

# Suffolk County Carceral Budgeting Methodology

The goal of this project is to calculate total spending on incarceration in Suffolk County MA from fiscal years 2016-2019 using publicly available data.

We define the incarceration system in Suffolk County as 18 different government agencies. 14 are within the state government and 4 are municipal police departments. The state agencies are the State Police, Suffolk County Sheriff's Department, Department of Correction, Trial Court, Public Counsel Services, Suffolk County District Attorney, Massachusetts Bay Transit Authority Police, District Attorney Association, Sheriff's Association, Parole Board, Municipal State Police Training Committee, Department of Youth Services, Appeals Court, and Supreme Judicial Court. The municipal police departments are the Boston Police, Chelsea Police, Revere Police, and Winthrop Police.

All data used is from publicly available government spending records. For the statewide agencies the data source is the Massachusetts Comptroller's cthru platform. Most data on municipal police departments is from budget documents in pdf form. A full description of data can be found in the "Sources of Data" section.

The spending by each agency in the system is a combination of stated yearly expenditures and several "hidden costs." There are 4 types of hidden costs that are calculated and added to stated costs: hidden payroll, pension costs, hidden fringe benefit costs, and hidden capital costs. The methodology to total all these costs is detailed in the "Cost Types Section."

This project looks exclusively at Suffolk County. Some of the agencies included in the analysis operate over the entire state of Massachusetts. A calculation was developed to find the fraction of total spending from statewide agencies spent within Suffolk County. The methodology to develop these calculations is detailed in the "Statewide to Suffolk Correction" section.

Federal dollars are removed where possible. The methodology to remove those dollars is detailed in the "Removing Federal Money" section.

The final section details the various instances of missing data and how they were addressed.

## Cost Types

## Cost Types Introduction

Spending is divided into the five cost types of payroll, non-payroll operating costs, pension costs, fringe benefit costs, and capital costs. Not each agency has spending on each category in each year, but most do. There are several reasons the analysis is organized this way.

The first reason is to provide the transparency on how the agencies in question spend money. A reader with interest in system efficiency or a transition to a public-health oriented model can see how resources are allocated between these different sorts of costs.

Another reason is to provide a framework within which “hidden costs” can be easily kept track of. The way hidden costs are defined in this analysis is that they are costs not listed under the relevant agencies’ stated spending. All government spending records divide expenditures up by the agency spending the money. However, some costs are lumped together and listed under a separate section.

For example, there is a single entity called the “Group Insurance Commission” in the Massachusetts state government responsible for administering health insurance plans to each state employee that receives the benefit. All state money spent on meeting this obligation is listed under the Group Insurance Commission’s spending. We count health insurance costs for corrections officers, trial court employees, etc, as carceral and so those costs are added to the analysis as “hidden.”

A full description of the methodology for each cost type and which dollars are counted as hidden can be found below.

## Non-Payroll Operating Costs

Non-payroll operating costs are defined as all expenditures listed under the relevant agency’s stated expenditure record except for payroll, fringe benefits, and capital costs. This category consists of line-items like office rentals, squad cars, and IT systems.

## Statewide Non-Payroll Operating Costs

For the state agencies, the [cthru dataset on yearly expenditures](#) is used. These numbers are organized by fiscal year. The payroll costs are all line-items whose object code begins with “A”, and the non-payroll costs are everything else.

Be specific that some fringe, capital spending is listed under the agency’s spending in which case it was removed to avoid double counting.

Add paragraphs for CPCS, MBTA

Write about CY to FY conversion

## Municipal Non-Payroll Operating Expenses

For the Boston Police Department, the non-payroll yearly operating costs are found in the public safety documents from <https://www.boston.gov/departments/budget>.

The Boston city budget documents split up “Department History” and “External Funds.” All of “Department History” is used, and non-federal dollars from “External Funds” is counted as well. From “Department History” the non-payroll operating cost is calculated as the agency-wide spending (“Actual” number under the “Grand Total” line-item on the “Department History” page) minus the total payroll (“Total Personnel Services” line-item on the “Department History” page). From “External Funds” the fraction of dollars calculated to be non-federal are taken from some line-item.

