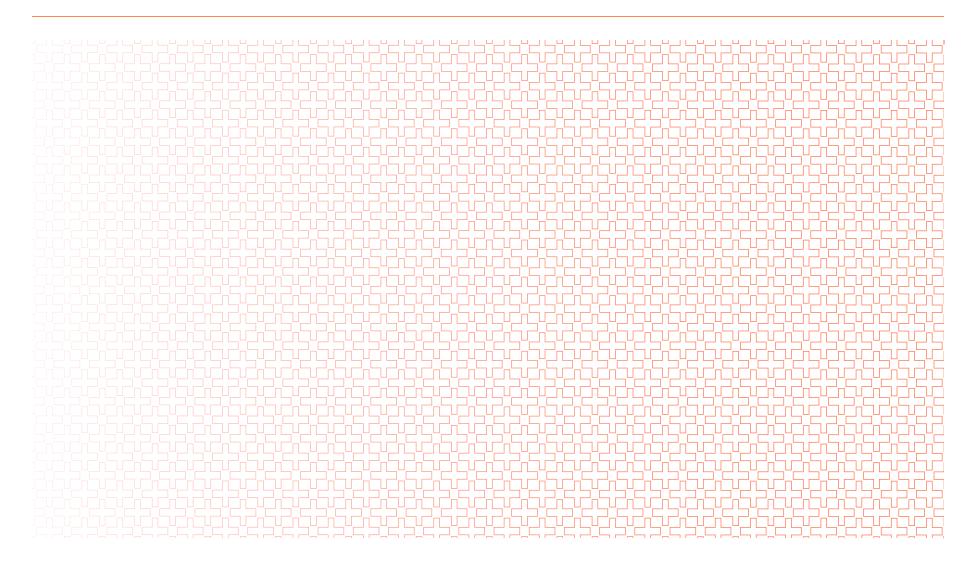
Action Research: Symposium Precis

Pushing Design Research into Implementation



AGENDA

ACS Manhattan Room, 150 William Street, 19th Floor January 31, 2018, 8:30 a.m. to Noon

8:30 — 8:45 a.m. Registration, Introduction and Welcome

8:45—10:30 a.m. Panel 1—Design Research Project Action Sets

- New York City Department of Probation's Neighborhood Opportunity Network Program
- New York City Department of Police's "People's Precinct" Initiative
- New York City Department of Environmental Protection's Wait... Pilot Program

10:30-10:45 a.m. Break

10:45-11:45 a.m. Panel 2-Impediments to

Design Research Implementation

11:45 a.m.—Noon Concluding Remarks

Participants:

 Dominic Berg, Dominic Berg, Associate Commissioner, NYC Gov Lab & Studio, New York City Department of Information Technology and Telecommunications

- Ifeoma Ebo, Senior Design Advisor, Mayor's Office of Criminal Justice
- Ellen Fisher, Ph. D., CID; VP for Academic Affairs and Dean, New York School of Interior Design, New York School of Interior Design
- David Frisco, Adjunct Professor, CCE Graduate Communications Design, Pratt Institute
- Deborah Gans, FAIA, Professor of Architecture and Director of Research, Pratt Institute, School of Architecture
- Edna Wells Handy, Chief Compliance Officer, New York City Housing Authority
- Philip Heller, Director of Capital Construction, New York City Police Department
- Terri Matthews, Director, Town+Gown
- Victoria Milne, Principal, 6¢ Design
- Erin Morey, Director, Demand Management and Resilience Policy, New York City Department of Environmental Protection
- Catrina Prioleau, Director, Neighborhood Opportunity Network (NeON), New York City Department of Probation
- Laetitia Wolff, Director of Strategic Initiatives, AIGA/School of Visual Arts

Town+Gown and Design Research. Town+Gown and Design Research. Town+Gown is a university-community collaboration program that brings academics and practitioners together to create knowledge in the built environment. Town+Gown's Action Research component consists of the Service Learning model of university-community collaboration in its experiential learning segment, and a unique combination of Faculty-Directed Research and University-Based Consultancy models in its funded research segment. Since academic year 2009-2010, Town+Gown has created or captured and/or supported 18 design-related research projects in its experiential learning segment.

Town+Gown's platform links academics and practitioners to increase applied built environment knowledge across disciplines and sectors. As new and previously unresolved built environment issues become apparent, so too the unmet need for applied research to increase common understanding. This platform attempts to scale long-standing structural hurdles that have made increasing levels of applied built environment knowledge difficult. The urban center's inter-related physical and governance setting serves as a laboratory for research in the built environment, which is a complex and dynamic social system with "wicked problem" characteristics that are further complicated by issues of geographical and temporal scales.

