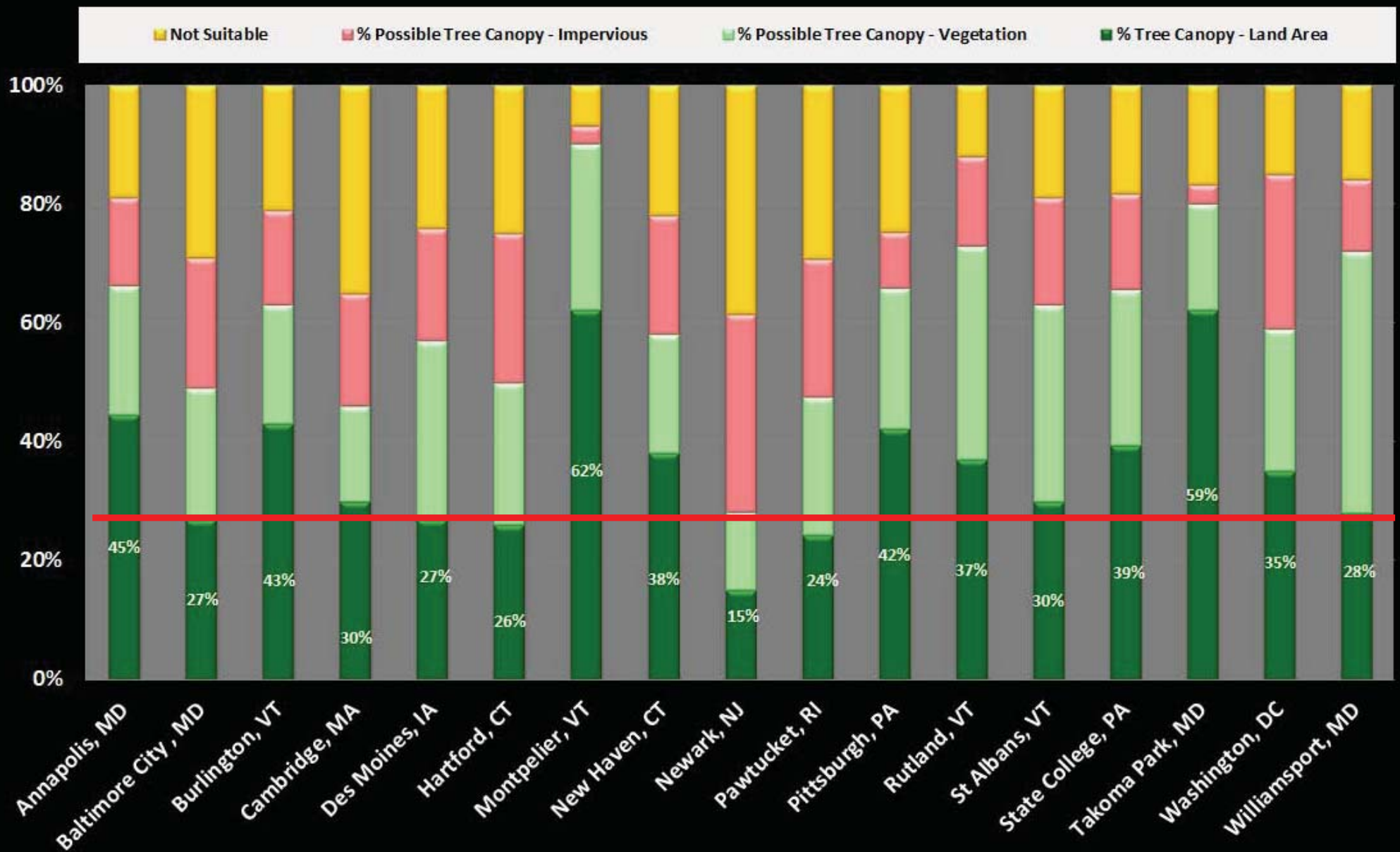


**Newark has roughly 5 times less tree canopy coverage than Essex County.**

**70% of Newark's land is paved.**

**Over 60% of residents live in census blocks with less than 20% tree canopy coverage.**

# Newark's paving and tree canopy are substantially different from comparably sized US cities



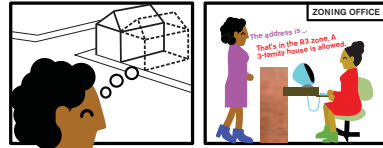
# Newark Planning Office

**1. Urban Design Coordination**

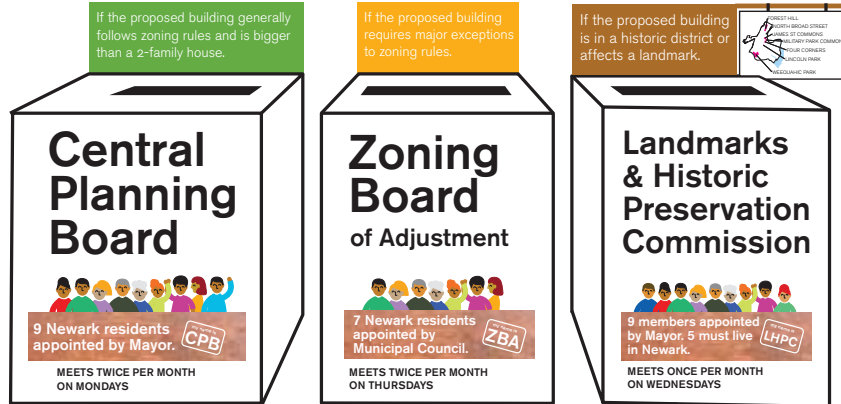
**2. Public Realm Investment**

# Who makes decisions about what gets built in Newark?

**1** Property Owner wants to build something.



**2** Property Owner files application(s)



**3** Hearing scheduled

**4** Public Notice

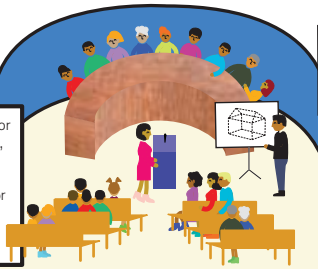


For the CPB & ZBA, Property Owner is legally required to send advance notice about the hearing by mail to all other Property Owners within 200 feet of the proposed building and publish notice in the newspaper.

**5** Public Hearing

The case is heard by the CPB, ZBA, or LHPC. The Property Owner, architect, and engineer present the project, members of the public are allowed to speak for or against, and the Board or Commission approves or denies the application. Sometimes they require special conditions for the approval.

**the Public**



**6** Building Permits

When the Property Owner applies for building permits from the Uniform Construction Code (UCC) office in City Hall Room B13, the plans are checked against the zoning approval. If they match, and the proposed construction meets building codes, permits are issued.

**7** Construction

The UCC office inspects the completed project. If it passes, the building receives a Certificate of Occupancy and can be put into use.

**8** Code Enforcement

If a property violates zoning law, residents can register complaints with Code Enforcement, which inspects the property and issues tickets if appropriate.

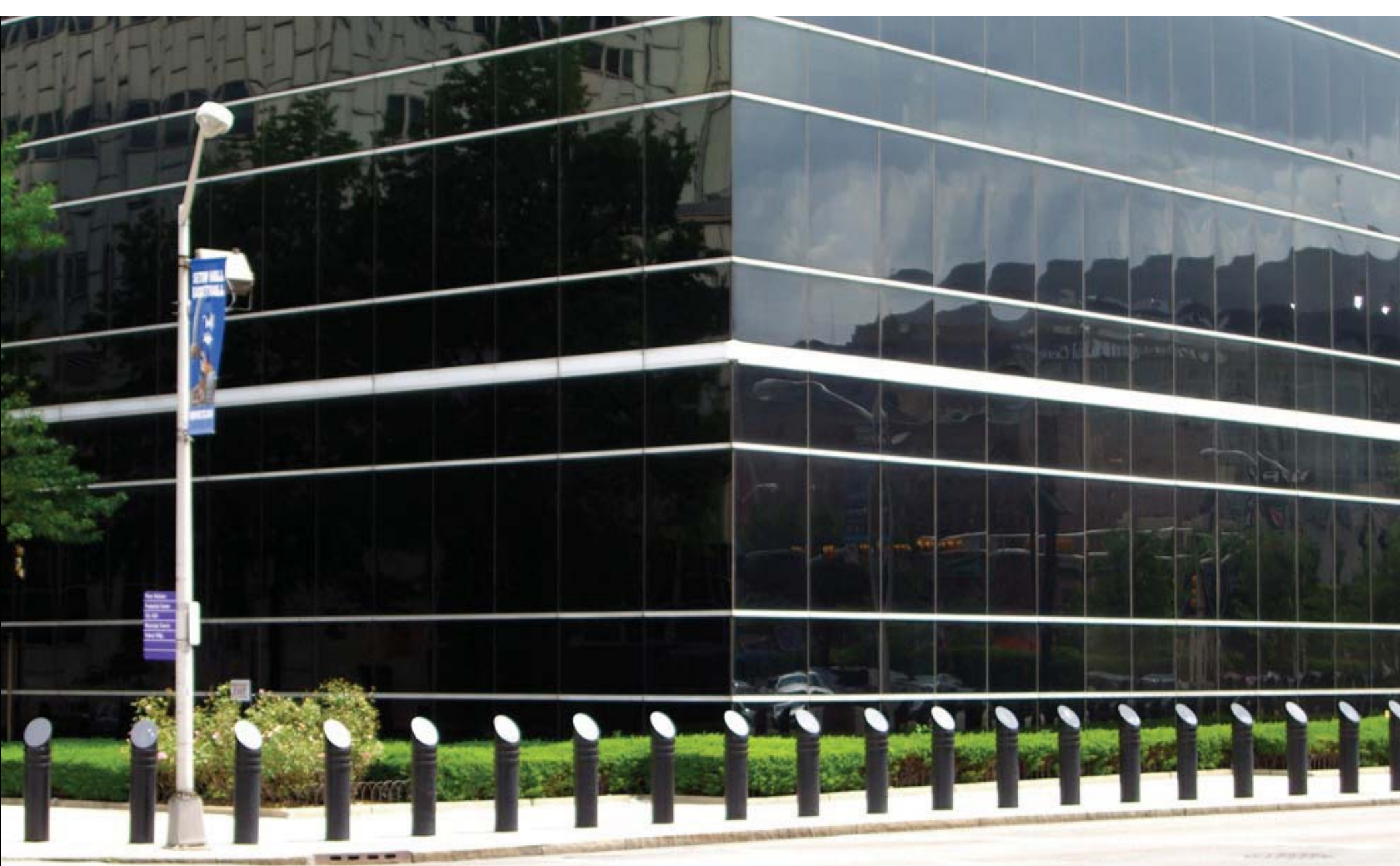


To learn more or receive agendas, call:

