

City of Innovation

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Leveraging the Talent, Ideas and Creativity of Boston's Municipal Workforce

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TABLE OF CONTENTS

| | |
|---|----|
| Executive Summary..... | 3 |
| Introduction & Context..... | 4 |
| Methodology | 6 |
| Innovation in Government: An Overview on Why It Matters | 8 |
| Research Findings..... | 12 |
| Culture of Innovation | 12 |
| Enablers | |
| Case Study: Indianapolis..... | |
| Barriers | |
| Cataloguing Innovation..... | |
| Case Study: New York City..... | |
| Recommendations | |
| Recommendation 1 | |
| Recommendation 2..... | |
| Recommendation 3 | |
| Recommendation 4..... | |
| <i>APPENDIX A: List of Interviewees.....</i> | |
| <i>APPENDIX B: Interview Questions</i> | |
| <i>APPENDIX C: Survey Instrument.....</i> | |
| <i>APPENDIX D: Survey Data Results</i> | |
| <i>APPENDIX E: City of Boston Organizational Chart</i> | |
| Bibliography | |
| End Notes..... | |

EXECUTIVE SUMMARY

Few municipal governments can claim a reputation for creativity and innovation. City governments are most often presumed to be large, bureaucratic, slow-moving machines that churn out services with little regard for ingenuity or efficiency. But in Boston, Mayor Thomas Menino is challenging these assumptions, and asking questions like, “what if municipal government were able to innovate, adapt, and improve with the same capacity and determination as its private sector counterparts? How would that impact the cost and quality of city services?” In his fifth inaugural address in January 2010, the Mayor named innovation as one of his key priorities for the next four years. Staff in the Mayor’s office have responded with a concept for an **Urban Innovation Center** focused on two primary goals:

- GOAL 1: To capture talent and creativity from external partners
- GOAL 2: To encourage innovation within the municipal workforce

This study is focused on the latter goal. It considers the current culture for innovation within the City of Boston and suggests methods to encourage city workers to share and develop ideas on how to improve services and proactively address the needs of a complex and demanding constituency.

Evidence from cities around the country suggests that there is value in encouraging innovation in the municipal workforce. Enabling employees to share and develop ideas about how to improve their job, their department, and their city can lead to better services and reduced costs.

Our findings indicate that City of Boston employees do have ideas for how to improve their jobs and their departments. We have collected and analyzed just a few of the many examples of innovative activities and programs happening both within departments and across departments. However, the findings also show room for improvement. Similar to other organizations with strong senses of traditions and cultures of work, the City struggles in capturing these ideas, building processes to channel them and encouraging a feeling that innovations can move from concept to reality in a sustainable fashion.

Based on intensive field work and investigation into the City bureaucracy, we have identified the current capacity for innovation as well as the primary enablers and barriers to new ideas within the organization. Our recommendations seek to address four primary issues brought out by our findings and reflective of needs for a robust innovation agenda:

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1. THE ROLE AND IDENTITY OF THE URBAN INNOVATION CENTER
 2. THE PROCESS BY WHICH INNOVATIONS ARE SOUGHT, DEVELOPED, AND IMPLEMENTED
 3. THE IMPORTANT FUNCTION OF MID-LEVEL MANAGERS IN IDENTIFYING AND IMPLEMENTING INNOVATIONS
 4. THE USE OF METRICS TO EVALUATE SUCCESS AND CONTINUALLY IMPROVE
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Through these findings and recommendations we hope to assist the City of Boston in taking advantage of the knowledge and experience of its workforce and implementing a framework from which the Mayor’s office can constructively intervene in municipal operations and promote a culture of creativity.

CONTEXT & BACKGROUND

On January 4, 2010, Thomas Menino was sworn in as Mayor of Boston for a historic fifth term. Such an unprecedented mandate could be interpreted as vindication of the status quo. Yet, in his inaugural address, Mayor Menino outlined a bold vision premised on transformation – transformation that reaches from education to the physical landscape to the way the city delivers services. Driving all this transformation? *Innovation*.

❖ BOSTON MUNICIPAL GOVERNMENT

The City of Boston has a strong executive form of government made up of 17,000 municipal employees. The workforce is on par with similarly sized cities, with the exception that Boston controls its own public school system and therefore its count includes nearly 9,500 staff that work for the Boston Public Schools.

Boston is uniquely positioned amid one of the nation's foremost hubs of innovation and technology. It is surrounded by institutions such as MIT, Harvard, Northeastern, and Boston University that sit on the cutting edge of academic research. In addition, the city sits inside the Route 128 loop, where high-tech companies, venture capital firms, and research labs fuel private sector innovation. The culture of innovation surrounding Boston presents both opportunities and expectations for the city. Opportunities abound for partnerships and shared resources with universities and companies, but the city's highly educated and tech-savvy population presents a challenge for the city to keep up with constituent demands for efficient and effective services.

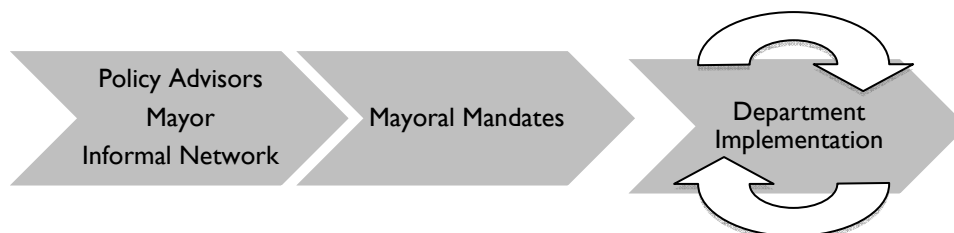
“Goal three is to transform our delivery of basic city services and usher in a wave of municipal innovation... It's time to build on our early experiments, deliver on projects we've dreamed up, and make Boston a proving ground for dozens of novel solutions.”

-Mayor Menino's Inaugural Address, January 4, 2010

❖ INNOVATION IN BOSTON

In the current environment, the Mayor's innovation agenda generally comes from three avenues: policy advisors, his own agenda items, and an informal network – which may include community leaders, private sector/academic partners and/or city staff. These innovations turn into top-down mandates that are implemented by departmental staff. Additionally, each department has an internal flow of innovation that generally stays within that department. This flow can be initiated by department leaders or innovative staff that implement marginal improvements within their own position or division.

Exhibit I: Current model of innovation in Boston.



At the department level, there is no standard operating procedure for innovation harvesting. Moreover, departmental leadership looks at innovation more as it relates to the mission and operating environment of the department rather than its citywide applications. However, some department leaders highlighted the importance of having ideas bubble up through informal forums, open door policies and commitment from management to hear ideas from the line staff.

This process has led to some great successes, which we highlight in this report, but it also comes with some inherent challenges. In the research to follow we have identified specific barriers standing in the way of greater innovation in Boston's city government, as well as opportunities to capitalize on existing sources innovation and improve the overall culture of creativity and problem-solving in the municipal workforce.

METHODOLOGY

To determine how the City of Boston can promote innovation among its municipal workforce, we needed to understand the current culture of innovation in the City. This resulted in soliciting opinions and thoughts from the leadership down to the front-line staff. In addition, we had to look beyond Boston to learn how other cities fostered workforce innovation, and understand the challenges and successes that could inform Boston's innovation strategy. Our research involved interviews of the City leadership and senior management, a survey administered to select departments in the City bureaucracy, and a review of existing literature on public sector innovation and best practices in municipal workforce innovation.

❖ STAKEHOLDER INTERVIEWS

Overall, we conducted a total of **13 in-person and one over-the-phone interviews with City staff**. These interviews averaged about 40 minutes in length. We interviewed Commissioners and leaders from six departments as well as staff from the Mayor's Office to learn about the City's current approach to innovation. These departments included: Public Works (DPW), Transportation (DOT), Neighborhood Development (DND), Parks, Inspectional Services (ISD), and Management Information Systems (MIS). These departments and offices were chosen because of their generally large citizen interaction, general need for continuous service improvement and their experimentation with new technologies and operational tools.

From the Mayor's Office we interviewed staff from Administration and Finance, Human Resources, Labor Relations and Policy and Planning. We focused on these staff members because of our focus on human capital and the employee attitude and capacity for innovation, historically and into the future. Additionally, we felt it was important to gain some perspectives on the financial and union-related circumstances on promoting an innovation agenda in the City. We asked the Commissioners and selected leaders a variety of questions about:

- Their view of the culture of innovation in their departments
 - Barriers to innovation in their departments
 - Examples of successful and failed attempts at innovation among employees in their department
 - The transmission of ideas between their department and other city departments
 - The relationship between their department and the constituents
- (See Appendices A and B for a full list of interviewees and questions)*

❖ CITY OF BOSTON WORKFORCE SURVEY

Our survey, entitled "Human Capital Study: Municipal Workforce Survey", was sent to employees at all level of the Boston workforce, from frontline staff to executive leadership, in four departments. The survey aimed to capture whether employees had new ideas, what they did with them, and how successfully ideas were disseminated and implemented. It also inquired about attitudes toward innovation, particularly on perceived barriers, risk-taking and accountability.

We administered the survey from January 14, 2010 to February 12, 2010 where it was available in electronic and paper format to **963 employees from DPW, MIS, ISD and DND¹**. The **total number of responses was 302**, for a **31.4% collective response rate** from those departments. The survey sample represents approximately **1.8% of the City's total municipal workforce**. Not including Boston Public Schools employees, the sample represents approximately 3.8% of the workforce. (See *Appendix C for a copy of the survey tool*).

Respondents were asked to self-categorize themselves by position type. Though there were some instances of ambiguity, most respondents were able to place themselves into one of the three categories provided. Though the City is a much more complex organization, we felt that at this stage of analysis this type of three-tier split would provide strong grounds for future analysis. The categories were reviewed by our client in MIS. The categories are:

- **Front-line staff** – Staff commonly found in the field, very limited management responsibility if any, and a high degree of interaction with constituents or direct service work.
- **Mid-level Management** – Staff with a degree of managerial authority and found throughout the layers of a particular agency's bureaucracy. Typically manages a division or sub-division unit.
- **Senior Management** – Upper level and senior executive staff at the agency and in the Mayor's office, high degree of decision-making power.
- **Other** – Typically contract or consultant staff (i.e. contractors, interns).

❖ LITERATURE REVIEW AND BEST PRACTICE CASE STUDIES

An important part of our study was to review previous work on municipal innovation. We reviewed some of the more recent research and understanding on harnessing efficiency, promoting creativity and risk-taking and nurturing innovation in the public sector, especially at the local level. This laid the conceptual foundation for our analysis of Boston's city government.

Additionally, our research took us beyond the Boston to study other cities and how they were able to overcome their unique barriers and encourage innovation. We interviewed current and former government officials from Indianapolis and New York City who have been particularly successful in pushing innovation in local government. Speaking with these officials helped us identify successful methods of promoting and implementing innovative practices and an innovation agenda.

¹ Total Agency Staff Levels (Survey Set): DPW – 450; MIS – 115; INS – 220; DND – 178

INNOVATION IN GOVERNMENT: AN OVERVIEW OF WHY IT MATTERS

Innovation, long considered a private sector notion, has become an increasingly popular objective for local governments looking to modernize and streamline their services to keep up with changing constituent needs. In this section we will consider generally the definition and role of innovation in local government.

❖ WHAT IS LOCAL GOVERNMENT INNOVATION?

