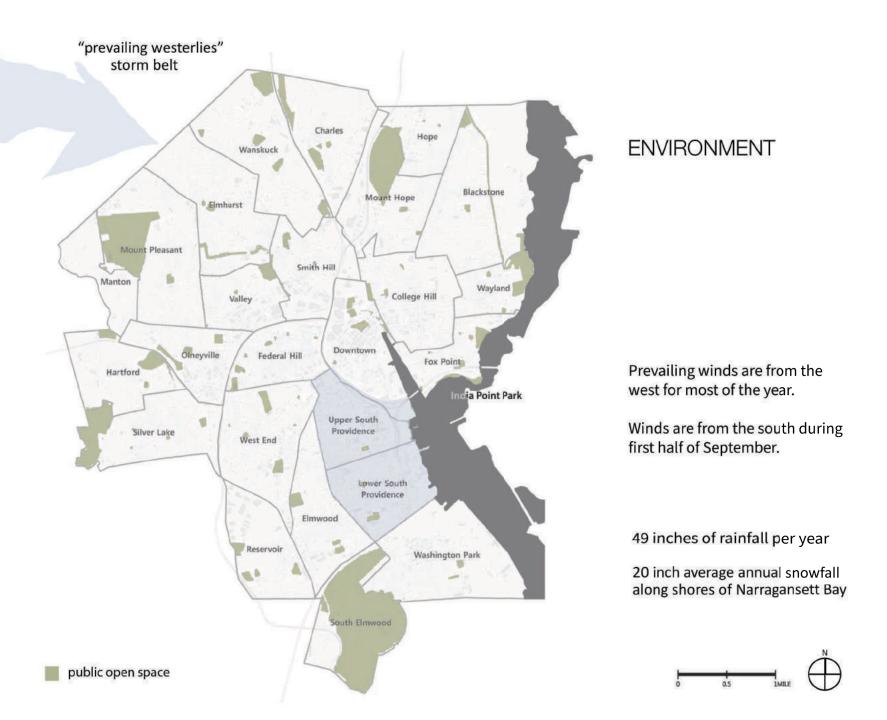
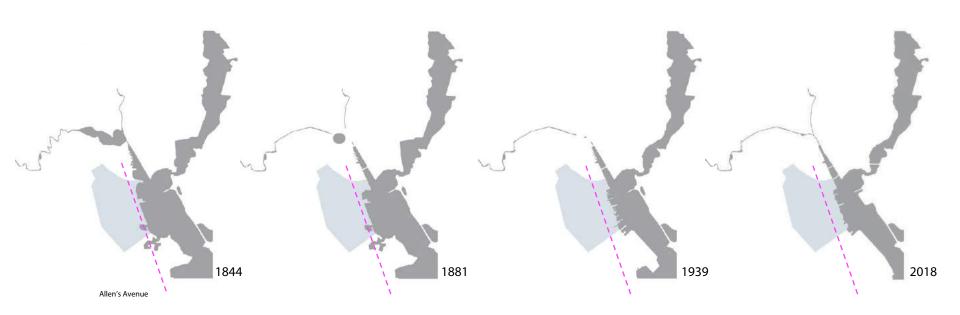


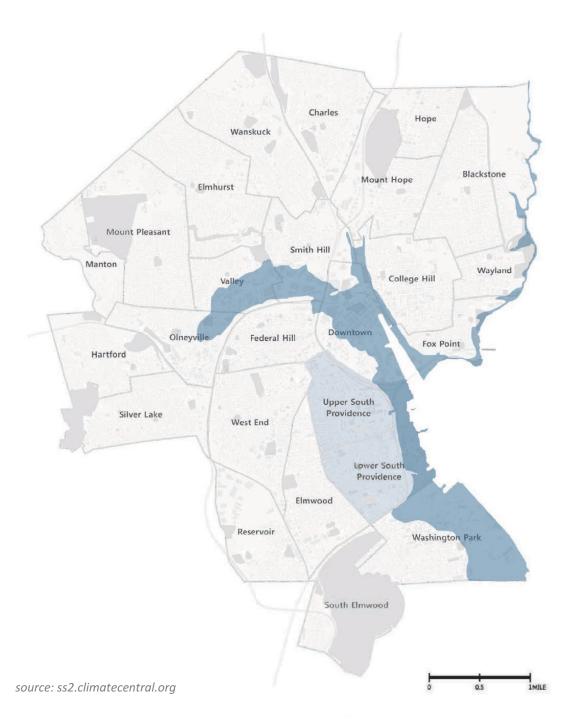
Reformulations Urban Systems 2018





EVOLVING SHORELINE through industrialization





SEA LEVEL RISE 6 meters

SOUTH PROVIDENCE

Upper South Providence, defined today by Providence's sprawling hospital district, first attracted industry in the mid 1800s due to its proximity to downtown and the Jewelry District. Industrial growth attracted primarily Irish and Eastern European Jewish immigrants.

The area that is now Lower South Providence was originally pasture land. The area was ceded to the new town of Cranston in 1754 and did not rejoin Providence until 1868.

Lower South Providence had greater access to Narragansett Bay and freight lines via the Port of Providence. Consequently, metal and jewelry factories began to appear by the late 19th C.

