Architects, Public Architects, and P3 Development: Innovation, Challenges, Lessons Learned

Course Number WE203
Wednesday, May 18th, 2016
Learning Units 7.5 LUs
This presentation is protected by U.S. and international copyright laws.

Reproduction, distribution, display and use of the presentation without written permission of the speaker is prohibited.
This program is registered with the AIA/CES for continuing professional education. As such, it does not include content that may be deemed or construed to constitute approval, sponsorship or endorsement by the AIA of any method, product, service, enterprise or organization.

The statements expressed by speakers, panelists, and other participants reflect their own views and do not necessarily reflect the views or positions of The American Institute of Architects, or of AIA components, or those of their respective officers, directors, members, employees, or other organizations, groups or individuals associated with them.

Questions related to specific products and services may be addressed at the conclusion of this presentation.
Speakers List

• Lee Solomon, NYCHA, Deputy Director

• Rasmia Kirmani-Frye, NYCHA, Director
  – President, Fund For Public Housing
  – 212.306.8210/rasmia@fundforpublichousing.org

• Amy Stokes, NYCHA, Deputy Director

• Bomee Jung, NYCHA, VP

• Terri Matthews, NYC DDC, Director
NYCHA INTRODUCTION

1. The current NYCHA context.
2. And how did we get here?
3. Next Generation NYCHA
1 in 14 New Yorkers calls NYCHA “home”

- **77,000 SENIORS**
  - 62 years old or older
- **110,000 CHILDREN**
  - Under 18 years old
- **40% OF HEADS OF HOUSEHOLDS ARE 62 YEARS OLD OR OLDER**
- **25% OF NYCHA EMPLOYEES ARE RESIDENTS OF PUBLIC HOUSING**
- **$23,000 AVERAGE HOUSEHOLD INCOME**
- **61% ARE EMPLOYED (OF NON-DISABLED, WORKING AGE ADULTS)**
- **41% ON FIXED INCOME (SOC. SEC., SSI, PENSION, OTHER)**
- **12% RECEIVE PUBLIC ASSISTANCE**
Majority of Low-Income Housing in NYC

New York City Rental Housing Units
2,184,297

- 4% Section 8 Voucher Units
  88,000
- 8.1% Public Housing Units
  177,666

NYCHA provides:
- 74% of all NYC rental housing less than $500/month
- 51% of all NYC rental housing less than $800/month

NYC rental housing under $500/month
- Non-NYCHA Rental Units
  38,473
- NYCHA Units
  112,010

NYC rental housing under $800/month
- Non-NYCHA Rental Units
  146,646
- NYCHA Units
  152,235

PHILAIADELPHIA!
AIA Convention 2016
May 19-21, Philadelphia
NYCHA’s Portfolio is Large and Varied...

328 developments made up of 2,550 buildings that consist of 178,000 apartments containing over 175 million square feet of space.

The largest development: a six-building apartment complex with 7,000 residents. The smallest development: a single-story senior building with 13 residents.

PHILADELPHIA! AIA Convention 2016
May 19-21, Philadelphia
And It Is Aging.
30% Decrease in Federal Capital Funding Since 2001

$1.16 Billion Loss

Data Source: NYCHA Finance

PHILAIADELPHIA!
AIA Convention 2016
May 19–21, Philadelphia
$1 Billion Loss in Operating Funding Since 2001

Annual Proration and Federal Operating Funding
Cumulative Loss by Year

Of the total operating funding NYCHA is eligible for on an annual basis from HUD, NYCHA receives only a portion, due to lower Congressional appropriations. This is known as a prorated amount. This graph shows NYCHA’s actual federal funding as a percent of its total eligible funding, and calls out the cumulative loss in eligible funding since federal disinvestment began in 2001.

Data Source: NYCHA Finance

$1.05 Billion Loss

PHILAIADELPHIA!
AIA Convention 2016
May 19-21, Philadelphia
2015: $98m Operating Deficit
Exteriors Key before Other Improvements

5-Year Unmet Capital Needs

$16.9B
- Grounds
- Building Interior
- Mechanical, Electrical, and Plumbing
- Building Exterior
- Apartment Interiors

AIA Convention 2016
May 19-21, Philadelphia
Capital Needs Far Outstrip Available Funds

Total Need: $16.6 Billion

Annual Bids: $535 Million

PHILADELPHIA!
AIA Convention 2016
May 19-21, Philadelphia
Why NextGen, Why Now?

NYCHA must change to preserve the precious resource of public housing

- Aging buildings in need of repair
- Significantly reduced government funding
- Structural deficit
- Large senior population aging in place
- Low-income families in need of affordable housing
What Will NextGen Accomplish?

