



Chattanooga Police Incident Data

Recommendations for Improved
Privacy



About the Dataset

- **Police incidents** for Chattanooga, Tennessee
- Available to the public as part of the Chattanooga Open Data Portal, **Chattadata.org**
- Includes **date**, **approximate address**, and **details** about the incident, including the type and a description
- “All crime data posted is **preliminary** and may or may not have been reviewed and approved by the Chattanooga Police Department’s (CPD) **quality control** process.”
- Purpose is **transparency in policing**

Current Privacy Protections

- Some incidents omitted per TN state law to **protect vulnerable classes** of people (juveniles, domestic violence victims)
- Location data **generalized to block level**
- **Filter functionality** restricted to particular columns

Bad Sleuthing (1/3)

Imagine I am James's prospective employer (non-tech savvy)

Get name, age, and prior addresses in phone book

Look up address in incidents

USPhoneBook Enter Name

[Phone Search](#) [Address Search](#) [Directory](#)

James Jackson, Age 49

Current Address:
1800 Wilcox Blvd; Chattanooga, TN 37406-3063

Phone Number:
(423) 629-4810 - LandLine

Prior Addresses:
1815 Rubio St; Chattanooga, TN 37406-3058
1316 Roanoke Ave; Chattanooga, TN 37406-3017
3919 Juniper St; Chattanooga, TN 37421-2149
2433 Doolittle St; Chattanooga, TN 37406-2206

Address	City	State	Zip	Date_Incident	Jurisdic...	Incident...	Zone	UCR_Inc...	Incident...
1800 Wilcox ...	Chattanooga	TN	37406	2021 Jul 07 12:03:00 PM	TN0330100	B3	Baker N	11A	Forcible Rape

Bad Sleuthing (2/3)

Match city court records on:

- Name
- Year of DOB
- Prior Address

Find 1993 convictions for larceny and hit & run

municipalrecordsearch.com/chattanooga/Cases/Detail?referrer=Case&citationNumber=J84812&violationNumber=02...

Citation J84812-02 Docket 06564224

Defendant

Name	JAMES CALVIN JR JACKSON
Address	2433 DOOLITTLE ST CHATTANOOGA, TN 37406
Date of Birth	10/17/1971

Violations (2) Citation J84812

Warrant	Violation	Docket	Status	Fine Amount
No	J84812-01 FAIL TO YIELD RIGHT OF WAY	06564216	DOCKET CLOSED - FOUND GUILTY 5/17/1993	\$0.00
No	J84812-02 LEAVING SCENE OF ACCIDENT	06564224	DOCKET CLOSED - FOUND GUILTY 5/17/1993	\$0.00

Citation 9303400-01 Docket 06522890

Defendant

Name	JAMES CALVIN JR JACKSON
Address	2433 DOOLITTLE ST CHATTANOOGA, TN 37406
Date of Birth	10/17/1971

Violations (1) Citation 9303400

Warrant	Violation	Docket	Status	Fine Amount
No	9303400-01 LARC ALL OTHER/\$100.00 TO 199.99	06522890	DOCKET CLOSED - FOUND GUILTY 4/12/1993	\$0.00

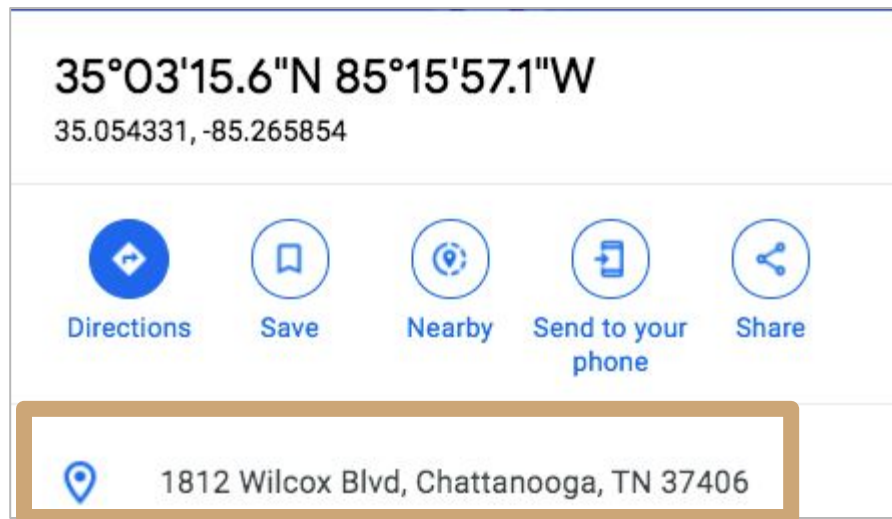
Bad Sleuthing (3/3)

