

Presentation Overview

Part 1: Background

Part 2: Methods

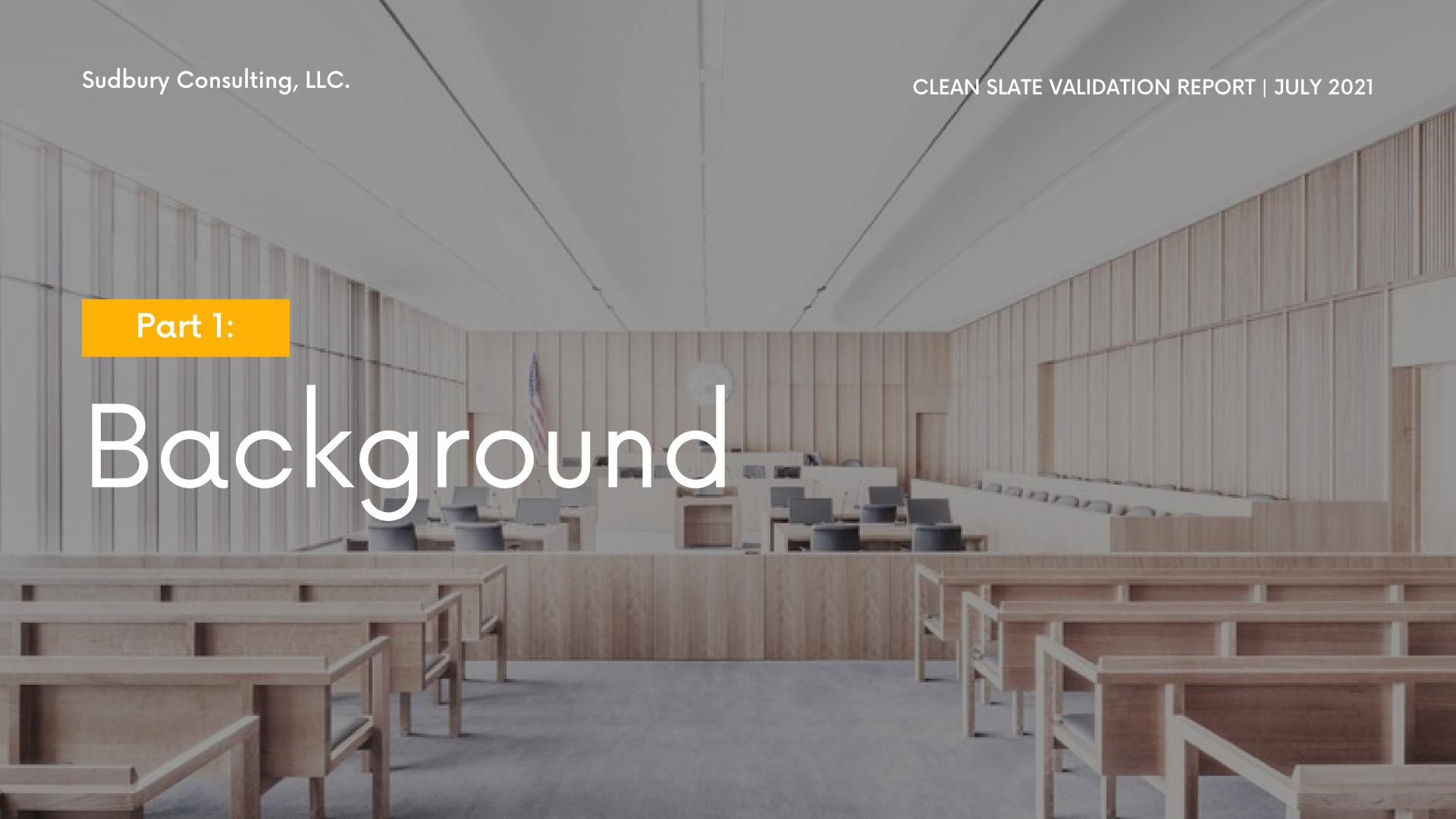
Part 3: Findings & Implications

- The problem
- Legislative efforts
- Project goals

- Entity Resolution
- Eligible Case
 Identification

- Validation Study
- Statistical Findings
- Next Steps

02



How We Got Here

1 in 3 Utahns have a record

More than 1 in 3 Utahns have some type of criminal record. Those records are largely still publicly available and permanent.

