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Digital Service Delivery for Stronger Communities

Can increased 311 usage improve civic engagement?

By Maya Alper and Valerie Eisenson

The Challenge:

Lower-income communities and communities of color in Boston engage with core city services, such as 311, less frequently than the white, wealthier communities in the city. 311 service requests are correlated with civic engagement across the city; therefore, a difference in 311 usage between communities is correlated with less civic engagement overall.

The Opportunity:

Each 311 case is an opportunity to build trust with residents, which in turn can develop into habits of civic engagement. Improving the quality and quantity of 311 interactions with folks across Boston, especially among currently underrepresented populations, is a channel for building trust and participation. **This research finds a correlation between participation in city services such as 311 and higher rates of civic engagement in Boston.**

For many in Boston, their decision to engage with city services is shaped by their beliefs about government, whether it works, and who it is meant to serve. When negative service experiences align with expectations that the government doesn't care about "people like me" it can harden entrenched community narratives that have their roots in the legacies of institutional racism and other forms of discrimination.

Working together with Boston Digital Service and in the Department of Innovation and Technology, this report focused on the following key question: **How can the city improve its service delivery to increase residents' trust and their willingness to engage in civic life in Boston?**

The report analyzes administrative data alongside original qualitative research to

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explore who currently engages with city services, the challenges they encounter when they do so, and the opportunities for service improvements. The focus is primarily on basic city services that address quality of life concerns, especially as requested through Boston 311, the city’s non-emergency hotline. Insights from these services can inform broader service design principles across the City’s suite of digital products.

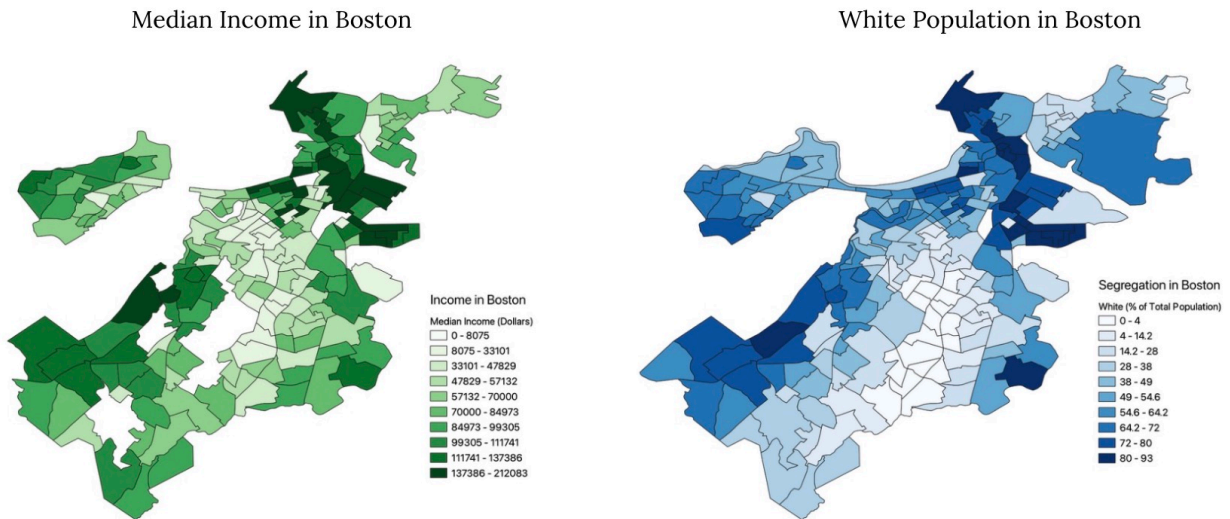
Exploring the Problem of Unequal Participation

Boston is a city of neighborhoods, each with a distinct character and culture. Yet, these distinct clusters are also indicative of Boston’s racial and socioeconomic segregation.