Town+Gown's Action Research component pays active attention to context and multiple modes of inquiry, research methodologies and types of academic-practitioner collaborations, all operating within a "interacting open system" and "over an extended—virtually an unbounded—period of time." Projects in Town+Gown involve both practitioner and academic as equal partners in knowl-

edge creation, addressing the continual need to integrate research within the broader context and providing a "learning architecture" in which system stakeholders can bring about changes in practice and policy based on research results. Town+Gown first began working with the Service Learning model, including the design research projects listed in Appendix A. See http://www1.nyc.gov/site/ddc/about/town-gown-archives.page#building for Building Ideas, Volumes 1-5.

Organized along the lines of six formal academic disciplines-Management, Geography, Economics, Law, Technology and Design—Town+Gown explores the recognized inter-disciplinary Built Environment field.4 Research projects under Design have focused on the many aspects raised by Design in this complex disciplinary field. Both public and private construction projects become part of the visible built environment, and this aspect of Design includes both Architecture and Engineering. Within or surrounding built objects, several other design disciplines also operate and contribute significantly to the overall success of any built environment object. Interior design, lighting design, landscape design, service design, communications (or visual) design, digital design and product design comprise a suite of integrated design services that interface with Architecture and Engineering and they are included in the Design discipline.

The purpose of generating research results within Town+Gown's broad open and cyclical process is to increase the common knowledge base and support systemic change over time. At the end of each academic year, Town+Gown abstracts the results of all completed projects in its annual review, *Building Ideas*, which is disseminated within the Town+Gown community, setting the stage for reflection among participants. An annual

symposia series provides the space for Town+Gown members to explore the topics raised by completed projects so that they may collectively use research results to conduct future research and inform future changes in policy and practice. The action research methodology facilitates change through "the use of small working groups around participants' practice—what action learning practitioners call 'action learning sets'—with repeated cycles of action-reflection." Since academic year 2012-2013, Town+Gown has hosted eight Symposium events, in addition to this event, that aimed at taking Design research projects into action of some form. For a list of these Design-focused Symposium events, please see Appendix B. See http://www1.nyc.gov/site/ddc/about/ town-gown-archives.page#symposium for materials associated with these Symposium Events.

A brief aside about Service Design. Service design is a powerful "interdisciplinary approach that combines different methods and tools from various disciplines" that began in the private sector consumer marketing sector and recently emerged in the public service sector.⁶ It can be guided by professional consultants from many disparate disciplines⁷ for the great benefit of entities focused on changing relationships with their clients and/or customers, but it is an easily understandable process, with standard business process elements, that any organization can engage in, on its own, with some level of success. Service design is "an evolving approach [that] is particularly apparent in the fact that, as yet, there is no common definition or clearly articulated language of service design."⁸

Service design thinking is a multi-disciplinary approach to improving service delivery that "... combines numerous skills in design, management and process engineering"

and the resulting "consciously designed services that incorporate new business models are empathetic to user needs and attempt to create new socio-economic value in society." Most organizations employ personnel who were professionally trained in management—a core skill/discipline for service design. The more disciplines within an organization brought to the service design efforts can yield results of "various forms: rather abstract organizational structures, operation procedures, service experiences and even concrete physical objects." But, at its most basic, service design consists of five principles or elements—it is user centered, co-creative and holistic and it involves sequencing and evidencing.

Projects for Today's Discussion. At this symposium event, we will focus on three action research sets in Design to understand the various routes they took to some form of action as a platform to discuss impediments to implementing design research projects conducted via the Service Learning model. Themes have emerged from the following observations over the years: it is not a straight line from research to implementation and, further, that the route to implementation is nothing like what was imagined at the completion, much less the initiation, of the projects. Another theme emerges from the observation that the ideas from these research projects do not die. The following action research sets includes projects for two agencies providing human services and a project for one agency providing infrastructure and infrastructure-related services.

New York City Department of Probation's Neighborhood Opportunity Network (NeON) Action Set. Town+Gown "adopted" From Waiting Rooms to Resource Hubs, a 2010-2011 design research project conducted by Columbia/Graduate School of Architecture, Planning and

Preservation (GSAPP) for the New York City Department of Probation (DOP) and the Mayor's Office of Operations. 12 The GSAPP researchers applied the collective findings of earlier academic-practitioner explorations at Columbia/GSAPP of the criminal justice system to the reality of DOP's operations "on the ground", which also addressed questions present in the Research Agenda related to the impact of design on human services programs. These earlier explorations, published in 2008, include using spatial mapping technology to investigate the geography of incarceration (The Pattern), a workshop to engage in scenario planning for justice reinvestment strategies (Scenario Planning Workshop), fieldwork to identify sites for justice reinvestment strategies (Justice Reinvestment in New Orleans), and an analysis using criminal justice mapping data as a scoping tool for physical structures (Architecture and Justice).

