



Town+Gown:NYC Master Academic Consortium Contract

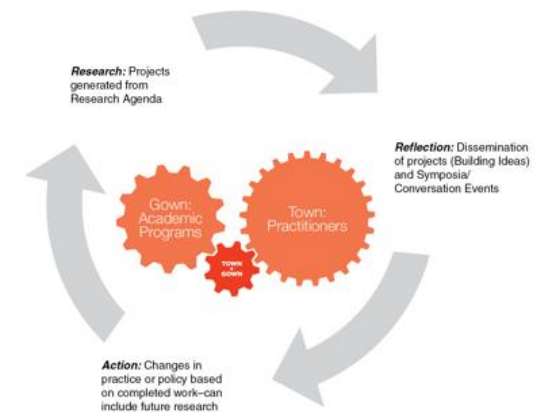
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MAWAC-ENAR Water Research & Innovation Workshop

- **Replicable model for sustained urban practitioner + academic collaboration on applied research projects that solved the (U.S.) procurement problem**
- **Available for collaborative research projects with NYC DEP and other NYC agencies for multi-city research projects identified through Workshop process**

TOWN+GOWN/NYC

- unique New York City-based university-community partnership bringing academics and practitioners together on Built Environment research
- action research program, with academics and practitioners as equals in knowledge creation
 - practitioner is an active participant in research, *not a research subject*, so that, from the start, applied research will be of value and use to the practitioner
- increases applied built environment research, using New York City as a laboratory, and transfer and translate research results to inform and support changes in practices and policies
- two mechanisms:
 - faculty directed research component (= funded research)
 - experiential learning component (= “free” research)





MASTER ACADEMIC CONSORTIUM CONTRACT FOR FACULTY DIRECTED RESEARCH

- solved the procurement problem for U.S. cities seeking to conduct applied research with academic institutions in relatively easy and quick manner
- permits some level of competition among the vendor pool schools so that agencies receive multiple proposals for evaluation
- 14 schools in vendor institution pool
 - Brooklyn Law School
 - City University of New York
 - Columbia University
 - Cornell University
 - Drexel University
 - Fordham University
 - Manhattan College
 - New York Institute of Technology
 - New York University
 - Pace University
 - Pratt Institute
 - State University of New York
 - The Cooper Union
 - The New School

INNOVATIVE FEATURES

- relatively painless and quick way (compared to standalone procurement) for public agencies, with funds, to tap academic knowledge and expertise—the aspirational timeline is:
 - 30-days: Town+Gown sends Agency RFP to academic institutions for review and proposal development
 - 30-days: Agency evaluates Proposals in Response and turns awarded Proposal into the Task Order for registration with Comptroller’s Office
 - 30-days: Comptroller’s Office registers Task Order within 30 days
- innovative master contract formation
 - open-ended procurement let us bring schools on board until 1 year after first public hearing date
 - moved competition to RFP/Task Order stage—schools did not compete to become member of vendor institution pool
 - negotiated acquisition feature permitted schools to contribute to master contract drafting process
 - contract permits various public entities other than NYC agencies to use it
- RFP, Proposal, and Task Order template forms are *only about the research project*—all other contractual provisions in the master contract incorporated by reference
- intellectual property, confidentiality, cost-accounting, collaboration and subcontracting provisions are suitable for academic research
- *third-party funds can fund or supplement city funds for projects*
- vendor institutions can collaborate with each other to make joint proposals, merging their research strengths to address interdisciplinary nature of urban problems
- 10-year contract term with option to renew for additional 5 years—in the process of renewals

MASTER ACADEMIC CONSORTIUM CONTRACT PROJECTS SUPPORT NYC POLICY CHANGE

New York City’s Net-Zero Carbon Target for 2050 Is Achievable, Study Finds

April 15, 2021

New York City can achieve carbon neutrality by 2050 through a dramatic ramp-up of renewable energy, deep emissions cuts across its building and transportation sectors, and transitioning to low-carbon fuels, according to a joint study led by the Mayor’s Office of Sustainability and the two major energy companies, Con Edison and National Grid.

[Read the 1-Page Summary](#)

[Read the Full Report](#)

Mayor de Blasio Releases NYC’s First-Ever Citywide Analysis of Rainfall-Based Flooding and Plan for Future Flood Preparedness

May 14, 2021

Climate change is projected to increase rainfall 25 percent by 2100 in NYC; new plan integrates cutting-edge climate projections into flood preparedness NEW YORK—Today, Mayor de Blasio released New York City’s Stormwater Resiliency P...