The Issue

Utah law allows individuals to expunge their records, but the petition-based court process is so complex, costly, and complicated that the vast majority of people eligible to clear their records never obtain relief.

Utah's Clean Slate Law

In 2019, Utah became the 2nd state in the nation to pass a Clean Slate law requiring the courts to automate its expungement process for qualifying misdemeanor records. This law eliminates the need for qualifying individuals to petition the courts to obtain an expungement.

Legislative Efforts

Utah's Clean State bill - HB 431 passed with unanimous support, and was signed into law by Governor Gary Herbert on March 28, 2019.

Under this law, Utah's Judiciary and the Utah Department of Public Safety, are required to make "reasonable efforts" to identify and automatically expunge qualifying records as "quickly as is practicable."*



*Utah Code Section 77-40-116

Who Qualifies?

- Number of cases must be within numerical limits
- Must be crime free for 5-7 years
- No outstanding fines, fees, or restitution

Eligible Offenses

- Class A drug possession offenses
- Most Class B and C misdemeanors
- Infractions
- Dismissals with Prejudice
- Acquittals

Ineligible Cases

- All Felonies;
- Any case types ineligible for expungement under the petition-based process;
- All exempted misdemeanors under 77-40-102(5)(c) (weapons offenses, sex offenses, offenses against the person including DV and simple assault, misdemeanor DUIs, etc.)

Sudbury Consulting, LLC.

Implementation Plan

In order to facilitate implementation, the Utah Administrative Office of the Courts entered a data sharing agreement with Code for America.

The Plan:

- Use computer software to match Utah criminal case records to the associated record holders;
- Using the statute, write computer code to identify cases eligible for automatic expungement relief under Utah's Expungement Act

