

Evaluating Potential Future States of Increased Data Sharing within the City of Boston

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Executive Summary

Data sharing within city governments can cultivate improved service delivery, transparency, and trust. The City of Boston aims to foster data sharing with Boston Public Schools (BPS) to improve educational outcomes and budgeting efficiency. Partnering with the Department of Innovation and Technology (DoIT), we assessed the technical and regulatory possibilities of various future states of increased data sharing. After speaking with a multitude of stakeholders within the City, we assessed the regulatory and technical requirements to ingest and utilize data from BPS and DoIT to conduct future analyses which could impact educational outcomes and the city's budget. We evaluated regulatory requirements of future states of data sharing, analyzed necessary legal and procedural requirements, and assessed technical possibilities of sharing data in a privacy-preserving way. Finally, we defined four future states that incorporated both impact evaluation value as well as privacy and security. These future states include: (1) Current state with non-personal, essential data sharing; (2) Sharing of anonymized, aggregated data; (3) Complete, non-sensitive, personally identifiable data sharing; and (4) Comprehensive data sharing for research and analysis. Moving forward, we highly recommend expanding collaboration with BPS. Even a small step in the direction of increasing data sharing will help promote trust and transparency between BPS and the City. Additionally, we recommend strong technical privacy controls for data shared, including encryption in transit and at rest as well as data manipulation techniques, such as aggregation, k-anonymity, tokenization, and differential privacy. DoIT has the technical abilities and stakeholder support to facilitate secure data sharing with BPS that will simultaneously protect the privacy and security of student data while providing critical information to the City.