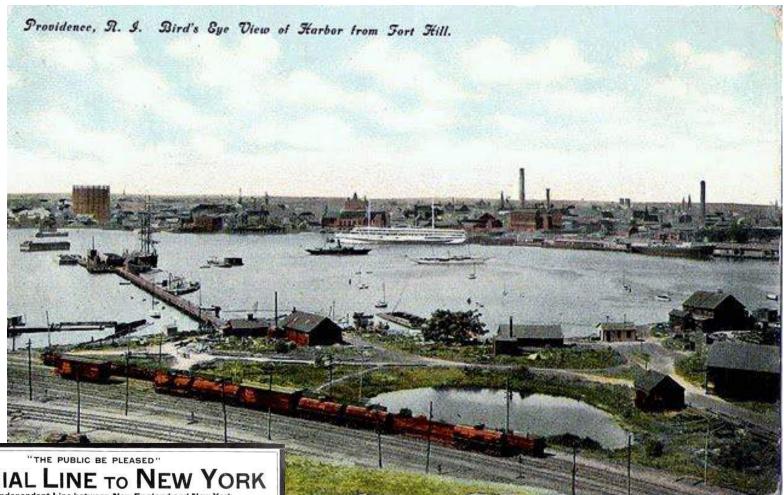
By the 1870s, the majority of housing became duplexes rented by working class tenants. By 1900, the creation of new electrified rail lines gave the area fast transportation and ample affordable housing, and the Lower South Side thrived. Between 1900 and 1950, descendants of the previous-generation immigrants moved into newer, more affluent areas, with the increased prosperity that they had attained.

In 1865 a streetcar ran west along Public Street and then south down Ocean Street; it transformed Lower South Providence into Providence's first streetcar suburb. Over the next ten years, the area developed rapidly.

Between 1860 and 1880 the population of Providence doubled to nearly 105,000 and the Irish immigrants who had lived to the north began to populate the southern part Providence. Cranston ceded Lower South Providence (along with Washington Park) back to Providence in 1868.

After 1950, the rise of the automobile sent the area into a long period of decline. The creation of Interstate 95 under the Eisenhower Interstate System required demolition of existing buildings and severed the region's historical connection to the waterfront. Green space was lost as lots and yards were converted into driveways and garages. Street renovation resulted in the loss of tree-lined streetscapes. Residents began to look farther out for newer, more prosperous neighborhoods.

source: wikipedia.org



The Only Independent Line between New England and New York

One Way \$1.60

OUTSIDE ROOMS

WIRELESS TELEGRAPH

Round Trip

\$3.00

EXCELLENT CUISINE

SERVICE UNSURPASSED

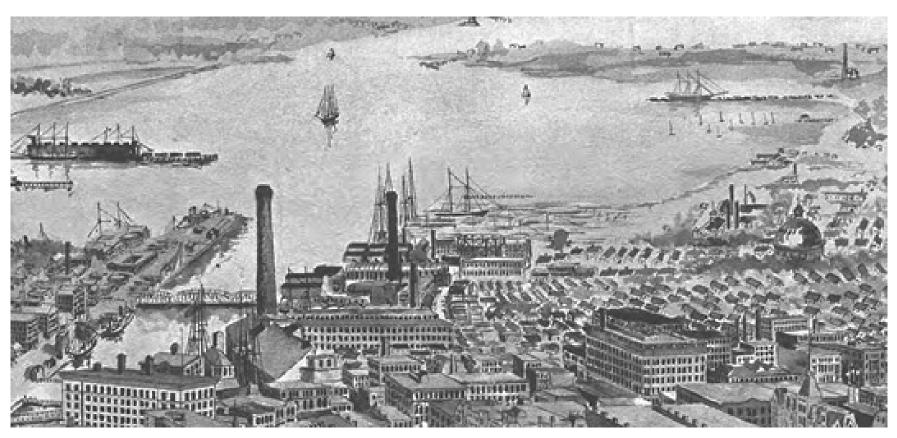
Steamers sail daily, including Sundays, at 7.00 P.M., from Colonial Wharf, South Water Street. Returning, leave NEW YORK at 5.00 P.M. from Pier 39, North River, foot of West

FREIGHT SERVICE PROMPT AND EFFICIENT.

RATES LOW.

During America's Industrial Revolution, which originated in the factory towns of Pawtucket and Central Falls, the increasing size of cargo ships and the bridges that began to interrupt travel up the Providence and Seekonk Rivers, forced most maritime activity to move further south to India Point and along Narragansett Bay, paralleling what is today Allen's Avenue. Slaves, immigrants and raw materials were shipped in, while textiles, jewelry, and other manufactured goods were shipped out to markets across the world.

(providenceworkingwaterfront.org)



Looking south from the Jewelry District (now the Medical School / Biomedical research area), mid 1800s



same view before I-195 bridge was relocated south of the hurricane barrier – old highway bridge is now replace by a pedestrian bridge

PORT OF PROVIDENCE TODAY

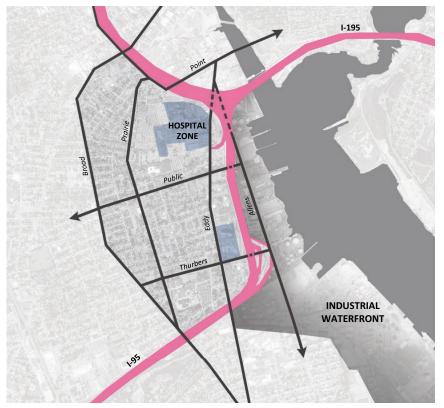
- The Port of Providence is the site for a proposed National Grid LNG facility. The last proposed LNG facility was rejected 13 years ago.
- Port companies already include a liquid asphalt plant that emits compounds linked to child development disorders and to cancer, and an oil terminal that emits similar pollutants and other toxins linked to neurological and respiratory disorders.
- The city's industrial waterfront serves as a coal port, a fuel-oil depot, and a train depot for ethanol. It's also home to several chemical-processing plants, including a Univar facility that manufactures chemicals for hydraulic fracturing (fracking). In 2013, the Environmental Protection Agency (EPA) determined that the Univar plant accounted for 1,275 of the more than 4,000 pounds of chemicals Port of Providence industries spewed into the local environment that year.
- Chemicals on site include: arsenic; benzene; ethylbenzene; lead; light non-aqueous phase liquid (LNAPL); naphthalene; polycyclic aromatic hydrocarbons (PAH); toulene; and total petroleum hydrocarbons (TPH).