Status quo $\Rightarrow$ $2.5b$ cumulative operating deficit
Implement strategies $\Rightarrow$ Break-even

Financially stable operations
Attract new resources
Address $17b$ capital need
Improve quality of life for NYCHA residents
NextGen gets NYCHA out of “the red”

Financial Impact of Select NextGeneration NYCHA Strategies

- Strategy #1: Relief of City payment (PILOT)
- Strategy #2: Improve rent and fee collection
- Strategy #3: Maximize ground floor: parking
- Strategy #4: Reduce central office costs
- Strategy #10: Create affordable housing units
- Strategy #11: Leverage HUD programs
- Combating homelessness

PHILAIADELPHIA!
AIA Convention 2016
May 19-21, Philadelphia
NextGeneration NYCHA Strategies

<table>
<thead>
<tr>
<th>Fund</th>
<th>Operate</th>
<th>(Re)Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Secure relief from PILOT</td>
<td>5. Transform to digital organization</td>
<td>9. Refine capital planning strategy</td>
</tr>
<tr>
<td>2. Improve collection of resident rent and fees</td>
<td>6. Localize property management</td>
<td>10. Provide land to support creation of affordable housing units</td>
</tr>
<tr>
<td>3. Lease ground floor spaces</td>
<td>7. Pursue comprehensive sustainability agenda</td>
<td>11. Use HUD programs to preserve units</td>
</tr>
<tr>
<td>4. Reduce central office costs</td>
<td>8. Increase safety and security</td>
<td>12. Adopt design excellence practices</td>
</tr>
</tbody>
</table>

Engage Residents

- 13. Transform from direct service provision to a partnership model
- 14. Leverage philanthropic dollars through a 501(c)(3)
- 15. Connect you to quality employment
NextGeneration NYCHA Transparency

NYCHA Metrics + Heat & Live stream Board + Annual
Hot Water Outages

Information
Online

2011 PNA + Capital All contract awards
project contracts + Sandy Recovery summaries
The Fund for Public Housing

Shola Olatoye, Chair
Rasmia Kirmani-Frye, President

May 2016
The Fund for Public Housing:  
MISSION is to Collaborate, Invest and Innovate

The Fund for Public Housing, Inc., an independent not-for-profit organization, invests in the well-being of New York City Housing Authority residents, and their surrounding communities. We collaborate with public and private industry entities to reimagine and improve the way public housing works.
Fund for Public Housing Framework: Raise $30M - $10M for Each Focus Area

PEOPLE: Residents thrive and reach their full potential

PLACE: The physical environment is responsive to needs and connected to the surrounding community

WORK: New structures are in place to generate employment opportunities and economic security

The Fund for Public Housing invests in the well-being of NYCHA residents. We collaborate with public and private entities to dramatically improve the way public housing in New York City works.

Health  Education  Human Capital  Sustainability  Technology

PHILADELPHIA!
AIA Convention 2016
May 19-21, Philadelphia
Fund for Public Housing Milestones

March 2015
- Director/President hired
- Political alignment with City Hall
- Bylaws authored
- Procurement policy authored
- Independent Board members selected
- Founding supporters secured
- Strategic plan adopted, Advisory Council forming, First year projects

May 2016
- Three Board Meetings: Documents accepted; Board members elected
- Launch event

Year 1: $30m
FPH Board of Directors

- **Shola Olatoye**, NYCHA Chair and CEO: Board Chair
- **Scott Anderson**, President, Intersection
- **Jennifer Jones Austin**, CEO, Federation of Protestant Welfare Agencies
- **Melanie Hart**, Executive Vice President, NYCHA
- **Diatre Padilla**, The Architectural League of New York, Resident
- **Latiya Stanley**, Hunter College, Resident
- **Renu Pani-Chakravarty**, Associate General Counsel, NYCHA

PHILADDELPHIA! AIA Convention 2016
May 19–21, Philadelphia
# Year One Goals: People

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Project</th>
<th>Goal</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEOPLE</td>
<td>Create a Resident Leadership Academy to help residents achieve professional success and support community development.</td>
<td>Identify institutional partner(s), develop curriculum, and select initial population of participants.</td>
<td>• Working with CUNY’s Murphy Institute to develop curriculum, negotiate partnership and raise funds</td>
</tr>
<tr>
<td></td>
<td>Expand relationship with University Settlement</td>
<td>Decrease evictions, stabilize families, increase rent</td>
<td>• Project planning and joint fundraising with University Settlement</td>
</tr>
<tr>
<td></td>
<td>Support the establishment of NYCHA Youth Councils with Community Programs and Development</td>
<td>Identify young leaders throughout NYCHA to have a voice in decision-making</td>
<td>• Capital One funding secured to pilot effort</td>
</tr>
</tbody>
</table>

**PHILAIADELPHIA!**

AIA Convention 2016
May 19-21, Philadelphia
## Year One Goals: Place

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Project</th>
<th>Goal</th>
<th>Status</th>
</tr>
</thead>
</table>
| PLACE      | Redesign NYCHA campuses to make them cleaner, safer, and more connected with surrounding neighborhoods. | Create new design guidelines and begin planning for reimagining of NYCHA campus - towards masterplanning | • Robin Hood proposal submitted  
• Partnering with Arch League and IPA  
• Scott Anderson, Board Member and Google and Sidewalk Labs engaged  
• $100K from Deutsche Bank secured - FIRST INVESTOR |
|            | Curated technology competition that solves NYCHA operational problems. | Tech companies want to help NYCHA solve operational problems. NYCHA uses innovation to become more efficient and effective landlord; resident quality of life improves. New audience. | • Grand Central Tech as competition co-organizer |
# Year One Goals: Work

