

CYNTHIA A. BAKER AND PATRICIA E. SALKIN, EDITORS

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Law and policy influence the complex web of relationships between institutions of higher education and their host communities. *Town and Gown* explores how institutions are working with communities in ways that can increase the influence of both. The book is divided into four parts: an overview of higher education, its host communities, and the law; professional and economic relationships; public safety, health, and students in the community; and community and economic development. Within these categories, experts from academe, government, and private practice discuss town-gown relationships that address a wide range of concerns, including higher education policy, contracts, conflicts of interest and board membership, property tax arrangements, finance, law enforcement, health initiatives, student housing and community development plans, professional partnerships, economic development strategies, zoning policy, and approaches to sustainability. Throughout the book, authors share best practices of how to build stronger and more synergistic town-gown relationships.

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### Introduction

In a book focusing on effective *legal strategies* promoting cooperation between institutions of higher education, or the "Gown" in Town+Gown, and their host municipalities, the "Town," this chapter may strike some as a slight anomaly. This chapter consists of a story of the creation of New York City's Town+Gown program. The development of the Town+Gown program illustrates how cooperation, difficult to achieve and maintain, can resolve the various problems on each side of the town and gown divide. There are, however, ever-present links to the law. From a systemic perspective, built environment practitioners know that statutes are almost always at the root of any problem in the built environment, but they are not permitted to examine or change them in the course of their work. Yet, those governmental officials entrusted with the role of monitoring the statutes, with the power to reform them, often do not understand the impact of laws "on the ground" over time.

This is a multi-disciplinary story in which the many disciplines critical to built environment inquiry, including law, and their particular research methodologies, enter as actors, creating their own structural divides. There is the basic long-standing divide between academia and practitioner. The divides within the fractured construction industry that creates the built environment find a mirror image of divides among corresponding built environment disciplines and rigid institutional research methodologies. Yet this story is about how practitioners working at a large public owner that is coterminous with a large municipal government and academics from the built environment disciplines and professional programs that overlap with them can

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create a mechanism to increase applied place-based research and establish an institutional space that permits them to feed the research results back into the complex system, so that they can inform changes in practice and policy.

The fact pattern "on the ground" that gave rise to the impulse for the creation of Town+Gown is found in many other complex system issue areas, suggesting that the Town+Gown model may be applicable beyond the built environment. In the absence of a methodology to understand and study the nature and elements of any complex system, its participants are doomed to a Kabuki-like drama that does not change over time and across administrations. A detailed description of how the program has developed and its plans for the future follows provides a roadmap for revising the drama or creating a new one. And, finally, as all chapters in a book meant for lawyers should have, there is a description of legal issues as they relate to the creation and operation of a bridging program that depends on collaboration between public and private entities.

## Fact Pattern "On the Ground"

The built environment is, in current public policy lingo, the ultimate public—private partnership. In a richer "Hannah Arendt meets Daniel Libeskind" description, the public built space is a public good that provides "a stable horizon of civic experience" and "an enduring home for members of a political community extended over many generations." The built environment is both an "ensemble of architectural creation" and "the deliberate expression of civic identity." Yet the civic or political government entity is itself a significant participant in the built environment, playing several interrelated roles simultaneously—owner, regulator, economic catalyst, and financier—which roles are further complicated by the interrelated activities of several levels of government—federal, state, and local—all similarly engaged. Most critical, however, is the understanding that the built environment is a complex and dynamic social system where its issues cannot be adequately comprehended in isolation from the wider system of which they are a part. The complexity of government's roles in the built environment and the interdependence of these roles are largely unexamined in the context of the whole system, creating stylized civic moments, with almost formalized structures and conventional roles, akin to Kabuki dramas that transcend government administrations and economic cycles.

Near the end of the Bloomberg Administration's first year, New York City ("City") agencies with some role in the City's capital program began to meet as a working group to identify and resolve common problems.<sup>4</sup> Over the course of the first year, themes began to emerge. The statutory and regulatory environment imposed on the City, primarily by the State of New York, but also by the City, constrained, or was thought to constrain, practices and policies. Anecdotal stories from the various working group participants rang true, but there were virtually no place-based analyses to support theories and solutions.<sup>5</sup> Moreover, the issues articulated

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by the group were not even close to being new—they had been part of their reality for decades. In its second year, the working group incubated what later became the City's Design and Construction Excellence (D+CE) program announced in July 2004. The City was able to alter some practices and policies on the design excellence side that it had imposed on itself, notably those imposed by the rules of the New York City Procurement Policy Board (PPB). Yet, practices and policies on the construction excellence side reflected in the City's budget process and the standard form construction contract had deep roots in the larger complex system, requiring a longer timeframe to support quantitative analyses necessary to support change.

In early 2006, Mark Strauss, president of the New York Chapter of the American Institute of Architecture (AIA), presented the chapter's theme for 2006—Architecture as Public Policy—to the working group, and members of the group expressed interest in working on specific research topics. A sub-committee began to work with the chapter on research projects to develop metrics of excellence and assess the impacts of public procurement law on City's built environment, but one year was too short to develop these projects. Later that year, however, concerns about the increasing spread between bid prices and estimates on construction projects in the city and elsewhere led to a series of focused analyses of cost drivers in both public sector and private sector construction. This effort highlighted the complex statutory environment constraining practices and policies, as well as the difficulties in analyzing data sets created for various governmental operations purposes within the compressed period of time imposed by the perceived crisis. The difficulties of conducting analysis under these circumstances turned the initial broader impulse to understand the drivers of cost increases into an articulation of discrete management problems solvable by management-based initiatives.