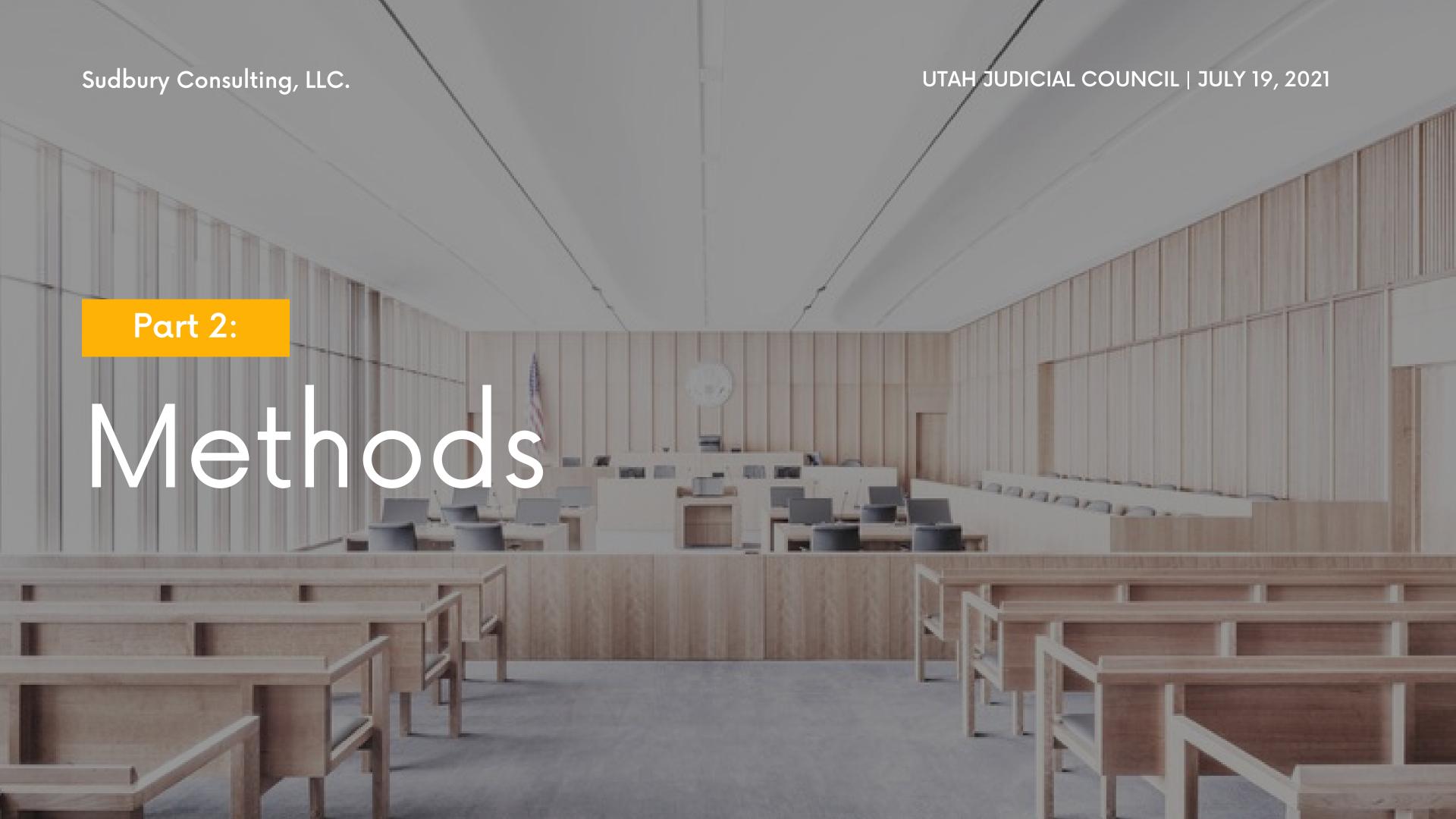
Clean's Slate's Projected Impact

People with a record (includes deceased & out of state)	1,152,000
People with a conviction	780,000
People living in UT with a conviction	654,000
People with a conviction who are eligible for relief	263,000
People living in UT with a conviction who are eligible for relief	223,000
People with a conviction whose convictions are fully cleared	203,000

Evaluation

Our Main Goal
Ensure that the Utah Administrative Office of the Courts issues judicial expungement orders for only those cases that meet the statutory criteria for automatic expungement under Utah law.
Objective 1
Determine if Code for America's matching software accurately identifies and matches cases to the correct people
Objective 2

Determine if Code for America's clean slate eligibility code identifies only those cases eligible for automatic expungement relief under Utach Code Section 77-40-102(5).



The Process

Sudbury Consulting worked with Drs. Arul & Himanshu Mishra, two data scientists from the University of Utah, to design a validation study to review Code for America's work

Part 1. Obtain 2,500 randomly selected eligible and ineligible cases from the AOC; work with legal expungement experts to review cases and provide an opinion on legal eligibility for automatic expungement.

Part 2. Compare the attorney determinations to the determinations of the code to determine rate of accuracy and any trend in errors.



Data from the courts included:

1

Qualified Cases

A list of randomly selected 1,250 "Qualified" cases, i.e., cases that the CfA code determined to be clean slate eligible 2

Unqualified Cases

A list of randomly selected 1,250 "Unqualified" cases, i.e., cases that the CfA code determined to be ineligible for relief 3

Full Case Histories for All Cases

Full case histories for all individuals with a case on the Qualified list and for all individuals with a case on the Unqualified List

Validation Events



Twenty volunteers were recruited to participate in validation events on May 25 & May 27, 2021. Attorney validators reviewed a total of 1,571 criminal histories that included cases on the Qualified or Unqualified case lists.

Volunteers included:

- Utah criminal defense attorneys,
- prosecutors,
- legal aid lawyers,
- paralegals who have deep subject matter experience in legal expungement eligibility, and
- the BCI Expungement Unit

Classifying Cases

The person had no cases that were eligible for

automatic relief



Reasons for Ineligibility

People were deemed ineligible for the following reasons:

- Too many cases
- Ineligible case type
- Case dismissed without prejudice
- Open case
- Fines and fees
- Other

University of Utah's Work

1

Identify Overall
Match Rate

Validators' eligibility
determinations were compared
with the Qualified and
Unqualified Lists to determine
the overall match rate between
CfA's determinations and the
human expert review

2

Infer Race, Gender, and Ethnicity

Algorithms were used to infer race, gender, and ethnicity based on first and last names