encroachment on neighborhood from north (hospital) and east (industry and hospital-related expansion)

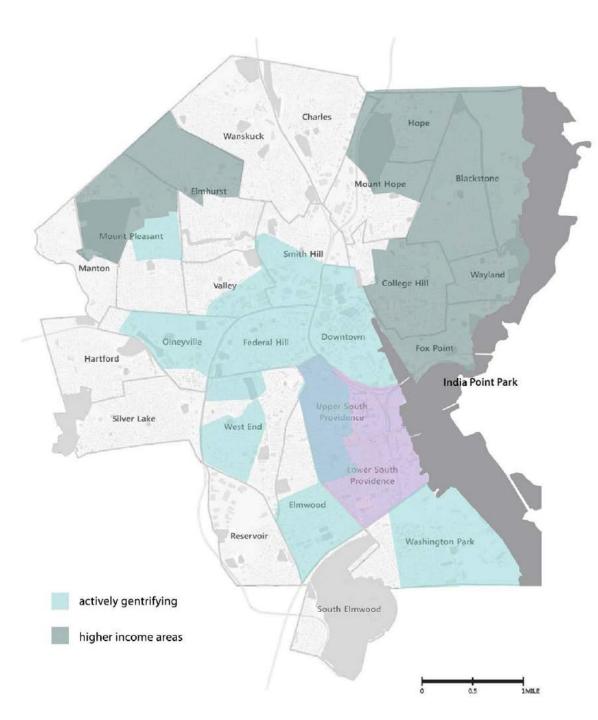
- South Providence suffers from a mix of pollutants from the industrial port and traffic emissions from I-95. The neighborhood has the highest asthma levels in the state at 10.4 15.4% (compared to College Hill at 0 4.4%).
- Close to 25% of South Providence's land area consists of paved roads and parking lots.
- Vast stretches of hospital parking lots create dead zones within the urban fabric, a negative impact on land values, excessive storm runoff due to impervious surfaces, and raise summer air temperatures through the urban heat island effect. This impacts energy demands for air conditioning and greenhouse gas emissions.
 Due to global warming, summer air temperatures are expected to rise 6-14 degrees by 2100.
- Upper South Providence has 10.9% tree canopy cover. Lower South Providence has 10.2% compared to 30% canopy cover on College Hill.





Primary street network

Parking lots

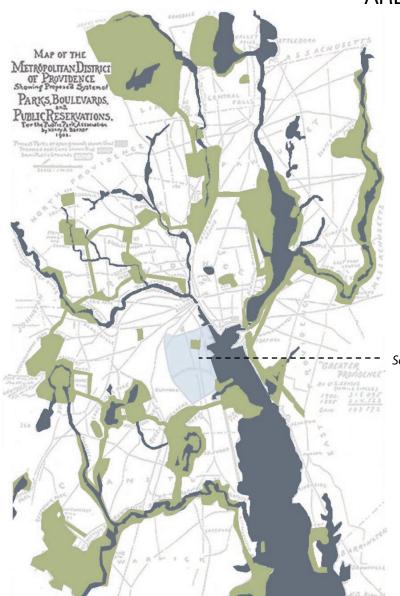




At the end of the day, gentrification is a colonization tactic. It's a way to move people out of a space that you now desire. Neighborhoods change all the time and the way they change and why is based on political power.

Christopher Rotondo, organizer for DARE (Direct Action for Rights and Equality)

AREA PLANS



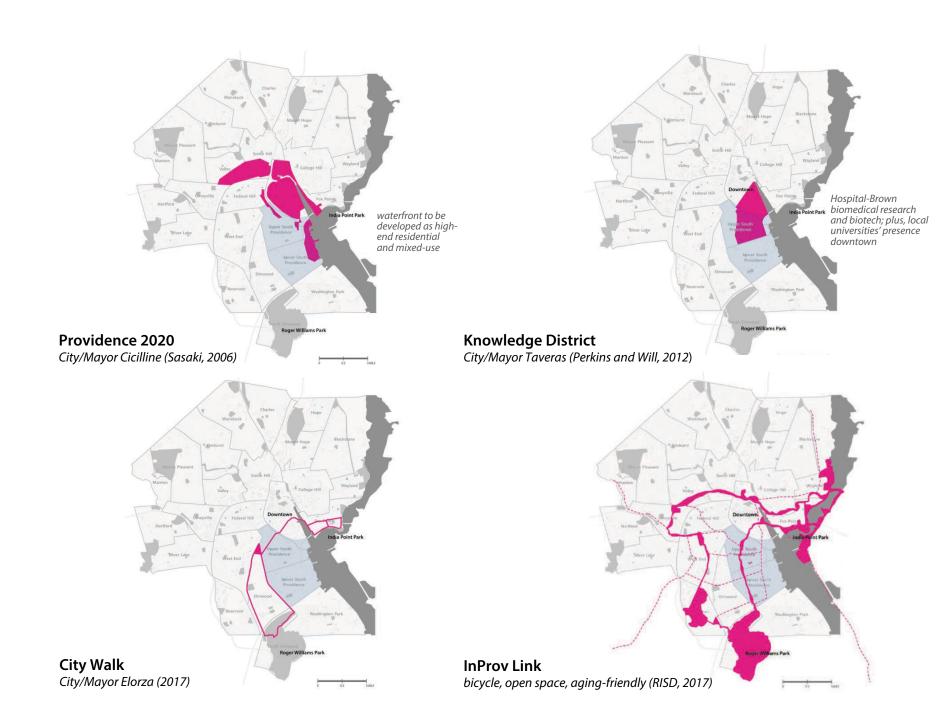


Roger Williams Park, 1870

South Providence

1903 Proposal for a System of "Parks, Boulevards and Public Reservations" for Metropolitan Providence

Public Park Association (Henry A. Barker)