Yet, during all this time, the regulatory environment also continued to change. The City modernized its building code and updated its MWBE policies and programs. The mayor released PlaNYC, a large-scale series of integrated policy initiatives to reduce carbon gas emissions, which led to enactment of a series of related environmental sustainability mandates. New York State finally enacted a limited reform of its inflexible public construction procurement laws. And, organizations allied with academics produced analyses of discrete built environment issues that updated earlier analyses related to "state of good repair" and the impact of built environment regulation on the built environment that had earlier failed to move the ship of state to change its systemic practices and policies. Since then, the lull in private construction activity has created a "buyers' market" for the public capital programs, removing whatever sense of crisis that had existed earlier.

## Systemic Issues

The complex nature of the built environment, the fragmented nature of the construction industry, low levels of public sponsorship, and inadequate linkages between research and application

have historically conspired to produce low levels of investment in built environment research. <sup>12</sup> These long-standing structural hurdles explain not only the historical low levels of research, but also, more important, the difficulty of increasing such levels. The construction industry as a whole "is dominated by a large number of relatively small firms, spread over a vast geographical area." Within any particular jurisdiction, there are many construction markets, because the industry located there "is concerned with producing and maintaining a wide variety of durable buildings and structures." Thus, as a highly fragmented market dominated by small firms, "[t]he type of construction—particularly in terms of its size and complexity, its geographical location, and the nature of the client—will define the market in each case." Industry fragmentation is unfortunately reflected within academia, where built environment research via the traditional research methodology <sup>16</sup> suffers from a tendency to become fractured, dividing "knowledge into domains with particular sub-disciplines."

Complicating the fragmented built environment industry and related academe is government's Catch-22 situation. Significant built environment research requires government sponsorship to some degree yet government operates within an environment where it is difficult to change practice or policies in the absence of rigorous analysis, but government is also unable to establish research as an operational value within itself. One reason for this situation is that government operates in the built environment simultaneously in different capacities, not unlike having multiple personalities. As a public owner and client of construction services that implement its capital program, government has many concerns in common with private owners, namely, project budget, schedule, quality, and safety. 18 Moreover, within any jurisdiction, there may be several public owners operating their own portions of a particular jurisdiction's built environment. 19 As regulator, government regulates built environment participants and built environment products, primarily for public health, safety, and welfare purposes.20 While any public capital program acts as a macro-economic tool at all points of the economic and business cycles, government also acts as an economic development catalyst, focusing on specific aspects of private economic activity.<sup>21</sup> Government, at multiple levels, is finally a financier of public capital programs, with the issuance of public debt, and subsidization of interest rates, as well as with the receipt and distribution of grants.<sup>22</sup> The interplay between government and private-sector participants, all built environment "practitioners" from the perspective of the practitioner–academic divide, reveals different aspects as a result of the role that government plays.

Thus, the effects of this complex system render government simultaneously in great need of applied research, yet unable to find the appropriate mechanisms to sponsor it, resulting in dramas that are re-enacted in one administration after another. Predictable built environment crises based on the economic/business/construction cycles are followed by a "shock that gambling is going on" and a roundup of the "usual suspects." In the absence of rigorous analyses

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eously in great need onsor it, resulting in le built environment by a "shock that gamof rigorous analyses to get at the multiple root causes behind predictable crises, decision makers are faced mostly with anecdotal information, which, though not wrong, seems an insufficient basis on which to base significant changes in policy and practice. Moreover, even in stable administrations, institutional knowledge gained at top levels during the crisis-shock-round-up cycle<sup>25</sup> disappears as the decision makers themselves cycle through the government, creating a situation not unlike Groundhog Day for those who remain in government for the duration of their careers. All of this is further compounded by divisions within governmental units, among governmental levels, and with the private sector.

Among the practitioners—both public and private—there are a number of places where the transfer of information can break down. Large organizations of all kinds are susceptible to the kinds of divides that many scholars attribute to large public bureaucracies. <sup>26</sup> In the built environment, these divides operate to minimize information transfers of whatever research and analysis may have been done in the past, dimming institutional memory of what has been known. The operation of the divide between permanent government and elected administrative apparatus over the long term results in a loss of institutional memory across administrations. The inability of knowledgeable agency staff, during any particular administration, to translate institutional memory effectively up the agency hierarchy and to elected officials every time an issue arises, is due in part to the obscure and technical nature of some issues, and in part to the conventional wisdom that is as fragmented as the state of formal analysis in this area. All divides are compounded by the possibility that there may be ineffective connections between policy management and practice management.

The long-term nature of the construction process creates temporal divides that are difficult to bridge in theory, more so in practice. The horizon for a project begins with the public planning and financing of the project, which in government occurs as part of the public capital budget and financing processes. The execution of a project involves a cast of many people, and occurs as part of the payment and audit process. The impact of project financing occurs much later when debt service on the bonds surfaces in the expense budget, a non-discretionary expense that sometimes crowds out discretionary expense items when revenues are flat or decreasing. Both the timing of debt service impact and the construction process are longer than the horizon for most public owners' budget analyses, which is typically no longer than five years, beginning with the most recently completed fiscal year, the current fiscal year and, finally, the next few fiscal years going forward for planning purposes. Yet there is no whole system process, other than the budget with all its limitations, which provides a direct connection to built environment issues and which also generates quantitative data.

While government collects data all the time, it collects much of the series data related to the built environment for various public accountability processes, such as budget planning and execution, payment and auditing, and management/performance. Many of these complex data

sets and systems are not easy to use for their intended purposes and are harder still to use to analyze trends in areas, such as the built environment, that they were not expressly intended to capture. Most data collected expressly for built environment purposes, especially project-specific data, is at the executing agency level, which, until recently, was on paper in project files. The ability to mine built environment data requires a focus and tenacity that must endure beyond any particular crisis and analytical skill sets that are not always present among practitioners.