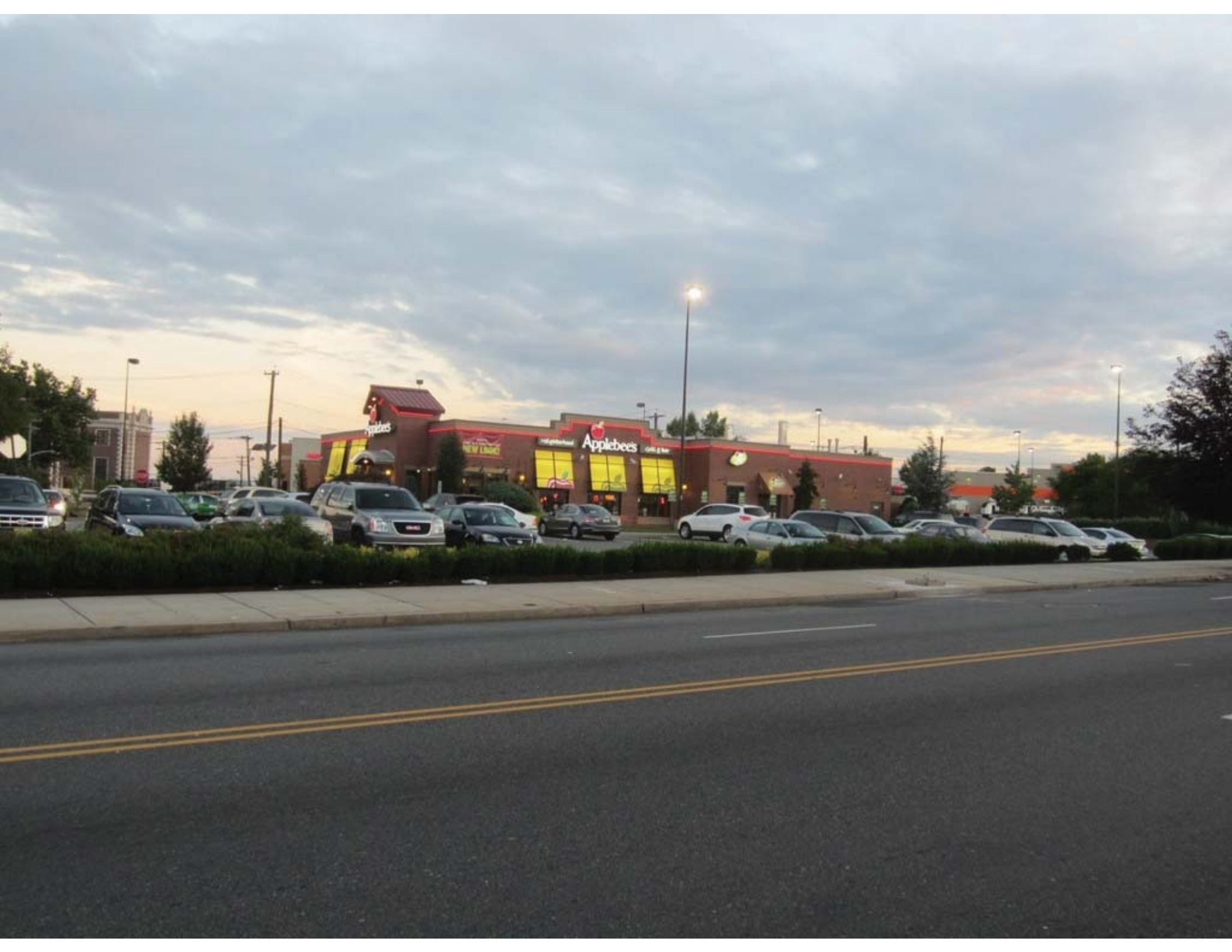
CPB, LHPC, & ZBA (973) 733-6333

To report zoning violations, call:

Code Enforcement (973) 733-4311



**Some past investments have not leveraged the value of Newark's walkable urbanism.**



**Working with the  
development community  
to leverage the value of  
walkable urbanism in the  
21st century.**



Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
© 2010 Google

© 2007 Google

Pointer 40°44'00.13" N 74°11'46.56" W

Streaming 100%

Eye all 922





Magnolia St

Highland St

Fairmount Ave

11th Ave

15th Ave

264 ft

Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
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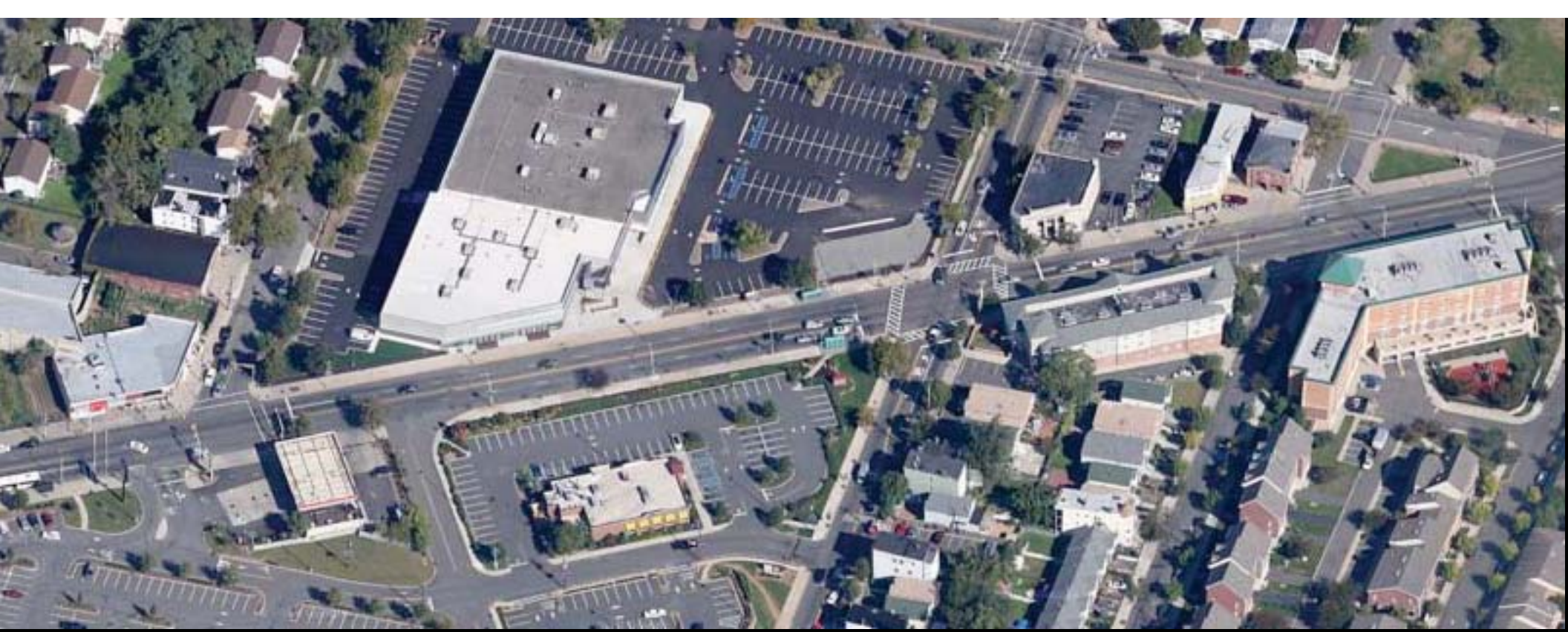


RA, U.S. Navy, NGA, GEBCO  
© 2010 Google

100%

© 2010 Google

Event 100%





**Contextual & walkable building design**

# the Box & Beyond Urban design for infill houses in Newark



City of Newark, Mayor Cory A. Booker  
Division of Planning & Community Development  
January 2009



Recently constructed 2-3 family houses in Newark.

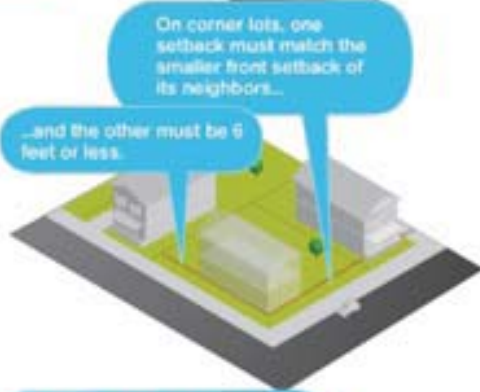
## Front setbacks

### Goal 1-A. Discourage excessively deep setbacks

Front yard setback standards shall be measured to the structural front walls of applicable buildings and shall not be based on the locations of open or enclosed porches, balconies, or bay windows. Small sections of the facade may also be recessed deeper than the required setback to allow for architectural interest.

1. The front setback of a new structure shall match the greater front setback of the two closest principal buildings on each side of the project site on the same block as the site.
2. Bay windows (with no wall section wider than six feet), balconies, stoops, and porches are permitted to encroach into the front setback area.
3. When the block has no existing development to serve as the reference for the required setback, the front yard setback shall be six feet.
4. For through lots, the street frontage where the closest principal buildings on each side of the lot have the lesser setback shall be considered the front yard.
5. For corner lots, the following special setback requirements apply to the street frontages of the two intersecting streets.

- a. One of the setbacks of a new structure shall match the lesser front setback of the closest principal building on that block and on that street frontage.
- b. The other frontage's setback shall be six feet or less.



## Side setbacks

### Goal 1-B. Discourage silver side yards that are unusable and difficult to maintain

For existing lots ranging in size from 2500-3499 square feet, a minimum side setback of three feet is required with the following exceptions:

1. The side setback is allowed to be zero instead of three feet if the closest building on the adjacent lot is set back at least three feet from the common lot line.
2. The side setback is allowed to be zero instead of three feet if the closest building on the adjacent lot has zero setback from the common lot line and a new structure's wall can be built flush with the adjacent building's wall.
3. On designated Commercial Streets (see definition and map on page 22), the side setback is required to be zero instead of three feet, and the new structure's wall must be flush with any adjacent building walls present.
4. No new construction may encroach within three feet of another building's windows or other fenestrations, nor block emergency access to those fenestrations. In cases where the side yard is to be zero, the setback from the adjacent building's fenestrations shall only extend from the location of the fenestration to the rear of the new structure.
5. No side yard shall be of a width between zero and three feet.