In some ways, defining innovation is straightforward. One can simply think of innovation as something “new.” Yet, applying this meaning to an organization like local government is more complex. Innovation in local government is not a static concept, but a process that puts, as Althshuler and Zegans state, “novelty in action.”ⁱ Yet, even this pithy description, does not capture considerations of scale, organizational transformation, and risk, which are further shaped by the particulars of an organization and its service area. Thus, rather than dive into the rich discussion over the exact definition, we will adopt Moore, et al’s (1997) definition to a local government context, **“An innovation is any reasonably significant change in the way [a local government] operates, is administered, or defines its basic mission [in how services are delivered to the public].”**ⁱⁱ

❖ THE NEED FOR INNOVATION

In fiscally austere times, complicated by increasing fixed costs and a more critical, technologically-savvy, and demanding constituent base, innovation is commonly looked to as a mechanism to ensure appropriate service delivery. Even beyond the current economic climate, things like rapid information exchange, ageing populations, and the effects of climate change, will continue to push local governments to innovate.ⁱⁱⁱ Yet in reality, the motivation to innovate in local government is not new. Times of crisis heighten the urgency for efficiency and cost-effectiveness, but local governments constantly operate under political and economic constraints, not to mention uniquely social and ethical limitations unseen in the private sector.

The public expects both high performance and accountability. These demands do not mesh well with the traditional methods of local government. They do however command engagement in what Althshuler calls, “the never-ending task of mission-driven innovation.”^{iv} The translation of this demand can take many shapes, and that is the true task of today’s government. Ultimately, the conversation is not so much about the need for innovation, but about how to consistently foster it within local government given the inherent constraints.

❖ CHALLENGES TO INNOVATION

Despite the importance of creating a culture of innovation in municipal government, there are significant hurdles. Government faces a variety of internal and external pressures that often stand in the way of implementing creative new ideas. Sanford Borins’ 2001 report on challenges to Government Innovation categorized the obstacles to innovation in three categories, bureaucratic/internal, political, and external.^v

Borins states that bureaucratic barriers to innovation include turf wars within and between departments, union opposition, and the challenging logistics of implementation. Political barriers included lack of funding, regulatory constraints, or legislative opposition. External barriers include public skepticism about the resulting impact or equal distribution of innovation, and concerns about interference with the private market.^{vi}

In a 1985 report, David Ammons cites 37 different “barriers to productivity improvement in local government”. Among his findings were a lack of performance measures and accountability, few monetary incentives to innovate, and an absence of market pressures.^{vii} Reflecting upon many cities across the country including Boston, these barriers remain as common and entrenched as when they were first reported twenty-five years ago.

More recently in a 2008 report commissioned by NESTA in the United Kingdom, Bacon, et. al., reported that, “specific targets can squeeze out the room for creativity; and risk may be discouraged in a culture where few are promoted for successful risk taking, but failures are quickly punished.”^{viii} The common thread running between much of the literature of barriers to innovation is that the culture within a municipal workforce offers more disincentives than rewards to the creative employee. Municipal unions push hardest for equality, consistency, and standardization rather than performance-based compensation; supervisors demand attention to day-to-day operations and offer few resources and little patience for experimentation; and tax-payers demand quality services, but rarely notice or praise innovative practices.

Our research in Boston has highlighted many of these same barriers. At the senior management level, commonly cited challenges included labor union conflicts, management structure, available funding, and time and space outside of day-to-day operations to focus on innovation. The vast majority of employees surveyed responded that there was little incentive to take risks, and yet many of them had reported coming up with and sharing a new idea about their job. So given these obstacles, the question becomes, how do cities overcome the barriers to encourage innovation?

❖ OVERCOMING THE CHALLENGES

Local governments have used a variety of approaches to get past the hurdles and encourage and implement innovative ideas. Borins suggests two categories of tactics: persuasion and accommodation. Persuasive tactics include: marketing and public relations efforts to show the importance of innovation and demonstration projects to show the value new ideas can have. Accommodation efforts include: training, co-opting, or compensating parties that may be affected by an innovation.^{ix} This could effect managers, union leaders, or frontline staff who are concerned about negative repercussions of a given innovation.

In June 2009 the Young Foundation and the British Council commissioned a report on “Breakthrough Cities,” written by Geoff Mulgan and Charles Leadbeater to determine how some cities become innovative. The report identified a variety of organizational culture qualities that have helped cities and their governments generate new ideas. Among their suggestions:

- Recognize crisis and challenge
- Create avenues for collaboration
- Build a culture of openness
- Disperse power through the bureaucracy^x

The authors argue that the final one, dispersal of power, would be a welcome improvement in most cities. Over-centralization and patronage networks exclude potential innovators and protect the status quo. Mulgan and Leadbeater offer the following table to highlight the relationship between organizational culture and innovation:

| The relationship between organisational culture and innovation potential | |
|--|--|
| Centralism | Devolution |
| Isolation Control Leading Information Quantity Uniformity Low risk High blame Conformity ↓ Less local innovation | Partnership Influence Enabling Participation Quality Diversity High risk Low blame Creativity ↓ Greater local innovation |

From Geoff Mulgan, et. al. (2009), "Breakthrough Cities." London: British Council. 2009

Many of these themes have risen out of our conversations with senior managers in Boston and elsewhere. Successful innovations seem most often to arise from environments where employees feel a level of access to management. This type of access signals not just openness but trust and creates a means of empowering employees. However, simple "open-door policies" are easy to suggest, but employees seem to crave some sustainability, both in terms of where their ideas go and the new ideas that are passed down to them. The need for senior managers or the city executive to "provide cover" to innovators has also been a prevalent theme. Given the realities of structure, accountability, responsibility, and size in local government these are challenges above and beyond what one might find in other sectors. As we explore the environment for innovation in Boston, we will recommend specific actions that senior leadership might take to overcome some of these structural barriers.

❖ IMPLEMENTING INNOVATION

Today, it is rare to find a local government that does not agree that innovation is good for performance and service. Undoubtedly, a commitment to new ideas from across the organization is of absolute importance. Yet beyond commitments, an organization's character and culture will truly drive innovation. Sanford Borins has developed a list of seven qualities of innovative public sector organizations that serve as a framework for organizations assessing their capacity to foster innovation. These qualities are:

- An innovative culture that receives support from the top.
- Rewards to innovative individuals (may include financial compensation such as performance-related pay and gain-sharing)
- A central innovation fund to support innovative ideas within the public sector.

- Diverse backgrounds and encouragement of different ways of thinking among an organization's members
- Effective systems for seeking out information from the outside, for example, by benchmarking, making site visits and participating in professional networks.
- Capacity to draw ideas from people at all levels
- Priority on experimenting and evaluation of experiments. ^{xi}

These broad goals do offer a general organizational agenda for cultivating innovation. More importantly, the goals suggest an approach to innovation that is “means” and not “ends” driven. Even though in large organizations, innovation rears its head frequently and often in surprising places, it's hard to define such organizations as innovative.^{xii}

These characteristics are difficult to implement at once, and often suffer from broader external forces. The City has had a record of innovation from the top, yet today's fiscal situation and the Boston's strong union culture make options like performance-pay and gain-sharing a non-starter. The innovation agenda should be considered as a multi-staged, multi-dimensional effort, which is certainly difficult in political environments, but more reflective of the nature of change in such institutions. Moreover, innovation should be treated as a something to be infused into the organization, not the endgame itself. This type of incorporation is something we explore at length later in the report.

Ultimately, the context of these traits and the acceptability of them to a particular organization are adaptable and should reflect Behn's notion of “tacit knowledge”—the “know-how and judgment that come from experience” within a particular organization or community. Recognizing the value of tacit knowledge is an essential aspect of effectively adapting best practices because it factors in the operational, political and social realities of an organization and its ability to implement and respond to change.^{xiii} For example in the City, our findings indicate a strong fraternal culture, where hard work and loyalty are valued and mid-level managers create, vet and transmit ideas. Trying to push new ideas and “best practices” into the organization should certainly attempt to capitalize on these traits.

RESEARCH FINDINGS

This section will present the findings from our primary source research. As explained earlier in the methodology, this was composed of in-depth interviews with city workers and leadership as well as a survey administered to employees of pre-selected departments.

“Innovation. Really break it down. Where is the organization ready for this?” – City Of Boston Official

We begin with organization-wide findings on the appetite for innovation. This information is primarily culled from our survey. Though the entire pool of survey respondents was 302 workers, when calculating the position-based percentages, we only analyzed data from the 291 that indicated their position type (see Methodology for position type definitions). When looking at tenure we included the full set. In general, we have focused analysis from a position type perspective given the more equalized distribution of respondents; splits by tenure subgroups are less evenly distributed (nearly 70% fall into the 10 years or more demographic). The tables below show the number of respondents according to type:

Tables 1 & 2: Survey Respondents by Position and Tenure

| Position | Total | Tenure | Total |
|-----------------------------------|------------|--------------------|------------|
| Front-line staff | 147 | < 3yrs | 42 |
| Mid-level departmental management | 82 | 3 -5 yrs | 26 |
| Other | 17 | 6 - 9 yrs | 24 |
| Senior Management | 45 | 10 - 15 yrs | 72 |
| | | >15 yrs | 132 |
| | | No Answer | 6 |
| Grand Total | 291 | Grand Total | 302 |

The second half integrates information from the survey and the 12 interviews with City leadership and management and presents them in a modified SWOT framework that focuses on current enablers and barriers to innovation. It should be emphasized that the bulk of our opportunities analysis falls into the recommendations portion. The information is presented in a manner that both aggregates and cites specific examples.

CULTURE OF INNOVATION

❖ PEOPLE

Overall, there appears to be a strong baseline for innovation in Boston. Of the respondents approximately **86% reported that have had a new idea about how to do their job more effectively**. This percentage is nearly identical when respondents are considered according to length of tenure and position type. **Interestingly, the tenure subgroup with the highest percentage is the 6 -9 year bracket and the position subgroup with the**

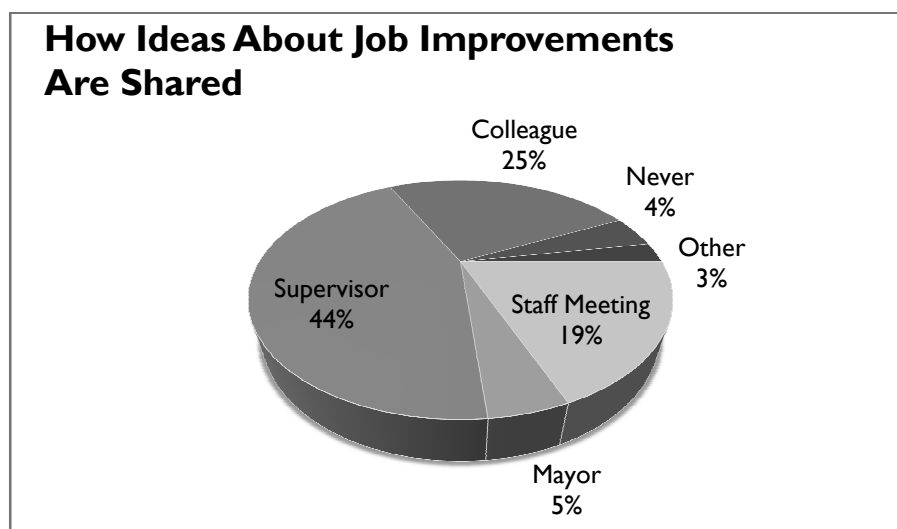
highest percentage is mid-level management. This not only confirms both additional findings from leadership interviews about the critical role of mid-level management in the innovation generation process, but also helps direct potential workforce development and solicitation action on the part of the organization and its efforts.

