

# Design: When Does It Begin and End?

A Town+Gown Symposia Event New York Public Library Branch @ 455 Fifth Avenue March 14, 2013 (8:30 a.m. to 10:30 a.m.)

Introduction. At an Archtober discussion event entitled Design: Just What the Heck Is It? last fall, three panels focused on different aspects of design. One panel discussed a case study about significant changes in policy and practice at the New York City Department of Probation (DOP) that were initially informed by a series of research projects leading to and including the repurposing of its waiting rooms into Resource Hubs in connection with its Neighborhood Opportunity Network (NeON) program. The story told by the panel began with design-inspired and design-based interventions in public policy analysis (at 30,000 feet) that ultimately resulted in changes in program policies, practices (at

1,000 feet) and physical sites (on the ground).

The case study is reproduced in this précis document as the foundation for the conversation at this symposium event. The beginning of the story revealed the interplay between design thinking and policy analysis and moved over time from public policy analysis at 30,000 feet to DOP's operations "on the ground." The story moved on to reveal insights into the realities that public agencies face when trying to implement design-inspired policy ideas on place-centric projects, and the site-specific design interventions revealed the interplay "on the ground" between design and program change. The "end" of the story is about evaluation, which brings the story

<sup>1</sup> On October 17, 2012 and co-sponsored by the AIA Center for Architecture and Town+Gown.

back full circle to the beginning of policy analysis, highlighting the question, asked last fall during the panel discussion, when does design begin and end?

# Origins of Public Policy Analysis at 30,000 Feet.

Before the advent, in 2011, of From Waiting Rooms to Resource Hubs: Designing Change at the Department of Probation,<sup>2</sup> several foundational analyses related to the criminal justice system had already taken place at the Spatial Information Design Lab at Columbia (GSAPP/SIDL). 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 (JR) strategies (Scenario Planning Workshop), fieldwork to identify sites for JR strategies (Justice Reinvestment in New Orleans), and an analysis using criminal justice mapping data as a scoping tool for physical structures (Architecture and Justice).

These explorations revealed, via maps, how incarcerated people in a particular jurisdiction come disproportionately from very few urban neighborhoods. In some cases, the visual concentration of locations where prisoners hail from

<sup>&</sup>lt;sup>2</sup> A participatory planning/design process that Columbia University's Spatial Information Design Lab at the Graduate School of Architecture, Planning and Preservation (GSAPP/SIDL) conducted with DOP staff and the Mayor's Office of Operations.

is so dense that it is easy to see how New York government spends between \$1 and 6 million dollars each year to incarcerate residents from a single City block. Those visual representations supported a hypothesis that a more effective and efficient public safety policy would include reallocating a portion of the funds spent on building and operating state prisons to strengthening the civil society institutions (e.g., education, healthcare and job creation) in the prisoners' communities. This hypothesis led to the development of DOP's Justice Reinvestment initiative, a data-driven approach to re-invest its resources—and to leverage additional public and private investments—in the community. As these analyses moved toward a place-based strategy, policy and design perspectives became intertwined and policy findings stepped over the divide into a protodesign phase. The intersection of design and policy created a new space for rethinking both design and policy and advancing both agendas, through crossdisciplinary conversation and planning that identified possible solutions and implementation strategies. Informed by the work that preceded it, the GSAPP/SIDL worked with a Waiting Room Improvement Team (WRIT) consisting of DOP line staff, including probation officers and their supervisors, and City Hall staff, none of whom had experience in design processes or methodology, to help DOP identify, analyze and understand solutions to problems in the spaces where probation clients wait to meet with their probation officers. DOP's "waiting room problems" included long wait times, typically uninviting public spaces and stigmatizing one-dimensional labels ("probationers," "offenders," "criminals"") that created mental obstacles for clients and probation officers alike.

