

The Transparency Stack:

LA County's Open-Source Model for Public-Facing Analytics and Trust

Analytics Center of Excellence (ACE)

March 6, 2026

CEO.



CEO.

Presenters



George Miranda



Fei Wu

Outline



What we do



Why transparency is important to us



How open-source enhances that transparency



What transparency looks like at LAC CEO

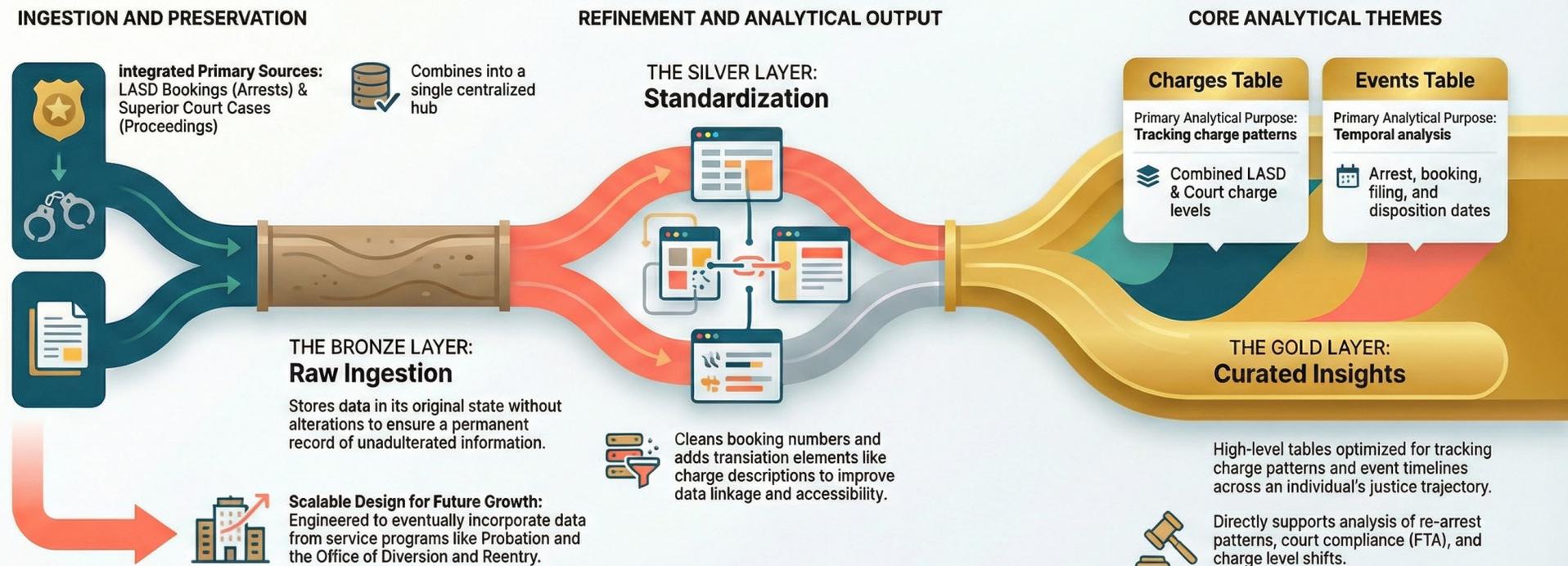
What We Do – Driving Data-Informed Policy & Equity

Pillar 1: Systemic Reform & Justice

- **Pretrial Reform & Jail Closures:** Scaling data insights to support safely reducing incarceration.
- **Diversion & Intervention:** Mapping the path from incarceration to community-based care.
- **Justice Data Workgroup:** Leading multi-agency collaboration to standardize justice metrics across the County.

From Raw Data to Justice Insights: The Medallion Data Architecture

The Criminal Justice Data Hub uses a three-tiered Medallion Architecture to transform raw administrative records into actionable insights, moving data through Bronze, Silver, and Gold layers to standardize information from law enforcement and the courts for complex temporal and behavioral analysis.



What We Do – Driving Data-Informed Policy & Equity

Pillar 2: Vulnerable Populations & Housing

- **Veteran Services (MVA):** Building integrated data systems to house veterans experiencing homelessness.
- **Transitional Age Youth (TAY) Homeless Prevention:** Identifying early indicators to prevent foster youth from entering the homelessness cycle.
- **Poverty Alleviation (PAI):** Analyzing the **Poverty Alleviation Initiative** data to ensure equitable resource distribution.