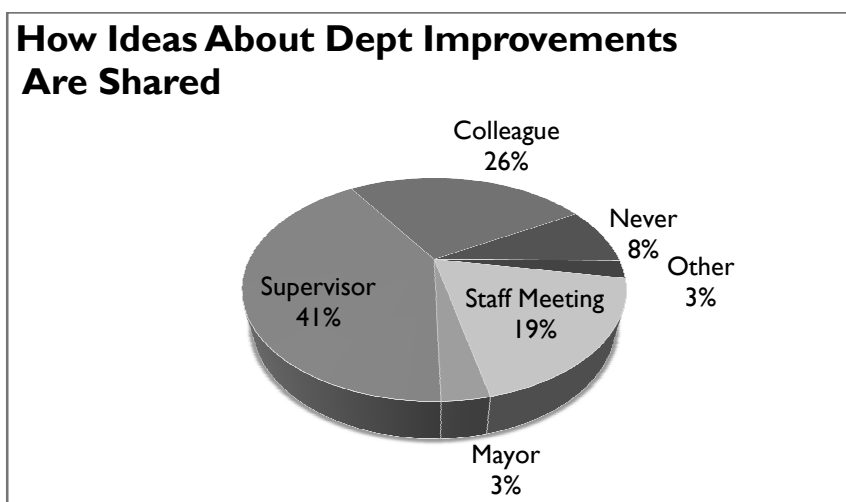
A slightly lower, but no less affirming, percentage reported that they've had **a new idea about how their department could be run more effectively.** Overall, **76% reported that they've had an idea to improve their department,** this is similarly reflected when respondents are considered by length of tenure and position type. **On this issue, the tenure subgroup with highest percentages is the 10-15 year bracket and the position subgroup with the highest percentage is the senior management.** This suggests that as workers grow and gain experience in the organization, they exhibit and consider innovation not based on job-specific responsibilities by more from an agency/organization-wide perspective.

❖ PROCESS

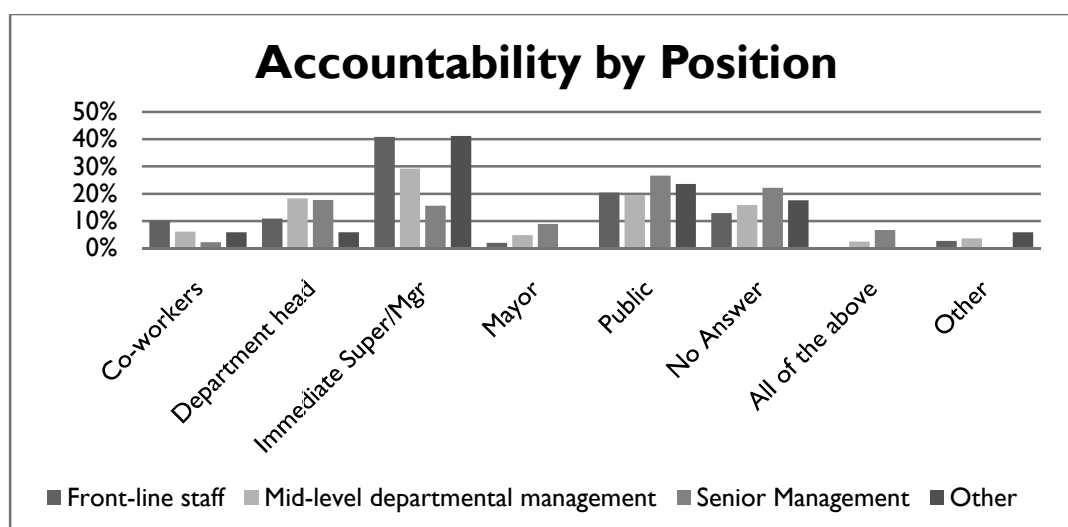
The natural follow-up question is of course, “So, if the City workforce is rife with new ideas and innovation, what happens to them?” Certainly packed into that question are a number of issues related to the history and politics of the organization that for the purposes of this study we did not perform in-depth research. However, we did uncover certain aspects about how ideas move through the organization by tapping into the culture, mission and dynamics of the City bureaucracy.

Graph 1: Idea Sharing Process among Boston Municipal Workers



Graph 2: Idea Sharing Process among Boston Municipal Workers

It's clear that the City's workers typically go to those in their immediate sphere of influence when they have new ideas either about jobs or about agency-level changes. This suggests that the organization as a whole benefits from strong unit level relationships and trust among workers and their direct managers. Equally encouraging is the fact that only 4% and 8% don't do anything with ideas on jobs and departments, respectively. In the table below we see again the strong role direct managers and the immediate work environment play on employees. Direct relationships inform productivity and action because it is in those relationships that employees feel the most accountability.

Graph 3: Sources of Accountability among Boston Municipal Workers

The variation by position type is interesting to consider as well. Front-line staff, possibly due to the nature of their work, also feel accountable to the public and to a lesser degree to their co-workers. However, senior management feels most strongly accountable to the public and much less to the Mayor despite their more frequent interaction with the Mayor and his staff.

Mid-level managers, seem to spread accountability across department heads, immediate supervisors and the public relatively more than the other position types. This again seems to align with their intermediary role. The fact that employees seem to function in strong team-like environments has potential positive gains for innovation and addressing bureaucratic barriers. Team-based processes allow for collaboration, frequent communication and collective buy-in and responsiveness. Mid-level managers can serve as the “key men” in overseeing possible mini-innovation teams.^{xv} Overall, the process results indicate managers are a crucial sounding board for new ideas and can play a critical role in making or breaking an effort.

Unfortunately, it’s not all good news regarding the harvesting of innovation. Though we will further breakdown the barriers present in the organization, it is worth exploring now some of the general cultural and psychological impediments that stymie ideas moving through and across ranks.

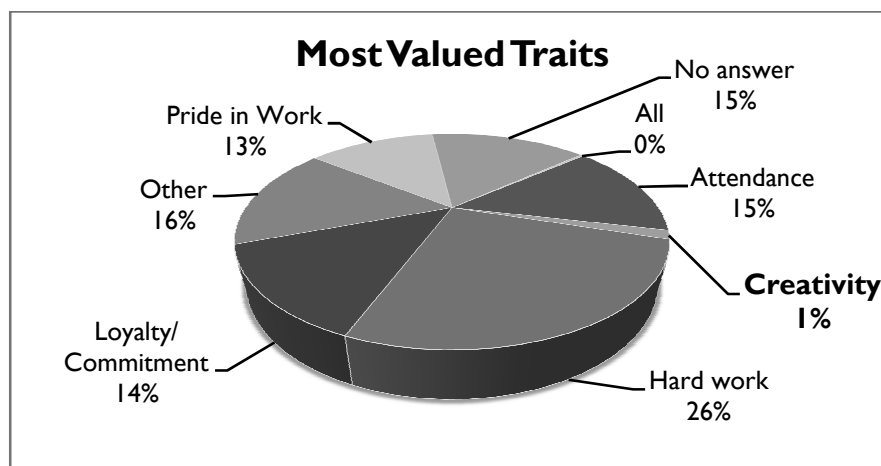
Typical of large public sector agencies, the appetite for risk-taking among City workers is low. **Roughly 74% indicated that there are no incentives for risk-taking.** That said, the data does not necessarily suggest that workers aren’t inclined to be more experimental with their efforts, but rather that they don’t feel there’s much benefit to it.

Table 2: Risk Taking by Position

| Position | No | Yes | No Answer | Grand Total |
|-----------------------------------|-----|-----|-----------|-------------|
| Front-line staff | 76% | 13% | 11% | 100% |
| Mid-level departmental management | 73% | 13% | 13% | 100% |
| Senior Management | 67% | 18% | 16% | 100% |
| Other | 65% | 12% | 24% | 100% |
| Grand Total | 73% | 14% | 13% | 100% |

The percentage is basically mirrored when the survey group is broken down both by position and tenure. Though the table above only provides information by position, it’s primarily because when viewed through the tenure splits there very little variation. However, when looking at the position type splits we do see that there is some increase in the perceived incentives for risk-taking.

Graph 4: Most valued job traits as perceived by City of Boston Municipal Workers



Based on some of findings around trust and relationships among the workforce it is not surprising that traits like “hard work” and “loyalty/commitment” are considered by the workers to be most recognized by the organization. These are critical components of keeping the organization tied to its public mission, and reflect much of the anecdotal responses we obtained from staffers on beliefs regarding working for the City. **However, what is most telling for our purposes is the low perceived valuation of “creativity.” Feeling confident that leadership and organization value out-of-the-box thinking and problem-solving is essential to nurturing innovation.** This finding suggests that rather than looking at issues and challenges differently, workers typically approach them conservatively and as they have always done. While they are working hard and committed to their colleagues and agencies, they may be missing opportunities for efficiencies and innovation.

“I see our department heads overworked and stressed out because they don’t have enough people to think within their depts. They end up doing more problem diagnosis than solution generation”

– City Of Boston Official

❖ ENABLERS

Through the course of research, we were able to identify a number of what we call “enabling factors” for innovation. These are processes, mandates or general characteristics that have played in a key role in driving innovation in departments or citywide. Lead drivers are the most commonly cited enabling factors from leadership. Secondary drivers are important, but are often dependent to the particular mission of an agency and may be more challenging to scale across the organization. These are factors that have worked in the past so they do not represent the full spectrum of approaches to facilitating innovation. However, it’s important that these do reflect the organizational culture and “tacit knowledge” of the City and are good starting points.

Lead Drivers

Mayoral Initiative – The City currently benefits from a very “hands-on” Mayor. This has been a driving force for innovation as he identifies an issue and/or problem and passes on the responsibility of addressing to departments. This has succeeded with efforts like the CRM system and the City’s progressive approach to housing because the Mayor establishes a clear mandate.

- In the case of the CRM, action was pushed by remaining competitive with other cities, advancing the customer-service agenda, as well as the Mayor’s belief in a highly responsive local government. On the housing agenda, the Mayor had a clear vision of maintaining the City’s integrity and accessibility for all types of housing consumers and thus initiated the Leading the Way strategy.

Timing – Staging an innovation matters especially when an agency is considering or in the midst of a large-scale operational and/or strategic change. Small-scale innovations can be folded into the broader shift. Such innovations can be “hardware” or “software” oriented.

- Inspectional Services was able to institute many of its smaller scale service improvements (for example, the photographs on building code violations) as part of the agency’s larger move to more automated processes and systems.

Lead Drivers

Incubation/Collective Issue Identification & Problem-Solving – In many ways this is most complicated means of generating innovation, yet it also has the potential to bear the most benefit. In some instances this type of approach has begun with a Mayoral mandate, other times it has simply been a matter of getting the right people in the room together. However, the parties all have to be committed to a larger, collective goal that allows them to both maintain and align interests and mission.

- In the City, the Leading the Way initiative, now in its 3rd phase is a standout example of this factor. All departments involved are able to collectively agree on the broad goal of housing opportunities for all citizens and coordinate agency interests around the goal (i.e. DND focuses on low-income and affordable housing while BRA looks at market rate, but they look at the City comprehensively and plan in conjunction not in silos).