The participatory design process began with an analysis of the location and current state of DOP's physical spaces and program functions and work flows conducted within them, and gave rise to design challenges to be solved, followed by "best practices" identification and analysis process and a related "blue

sky" exploration of solutions and challenges. The collaborative process identified, as a tipping point for the program design, a need for DOP's program to address—figuratively and literally—those with whom it engages as whole, complex individuals and led to proposed solutions integrating the design of DOP spaces to support changes in program policies and practices, including the NeON program.<sup>3</sup>

Transition to Specific Sites and Identification of **Systemic Issues.** From Waiting Rooms to Resource Hubs informed DOP's new understanding of the situation and prepared the ground so that the agency could take advantage of an unexpected opportunity, in the form of expense budget funds surfacing near the end of the City's fiscal year, to realize specific projects through design applications and interventions at specific sites. At this point, the SeeChangeNYC program at the New York City Department of Design and Construction (DDC) stepped in to work with DOP. SeeChangeNYC aims at helping city agencies "see" their programs and spaces with a "new eye" by using design as a tool to make changes in program operations and by working flexibly and quickly within existing rules to leverage pro bono design services and other donated services and products. Small renovation projects represent manageable opportunities for SeeChangeNYC to use a directed design-focused process to help agencies rethink and improve aspects of their services and

-

Tor more details about this phase, see <a href="http://urbanomnibus.net/2012/10/from-waiting-rooms-to-resource-hubs-designing-change-at-the-department-of-probation/">http://urbanomnibus.net/2012/10/from-waiting-rooms-to-resource-hubs-designing-change-at-the-department-of-probation/</a>. Early emerging ideas included repurposing the waiting room as a resource hub, with updated technology, new signage and improved furniture and arrangements so that DOP staff could function as greeters and resource advisors and team up with representatives of partner organizations. To implement this proposed integrated design solution, WRIT paired the list of small steps leading to big changes in DOP's program, including creating model sites with a "kit of parts" approach that would be scalable across the agency and conducting a full process evaluation of current operations to support future replication.

delivery of services by the application of replicable multi-dimensional design interventions. This approach parallels "service design", which seeks to develop holistic approaches to improving service interactions, by consciously organizing the human, digital and material components of a service to optimize the experience of service users and service providers.

SeeChangeNYC's collaboration with DOP and the design realization team revealed systemic and Citywide budget and procurement challenges in deploying design thinking and achieving design realization at actual worksites. Scaling the structural impediments required wrangling essential materials and labor from unlikely sources, pushing and pulling DOP's first Resource Hubs into existence against all odds. As described below, the case study illustrated how SeeChangeNYC's mission and modus operandi ran into obstacles posed by the City's budget and procurement protocols that not only created some of the problems SeeChangeNYC seeks to solve, but also constrained the ability of SeeChangeNYC to solve them for agencies seeking the kind of change that DOP sought.

From the budget side, the City's capital eligibility rules require that the purchase of certain interior renovation project elements be financed out of the expense budget, instead of the capital budget. In practice, expense funds allocated (or not) each year for such small projects typically falling under the rubric of maintenance compete with agency operating programs, resulting in systemic reallocation of expense budget funding of maintenance renovations to operations and deferred maintenance across agencies. The City's historic practice of deferred maintenance transforms smaller expensefunded renovation projects over time into larger renovation projects eventually becoming eligible for capital financing; while the practice spares each agency's expense budget in the short-term, it also

incrementally increases city-wide capital project costs/debt service over the longer term.

Notwithstanding agencies' tendency to cannibalize their allocated maintenance expense funding, unused expense funds typically emerge for spending from other areas of an agency's budget near or at the beginning of the third quarter of the fiscal year demonstrating the issues from the procurement side. It is not unknown for agencies to spend a part of these projected interim expense surplus funds<sup>4</sup> near the end of the fiscal year to purchase items available via the City's requirements contracts for goods in order to facilitate the spending of such monies by the end of each fiscal year. This rushed end-of-fiscal-year spending often leads to less-than-optimal purchases of items available from existing requirements contracts that are made worse by the failure to integrate these purchases with planned expense budget renovations, elements of which have been typically deferred.

# The Design Realization Process "on the Ground".

SeeChangeNYC saw the DOP offices and waiting rooms as public spaces in desperate need of transformation, in the physical, customer service and programmatic domains. SeeChangeNYC, as an advocate for projects and for design, introduced DOP to the other members of the design realization team including architects and a graphic artist, who, during this project realization phase, collectively performed their own research to define the problem to be

<sup>&</sup>lt;sup>4</sup> The City's quarterly expense spending allocation ("QAS") process promotes predictable and fiscally responsible spending of appropriated amounts over the fiscal year. Often the QAS process identifies, near or at the beginning of the third quarter, expense funds in various units of appropriation in excess of amounts the agency projects will be needed by the end of the fiscal year ("projected interim expense surplus funds"). In some instances, agencies will return such funds to the General Fund for reallocation, while in other instances agencies will seek to spend such funds before the end of the fiscal year.

solved, beyond the program and explicit requirements, which informed specific aspects of the design realization team's proposal and generated the brief (or program) for change on the ground for DOP.