Pillar 3: The Collaborative Engine

- **Analytical Infrastructure:** Modernizing how departments store and share data (Azure/Databricks).
- **Statistical Guidance:** Acting as the "Lead" reviewer for university researchers and think tanks.
- **Transparency:** Powering the **Open Data Portal** to foster community trust and public accountability.

Why Transparency is Important to Us

- **Building Trust** - Strengthens agency partnerships through the secure stewardship of sensitive data.
- **Innovation Bound** - Drives superior outcomes via vetted, peer-reviewed methodologies.
- **Staying Relevant** - Utilizes continuous feedback loops to inform iterative development.
- **Integrity & Insight** - Identifies and manages data limitations to ensure results are accurate, transparent, and ethically sound.

How Open-Source Enhances Transparency

1. Peer-Review & Methodological Integrity

- **The Concept:** By making code open-source, we invite stakeholders to review methodology.
- **The Benefit:** It transforms a "Black Box" algorithm into a peer-reviewed standard. Academic partners, community advocates, and other County departments can verify that the math is sound and the logic is unbiased.



How Open-Source Enhances Transparency

2. Crowdsourced Innovation (Engaging Collaborators)

- **The Concept:** Engaging collaborators isn't just about help; it's about interoperability.
- **The Benefit:** When you share a data schema or a cleaning script, you allow other agencies to build *with* you rather than *around* you. It prevents the "silo effect" and lets the community contribute improvements, bug fixes, and more efficient queries back to the County.



How Open-Source Enhances Transparency

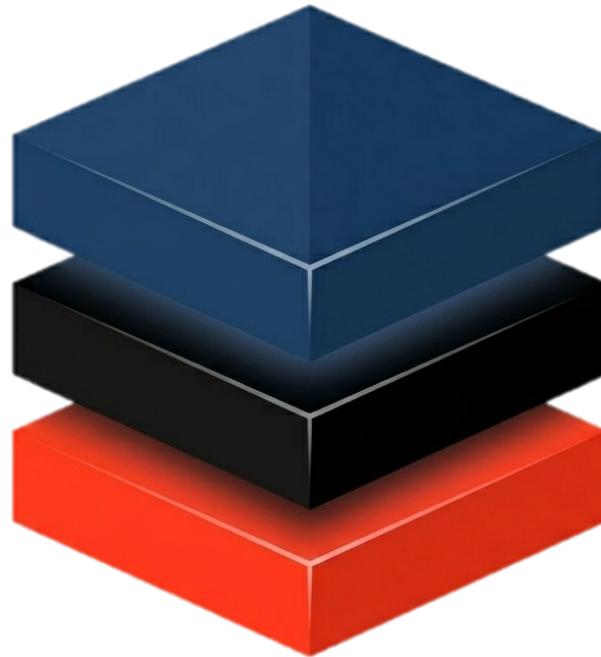
3. The "Secure-Open" Paradox (Protecting Sensitive Information)

- **The Concept:** Transparency does not mean a lack of security.
- **The Benefit:** Open source allows you to share the **logic** (the recipe) without sharing the **data** (the ingredients). We can show the world exactly how we calculate "Length of Incarceration" while keeping the actual PII (Personally Identifiable Information) locked behind our Azure/Databricks firewalls.



What Transparency Looks Like at CEO

Charge Categorization



**Chief
Executive
Office.**



Open Data Portal
Stats & Methods

GitHub
Share Source Code



Databricks
Data Processing and Analysis



Collection

Los Angeles County Justice Data Center

Operated by the Los Angeles County Chief Information Office - Analytics Center of Excellence (CIO-ACE)

Get started

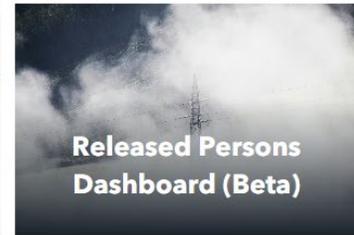
Open Data Portal



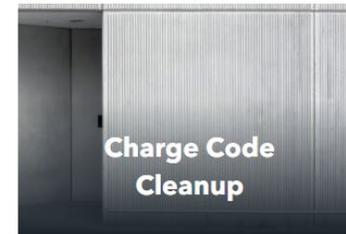
Pretrial Reform Data Framework 2.0



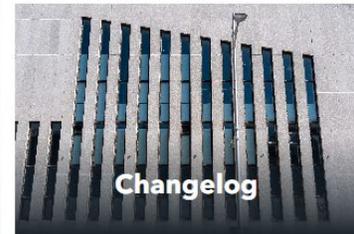
Jail Custody Dashboard (Beta)