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Project</th>
<th>Goal</th>
<th>Status</th>
</tr>
</thead>
</table>
| WORK       | Create capability development programs in technology and physical plant services to expand resident career opportunities and support NYCHA development needs. | Hire an internship manager to recruit 28 residents to participate in NYCHA technology internships and provide on-the-job training for a cohort of 30 residents to enter heating plant careers. | • proposal submitted  
• Partnering with REES  
• Explore private sector partners to sponsor, like boiler companies |
|            | Expand a resident-owned worker cooperative model to enable resident entrepreneurs to launch and grow businesses. (Resident owned worker cooperatives) | Legally establish the food cooperative, purchase two food trucks, train team members, and launch.  
Explore cooperatives that respond to gaps in property management. | • Citi Community Development and “Doorways to Opportunities” investment secured  
• Part of Robin Hood proposal  
• MDRC experts in cooperative models and Unions are now pro-coop |
### Fund for Public Housing and NYCHA: Process and Roles

<table>
<thead>
<tr>
<th>Nurture</th>
<th>Initiate</th>
<th>Test</th>
<th>Implement</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Nurture relationships with potential funders</td>
<td>• Select high potential opportunities</td>
<td>• Facilitate prototypes in collaboration with partners</td>
<td>• Fund partners to implement pilot programs</td>
</tr>
<tr>
<td>• Earn funding commitments</td>
<td></td>
<td></td>
<td>• Fund partners to scale up successful pilots</td>
</tr>
<tr>
<td>• Collaborate with key stakeholders to spot opportunities</td>
<td>• Invite partners to propose solutions to priority opportunities</td>
<td>• Measure progress and determine readiness to pilot OR need for further prototyping</td>
<td>• Measure progress and determine readiness to scale up OR need for further piloting</td>
</tr>
<tr>
<td>• Identify potential partners and nurture relationships</td>
<td>• Select partners to participate in prototyping</td>
<td>• Lead hand-off discussions with NYCHA and partner organizations</td>
<td>• Provide support to partner organizations to improve implementation and drive up impact</td>
</tr>
</tbody>
</table>

**Key:**
- **FP Led** = FPH-led action
- **FPH/NYCHA** = FPH/NYCHA collaboration
- **NYCHA Led** = NYCHA-led action
Faster and Stronger Social Impact

Over the next three years, we endeavor to raise an endowment of $200M that will support public housing innovation for years to come. The Fund for Public Housing offers the possibility of faster, stronger social impact and long-term return on investment.
AFFORDABLE HOUSING DEVELOPMENT: FOCUS ON FINANCING AND DESIGN OF NYCHA REAL ESTATE DEVELOPMENT PROJECTS
Agenda

- Real Estate Development in NextGen NYCHA
- Public/Private Partnerships in Financing
- Areas that Impact Financing
- Public Architects in the Pre-Closing Process
- Best Practices for NYCHA Real Estate Development Design
- Examples
NextGen NYCHA

**Fund**
- 1) Secure relief from PILOT
- 2) Improve collection of resident rent and fees
- 3) Lease ground floor spaces
- 4) Reduce central office costs

**Operate**
- 5) Transform to digital organization
- 6) Localize property management
- 7) Pursue comprehensive sustainability agenda
- 8) Increase safety and security

**(Re)Build**
- 9) Refine capital planning strategy
- 10) Provide land to support creation of affordable housing units
- 11) Use HUD programs to preserve units
- 12) Adopt design excellence practices

**Engage Residents**
- 13) Transform from direct service provision to a partnership model
- 14) Leverage philanthropic dollars through a 501(c)(3)
- 15) Connect you to quality employment
Public/Private Partnerships in Financing

In order to build new affordable housing and preserve NYCHA housing the Authority uses various financing sources from private capital markets and public agencies.

- Tax-exempt bonds, issued by the City or State, are typically used to raise debt for projects.

- Tax credit equity is invested via private investors, typically banks.

- An affordable housing development project usually has a credit enhancement from a bank, FHA, Fannie Mae, etc.

- Subordinated financing comes from other City/State government agencies.
Bond Financing and Tax Credit Equity

- Tax-Exempt Bonds subject to volume cap are the primary source of debt financing for these rehabilitation projects.

- The size of each transaction and the frequency of transactions per year is limited by the available volume cap bonds. NYC HDC and NYS HFA are the only Housing Bond Issuers for the city.

- **Equity - 4% LIHTC**
  - Serves low-income populations
  - Only eligible for units up to 60% Area median Income (AMI)
  - “As-of-right” for projects financed with tax-exempt bonds
  - 15 year compliance period
  - Investors receive a federal tax benefit over a 10 year period

---

PHILAIADDELPHIA!