3

Analyze and Quantify Errors

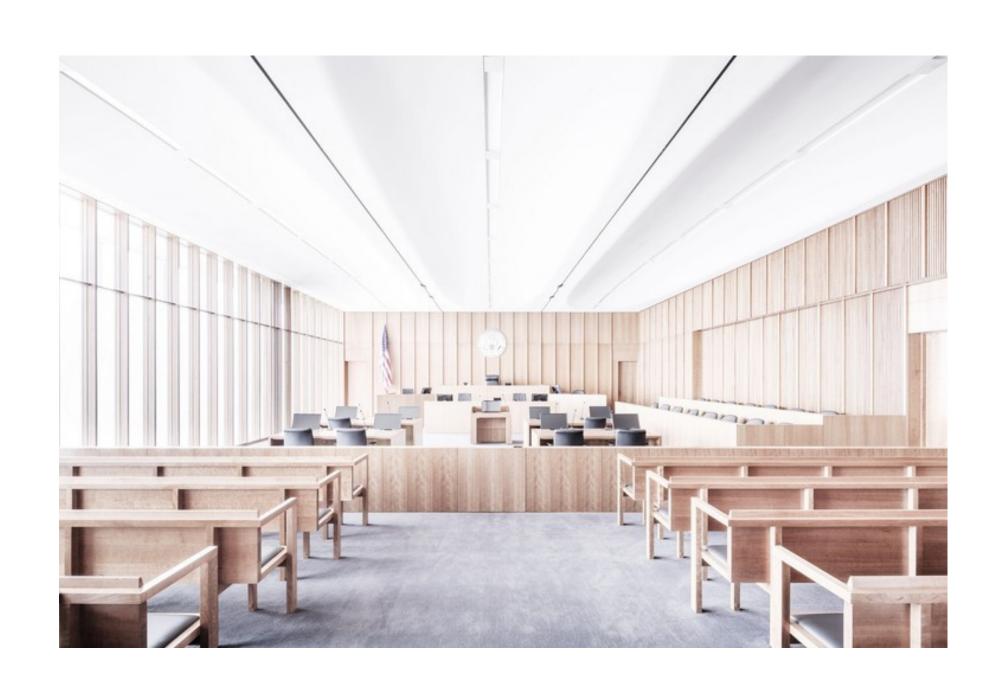
Conduct statistical analysis to measure the accuracy of the sample and make predictions about the whole dataset.



Overall Findings

1,571 total criminal histories reviewed:

- 1,357 decisions matched (for a match rate of 86%)
- 214 determinations did not match
 - 98 False Positives
 - 116 False Negatives



Confusion Matrix: Overall Findings

CfA Prediction P' n' total

	True	False	
\mathbf{p}	Positive	Negative	P
	= 806	= 116	
]
	False	True	
\mathbf{n}	Positive	Negative	N
	= 98	= 551	

Attorney Determination

Metric	Estimate	95% Confidence Interval
Accuracy	86.38%	(84.58, 88.04)
Sensitivity	87.42%	(85.1, 89.49)
Specificity	84.9%	(81.91, 87.57)

Comparison by Gender

Metric	Estimate	95% Confidence Interval
Accuracy	86.25%	(84, 88.3)
Sensitivity	87.28%	(84.28, 89.9)
Specificity	84.97%	(81.36, 88.11)

Metric	Estimate	95% Confidence Interval
Accuracy	86.27%	(82.89, 89.2)
Sensitivity	87.38%	(83.22, 90.83)
Specificity	84.21%	(77.86, 89.33)

Men Women

Comparison by Race and Ethnicity

Metric	Estimate	95% Confidence Interval
Accuracy	84.78%	(80.11, 88.71)
Sensitivity	88.14%	(82.44, 92.5)
Specificity	79.46%	(70.8, 86.51)