Leverage Mid-Level Managers – One of the City’s key assets is its strong management resources. Results from the survey indicate that approximately 75% of both mid- and senior level management have been with the City for 10 years or more. About 60% of mid-level and 73% of senior management have attempted to implement an innovative idea in their departments, and 62% of both feel their respective departments are innovative. Moreover, front-line, mid-level staff and unclassified workers like consultants and contractors often turn to immediate supervisors to both vet, test and support new ideas. Thus, managers, when considered in a direct oversight perspective are often both the source and sounding board for new ideas, making them essential components of the process. The importance of good managers was commonly cited by department leadership. A number stressed the critical need for good decision-making and advocated shadowing and inter/intra-departmental “sabbatical” type opportunities to keep managers fresh, energized and creative in assessing and dealing with problems.

Flexible Staff – A dynamic, problem-solving staff allows for lateral movement and real-time responses to new opportunities like grants, special projects or new policy initiatives. This may be more suitable in more policy-driven agencies like DND and DOT, but it can thrive with the right leadership. Replenishing agency-based policy and planning shops can help facilitate forward-thinking. Leadership from DOT repeatedly mentioned the importance of the comprehensive “30,000 ft view” provided by in-house policy specialists and cited the “Complete Streets” program as the type of initiative that could thrive in that sort of professional environment.

“Nimbleness” in Improving Service Delivery – This type of *facility* with service delivery is a characteristic all hierarchical organizations hope to nurture, but struggle in building given inherent conflicts and scale of operations. However, “nimbleness” can be cultivated in pilot fashion with efforts where agencies are part of a continuum of services to constituents that draw in private, non-profit and public resources. If the public agency is in some form creating a bottleneck through regulation or oversight, then there’s motivation to transition into leaner processes that emulate market efficiency.

- One example is reforms taken by the Boston Home Center (BHC) to improve its lending services to homebuyers. BHC realized that the pace of their internal loan requirements were restricting homebuyers from closing. Mounting an internal campaign premised on reasonable, well-backed assumption, BHC created a recourse agreement with lenders and granted them access to an external account. The change emulated processes in the private sector and ultimately helped citizens. Keys to the whole innovation were recognition of market failure, identification of a policy alternative, proper marketing to leadership and follow-through.

Automation – Where an agency is delivering standardized, “trackable” services where targets can be easily measured and determined, substantial efficiency gains can be gained through larger-scale automation efforts. Though for agencies that have functioned in paper-based systems, shifting to automated systems can help bolster efforts to move to performance driven operations. However, automation in agencies should incorporate the input of users and reflect their expertise in relevant information and how interfaces are designed.

Impact Bargaining – This is a measure that can be used by the City when confronted with challenges and disputes from relevant unions. Essentially, the City is able to make changes within departments that reflect actual union contracts. In some instances, the City has not effectively enforced this technique.

Case Study: The Mayor's "Innovation Seekers" in Indianapolis

In 1992 Mayor Stephen Goldsmith was elected to office in Indianapolis on a platform of reform. The arena was clear. The Mayor had inherited a \$500 million dollar balance in unfunded liabilities and a city in financial peril.

Mayor Goldsmith introduced a number of programs to help cut costs in municipal government, including "managed competition," to allow private contractors to bid for certain city services and performance-based pay for municipal employees.

As he was making top-down changes, the Mayor was also looking for avenues to generate cost-saving innovations from within his workforce. For this he hired Skip Stitt and Chuck Snyder to help seek out and promote employee ideas.

Concerned that creative ideas were being stifled by the municipal hierarchy, Goldsmith wanted to create direct access for workers to bring ideas to the executive office. "I hired [Stitt and Snyder] to run through government and find ideas, and not be beholden to the managers," said Goldsmith, "[We aimed] to create a culture where [new ideas] are approved so that managerial retribution is expensive to the manager."

Stitt offered front line workers direct access to the Mayor, believing that the people on the ground each day were the ones who could identify gaps in service and wasted spending. According to Stitt, "I began meeting, at the Mayor's direction, with union staff without managers. I had an open door policy with labor. We had guys who had never been in the Mayor's office who could literally show up without an appointment. That began to build some trust."

Stitt spent significant time in the field, riding the garbage routes and working with the road crews to enable employees share ideas without the layers of bureaucracy. "I don't think this job can reside inside the departments," said Stitt. "In the departments you've got too much small politics going on, opportunities for promotions, demotions, and pay changes. [My job] needed to be outside of that chain of command...reporting directly to the Chief Executive."

In addition to providing access, Mayor Goldsmith created two innovation programs, the "Hot Idea\$" program and the "Golden Garbage Award." The Hot Idea\$ program offered a cash prize for cost-saving and/or service improving ideas in the city. A few such ideas included the design of a camera float for sewer line inspections, saving the city over \$2,000 and a decision to send RFP postcards rather than full bidding packets to city vendors to save on paper and postage. The Golden Garbage Award was a prize for the disclosure of the most extreme examples of irresponsible government spending. Discoveries included hundreds of thousands of unnecessary dollars spent on everything from truck repair to baseball field chalk.

In addition to providing access, Goldsmith, Stitt and Snyder also offered profit sharing opportunities for employees and departments that saved money. They shared the departmental budgets with every employee and even offered outside training in cost modeling to line staff so they could learn where funds were being spent unnecessarily. When employees learned for example that their department spent \$800,000 on legal fees for grievances – money that could go toward bonuses if unspent – grievances fell 97%. Similarly, time lost to injury and "shrinkage" (workplace theft) fell dramatically.

By creating access and celebrating and rewarding innovation, the city of Indianapolis helped create a cultural shift among the workforce and enabled a set of effective and efficient new approaches to service delivery.

❖ BARRIERS

The ways in which innovation is hindered in the City is both typical of large municipal governments and unique to the organization, particularly in how such barriers manifest in the specific political and budgetary climate of the City. For purposes here, we've identified what barriers are unique to Boston. These are challenges that appear repeatedly and represent particular aspects of the bureaucracy. In addition to those described below, a number of common barriers including political realities and priorities, media scrutiny, union hurdles and negotiations and financial wherewithal were also commonly cited.

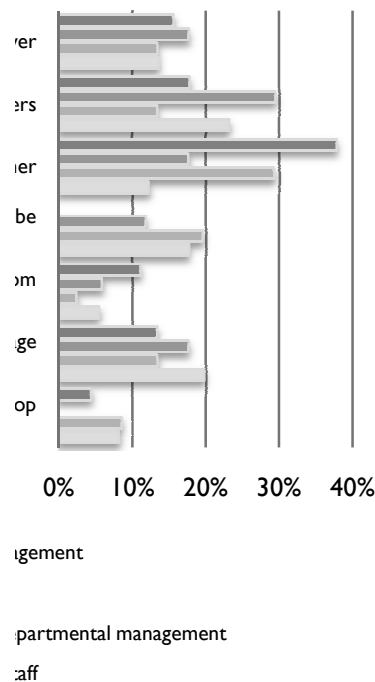
Silos & Territoriality – While at the senior leadership level, departments expressed a good deal of sharing and interaction with other departments, many cited a frustration over the bureaucratic barriers between agencies. Often, this seemed to be a consequence of a perception that departments resisted thinking about collective efficiency to protect budgets, jobs and union battles. This resistance also prevented thinking about duplicative services and ways of eliminating unnecessary separation. It's also important to recognize that not all innovations need to cross departmental lines and some can have just a great impact functioning within a particular agency.

- One example cited was a Mayor's Roundtable effort where the Mayor convened mid-level department staff to share best practices, thoughts on practices and general ideas. Departments viewed it as a threat and often avoided sending their strongest staff and the initiative never gained any steam.

Elimination of Departmental Policy Staff and Training – While we didn't fully explore this in the research, given the importance a policy unit played in DOT and DND, it seemed that this organizational change has impacted the level of institutional knowledge, strategic thinking and innovation at the agency level. These units can play a strong facilitation role, helping to cut intra- and inter-departmentally with ideas and methods for implementation, while serving as an entrenched communication channel between senior management and front-line staff.

"Intergenerational" Conflict & Transition – Though it seems relatively unsophisticated, it's a very potent reality in the City's workforce. Continuing to operate and perform according to the status quo is a strong tradition across departments. It reflects in what the organization considers most valued as well its beliefs on risk-taking. Over the next 10 – 15 years as large numbers of the City's workforce retires, this tension will become even more pronounced. Concerns were expressed over balancing the communication of ideas and challenging workers to think creatively. Leadership did not want to squash innovation, but also wanted younger workers to be cognizant of change and process relative to the organization's broader culture and political nature.

to Innovation



Discounting the “other” category (popular filled-in answers centered on time, union and availability of funding), what is most striking about these results is the high degree in which workers at all levels feel *there are no barriers to innovation*. It is worth noting that as one moves vertically up the organization, the most common cited barriers shift from a sense of management control and job-based restrictions to a feeling that colleagues play a stronger role in inhibiting innovation. This seems to reinforce the strong fraternal connection the organization exhibits throughout its ranks, but strongest in the line and mid-management levels.

This may also indicate that senior management feels less inclined to share ideas or work in partnership, which is also reflected in the interviews. That said, it should be noted again that restricting innovation to cross-agency collaboration does not capture all the innovation potential.

Perhaps, the fact that mid-level management does not believe their job is innovative is also telling. If the hypothesis is that these positions play a critical facilitation and intermediary role in the innovation process, then a means of empowerment of this branch is to holistically encourage creation, dissemination, and vetting among these ranks.

❖ CATALOGUING INNOVATION

Findings on the City workforce's culture for innovation suggest that workers generally have a positive view of opportunities to develop and share new ideas. Unfortunately, as we have seen, these ideas often get bottlenecked within the structures of the bureaucracy. However, in the cases of success, it is important to understand what factors facilitated an innovation's movement within departments and the organization at large. Examples of success allow for the construction of a general "Boston Model for Innovation."

"Stuff gets sanitized on the way up – commissioner has to worry about how much it would cost and how to implement it. As it rises up it gets farther away from the original intent." – City Of Boston Official

The following table collects information on 12 innovations we identified through our interviews with City workers. These 12 innovations are merely a sampling and by no means a definitive list. Nor are they reflective of the scale and rate at which innovations occur within the organization. Rather the table offers a baseline evaluatory framework for looking at innovations and new ideas offered by the workforce.

The innovations are categorized by: *origin, size, type and legitimating authority*, which are explained in-depth below. One category that is missing is some form of cost evaluation. Innovations can be considered from both a

savings and revenue generations perspective as well as through costs in relation to timing and upfront versus long term and continuous investment.

An innovation's size refers to the scope and area of direct impact. Obviously, innovations often have ripple effects that are equally important, but rather than assess diffusion and indirect results, we felt it imperative to understand the immediate arena of input, development and implementation. An innovation can fall into the following size definitions:

- **Division (DIV)** – *any innovation where the greatest impact is felt at the departmental division level. Though innovations may require approval from leadership, they are applicable on a routine basis to a particular division and improves that division's performance*
- **Full Department (FULL)** – *any innovation where the greatest impact is felt throughout the entire department. Such innovations are a change in technological infrastructure, management systems and other department-wide changes that have potential to re-orient an entire department culture.*
- **Cross-Department (C-D)** – *any innovation where impact is distributed across departments, though not necessarily to an equal degree. Such innovations are oriented to a particular objective or goal that requires sustained commitment from multiple stakeholders for successful implementation.*
- **Citywide (CITY)** – *any innovation where impact cuts across the activities and culture of the entire organization. Such innovations are normally Mayoral priorities and require multi-year planning with large financial and human capital commitments.*

The type of innovation indicates the topical area in which the efficiency is most strongly felt.