AIA Convention 2016
May 19–21, Philadelphia
Other Funding Sources

- **City/State Subsidy**
  - The City/State invest money as mezzanine debt into many affordable housing transactions.
  - The amount of the loan(s) is based on the area median income (AMI) levels being targeted in the transaction.

- **NYCHA Seller’s Note**
  - Acquisition prices based on capitalization value of net operating income and/or independent appraisals.
  - At closing, acquisition is financed by Seller’s Note. The deferred amount is considered a source of funds. The balance will be paid out of project cash flow over the term of the Note.
Areas that Impact Financing

- Rental income can restrict the amount of permanent debt that can be raised to finance the project
- Maintenance and operating expenses vary based on items like market pricing (e.g. oil) and other supportive services
- High construction costs can make financing tight
- All these areas that impact financing can directly impact the overall design and site planning of a final project
Rental Income

- **Tax Credit Rents**
  - Calculated as 30% of area median gross income and accounting for the number of bedrooms in the apartment.
  - Usually includes a utility allowance.

- **Section 8 Rents**
  - Subsidy amount based on fair market rent and a rent reasonableness study.
  - Residents pay 30% of their income towards rent.
  - The balance of the rent is paid through federal subsidy up to the established fair market rent.

- **Public Housing Rental Assistance Demonstration (RAD) Rent**
  - Subsidy amount based on public housing subsidy, which is lower than Section 8.
  - Residents pay 30% of their income towards rent.
Maintenance and Operating Expenses

- **Underwriting Standards**
  - Bond issuers and lenders generally have standards that they like deals to be underwritten to.
  - Many hesitant to underwrite to lower energy costs unless historical data is sufficient.

- **Reserves**
  - Typically $250 per unit of operating reserves
  - Can vary depending on risk and lender

- **Other Requirements**
  - Other reserves such as a social service reserve may be required to pay out of operating
  - Park or ancillary property maintenance
Construction Costs

- **Project Scale**
  - Lot specific challenges
  - Larger projects can lead to more units but also more expensive construction (e.g. wood-frame to steel)

- **Community Concerns**
  - Integration with surrounding community
  - Address community opposition (e.g. may need to include other items like parks)

- **Price of construction labor**
  - Highly market specific
  - Level of workforce unionization and financing sources

- **Regulations**
  - May prohibit innovative building techniques
Typical Pre-Closing Milestones

Public architects work on incorporating design and site planning into projects throughout the pre-closing process.

<table>
<thead>
<tr>
<th></th>
<th>milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stakeholder/Resident Engagement*</td>
</tr>
<tr>
<td>2</td>
<td>NYCHA Annual Plan</td>
</tr>
<tr>
<td>3</td>
<td>Release RFP*</td>
</tr>
<tr>
<td>4</td>
<td>Select Developer Partner*</td>
</tr>
<tr>
<td>5</td>
<td>Environmental Review</td>
</tr>
<tr>
<td>6</td>
<td>Section 18 Disposition Process</td>
</tr>
<tr>
<td>7</td>
<td>Financial Closing*</td>
</tr>
<tr>
<td>8</td>
<td>Start Construction*</td>
</tr>
</tbody>
</table>

* Critical touch points for public architects in the process
Best Practices for NYCHA Real Estate Development Design

- Direct involvement of residents and resident concerns being addressed in the forefront
  - Town halls
  - Visioning sessions
  - Small working groups
  - Tenant Associations

- Support alternative strategies
  - RFP design guidelines that support areas like sustainability
  - Development proposals that are innovative and can help control costs (e.g. passive housing)

- Good site planning
  - Integration with the current NYCHA developments
  - Upgrading amenities that can serve entire community
  - Fabric of neighborhood
NextGen NYCHA Visioning Sessions

- NYCHA is currently planning new construction at NYCHA Holmes (MN), Wyckoff (BK), Ingersoll (BK), Van Dyke (BK) and Mill Brook (BX) developments.

- NYCHA has engaged residents through site visioning sessions to get feedback on the proposed sites for development and building features.
Arbor House for North Atlantic

Basics
- Bronx
- 124-unit affordable units
- 60% AMI or below residents with NYCHA preference

Key Elements of Design
- Rooftop hydroponic farm that serves residents and community
- Artwork by local and notable artists
- Living green wall in lobby providing fresh oxygen
- Platinum LEED Certification
- Construction primarily used local and recycled products and 95% waste was recycled and diverted from landfills
- Met NYC Active Design Guidelines
- Community space

Integration with NYCHA
- Located at Forest Houses
- Pedestrian walkways to integrate site
- Integrated landscaping
- Access to rooftop farm

Developer: Blue Sea Development Company / Architect: Danois Architects

AIA Convention 2016
May 19-21, Philadelphia
Basics
- Upper Manhattan
- Existing NYCHA development
- Part of a portfolio rehab of six-developments