Among built environment practitioner agencies, a culture of research that exists in other governmental areas, such as in public health and public welfare, has never developed and taken hold.<sup>32</sup> Practitioners tend to focus on doing the work because their skill sets do not support applied research on the job, and the job does not require research. Professional associations provide some connection to general applied research.<sup>33</sup> The lack of funding for research activities is due to institutional undervaluing of research, pressure from other more critical budget needs, and the process associated with procuring professional services. In the absence of a strong culture of research, the institutional fear of being perceived as not knowing and the paradoxical fear of knowing too much further discourage research. There is a perceived political danger to admitting a need to conduct research and a related fear of an inability to control the results. And, finally, practitioners do not speak the language of academics and do not always share their values.

But without analyses of the entire system of which a governmental actor is a part, there is no way to express issues and solve them systematically. One default tendency, particularly within the executive branch, is to view and articulate problems as management problems solvable by management solutions. Another default tendency, shared by both branches of government, is to view the laws and regulations under the jurisdiction's control as the solution. Either approach will have the potential for limited success, at best, simply because each is conceived in isolation from an understanding of the complex system.<sup>34</sup> In the absence of a mechanism to enable participants to collectively analyze the system, both management tools and legislation function like hammers in the hand of someone who sees everything as a nail. The default approaches are particularly problematic for the built environment: targeted management solutions cannot fix the problem, because of their limited nature, and the unintended consequences of new regulation, often in conjunction with existing regulations, can make matters within the system worse. Thus, in order to move out of the Groundhog Day loop, and face the next crisis, with the results of applied research using place-based data, it seemed necessary to find a mechanism to increase research in a systemic context, with government as a committed partner in the research.

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## Research about Research

In 2007, the New York City Department of Design and Construction (DDC) embarked on a project to explore how to develop such a mechanism. DDC, created in 1996 to improve the design and construction of the City's public projects, is the only construction agency at the City with a city-wide role in analyzing and developing built environment policy. Moreover, DDC was a lead participant in developing the City's D+CE program and continued to be aware of the ongoing systemic issues that are impediments to construction excellence. DDC commenced research to explore how government entities responsible for the various public works programs, higher education institutions, and other built environment practitioners in the private sector, such as professional, trade and civic associations, and other owners, could marshal and coordinate various analytical capacities and data sets to collectively increase evidence-based analysis, information transfer, and understanding of the City's built environment. As the earlier experience with the capital program working group suggested, no practitioner or academic involved in or with the City's built environment has enough time or financial resources, data or access to data, or analytical skills to do the necessary analyses in a timely way that meets the needs of those who can benefit from them.<sup>35</sup>

In a complex social system such as the built environment, so many questions must be answered and those answers must feed back into the system in an open source manner to create baseline knowledge to inform changes in practice and policy. Stakeholders do not need another academic center or private think tank; instead, they need a mechanism to link academic and quasi-academic entities with practitioners to collaborate on applied research projects, to converse about the completed work, and to disseminate both the work and conversations in a directed and thoughtful way to set the stage for changes in practice and policy and/or follow up research. In addition, as anyone who has worked in government can attest, government requires a "safe space" where it can receive help in analyzing its own data, and a mechanism to advance collective understanding and retain and access its institutional memory.

Among the many models of town-gown partnerships to develop collaborative informational transfers, faculty-directed research, service-learning, university-based consultancy, formalized university centers, and continuing education/management training seemed the most useful for the purpose of creating this mechanism. While academic institutions believe they have, as a component of their overall mission, obligations to society as a whole and to the community where they are located, academics and their institutions find it nearly as difficult as practitioner entities do to make effective and productive connections. Moreover, any attempt in New York City to increase the number of productive town-gown partnerships and their output in a focused, coordinated and systemic manner must avoid "imposing a burdensome new structure on an already highly active and competitive metropolis."

One overall theme that emerged from the literature review was the existence of institutional divides between academics and practitioners that must be bridged in order to increase collaborations and informational transfers. The various institutional participant types have their "own methods of operation and organizational goals," some of which are complementary and can overlap and some of which conflict.<sup>39</sup> Prior attempts faced, and future attempts will face, a need to strike a delicate balance to "ensure that practitioners have access to usable information that can assist them in their everyday work, and that researchers are able to see their work used to its best effect." Moving beyond the desire to collaborate on research to achieving effective collaborations requires "a shared vision of a common outcome," which depends on shared values and a mechanism to "understand and make room for a positive outcome for each partner." The mechanism to enhance effective collaborations further requires "an inclusive structure in which all participants have a voice in shaping what they need."

As noted above, built environment practitioners have not fully supported a culture of research, in part because any impulse to fund research activities must compete with higher-valued institutional needs and comply with a complex procurement process.<sup>43</sup> On both sides of the divide, there is no counterbalance to traditional fears of losing control: on the practitioner side there is the fear of being perceived as not knowing and the fear of losing control of the work product and conclusions, while on the academic side there is the fear of control by practitioners impairing academic freedom. The tendency in modern academia to control the creation of knowledge, viewing only academic peers as partners in knowledge creation, and practitioners as the *subject* of study, not only limits the usefulness of most academic work to practitioners, but it also reinforces traditional fears on the practitioner side about initiating research.<sup>44</sup> When practitioners attempt to bridge the divide for applied research, differences in language and the imperatives imposed by traditional research methodologies can make the attempt difficult and discourage future efforts. With these different values and objectives, chances are high that projects that manage to clear these structural hurdles will disappoint one or both partners.

The divide is complicated by the presence of academics operating outside formal academia, competing to some extent in knowledge production and challenging the formal academics institutions' monopoly on knowledge. <sup>45</sup> In the city, many privately funded think tanks and institutions created by specialized interest groups have produced credible research and analysis to support their advocated positions, some of which relate to the built environment. <sup>46</sup> The results of these advocacy-inspired linkages can feel like a shot across the bow of the targeted government practitioners. Government practitioners use the vehicle of "blue ribbon" panels to perform a similar function by appointing members of academia to them. The research results of these "blue ribbon" panels tend to remain within the practitioner entity, unless the practitioner is using the results to support its position. Thus, while some products of research and

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analysis circulating in the public domain may reflect credible work, their origins in advocacy limit can their usefulness to all participants in the complex system.