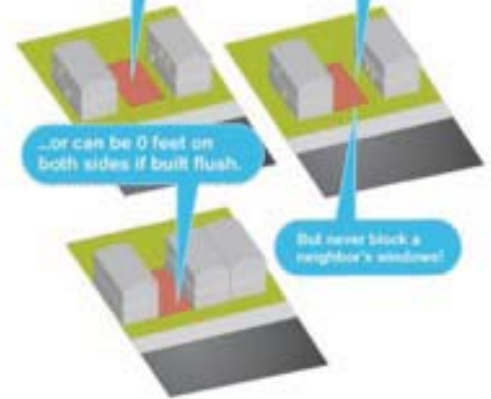
For lots resulting from a post-2006 subdivision and for existing lots of 3500 square feet or more, a minimum side setback of 3.5 feet is required with the following exceptions:

1. The side setback is allowed to be zero instead of three and one-half feet if the closest building on the adjacent lot is set back at least three feet from the common lot line.
2. The side setback is allowed to be zero instead three and one-half feet if the closest building on the adjacent lot has zero setback from the common lot line and a new structure's wall can be built flush with the adjacent building's wall.
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5. No side yard shall be of a width between zero and three and one-half feet.

For new houses on 2500-3499 square foot lots...

...the side setback must be at least 3 feet...

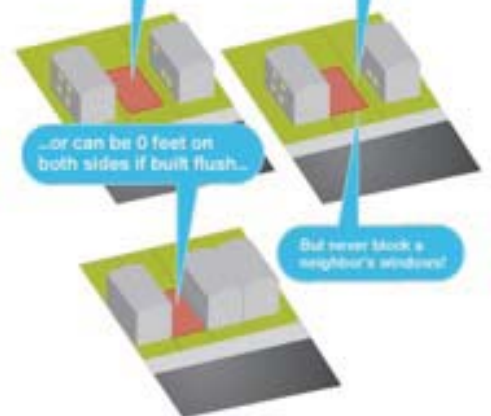
...or can be 0 feet on one side if built flush...



For new houses on lots of 3500 square feet and larger...

...the side setback must be at least 3.5 feet...

...or can be 0 feet on one side if built flush...

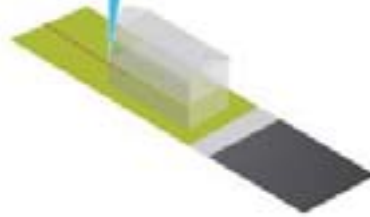


## Rear setbacks

Goal 1-A: Preserves possibility of spacious, usable, and comfortable rear yard

All lots must have a 20-foot minimum rear setback.

Minimum rear setback is 20 feet.



## Windows

Goal 1-D: Encourage higher quality façade composition and materials

1. For the primary front façade a minimum of 30% of the wall area shall be devoted to transparent windows or doorways.
2. For street-facing side or rear walls of structures on corner lots or through lots, a minimum of 20% of the wall area shall be devoted to transparent windows or doorways.
3. For non-street-facing walls, a minimum of 10% of wall area or the maximum amount allowed by construction code shall be devoted to transparent windows or doorways.
4. All transparent glazing areas on door panels count toward this requirement, but door panels themselves do not count towards this requirement.
5. For first floor façade of buildings on commercial streets measured from grade to the ceiling height of that first floor, the minimum percentage is 45%.



## Driveway width

Goal 1-A: Decrease off-street parking in front of buildings

1. The maximum driveway width at the lot line shall be 10 feet, and garage doors on a building's front facade shall be no wider than 10 feet.
2. For corner lots, the following exception to requirement #1 above is permitted provided all parking is located inside the principal building: On the longer façade of a new dwelling, the driveway width and garage door opening width is permitted to be up to 16 feet wide for a two-family dwelling and 24 feet wide for a three-family dwelling.
3. Driveway openings shall not be permitted on commercial or arterial streets if the site has less than 30 feet of width or less than 5,000 square feet.

## Front yard impervious area

Goal 2-C: Encourage use of environmentally-friendly construction features like permeable pavement

1. Minimum of 50% of front yard lot area.
2. Only one driveway area shall be permitted in the front yard, and it shall be no wider than 10 feet within the front yard area.

## Distance between driveways

Goal 1-A: Decrease off-street parking in front of buildings

Minimum 10 feet between driveways at the lot line, but driveway pairs are allowed provided that there is less than eight feet at the lot line between the driveways in the pair.







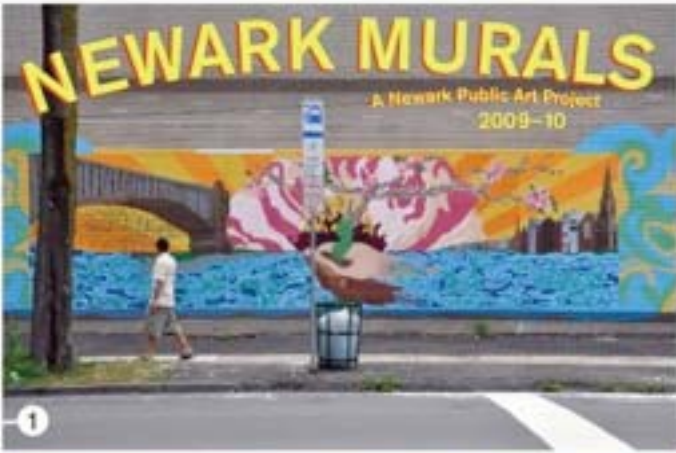
# Newark Planning Office

1. Urban Design Coordination

2. Public Realm Investment

# Investing in the public realm & creative placemaking



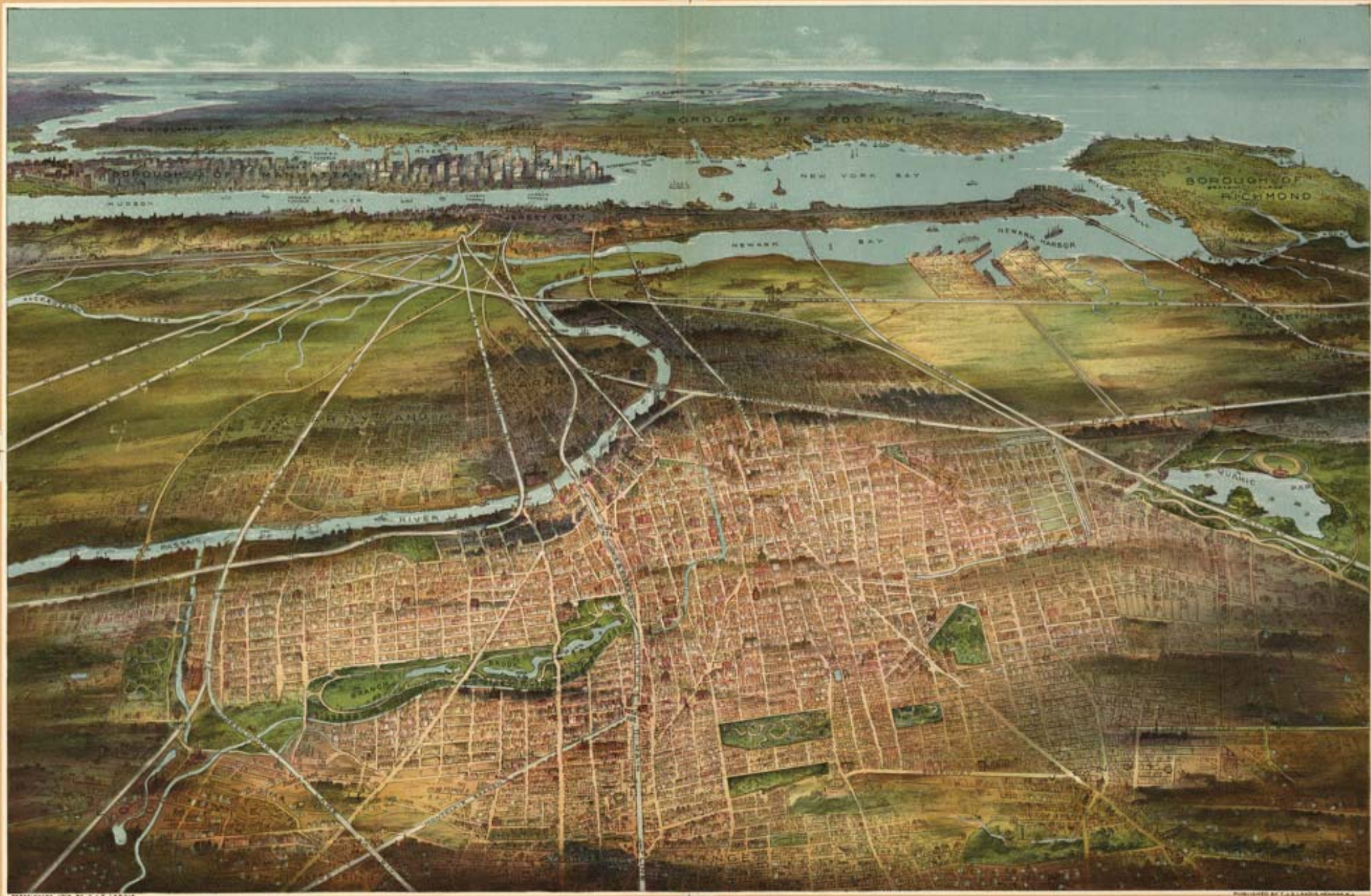


- ① **Communities Nurturing & Showing Love to One Another**  
Melanie Stokes and Dawn Hermon with youth team  
In partnership with La Casa de San Pedro  
Vintage Industrial & Building Supply, 495 Newark Street
- ② **The Valley**  
Kevin Elyria Sampson and Edwin Vasquez with youth team  
In partnership with the Donald R. Tucker Complex  
2242 Elizabeth Avenue
- ③ **The Butterfly Effect**  
Kevin Carmack and Caroline Spring with youth team  
In partnership with Urban League of Essex County  
948 Central Avenue
- ④ **A Brief History of the Involvement**  
Eder Mulla and Nicole Schuman  
In partnership with the Involvement Community Corporation  
George Street Company, 423 Market Street
- ⑤ **You and Me, an Extraordinary Experience**  
Dawn Ferraraccio with Yannis de Jesus and youth team  
In partnership with La Casa de San Pedro  
23 Broadway
- ⑥ **Theater Team**  
Matt Gosler and youth team  
In partnership with FOCUS Newark Center for Creative Development  
441 Broad Street
- ⑦ **Time to Build, Time to Drive**  
Giacinto (Lyle) Crowl and James Baker with youth team  
In partnership with Greater Newark Community  
468 Springfield Avenue
- ⑧ **The Cut**  
Kevin Elyria Sampson with youth team  
In partnership with Involvement Community Corporation  
Hawkins Court and Rome Street



These are only eight of the twelve murals produced to date, and there's more to come! For more information, visit [thisisnewark.wordpress.com](http://thisisnewark.wordpress.com), email [newarkpublicart@gmail.com](mailto:newarkpublicart@gmail.com), or call (973) 733-5812.