Figure 1 visualizes the socioeconomic and racial segregation of Boston and highlights how race and wealth are deeply connected. The whitest areas of the city are also among the wealthiest. Median income across Boston is just over \$89,000.ⁱ Holding all else equal, a one percentage point increase in the white population share in a census tract is associated with a \$1,117.58 increase in the area’s median income.ⁱⁱ

Residential segregation is a massive challenge on its own, but the implications for the provision of city services are particularly critical. Unlike policy delivery in state or federal government, the bulk of public goods and services provided by city halls are place-based. As a result, cities inevitably grapple with residential segregation when planning service delivery.ⁱⁱⁱ

Figure 1: Income and Racial Segregation



Source: 2020 Data from US Census Bureau, presented at census tract level

Boston's non-emergency service request system, 311, is old, fragile, and complicated.^{iv} Cases can be created by constituents or employees through the app, website, or a phone call. The number of 311 requests made in 2023 per census tract was 1,427, or roughly 42 requests for 100 people, with a high degree of variability across the city.^v

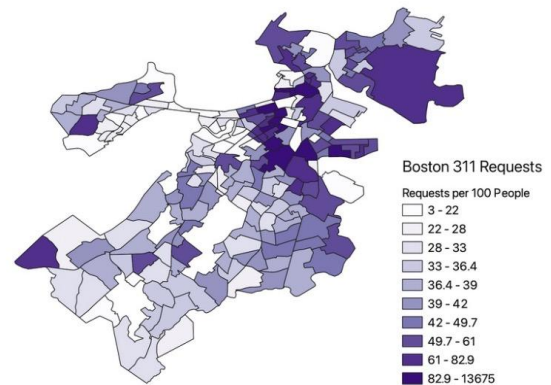
A \$1,000 increase in an area's median income is associated with an additional .20 requests per 100 people ($p < .01$). A one percentage point increase in the share of the population that is white is associated with .26 more requests per 100 people ($p < .01$). The effect of higher incomes remains robust when controlling for the racial demographics of a tract, suggesting that relative resources may be a significant factor in understanding these patterns. Figure 3 visualizes this correlation.^{vi}

Why Participation Matters

Who participates in civic life not only influences which trash cans are emptied and sidewalks repaired but also fundamental questions of who holds power and whose voices carry weight.

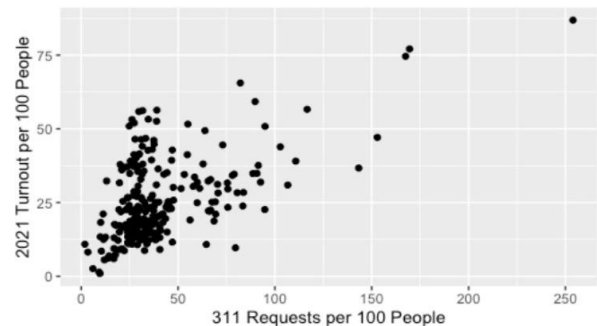
In Boston, 311 service requests are highly correlated with voter turnout. While not causal evidence, this suggests that these civic and service engagement activities tend to move in concert with one another (Figure 3).^{vii,viii}

Figure 2: 311 Requests Mirror Area Demographics



Source: Analyze Boston, 2023 volume per 100 people by census tract

Figure 3: 311 Requests and Mayoral Election Turnout (2021)