For the Chelsea Police Department, total non-payroll operating costs are taken from the “Budget” columns in the “Operations and Maintenance” line-items in the 2020 and 2021 budget pdf’s.

For the Revere PD, all data is from budget pdf’s found at <https://www.revere.org/departments/auditor>. The section titled “Total Department Expenses” has an “Adopted” column which is used as spending on payroll and non-payroll.

For the Winthrop PD, all data is from budget pdf’s found on [Winthrop's Site](#). For each year the payroll expenditures are found on the “Sub-Total Personnel Services” line item under the “Actual” column, and yearly non-payroll operating expenses are calculated as the total department expenditures minus the payroll expenditures.

## Payroll

### Statewide Agency Payroll

The CTRHU platform has a dataset of all payroll paid to each state employee each year. This dataset provides earnings for each employee for each calendar year. Because the analysis is done by calculating a cost by fiscal year, the calendar year to fiscal year conversion was done.

The Committee for Public Counsel Services (CPCS) spends a large amount (add number here) on labor costs not technically classified as “payroll” because the lawyers are paid as contractors. Those costs are labeled with object code “R24” and are classified as “payroll” for the CPCS. This is referred to as the R24 correction.

The Massachusetts Bay Transit Authority (MBTA) police require a more complex method for two reasons. The first is that there isn’t payroll data for 2016, and the second is that most of its employees aren’t carceral. This is the only agency examined with both carceral and non-carceral responsibilities.

To fill in the gap of 2016, a dataset of yearly earnings from the MBTA site is used. The 2015 and 2017 reports are used.

Only employees whose title includes the term “Police” or “Sergeant” are counted towards the MBTA police payroll.

For the Boston Police Department (BPD), yearly payroll is from this [yearly earnings report](#). All employees employed by the “Boston Police Department” are counted towards BPD payroll. The amount under “TOTAL EARNINGS” is used. Because the data is organized by calendar year, the fiscal year to calendar year conversion is used.

For the Chelsea Police Department (CPD), yearly payroll is calculated from the earnings reports on the [Open Finances Page](#), except for 2016 where it is taken from the 2020 yearly budget pdf found on [Chelsea Financial Reports](#) page.

For the earnings report, any employee employed by the “POLICE DEPARTMENT” are counted towards CPD payroll. The number under “totalpay” is used.

For 2016, the number

## Pension Costs

Calculating pension costs for a particular agency involves several steps. In a given year the government is responsible for making contributions to each pension fund it manages, and the goal is to estimate the % of those contributions that are “due to” employees in the relevant agency. The methodology to achieve this is slightly different at the state and municipal levels

At the state level, the Office of the State Treasurer is responsible for paying the yearly employer contributions under the appropriation name “State Retirement BD Commonwealth Pension.” To find the % of this yearly contribution that is attributed to each agency a second dataset of [yearly pension payouts](#) is used. The % of the total contribution that is assigned to each agency as “pension costs” is the % of the total pension payouts that go to former employees of that agency.

At the municipal level, the budget documents linked above have the city’s yearly contribution to the citywide pension funds. However, there is no publicly available data on where the retirement payouts go, so instead the % of total city payroll is used. But teachers statewide participate in a state-run pension system, so the calculation is done as the police payroll as a % of *non-teacher* payroll.

Add a section here on DOC and MBTA methodology.

## Fringe Benefit Costs

This cost type includes all spending on the following employee benefits: health insurance, life insurance, worker’s comp, and unemployment insurance. None of the agencies

analyzed list these costs under their own spending. These benefits are not broken by employee either, so the % of total spending on fringe benefits that is associated with each agency is estimated as % of total payroll that is dedicated to each agency.

For all state agencies, fringe benefits consist of health insurance premium spending from an agency called '[GROUP INSURANCE COMMISSION](#).' Because spending on health/life insurance from this agency is not broken down by department or employee, an estimation is used. The % of total payroll for each agency is calculated using total yearly payroll from the cthru payroll dataset.

For this section I need to be more clear about the calculation

For the Boston PD, the [2019 citywide summary budget](#) and [2021 citywide operating budget](#) have line-items for health insurance and a worker's compensation fund. There is a line-item for unemployment insurance too but it doesn't include any spending 2016-2019.