# NEWARK-NEW JERSEY

• 1916 •

Map of Newark  
1916  
Scale of 1/250,000

71-44955



# NEWARK RIVERFRONT REVIVAL

Super  
Neighborhood  
River Walks

New Riverfront Park

Young Riverfront Planners Project

Public Floating Dock

High School Boating Program



# **Organizing** to build a strong constituency for Newark's riverfront

Public tours & programs

Neighborhood information sessions

Youth education programs

# **Planning** a long-term vision for public and private improvements.

Regulate private development

Prioritize public investment

# **Building** public improvements to bring life to the riverfront











Welcome!  
Bienvenido!  
Bem-vindo!

MEADOW

TENNIS

BASKETBALL

PLAYGROUND

SOCCER/FOOTBALL

BASEBALL

PARKING

PLAYGROUND

RIVERFRONT CELEBRATION  
FOOD VENDORS

BRILL ST ENTRANCE

RAYMOND BLVD

FREEMAN ST  
ENTRANCE

FREEMAN ST

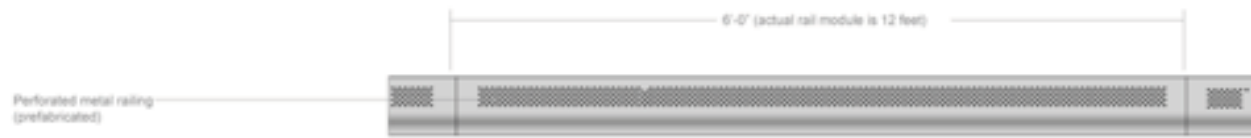
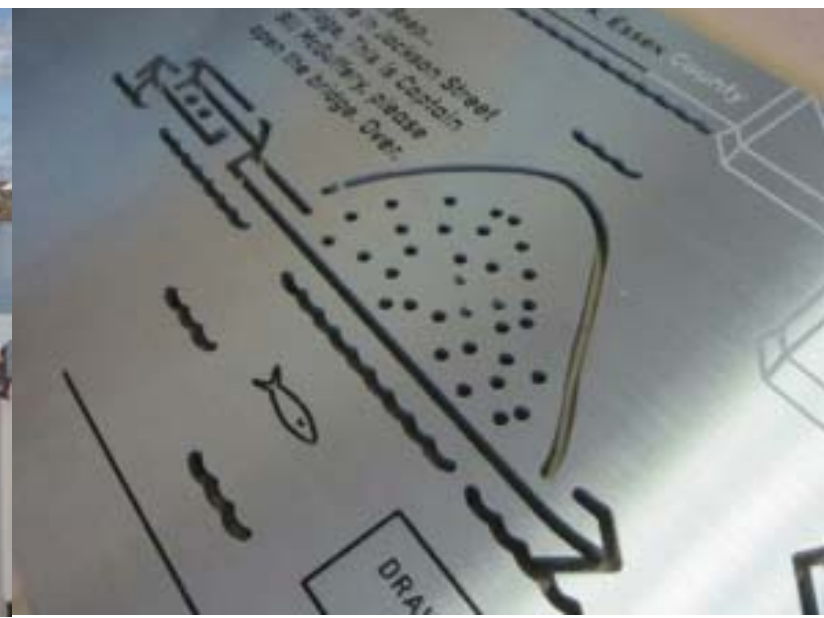
BRILL ST

OXFORD ST

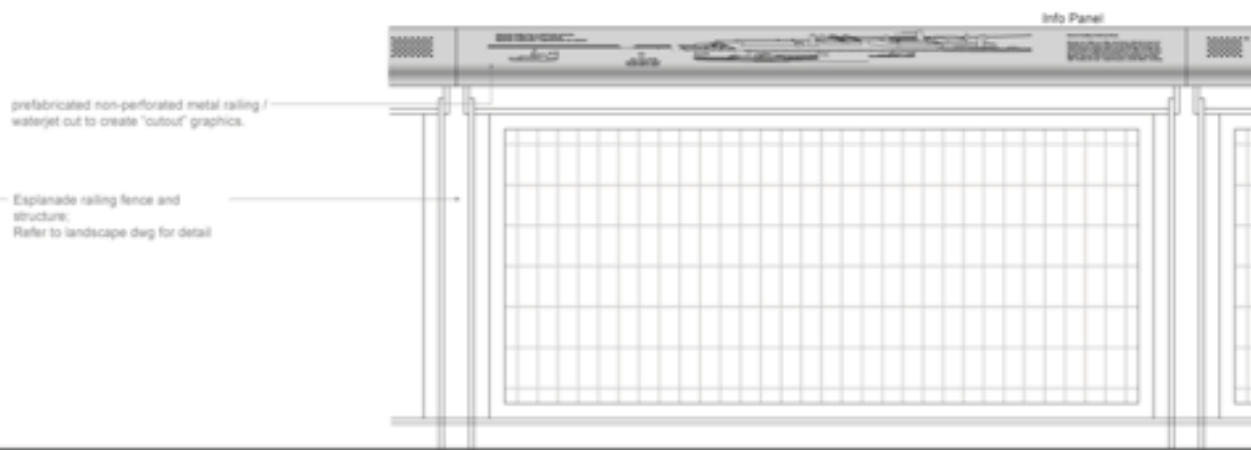
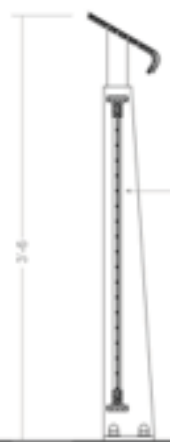
Essex County Riverfront Park







Dock Rules / "No Fish, No Swim, No Crab"



Section Scale: 1" = 1' 0"

Elevation Scale: 1" = 1' 0"







What's that concrete platform behind here?

# Combined Sewer Overflow

That's the top of an underground netting chamber. It works like a net or pasta strainer attached to the end of the sewer pipe that runs under Polk Street to the river. When it rains and sewers overflow, the nets in the chamber hold back some of the gross garbage and sewage that would otherwise go into the river. These drawings show the history of sewers in Newark and why they overflow.

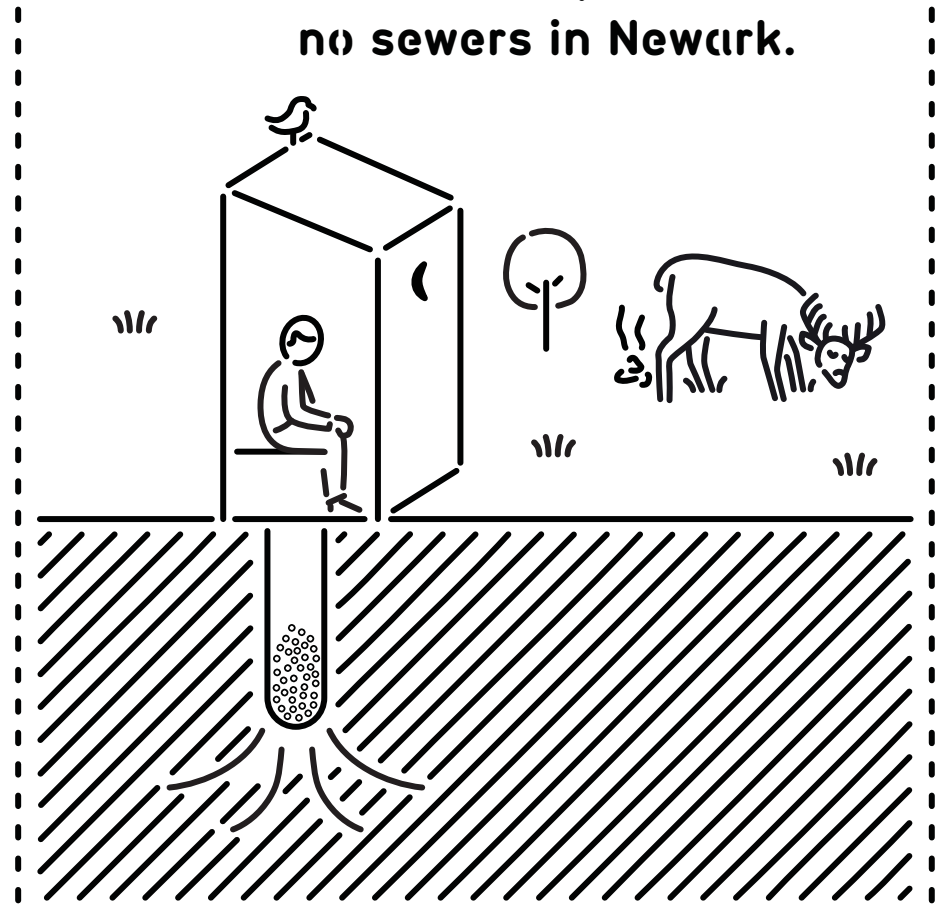


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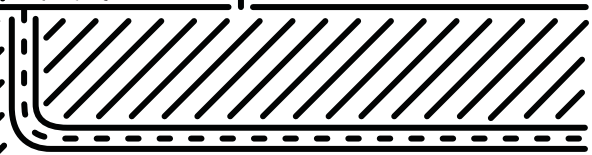
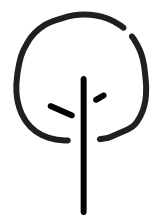
Before 1850, there were no sewers in Newark.