Sensitive data generalized to block level

Looks like a real address

Lends itself to misinterpretation

Search on latitude-longitude gives a more specific location



Re-identification (1/3)

- Able to identify someone from Chattanooga police incident
- From the address of the incident, I could find out who is the owner, when his/her house is bought, with what price on the Hamilton County's government website

assessor.hamiltontn.gov/search.aspx

HAMILTON COUNTY TENNESSEE
Assessor of Property
Marty Haynes

HOME SEARCH ABOUT HELP

Street Name: Street Number: Parcel: Owner:

* Searching requires only one complete field, but entering more information will narrow your results. Click [here](#) for help.

Print Page 1 of 1

Click on the Column Headings to sort accordingly.
Click on the Parcel ID to view the parcel detail.

Parcel ID	Location	Owner	Year Built	Total Value	Square Footage	Description	Sale Date	Sale Price	Book Page
128P B.026	3300 CURTIS ST	HARRIS SYLVESTER	1913	\$85,000	2,666	RESIDENTIAL	5/30/1991	\$17,290	3857-0308

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ChattaData

Search

Employee Login Home About Catalog Suggest a Dataset Chattanooga Performance Dashboards Sign In

Police Incident Data
Based on [Police Incident Data](#)
The data provided in this public website represents general data of incidents based on the Tennessee Incident Based Reporting

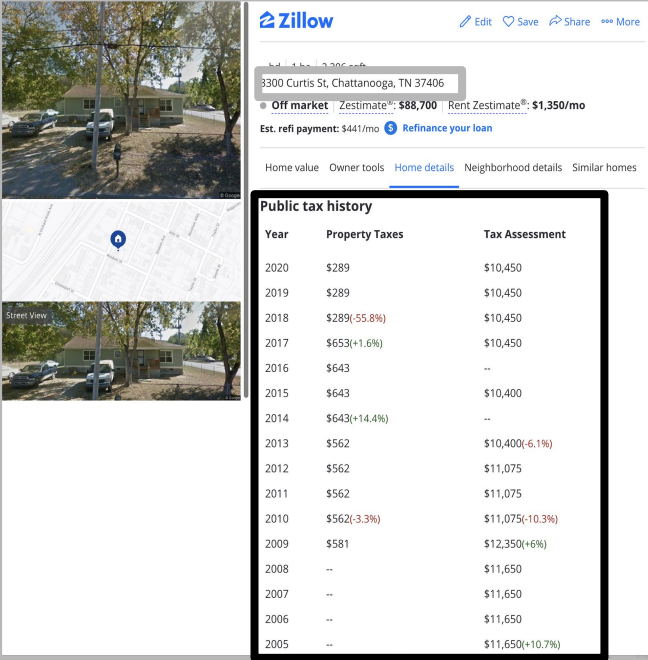
21-073198

More Views Filter Visualize Export Discuss Em

Address	City	State	Zip	Date_Incident	Jurisdct..	Incident..	Zone	UCR_Inc...	Incident..	Incident..	Case_N...	Case_St...	Case_St...	Latitude	Neighbo...	Longitu...	Location
3300 Curtis St	Chattanooga	TN	37406	2021 Jul 13 03:20:00 AM	TN0330100	B1	Baker N	91Z	Field Interview		21-073198	3	Pending/Pos...	35.077289		-85.249798	POINT (-85.2...

Re-identification (2/3)

- From the Hamilton County's government website, I can find out how many houses he/she owned, sale prices, and purchase dates.
- I could find out about his/her tax history on Zillow.



Public tax history

Year	Property Taxes	Tax Assessment
2020	\$289	\$10,450
2019	\$289	\$10,450
2018	\$289(-55.8%)	\$10,450
2017	\$653(+1.6%)	\$10,450
2016	\$643	...
2015	\$643	\$10,400
2014	\$643(+14.4%)	...
2013	\$562	\$10,400(-6.1%)
2012	\$562	\$11,075
2011	\$562	\$11,075
2010	\$562(-3.3%)	\$11,075(-10.3%)
2009	\$581	\$12,350(+6%)
2008	...	\$11,650
2007	...	\$11,650
2006	...	\$11,650
2005	...	\$11,650(+10.7%)