Released Persons Dashboard (Beta)



Charge Code Cleanup



Changelog



Glossary



Acknowledgements



Pretrial Reform Data Framework 1.0

Raw Data Comes in Different Forms

This is how Burglary (459PC) can be recorded



LA Sheriff's Bookings

A ^B C bchg_source_charge_code	A ^B C bchg_cjis_charge_code_type	A ^B C bchg_charge_level_code
459 5PC	null	M
459PCGAR	PC	F
459.5PC	PC	M
459.5(A) PC	null	null
459PCAUTO	PC	F
4595PC	null	M
459.9PC	null	M
459.5(A)PC	null	M
459PCFDG	PC	F
459.5 PC	PC	null
459 PC	PC	null
459(A)PC	null	F
459(B)PC	null	M
459PC	PC	F
459PCCOM	PC	F
459 5(A)PC	null	M
459PCRES	PC	F



LA Superior Court Cases

A ^B C cchg_cjis_charge_code	A ^B C cchg_cjis_charge_code_type	A ^B C cchg_charge_level_code
459.5PC	PC	M
459PC	PC	F



LA County Probation Cases

A ^B C case_prmry_chrg_statute	A ^B C case_prmry_chrg_code	A ^B C case_prmry_chrg_level	A ^B C case_prmry_chrg_literal_identifier
459/460(A)PC	PC	F	
459.5PC	PC	M	
459-460(B)PC	PC	F	
459.5(A)PC	PC	M	
459/460APC	PC	F	
459-460(A)PC	PC	F	
459/460PC	PC	F	
459/469(A)PC	PC	F	
459/450(A)PC	PC	F	
459/460(B)PC	PC	F	
459PC	PC	F	
459-46-(B)PC	PC	F	



“Authoritative” Reference Data From the District Attorney’s Office

A^BC cjis_charge_clean	A ^B C statute_clean	A ^B C subsection	A ^B C code_clean	A ^B C offense_level	A ^B C literal_id	A ^B C full_description	A ^B C short_description
459.5PC	459.5	null	PC	M	null	SHOPLIFTING	SHOPLIFTING
459.5PC	459.5	null	PC	F	47	> SHOPLIFTING AFTER SPECIFIED PRIOR...	> SHOPLIFTING W/...
459/12022.5PC	459/12022.5	null	PC	F	null	BURGLARY W/FIREARM	ENHANCEMENT
459PC	459	null	PC	F	null	BURGLARY	BURGLARY
459PC	459	null	PC	F	null	BURGLARY 1ST DEGREE	> BURGLARY 1ST ...
459PC	459	null	PC	F	null	BURGLARY 2ND DEGREE	> BURGLARY 2ND ...
459PC	459	null	PC	M	null	BURGLARY	BURGLARY
459PC	459	null	PC	F	AUT	BURGLARY FROM VEHICLE	> BURGLARY FRO...
459PC	459	null	PC	F	COM	COMMERCIAL BURGLARY	> COMMERCIAL B...
459PC	459	null	PC	M	COM	COMMERCIAL BURGLARY	> COMMERCIAL B...
459PC	459	null	PC	F	GAR	GARAGE BURGLARY	GARAGE BURGLARY
459PC	459	null	PC	F	RES	RESIDENTIAL BURGLARY	> RESIDENTIAL BU...



la-county-cio/charge_codes

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

charge_codes Internal Watch 0 Fork 0 Star 0

main 2 Branches 13 Tags

Go to file Code

Jorge Miranda Jr redeploying fix 2bf2f5c - last week 101 Commits

.github/workflows	Removed paths to watch for build action. Only using igno...	last week
scripts	Modified baking categories with cleaning steps.	last week
src/charge_codes	redeploying fix	last week
tests	fixed category match logic	last week
.gitignore	Relocated git root to project level and updated for src-lay...	last month
README.md	Category logic and cleaning steps added to load_referenc...	last week
manifest.in	Updated CJIS Data	3 weeks ago
pyproject.toml	Removed Spark Connect DF dependency	2 weeks ago
requirements.txt	Pinned Spark 3.4.1 for GH Action	3 weeks ago

README

Charge Codes CI passing

Charge Codes Library

A Spark-optimized utility for describing and classifying charges in California's legal system. Whether you are working with a small CSV in Pandas or a multi-million row dataset in PySpark, `charge_codes` provides a unified interface to identify charge descriptions with high confidence.