The researchers engaged in a participatory design process that began with an analysis of the location and current state of the physical spaces and program functions of DOP's waiting rooms and the work flows within them, giving rise to design challenges to be solved, followed by identification of integrated design practices, process analysis and a related blue sky exploration of solutions and challenges. The collaborative process identified, as a tipping point for program design, a need for DOP to address—figuratively and literally—its clients as whole persons. This tipping point led to an integrated design solution that supported DOP's new policies and practices. The recommendations included a "kit of parts" methodology that would be scalable across the agency to repurpose existing waiting rooms to become Resource Hubs and a creating a full process evaluation of current operations to support future replication of the model.¹³





DOP implemented many of these research recommendations as it implemented its NeON program, 14 encountering issues that Town+Gown explored in its March 14, 2013 Symposium event entitled *Design:* When Does It Begin and End?. 15 This event picked up from where an October 17, 2012 event, co-sponsored by the AIA Center for Architecture, entitled *Design: Just What the Heck Is It?*, had left off. The 2012 event used the Columbia/GSAPP design research project for DOP as a case study project, and the 2013 event continued using this case study project to explore the transition of design research projects to specific sites—or implementation—identifying systemic issues.

Among the issues identified was the inadequate calibration of the City's budget and procurement practices to accommodate small interior renovation projects suggested by design-focused research recommendations aimed at helping agencies rethink and improve aspects of their services and delivery of services through multi-dimensional design interventions that do not rise to the level of being eligible for capital funds. The alternative of using expense funds, however, ran into the absence of city-wide service contracts for this kind of work that city agencies could access when they had funds/needs.16 The design resources that did exist included city-wide printing contracts (which agencies tried to leverage for design work), NYC+Co resources (which had, at the time, a design unit that had been leveraged for some of this type of work), and capital-oriented construction contracts, which were not appropriate for expense-level implementation work.

Procurement staff from the New York City Department of Citywide Administrative Services (DCAS), which procures

all goods for City agencies, attended the 2013 event and decided to add design-related services to its citywide services procurement initiative. As a potential Town+Gown action item, Town+Gown collaborated with DCAS staff to develop a suite of City-wide master contracts for various non-capital funded design services, including service design and other allied design services, under an initiative called GovernmentxDesign to link it closely with the City's emerging NYCxDesign programming. A city-wide services master contract structure enables the creation of a vendor pool that all City agencies can access via a shortened procurement process as compared to a stand-alone procurement. Unable to implement that series of master contracts by the end of the Bloomberg Administration, the New York City Department of Information Technology and Telecommunications (DoITT), picked up this concept during the first term of the de Blasio Administration, which had early articulated a commitment to design in government.

As part of the Mayor's Office for Economic Opportunity's Municipal Design Studio program dedicated to improving services for low-income residents, one of the Studio's resources for City agencies, under its Civic Service Design Tools and Tactics, will be DolTT's "Government x Design" Design Services Master Contract, which will support advancing design services for City agencies. DolTT released a Request for Expressions of Interest with respect to this initiative, in October 2016, and expects to release a Request for Proposals in 2018, calling for submissions from firms with expertise in digital design, communication design and/or service design.

New York City Police Department's People's Precinct Action Set. From October 2014 to August 2016, Town+Gown developed and supported several de-

sign-research projects in connection an initiative of the New York City Police Department (NYPD) to transform New York's police precincts into "people's precincts," using the 73 Precinct in Brownsville as the case study project.¹⁸ In Los Angeles, the "peoples' precincts" program, in its most basic physical form, consists of two elements: (a) an ATM machine and (b) a community space where members of the community and the police precinct staff are able to engage in joint programming, both of which are located in the space between the front door of the precinct building and the sergeant's desk where police work takes place. Since DOP's NeON program was expressed as a service design effort in the criminal justice area, it served as a touchstone for the Town+Gown family of projects with NYPD, standing for the proposition of engaging in co-design as early as possible during the design process. In addition, a joint architecture/construction management building information modeling-enabled class with Pratt Institute/School of Architecture (Pratt/Architecture) that used "off-theshelf" pre-fabricated building components to create a "kit of parts" program for temporary facilities in which to locate a variety of City post-disaster services, served as the additional touchstone for the architecture projects. 19

Implementing these two "people's precinct" elements at the 73 Precinct would signal a change of policy intent in a physical space, which had been constructed in 1985 in the fortress style common to that period, aimed at improving community police relations. The "as built" condition of the building, however, created an obstacle to creating a community space within it. Several design research projects focused on the attempt to turn the 73 Precinct into "people's precincts".