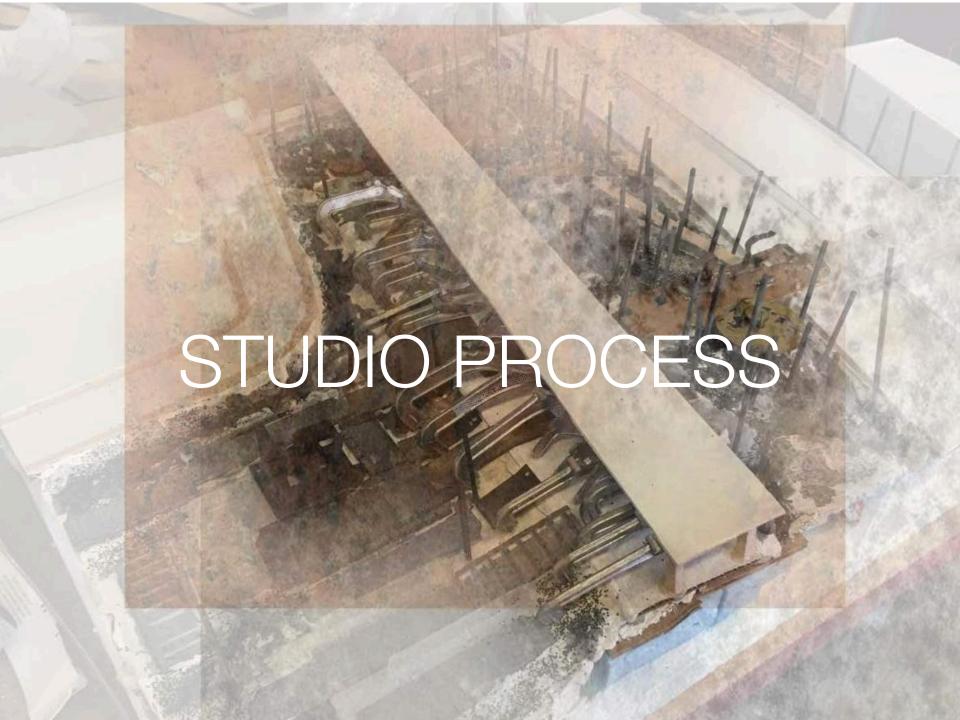
---- South Providence

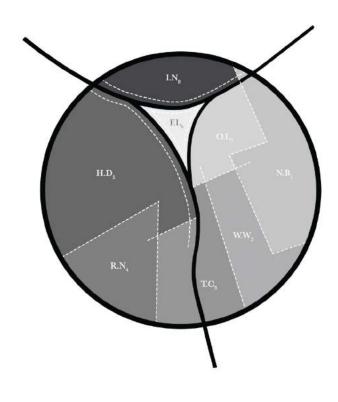
Hospital Zone

---- Brown University
Medical School /
Bio-Medical research

KNOWLEDGE DISTRICT

-- Downtown





Polyphony

the simultaneous sounding of points of view, perspectives, actions and voices, liberated from the domination of an authoritative narrative while co-existing

within a particular narrative

Counterpoint

the relationship between various melodic lines occurring at the same point in time

