

# JUSTICE EXPENDITURE AND EMPLOYMENT TOOL

Bureau of Justice Statistics | Re-entry, Recidivism, and Special Projects Unit

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## Keywords:

User experience, Data scrubbing & manipulation, Visualizations

## Summary:

Mandy played a key role in enhancing the Justice Expenditure and Employment Tool (JEET), a resource that tracks and analyzes financial and employment data within the U.S. criminal justice system. Using **R**, **Tableau**, and **Figma**, Mandy significantly improved the tool's usability for the public and successfully integrated an **additional 40 years of data**. Her contributions to the ongoing iteration of JEET have streamlined the process of accessing criminal justice data, reducing the manual effort required for public access and making the tool more user-friendly and comprehensive.



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# Justice Expenditure and Employment Tool

...Or the JEET



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## The First JEET

Progress by Abt, but not finished!

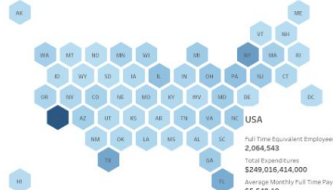
Only data from 2016-2019, with older vintages

### Justice Expenditure and Employment Tool (JEET)

The Bureau of Justice Statistics (BJS) extracts justice expenditure and employment data from the U.S. Census Bureau's *Annual Government Finance Survey* and *Annual Survey of Public Employment and Payroll*. BJS has made these data available through the Justice Expenditure and Employment Tool (JEET), an interface that can generate expenditure and employment statistics for different justice categories (Total Justice, Police Protection, Judicial and Legal, Corrections) and different levels of government (National, State, County, City). The JEET will be updated annually with subsequent years and historical data from 1982 onward.

Home National Overview State Data County Data City Data Resources

Click here to access national-level JEET data



Click here to access state-level JEET data



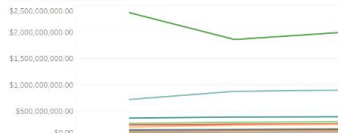
Click here to access county-level JEET data

Average Pay by Criminal Justice Function



Click here to access city-level JEET data

Total Expenditures over Time



State California Year 2019 Metric Total Per Capita

Ranked 1st in total expenditures

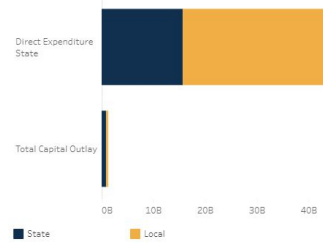
Ranked 1st in corrections expenditures

Ranked 1st in judicial expenditures

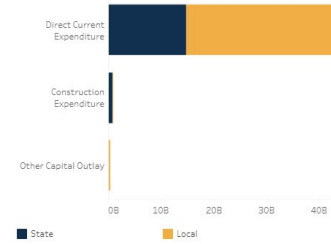
Ranked 1st in direct expenditures

Ranked 1st in police expenditures

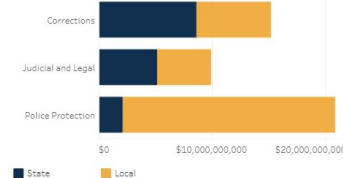
Total Expenditures



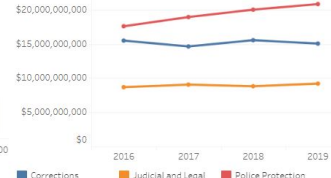
Total Direct Expenditures by Type



Total Expenditures by Criminal Justice Function



Total Direct Expenditures over Time





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## MAIN TASKS

(1) Understand the structure of the JEEE data

(2) Improve the revised JEET for approval

(3) Integrate 40 more years of data

AND PASS THE BATON  
by documenting everything...