For The People's Precinct at the 73, Pratt/Architecture developed a three-semester series of classes, from Spring 2015 to Fall 2015, that was intended to explore community engagement, design and technical innovation and fully integrated project delivery in the form of a team-based design build effort that included students. The three seminar courses, which incorporated building information modeling tools, were structured conceptually along the lines of Yale University's design-build studio sequence, were intended to go from design (spring) to estimation/specification (summer) to build (fall), culminating in a student-involved build of the student-designed structure (fall). The Yale program, initiated in 1967 by Charles W. Moore, required design students to get out of the studio to build the projects they designed so that they would not only be inspired by the mechanics of building during design but also develop a practice of positive social action by building for those underserved by design services.



In The People's Precinct at the 73—Design of the Community Connection Pavilion, the architectural solution revealed itself as a moveable free-standing modular structure that could be placed somewhere on the sidewalk surrounding the front of the building and later moved to other precincts over time to test the "People's Precinct" model across the City (the CCP pod). NYPD's desire to create a community room at a space-challenged location, created the opportunity to provide a new "front door" for the fortress-style building where the entrance to the building was hard to see from the sidewalk as well as explore the targeted and temporary use of pre-fabricated modular design and construction to address the City's systemic capital funding issues that tend to favor full rehabilitation or new construction for older buildings.

Specific design elements of the CCP pod reflected stakeholder input and included: the necessary balance between public accessibility and security for NYPD staff, with a transparent entry fitted with ballistic glass; an external neighborhood-specific identity able to utilize different local artists' work and balance day lighting and users' needs for privacy; an informative and welcoming reception area with space for an electronic "bulletin board", with a welcome desk to be staffed by community liaison officers, and an interior able to accommodate computer stations for residents to search police-related information, space for the ATM, a public restroom, and flexible meeting and conference space to support a variety of police-community uses; practical and durable systems and materials intended to require minimal maintenance and years of service; and, finally, fast deployment and flexible use at multiple sites.



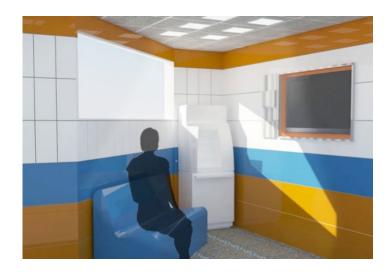
In the summer semester, work study students with one of the Pratt professors from the spring semester project in his office conducted The People's Precinct at the 73— Technical Specification and Estimation of the Community Connection Pavilion, which was a technical specification and estimation exercise applied to the CCP pod designed the previous semester. The student team used building information modeling (BIM) programs, assuming a computer numerical control production process and offsite pre-fabrication. BIM supports greater use of offsite fabrication and modular construction, including using manufactured products. BIM use has the potential to increase integration of design with constructability analysis during the early stages of a project, minimizing the need to resolve questions of the design when construction commences and related delays and additional costs; to permit materials requisition on an "as needed" basis, reducing costs associated with traditional stockpiling of materials on site; and, to increase labor productivity in construction. While this project was nearing completion, a decision was made to subject the entire Peoples' Precinct initiative—in the broader context of a community policing initiative—to an overall service design analysis, in addition to other analyses, delaying any decision with respect to the final build of the CCP pod academic

demonstration project until completion of comprehensive analyses. A form of "action" did, however, occur when, earlier in the spring, NYPD decided to include a community space and ATM in the design of the new City-funded building for the 40th precinct in The Bronx, then in the design phase at the New York City Department of Design and Construction.²⁰

An ATM machine had been delivered to the vestibule of the 73 during Spring 2015, and has been in use since then. During Summer 2015, experiential learning students from New York School of Interior Design conducted The People's Precinct at the 73-Interior Redesign of the Vestibule. The crenelated building front of the building created a vestibule space that was not only oddly shaped but also small, with small transom windows at the top of the exterior walls providing the only natural light and dark ceramic tiles covering the walls; a small number of standard City-procured chairs; and, an officer's window near the interior door that provided neither privacy to visitors with inquiries or complaints nor comfort to the officer stationed there and, when lines formed, inhibited free flow from the entrance to the door leading to the sergeant's desk.