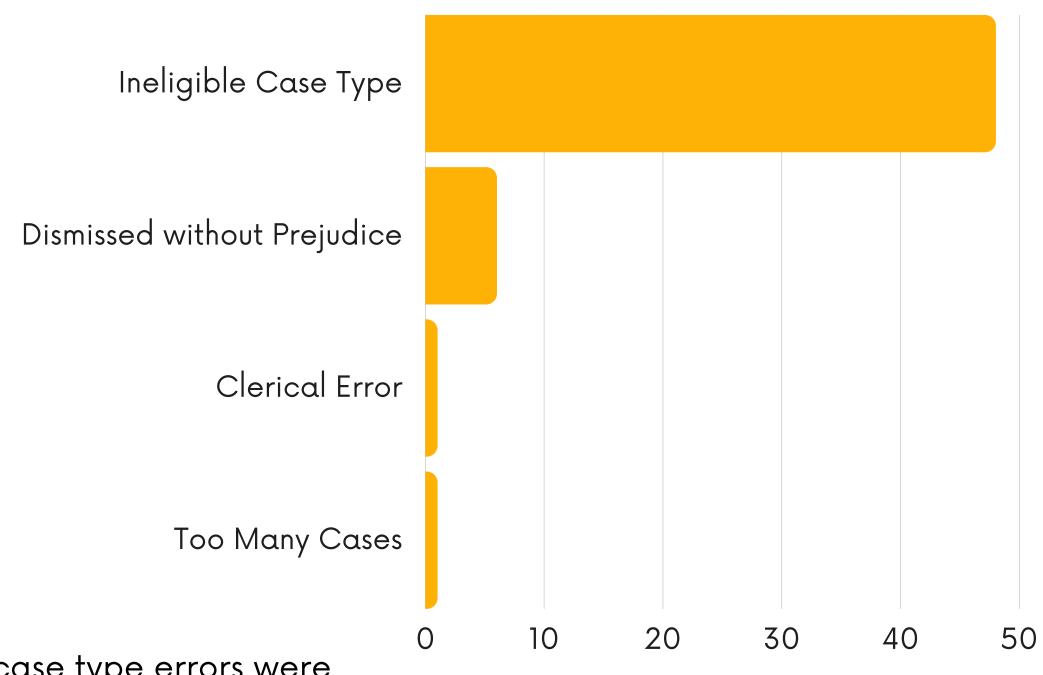
Metric	Estimate	95% Confidence Interval
Accuracy	87.01%	(84.9, 88.92)
Sensitivity	87.48%	(84.7, 89.92)
Specificity	86.35%	$(82.91,\ 89.33)$

Hispanic

False Positive Code Error: code says eligible, legal expert disagrees

False Positive Code Errors (N=56)

The majority of False Positives missed by CfA's algorithm were due to Ineligible Case Types* (N=48)



*Upon review of these cases, all ineligible case type errors were due to a missed list of offenses in Utah Code Section 77-40-102(5)(c)(iii)

COUNT OF ERROR REASONS

False Positive Label	Definition	
Ineligible Case Type (N=48)	The legal expert determined that the type of case was not one eligible for automatic expungement under the statute	
Dismissed without Prejudice (N=6)	An attorney determined that because one charge in the case was dismissed without prejudice, the entire case was ineligible for automatic expungement.	
Too Many Cases (N=1)	An attorney determined that the person's total number of cases was over the numerical limits set forth in the statute (i.e., the code did not identify all cases linked to that person).	
Clerical Error (N=1)	Attorney found case was ineligible because a charge within the case was dismissed without prejudice, but after reviewing the docket determined this was due to a clerical error, because the case should have been dismissed with prejudice	

CLEAN SLATE VALIDATION REPORT | JULY 2021

SECOND DISTRICT COURT - OGDEN WEBER COUNTY, STATE OF UTAH

OGDEN CITY vs. DAVID LOPEZ RODRIGUEZ

CASE NUMBER 971002696 Other Misdemeanor

CHARGES

Charge 1 - 9.48.030 - INTOXICATION - Class C Misdemeanor

Offense Date: August 28, 1997

Disposition: August 29, 1997 Dismissed (w/o prej)