Existing Problems
- Entries inconsistent to overall design language
- Poor condition and integration of storefronts
- Unappealing entries to courtyard
- Building entries had a poor choice of materials and limited natural light
- Signage was outdated, no common standards and insufficient information
- Limited landscape program
- Heavily used green space with few amenities

Design Strategy
- Inventory existing physical problems
- Implement practical solutions for existing problems
- Design overlay and social strategy

AIA Convention 2016
May 19–21, Philadelphia
Milbank-Frawley

- Retail component in disrepair
- Escape stairs deteriorated
- Poorly designed and dated entry elements
- Window guards/AC units inconsistent
- Courtyard landscape/hardscape neglected and undeveloped
- Original architectural details in need of renovation and maintenance
- Signage, utilities, lighting, security outdated and poorly designed
- Change red paint
Milbank-Frawley

Solutions

- New design language for hardware and security features
- Redesigned entries that take advantage of natural light
- Contemporary signage and incorporated into architecture
- Updated utility infrastructure while also concealing and improving with new architectural framework
- Activate green space with amenities that can be used by residents
- Improve street façade experience
- Tie in redesigned entry elements to existing

Developer: Triborough Preservation Partners / Architect: Global Design Strategies and OCV Architects
BuildingEnergy NYC 2015

We the People >>> NextGen NYCHA

We the People ... In Multifamily Buildings!

May 18, 20165
## NextGeneration NYCHA Strategies

### Fund
1. Secure relief from PILOT
2. Improve collection of resident rent and fees
3. Lease ground floor spaces
4. Reduce central office costs

### Operate
5. Transform to digital organization
6. Localize property management
7. Pursue comprehensive sustainability agenda
8. Increase safety and security

### (Re)Build
9. Refine capital planning strategy
10. Provide land to support creation of affordable housing units
11. Use HUD programs to preserve units
12. Adopt design excellence practices

### Engage Residents
13. Transform from direct service provision to a partnership model
14. Leverage philanthropic dollars through a 501(c)(3)
15. Connect you to quality employment
NextGen NYCHA Sustainability Agenda

• Focus on enhancing our core capacity as a housing provider
• Address all four key sustainability responsibilities:
  1. **Healthy indoor environments / IEQ**
  2. **Energy** (Retrofits, management, distributed generation strategy)
  3. **Water** (Retrofits, in-building and on site management)
  4. **Waste** (Reduction and management)
• Extend the discipline of **performance metrics** beyond energy
• **Integrate sustainability** into the “common practice” in Development, Capital, and Operations divisions
• **Engage residents** in sustainability through highly effective partnerships
Bricks and Roofs
State of the Art in 1939
By and large, still there.
Meanwhile...

42% Decrease in Heating Technician Count
2000-2015


- Red: Total
- Blue: Junior Staff
- Green: Senior Staff
What’s the installed technology?

Apartments by Boiler Vintage
- Pre 1980: 2%
- 1980s: 32%
- 1990s: 46%
- 2000s: 15%
- 2010s: 5%

Apartments by Fuel & Distribution Type
- ConEd Steam: 2%
- Oil / Steam: 0.4%
- Gas / Hydronic: 5%
- Gas+ / Hydronic: 3%
- Gas / Steam: 6%
- Gas+ is firm gas with dual-fuel burners

Apartments by DHW Type
- Indirect Instant: 45%
- Indirect Tank: 52%
- Gas Heater: 3%
Energy: Where’s it going?

Source Energy Use
All Buildings Over 50,000 Square Feet

- Other: 9%
- Space Heating: 30%
- Plug Loads/Misc: 15%
- Process Loads: 3%
- Conveyance: 3%
- Lighting: 13%
- Ventilation: 5%
- Space Cooling: 10%

Source Energy Use
NYCHA Buildings

- Space Heating: 41%
- Common Area Electric: 14%
- Apartment Electric: 21%
- DHW: 24%

NYC Mayor’s Office of Sustainability

PHILAIADELPHIA!
AIA Convention 2016
May 19-21, Philadelphia
Energy: How are we doing?

Site Energy Use Intensity (kBTU/sf)

1&2 Fam 4-20 units 22-49 units 50-99 units >100 units Single Buildings 10 or more bldgs

85 NYC Multifamily Median

PHILAIADELPHIA! AIA Convention 2016 May 19-21, Philadelphia
Energy Efficiency Retrofits

Typical Scope of Work

- Water-saving Fixtures
- Lighting - Exterior & Site
- Lighting - Common Area
- Lighting - Apartment
- Envelope - Roof Insulation
- Energy Star Appliances
- Controls - Wireless Energy Modules
- Controls - Steam Traps
- Controls - Thermostatic Radiator Valves
- Boilers - Repair/Replace
- Boilers - Instant Hot Water
- Boilers - Cogeneration

Site Energy Use Intensity (kBTU/sf)

- Typical Scope of Work
What’s real-time monitoring telling us?