The student-led research team in this four-week summer experiential learning seminar was tasked with developing interior design options for the vestibule at the 73rd precinct as well as a palette of options useable in vestibules in other precincts to support NYPD's roll-out of the ATM-machine component of the "People's Precinct" program across the City, all of which were intend to convey a sense of welcome and information. Following a user-centered design research methodology, the research team conducted four structured design meetings with the staff at the 73 and members of the Community

Precinct Council to create two related designs—the first to be a simple design, constrained by cost and the physical space limitations at the 73rd Precinct, and the second to articulate a "civic standard" palette of design features that could be applied to spaces across NYPD's inventory of existing buildings. The design for the 73rd Precinct vestibule reflected the physical space limitations and provided for improved lighting and made small changes to an interior non-load bearing wall to increase privacy for those speaking to an officer at the reception desk, shielding the arrestee intake space from the view of visitors and improving traffic flow at the interior door. The materials chosen reflected operational needs for durability and ease of maintenance, and the colors chosen lightened the interior space that received only small amounts of natural light during the day. The design also included exterior signage to clearly identify the entrance and coordinated with the interior design features pointing to the ATM machine located in the corner of the vestibule. The team also designed signage specifically for the ATM to be used on the exterior or in the interior.





The vestibule redesign also included space for an electronic bulletin board to provide useful information, including information tied to the ATM such as City-funded financial literacy programs available within the community. The civic standard design palette, consisting of these elements, would provide a useful foundation for NYPD as it thinks about how to redesign other precincts' vestibule areas to implement elements of the "People's Precinct" program in advance of full-scale precinct renovations. Like implementation of the CCP pod design, implementation of the interior redesign of the vestibule was put on hold pending an overall service design analysis for NYPD's entire system.

Both CCP pod design and the vestibule interior design projects were influenced by an earlier design research

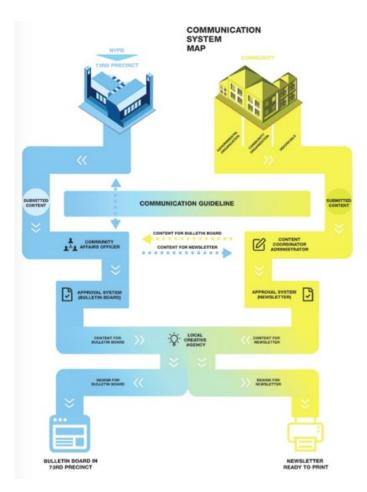
project, entitled Mapping Red Hook/Red Hook HUB: A Creative Placemaking Project, that was captured by Town+Gown in academic year 2013-2014.21 The idea for a bulletin board emerged from both sets of co-design meetings with members of the Community Precinct Council, who raised the issue of communications and education. A physical result of the adopted design research project, the Red Hook HUB, is an electronic bulletin board, located at the NYCHA Miccio Community Center in Red Hook, that is a community electronic bulletin board "owned" by community groups, one of which takes responsibility for the curating the content. Since the idea of an electronic bulletin board was embedded in both design research projects discussed above, the last project in this action set aimed at developing a community-based communications strategy and infrastructure leading to information that would support police and community relations and would also be appropriate for an electronic bulletin board located within a police precinct building.

In Change the Story Brownsville: A Communication Strategy to Build Trust, students from School of Visual Arts/2016 Impact! Design for Social Change, conducted a multiple method research project that, at its core, identified the relationship between police and the community as a significant challenge and explored ways to enable existing communication channels in Brownsville to increase trust between the police and the community. The researchers' methods included a walking tour to document the physical conditions in the neighborhood; a series of interviews with service providers and agencies to identify community organizations; a participatory design process with community residents utilizing concept cards and narrative prompts to test emerging ideas and gain deeper insight; and, additional research to dig deeper and validate earlier findings.

Taken as a whole, the researchers' insights reflected differing perceptions of the current state of police community interactions, the largest part of which take place outside the precinct building, but also reflected a shared interest in building trust over time with face-to-face interactions. The researchers mapped current communications channels amid differing perceptions of safety within the neighborhood.