**Two Town+Gown:NYC
Research Projects
Investigate City’s Carbon
Neutrality and Future
Flooding Risk**

June 29, 2021



TOWN+GOWN:NYC

Archived Town+Gown RFPs		
Agency	RFP	Due Date
DEP	NYC DEP Regional Scale Nutrient Assessment for the NYC Water Supply Watersheds Project RFP, Under the Consortium Contract Transmittal Memorandum Addendum #1 Addendum #2	03/22/2024
DOC	DOC Logistics Optimization Project RFP Under the Consortium Contract Transmittal Memorandum Addendum #1	12/18/2023
OTI, Mayor's Office of Operations	NYC OTI Citywide Soils Model Interpolation Methodology Research Project RFP Under the Consortium Contract Transmittal Memorandum Addendum #1 Addendum #2	11/22/2023
DOT	NYC DOT Neighborhood Loading Zone Evaluation Study RFP under the Consortium Contract Transmittal Memorandum Addendum #1	4/13/2022
DCAS, MOCR	Climate Vulnerability, Impact, and Adaptation Analysis (VIA RFP) under the Consortium Contract Addendum #1 Addendum #2	1/28/2022
DOT	NYC DOT Overweight Truck Impact Study Addendum #1	12/12/2021

DEP	NYC Carbon Trading Study Transmittal Memorandum Consortium Contract Appendix A Addendum #1	10/18/2019
DEP	Hemlock Woolly Adelgid Biological Control Transmittal Memorandum Consortium Contract Appendix A	10/2/2019
DEP	Croton Water Filtration Plant Study Addendum #1	5/30/2019
DEP	BWS RFP Addendum #1	2/1/2019
DEP	Energy Infrastructure – Pathways to Achieve 80x50 Study Addendum #1 Addendum #2	10/24/2018
DEP	Citywide Stormwater Resiliency Study Attachment 1 Attachment 2-4 Attachment 5 Addendum #1	02/08/2018
DOB	Risk Assessment RFP	01/27/2017
DOT	Traffic Analytics Symposium	11/14/2016
DOB	Wind Study RFP	04/15/2016

DDC	Service Design RFP	07/31/2015
DDC	Healthy Living RFP	07/31/2015
DDC	Equity Lens RFP	07/31/2015
DDC	BIM RFP	07/31/2015
DOT	BQE Charrette	03/20/2015

STATS:

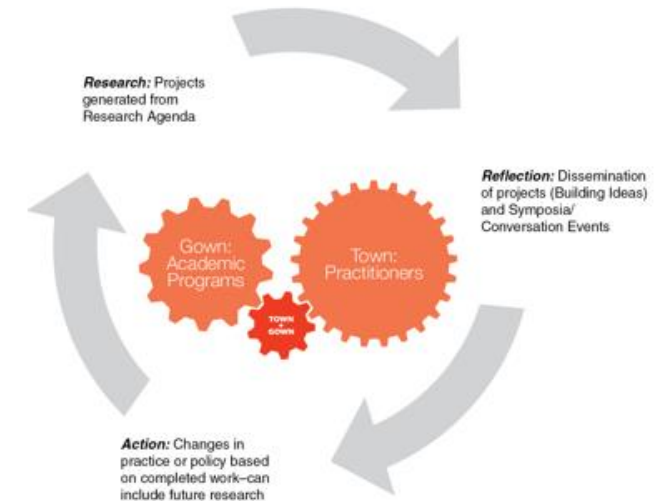
- 20 RFPs leading to Task Orders
- Funding levels from \$50,000 to \$2.5 M

Town+Gown:NYC

- **is a replicable model**
- **that operates from the practitioner side (specifically local government) of the academic-practitioner divide**
- **to support sustained practitioner + academic collaborations with experiential learning programs and funded applied research projects**

Town+Gown:NYC Model

- created from the practitioner (governmental practitioner) side of the academic/practitioner divide to solve observed impediments to research from the practitioner side
- New York City-based university-community partnership that brings academics and practitioners together on research in the Built Environment, a multi-disciplinary research area
- action research program, with academics and practitioners as equals in knowledge creation so that from the start, applied research will be of value and use to the practitioner partner
- increases applied built environment research, using New York City as a laboratory, and transfer and translate research results to inform and support changes in practices and policies
- uses two mechanisms:
 - experiential learning component (= “free” research)
 - faculty directed research component (= funded research)



Town+Gown Background

Observed “Groundhog Day” Problem in Government—Built Environment research and practice is complex and fragmented leading to government in need of applied research but unable to find appropriate mechanisms to sponsor it, translate it and transmit it over administrations, resulting in predictable dramas re-enacted in one administration after another