<table>
<thead>
<tr>
<th>Floor</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>75</td>
<td>86</td>
<td>77</td>
<td>72</td>
<td>76</td>
<td>73</td>
<td>70</td>
</tr>
<tr>
<td>19</td>
<td>70</td>
<td>73</td>
<td>74</td>
<td>74</td>
<td>75</td>
<td>77</td>
<td>68</td>
</tr>
<tr>
<td>18</td>
<td>69</td>
<td>71</td>
<td>76</td>
<td>74</td>
<td>75</td>
<td>73</td>
<td>72</td>
</tr>
<tr>
<td>17</td>
<td>67</td>
<td>72</td>
<td>73</td>
<td>72</td>
<td>74</td>
<td>74</td>
<td>74</td>
</tr>
<tr>
<td>16</td>
<td>68</td>
<td>72</td>
<td>73</td>
<td>89</td>
<td>80</td>
<td>76</td>
<td>77</td>
</tr>
<tr>
<td>15</td>
<td>70</td>
<td>72</td>
<td>74</td>
<td>79</td>
<td>69</td>
<td>75</td>
<td>73</td>
</tr>
<tr>
<td>14</td>
<td>71</td>
<td>79</td>
<td>73</td>
<td>76</td>
<td>73</td>
<td>76</td>
<td>71</td>
</tr>
<tr>
<td>13</td>
<td>69</td>
<td>70</td>
<td>73</td>
<td>74</td>
<td>74</td>
<td>74</td>
<td>72</td>
</tr>
<tr>
<td>12</td>
<td>70</td>
<td>71</td>
<td>72</td>
<td>77</td>
<td>86</td>
<td>73</td>
<td>75</td>
</tr>
<tr>
<td>11</td>
<td>75</td>
<td>66</td>
<td>73</td>
<td>78</td>
<td>72</td>
<td>76</td>
<td>74</td>
</tr>
<tr>
<td>10</td>
<td>74</td>
<td>67</td>
<td>75</td>
<td>73</td>
<td>71</td>
<td>78</td>
<td>73</td>
</tr>
<tr>
<td>9</td>
<td>72</td>
<td>70</td>
<td>74</td>
<td>71</td>
<td>74</td>
<td>77</td>
<td>70</td>
</tr>
<tr>
<td>8</td>
<td>70</td>
<td>72</td>
<td>73</td>
<td>69</td>
<td>70</td>
<td>72</td>
<td>73</td>
</tr>
<tr>
<td>7</td>
<td>71</td>
<td>75</td>
<td>75</td>
<td>70</td>
<td>71</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>6</td>
<td>73</td>
<td>72</td>
<td>74</td>
<td>74</td>
<td>70</td>
<td>74</td>
<td>65</td>
</tr>
<tr>
<td>5</td>
<td>70</td>
<td>73</td>
<td>73</td>
<td>72</td>
<td>71</td>
<td>79</td>
<td>65</td>
</tr>
<tr>
<td>4</td>
<td>74</td>
<td>72</td>
<td>83</td>
<td>80</td>
<td>72</td>
<td>73</td>
<td>69</td>
</tr>
<tr>
<td>3</td>
<td>74</td>
<td>72</td>
<td>73</td>
<td>75</td>
<td>72</td>
<td>78</td>
<td>71</td>
</tr>
<tr>
<td>2</td>
<td>75</td>
<td>71</td>
<td>75</td>
<td>72</td>
<td>70</td>
<td>76</td>
<td>74</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Energy: How are we doing?

Heating Index 2012-2014
(BTU/SF/HDD)

NYC
Multifamily
Typical HI

AIA Convention 2016
May 19-21, Philadelphia
Improving Communications

- Create, view, and schedule work tickets
- View inspection appointments for your apartment
- Subscribe to alerts for outages in your development
- Maintain your contact information
Recycling in all developments by end of 2016
Making Sustainability Visible

why the resident green committees **MATTER TO YOU**

Resident Green Committees (RGCs) are groups of concerned New York City Housing Authority (NYCHA) residents who are committed to fighting climate change and preserving public housing. We plan projects, organize events, and educate our neighbors about environmental and energy issues. The RGCs are part of NYCHA's Green Agenda, the Housing Authority's program to promote environmental sustainability and reduce energy costs. By increasing the energy efficiency of NYCHA buildings, and connecting residents with "green collar" jobs, NYCHA will decrease its carbon footprint, save on energy costs, and help preserve public housing. Resident participation is crucial to the success of the Green Agenda...