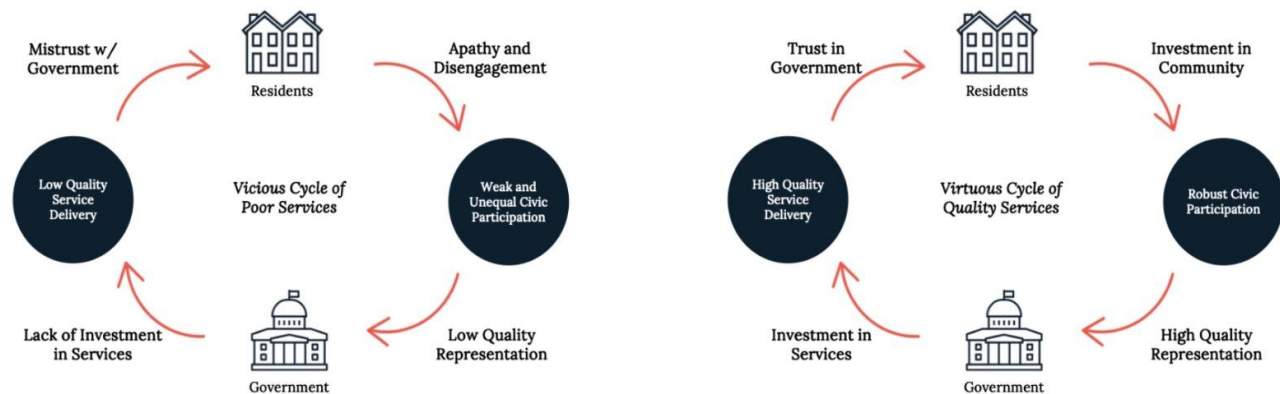


10 Additional 311 requests in a precinct:

+ 8.3 registered voters**

+ 1.99 mayoral election voters**

Source: Analyze Boston, Boston Elections Department



Service interactions help form residents' perceptions of the institution of government itself.^{ix,x} The City's decisions on how services operate and policies are delivered have a direct impact on residents' attitude formation, for better or worse. In their ideal form, service interactions can teach residents that the City is responsive to their needs, building confidence and propelling a "Virtuous Cycle of Quality Services." On the contrary, poor design and delivery can seed or embolden attitudes that the City is incompetent or doesn't care about "people like me," creating the "Vicious Cycle of Poor Services."

Key Findings: Root Causes of Unequal Participation

Why do some people proactively engage with the City at higher rates than others?

Community Narratives Shape Residents' Expectations:

For some Bostonians, the perceived costs of engaging with city hall are quite high. This can lead residents to actively choose not to engage with the City or passively disengage through inaction.

For example, some residents believe that if you put in a service request for a pothole on your street, ICE might show up.^{xi} Others believe that the police may get involved.

The perceived benefits of engaging with the City are also influenced by an individual's circumstances and community history. If you've personally experienced a successful case resolution, or you know someone who has, you can more easily see and feel the benefits of making a request the next time you have a problem. On the other hand, many residents feel like they've "been burned" in the past, and that even if they file a case or request a service, nothing will come of it.^{xii} As one community organizer put it, "You can't just ask [residents] to trust you when there isn't a record of trust to be accounted for."^{xiii} Unfortunately, many residents have a strong feeling that their community is being left behind and disproportionately failing to benefit from city services.

In areas of the City such as Fields Corner and Mattapan, residents liken the experience of accessing city services to "climbing Mount Fuji," and that even if they put in a request,

Community Narratives Shape Residents' Expectations

"People feel like their neighborhood is neglected, that they are underfunded, under resourced, and they don't get attention."

- Codman Square

"The general consensus is that no matter what you do, the city ain't gonna do nothing about it... they don't care."

- Mattapan

"Young people see their parents not believing [in the City] because they can't get any help. So our generation, we see that and we we don't reach out to the government either."

- Fields Corner

"Some people truly believe if you create a case for a pothole, then ICE might show up."

- City of Boston employee

"the city ain't gonna do nothing about it." ^{xiv,xv}

On the other hand, many residents have positive experiences with the government that reinforce feelings of connection and belonging. They feel heard and trust that the city will respond to their needs.

"Small" Features Hamper Service Delivery:

Administrative burdens are broadly defined as the costs of interacting with the government.^{xvi} These costs, both large and small, inform how Bostonians feel about their government whether they choose to engage with it. Administrative burdens come in three main forms:

1. **Learning costs:** to search and find necessary information
2. **Compliance costs:** to meet various standards or regulations to receive services
3. **Psychological costs:** anxiety, mental load, lack of agency, loss of dignity, stigma, or stress associated with accessing a service.

There are a few key indicators of administrative burdens within the 311 App that hinder accessibility to Boston services, and that pose challenges to frontline workers.

The first is **language access**. Boston has made significant investments in improving its language access due to dedicated advocacy from stakeholders within and outside government – The 311 App is available in Boston's 11 most spoken languages. In addition, there is a growing number of employees who can deliver services or information in multiple languages within city hall. Language access is a critical way to reduce administrative burdens of all three types for the 35% of Bostonians who speak a language other than English at home, and the 15% with limited English proficiency.^{xvii}

But simply making tools available in other languages does not guarantee true accessibility. Only 2.3% of users who responded to a customer satisfaction survey on the 311 App did so in a language other than English.^{xviii} Additionally, less than .01% of the almost 15,000 people who have responded to feedback forms on the

Boston.gov webpages have done so in a language other than English.^{xix} These low levels of engagement mean that non-English speakers' voices are disproportionately missing from many of the channels the City relies on to fuel its continuous improvement.

The second is the **ease of use** of the app. Users of the BOS311 app report differing levels of ease when surveyed about their experiences. On a scale of 1-5 from "Very Hard" to "Very Easy," app users report an average score of 3.45.^{xx} Among residents who report challenges within the app, the most common themes are difficulties with the geolocation tools or tracking the status of their cases.