Learned lessons from government practitioner side

1. You can't have it if you can't pay for it (includes capital projects and funded academic research)
2. Local governments do not do everything people think they do (complicated by overlapping jurisdictions), and state laws constrain activities that are tied to revenues and set state-wide policies (i.e., capacity to act and limits of the “think global, act local” mantra)
3. All politics is local (Tip O’Neill) (place-based research is local and often implicates “politics”)
4. Built environment is not rocket science and is not metaphysics (i.e., most public policy objectives have or require a physical capital intervention—see 1 and 2 above)
5. Don't duplicate efforts of others by working on issues no one else is working on to add value, which often leads to the harder “wicked” long-term systemic problem identification and solutions (see 8 below)
6. Rome wasn't built in a day—stay in lane (see 2-5 above)
7. There are no stupid questions (only stupid question is one not asked earlier because thought it was a stupid question)
8. Stay out of trouble (see 2-5 above)

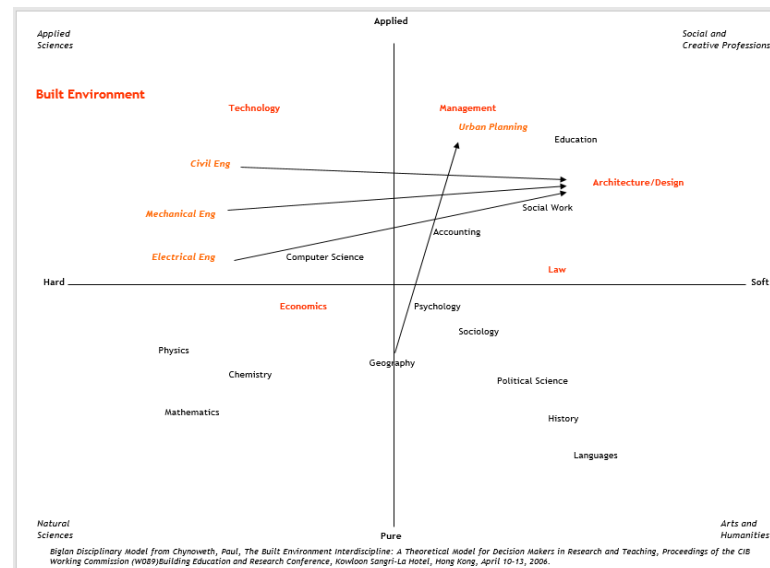
An “incubation” group, representing a cross-section of Built Environment system stakeholders, began, in 2007, to explore mechanisms to break the Groundhog Day loop by increasing applied Built Environment research in systemic context among governmental entities responsible for various public works programs and policies affecting NYC's built environment, as a committed partners in the research, bringing in other practitioners (e.g., professional, trade and civic associations) and higher education institutions.

System stakeholders (Town=practitioners) needed a mechanism to link related academics (=Gown), as equal partners in knowledge creations, on applied research on questions related to what practitioners do/can do (capacity to act) and to discuss research results disseminated among stakeholders to parse out what changes could be made to practice and policy and future research needs in a continuous action research cycle

The Multi-Disciplinary Built Environment

The Built Environment is a complex economic/social system that has many questions to answer within a collaborative effort to marshal and coordinate various analytical capacities and data sets to collectively increase evidence-based analysis, information transfer, and understanding of NYC’s built environment, and those answers need to feed back into the system in an open-source manner to increase knowledge over time to inform changes in practice and policy

Town+Gown’s originally focused on construction-related research, but construction takes place in a complex economic/social system, and the multi-disciplinary Built Environment supports a systems-based research approach linking construction to the broader system of which it is a part, which includes urban planning, economics, management, law, technology and the professional disciplines such as engineering and architecture and allied design fields. The Built Environment, like environmental sustainability, is also a “barn door” through which many types of research projects can pass, including community-focused projects



Town+Gown's Three University-Community Partnership Models

Academic institutions speak of obligations to the community where they are located as a component of their overall mission, yet both academic institutions and practitioner entities find it hard to make effective, productive, and sustained connections without imposing a burdensome new structure on an already highly active and competitive marketplace. By 2008, the incubation group, whose members became the “charter” Town+Gown members, identified three university-community partnership models:

- **Service-learning** (e.g., experiential learning) component was initiated in 2009-2010—we hit the ground running with this component working with capstone, studio and workshop programs

The action research method, within which the experiential learning component operates through a research agenda with agency-articulated research needs, provides a platform and architecture to conduct, document, disseminate and translate academic work product that:

- is of direct value to the City agencies (and the communities they serve) and the students because they use their skills on real-life projects of known interest and relevance to the agencies
- generates long-term value to agencies to inform and support changes in practices and policies, especially through Town+Gown's working groups
- students can present at related symposium events and include as work product for potential employees (abstracts in *Building Ideas* and direct links to working groups)

- **Faculty-directed research** component was initiated in 2010, with the first six master contracts registered in 2015, with total of 15 schools

The master contract structure for funded research is akin to a requirements contract making it easier and faster (compared to standalone procurement) if agency has funds for research

- **Formal university centers/institute** component was initiated in 2021 to expand the experiential learning model
 - research centers have previously developed analytical models and PhD students/post docs working at the centers
 - agencies have data they don't have the technical capacity yet to analyze fully to send the centers
 - Center's PhD students/post docs produce insights for the agencies, and the centers get to play with data to further train their models and gain additional insight into what is happening in the city

Problems for University-Community Partnerships

Experiential Learning Engagements

- Hard to scale up and sustain successful experiential learning engagements within single agency over time and across agencies within the governmental entity due to on-going administrative changes
- Hard for individual agencies to develop and support individual projects and document, disseminate and translate them to be of value over time to the agency and other agencies to support action (policy and practice change)
- Hard to know what agencies need in terms of research (research agenda)
- Hard to navigate personnel changes at an agency over time and across agencies over time due to changes in executive administrations

Action Research Model enabled by annual Research Agenda, matchmaking research project ideas with experiential learning programs, supporting the agency and student teams throughout project, clearing house resources, symposium events and working group structure

Funded Faculty-Directed Research

- Standard procurement vehicles not efficient for academic research, and consultant-based contracts/procurements do not work for academic institutions due to standard intellectual property and publication provisions (*cf.* master contract structure)
- Source selection process in a stand-alone procurement for research adds time to RFP development (*cf.* master contract structure)
- Government wary of hitching horse to single cart when many academic institutions exist within and near jurisdiction—need competition of ideas to select from on particular research needs (*cf.* master contract structure)
- Government resources for research wax and wane over time due to budget constraints requiring a long-term contract
- Hard to know what types of applied research agencies actually need based on their capacity to act unless they tell you

Innovative Master Academic Consortium Contract

- establishes applied research as operational value within government, uniting the government's multiple roles within interdisciplinary area, so that agencies are able, with additional necessary applied research, to translate research results into action
- Develops an enterprise-wide research agenda, as tool for engagement between practitioners and academics, with core research questions and policy overlays that are adaptable across administrations as policy objectives change
- Operates across internal governmental divides to capture and present complex issues and to support research projects with systemic focus and root cause analyses for long-term systemic solutions
- Provides expert knowledge on administrative/institutional datasets generated for enterprise—not research—purposes
- Clearinghouse function maximizes institutional knowledge by keeping past knowledge transfers available across administrations
- Structural cost effectiveness and long-term sustainability
 - Minimal government staffing administers Master Contract so that agency public funds are used exclusively for Master Contract faculty-directed research
 - Minimal government staffing supports experiential learning research component to maximize “free” research and provide translation, dissemination and clearinghouse functions

University-community relationship works in *both* directions:

- Master Contract supports paid faculty-directed research projects and provides government with a real alternative to using private consultants for what should be longer-term academic work
- Master Contract respects and supports academic purposes, functions and operations, as well as the economic development role that academic institutions perform within their communities
- Gown Advisory Council created under the contract performs governance, educational resource and forum functions, supporting Town+Gown's other components

Consortium members can augment public funds with third-party grants available only to them (e.g., NSF, NIST, EPA)

Experiential Learning Component

- 243+ experiential learning projects since 2009-2010 (initial rate 10-12 projects/year, now up to more than 20 projects/year) with 54 academic programs
- 49+ symposium events since 2012-2013 (3-6 events/year)
- Started working group model in 2018 to advance research into action, to which T+G has been driving experiential learning projects to
 - Urban Resource Recovery (formerly Construction+Demolition Waste)
 - Construction Culture+Data
 - Resilient People Places and Projects
 - Toward a Smart City-Utilidors
 - Innovative Water Research (in formation related to UNESCO supported multi-city water research initiative @ <https://www.nyc.gov/site/ddc/about/press-releases/2023/pr-040523-UN-Water.page>)



New York City Partners With the Fashion Institute of Technology to Create Educational, Interactive Coloring Book About New York City's Water Story

April 26, 2023



Town+Gown:NYC, NYC DDC, NYC DEP, NYU Tandon School of Engineering Presented at UNESCO's Megacities Alliance for Water and Climate Inaugural Metropolitan Water Research and Innovation Two-Day Workshop

April 5, 2023