1850, there were  
s in Newark.

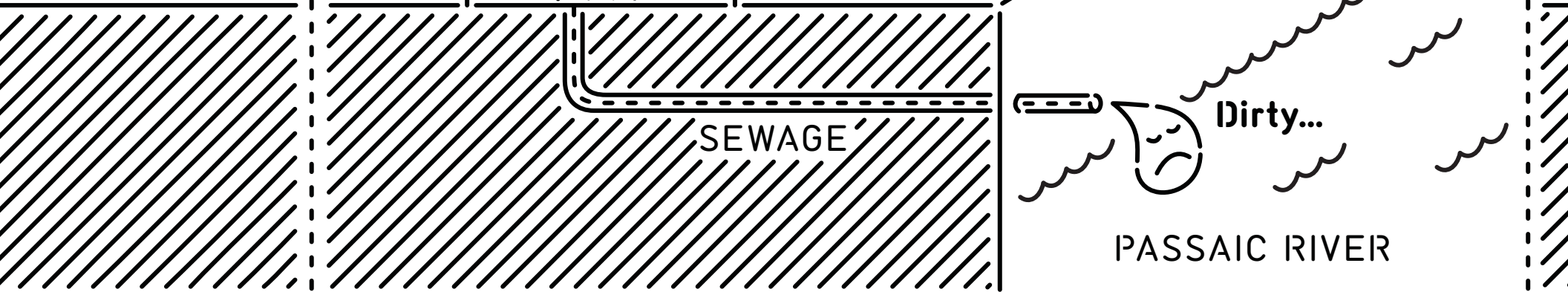


Between 1850 and 1924,  
Newark's sewers took  
wastewater directly to  
the river.

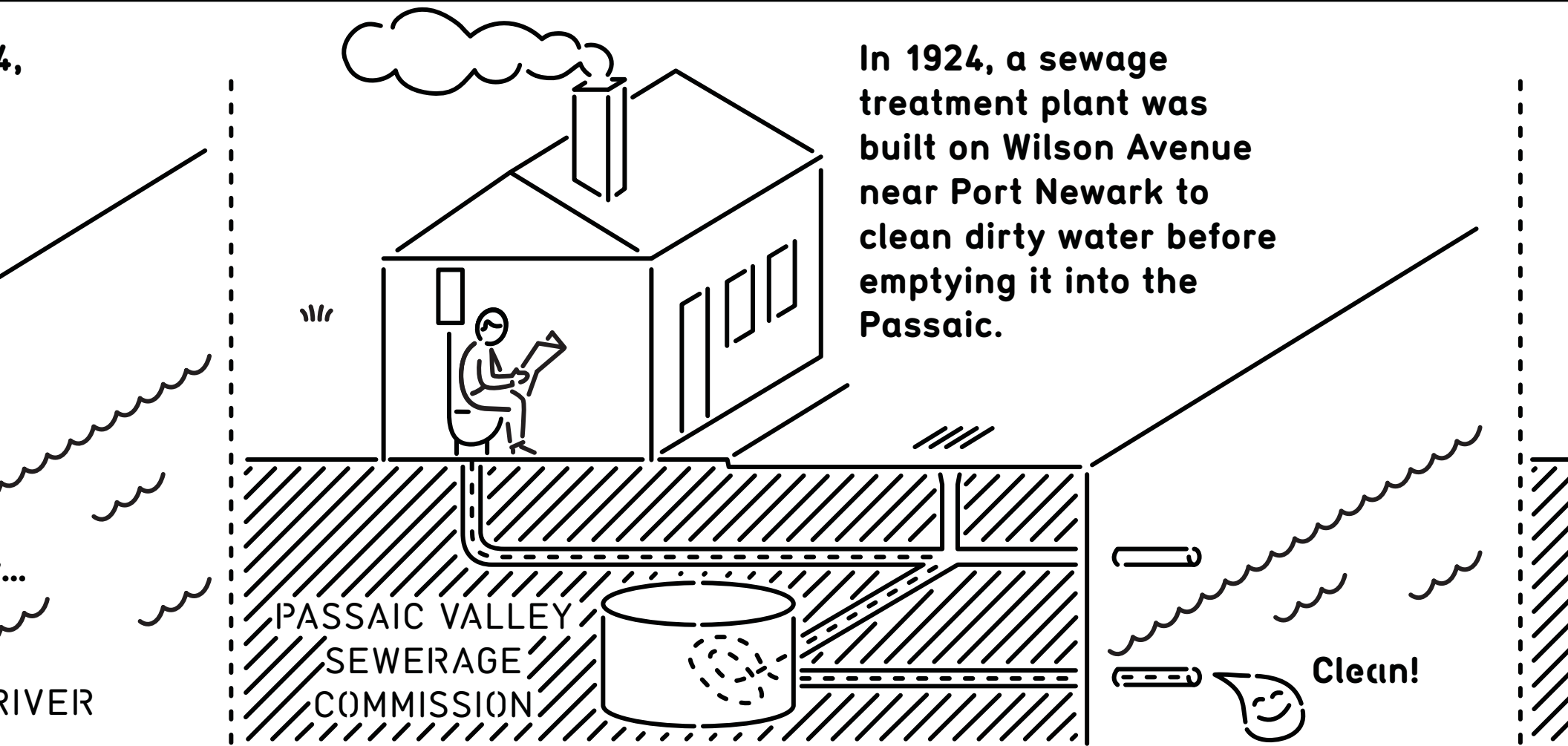


Dirty...