and/or space

Harmony

many voices heard as one; peaceful and

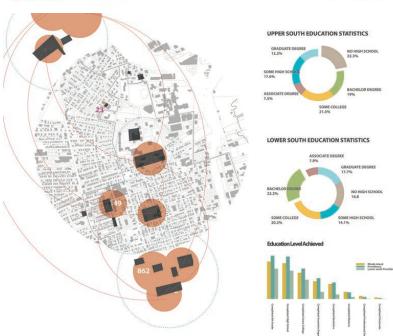
balanced conditions; unity

URBAN TRANSECTS and FIELD SURVEY



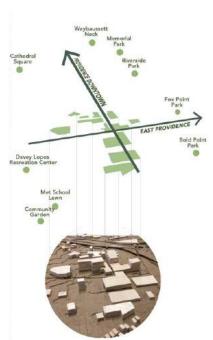
TEAM AND INDIVIDUAL RESEARCH





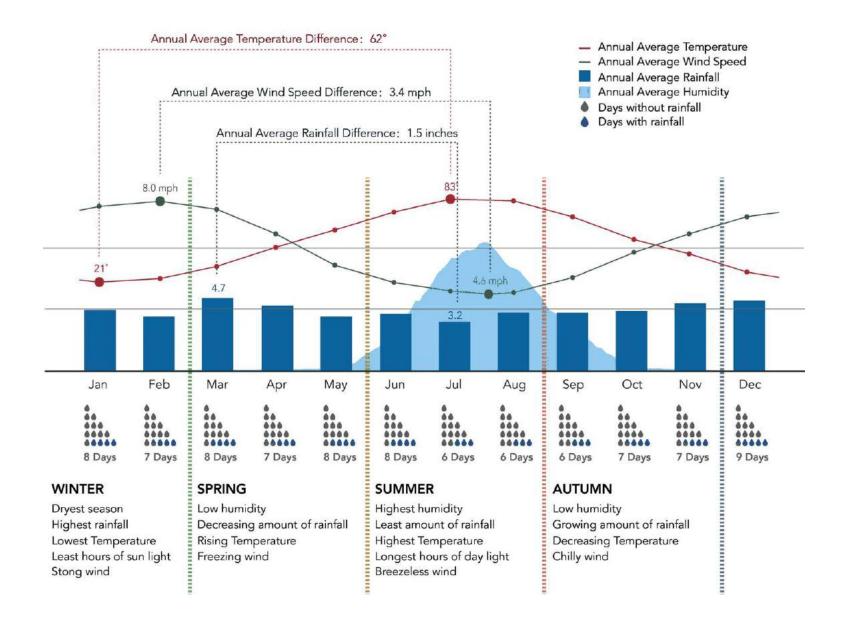








CLIMATE









Southside Community Land Trust

BUILT ENVIRONMENT



Pine Street Historic District





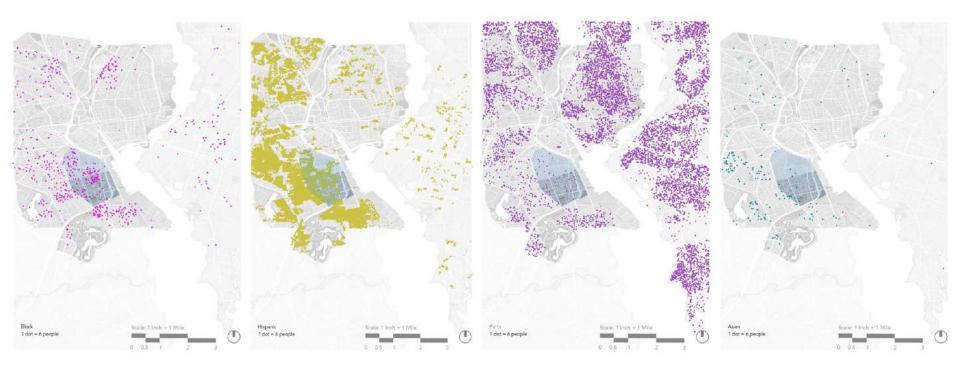


Industrial heritage





DEMOGRAPHICS



	Upper South Providence	Lower South Providence	All Providence
POPULATION	6494 (52% M / 48% F)	7066 (48% M / 52% F)	173618 (48% M / 52% F)
Hispanic	48%	66%	30%
Black	34%	21%	14.5%
White	13%	8%	54.5%
Asian	2%	2%	6%
AGE			
<10 yrs of age	16%	18%	15%
10-17 yrs	14%	15%	16%
18-34 yrs	26%	23%	29%
35-64yrs	31%	34%	29%
65+	13%	9%	11%



SOCIAL SUPPORT INSTITUTIONS

Community Events

1: SOUTHSIDE CULTURAL CENTER OF RI









Classes of Different Culture

2: SOUTH PROVIDENCE NEIGHBORHOOD ASSOCIATION



Public meetings every week

3: KNIGHT MEMORIAL LIBRARY











4: CELEBRATE BROAD STREET EVENT







Fifth Annual Providence Earth Day Spring Cleaning & Parade of RI

5: SOUTH PROVIDENCE LIBRARY

Mon	Tue Wed	Thu	Fri	Sat
				5
Spanish Class	Homework Help by Brown Students	Game Day	Movie Nig	ght

6: JACK-O-LANTERN SPECTACULAR



Community Services

1: AMOS HOUSE SOUP KITCHEN



- . Breakfast and lunch served to anyone: Mon-Fri 7-Sam, 11-12:30pm
- · 200-400 people served every meal

2: DORCAS INTERNATIONAL INSTITUTE OF R.I.



- . Tutors and Teachers Aides
- · Immigration and Citizenship Support
- Refugee Mentors

3: CITY ARTS



- · Teachers Assistants
- Homework Helpers
- . Photographer / City Arts Reporter

4: SERVE RHODE ISLAND



- · Providing Training to those who need it
- . Increasing number of individuals engaged in volunteer / service

5: HIGHER GROUND INTERNATIONAL



- Advocates / Provides programs for West African Immigrants
- · Serves West African Refugees
- Serves marginalized communities in Rhode Island

6: GENESIS CENTER



- · Nonprofit dedicated to assisting immigrants becoming US citizens
- · Finding immigrants employment

7: MEETING STREET



- . Individualized attention to students of all ages
- · After school programming



Cultural Events

1: BOLIVIAN FESTIVAL DE LA VIRGEN DE URKUPINA Saturday, August 12th



- Procession starting from St. Patrick's Church on Smith Street
- Festival at the Alex & Ani Skating Rink
- 2: VENEZUELAN INDEPENDENCE DAY FLAG RAISING Thursday, July 6th



- · Celebration of the Venezuelan Independence
- 3: ECUADORIAN INDEPENDENCE DAY FLAG RAISING Thursday, August 10th



- . Celebration of the Ecuadorian Independence
- 4: PUERTO RICO FLAG RAISING Tuesday, August 15th



- . Celebration of the Puerto Rican Independence
- 5: ANNUAL RI HERITAGE DAY FESTIVAL Saturday, September 9th