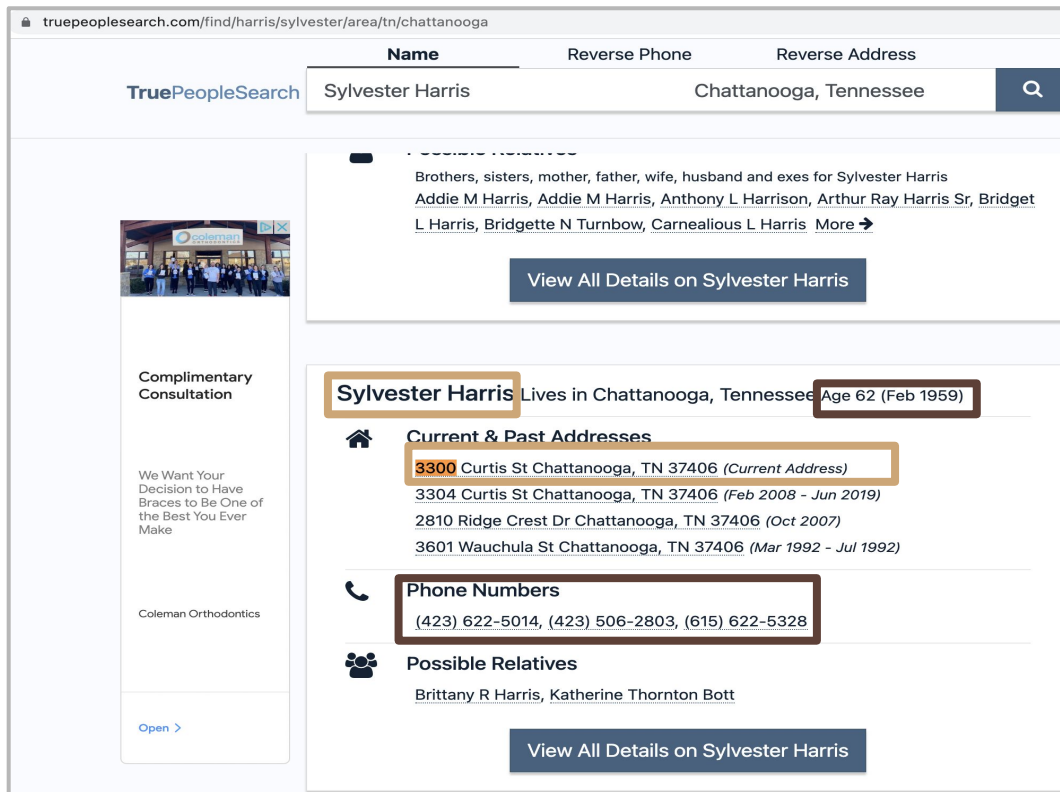
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Parcel ID	Location	Owner	Year Built	Total Value	Square Footage	Description	Sale Date	Sale Price	Book Page
128P B 026	3300 CURTIS ST	HARRIS SYLVESTER	1913	\$85,000	2,666	RESIDENTIAL	5/30/1991	\$17,290	3857-0308
128P B 027	3304 CURTIS ST	HARRIS SYLVESTER		\$7,500	0	RESIDENTIAL	2/29/2008	\$5,000	8608-0050

Re-identification (3/3)

- I could also identify this house owner's age from a public website.
- From year the house is bought and the address, I could identify this matches with the house owner.
- So now, I know about his age, birth related info, and phone numbers.



The screenshot shows a web browser at the URL `truepeoplesearch.com/find/harris/sylvester/area/tn/chattanooga`. The page features a search bar with 'Sylvester Harris' and 'Chattanooga, Tennessee' entered. Below the search bar, there's a section for 'Brothers, sisters, mother, father, wife, husband and exes for Sylvester Harris' listing Addie M Harris, Anthony L Harrison, Arthur Ray Harris Sr, Bridget L Harris, Bridgette N Turnbow, and Carnealious L Harris. A button 'View All Details on Sylvester Harris' is present. The main profile section for 'Sylvester Harris' indicates he 'Lives in Chattanooga, Tennessee' and is 'Age 62 (Feb 1959)'. Under 'Current & Past Addresses', the current address is '3300 Curtis St Chattanooga, TN 37406'. Other past addresses include '3304 Curtis St Chattanooga, TN 37406 (Feb 2008 - Jun 2019)', '2810 Ridge Crest Dr Chattanooga, TN 37406 (Oct 2007)', and '3601 Wauchula St Chattanooga, TN 37406 (Mar 1992 - Jul 1992)'. The 'Phone Numbers' section lists '(423) 622-5014, (423) 506-2803, (615) 622-5328'. The 'Possible Relatives' section lists 'Brittany R Harris, Katherine Thornton Bott'. A button 'View All Details on Sylvester Harris' is also at the bottom.