PASSAIC RIVER



4,

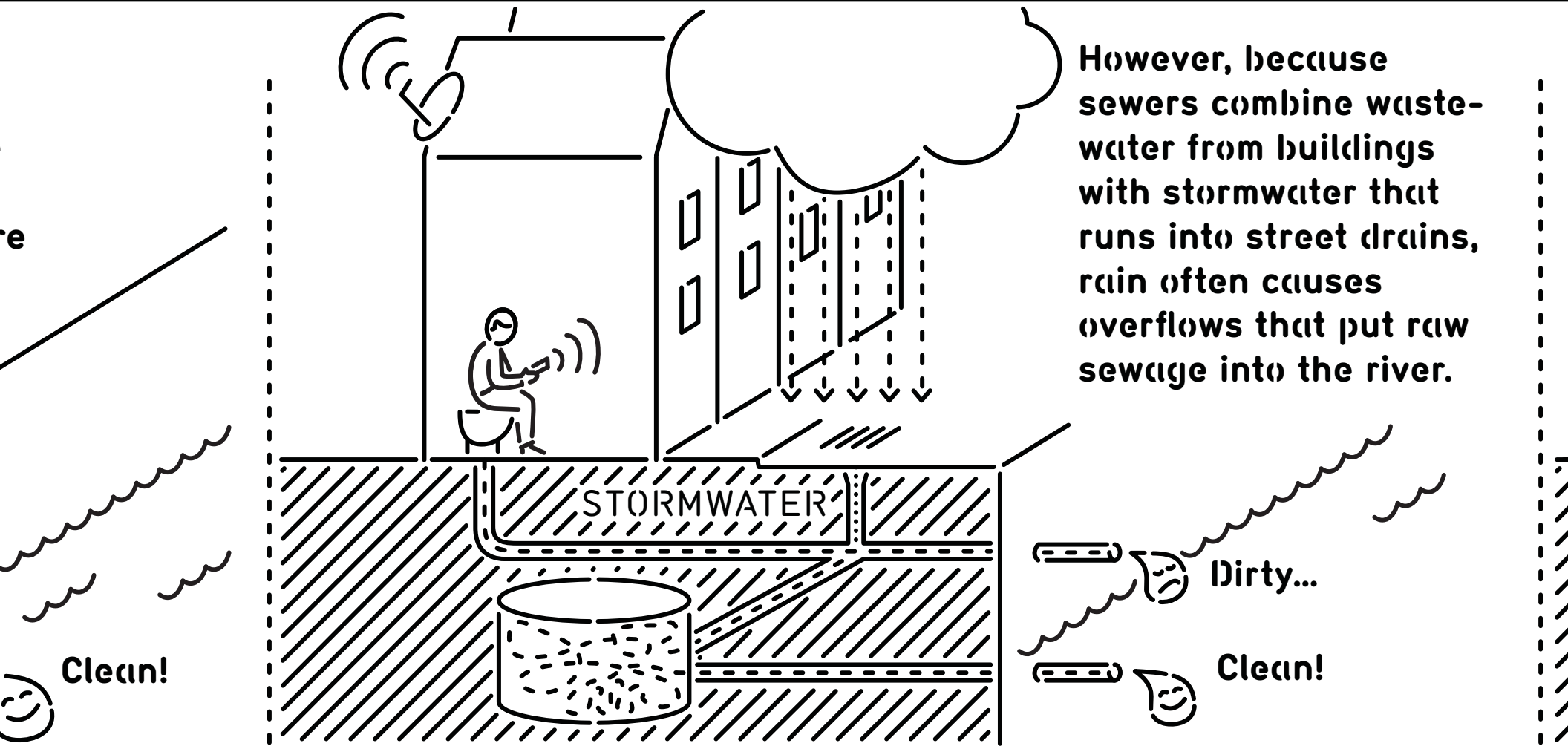


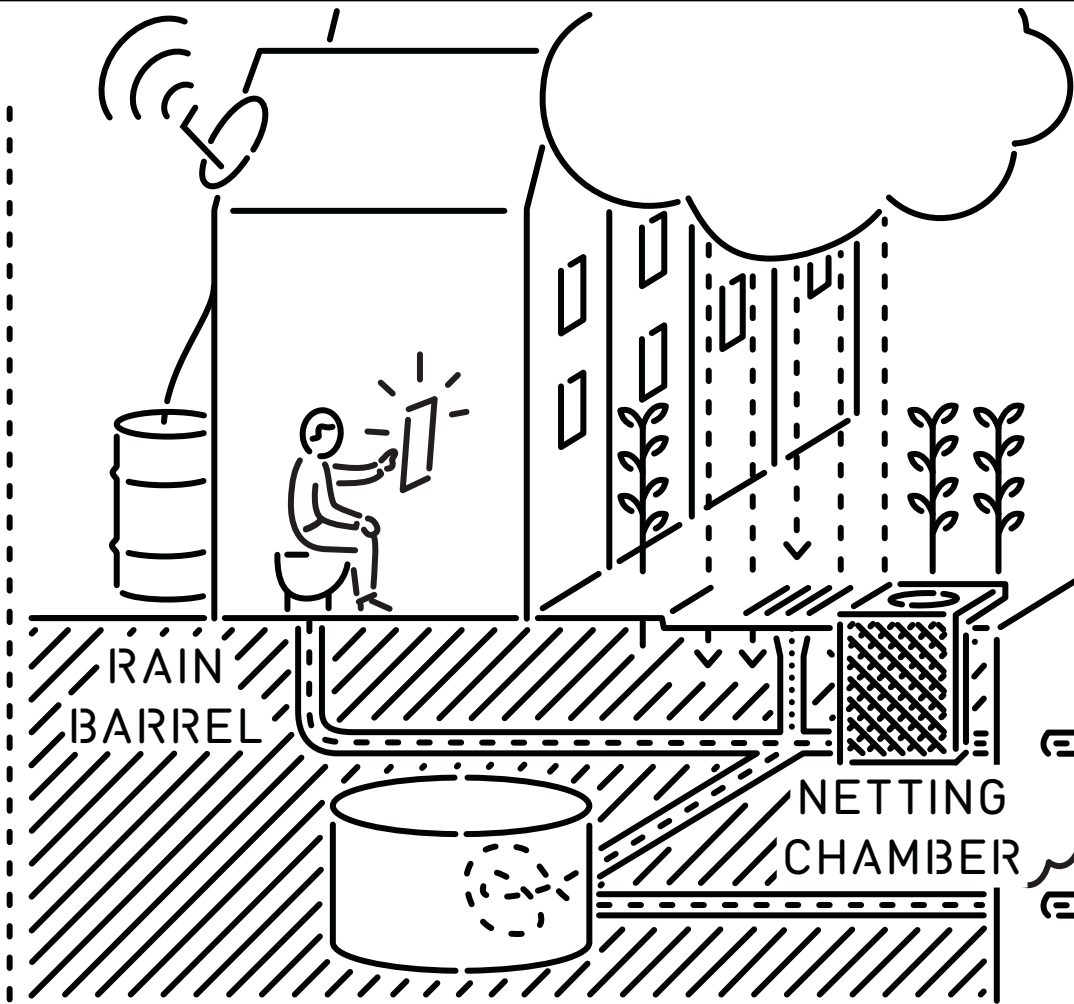
In 1924, a sewage treatment plant was built on Wilson Avenue near Port Newark to clean dirty water before emptying it into the Passaic.

PASSAIC VALLEY  
SEWERAGE  
COMMISSION

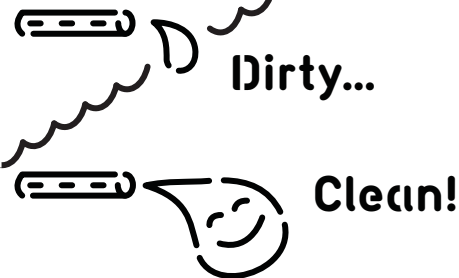
RIVER

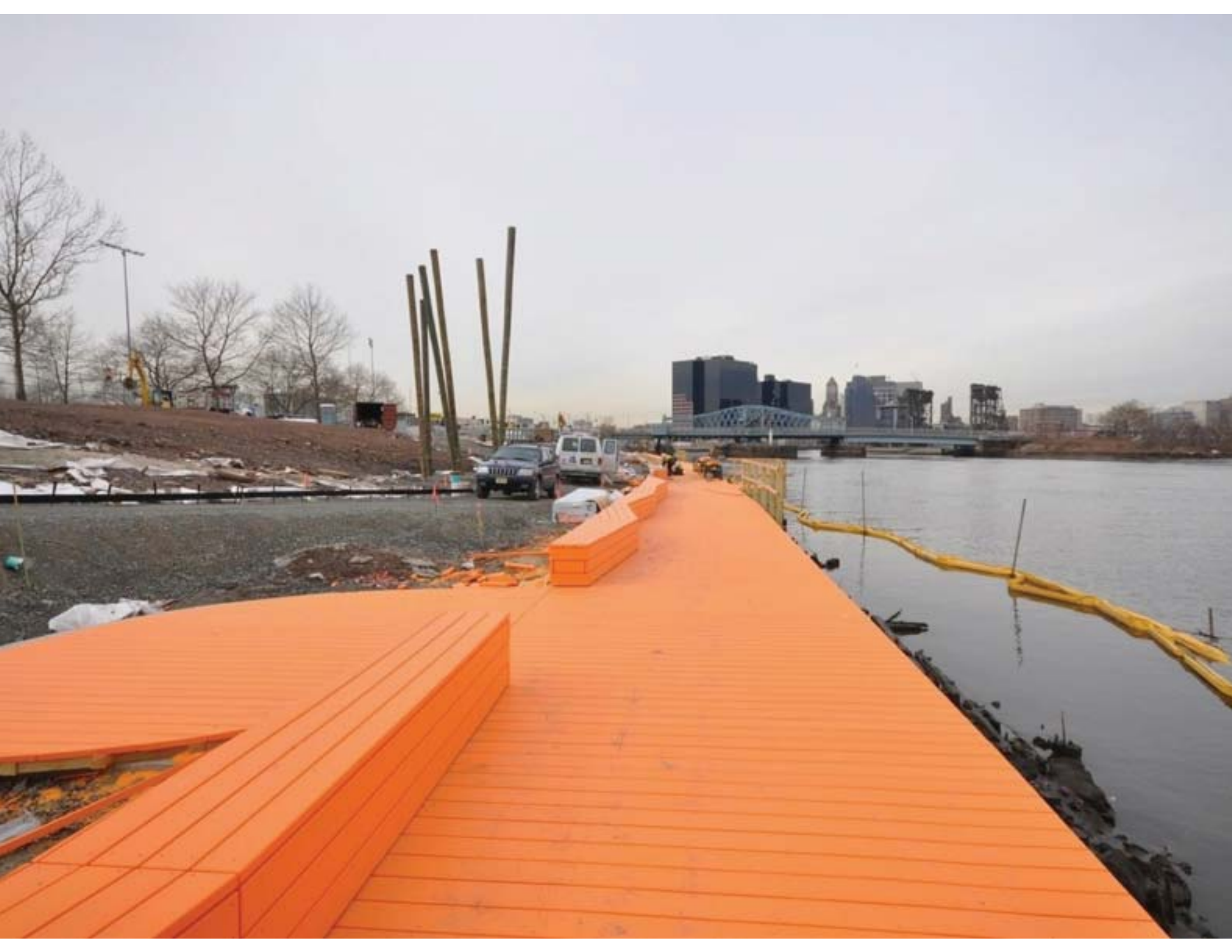
Clean!





Newarkers can help reduce combined sewer overflows by preventing rain from entering the sewers: for example, by capturing water using rain barrels or replacing pavement with plants, which lets the ground absorb more rain.

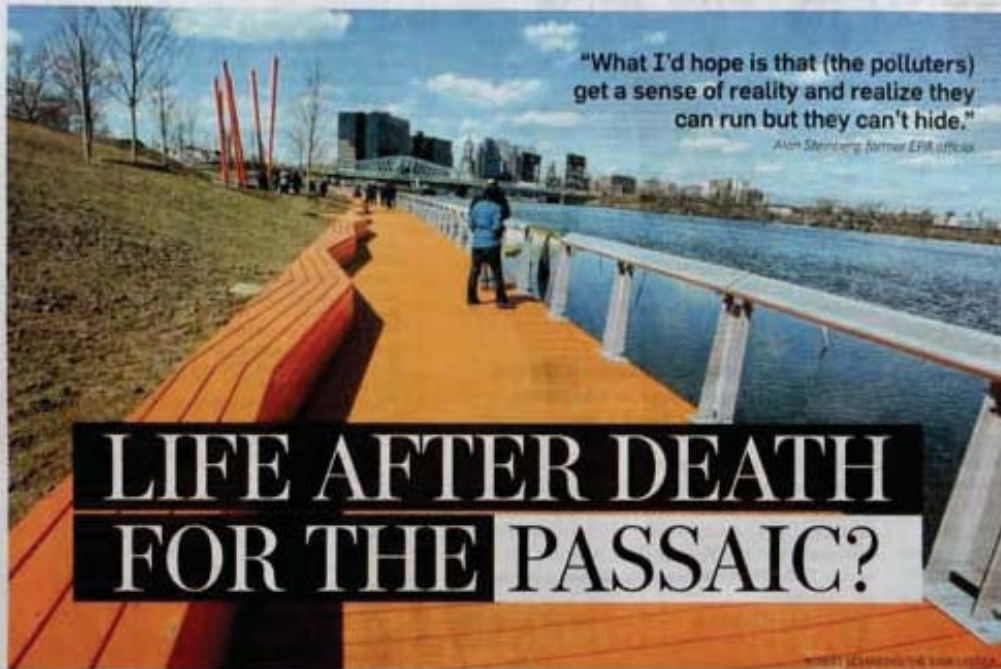




# PERSPECTIVE

SECTION TWO | APRIL 14, 2013 | NJ.COM/PERSPECTIVE

50¢ NEWSPAPER



**"What I'd hope is that (the polluters) get a sense of reality and realize they can run but they can't hide."**

*Alan Sternberg, former EPA official*

## LIFE AFTER DEATH FOR THE PASSAIC?

Polluters are resisting a cleanup, but their day of reckoning is coming

**Tom Moran**  
*By Tom Moran*



A half-century has passed since workers at Diamond Shamrock were ordered to dump dioxin into the Passaic River in Newark, and then to march out at low tide and knock down the toxic mud piles with rakes

so that no one would know. So began the long history of polluters evading responsibility for the murder of this river, an effort that continues to this day. Workers with rakes have been replaced by consultants and lawyers.

And as polluters clean up their messes in places like the Hudson River and the Great Lakes, the Passaic remains an industrial dead zone, where fishing and swimming are off limits, and even boats are a rarity.

SEE MORAN, PAGE 4

### RIVER OF DREAMS

To most people, the Passaic River is a filthy backwater, a casualty of the industrial revolution, helplessly lost. But not for a band of forty activists who have



WITH SEN. ROBERT MENENDEZ

## A deal that breaks immigration logjam

Eight U.S. senators — Democrats and Republicans — have been working furiously on an immigration reform bill that is expected to be introduced this week. Editorial writer Linda Ocasio spoke with one of the eight, Sen. Robert Menendez (D-N.J.), about what to expect. An edited transcript appears below.