Yet, features of the built environment provide some rays of sunshine to the setting of the divide. First, in contrast to other policy areas, the built environment is a policy area where many conditions exist for policy analysis to be more likely to alter the beliefs of policy makers in a way that advances policy based on empirical analysis. Participants in the built environment share a "mix of policy core and peripheral beliefs and policy positions" and are "willing to alter some beliefs and policy positions on the basis of analytical results" leading to less conflict on most issues.47 There is, consequentially, a high level of analytical tractability where "[s]ubstantial agreement on data and theory [leads] to a narrow range of plausible analytical claims."48 Finally, the built environment supports several professionalized for where "[p]articipants [are] admitted on basis of professional/technical competence, and thus share common bases for assessing analytical claims." The existence from 1993 to 2001 of an academic consortium contract between the city's several architecture and engineering schools that supported several applied research projects provides some evidence that these conditions in the built environment help mitigate some of the negative aspects of the traditional divide.<sup>50</sup> And, fortunately, some scholars within academia have recently developed methodologies and tools "to implode the researcher-researched hierarchy and unite practice and theory in a way that privileges lived experience and relinquishes 'expert' control over knowledge."51 Under the broad heading of cooperative inquiry (CI), they include action research and action learning.

Action research "is an approach to inquiry that supports many methods in the service of sense making through experimental action. It combines inquiry with action as a means of stimulating and supporting change and as a way of assessing the impact of that change."<sup>52</sup> Among the many characteristics of action research, some that have influenced Town+Gown's design are an explicit link of attempts to study with attempts to solve systemic issues, a "spiral process of data collation to determine goals and assessment of the results of intervention, an inclusionary and public process for feedback and "continuous cooperation between researchers and practitioners."<sup>53</sup> Successful CI projects, including action research, however, require an equal partnership between academics and practitioners in order to reap the benefits of "action learning and action research," placing "practice as a source of knowing" on the same level as traditional academic tools of knowledge creation.<sup>54</sup> By integrating CI within a research agenda, the action research methodology can provide a "learning architecture" within which system stakeholders can bring about changes in practices and policies, through "the use of small working groups around participants' practice—what action learning practitioners call 'action learning sets'—with repeated cycles of action-reflection."<sup>55</sup>

Research in a complex system requires a nonlinear process, with multiple perspectives and research methodologies over time, and the built environment is no exception.<sup>56</sup> Yet the

place-based nature of the built environment can also provide another kind of "learning architecture" as subject-matter-in-reality.<sup>57</sup> Any place can be—but New York City certainly is—a "source of energy, of wonderfully complex intellectual problems, and of nonacademic intellectuals who have much to offer."<sup>58</sup> A pragmatic and integrated approach, such as CI, that applies "a variety of data collection and analysis techniques" to the particular setting of New York could help to mitigate insufficient and fractured research in the built environment.<sup>59</sup>

# Town+Gown The Incubation Period

In February 2008, amid calls from diverse groups to increase research activities in the built environment, DDC convened a group of practitioners and academics, later to be called the Incubation Group, to a conference room at the AIA New York City Chapter's Center for Architecture near Washington Square, to explore creating a mechanism for systemic research. Members of the Incubation Group confirmed many of the facts outlined above—the existence, for years, of many fundamental questions unanswered by rigorous placed-based research, and the absence of a need for another academic center or private think tank. In view of the vastness of the potential scope of this project, however, the Incubation Group thought it was important to focus first on what could be accomplished quickly to produce concrete results as the foundation for what was to become the Town+Gown program.

The Incubation Group recommended focusing on a core group of public owner practitioners, such as New York City's built environment agencies. On the academic side, the service-learning, or capstone, programs at the graduate public administration and policy schools in the City seemed the best place to begin, because they fit squarely within the CI methodology and public administration and policy fields related to many built environment issues. Furthermore, the capstone programs permitted an in-kind exchange of government's untapped series data and practical expertise with graduate schools' students in need of good projects to use their newly acquired skills. Both sides could benefit by receiving something of value, but the City's budget and procurement processes would not be triggered. Several of the City's academic programs were familiar with the Congressional Research Service's University Capstone Projects program, which supplies several public policy schools with a research agenda for use by their capstone programs. DDC could function like the Congressional Research Service by working with the various City agencies to generate a research agenda with questions of interest to the various City agencies and disseminate the agenda to the schools as part of their annual program development process. Then DDC could function as a "matchmaker" for possible projects and later, after projects became "live," as a project facilitator, helping to bridge any divides between the academic and practitioner partners.

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At their second meeting in May 2008, the Incubation Group got down to business and created a proto research agenda. Each of the participants sitting around the conference room table at the Center for Architecture formulated three research questions that DDC would use to develop a full research agenda with the participation of the City's built environment agencies. The plan was to schedule a meeting that fall to introduce the City's built environment agencies and the graduate public policy and administration programs to each other, and to the program now formally called "Town+Gown." The Incubation Group and DDC convened the kick-off meeting in November 2008, again at the Center for Architecture, albeit in a larger room. The administrators described their respective program structures and mechanics and project requirements and expectations. Agency personnel asked many questions about the relationships between clients and student teams, the nature of client commitments, student team needs for access to data and personnel, and the potential need to keep the final work product confidential. DDC described a flexible and iterative process in which the research agenda, a work in progress, would serve as a tool for a conversation between agencies and schools. DDC would focus first on expressing agency questions in a format that would be generally consistent with the programs' requirements, and committed itself to tailoring projects based on the questions with agencies and schools to meet program needs once schools identified an interest in them. In April 2009, at a "hand-off meeting" at the Center for Architecture, the Incubation Group and DDC met with agencies and schools to hand off to all present the first Town+Gown Research Agenda for academic year 2009-2010.