The city has made significant strides in reducing the administrative burdens of interacting with the government. The City's publicly available brand and writing guides emphasize plain language and simplicity. These modernization projects have gone hand in hand with the expansion of Boston's Digital Equity efforts to help close the digital divide and ensure residents aren't being left behind. But despite these advancements, there is still a perception gap: measuring with objective criteria, such as total time or ability to complete a task, processes have gotten easier; yet, when asked about their general expectations for interacting with the city, many community members still anticipate processes to be cumbersome and inaccessible.

The third indicator of administrative burdens that this report observed is the **lack of operational transparency**. The City has

been on the cutting edge of the operational transparency movement in government. After academic studies showed that providing photo updates of the City's basic service delivery (such as filling potholes or repairing streetlights) increased future request behavior by 60%, the city institutionalized the norm of including closure photos on 311 requests.^{xxi}

But there is still much work to be done. Residents feel like they are yelling into a void when putting in a 311 request and have no insight into what happens next. One city staff member stated, "The city does a bizarrely poor job of communicating their progress or the lack of progress. There is this tendency to fumble the ball at the one-yard line."^{xxii} The problem lies not necessarily with the quality of work, or timeliness of response, but instead in communicating with residents in ways that make them feel seen, heard, and understood.

These transparency challenges are compounded when bandwidth-constrained city workers, who are managing an ever-growing queue of requests, must actively decide how to fill in a free text field explanation with each case. Simple miscommunications or ambiguous language can be interpreted with nefarious intent if there isn't a baseline of mutual trust or respect towards the City.

Policy Implications / Recommendations:

Real improvements that will power the virtuous cycle of delivery, engagement, and representation will require deep community work to "repair relationships and rebuild

trust,” alongside process improvements and technology modernization efforts.^{xxiii}

Instead of thinking of elevating technology as a panacea, the Digital Service must continue to think strategically about how it can use new and existing tools to amplify the effectiveness of the people of government, who are its true engine.

Recommendation #1: Customer Experience as the guiding lens

Boston Digital Service must center residents’ experiences as it weighs tradeoffs in where to spend time and money. Lifting up Customer Experience as both a functional competency within the City and a guiding principle gives direction to these efforts.

The findings from this report suggest two starting points to inject a CX ethos at scale within Boston Digital Service.

1. Audit the administrative burden of high-priority services
 - a. Audit a sample of high-priority services to document their inefficiencies and imposed administrative burdens. This can inform Boston Digital Service’s strategic plan and product roadmaps.
2. Expand the operational transparency toolkit with new products and guidelines
 - a. “Keep it simple and take credit” – the City can invest in improving the accessibility of its transparency and self-service tools. This includes improving the efficacy of existing transparency tools, such as adding a “check status” button to Boston 311’s home page.

- b. Adopt the norm of expectation setting across all departments, even when sharing news about delays or challenges.
- c. Build out self-service functionality for additional services, to help create the same level of transparency and autonomy across all types of city services.

These recommendations will reduce the time and effort needed to successfully navigate city services.

Recommendation #2: Supercharge the credible messengers

The neighborhood and cultural liaisons have broad mandates to keep track of the goings on in their areas and develop deep relationships with residents and community organizations. They help to fill gaps in the current system by overcoming residents’ administrative burdens and shining a light on the back-office work to deliver services. But liaisons face capacity constraints, with only a dozen or so serving Boston’s 650,000 residents.

To both deepen and broaden the positive impact of these credible messengers from the City, the Digital Service can partner with liaisons to develop tools that make their constituent service work more seamless. Digital tools and data sharing agreements that break traditional silos can help create a single front door for residents to bypass the current learning and compliance costs. The proposed burden audits and transparency tools are a key first step in this process.

When the costs of navigating the bureaucracy are reduced, liaisons can invest

that saved time in the long-term relationship-building and organizing efforts that help bring new community members into the fold.

Conclusions & Next Steps:

High-quality digital services and products, alongside robust community outreach efforts, will help to create government-resident interactions that are trust-enhancing rather than trust-breaking. At a time when trust in government is in crisis across the country, Boston Digital Service must double down on its efforts to show that, at least on the local level, government can deliver for residents and be worthy of their trust. Proving government can work is a key component to making the case that democracy can too.

Endnotes

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- ^{xix} Confidential data shared with the author, collected through Boston.gov.
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