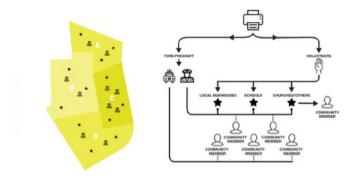
The researchers observed that the police and the community approached developing better relationships of trust, which is complicated and dependent on time and perceptions, from opposing directions, with the police starting from an approach of providing public safety and the community starting from an approach of developing personal relationships. The researchers concluded that a solution to achieve the stated desire to build trust reguired a "counter narrative" to the dominant narrative of negative police community relations. The counter narrative would include key values of Brownsville residents, such as community ownership and sense of belonging, understanding public safety "on the ground" in their neighborhood, knowledge of physical and social neighborhood assets where people want to go and engage, and community art to imagine what can be possible in the future.

Their proposed communications strategy for the digital bulletin board included the creation of a new community newsletter that would leverage existing communication channels; provide a vehicle to change the current narrative by promoting a holistic view of Brownsville; and, overlap with the digital bulletin board. In the social infrastructure behind the proposed strategy, the community would be responsible for the newsletter, creating positive and constructive content about the community,



in the context of an agreed-upon set of guidelines and a protocol between the community and the police, with articulated roles, to create the content, since it would migrate to the bulletin board inside the precinct building. Since, however, the proposed protocol specifically envisioned a position of community content coordinator and administrator to interface between the community and the precinct, hiring of a local creative agency and the purchase of a digital bulletin board, the researchers

THE PROPOSED SOLUTION+



identified the need to identify funding models for start-up operations and long-term operations as pre-condition for implementation.

New York City Department of Environmental Protection's Wait... Pilot Program Experience. As part of its ongoing effort to improve water quality in the City's waterways, the New York City Department of Environmental Protection (DEP) developed a pilot program to encourage residents in the Newtown Creek sewer-shed to wait to use water during heavy rain events (the Wait... Pilot Program). When there is heavy rain and heavy household water usage, the City's sewers can reach capacity, which can lead to combined sewer overflows (CSOs) and impact water quality. The Wait... Pilot Program encourages participants to wait to do laundry, wash dishes, shower, and flush the toilet during these rain events to help free up capacity in the sewer system.

Inspired by the energy industry's campaigns to encourage reduced energy consumption during peak demand periods, the Wait... Pilot Program is intended to leverage the actions of individual water users within the New-

town Creek sewer-shed to help increase capacity in the combined sewer system and reduce the concentration of wastewater in CSOs.



The neighborhoods in the Newtown Creek sewer-shed are served by a combined sewer system. In approximately 60 percent of the City, this type of system combines

sanitary flow, created each time a New Yorker turns on a tap or flushes a toilet, with storm-water runoff that enters the sewers whenever it rains or snows. While the City's 14 Wastewater Treatment Plants (WWTPs) are designed to treat twice the permitted dry weather flow, during some rain events, the system can become overburdened and a mix of storm-water and untreated wastewater may discharge directly into surrounding waterbodies as a CSO to protect the treatment process at the WWTPs. In 2012, DEP and the New York State Department of Environmental Conservation initiated development of 11 Long Term Control Plans (LTCPs), which are comprehensive evaluations of long term solutions to reduce CSO events and to continue to improve water quality in New York City's waterbodies. Each LTCP is unique and seeks to develop approaches for each waterbody to achieve applicable New York State water quality standards, using a hybrid green infrastructure and grey infrastructure approach to address, measure, and mitigate the effects of CSO events.

For the Wait... Pilot Program, a student-led team from Pratt Institute's School of Design/Communications, working with another student-led sustainability team from Pratt Institute's Graduate Center for Planning and the Environment/Green Infrastructure Fellowship Program, sought to identify communications design principles for DEP to utilize to encourage public engagement and to illustrate to a broad audience that individual actions, such as voluntarily reducing the volume of water used during heavy rain events, can have a positive impact on the City's waterbodies.

Using the Newtown Creek sewer-shed pilot²³ as the case study for a waterbody stewardship campaign, the team developed a communications campaign with printed material and text messages that would be suitable for

DEP to use as it scaled up the initiative across the City's sewer-sheds, and that would also generate survey data to permit evaluation of the success of this informal partnership model. The students engaged in a three-phase research effort to create a communications campaign that connects communities to their waterbodies, harnesses community action, and offers qualitative measures of success.

In addition to conducting a literature survey with respect to individual behavior and ethnography, the team began with one-on-one interviews of residents to understand perceptions and knowledge of water issues. Working from the interview results, sub-teams designed interventions to engage larger audiences and draw them into increased individual participation, including prototyping the interventions, developing a blueprint of touchpoints and developing a plan for public engagement that included a focus on specific spaces and locations. The final phase involved developing an awareness campaign highlighting specific water issues raised in the first two phases, with options for campaign launching, digital and other communications assets and a roadmap for evaluation. The teams conducted demographic, mapping, and stakeholder analyses focusing on the Flushing Bay/Flushing Creek sewer-shed.