Read the full story »

Upcoming Events

- **October 13, 2015** - Frederick Samuel RGC Meeting, 6:30 pm
- **October 14, 2015** - Pomonak RGC Meeting, 6:30 pm

See All Events

Helpful links

- citizens committee for new york city
- green city force
- green thumb nyc
- idealist
- materials for the arts

Find us on Facebook

PHILAIADELPHIA! AIA Convention 2016 May 19-21, Philadelphia
Fostering Partnerships
Presentation to AIA Public Architects and P3 Development
Town+Gown as a Public Private Partnership
May 18, 2016
Problem: Long-standing intractable issues in built environment practice point to unresolved systemic dysfunctions that consistently negatively impact built environment processes and projects

Solution: Town+Gown
Town+Gown: Public-Private Collaborations in Knowledge Transfer

- provides **open-source platform and shared space** for analysis, documentation and discussion of **underlying systemic causes of dysfunction**, in real time and over time
- **links and supports** academics and government practitioners on applied research projects to **increase overall applied built environment research**
- uses **physical built environment as a laboratory** for interdisciplinary Built Environment field
- **assures equality** between academic and practitioner in **knowledge creation**
- provides **clearinghouse of evidence-based research** for **long-term transformative systemic changes** in practice and policy
Systemic action research program

Action research: “a comparative research on the conditions and effects of various forms of social action and research leading to social action” that uses “a spiral of steps, each of which is composed of a circle of planning, action and fact-finding about the result of the action”. Kurt Lewin
Town+Gown: Experiential Learning Component

In-kind (i.e., free) exchanges where students provide newly learned skills and practitioners provide real problems with real data and practice information to produce actionable knowledge

• Experiential learning and service learning programs
  • Studios
  • Workshops
  • Capstones
  • Clinics
  • Community service
• Masters and doctorate programs with thesis and dissertation requirements
• Classes and independent study.
Town+Gown: Funded Research Component

Academic Consortium Contract with a pool of academic institutions that stand by to receive Mini RFPs and be awarded task orders for research services:

- Brooklyn Law School
- City University of New York
- Drexel University
- Fordham University
- Manhattan College
- New York Institute of Technology
- New York University
- Pace University
- Pratt Institute
- State University of New York
- The Cooper Union
- The New School
- Tufts University

Any combination of City agencies, State agencies and certain not-for-profit corporations, using their own funds, can utilize the Contract by submitting a Mini RFP to DDC as manager of Town+Gown and as Contract administrator.
Town+Gown: Completed Projects Ready for Action

- Predictive model to estimate public construction project contingency (or total change order) amounts (NYU/Poly/Tandon)
- Life cycle cost model to compare green infrastructure elements on roadway reconstruction projects (Columbia/SIPA)
- Hedonic difference-in-difference model to measure economic impact of City construction projects on surrounding neighborhood (Columbia/SIPA)
- Temporary prefabricated structure design (Pratt/Arch) and interior entrance space design (New York School of Interior Design) to signal public policy change
- Multipurpose underground utility corridor infrastructure ready for public private financing mechanisms
## Town+Gown: Projects Underway

<table>
<thead>
<tr>
<th>School</th>
<th>Project(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fordham/Gabelli</td>
<td>Various data analytics projects with city data sets</td>
</tr>
<tr>
<td>Columbia/SIPA</td>
<td><em>Public private partnership financing of green infrastructure</em></td>
</tr>
<tr>
<td>Columbia/SIPA</td>
<td>“Stopping Trash Where It Starts” (data collection and analysis)</td>
</tr>
<tr>
<td>Pratt/Design</td>
<td>Behavioral-based communication design to support grey infrastructure avoidance</td>
</tr>
<tr>
<td>Brooklyn Law School</td>
<td>Risk management based comparative contract analysis</td>
</tr>
<tr>
<td>New York School of Interior Design</td>
<td>Vestibule interior design construction intent drawing project for public safety building</td>
</tr>
<tr>
<td>School of Visual Arts</td>
<td>Electronic bulletin board or “HUB” for public safety building</td>
</tr>
<tr>
<td>CUNY/Hunter-Planning</td>
<td>“Assessing and Planning for Community Needs in Brownsville, Brooklyn”</td>
</tr>
<tr>
<td>Columbia University</td>
<td>NSF Sustainability Research Network</td>
</tr>
<tr>
<td>CUNY/CCNY-Grove</td>
<td>NSF Construction and Demolition Waste Recycling</td>
</tr>
<tr>
<td>New School/Parsons-Architecture, Brooklyn Law School (with Fordham Law School)</td>
<td>Use of interior design to Increase operational flexibility at juvenile detention facilities for juvenile justice programs</td>
</tr>
</tbody>
</table>
Town+Gown: Case Study Design-Based Research Projects

• Series of Town+Gown’s systemic action research sets demonstrates how architectural and small-scale non-architectural interventions can provide public owners with manageable opportunities to use directed and replicable multi-dimensional design-focused processes to help them rethink and improve aspects of their programs and the delivery of program services:

• Department of Probation’s *From Waiting Rooms to Resource Hubs* service design project with Columbia/GSAPP in 2010-2011 (the “NeON projects”)

• New York Police Department’s “peoples’ precinct” project at the 73rd Precinct with the Pratt Institute/Architecture, the New York School of Interior Design and the City University of New York/John Jay College of Criminal Justice in 2014-2015 (the “Peoples’ Precinct projects”)

PHILAIADELPHIA! AIA Convention 2016
May 19-21, Philadelphia

74
Town+Gown: Action Research is Messy

Design Pathways in Public Policy
This chart shows the intertwined design and public policy threads in Town+Gown’s action research cycles since 2010-2011.