Similarly to the size classification, a certain degree of ambiguity regarding the target audience of the innovation creates difficulty in limiting the improvement to one type. However, in this framework, types are assigned according to what *drives* the innovation. The types are:

- Customer (CUST)– *any innovation that is motivated in improving customer-service. Theoretically, all government actions are geared at creating better services for the public, but in these instances, innovations are explicitly about catering to specific needs and demands of consumers, as well as allowing customers to engage with citizens in a more user-friendly manner.*
- Process/Operational (P/O) – *any innovation that is motivated by changing the systems of service delivery. These can range from small, marginal process flow improvements to large-scale system-wide changes. In essence, they change the way a department or the City does business by challenging the status quo of operations, roles, responsibilities and expectations within the organization.*
- Policy – *any innovation that is motivated to address a specific policy issue. Process and/or customer service efficiencies may follow, but the crucial driver of change is action on a complex local issue that requires research, planning and monitoring in addition to particular management and administrative changes.*

The final category included considers what is called the legitimating authority; essentially, the actor where final approval of the innovation rests. Sometimes, the legitimating authority may be the originator, but not always. Rather, they are arguably the most accountable party in the innovation's success and can often ensure its sustainability. Legitimizing authorities range from:

- Mayor – *any innovation where the final decision on an innovation's value comes from the Mayor. In these cases, innovations are sustained or eliminated at the Mayor's behest, moreover, they often begin through processes issued from the top-down.*
- Department Head (Dept Head) – *any innovation where a department head translates an innovation into a formalized process/action/aspect of that particular department's operations. Similar to the Mayor, a Department Head can initiate and develop innovations or serve as a convening party and decision-maker.*
- Supervisor/Manager – *any innovation where an innovator's direct supervisor bears the responsibility of an innovation's credibility and sustainability. Given the importance of this relationship in the City's innovation process, these positions are critical, though they may not claim visible accountability.*

Table 3: City of Boston Innovation Catalogue

| <i>Innovation Name</i> | <i>Description</i> | <i>Origin</i> | <i>Size</i> | <i>Type</i> | <i>Auth</i> |
|---|--|---------------|-------------|-------------|-------------|
| Bldg Code Violation Photographs | Adoption of technology used by parking collections, ISD equipped on-site violations hardware with cameras to help reduce appeals and improve collections. Informal estimates suggest a 50% reduction in appeals. | ISD | DIV | P/O | Dept. Head |
| Citizens Connect | New iPhone application that allows citizens to directly photograph and pass on surface road problems to the City and CRM system. | MIS | CITY | CUST | Mayor |
| CRM | An integrated, multi-department call center that fields, maps and tracks service requests on a number of constituent needs. | MIS | CITY | CUST | Mayor |
| Flexible Scheduling | In coordination with the unions, INS reconfigured its work schedule on some of the more “foot trafficked” constituent services to better accommodate to standard work schedules. | ISD | DIV | CUST | Dept. Head |
| Leading the Way | An inter-departmental, Mayor-convened initiative that seeks to unify a housing vision for the city. | Mayor/ DND | C-D | Policy | Mayor |
| Moving Permits | To help reduce theft of moving permits, DOT changed the standard moving permit form to include addresses. | DOT | DIV | P/O | Dept. Head |
| Overtime Reduction | Pushed by A&F, this was in response to the fiscal realities of the City to help departments improve productivity. | Mayor | CITY | P/O | Mayor |
| Reinforcement of DOT Policy & Planning Office | Cited as the in-house strategic planning office; have led the agency’s transformation away from “car-based” vision to multi-modal and have been leading the “Complete Streets” agenda. | DOT | FULL | P/O | Dept. Head |
| Printing Plant Elimination | Noting the excessive costs incurred by doing printing in-house, Labor Relations showed the cost savings of outsourcing and pushed to eliminate the plant and save \$2M in costs. | LRD | C-D | P/O | Dept. Head |
| Recycling/ Sanitation Merge | Merger of a service and policy division in DPW to push more strategic thinking into the operation | DPW | DIV | P/O | Dept. Head |
| Security Force Elimination | Response to poor behavior and performance of the City’s internal security force; curtailed their mission creep and explicitly outlined job responsibilities. | LRD | DIV | P/O | Dept. Head |
| Street Tree Management | Initiative by Parks to proactively tackle tree maintenance issues through regular, comprehensive pruning instead of reactive services. Targeting neighborhoods. | Parks | DIV | Policy | Dept. Head |

Indeed, a cursory glance at the City's innovation catalogue indicates that no innovation is the same, nor is there a standard model for adoption. Over time, the innovation evaluation framework can be enhanced to include things like cost effectiveness, probability of success, as well as other criteria. Additionally, as the volume of innovations assessed increases, process and generation trending can be set.

For purposes here, it's clear that Boston's "spectrum of innovation" runs the gamut of small, incremental "localized" change to much broader, organizational reorientation. In our recommendations section we will further explore how the City could benefit from designing a basic database for collecting innovation data, who would monitor and enhance the catalogue, and where such a database should be housed.

Case Study: New York City's Center for Economic Opportunity

Despite New York's unrivaled position at the top of the financial world and its inspiring economic recovery from the 9-11 tragedies, it was becoming clear that New York was functioning as two cities: one rich and one poor. In March 2006, Mayor Michael Bloomberg appointed a Commission for Economic Opportunity to investigate the roots, causes and consequences of poverty in New York. The Commission was composed of leaders from the non-profit, academic, private, and philanthropic sectors.

Six months later the Commission submitted their report to the Mayor that outlined three primary recommendations to be carried out by a new Center for Economic Opportunity (CEO). At its core, the CEO represented a clean break from historic ways of addressing poverty. Services would be targeted at key populations in a manner that emphasized coordination, accuracy, heavy evaluation, accountability and willing to drop poor performing programs. Such a mission was a bold step for promoting cutting-edge and innovative approaches to poverty reduction.

Today, CEO's pioneering efforts have introduced experimental programs like conditional cash transfers and pre-populated EITC forms to the poverty conversation and helped drive rethinking on how the federal poverty metric is calculated (an important piece of figuring out aid and support to the nation's poor, as well as states and cities).

To Deputy Mayor Linda Gibbs, who played a key role in pushing CEO's intensive research-based, heavily-evaluated agenda and who now oversees the agency, CEO offered a refreshing opportunity for cross agency collaboration and participation towards a shared goal. "There is not often a venue for organizations to come together around shared interests and concerns," Gibbs recounted in a January 2010 interview. "Participatory process serves to create legitimacy and let's stakeholders have a chance to be heard, as well as test your assumptions and to vet ideas is an important part of the process...[it] can shake loose the natural leaders who were out there in the field and ready to do stuff and help them to rise to the top." Ultimately, the CEO offered alternate and empowered communication channels that feed experimentation.

This combination of a strong results-driven approach (and an encouragement to test new ideas until proven ineffective) with a focus on a comprehensive and complementary palate of services has empowered agencies and also improved opportunities for external partners to come to the table, with research groups like MDRC and national community service providers like SEEDCO heavily involved. Additionally, as agencies have internalized the results-driven methodology through their participation in CEO, the approach has been adopted in non-CEO related initiatives, a welcome spillover effect.

Framing also proved critical to the CEO's success. The Mayor's identification and commitment to poverty reduction created a shared common ground upon which agencies and partners could share, explore and design solutions jointly.

Understanding the true impact of the CEO is still a few years away, as data and program evaluations continue to come in. Moreover, CEO's financial situation (it is funded through an independent tax levy and private dollars) make it unique. However, the organizational re-orientation the effort has offered cannot be overstated. Nor can the lessons of shared responsibility, experimentation and problem-oriented innovation. As Deputy Mayor Gibbs stated "You've got to stand for something besides just being innovative. What is the value that the leadership is embracing and valuing in the workforce? You've got to tolerate and encourage some amount of rule-breaking."

RECOMMENDATIONS

After thorough analysis of our survey and interview data, and an in-depth review of the literature and best practices in fostering civic innovation, we have developed a set of four primary recommendations for Boston's Urban Innovation Center (UIC). The first two recommendations have to do with the basic role and structure of the Center, and how it can best encourage, collect, and disseminate innovative ideas in a manner that aligns with the broader goals of the city. The third suggests a specific program opportunity to help drive innovation in City Departments, and the fourth suggests a way to measure and evaluate innovation in Boston and encourage an innovative culture going forward.

RECOMMENDATION I: THE ROLE & IDENTITY OF THE URBAN INNOVATION CENTER

Municipal workers and department leaders will have a range of reactions to an Urban Innovation Center. At the positive end of the spectrum will be staff members who say, "Finally, the city is making an effort to recognize and make use of my good ideas." On the negative end will be employees who bemoan the effort, complaining, "This is just another way for the central administration

to tell us how to do our jobs." The way the UIC structures and presents itself will be critical to eliciting the right reactions and enabling the UIC to accomplish its goals. **While we**

"You can build a chasm between the people that are innovative and the people that are operational, and if you build that chasm then you've got a problem. You can have great innovation going on, but if you've got a disenfranchised operational group that doesn't want anything to do with what comes out of that innovation team."
— City of Boston Official

recommend the UIC take a pro-active role in targeting goals for innovation (see recommendation II) and identifying and recognizing department-level innovation, we believe it should intervene in the idea development and implementation process only in very specific circumstances. While the UIC addresses a very public Mayoral priority of promoting innovation in the city, its best chance for success will come if it operates largely invisibly as supporter and advocate more than a high-profile initiator of innovation.

❖ SEGMENTING INNOVATIONS

We presented in Table 3 (p. 24) an initial framework for categorizing innovations in the organization. By segmenting innovations with tools such as these, the UIC can better determine how ideas progress through the system, identify trends (sources, types, etc.) and ultimately develop a "innovation database" that can inform how to respond to ideas brought to the table. **Broadly speaking, the response should be framed around the origin and perceived scale of the innovation (see Exhibit I).**

Our data suggests that employees commonly generate new ideas and feel like their departments are innovative. They clearly value the innovation that's already occurring at the department level to better serve their constituents. We feel **the UIC should refrain from**

becoming the central judge or the gatekeeper to innovation, but rather should build off the current climate to recognize, reward, and support departments that are successfully evolving to keep up with modern needs. When the UIC identifies department-level innovations, it should respond with recognition and resources for both the innovator and the leadership, and allow departmental managers the task of implementing and evaluating the innovation. Resources may include assistance with financing, help with streamlining the human resources and administrative processes, auditing potential cost savings and helping advocate to skeptical external players such as unions, community groups, and other employees. This sets an important tone that the Mayor's Office values innovation, but the UIC is not seeking to disrupt department operations.

The UIC should play a more active role when it identifies innovations that have the potential for cross-departmental impact. In this instance, the UIC should convene the innovator, leaders from relevant departments, and policy staff to create a plan for developing, testing and implementing the idea across departments, using the index of previous innovations as a template for action.

With Mayor-driven innovations that have broad city applications, the UIC should use its convening authority to vet ideas with department staff and create a plan for implementation. Mayor-driven innovations that are specific to one department should be passed to the department head and the UIC should provide them the resources and support they need to craft an implementation strategy. This strategy optimizes the time and resources of UIC staff and sends the message that the UIC is in place to encourage and support innovative staff, not to create a separate legitimating authority for innovations that may otherwise happen organically at the department level.