The design realization team translated the brief/program into real space, accounting for real contexts, budgets, available resources, as well as "extra-programmatic" features, such as posters, information hierarchy and tone of voice. The design realization team made it clear that design could only address a small part of more comprehensive problems and solutions. Specifically, design could announce the agency's intent to change and promote a better social atmosphere in the waiting rooms to support other programmatic change initiatives. The redesign of the waiting room signified a shift from a dominating control and enforcement paradigm to a strengths-based approach focused on greater community collaboration and engagement.

The design realization team used design to change the point of contact between probationers and DOP staff at sites transformed by design, where clients in the former waiting rooms could accomplish important functions while waiting to see probation officers. Throughout the process, the design realization team used, as a guide, the simple idea that time spent in a space is no longer waiting if one is able to "get something done" in that space, enabling them to achieve the goals of making the spaces useful and to make clear the signal that the agency cares about helping its clients.

In order to help DOP achieve its intended programmatic change—helping to keep probationers out of prison through greater community collaborations—it was necessary for the design realization team to deal with DOP's 22 actual dilapidated, distressed and worn-out waiting rooms of various physical conditions, space configurations and sizes, in City-owned and -leased buildings. The programmatic reforms planned by DOP could not

occur in distressed spaces with distressed furniture bolted on the floor and together in rows and signs prohibiting talking, eating, cellphones and just about everything else. The goals of design at this stage focused on spatial design and organization and visual art to create clear cues for use of what would become Resources Hubs and expected behavior, all in the context of the last two months of the fiscal year, with limited expense funds, existing requirements contracts for goods and limited alternative procurement methods/vehicles. The design realization team created typology metrics, based on space size, space shape and seating capacity, to provide guidelines to implement design goals and with associated design features of furnishings, use and layout.<sup>5</sup>

Challenges the realization team encountered with this public agency client while implementing this project included negotiating with DOP line staff to accept, or at least to try, a number of solutions unfamiliar to them, such as keeping furniture moveable (i.e., not screwed to the floor), arranging chairs in ways other than rows and removing plexiglass barriers between receptionists and clients. Challenges specific to the criminal justice system area included finding durable furniture without associations to the prison environment and avoiding colors with gang associations. These design interventions creating the Resource Hubs were then combined with other operational changes, such as deploying greeters and resource advisors, to signal change to probationers working with DOP, as well as to provide the foundation for DOP's NeON program, the totality of which represent a reallocation of the costs of corrections to public safety investments in the neighborhoods with a disproportionate share of those in the criminal justice system.

For more detail about the project, see
<a href="http://www.biber.co/architecture/civicurban?project\_id=234">http://www.biber.co/architecture/civicurban?project\_id=234</a>
<a href="http://www.biber.co/architecture/civicurban.ground=234">http://www.biber.co/architecture/civicurban.ground=234</a>
<a href="http://www.biber.co/archit

<u>Evaluation and Back to the Beginning.</u> Mindful that redesigning the waiting spaces was just the first step towards wider systemic change, DOP engaged researchers from John Jay College of Criminal Justice to conduct a high quality process and implementation study. Seeking to document the process of transformation, the researchers are documenting the successes and challenges faced by staff directly implementing systemic change, and gauging clients' and community members' perceptions of their involvement with DOP. Data concerning staff perceptions and experiences of the change are being gathered through interviews with multiple stakeholders over time, and observations of meetings, treatment delivery, and probation client contacts. Data concerning clients' and community members' perceptions are being gathered through multiple key informant interviews, focus groups, and observations of public forums. Working collaboratively with DOP, researchers are engaging in a reflective action-research approach, whereby inquiry, discussion, and problem-solving of the implementation difficulties occur while the research is underway.<sup>6</sup> In addition to day-to-day collaboration with DOP staff, at the end of the study, researchers will provide an implementation "blueprint" documenting the process of transformation. The blueprint will be useful for other probation areas considering similar systemic change.