April 2011
Columbia/GSAPP with DOP From Waiting Rooms to Resource Hubs

September 2011
NYU/Polytechnic Project Management Course CE 8303

April 2011
Center for Urban Future Future Growth by Design

November 2011
T+G Building Ideas, Volume 2

October 2011
CUNY/John Jay with DOP Evaluation of NeOn Resource Hubs

October 2012
AIA/Archtober T+G Symposium Design: Just What the Heck is It?

January 2012
T+G Symposium Design: When Does it Begin and End?

October 2012
AIA/Archtober T+G Symposium Policy, Meet Design

October 2013
CUNY/John Jay with NYPD Lessons in Co-Design from NeOn to CCP Pods

January 2014
Pratt/Arch + CM with DDC BIM 4d

October 2014
AIA/Archtober T+G Symposium Issues in Civic Visioning

June 2015
New York School of Interior Design with NYPD, DCA and MCU ATM Vestibule Designs

March 2012
Center for Urban Future Designing New York’s Future

November 2012
T+G Building Ideas, Volume 3

January 2014
Pratt/Design Mapping Red Hook with AIGA/NY Design Relief Red Hook Hub

October 2013
NYCxDesign T+G Symposium Redesigning Neighborhood Change

May 2013
NYCxDesign T+G Symposium Looking Ahead to NYCxDesign 2014

January 2015
Pratt/Arch with NYPD Community Connection Pavilions

May 2015
NYCxDesign T+G Symposium Policy, Meet Design 2

PHILAIADELPHIA!
AIA Convention 2016
May 19-21, Philadelphia

Policy, Meet Design

Design, Meet Policy
The problem at 30,000 feet . . .

Source: Laura Kurgan, Associate Professor of Architecture, Planning, and Preservation from Design: Just What the Heck Is It?, a Town+Gown event in collaboration with the AIANY/Center for Architecture presented in association with Archtober, Architecture and Design Month, New York City, October 17, 2012
The problem on the ground . . .
Service design as part of the solution . . .

Source: Associate Professor of Architecture, Planning, and Preservation from Design: Just What the Heck Is It?, a Town+Gown event in collaboration with the AIANY/Center for Architecture presented in association with Archtober, Architecture and Design Month, New York City, October 17, 2012
Interior design and action . . .

Source: Kevin Barnes-Ceeney, Director of Research, Prisoner Reentry Institute, John Jay College of Criminal Justice, from Policy, Meet Design.2, a Town+Gown Symposium Event in collaboration with Parsons Desis Lab, Public Policy Lab, AIGA/NY and NYCxDesign May 13, 2015.
Exterior Design for Academic Demonstration
“Community Connections Pavilion” Pod at 73 Precinct

NYPD/Pratt Institute-Architecture Project
Source: James Garrison, Adjunct Associate Professor, Pratt /Graduate Architecture and Urban Design

PHILAIADELPHIA!
AIA Convention 2016
May 19-21, Philadelphia
Interior View of Academic Demonstration “Community Connections Pavilion” Pod at 73 Precinct

NYPD/Pratt Institute-Architecture Project

Source: James Garrison, Adjunct Associate Professor, Pratt /Graduate Architecture and Urban Design

PHILAIADELPHIA! AIA Convention 2016 May 19-21, Philadelphia
Demonstration Interior Design Project 73
Precinct Vestibule with ATM

Source: Francisco de Leon, Member of Faculty, New York School of Interior Design

NYPD/New York School of Interior Design Project

PHILADELPHIA!

AIA Convention 2016
May 19-21, Philadelphia
New York State Law Impediments to Public Private Partnership Financing for Public Construction Projects

No general authorization for Design/Build service delivery methodology for all New York State public owners in order to establish cost to be financed

State constitutional gift and loan provision prohibitions require use of local development corporations or state-created authorities to facilitate any tax-exempt financing component
Feasible Public Private Partnerships

Department of Transportation’s financing franchise agreement with Cemusa for the City’s “street furniture”

Department of Sanitation Garage—real estate condominiums

Department of Education/Educational Construction Fund financing of schools

IRS Rev. Proc. 63-20 financing for under-roadway consolidated infrastructure
Department of Transportation: CEMUSA Street Furniture Franchise
Department of Sanitation: Spring Street Garage
Condominiums
Department of Education: MS 114 @ 331 East 91st Street, Manhattan
New York City Educational Construction Fund
Problem on the Ground for Smart Cities as They Encounter the Under-the-Roadway

Wall and William Streets, early 1900s

William Street near Fulton Street. 2003

Source: Con Edison, Multi-utility Tunnels, presentation document, dated March 3, 2005
The Complete Roadway as a Complex Transportation Infrastructure System Above and Below

Source: David Akey, NYCCDC Creative Services
Engineering Design Solution Requires Public Private Financing to Implement

Source: Con Edison, Multi-utility Tunnels, presentation document, dated March 3, 2005
Thank You