During academic year 2009–2010, DDC worked with the schools and agencies to refine questions of interest to the programs and, when necessary, to present those potential projects to interested student teams. For those projects that became "live," DDC worked to support agency participation. At the end of academic year 2009–2010, there were thirteen completed Town+Gown projects for eight City agencies, produced by student teams from five of the City's graduate programs. In November 2010, Town+Gown held an event at City Hall to release its first annual review, entitled *Building Ideas*, which abstracted the completed projects. Five students made "encore" presentations of their respective projects, and DDC announced the presence of Town+Gown on its agency website. <sup>60</sup> Town+Gown had hatched!

#### Present and Future Tenses

Town+Gown is at the end of its fourth year of operation. By the end of its first year, Town+Gown counted most of the City's graduate public administration and policy programs and urban planning programs as members of the Gown Group, and additional schools and programs continue to enroll. In its second year, DDC specifically recruited the City's architecture and engineering programs to the program and, in March 2011, convened a meeting of all participating architecture and engineering schools, exponentially expanding the nature and scope of possible

collaborations. Two law school clinic programs and two schools of business administration have also joined Town+Gown, and DDC plans to recruit other law and business schools in the future. The presence of schools and programs with many disciplines that overlap built environment issues makes multi-disciplinary work on projects possible, within individual schools and across schools, in the future.

The Town+Gown Research Agenda has evolved substantively and mechanically since its first academic year. Still loosely organized around the five academic disciplines—Management, Economics, Law, Technology, and Design—that comprise the recognized multi-disciplinary field of the Built Environment,61 Town+Gown modified this paradigm by combining three engineering disciplines with architecture under Design and by adding Geography to encompass the urban planning field. The placement, under a single disciplinary heading, of questions with a multi-disciplinary potential can obscure them from readers from various backgrounds, so most questions in the Research Agenda also have "issues icons" designed to highlight their multi-disciplinary nature. The online version of the Research Agenda permits readers to move easily between the table of contents and the questions, both of which have the icons.  $^{62}$  Since system temic action research contemplates an open process, with multiple perspectives and research methodologies over time that require a broad iterative feedback process, the questions in the Research Agenda are intended to be broad, forming an umbrella research concept under which the schools and practitioner partners can work together to craft problem statements leading to more defined projects that meet the needs of both the students and agencies, with specific deliverables.

In parallel with developing the research portion of the systemic research program, Town+Gown has also been developing the reflection-action component, in particular, "action learning sets" discussed earlier. Beginning in November 2008, Town+Gown hosted a lunch series, inviting members of the City's Law Department and the Mayor's Office of Management and Budget to presentations of published research projects from local academics on various built environment issues. The interest in the research results indicated by questions raised and conversations that ensued suggested that "action learning sets" with small working groups drawn from participant practice areas and related academics would be productive once there was sufficient program output for participants to consider. 63 Beginning in February 2011, Town+Gown hosted its first series of symposium events, supported by précis documents that focused on issues raised by completed Town+Gown projects. The third annual Building Ideas review not only abstracted completed projects, but also contained summary proceedings from the first symposium event series. Actions that can emerge from symposia events are pilot initiatives and additional follow-up research projects for the next Research Agenda. Town+Gown also produces a bi-monthly catalog of recent reports and articles of interest to academic and practitioner researchers, organized along Built Environment disciplinary lines. An online library

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to house the collaborative institutional memory is under development, as are ideas to develop new work products, such as a series of general educational analytical briefs and case studies to provide background and context for researchers working on Town+Gown projects to enlarge and enhance the collaborative research community.

It was anticipated that working with the experiential or service learning programs, which are important components of professional education programs, would highlight the limits of these types of arrangements for sustained research with complex data sets. At some point in the repeated cycles of "action-reflection," it will be necessary for practitioners to compensate for limits necessarily posed by these programs by committing financial resources to academic institutions for the types of skills that reside in programs with more purely research-driven PhD graduate students in order to complete many of the projects in the Town+Gown Research Agenda. Thus, Town+Gown has finalized a multi-agency, multi-vendor task-order based requirements contract for academic services to support the Town+Gown program as it evolves and to provide participating practitioner entities with relatively easy access to participating academic institutions and programs for sophisticated research needs that require advanced skills and personnel. This Town+Gown academic consortium contract will be the successor to the old consortium contract.

Town+Gown, the result of various theories, is itself an experiment that will need to be evaluated. While it is too early to evaluate the effectiveness of Town+Gown, when the time is appropriate for evaluation, it is likely that different evaluation tools and methodologies will be appropriate for different aspects of the program. For example, systemic action research programs have existed some time in Great Britain, generating an extensive body of literature that will assist in developing an evaluation model for the program as a systemic action research program. <sup>65</sup> Surveys of program participants and product users will be useful as tools for developing the program as well as evaluating it. Models used to evaluate service learning programs in general could be adapted for the purpose of evaluating related aspects of Town+Gown. <sup>66</sup> Since one of the program's underlying theories is that qualities of the built environment make it likely that policy analysis can alter the beliefs of policy makers so that changes in policy and practice are based on empirical analysis, a larger test of Town+Gown's success will be the ability to replicate it, or some of its aspects, in other less-ideal issue areas. <sup>67</sup> Finally, the City's procurement rules, discussed in some detail in the next section, will require an evaluation of the innovative procurement for Town+Gown's academic consortium contract. <sup>68</sup>

## Some Legal Issues

Aside from broader systemic issues involving the statutory framework for construction and the built environment, alluded to earlier, <sup>69</sup> certain operational aspects of Town+Gown have raised legal issues. The most extensive legal issue developed from the desire to recreate an

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academic consortium contract, including more disciplines, to support the Town+Gown program that ran into public procurement constraints. Fortunately, these constraints were resolvable within the existing law. The PPB Rules permit, as a method of source selection, a vehicle called "innovative procurement" to "test and evaluate the feasibility and application of procurement methods not currently used by the City or provided for under [the PPB Rules]." The existence of Town+Gown, the collaboration of academics and practitioners on actual projects, and the resulting trust provided the basis for the alternative procurement methodology. For this new contract, patterned on the old contract that was set up as a master requirements contract with individual task orders, there seemed to be no public policy served by excluding any academic institution that may join the program in the future from participating in the first level of the contract, which is essentially being "on call" to receive and consider responding to task orders for particular research projects from Town+Gown practitioners. The competition required by public procurement would occur at the task order level. DDC, which manages Town+Gown on behalf of all City built environment agencies, requested approval of an innovative procurement for an academic consortium contract to support the program and received it at the end of 2010.