Exhibit I: UIC Response

| | Mayor's Office | Department Staff |
|--|---|---|
| Large Scale (Citywide applications) | Heavy Involvement: Use convening authority of the UIC to vet ideas with department staff and create a plan for implementation | Heavy Involvement: Bring into UIC for development, vetting, testing, and implementation strategy |
| Small Scale (Relevant to specific division or department) | Light Involvement: Pass along to Department Heads and targeted mid-level managers for testing and implementation | Light Involvement: Recognize, support, and assist |

**Adapted from Mark Moore, Harvard Kennedy School 2010.*

RECOMMENDATION II: A PROBLEM-ORIENTED APPROACH TO URBAN INNOVATION

❖ MEANS VS. ENDS

An important early distinction to make as we consider methods to encourage innovation is whether we're looking at innovation as a means or an end. Given the growing momentum for innovation in government, it can be tempting to see innovation as an end in itself. Indeed, there can be value to innovation as an end, including:

- Better moral among the municipal workforce
- Better communication avenues between citizens and government, between city departments, and between levels of municipal employees

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Recognizing these values, we believe **the most important assets of an innovative workforce lie in the capacity to resolve fundamental city problems in a more effective and efficient way. For this reason, we recommend the Urban Innovation Center structure its approach by treating innovation as a means, or an output** (see Exhibit 2), rather than an end in itself. This way of looking at innovation drives the overall model that we recommend for the UIC.

Exhibit 2: A Basic Logic Model for Urban Innovation



By taking a problem-oriented approach, the City will not only reap the benefits of innovation to resolve large-scale city issues, but will help encourage an innovative environment among the workforce.

❖ WHAT IS A PROBLEM-ORIENTED APPROACH?

A problem-oriented approach simply means identifying goals and objectives for innovation before soliciting ideas and solutions. The City has many assets at its disposal to identify fundamental city issues that need creative, innovative solutions. Among these:

- CRM Data
- Boston About Results Data
- Mayor's Policy Staff and Cabinet
- Active solicitation of complaints and needs from municipal workforce

UIC staff are well positioned to analyze and consolidate this information as it relates to innovation, and condense it into a set of cross-cutting city objectives. Creating these objectives will serve as one of the primary foundations for UIC activities.

Establishing broad “problems” and disseminating them to the workforce sends a message that the city wants their input and that they are a partner to solving the major issues that Boston faces. Without establishing an objective from the outset, a request for innovation can seem token – or worse, can appear as a mandate without purpose. Collaborative problem solving however, reorients the request for innovation as an opportunity to help the city meet a real need.

❖ WHAT ARE EXAMPLES OF APPROPRIATE “PROBLEMS”?

When we consider appropriate problems to spark innovation we are prioritizing a few key principles. Problems should be:

- Cross-cutting and broad: *The objectives that drive innovation should not be specific to any one department, but rather approachable by multiple agencies.*
- Solvable from multiple angles and levels of the workforce: *These should be issues that can be tackled by multiple levels of staff, from front-line employees to cabinet members*
- Politically tenable: *Problems should be issues that can be addressed publically without fear of recourse from media or constituent groups.*

With these considerations in mind, we have identified three categories of problems that are good candidates to spark innovation seeking:

I. Problems defined by space and time - These issues will largely derive from CRM data and will identify geographic locations and particular times where Boston faces poor outcomes. Staff across departments can be issued a call for innovative solutions to reverse these trends. Those who have “ownership” over these particular regions – or staff who have installed innovative practices elsewhere may be motivated to answer the city’s call for innovation. Geographic issues (i.e. neighborhood-based) not only cut across departments, but also often call for collaboration between departments to find solutions. Similarly, time issues – such as youth violence occurring most frequently between 3pm and 6pm or during the summer months – may be an opportunity to call for innovation. How does Boston better allocate its resources – parks, schools, police, social workers – to focus on these periods?

2. Issue Driven - A second type of problem could be driven by broader city issues that touch many departments. A few years ago home foreclosures became a Mayoral priority. A directive was given to Neighborhood Development, Inspectional Services, the BRA and others to figure out how to keep people in their homes, and an innovative program emerged. In his Inaugural Address the Mayor mentioned commercial corridor development as a city priority. This objective touches public works, economic development, transportation, and could drive an innovative and replicable process of revitalizing high-traffic business districts. Issues with far-reaching goals prioritized by the Mayor, and disseminated by the Urban Innovation Center could lead to creative new ideas.

3. Administrative/Process-driven - Process-oriented objectives can also help drive innovation. When departments like Administration and Finance and Human Resources identify troubling trends with specific budget items or staffing issues, it presents an opportunity to bring workforce ideas into the mix. In Indianapolis, Mayor Goldsmith, recognizing a potential budget shortfall, regularly relied on the staff to find areas to trim expenses and operate more efficiently. He assumed, often correctly, that staff knew where inefficiencies occurred, and in the face of known budget constraints, would be the first to identify them. Disseminating administrative problems to the staff can empower them to participate and lead to better efficiency and innovation.

❖ UIC PROCESS

The problem-oriented process means approaching innovation from five basic stages: analysis, dissemination, solicitation, experimentation, and implementation. These stages help define problems and facilitate a participatory process of finding solutions. Timing is an important aspect of the UIC “mining” process and although we present it in a systematic/chronological manner, ultimately, the UIC will cycle, catalogue and implement in a continuous fashion.

Exhibit 3: Problem-oriented Innovation Process

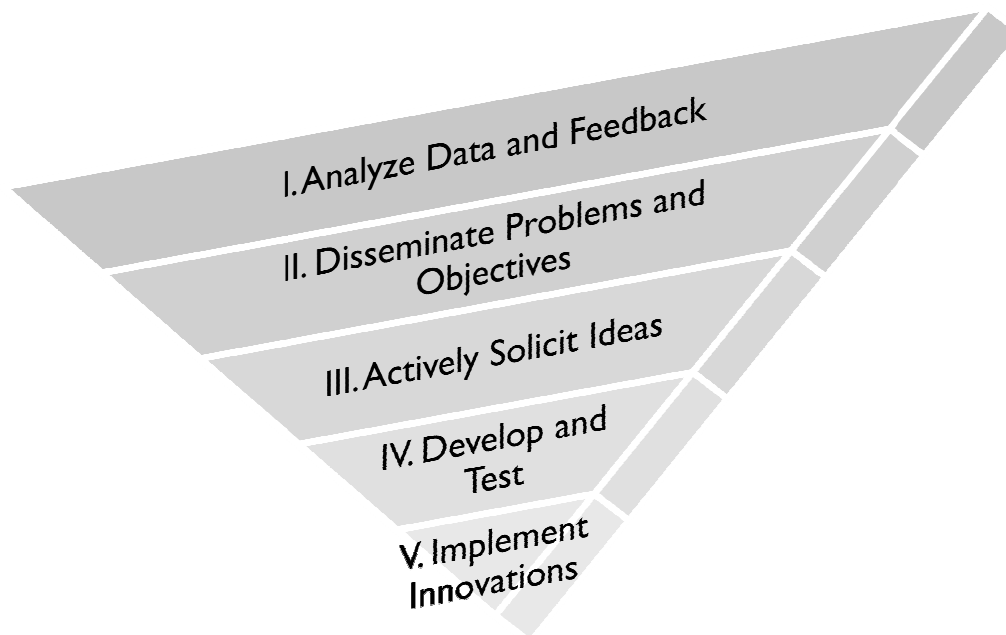


Table 4: Detailed Problem-oriented Innovation Process

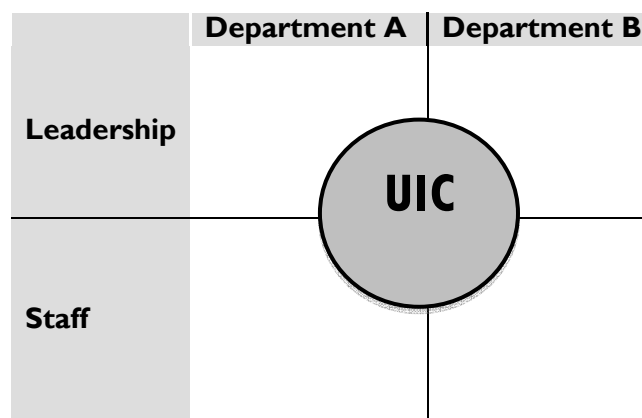
| Stage | Primary Actors | Description |
|-------------------------------------|---|--|
| Stage One: Analysis, Problem ID | UIC Staff, Mayor's Office, and Department Heads | This stage is driven by constituent data, workforce and department head feedback, and Mayoral priorities. UIC staff will analyze CRM and other city data to segment between areas that are working smoothly, and areas that could benefit from innovation. Once problem areas have been identified, the staff will consolidate the data into a small number of actionable objectives. In consultation with the Mayor's office, UIC staff will select two or three key objectives that will be targets for innovation in the given year. |
| Stage Two: Dissemination | UIC Staff, Department Leadership | This stage will require the active diffusion of the target problems throughout the municipal workforce. UIC staff will work closely with department heads and selected mid-managers (see recommendation three) to share these city objectives with employees throughout the city. In addition to targeting the problems, UIC will also need to advertise the avenues to share solutions. We recommend developing an internal online platform for initial ideas, comments, and feedback, as well as creating an "open-door policy" in City Hall where people can deliver ideas. |
| Stage Three: Active Solicitation | UIC Staff, Selected Department Staff, Department Heads, Workforce | UIC staff will actively seek out ideas at the department level by holding focus groups, meeting with supervisors and frontline staff, and making themselves regularly available at the various sites where city employees work. Employees should be reassured through this process that the UIC will provide political cover to innovators they will not be held responsible for failed or unpopular ideas. In addition, the UIC can support innovation by nominating a mid-level manager in each department to serve as a liaison to the UIC and seek innovation internally within departments (see recommendation three for more). |
| Stage Four: Development and Testing | UIC Staff, Selected Innovators, Department Heads | Stage four requires first narrowing the ideas that come through the stage three process to the strongest and most viable innovations. In collaboration with Department Heads, UIC will invite staff members with the strongest ideas to spend a portion of their week working with UIC staff and department leadership to develop their model and field-test their innovation in a limited area. UIC staff will evaluate results, determine costs and potential risks, and decide whether to pursue the innovation on a broader scale. |
| Stage Five: Implementation | UIC Staff, Department Heads, Workforce | The final stage of the process will be the implementation of ideas on a broad scale. This process should be driven by the department heads and be deliberate in recognizing the contributions of all actors in the process as the innovation becomes practice. |

❖ KEY PROCESS POINTS

Keep department leadership involved at every stage - One of the critical goals for the UIC should be to avoid creating a fissure between Mayor's policy staff and department leaders. As we have identified from our data, staff feel most accountable to their immediate supervisors and department heads, and they are a critical piece of creating a culture of innovation. While the UIC is well-positioned to side-step a hierarchical process that can serve to stifle innovation, buy-in from departmental leadership will greatly assist UIC staff in disseminating problems and gathering solutions. Innovative employees will be more likely to suggest ideas if they feel there is buy-in and political cover from both the Mayor's office and their department leaders. **It is our belief that department heads should be involved in every step of the process, and that successful innovations not only celebrate the individual innovator, but the department as a whole.**

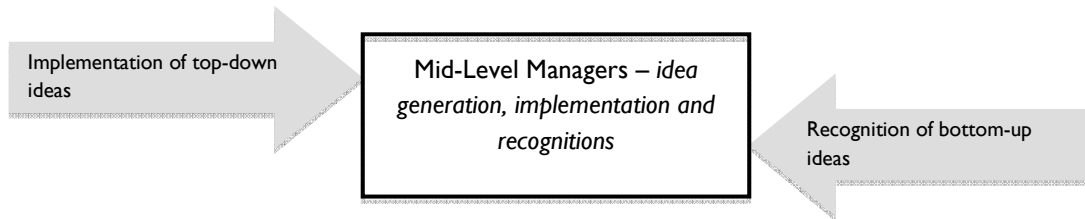
Create a continuous feedback loop - Once the UIC has been established, and employees know there is a place in city government to bring new ideas, the UIC should move to become a hub for cross-departmental and cross-positional communication. **This continuous feedback loop will move the UIC process from linear to cyclical, and better enable the workforce to identify problems and interface with departmental and city leadership to suggest innovations.**

Exhibit 4: UIC as a hub for cross-departmental and cross-positional communications



RECOMMENDATION III: MID-MANAGERIAL FELLOWSHIP

Chief among our conclusions from survey data and interviews is the importance of the mid-level managers (MLMs) in supporting or stifling innovation. These supervisors set an important tone among the workforce and can either be leaders in promoting creativity and new ideas, or can serve to block both the development and implementation of innovation.