truepeoplesearch.com/find/harris/sylvester/area/tn/chattanooga

Name	Reverse Phone	Reverse Address
Sylvester Harris		Chattanooga, Tennessee

TruePeopleSearch

Brothers, sisters, mother, father, wife, husband and exes for Sylvester Harris
Addie M Harris, Addie M Harris, Anthony L Harrison, Arthur Ray Harris Sr, Bridget L Harris, Bridgette N Turnbow, Carnealious L Harris [More →](#)

[View All Details on Sylvester Harris](#)

Sylvester Harris Lives in Chattanooga, Tennessee Age 62 (Feb 1959)

Current & Past Addresses

3300 Curtis St Chattanooga, TN 37406 (Current Address)
3304 Curtis St Chattanooga, TN 37406 (Feb 2008 - Jun 2019)
2810 Ridge Crest Dr Chattanooga, TN 37406 (Oct 2007)
3601 Wauchula St Chattanooga, TN 37406 (Mar 1992 - Jul 1992)

Phone Numbers

(423) 622-5014, (423) 506-2803, (615) 622-5328

Possible Relatives

Brittany R Harris, Katherine Thornton Bott

[View All Details on Sylvester Harris](#)

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Coleman Orthodontics

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Disproportionate Impact (1/3)

According to a Chattadata report,
“there is a **significant disproportionate amount of** economic violation only type traffic stops for the **BIPOC community,**” which suggests that non-white Chattanoogaans may be overrepresented in this dataset.



Disproportionate Impact (2/3)

- **Avondale** is a historically Black community with over **90% Black residents**
- **1.5%** of Chattanooga's **population**
- **9.3%** of the **Police Incident reports** with an associated neighborhood were from Avondale



Disproportionate Impact (3/3)

- Avondale residents are **more likely to be identified** in this dataset
- It may struggle to lose reputation as being **“high crime”**
- This could **perpetuate existing economic disparities** from historically discriminatory practices like red-lining



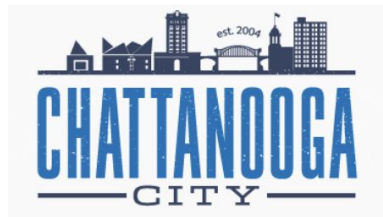
Police Incident Data

Want to know where crime is occurring in the city? Explore, analyze, and learn from the Police Incident Dataset.

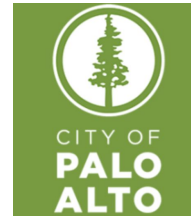
Comparison with Other Cities



- Madison, WI(Worse)
 - Suspect name
 - Victim name
 - Address
 - Selected by officers
 - Not inclusive of all incidents
 - Body characteristics
 - Case number



- Chattanooga, TN(Better)
 - Latitude/Longitude
 - Address
 - Case number
 - Devoid of protected classes
 - Generalized to block level(some*)
 - Preliminary
 - Jurisdiction



- Palo Alto, CA(Best)
 - Latitude/Longitude
 - Address(compressed to block level)
 - Description

- Predictive policing harm

Recommendations

- Challenges

- Public Datasets - essential for research community
- High demand but low quality
- Creates awareness
- Devoid of biases

- Approach: Mask Address
- Aggregate data (Ex: census block)
- Differential Privacy
- Mark last 2 digits clearly (use 'xx' instead of '00')
- Regulate by Federal Govt.
- Standardize across country



Thank you!

References

Police Incidents: <https://www.chattadata.org/Public-Safety/Police-Incident-Data/jvkg-79ss>

Court Records: <https://www.municipalrecordsearch.com/chattanooga/Cases>

Phone Book: <https://www.usphonebook.com/>

Problems with Police Reports: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7642213/>

TruePeopleSearch: <https://www.truepeoplesearch.com/find/harris/sylvester/area/tn/chattanooga>

Hamilton County Assessor: <https://assessor.hamiltontn.gov/search.aspx>

Public PoliceRecords: <https://www.publicpolicerrecord.com/georgia/doc-prisoner/HARRIS SYLVESTER/0000753070>