After all required notices had been published and the comment period had elapsed, Town+Gown convened a series of meetings with all interested academic institutions to discuss the structure and mechanics of the master contract, borrowing from another existing source selection process that permits initial discussions with an identified vendor pool. The participating members of Gown quickly recognized that a primary issue in drafting the new consortium contract is striking the right balance between the detail in the master contract to which all schools and programs would be a party and the detail in the task orders issued under it, for which interested schools would submit proposals for agency evaluation and selection. While the City will be constrained to some degree by its "boilerplate" legal and policy restrictions, there is room for some flexibility in structuring the umbrella master contract. Other specific issues raised at the meeting were intellectual property, access to information, copyright, and human research review requirements, all of which required careful discussion and drafting to assure that the final contract to be registered will efficiently and effectively support Town+Gown for its initial ten-year term.

The next series of legal issues involves the City's conflict of interest law and rules. Since City employees are often graduate students and adjunct faculty at Gown institutions, Town+Gown has the potential to raise conflict of interest issues. City employees are neither permitted to be paid by other entities to do their City work, nor are they permitted to do non-City work on City time. As the program expands and matures, it is conceivable that a City employee teaching, for example, a design course after work might want to use a Town+Gown question as the subject of his or her class, or the subject of a studio or workshop. If the research question comes from an agency other than the employee's own agency, issues of a conflict of interest seem remote.

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nd rules. Since City ions, Town+Gown er permitted to be 1-City work on City loyee teaching, for tion as the subject estion comes from erest seem remote. But what about a question posed by the employee's agency or the employee himself or herself? The potential of a conflict is replicated for students who are employees. If a student is presented with several experiential learning projects, one of which is a Town+Gown project, with one or more City agencies as clients, may he or she pick the Town+Gown project? If the client is not his agency, the issues of a conflict again seem remote. But what about a question posed by the employee's agency or the employee himself or herself months or years earlier? Preliminary conversations with staff at the City's Conflict of Interest Board suggest a methodology to approach these issues, on a case-by-case basis, using existing mechanisms, such as waivers, and the principles that underlay the law. And, finally, since Town+Gown has, from the beginning, placed an importance on meeting in neutral sites conducive to academic-based discourse, it has been necessary to address another conflict of interest issue. When organizations that typically charge users fees to use their spaces permit Town+Gown, a City program, to use such spaces free of charge, they are making a gift to the city. Fortunately, the City's conflict of interest rules also permit public servants to solicit gifts to the City, subject to certain safeguards.<sup>73</sup>

### **Notes**

- 1. Ronald Beiner, Our Relationship to Architecture as a Mode of Shared Citizenship: Some Arendtian Thoughts, 9 TECHNÉ 60–61 (Fall 2005).
  - 2. Id. at 61-62.
  - 3. Danny Burns, Systemic Action Research: A Strategy for Whole System Change 1 (2007).
- 4. At the request of Christopher Ward, then-Commissioner of the New York City Department of Environmental Protection.
- 5. The work and reports of appointed "blue ribbon" commissions are not exactly the same as research and analysis. But since the construction milieu is different than the typical public service provision milieu setting used in public policy and administration programs, traditional public policy analysis of built environment issues are not typically done. It is much more common to find urban planning, engineering, and economic analyses. Though it may require some specialized background to comprehend issues fully, the construction milieu exhibits the same issues of management, finance, and technology aspects that are the subject of traditional public policy study and analysis.
- 6. See http://www.nyc.gov/html/ddc/html/design/dc\_excellence.shtml, and Press Release, Mayor Michael R. Bloomberg Announces the 22nd Annual Art Commission Awards for Excellence in Design—Design and Construction Initiative Also Announced, http://www.nyc.gov (July 12, 2004), available at http://www.nyc.gov/portal/site/nycgov/ (search for "PR-191-04," in upper-left corner).
- 7. See Press Release, Mayor Bloomberg Announces Reforms to Make City Capital Construction Projects More Affordable and Efficient, http://www.nyc.gov/gov/gov/gov/gov/gov/portal/site/nycgov/ (search for "PR-291-08," in upper-left corner).

8. See Press Release, Mayor Bloomberg and Buildings Commissioner Lancaster Announce Completion of First Proposed Overhaul to Building Code since 1968, http://www.nyc.gov (May 3, 2007), available at http://www.nyc.gov/portal/site/nycgov/ (search for "PR-135-07," in upper-left corner); and Press Release, Mayor Bloomberg, Congressman Rangel, Comptroller Thompson, Building and Construction Trade Council President Malloy and Non-traditional Employment for Women Board Chair Hayes Announce 10 Initiatives of Mayor's Commission on Construction Opportunity, http://www.nyc.gov (Oct. 5, 2005), available at http://www.nyc.gov/portal/site/nycgov/ (search for "PR-383-05," in upper-left corner).