**Q. What are the basics of the new bill for people who entered the country illegally?**

**A.** In broad strokes, an undocumented person who arrived here before Dec. 31, 2011, would have to register with the government and pass a criminal background check. They'd get temporary-status work permits and the opportunity to travel to their home country. They cannot be a public charge. They'd have to learn English for permanent residency, and pay taxes.



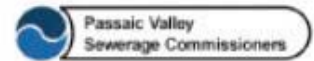
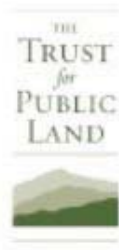
SEN. ROBERT MENENDEZ

DREAMers get a special, accelerated pathway to citizenship. They came here as children, they have an allegiance to any other country, we've all they know. And we've invested in









[www.newarkriver.wordpress.com](http://www.newarkriver.wordpress.com)

## PRIORITY FOUR

# Stormwater Management and Community Greening



## VISION

Newark will use its land to absorb stormwater before it gets into the sewer system, and do that in ways that also cool and beautify its neighborhoods. Green infrastructure, which mimics the capacity of nature to absorb rainwater into the earth using engineered landscaping, plants, trees, raingardens and pocket parks, and permeable surfaces, will become a critical complement to the City's existing gray infrastructure of pipes and storage tanks. Strategically combining the two approaches will reduce instances of flooding and help prevent the sewer system from becoming overwhelmed. At the same time, Newark's use of green infrastructure will expand the network of green community spaces in order to cool and clean the air, beautify neighborhoods, and filter toxins and pollutants from the soil and water. Accomplishing this shift will provide job and business opportunities for Newark residents. In Newark's sustainable future, rainfall will be a resource for the city's expanding network of parks, gardens, and trees, rather than a problem for its river, streets, and basements.

## CHALLENGES

Newark has aging water infrastructure with limited resources available for making needed upgrades. In addition, the majority of the city is paved, creating problems for stormwater runoff and contributing to urban heat island effect. Newark often has the highest temperature in the region (sometimes 6-8 degrees warmer than neighboring suburban communities) in part because of its lack of green spaces relative to concrete and paved surfaces. The city's many brownfields, or sites affected with industrial contamination, also pose stormwater challenges as runoff may contain harmful pollutants. Newark hosts the region's wastewater treatment plant and has a combined sewer system—meaning that the same pipes handle rainwater from street gutters, building waste water, and sewage. The combination of extensive paved surface and aging and outdated stormwater infrastructure results in flooding during heavy rainstorms, and can also lead to discharges of raw sewage into the river and the bay. Addressing these serious problems will require changes in policy, financing mechanisms for infrastructure, and significant expansion of both green and grey infrastructure projects.

## ACTION ITEM SUMMARY

- Launch a high-profile campaign to put Newark on track to double its tree canopy and establish a stable source of revenue for tree maintenance
- Implement a new Newark Stormwater Ordinance and develop green infrastructure policy
- Integrate green infrastructure standards into street repair and other public space capital projects
- Identify and implement at least 10 new green infrastructure capital projects over the next five years
- Develop a stormwater infrastructure bank and explore options for funding stormwater improvements through fees on impermeable surfaces
- Support neighborhood-based rain capture projects



## Action Item 1:

### LAUNCH A MAJOR CAMPAIGN TO DOUBLE NEWARK'S TREE CANOPY AND ESTABLISH A STABLE SOURCE OF REVENUE FOR TREE MAINTENANCE

Trees can function as part of a city's green infrastructure by absorbing stormwater and reducing the volume that runs into the sewer system during heavy rains. But they also provide a range of other environmental services. Trees absorb carbon dioxide, a greenhouse gas and they can significantly reduce demand for electricity by shading buildings and decreasing the need for air conditioning. Leaves can also absorb pollution, including particulate matter from diesel exhaust that settles around highways and truck routes. They cool the air on hot summer days, an especially important service in Newark, where temperatures tend to be about 7 degrees higher than in the surrounding (leafier) suburbs during the summer. Tree-lined streets are more beautiful, calmer, and have much more real estate value than do streets without trees.

But GHG reduction is just the beginning. Trees also absorb pollution, including particulate matter from diesel exhaust that settles particularly around highways and truck routes. Trees absorb stormwater through their roots and tree pits, reducing the likelihood of neighborhood flooding and alleviating pressure on the sewer system. They cool the air on hot summer days, an especially important service in Newark, where temperatures tend to be about 7 degrees higher than in surrounding (leafier) suburbs. Tree-lined streets are more beautiful, calmer, and have much more real estate desirability than do streets without trees. The project of substantially increasing Newark's tree canopy offers the potential for

training and for living-wage employment in a specialized field. With rising frequency and severity of storms, demand for tree care specialists can be expected to rise. Funding and carrying out a major tree planting and maintenance campaign turns the City of Newark into a predictable market for tree services—one that can employ Newark residents and contractors. Finally, tree planting and care offers an avenue for community engagement, education, and stewardship activities. This can bring neighbors together and create partnerships with volunteers or sponsoring firms or organizations. Projects to expand the tree canopy may also help strengthen civic and social ties within a community.

Trees are not a totally unmixed blessing, however. Many species carry pollen that can worsen allergies and asthma. They require maintenance and can create a nuisance if not given proper care. Neglected urban forests can even become hazardous. Resources and experience in city government, the private sector, and the community are required to maintain a healthy tree canopy.

On balance, because of the many benefits offered by trees, the Sustainability Action Plan calls for an ambitious program to generate enough resources to grow and maintain a well-preserved urban forest. The goal of this Action Item is to establish the financial and technical capacity to put Newark on track to double its tree canopy, and to develop a stable, recurring private revenue source for tree maintenance.

Recommendations for growing and maintaining Newark's urban forest include:

- Develop a baseline analysis of existing tree canopy coverage
- Increase the City's capacity to plant and maintain street trees
- Establish an independent nonprofit entity to raise and re-deploy funds in support of the City's tree canopy
- Launch a high visibility campaign to connect individual, corporate, and organizational donors to Newark's tree planting and maintenance efforts
- Explore connecting Newark's urban forestry program to promotion of carbon offset payments made by businesses and individuals flying through Newark airport
- Support development or scaling up of community engagement, stewardship, job training, and job placement for Newark residents within tree care industries

#### DEVELOP A BASELINE ANALYSIS OF EXISTING TREE CANOPY COVERAGE

Newark has one of the lowest tree canopy coverage ratios of any city of its size in the nation. The City has begun the process of developing a clearer picture of that canopy, working in partnership with the U.S. Forest Service. The U.S. Forest Service has intensified its focus on urban forests in recent years. It collaborated with a number of stakeholders and the New York Restoration Project to produce a new guiding document for supporting tree canopy growth in cities such as Newark: Vibrant Cities & Urban Forests (<http://vibrantcities.org/>). The baseline map under development will show areas of relative scarcity of trees within the city. It will also show areas with potential to absorb new trees, whether on the street, in parks, or on private property. The map can be used to make tree planting strategies more effective.

#### INCREASE CITY CAPACITY TO PLANT AND MAINTAIN TREES

Newark's capacity to grow and maintain its urban forest rests with two City departments and with several key nonprofit partners, particularly the New Jersey Tree Foundation (NJTF; [www.newjerseytreefoundation.org](http://www.newjerseytreefoundation.org)), a nonprofit with a mission to engage and train volunteers in planting and caring for new trees in urban areas throughout the Garden State. Within City government, the Traffic & Signals division opens tree pits and manages street tree planting contracts. The Department of Neighborhood and Recreational Services (NRS) provides tree maintenance and removes fallen or hazardous trees. NRS also maintains a current Community Forestry Management Plan and coordinates an annual Arbor Day celebration. These activities allow Newark to be recognized as a Tree City USA.

Newark benefits every year from the Newark Renaissance Trees Program (NKT: <http://njtreefoundation.org/about/newark-renaissance-trees-program/>) run by the New Jersey Tree Foundation. Over the last several years, NJTF has worked with residents and businesses to plant more than 1,624 trees, using a model that cultivates stewardship and helps build

community at the block level. Ten neighbors on a block must pledge to care for the young trees for two years. Residents on any block can apply for participation. NJTF provides instruction, coordinates preparation, including opening up new tree pits in the sidewalks, brings young trees to the neighborhood, engages paid and volunteer help to assist residents with planting their own trees, and conducts follow-up visits. The City works in partnership with NJTF, particularly through its Neighborhood and Recreational Services Department, to support the success of tree planting days. NJTF recently added a Treekeepers Training that will provide 40 Newarkers with the knowledge and tools needed to provide excellent care to trees under 5 years old throughout the city.



In 2006, the New Jersey Tree Foundation kicked off the Newark Renaissance Tree Program. Here, Lincoln Park residents volunteer as tree planters, part of a community event that planted over 800 trees around Newark. Photo credit: Lincoln Park Coast Cultural District.