What we know:

- Employees feel most accountable to their immediate managers.
- 52% of MLMs generally do not feel that there is room for growth (although this percentage is more than front-line staff it is less than senior management).
- MLMs sit at an important intersection between leadership and front-line staff.
- Strong MLMs can drive innovation, effectively leveraging tools like impact bargaining, coalition-building, and strong communication.
- As policy and planning advisors within departments have been largely eliminated, MLM have become increasingly important to strategic thinking and carrying institutional knowledge within an agency.

So how do you leverage the important position of mid-level managers to drive innovation? We recommend a fellowship opportunity for managers that have demonstrated the capacity to support and encourage innovation among their staff.

❖ KEY ELEMENTS TO THE FELLOWSHIP

Liaison between UIC and staff - Management fellows would play an important role in identifying, legitimating, and encouraging innovation among the workforce. The fellows would work closely with the UIC staff to help disseminate objectives and seek innovative solutions. They would spend significant time educating staff about the UIC resource, working with front-line employees to solicit and support their ideas, and selecting staff members to participate in focus groups and problem solving sessions. They would work with UIC staff, the Mayor's office and department heads to bring the best ideas to the surface, find appropriate venues to test models, and help drive their implementation. They would assist Department heads with innovation strategy and help create a bridge between the UIC and the workforce.

Department Rotations - Part of the fellowship would also involve nurturing and disseminating best practices between departments. To facilitate this, we recommend that fellows participate in a rotation process where they spend two weeks working with colleagues from other departments on management, innovation, and strategy. These rotations accomplish three key goals:

- Bring the fellows' ideas and experiences to other departments
- Enable the fellows to learn from other departments
- Facilitate communication between departments

Results - We expect the fellowship to address specific barriers identified by interviewees and survey respondents by offering mid-managers an opportunity to grow and be recognized through innovation and gleaning good ideas from employees. In addition, we believe this position will be integral to minimizing the valley between Mayoral "innovation staff" and front-line employees.

*"A strong middle manager,
wherever you put them will shine,
so you could put their good
management skills to work at a
place that we're concerned about"*
– City of Boston Official

RECOMMENDATION IV: DEFINING METRICS FOR INNOVATION

As the City places more priority on innovation, it will be necessary to establish a set of metrics to encourage creative problem solving and measure the success of new projects. There are three fundamental reasons why we believe it essential to create metrics for innovation: to determine success, to support innovation, and to build innovation into current systems. The

“Mayor Goldsmith created an environment where innovation was valued, recognized, rewarded, and when you screwed up, he gave the air cover” When you’re in that culture and there’s not a scapegoat, it’s a new world.” - Skip Stitt, Indianapolis

table below provides some initial assessment categories based on these criteria. As the City builds its innovation catalogue and refines its evaluatory framework these

metrics can become more robust and targeted in understanding the innovative capacity of employees, agencies, the UIC and the City as a whole.

Table 5: UIC Innovation Metrics

| Recruitment Metrics | Employee Metrics | Department Metrics | UIC Metrics |
|---|---|---|--|
| Resume/Application <ul style="list-style-type: none"> Leadership Experience Problem Solving Experience Education & Training Collaboration Interview <ul style="list-style-type: none"> Communication skills Experience with persuasion Experience taking initiative Creativity solving problems | <ul style="list-style-type: none"> Hours of training and continued education Work in teams UIC inputs UIC successes | <ul style="list-style-type: none"> Hours and continued education in Department Mentorship opportunities for employees UIC inputs UIC successes Department evaluation by employees Cost savings through innovation | <ul style="list-style-type: none"> Number of inputs Diversity of inputs Innovation tested Innovations implemented Survival rate (3-5 year) Cost savings through innovation Constituent satisfaction with innovation |

Determining Success - First, and most obviously, it will be important assess the quality of the Urban Innovation Center. By measuring inputs into the center over time, as well as the success of innovations in terms of implementation, cost savings, and service to constituents, the UIC will be able to understand whether its process is successful, and where it needs improvement.

Support Innovations - As we have identified in our research, there are plenty of people and institutions that pose barriers to innovations and will look to block new ideas and projects. The UIC should be prepared to conduct an audit of each innovation to demonstrate its benefits for

the city. This will provide a level of cover to the individual innovator from co-workers, supervisors or union leaders in the case of success and failure. Measuring such outcomes as cost savings, job impacts, and service improvements will pro-actively address negative reactions and campaigns from prospective opponents. Consider consulting the Department of Labor Relations auditing process and leveraging impact bargaining tools for potential union confrontations.

Building Innovations into current systems - Adding metrics for innovation into processes such as recruitment, promotion, and evaluation of department leaders will help spur an ongoing culture of innovation. We recommend supplementing traditional qualifications for new hires with innovation metrics such as problem solving experience and collaboration. Additionally, including such measures in the evaluation of current employees and consulting these metrics when considering promotions will demonstrate that innovation is valued and rewarded and will help the city's best problem-solvers rise within the municipal government. Finally, using the UIC to measure innovation within each department, and evaluating department leaders based on their overall performance will help incentivize department heads to encourage innovation among their staff and work more closely with the UIC.

Conclusions

Promoting workforce innovation means creating an environment in which employees feel motivated and supported to suggest new approaches to city services. Our four recommendations suggest a common goal of centering innovation around the employees and the department leaders and building the UIC as a supporting and convening entity rather than Boston's centralized space for innovation. The UIC has an opportunity to advance an environment where innovation is happening, and concentrate on leveraging these innovations to ensure successful implementation and maximum impact. Boston's Urban Innovation Center will be among the first of its kind in the nation, and can elevate the city as a leader in municipal government innovation. But more importantly, the Urban Innovation Center can use the great ideas of staff and external partners to advance public services in Boston and improve quality of life for residents across the City.

APPENDIX A: INTERVIEWEE LIST

Nigel Jacob, Management Information Systems, regularly December 2009 – February 2010

David Nero, Management Information Systems, January 21, 2010

Commissioner Thomas Tinlin, Department of Transportation, January 22, 2010

Commissioner Joanne Massaro, Department of Public Works, January 26, 2010

Stephen Goldsmith, Former Mayor of Indianapolis, Professor of Public Policy, Harvard Kennedy School, January 26, 2010

Skip Stitt, Former Chief Administrative Officer, City of Indianapolis, January 28, 2010

Commissioner Toni Pollack, Parks Department, January 29

Mitch Weiss, Mayor's Chief of Staff, January 29, 2010

Commissioner William Good, Inspectional Services Department, January 29, 2010

Michael Grace, Inspectional Services Department, January 29, 2010

John Dunlap, Department of Labor Relations, February 3, 2010

Vivian Leonard, Department of Human Resources, February 5, 2010

Meredith Weenick, Department of Administration and Finance, February 8, 2010

Michael Denehey, Department of Public Works, February 12, 2010

Michael Kineavy, Mayor's Chief of Policy and Planning, February 12, 2010

Deputy Mayor Linda Gibbs, New York City, Center for Economic Opportunity, February 12, 2010

Carol Donovan, Department of Neighborhood Development, February 19, 2010

Bill Cotter, Department of Neighborhood Development, February 27, 2010

APPENDIX B: INTERVIEW QUESTIONNAIRE

The following questions represent the general scope and content of the 16 interviews we conducted with City of Boston staff and leaders from other cities.

Interview Questions

1. How long have you worked for the COB? How long have you been in this department? In this position?
2. If you are new to the COB, where did you last work and what attracted you to take a job with the COB?
3. Please describe what you feel to be mission and scope of service of this department.
4. Please describe the operational and organizational culture of this department.
5. Where do you feel new ideas and innovation come from in this department? Do you have a sense of the “frequency” of these ideas? Is it from the workforce? Management? Is it from other departments? Does it come from COB leadership? (Behn’s learning & adaptation vs. mimicry)
6. How well do you think this department responds to innovation? What are its strengths in nurturing innovation? What are its weaknesses? Do you have a systematic way of tracking success (Bell Mason Frameworks from VC)
7. Are there distinct barriers to innovation?
8. Do you use methods to incentivize innovation within the department (performance-based pay? “innovation time” strategies, recruitment of workers with innovation “skills”)
9. Can you describe an example of a successful innovation and why you feel it was successful?
10. Can you describe an example of a failed innovation and why you feel it failed?
11. Have you heard from citizens about the benefits of innovation in services provided by our department?

12. Have you or the department developed partnerships with external agencies around innovation? Have external agencies come to you seeking to “test”/”model” ideas and innovations? Do you feel that there is opportunity for this?
13. Have you noticed diffusion of innovation between departments?

APPENDIX C: SURVEY INSTRUMENT

The following pages are the actual survey we administered to City of Boston staff during the period of January 14, 2010 to February 14, 2010. The survey was administered online and in paper form.

CITY OF BOSTON & Harvard Kennedy School

Human Capital Study

Municipal Workforce Survey

Survey Introduction & Purpose:

Boston City Government employs over 17,000 people. This workforce is full of talented, experienced and dedicated individuals with new and innovative ideas on how to improve the way services are delivered to citizens. The purpose of this survey is to better understand how effectively these new ideas are incorporated into the operations of Boston city government.

The following survey was designed by students from the Harvard Kennedy School as part of research project being done in partnership with the Mayor's Office. The results from the survey will be used as part of a larger effort in developing an innovation strategy for Boston city government.

All answers are anonymous and confidential. The survey should take no more than 10 minutes to complete.

Thank You for your participation.