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# (1) Understanding The Data



## JEEE



### Justice Expenditures and Employment in the United States, 2017

Date Published: July 2021  
Series: [Justice Expenditure and Employment](#)  
Publication Type: Publication



### Justice Expenditure and Employment Extracts, 2017 - Preliminary

Date Published: July 2021  
Series: [Justice Expenditure and Employment](#)  
Publication Type: Data Table  
Agencies: BJS



### Justice Expenditure and Employment Extracts, 2016 - Final

Date Published: July 2021  
Series: [Justice Expenditure and Employment](#)  
Publication Type: Data Table  
Agencies: BJS



### Justice Expenditure and Employment Extracts, 2015 - Final (Update)

Date Published: July 2021  
Series: [Justice Expenditure and Employment](#)  
Publication Type: Data Table



### Justice Expenditure and Employment Extracts, 2014 - Final (Update)



**Table 16 (JEEE16)**

*Justice System Employment and Payrolls of 66 large city govs by activity*

#### General Notes

No data on Full-time equivalent. For any function outside of Total justice system, FT employee nums and FT equivalent does not exist.

Q: Why are FT employee numbers not a part of the tooltips?

- Column B (Total Justice System: Total Employees)
  - City Data → Employees Tab → Total Employees by Criminal Justice Function Bar Tooltips "Total Employees"
- Column C (Total Justice System: Full-Time Employees)
  - City Data → Employees Tab → Total Justice System Total Employees by Employment Type Tooltips "Total Employees"
- Column D (Total Justice System: Full-Time Equivalent)
  - DNE \*\*measures workload of an employed person that makes workloads comparable across various contexts (e.g. comparing 40 hr week to 30 hr)

- Column E (Total Justice System: March Payrolls)
  - City Data → Pay Tab (Total Metric) → Total Pay Over time Line graph
- Column F (Total Justice System: Average earnings of FT Employees [dollars])
  - City Data → Pay Tab (Per Capita Metric) → Total Justice System Per Capita Pay by Type

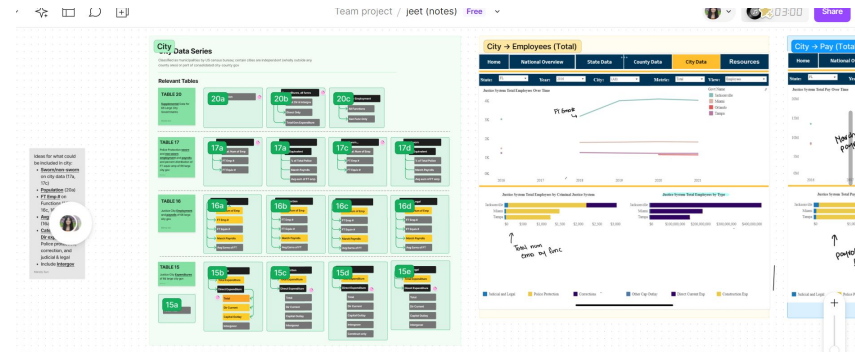
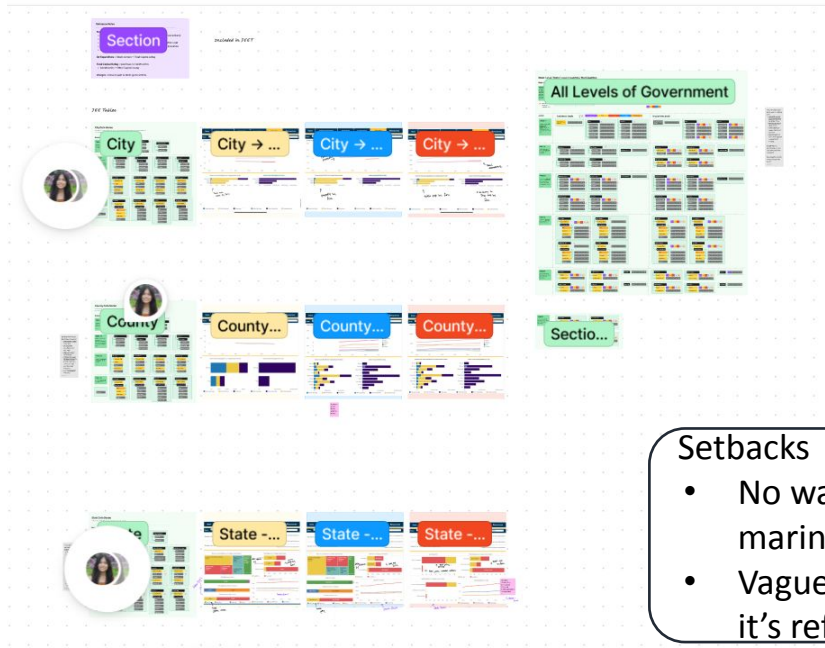