9. See Press Release, Mayor Bloomberg Presents PlaNYC: A Greener, Greater New York, http://www.nyc.gov (Apr. 22, 2007), available at http://www.nyc.gov/portal/site/nycgov/ (search for "PR-119-07," in upper-left corner). PlaNYC was incubated staff within the Mayor's Office, which later became the Mayor's Office of Long-Term Planning and Sustainability, an office with a strong academically based, quantitatively oriented staff. See also Press Release, Mayor Bloomberg Announces Create of Office of Long-Term Planning and Sustainability, http://www.nyc.gov (Sept. 21, 2006), available at http://www.nyc.gov/portal/site/nycgov/ (search for "PR-335-06," in upper-left corner).

10. See Press Release, Statement by Mayor Michael R. Bloomberg on Agreement to Change Wicks Law, http://www.nyc.gov (June 14, 2007), available at http://www.nyc.gov/portal/site/nycgov/ (search for "PR-197-07," in upper-left corner); and Press Release, Governor Paterson Announces Wicks Law Overhaul, http://www.ny.gov (Apr. 9, 2008), available at http://www.budget.ny.gov/pubs/press/2008/enacted0809/enacted0809\_wicks.html.

11. See http://www.cbcny.org/sites/default/files/report\_ppp\_12112008.pdf as relates to issues of state of good repair and http://www.manhattan-institute.org/html/rdr\_04.htm as relates to issues of the impact of built environment regulation on built environment products.

12. National Research Council (U.S.), Building for Tomorrow: Global Enterprise and the U.S. Construction Industry 55 (1988); see also Sir John Fairclough, Rethinking Construction Innovation and Research: A Review of Government R&D Policies and Practices 6, 14 (2002). Recent literature points to the need to increase research activities in the areas of construction and the built environment. From the construction perspective, the New York Building Congress released a report in July 2012, New York's Rising Construction Costs: Issues and Solutions, available at http://www.buildingcongress.com. The Building Congress recommended a role for the public sector to increase research to foster innovation in construction operations. From the built environment perspective, Minerva Partners released a report from a collaborative project focusing on the future of preservation entitled, Preservation Vision: Planning for the Future of Preservation in New York City (http://www.preservation-nyc.org). Again, among the many suggested proposals, an effort to undertake serious research emerged as a top recommendation.

13. Danny Meyers, Construction Economics: A New Approach 7 (2004). 14. Id. at 10.

Announce Completion ay 3, 2007), available at ner); and Press Release, struction Trade Council res Announce 10 Initia-Oct. 5, 2005), available corner).

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TERPRISE AND THE U.S. CONSTRUCTION INNO-ES 6, 14 (2002). Recent tion and the built envileased a report in July le at http://www.buildto increase research to tive, Minerva Partners tion entitled, *Preserva*preservation-nyc.org). arch emerged as a top 15. Id. (citing Derek Drew & Martin Skitmore, The Effect of Contract Type and Size on Competitiveness in Bidding, 15 Constr. Mgmt. & Econ. 469–89 (1997)).

16. Joel R. Oaña, Developing and Managing a Research Program: FEU-SURE and Urbanization Issues, Conference on Urbanization and the Educator's Response 1 (Nov. 19, 2004), available at http://ched-zrc.dlsu.edu.ph/pdfs/joel\_oana\_paper.pdf.

17. Id. (citing Linda N. Groat & David Wang, Architectural Research Methods (2002)).

18. Owners bear the ultimate responsibility for any capital project or program—from program definition to project commissioning. A critical objective for the owner is to align its interests in budget, schedule, safety, and quality with those of its agents in a shifting environment of unequal information where the collective understanding of a project develops over time.

19. For example, within the jurisdictional boundaries of New York City, several public owners operate complex systems of their own: the Port Authority, the Metropolitan Transportation Authority, the State Department of Transportation, and the City University of New York.

20. For example, in New York, these regulations are found at the municipal level in the building codes, regulating the products of construction and certain built environment participants, but also result from laws that govern planning and zoning and environmental review. The state imposes a significant regulatory overlay, such as the real property tax code, regulations of certain built environment participants, and regulations governing how public owners can build their projects.

21. At the local level, government uses parts of its capital plan to serve as an anchor in areas deemed in need of additional economic development to attach various public subsidies and attention. The higher levels of government, with their proportionately broader scopes, also function similarly as economic development catalysts with macro-economic tools appropriate to their governmental level and scope.

22. For example, the city issues its own tax-exempt debt to finance most of its capital program, but also takes advantage of state laws that permit the creation of debt-issuing authorities to finance the rest. Grant programs related to the production of identified types of infrastructure supplement the federal tax-exempt bond program. State and local governments actively leverage both to support their capital programs, supplementing federal subsidies and grants with subsidies and grants of their own, over an array of programs designed to increase the production of targeted types of built environment projects by reducing costs, in part imposed by regulation, in part imposed by market conditions.

23. The metaphorical allusion of being "shocked, *shocked* to find that gambling is going on here" occurs when what has been obvious to all working within the complex system becomes obvious to those elected and appointed officials who cycle through the system. There are many examples of what is obvious to all.

24. The metaphorical allusion of rounding up the "usual suspects" occurs when the crisis or apparent crisis demands that "something must be done." In a complex system, each institutional participant tells its portion of the whole story. If all are gathered, and there is sufficient time and interest to knit all the strands of the story together, a total picture can emerge over time; if not, then only a partial picture.