Features

- Built-in Descriptions** Updated charge description reference table to match with your cleaned up charge

About

No description, website, or topics provided.

- Readme
- Activity
- Custom properties
- 0 stars
- 0 watching
- 0 forks

Releases 13

Release v0.8.2 Latest
last week

+ 12 releases

Packages

No packages published
[Publish your first package](#)

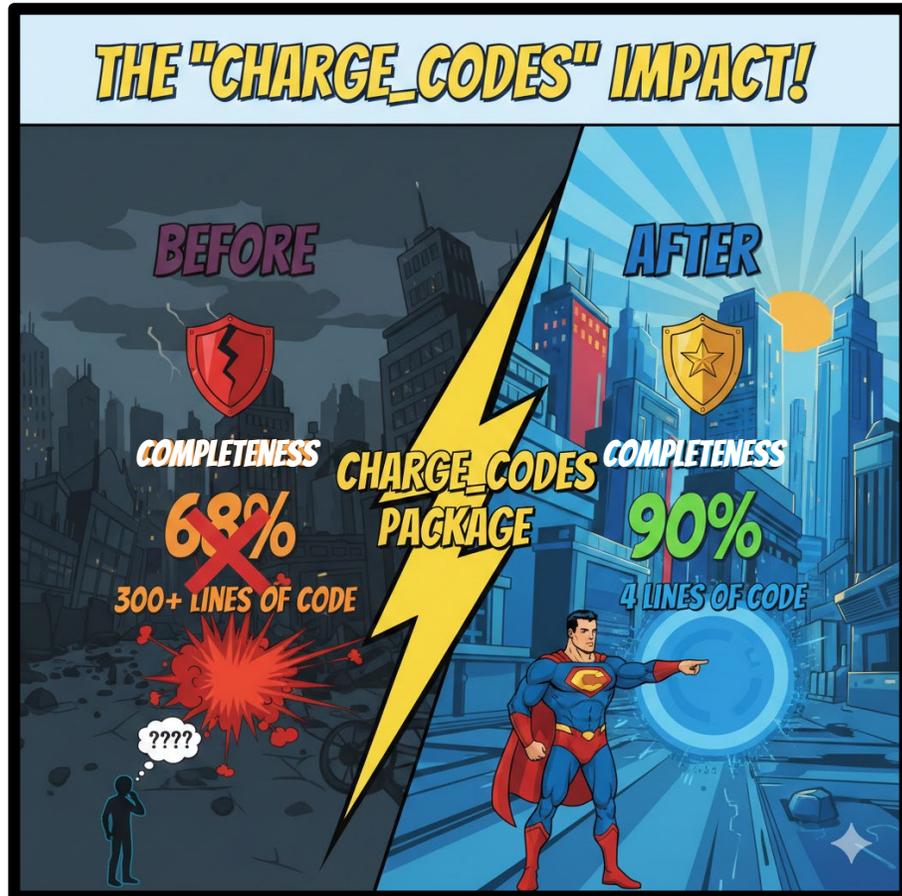
Contributors 2

- geom2 Jorge (George) Miranda
- areyes-cio Adrian Reyes-Zamudio

Languages

- Python 100.0%

	Step	Match Method	Example
Most Restrictive	1	Statute, Sub, Code, Level, & Literal ID	Misdemeanor 12702(A)HSWPR
	2	Statute, Sub, Code, & Level	Misdemeanor 12702(A)HS
	3	Statute, Sub, & Code	12702(A)HS
	4	Statute & Code	12702HS
Least Restrictive	5	Statute	12702



Match Method	Count
Statute, Sub, Code, Level, & Literal	104,302
Statute, Sub, Code, & Level	6,324,871
Statute, Sub, & Code	767,528
Statute & Code	102,175
Statute	72,948
Unmatched	860,612



What's Next?



Expand the statute taxonomy



Build partnerships