Utilizing a behavioral model for persuasive design, the team adopted an approach to promote sustainable behavior with community-based social marketing and designing for behavior change intervention. The demographic and mapping analyses highlighted, among other things, that water usage and the cost of water is not experienced in the same way across the City's 11 sewer-sheds. The Flushing Bay/Flushing Creel sewer-shed stakeholder analyses revealed a complex environment of business,

educational, environmental, and recreational stakeholder groups at the local level, providing a methodology for future analyses of other sewer-sheds and comparison of local communications resources.

The team developed three survey instruments to be administered over a campaign's lifespan to determine the change in local awareness of CSO events and to evaluate a campaign's success, using qualitative metrics of access to water, empathy with respect to interacting with water, and awareness of municipal education efforts, along with standard quantitative demographic metrics. The team recommended that the City utilize the project deliverables on a sewer-shed-by-sewer-shed basis, in the context of the City's LTCP Program.

The Problem of Implementing Town+Gown Design Research Projects. The power of design has been celebrated since the Bloomberg Administration, and the de Blasio Administration has embedded awareness of the power of design into programs across agencies. The City's Economic Development Corporation (EDC) developed NYCxDesign, an annual 10-day program with New York City's design community, which was launched in May 2013, and continues with EDC support to the present time. The City has promoted design events, and agencies are starting to train their in-house groups on basic design strategy and community engagement.

What we have learned in Town+Gown is that design research project implementation is not a straight line, proceeding in ways not anticipated at the time the project began and was completed, but they do proceed into some form of action in addition to future research, which is discussed during Panel 1 of this Symposium Event.

The topic for the Panel 2 discussion will focus on the following questions:

- What has been the value of Town+Gown's design research projects?
- What are measures of success for an experiential or student-led design-research project?
- Speed from research to action?
- Straightness of line from research to action?
 o how close to what was anticipated?
- o how unexpected was the path?
- What about when there is no change in policy or practice ever?
- Are there pedagogical benefits a real project (a project with a real client and a real problem) that does not lead to action?
- What is the value of completed projects leading to future research opportunities?
- Should Town+Gown make design research applied research?
- What can be done differently at project engagement to increase the chances it leads to action?
- How can Town+Gown support the engagement of client agencies until complete implementation of a design research project?

APPENDIX A

List of Town+Gown Design Research Projects

2010 - 2011

From Waiting Rooms to Resource Hubs

Town: NYC DOP and Mayor's Office of Operations

Gown: Columbia/GSAPP

2012 - 2013

What Would You Do If a Hurricane Was Coming— The Pre- and Post-Emergency Toolkit for the 21st Century

Town: NYC DDC

Gown: NJIT/Industrial Design

Collab: Design & the City

Town: No specific client agency Gown: New School/Parsons

Sensory Interiors Manual

Town: NYC DDC Gown: Pratt Institute

2013 - 2014

4D BIM Explorations in Design and Construction Management

Town: NYC DDC

Gown: Pratt/Architecture

Sustainable Communities: Making the Invisible Visible

Town: NYC DEP and NYC DDC Gown: Pratt/Graduate Center

Mapping Red Hook/Red Hook HUB: A Creative Placemaking Project

Town: AIGA-NY/Amplifier/MGMT Gown: Pratt/Communications Design

2014 - 2015

The People's Precinct at the 73—Design of the Community Connection Pavilion

Town: NYPD

Gown: Pratt/Architecture

The People's Precinct at the 73—Technical Specification and Estimation of the Community Connection Pavilion

Town: NYPD

Gown: Pratt/Architecture

The People's Precinct at the 73—Interior Redesign of the Vestibule

Town: NYPD

Gown: New York School of Interior Design

APPENDIX B

List of Symposium Events Focusing on **Design**

2015 - 2016

October 28, 2015
 The Policy of Design and Equity

2014 - 2015

May 13, 2015Policy, Meet Design.2

October 22, 2014
 Issues in Civic Visioning

2013 - 2014

May 15, 2014
 Engineers Design

October 10, 2013
 Policy, Meet Design

2012 - 2013

May 21, 2013
 Looking Ahead to NYCxDesign 2014

March 14, 2013Design: When Does It Begin and End?

2011 - 2012

October 17, 2012
 Design: Just What the Heck Is It?