For the Chelsea PD, there is a single line-item for "Salaries, Wages and Benefits." This entire line-item is categorized as "payroll" and fringe benefits are set to 0.

For the Revere PD, there is an "Unclassified" section under departments that has a single line-item for "Employee Benefits, Insurance."

For the Winthrop PD, the following line-items are counted as fringe benefits: "Workers Comp", "Unemployment", "Group Insurance - Retirees", "Group Insurance - Town", "Police Fire Medical." Here include how Winthrop doesn't clearly list citywide payroll so Revere Fraction is used.

## Capital Costs

This cost type refers to spending on longer-term capital projects.

At the state level, some of these costs are "hidden" in that they are paid through the '[CAPITAL ASSET MANAGEMENT AND MAINTENANCE DIVISION \(DCP\)](#).' Some of the capital costs are also paid through each individual agency's spending with object code '(2CN) CAPITAL.'

Within the DCP, there are payments for "Court Facilities" that are assigned as Trial Court Spending, payments for "Jail" and "Correctional Facilities" spending that are assigned to Department of Correction, and "State Police" spending that is assigned to the State Police.

For Boston, Chelsea, and Winthrop, the yearly capital costs associated with the police departments are clearly laid out in the budget documents. For Revere there is only capital costs for a "Public Safety" division that includes police as well as other departments. The % of public safety capital costs that go to police is estimated as the % of the total public safety budget that goes to police.

## Statewide to Suffolk Correction

These corrections cover all statewide agencies included in the analysis.

## Trial Court Correction

This correction uses data from the [trial court metrics on mass.gov](https://trialcourtmetrics.mass.gov). There are two overlapping corrections that are applied here. The first is to estimate the % of trial court money that goes to prosecuting criminal cases, and the second is to estimate % of that money that goes to cases in Suffolk County.

Within the “Year End Summary of All Court Activity” documents there is a breakdown of how many of the total case filings are due to criminal matters. The fraction of case filings that are criminal are used as the fraction of total dollars that go to running criminal court. This document also provides the total criminal cases statewide under the sub-header “Criminal.” The number of these cases that occurred within Suffolk is the sum of the total criminal cases in the Boston Municipal Court document, the total criminal defendants in Chelsea in the Total Filings by Court Location document, the Criminal Case Entries in Suffolk in the Civil and Criminal Cases Entered document under the “Superior Court Department” header, and the Adult Criminal, Delinquency, and Youthful Offender Juvenile Cases within Suffolk in the Total Filings by Court Location document under the Juvenile Court Department header. The fraction of criminal cases that occur in Suffolk County is used as the fraction of total dollars that go towards Suffolk County. The final correction is these two fractions multiplied together.

This correction is used for Trial Court, Public Counsel Services, and Supreme Judicial Court as these agencies operate within the court system and participate in both criminal and non-criminal cases.

Include description of how TRC local vs statewide employees in the pension payouts and the corresponding calculation.

## Appeals Court

The Appeals Court is the only agency within the court system that has separate records on how many cases each year are criminal. Data on the number of criminal panel decisions on the [Appeals Court Cases](https://appealscourt.mass.gov) on mass.gov was used to calculate the % of money spent on criminal cases out of total spending. There are no numbers on location specific enough to know if cases are in Suffolk County or not, so % of total cases in Suffolk County is estimated to be the same as Trial Court correction.

## DOC Correction

This correction uses [Department of Correction records on admissions and releases from mass.gov](https://departmentofcorrectionrecords.mass.gov). Similarly to the trial court correction, there are two overlapping corrections for the % of population that is in on criminal cases and the % of new admits that are in on cases from Suffolk County.

Data on % of cases that are criminally sentenced is found in figure 1.2. Data on % of new “court commitments” (ie admits) that are booked on Suffolk County cases is found in figure 2.7.

This correction is used for the Department of Correction and Parole Board.

## Population

For the remaining statewide agencies there isn't rigorous publicly available information on where within the state of Massachusetts they use their resources. So the estimation is used that the % of money spent in Suffolk County each year is equal to the % of the statewide population that lives in Suffolk County that year. Data is from the American Community Survey.

## Removing Federal Money

For statewide agencies, removing federal money is simple. All expenditures with an appropriations code that contains the term "FEDERAL" is excluded.