- 25. At some point, if one has the drive to follow the narrative threads with the usual suspects, one will discover the questions/issues raised by the crisis/apparent crisis have been around for a long time, since research was not able to have been done after any of the prior crises. Getting up to speed requires meeting with and conducting interviews of line agencies and hearing almost exactly the same thing, with the differences attributable to institutional perspective and allegiance. The problem is not a simple example of "silos." It is deeper and structural and imposed by the nature of the industry in which the agencies operate.
  - 26. James Wilson, Bureaucracy 221-32 (1989).
  - 27. The land-use planning processes overlap during the process planning process, as well as early stages of the project execution process.
  - 28. Debt service is typically carried as an enterprise-wide expense not proportionately attributable to the agencies whose projects generated the debt.
  - 29. Though total debt service expense is subject to reductions on the margin via refundings that can generate lower debt service payments.
  - 30. One result of the city's fiscal crisis in 1975 has been a concerted focus on the present budget and next three fiscal years. There is a temporal and substantive gap between the capital budget and financing for the projects being constructed and the expense budget where related debt service eventually surfaces. All built environment processes occur during this gap, and they do not fit neatly within the city's highly scripted budget process.
  - 31. None of the land-use planning processes works as a substitute for the budget process as an analytical tool, especially in the absence of any evaluation of past planning activities, partly due to the absence of planning action metrics and the absence of evaluating past land use actions.
  - 32. For example, at the city, there are pockets of active research: The Department of Health and Mental Hygiene conducts epidemiologic research and the Human Resources Administration (HRA) conducts high-level analysis of welfare system-related data. Some agencies, like the Department of Homeless Service, that were spun off from HRA, continue in that tradition. The Department of Design and Construction, created in 1996 to, among other things, have a city-wide policy role in the capital program, has funded a research and development program, primarily focused on technical engineering and architectural issues as well as environmental sustainability issues.
  - 33. For example, the Public Architects Committee at the American Institute of Architects, New York chapter; the American Society of Civil Engineers, Metropolitan Section; the New York Inter-agency Engineering Council; the Society of Municipal Engineers of New York City; the Association to Advance Cost Engineering; and the Construction Law Committee of the New York City Bar Association.
  - 34. For example, the use of the regulatory tool creates the need for government action in its other roles of economic policy developer and financier to reallocate funds to offset the distortions created by regulation.
  - 35. For an analogous situation, see Natasha Singer, Seeking a Shorter Path to Drugs, N.Y. Times, Nov. 15, 2009, available at http://www.nytimes.com/2009/11/15/business/15stream.html?\_r=0

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36. NICOLE MARWELL ET AL., UNIVERSITY-COMMUNITY PARTNERSHIPS 6–7 (2003). Actual practitioner/academic partnerships with useful qualities identified through this preliminary research include the National Bureau of Economic Research, the Vera Institute, the New York State Public Health Research Institute, The Design Trust for Public Space, the Consortium on Chicago School Research at the University of Chicago, and the Canadian Policy Research Networks.

37. Id. at i.

38. Id.

39. Id. at 5.

40. Id. at 1.

41. Id. at 16.

42. Id.

43. Sonia Ospina, Waad El Hadidy & Amparo Hofmann-Pinilla, Cooperative Inquiry for Learning and Connectedness, 5 Action Learning: Research and Practice 131–47 (July 2008), available at http://www.informaworld.com/smpp/content~db=all?content=10.1080/14767330802185673.

44. Id.

45. Thomas Bender, The Unfinished City 152-3, 156 (2002).

46. Id.

47. HANK JENKINS-SMITH, DEMOCRATIC POLITICS AND POLICY ANALYSIS 103, 118 (1990).

48. Id. at 103.

49. Id.

50. Procurement rules that became effective after this academic consortium contract was executed made it impossible to recreate this earlier consortium contract in the original manner after it expired before the Bloomberg Administration took office and after its need became apparent when the construction agency working group process revealed the long-standing built environment issues.

51. Ospina, *supra* note 43, at 2 (citing Peter Reason, *Choice and Quality in Action Research Practice*, 15 J. MGMT. INQUIRY 187–203 (2006)).

52. Burns, supra note 3, at 11.

53. Id. at 13.

54. Ospina *supra* note 43, at 2–3, citing John Bray, Lyle Yorks, Linda L. Smith & Joyce A. Lee, Collaborative Inquiry in Practice: Action, Reflection, and Making Meaning (2000).

55. Id.; BURNS, supra note 3, at 1.

56. Burns, *supra* note 3, at 1; *see also* Advanced Research Methods in the Built Environment xiii-xvii (Andrew Knight & Les Ruddock eds., 2008).

57. BURNS, supra note 3, at 1.

58. BENDER, supra note 45, at 152-53, 156.

59. Id.

60. See http://www.nyc.gov/html/ddc/html/design/tg.shtml.

- 61. Paul Chynoweth, The Built Environment Interdiscipline: A Theoretical Model for Decision Makers in Research and Teaching, Proceeding of the CIB Working Commission Building Education and  $Research\ Conference\ 1-5\ (2006), available\ at\ http://www.lawlectures.co.uk/bear 2006/chynoweth\ pdf.$
- 62. See http://www.nyc.gov/html/ddc/downloads/pdf/town\_and\_gown/1.%20CURRENT\_PRO-GRAM/01\_ResearchAgenda2012.pdf.
  - 63. Ospina supra note 43, at 2.
- $64. See \ http://www.nyc.gov/html/ddc/downloads/pdf/town\_and\_gown/3.\%20 CONSORTIUM\_CON$  $TRACT/1.\%20INTEREST\_IN\_PARTICIPATION\_FORM.pdf.$ 
  - 65. See Burns, supra note 3, and Ospina supra note 43.
- 66. David Schachter & Deena Schwartz, The Value of Capstone Projects to Participating Client Agencies, 15 J. Pub. Aff. Educ. 445-461 (Fall 2009).
  - 67. See Jenkins-Smith, supra note 47.
  - 68. New York City Procurement Policy Board Rules § 3-12.
- $69. \textit{See } \textbf{http://www.nycbar.org/pdf/report/ConstructionLaw.pdf} \textit{ and } \textbf{http://www.nycb$ report/uploads/20072050-21 st Cent Construction 20 th Cent Construction Law Updated. pdf.
  - 70. New York City Procurement Policy Board Rules § 3-12.
  - 71. Id. §§ 3-03(j) and 3-14.
  - 72. Id. § 3-04.
  - 73. New York City Conflict of Interest Board Advisory Opinion No. 2003-4.