2015 - 2016

Wait ... Pilot Program

Town: NYC DEP

Gown: Pratt/Design-Communications

Change the Story Brownsville: A Communication Strategy to Build Trust

Town: NYPD

Gown: School of Visual Arts/2016 Impact! Design for

Social Change

Soak Up NYC

Town: NYC DEP/Green Infrastructure Gown: Pratt/Communication Design

73 Precinct Officers' Lounge and Gym Reimagined

Town: NYPD

Gown: New York School of Interior Design

2016 - 2017

Build with Us: NYC Infrastructure Initiative

Town: NYC DDC

Gown: Pratt/Communications Design

NYC LEPBridge and Serving Low English Proficiency Residents of New York City

Town: New York City Office of Immigrant Affairs

Gown: New School/Parsons

END NOTES

- 1 Town+Gown has recently added a new component, called the Institute, to incorporate the Continuing Education (Workforce Development) model of university-community partnership.
- 2 Horst W. J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning", Policy Sciences, 4 (1973), pp. 155-169.
- 3 Burns, op. cit., p. 1.
- 4 Paul Chynoweth, The Built Environment Interdiscipline: A Theoretical Model for Decision Makers in Research and Teaching, Proceedings of the CIB Working Commission (W098) Building Education and Research Conference, Kowloon Sangri-La Hotel, Hong Kong, April 10-13, 2006, Rider 9-A, http://usir.salford.ac.uk/12453/2/ Interdiscipline(SS-2009).pdf, accessed 04-11-17 @ 12:08 p.m.
- 5 Sonia Ospina, Waad El Hadidy and Amparo Hofmann-Pinilla, "Cooperative Inquiry for Learning and Connectedness," Action Learning: Research and Practice, July 2008, 5:2 (Taylor & Francis), pp. 131-147; online reprint, https://upcommons.upc.edu/bitstream/handle/2099/5810/l8_pap_Hofmann-Pinilla.pdf, accessed 04-11-17 @ 12:28 p.m.
- 6 Marc Stickdorn and Jakob Schneider, This is Service Design Thinking: Basics—Tools—Cases (Hoboken, NJ: 2011), p. 29.
- 7 Including, but not limited to, architects.
- 8 Idem.
- 9 Ibid., p. 30.
- 10 lbid., p. 14.

- 11 Op. cit., Stickdorn and Schneider, p. 34,
- 12 See pp. 48-49 of Vol. 2 of Building Ideas at http://www1.nyc.gov/assets/ddc/downloads/town-and-gown/building-ideas-2.pdf.
- 13 During the NeON program implementation, DOP engaged researchers from CUNY/John Jay College of Criminal Justice (John Jay) to conduct an institutional action research study, interviewing key NeON staff, probation clients, service providers and community members; observing daily probation work and events; and, providing ongoing feedback to DOP senior management team as the study progresses. (Notes from Kevin Barnes-Ceeney, John Jay researcher)
- 14 DOP collaborated with SeeChangeNYC, a Bloomberg Administration initiative resident at DDC, to transform its waiting rooms into Resource Hubs.
- 15 See http://www1.nyc.gov/assets/ddc/downloads/town-and-gown/DesignBeginEnd.pdf.
- 16 See pages 2-3 of Design: When Does It Begin and End?.
- 17 See https://civicservicedesign.com/the-launch-of-the-nations-first-ever-municipal-service-design-studio-dedicated-to-improving-c9b23502f1d4 and https://www1.nyc.gov/nyc-resources/design-rfei.page.
- 18 At the time the "people's precinct" initiative was announced, NYPD had also undertaken a broad community policing initiative.
- 19 See pages 62-63 of Vol. 5, Building Ideas at http://www1.nyc.gov/assets/ddc/downloads/town-and-gown/building-ideas-5.pdf.

- 20 Since the design phase of the 40th Precinct, which includes a community room, a working set of design principles for precincts and other civic buildings includes creating opportunities during design for increased civic engagement, social cohesion and access to services, subject to budget constraints; the proposed conceptual design of the new 116th Precinct in Southeast Queens reflects space for a community room.
- 21 See pages 70-73 of Vol. 5, Building Ideas at http://www1.nyc.gov/assets/ddc/downloads/town-and-gown/building-ideas-5.pdf.
- 22 See http://www.nyc.gov/html/dep/pdf/green_infrastructure/ CO2-20110512-25.pdf for the consent decree between New York State Department of Environmental Conservation and DEP.
- 23 DEP had earlier engaged a private sustainability marketing and communications firm for this pilot.
- 24 See http://www1.nyc.gov/assets/servicedesign/index.html.
- 25 See https://www.nycxdesign.com/presskit/.