The Boston PD is the only municipal police department that explicitly states which of it's dollars come from federal grants. Within the external funds section, it breaks down the money paid out yearly from each "external" source which are federal grants, private foundation money, and state/municipal dollars from funds earmarked for specific purposes. Along with federal money, a small amount of dollars from private foundations are also excluded.

Write about how federal payroll fraction is developed and implemented.

## Missing Data

### Debt Service

Along with Capital Costs, "Debt Service" is where spending on expensive long-term projects like construction/renovations shows up with the budget records. Unfortunately at no level of government is the debt service broken down by agency or project well enough to determine how much of those dollars go towards the agencies examined here.

## Missing Numbers from Municipal Budget Documents

There are missing expenditures for the Chelsea, Revere, and Winthrop police departments at various years:

1. Chelsea Total Expenditures 2016 not found, use Total Budget instead (less than 1% difference on net between the two the years we have data for 2017-2019)
2. Revere Total Expenditures 2019 not found, use total Budget instead (less than 1% on difference on net between the two years we have the data for 2016-2018)
3. Winthrop Total Expenditures 2018 not found, use total budget instead (less than 1% difference between total budget and total expenditures for the one year we have both)

## DOC Pension Dollars Error

The data says there are 160 million dollars in pension costs paid out in 2020 but 6 through 11 million was paid out in the previous 9 years. This is assumed to be a book keeping error and the 2020 dollars were meant to spread out over some larger number of years. The dataset went back to 2011, so it seems most likely that the 160 million dollar 2020 payout was supposed to be spread out over 2011-2020. So for each year 2011-2020 the fraction of total money paid in that year is calculated, and the lump sum is distributed according to that fraction. Even with this correction, the DOC pensions are surprisingly low. The DOC is an agency with a 130% larger budget than the state police but about 30% lower total retirement payouts.

## Lack of Transparency for MBTA Police

There is a great deal of missing data for MBTA Police due to it being the only agency in the analysis that is not a separate agency as defined within the state/municipal government. The MBTA police is technically a department within the MBTA, and so it's yearly expenditures aren't clearly laid out in cthru (it's lumped in with the entire MBTA). Cthru has a separate dataset of payroll expenditures that include employee title, so the payroll for the police within the MBTA can be separated from the total payroll. This data doesn't cover all years, so for data on payroll from the [MBTA's site](#) is used to calculate total payroll for 2016 and 2017. For 2016 the 2015 numbers are used as data for 2016 is missing.

## Settlements/Payouts

Data on settlements and judgement paid out for Boston police misconduct could not be found. Cthru has data on settlements/judgements paid out due to lawsuits but without the Boston Police Department settlements numbers this section is incomplete so it isn't included in the final report.

## Section on Budgeted/Spending in Municipal Budget PDF's

Point is we always want actual spending, sometime it's unclear or unavailable in which case we do the best we can.



## Sources of Data

### CTHRU

CTHRU is a “Financial Records Transparency Platform” run by the Massachusetts Comptroller. It hosts a group of datasets on the state budget, expenditures, and other accounting-related matters. It is accessed through an API that delivers the data as .csv.

- Expenditures dataset
- Payroll dataset
- Pension

### Budget Documents

Each municipality in Suffolk County publishes its yearly expenditures in a pdf hosted on the city government website. These are less detailed than the data from cthru but still point to the necessary information. Discrepancies from year to year lead to some missing data.

### Earnings Datasets

Boston and Chelsea have tables of employee earnings on their respective city government websites. These list each city employee's yearly earnings.

### MBTA Earnings Reports

The payroll data for the MBTA on cthru is incomplete so reports of yearly employees earnings in pdf form from the MBTA's website are used to fill in the missing years.

### Trial Court Metric Reports

The statewide trial court publishes yearly summaries on metrics like types of cases handled each year and where the cases are tried.

### Department of Corrections Reports

The department of corrections publishes reports that metrics like the number of people admitted each quarter, where incarcerated people were tried, and whether people are incarcerated on criminal or civil cases.

## U.S. Census American Community Survey

This data is used to find the proportion of the Massachusetts population living in Suffolk County each year.