- Parade of International Flags Representing 30 Countries
- · Dancers and Musicians from Various Countries
- 6: CAMBODIAN KHMER NEW YEAR Late April



- . Food, Dance, and Celebrations for the New Year
- · Rhode Island Convention Center
- 7: HISPANIC HERITAGE MONTH September 15th October 15th



- Group Arcoiris Performance at the Providence Children's Museum
 Traditional Music and Dance from Dominican Republic, Caribbean
- 8: LATINO BOOKS MONTH Thursday, August 10th



- · Promotes Books for Latinos: Spanish and English
- Sponsored by the Association of American Publishers
- 9: LIBERIAN INDEPENDENCE DAY Liberian Culture and Independence



- Providence has the Largest amount of Liberian Immigrants / Refugees
- 10: DOMINICAN FESTIVAL OF RI Sunday, August 13th (30th Annual)



- Parade down Broad Street, ends at Roger Williams Park
 - · Food Dance and Music
- 11: CENTRAL AMERICAN FESTIVAL Sunday, September 17th



- · Music, Dance, Food, Costumes
- Temple of Music, Providence
- 12: CUENTOS LATINOS Sunday, September 17th



13: GUATEMALAN ANNUAL FESTIVAL Sunday, September 3rd



· Food Dance and Music at India Point Park

INCOME AND HOUSING



Median Home Value: Median Rent:

Median Income:

\$141,795

\$797

\$25,927

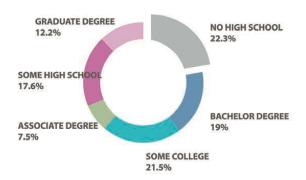
Rent vs. Own

Rent	78%
Own	22%

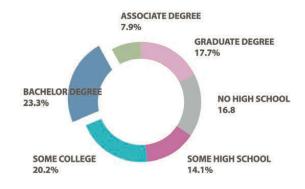
- Household income for all Providence is \$37,366
 All Rhode Island is \$58,387
- 75% housing stock is multifamily
- 330 vacant, abandoned or seriously deteriorated properties in the South Side (South Providence, Elmwood, Washington Park)

EDUCATION Central High School **Providence Career & Technical Academy** 5: 624 **Head Start School** (for 0-5 years children from low incoming **Beacon Avenue Elementary School Tavares Pediatric & Education Center** Southside Elementary Charter School 5: 23 **Preparatory School** Flynn Elementary Liston Campus Community College of Rhode Island (CCRI) Metropolitan Careen Tech Cente High School (MET Cale Robert L Bailey IV Elementary Mary E Fogarty Elementary School **Tides Family Services** Private School Oxford Street School Bishop Mc Vinney Regional School **Providence Academy of** preschool to middle school International Studies High School 5:684 **New Opportunities Career Academy** Roger Williams Middle Schoo Roger Williams Day Care Cen Woods Elementary School 5: 692 **PRESCHOOL ELEMENTARY** MIDDLE / HIGH SCHOOL COLLEGE OTHERS

UPPER SOUTH EDUCATION STATISTICS



LOWER SOUTH EDUCATION STATISTICS



CRIME

The police are here when you need them, and sometimes there's an occasional shooting.

I would love to see my community grow and get better but, the violence has gotten out of hand. And not much is being done about it

Crime Data in	Upper South	Providence
---------------	--------------------	------------

Most frequent crimes in 2017

157 118
COUNTS OF THEFT COUNTS OF ASSAULT

73
COUNTS OF VANDALISM

36 COUNTS OF ARREST

16 COUNTS OF BURGLARY

Crime Data in Lower South Providence

Most frequent crimes in 2017

158

93

76

74

31

COUNTS OF THEFT

COUNTS OF ASSAULT

COUNTS OF VANDALISM

COUNTS OF ARREST

COUNTS OF BURGLARY

UPPER SOUTH PROVIDENCE CONCEPT MODELS









PRELIMINARY MASTER PLAN STRATEGIES

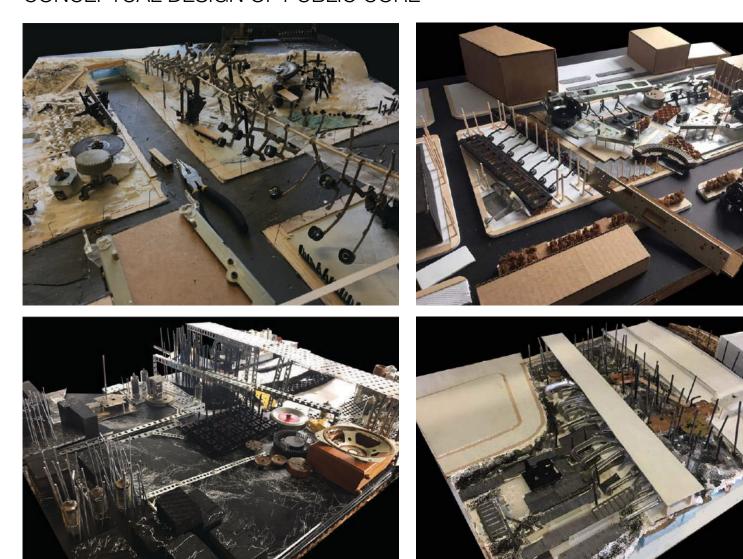








CONCEPTUAL DESIGN OF PUBLIC CORE







IDENTITY



COMMUNITY



CONNECTIVITY



PRODUCTIVITY



SUSTAINABILITY

- · celebrate cultural diversity
- offer physical location and amenities that reinforce community identity
- improve economic stability
- offer physical location and amenities that promote community building
- create open space networks and activities that support connections with surrounding waterfront and parks, neighborhoods, and downtown
- create healthy living conditions and mediate harmful ones, such as noise, air and ground pollution from highway and industry
- engage currently underutilized open space and properties for food production and community activities
- create new training and job opportunities
- · develop more productive land
- create a closed loop urban system between production-waste-reuse of water, land, food, energy, waste

I would encourage all city planners and developers to take a long, hard look into the ways in which ecosystems behave. It is the model for how we should be handling things like water management, energy utilization, and the recycling of waste into usable resources. In an ecosystem, assemblages of plants and animals are linked together by a common thread: the sharing of nutrients, the transfer of energy from sunlight to plants and then to animals, and the recycling of all the elements needed to ensure the survival of the next generation of those living within the boundaries of that geographically defined area.