Despite all this effort, Newark's tree canopy is still low and in some cases declining as trees are lost due to storms, age, and removal based on hazard status. Moreover, the City has not had capital funds allocated to planting street trees for several years. New trees planting since that time have relied on volunteers and donations. Neighborhood Services focuses the time and capacity of its tree specialists on taking down hazardous trees, a key priority in the Community Forestry Management Plan. To bolster existing capacity and to prepare for the future, the Sustainability Action Plan recommends that the City take the following steps:

**Use a planning ordinance to gain trees and tree planting funds from applicants for site plan approval**  
Current law requires certain types of development applicants to provide for tree planting on their properties if they are approved. A subsection of the law allows developers to pay into a Tree Planting and Maintenance Fund if planting the required number of trees on-site is not practical. The City should ensure that these rules are not waived and that steps are taken to

**Trees make an impact on the look, feel, and value of a block, as well as providing environmental services**



# Building on existing partnerships, Newark can use tree canopy to help transform neighborhoods, create jobs

Goldsmith Ave before and after NJTF event



Youth volunteers with NJTF planting trees in Lincoln Park



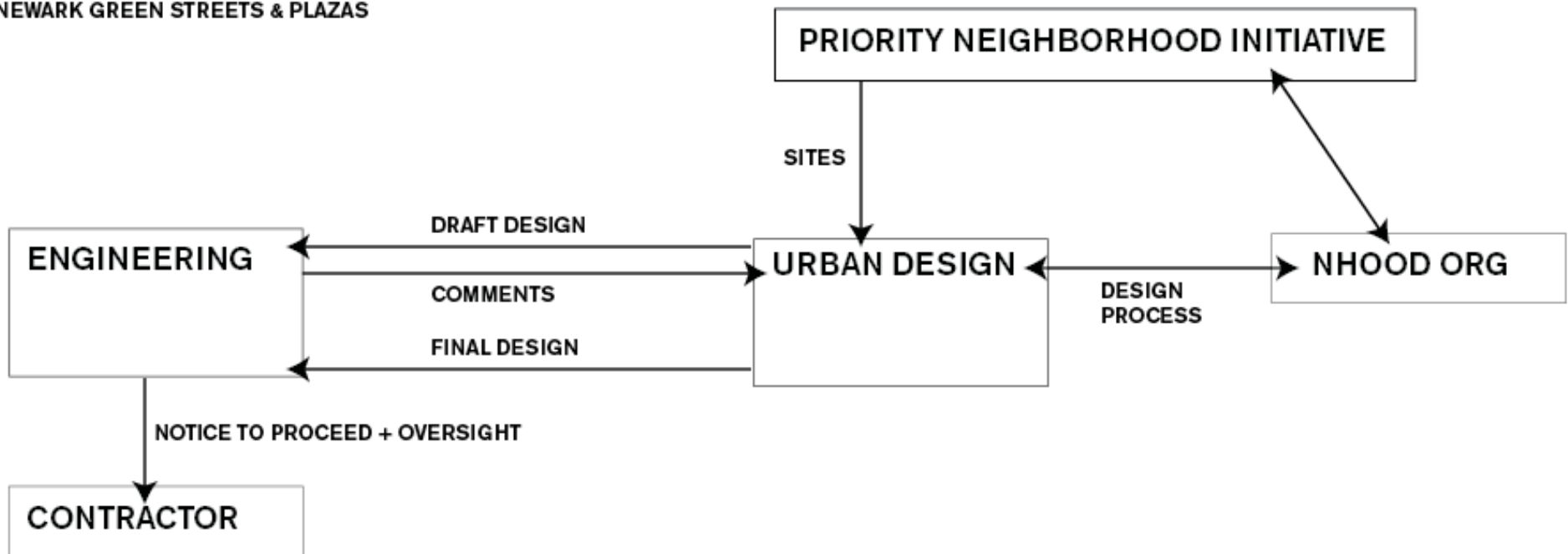
United Airlines employees partner with Greater Newark Conservancy to establish tree farm



# Mr Greenstreets

- + Improved pedestrian accessibility
- + Strengthened neighborhood identity
- + Quality open space & beautification
- + Improved storm water management

NEWARK GREEN STREETS & PLAZAS





# Mr Greenstreets Stormwater Management + Public Space + Art





HOT  
ROD  
LADIE  
BAD MAN

Intersection of Clinton Ave and Badger Ave

# Badger Triangle



What would you like to see at Peshine Park?

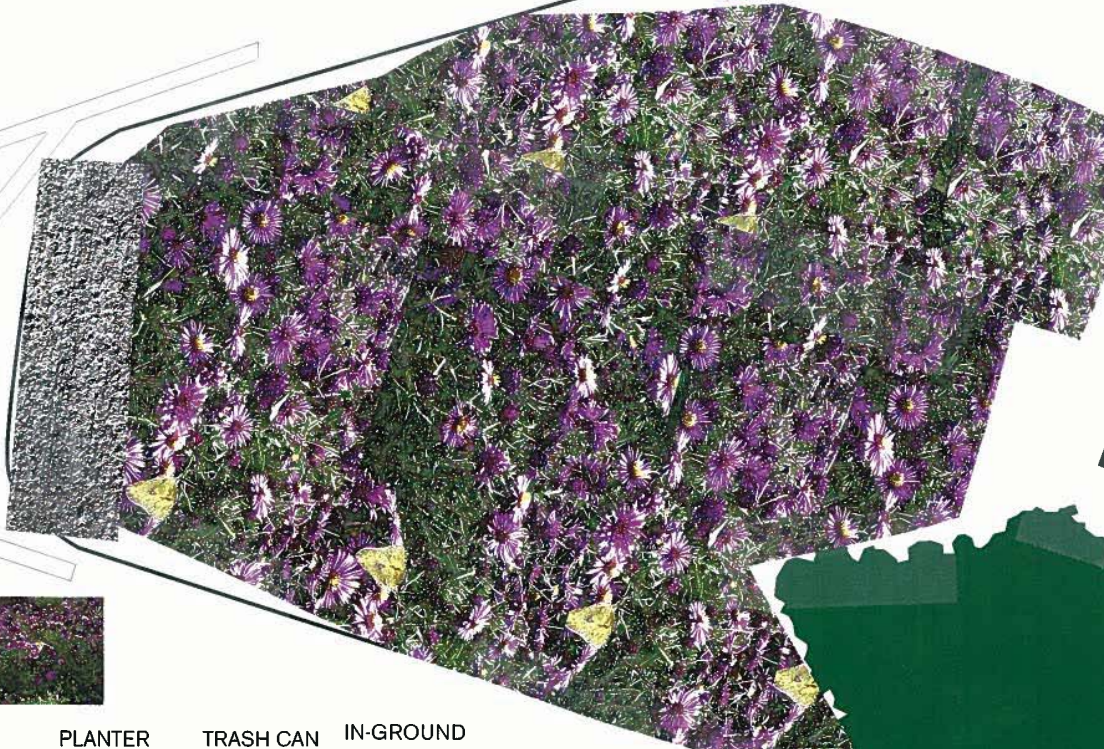


SCALE: 1/8" = 1'

Clinton Ave

Badger Ave

W. Alpine St



COBBLESTONES NATURAL GRASSES CONCRETE FLOWERS



CHESS & CHECKERS TABLE

FENCE

TREE + PIT

BENCH

PLANTER

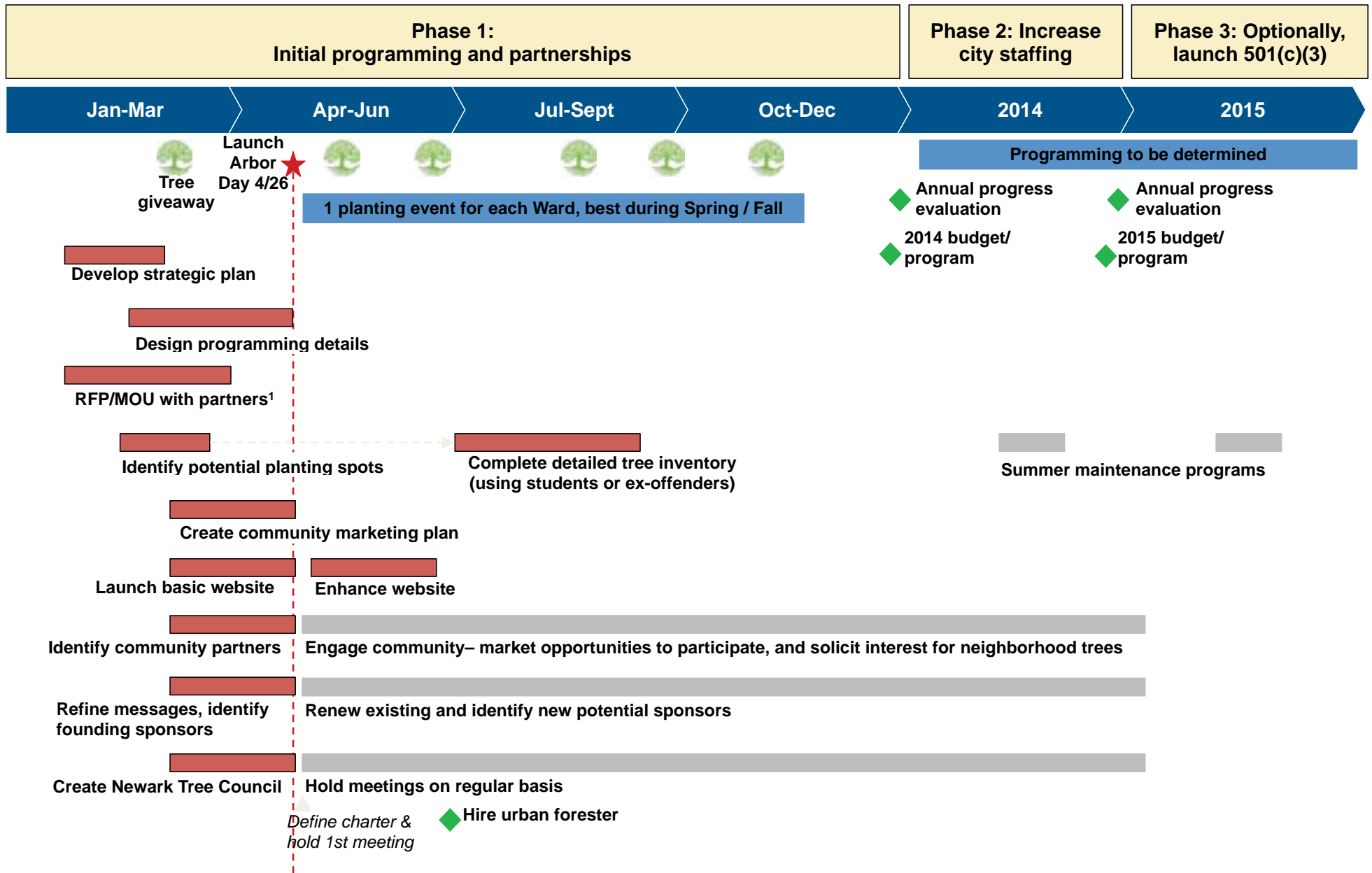
TRASH CAN

IN-GROUND PLANTING





# High-level timeline



**How do we make our current contract as flexible and impactful as possible?**

**What design elements “beyond the curb” should we prioritize for our next round of installations?**

**How do we increase the City’s in-house capacity for designing & implementing GI?**

**How can we quickly scale up the impact of GI in neighborhoods & across the city?**

**How can we secure funding for GI construction & operation? Stormwater impact fees?**

**What should be our early investments in monitoring?**

**Natalia O'Neill Vega**

**Junior Urban Designer**

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Thank you.

