CS 506 - Data Science Fundamentals

City of Boston: City Budget Team A

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Key Question #1: **How has spending per department changed over time?**

On average, the city budget increased by **5.59%** per year. Budget had a **6.56%** increase from 2021-2022, a **3.56%** increase from 2022-2023, and a projected **6.65**%increase from 2023-2024.

The three departments which gained the largest percent-increase in funding per year over this four-year period were:

* Execution of Courts (under the Finance Cabinet), with a 136.81% increase
* Annual Audit Costs (under “Other”), with a 133.88% increase
* Reserve for Collective Bargaining City (also under “Other”), with a 117.21% increase

Notably, this excludes the OPAT cabinet, which received no funding in 2021 (it was conceived in 2022).

The three departments which lost the largest percent-decrease in funding per year over this four-year period were:

* Office of Finance (under the Finance Cabinet), with a 20.12% decrease
* Suffolk County Sheriff Dpt. (under “Other”), with an 8.32% decrease
* Library Department (under the Human Services Cabinet), with a 4.89% decrease

The Police Department and the Central Fleet Management were the only other two departments to report an average yearly decrease in funding over this period. All other 61 departments reported an increase.

Key Question #2: **How has spending per program changed over time?**

The three programs which gained the largest percent-increase in funding over this four-year period were:

* Trust (under the Treasury Department), with a 4854.92% increase
* Small & Local Business (under the Office of Economic Opportunity & Inclusion), with a 656.51% increase
* Reserve for Collective Bargaining City (under department of the same name), with a 444.38% increase

The Trust project is somewhat of an outlier, since its budget in 2021 was relatively low ($631.62).

Again, this excludes the OPAT cabinet, which received no funding in 2021 (it was conceived in 2022).

The three programs which lost the largest percent-decrease in funding over this four-year period were:

* Affirmative Action (under Human Resources), with a 97.31% decrease
* Consumer Affairs (under Consumer Affairs & Licensing), with an 56.63% decrease
* Alterations & Repair (under the Property Management Department) with a 54.68% decrease

151 projects (82.07%) received an increase in funding, whereas 33 (17.93%) received a decrease.