Dickson Despommier Emeritus Professor of Public Health, Columbia University

South Providence VISION

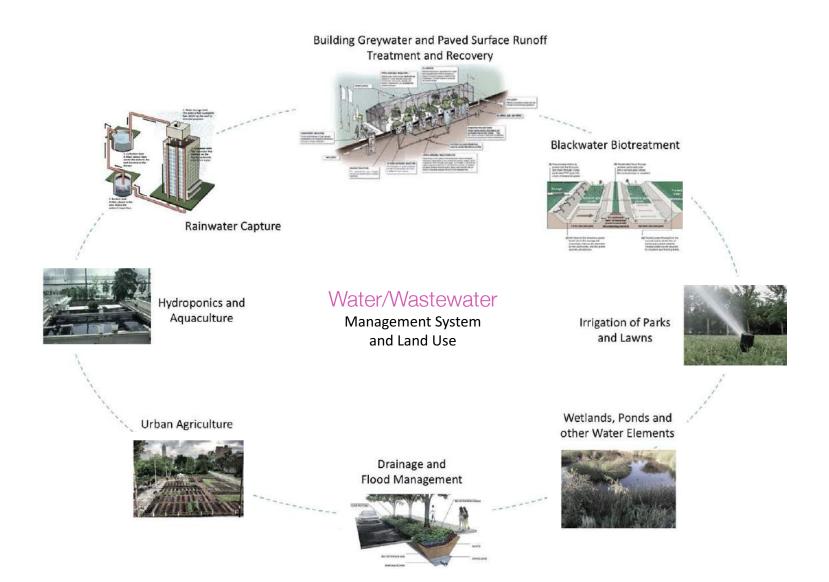






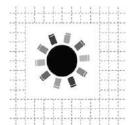


SYSTEM-BASED STRATEGIES





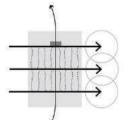
Group A



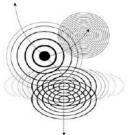
YIYANG WANG Community Table



PEISHAN GUO Urban Junction

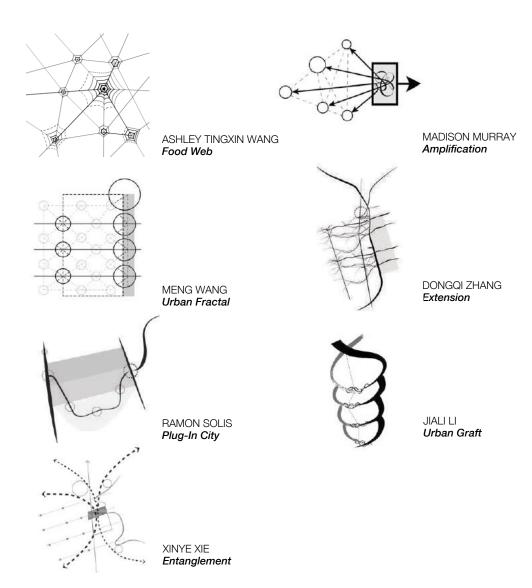


YUAN BIN WANG Urban Stitching

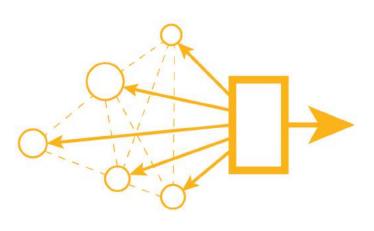


HARRIET CHENGLIN ZHU *Urban Ripple*

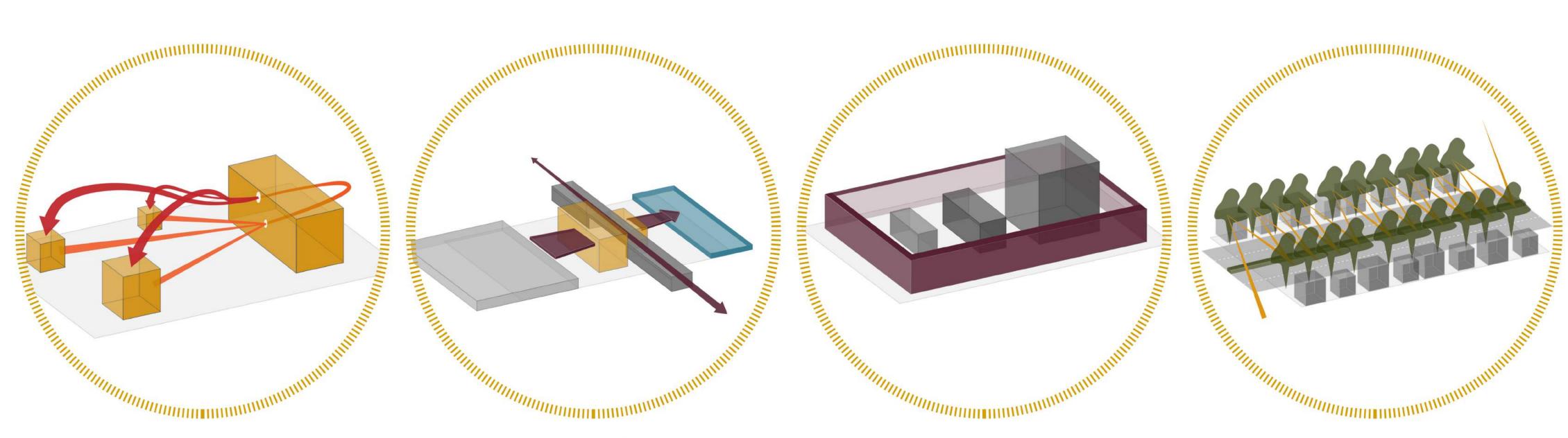
Group B



AMPLIFIER



PROMOTE SOCIAL, ECONOMIC, AND ENVIRONMENTAL HEALTH IN SOUTH PROVIDENCE THROUGH...



ESTABLISHING A COMMUNITY NETWORK

Re-purpose various vacant properties as a mechanism for fostering a stronger sense of community and stewardship. Link the development of these "pocket parks" with local community volunteers and organizations. Design a large community center that will bring together these sub-communities, allow them to learn / grow, and then take what they have learned and insert it back into the urban fabric.

CONNECTING SOUTH PROV. TO NEW WATERFRONT PROGRAM

