Procuring for a Capital Works IT System in Boston, Massachusetts

As part of Bloomberg Philanthropies’ What Works Cities initiative, the GPL provided pro bono technical assistance to help Boston procure for an IT system designed to improve the management and performance of capital construction projects.

The Problem: Each year, Boston spends over $120 million on construction projects across its Public Works, Public Facilities, Parks and Recreation, and Transportation departments. Prior to engaging the GPL, these projects were managed through a combination of homegrown databases, paper files, and spreadsheets, making it difficult for departments to collaborate and share project information. In an effort to standardize project management processes, increase the flow of data, and improve service delivery both across and within departments, the Department of Innovation and Technology led the procurement for a cross-department capital project management (CPM) IT system.

Applying Results-Driven Contracting Strategies: To ensure that the procurement of the CPM IT system met user needs and fell within the planned timeline and budget, the GPL and Boston:

1) Conducted market research on vendors and products. The City interviewed universities and other public entities that use CPM systems, reviewed their request for proposals (RFPs), and conducted site visits to observe these systems in action.

2) Issued a request for information (RFI) to gather vendor feedback on project scope and pricing structure. The City released a draft scope of work as an RFI in order to gather vendor feedback on project framing, detail, and pricing structures, which are often complex for these types of systems. An accompanying Google Form made it easy for vendors...
to provide input, and for the City to obtain granular information on system component prices.

3) **Released a problem-based procurement emphasizing essential functionalities over prescriptive specifications.** Instead of outlining technical system requirements in the RFP, the City identified its most pressing problems and high-level goals, such as “promote project transparency through data centralization” and “facilitate collaboration.” The City deliberately left the RFP open-ended so that vendors could suggest an array of methods to achieve these goals. Vendors were invited to propose solutions and to recommend process and design best practices from their experiences with other governments.

4) **Requested a phased-in solution so as to slowly introduce process improvements and increase the probability of project success.** The City asked that only essential functions be developed within the contract’s first year, and selected key department staff to receive access to and test the system during the initial implementation phase. This agile product development approach enables the City and vendors to iterate on the design and implementation of core functions and incorporate user feedback. Additionally, it reduces the time necessary to establish an initial working product, and improves the overall likelihood of a successful user experience. Finally, vendors were asked to separately propose and price advanced functionalities in their response to the scope of work, giving the City the ability to incorporate select modules in the second year of the contract and beyond.

**The Results:** Due to extensive market research and engagement with potential vendors, as well as a thoughtful and easy-to-understand RFP, Boston received 13 proposals on its procurement for a new CPM IT system (surpassing the six proposals it typically receives for similar IT procurements). Moreover, having four departments procure for a single system that fits all of their needs facilitated the sharing of best practices, and has already led to process improvement and increased coordination. Finally, the lean initial deployment is less costly, accelerates timelines, and places emphasis on the user experience.