Survey Contact:

If you have any questions, please contact: matt_joyce@hks10.harvard.edu or jayant_kairam@hks10.harvard.edu

PART I: Basic Information**1. Please indicate which category best describes your position**

- ☐ Mid-level departmental management
- ☐ Senior departmental management
- ☐ Front-line staff
- ☐ Other _____

2. Please indicate your department *(write in space below)***3. How long have you worked for the City of Boston?**

- ☐ Less than 3 years
- ☐ 3 – 5 years
- ☐ 6 – 9 years
- ☐ 10 – 15 years
- ☐ 15 years or more

PART II. New Ideas**1. Have you ever had a new idea about how your job can be done more effectively?**

- ☐ Yes
- ☐ No

2. If you have a new idea about your job, how do you share it?

- ☐ Sent it to the Mayor/executive staff
- ☐ Talked to supervisor/manager
- ☐ Never shared it
- ☐ Discussed with colleague/co-worker
- ☐ Brought it up at a staff worker
- ☐ Other _____

3. How successful was it?

- ☐ Some interest from colleagues/manager, but was not adopted for the long-term
 - ☐ Idea was implemented throughout the department
 - ☐ Some colleagues or managers adopted the idea
 - ☐ Didn't go anywhere
 - ☐ Other
- _____

PART III. Innovation**1. Would you describe your department as innovative?**

- ☐ Yes
- ☐ No

2. Would you describe your department as constantly looking forward and improving?

- ☐ Yes
- ☐ No

3. Have you ever tried to implement a project you would describe as innovative?

- ☐ Yes
- ☐ No

4. Have you ever collaborated with colleagues on a project of your own design?

- ☐ Yes
- ☐ No

5. What do you feel is the main barrier to developing innovative projects in your department?

- ☐ I have no incentive to develop innovative projects
- ☐ My job is not designed to be innovative
- ☐ My colleagues discourage me from pursuing innovative projects
- ☐ There are no barriers
- ☐ Management does not encourage innovative projects
- ☐ Other _____

PART IV. Other Information**1. What do you think is most valued in your department?**

- ☐ Hard work
- ☐ Loyalty/Commitment
- ☐ Creativity
- ☐ Attendance
- ☐ Pride in Work
- ☐ Other _____

2. Do you believe there are incentives to take risks in your department?

- ☐ Yes
- ☐ No

3. To whom do you feel most accountable?

- ☐ Co-workers
- ☐ Mayor
- ☐ Department Head
- ☐ Immediate supervisor/manager
- ☐ Public
- ☐ Other _____

4. Do you believe there are good training and professional development opportunities in your department?

- ☐ Yes
- ☐ No

5. Would you like to see more training and professional development opportunities?

- ☐ Yes
- ☐ No

6. Do you believe there are opportunities to advance to a leadership role in your department?

- ☐ Yes
- ☐ No

APPENDIX D: MUNICIPAL WORKFORCE SURVEY RESULTS

Below are a number of data tables that list results from our survey administered to the City's workforce. Each table is carefully labeled to indicate the splits. Results are presented in aggregate response totals to show volume of response by sub-split. These are selected results from the full data set. The full set will be provided to the client in a separate electronic file.

By Position

Table A1. Feels there are good training opportunities

| Position | No | Yes | No Answer | Grand Total |
|-----------------------------------|-----|-----|-----------|-------------|
| Front-line staff | 82 | 51 | 14 | 147 |
| Mid-level departmental management | 54 | 18 | 10 | 82 |
| Senior Management | 19 | 19 | 7 | 45 |
| Other | 6 | 7 | 4 | 17 |
| Grand Total | 161 | 95 | 35 | 291 |

Table A2. Wants more training opportunities

| Position | No | Yes | No Answer | Grand Total |
|-----------------------------------|----|-----|-----------|-------------|
| Front-line staff | 14 | 120 | 13 | 147 |
| Mid-level departmental management | 3 | 69 | 10 | 82 |
| Senior Management | 1 | 36 | 8 | 45 |
| Other | | 14 | 3 | 17 |
| Grand Total | 18 | 239 | 34 | 291 |

Table A3. To whom do you feel most accountable?

| Position | Co-workers | Department head | Immediate Super/Mgr | Mayor | Public | No Answer | All of the above | Other | Grand Total |
|-----------------------------------|------------|-----------------|---------------------|-------|--------|-----------|------------------|-------|-------------|
| Front-line staff | 15 | 16 | 60 | 3 | 30 | 19 | | 4 | 147 |
| Mid-level departmental management | 5 | 15 | 24 | 4 | 16 | 13 | 2 | 3 | 82 |
| Senior Management | 1 | 8 | 7 | 4 | 12 | 10 | 3 | | 45 |
| Other | 1 | 1 | 7 | | 4 | 3 | | 1 | 17 |
| Grand Total | 22 | 40 | 98 | 11 | 62 | 45 | 5 | 8 | 291 |

Table A4. Feels there are opportunities to advance

| Position | No | Yes | No Answer | Grand Total |
|-----------------------------------|-----|-----|-----------|-------------|
| Front-line staff | 93 | 40 | 14 | 147 |
| Mid-level departmental management | 43 | 30 | 9 | 82 |
| Senior Management | 14 | 22 | 9 | 45 |
| Other | 6 | 8 | 3 | 17 |
| Grand Total | 156 | 100 | 35 | 291 |

By Tenure

Table B1. Feels there are good training opportunities

| Tenure | No | Yes | No Answer | Grand Total |
|-------------|-----|-----|-----------|-------------|
| < 3yrs | 13 | 19 | 10 | 42 |
| 3 -5 yrs | 20 | 5 | 1 | 26 |
| 6 - 9 yrs | 16 | 8 | | 24 |
| 10 - 15 yrs | 39 | 25 | 8 | 72 |
| >15 yrs | 75 | 39 | 18 | 132 |
| No Answer | 4 | 2 | | 6 |
| Grand Total | 167 | 98 | 37 | 302 |

Table B2. Wants more training opportunities

| Tenure | No | Yes | No Answer | Grand Total |
|-------------|----|-----|-----------|-------------|
| < 3yrs | 1 | 32 | 9 | 42 |
| 3 -5 yrs | 2 | 23 | 1 | 26 |
| 6 - 9 yrs | | 24 | | 24 |
| 10 - 15 yrs | 8 | 56 | 8 | 72 |
| >15 yrs | 7 | 107 | 18 | 132 |
| No Answer | 1 | 5 | | 6 |
| Grand Total | 19 | 247 | 36 | 302 |

Table B3. To whom do you feel most accountable?

| Tenure | Co-workers | Department head | Immediate Super/Mgr | Mayor | Other | Public | No Answer | All of the above | Grand Total |
|-------------|------------|-----------------|---------------------|-------|-------|--------|-----------|------------------|-------------|
| < 3yrs | 1 | 5 | 16 | | | 10 | 10 | | 42 |
| 3 -5 yrs | 2 | 3 | 10 | 1 | 1 | 8 | 1 | | 26 |
| 6 - 9 yrs | 2 | 3 | 12 | | 1 | 5 | | 1 | 24 |
| 10 - 15 yrs | 5 | 8 | 24 | 3 | 2 | 16 | 14 | | 72 |
| >15 yrs | 13 | 23 | 36 | 6 | 4 | 24 | 22 | 4 | 132 |
| No Answer | | | 2 | 1 | | 3 | | | 6 |
| Grand Total | 23 | 42 | 100 | 11 | 8 | 66 | 47 | 5 | 302 |

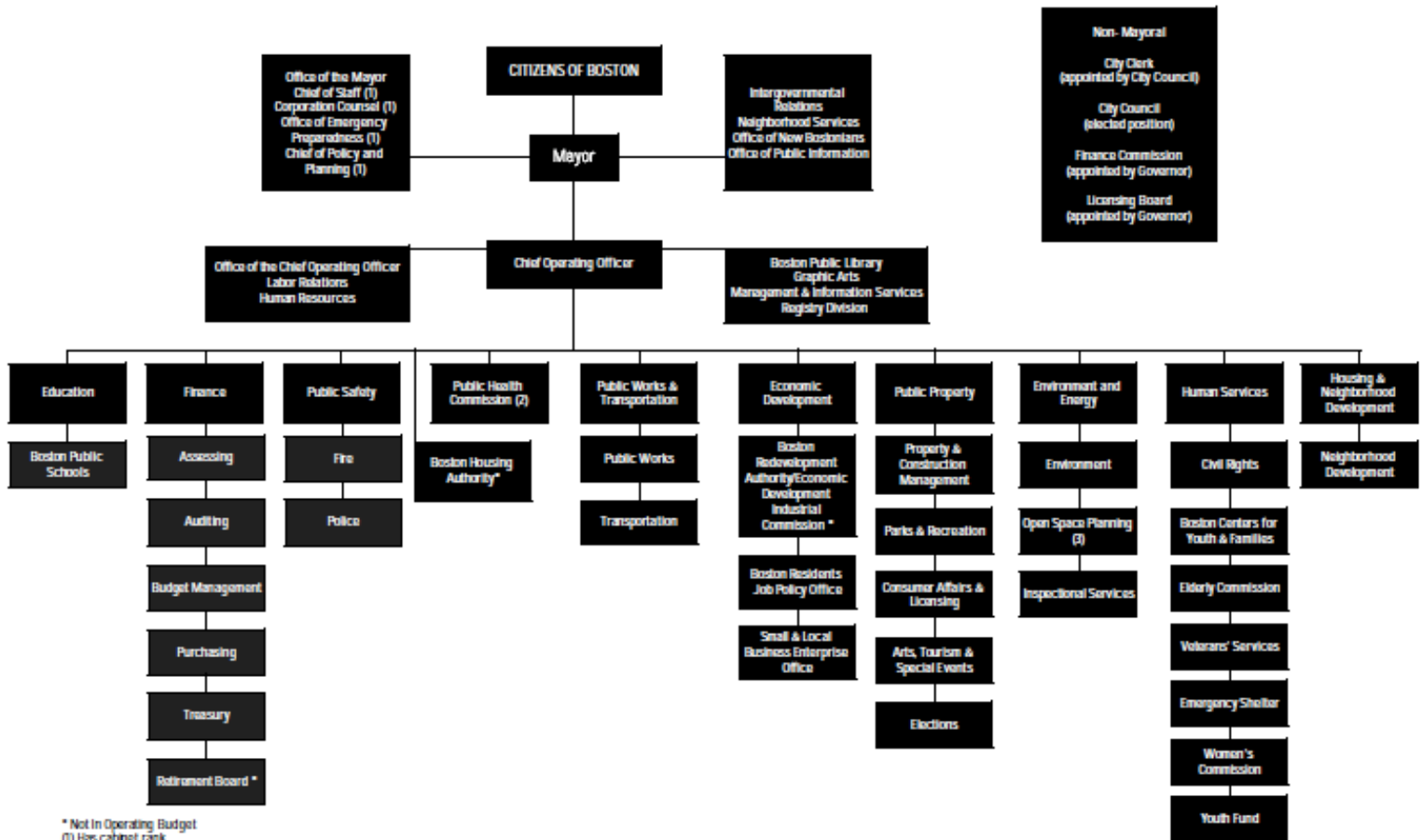
Table B4. Feels there are opportunities to advance

| Tenure | No | Yes | No Answer | Grand Total | |
|-------------|----|-----|-----------|-------------|-----|
| < 3yrs | | 15 | 17 | 10 | 42 |
| 3 -5 yrs | | 17 | 8 | 1 | 26 |
| 6 - 9 yrs | | 11 | 13 | | 24 |
| 10 - 15 yrs | | 42 | 22 | 8 | 72 |
| >15 yrs | | 72 | 41 | 18 | 131 |
| No Answer | | 4 | 2 | | 6 |
| Grand Total | | 161 | 103 | 37 | 301 |

APPENDIX E: CITY OF BOSTON ORGANIZATIONAL CHART

The following chart is the official organizational chart used by the City of Boston.

ORGANIZATION OF CITY GOVERNMENT



Source: City of Boston website, www.cityofboston.gov

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