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## JEEE

Diagrams! JEET Annotations

Proposing New visualizations?



### Setbacks

- No way to automate understanding ☐ necessary for data to marinate in brain
- Vague titles for most visualizations ☐ hard to find what data it's referencing



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## (2) Revising the JEET





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# **(3) Integrating 40 years of data**



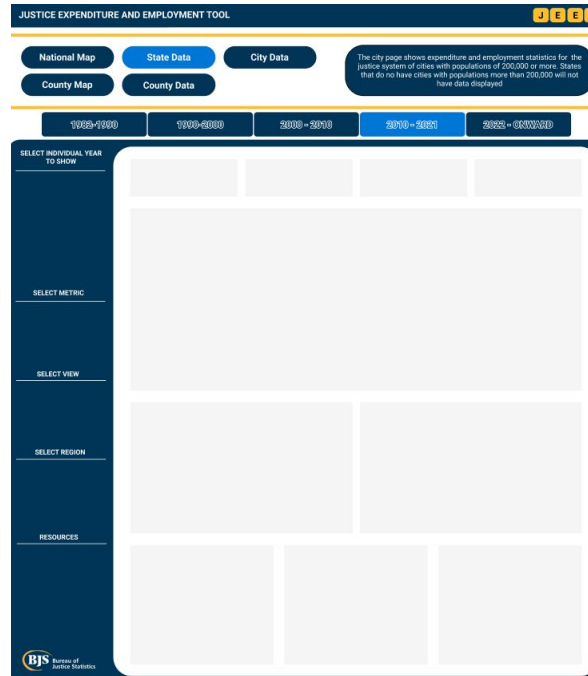
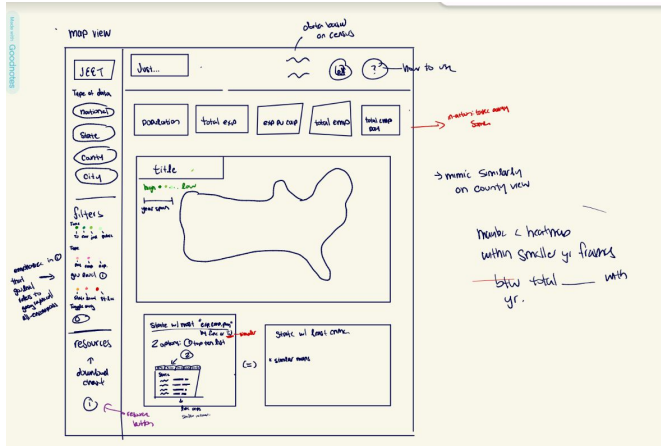
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## Mockups

Drawing out new vizzes

Taking inspo from others

Improving usability and aesthetics



### Setbacks

- Figma to Tableau (more tableau limits)
- Whack-A-Mole bugs
- Integrating without breaking



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# WHAT I LEARNED



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## WHAT I LEARNED

### Pre-professionally

Pivoting and prioritizing

Software: Tableau, R-Studio, and Figma

Iterative improvements

MY Data workflow

### Government Domain

The Juggling act of BJS emps

Usability for the public

Focus on presenting neutral data



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# THE FUTURE OF JEET

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