Use the new community center as a mechanism for linking South Providence to the new waterfront zone. The new waterfront functions as a interactive, restorative district with the creation of artificial wetlands, floating wetlands, pier walks, greenhouses, sculpture parks, and a new Maker-Space Complex. It also connects to a new Ferry Terminal and Retail zone that will generate jobs for the local community and help boost local economy.

MANAGING FUTURE HOSPITAL GROWTH

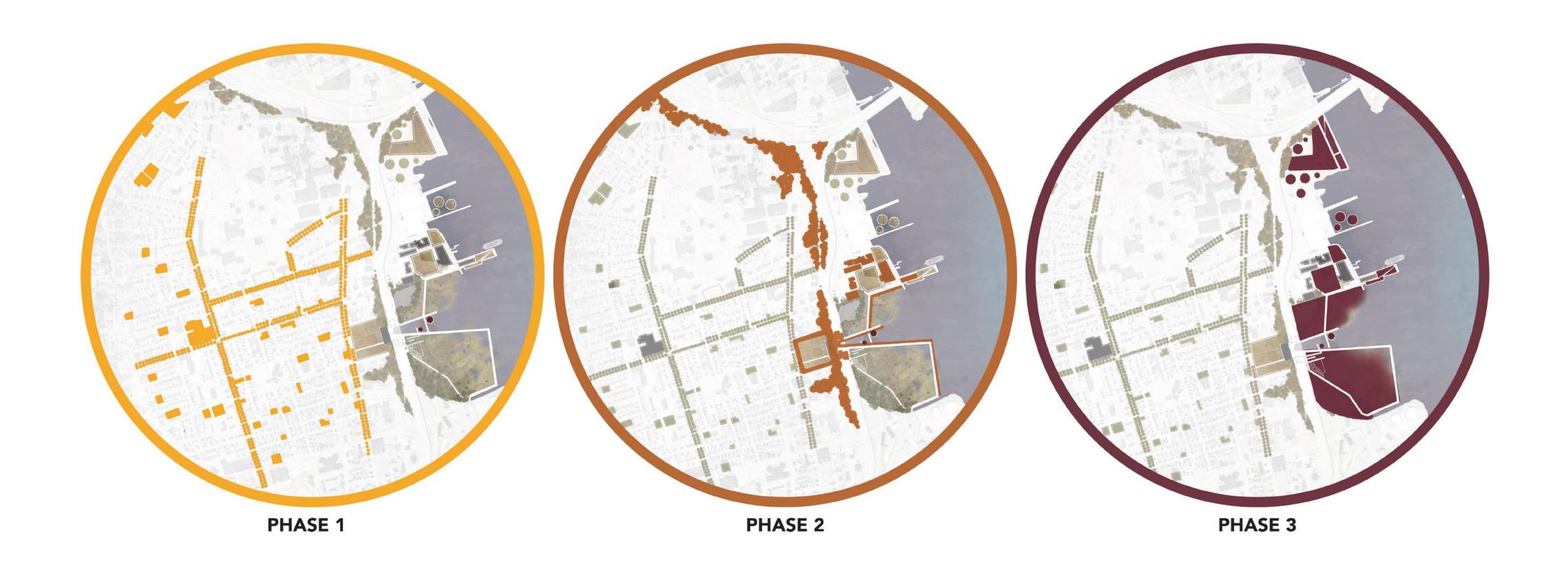
Halt the growth of the Hospital District by allowing them to keep what parking lots they have and not build past the new boundaries. The hospital does not serve the community and fragments various neighborhoods.

CONNECTING COMMUNITIES THROUGH PLANTING

Line major streets with trees in order to emphasize their significance, become a form of way-finding, and bring a sense of connectivity to different zones. Instead of being seen as dividers they will be transformed into crucial links in the urban fabric of South Providence. These streets link to the new community centers, Downtown Providence, the waterfront, and Roger Williams.

...BY INCORPORATING ART, SCIENCE, AND COMMUNITY ENGAGEMENT INTO THE DESIGN.





SITE PLAN / PLANTING PLAN