**Questions for the Symposium Conversation.** The case study as a methodology "capture[s] the complexity of a single case," which is a collection of artifacts that carry and reflect the history leading up to their creation and can lead to later evaluation.<sup>7</sup>

<sup>6</sup> Eileen Ferrance, *Action Research* (Providence, RI: Brown University). Town+Gown is also an action research program.
<sup>7</sup> Rolf Johannson, "Case Study Methodology", key note speech at the International Conference "Methodologies in Housing Research" organized by the Royal Institute of Technology in cooperation with the International Association

Thus, this case study contains within it, the kernels for several future studies within Town+Gown, whether in the case study methodology and/or other complementary methodologies.8 This "intensive study of a single unit for the purpose of understanding a larger class of (similar) units" could lead to a study of systemic issues related to application of design principles and interventions in public programs and a study of the research methodologies used in various design interventions as well as a study exploring how to evaluate design interventions that support changes in public policy and program practice. 9 Town+Gown's Research Agenda is organized around several academic disciplines, <sup>10</sup> and issues for consideration and conversation at this symposium event are arranged below around these disciplines:

#### **Design in Management**

Management, as taught in public and business administration programs, focuses on systems as abstractions, reducible in some instances to quantification, subject in other instances to human psychology. The application of design thinking and design tools in this case study clearly had aspects of

of People-Environment Studies, Stockholm, September 22-24, 2003, pp. 2, 5.

<sup>&</sup>lt;sup>8</sup> *Id.* at pp. 10-11. *See also*, John Gerring, "What Is a Case Study and What Is It Good for?" *American Political Science Review*, Vol. 98, No. 2 (May 2004), p. 353.

<sup>&</sup>lt;sup>9</sup> Gerring, *supra*, p. 342.

Management, Economics, Law, Technology and Design comprise the recognized multi-disciplinary field of the Built Environment; T+G has modified them somewhat by combining the three engineering disciplines with architecture under Design and by adding the Geography discipline to cover issues related to the urban planning field. See Paul Chynoweth, *The Built Environment Interdiscipline:*A Theoretical Model for Decision Makers in Research and Teaching, Proceedings of the CIB Working Commission Building Education and Research Conference
2006), http://www.lawlectures.co.uk/bear2006/chynoweth.pdf, pp.1-5.

traditional management. How can city agencies explore the application of design principles and tools as part of their ongoing management functions? What place does this application have in the public sector, where there is always competition among programs for scarce resources—what is the relation of these interventions to program costs?

The case study highlighted city-wide budget and procurement impediments to agencies utilizing design thinking and tools on small scale physical interventions—whether expense funded small renovations or operations and maintenance repairs.

- What changes to budget and procurement protocols would help the City to expand the use of these applications on smaller scale projects?
- What changes would help City agencies devote more expense funding (or stop cannibalizing allocated expense funding) to annual facilities maintenance and repair to keep small, manageable needs from blossoming into more expensive capital eligible projects?

The evaluation of the case study involves gathering and assessing clients' and community members' perceptions of the programmatic and related physical changes and may provide a "real time" opportunity to engage end-users in a co-creative or co-productive process, a hallmark of service design, as this case study initiative matures. What impediments exist for public agencies to engage end-users in a co-creative or co-productive process when they begin rethinking their programs and physical spaces? How might agencies mitigate impediments to embracing a usercentered or user-generated design process, inviting users to contribute to design ideation, participate in producing or delivering the improved spaces or interactions and/or participate in various forms of user testing, feedback and iteration?

The urban planning field originated in architecture, took a turn into public policy and, with urban design, is back in architecture. How can urban planners utilize the tools and processes used by GSAPP/SIDL to investigate the geography of other public policy issues, moving the geospatial observations to the ground level of conventional planning, identifying sites and scoping for physical structures, but keeping the link between planning and policy always present?

## **Design in Economics**

Moving from the public policy-urban planning nexus to the public policy-public economics nexus, how can economists utilize geospatial tools and processes to investigate reified public welfare issues, such as the distribution of social goods (parks, open space, well-functioning public buildings and facilities) and those public facilities with negative externalities (the ca. 1989 charter revision "fair share" issue)?

#### Design in Law

The case study's geospatial approach also made more obvious the impacts of certain criminal laws. How can policy analysts use geospatial tools and processes to investigate the impacts of built environment-related and other laws?

### **Design in Technology**

As discussed above, service design attempts, in the context of discrete programs, to integrate the human, the digital and the material components of a particular service or program to optimize the experience of users and providers. How might that approach be expanded to analyze and evaluate existing technology gaps and solutions for the City as a whole?