Charge 2 - 9.48.030.1 - PUBLIC DRINKING - Class C Misdemeanor

Offense Date: August 28, 1997

Plea: August 29, 1997 Guilty

Disposition: August 29, 1997 {Guilty Plea}

CURRENT ASSIGNED JUDGE

PARLEY R. BALDWIN

PARTIES

Plaintiff - OGDEN CITY

Defendant - DAVID

Cases Dismissed Without Prejudice

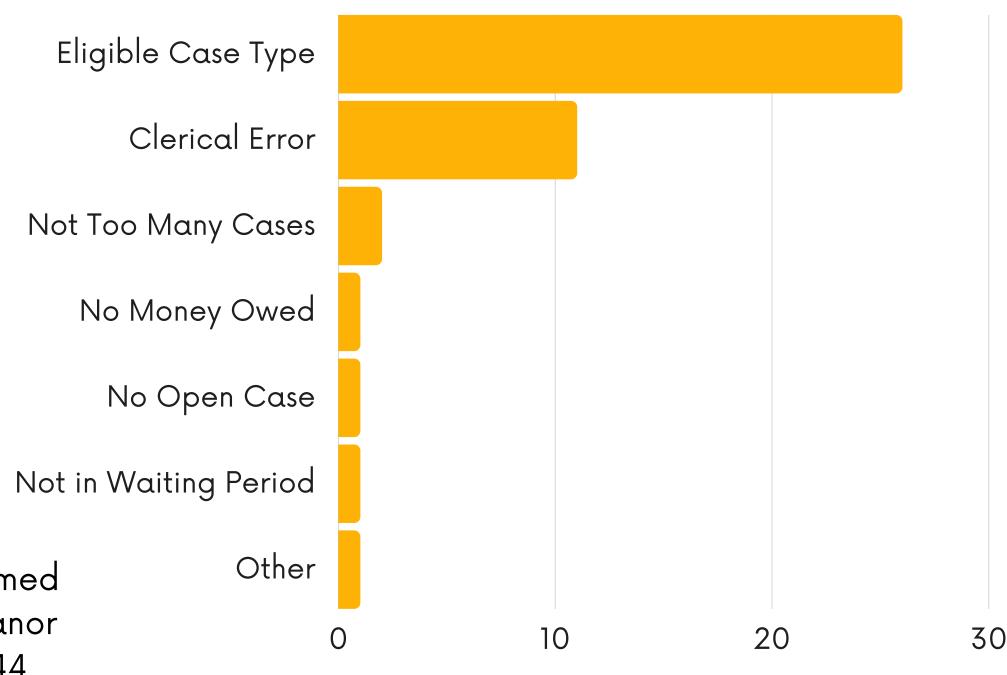
COUNT OF ERROR REASONS

False Positive Human Error: code says eligible, second legal expert agrees

False Positive Human Errors (N=42)

The majority of False Positives missed by attorneys were due to Eligible Case Type (N=25)

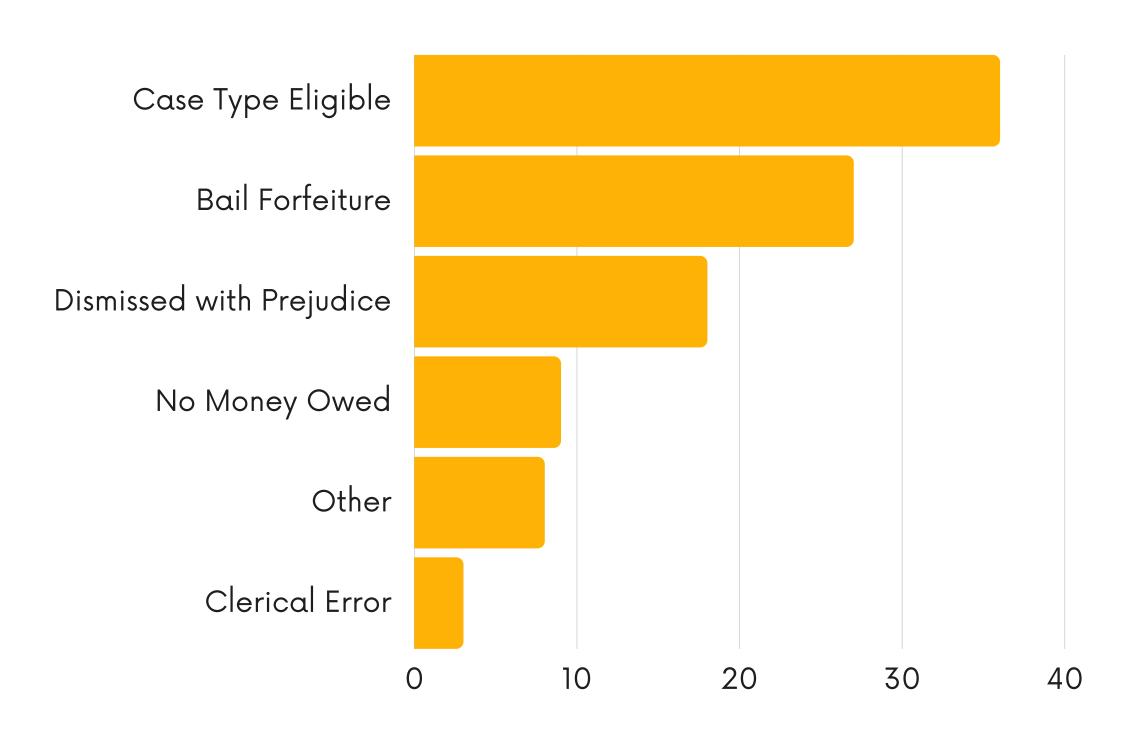
Note: quite a few eligible case type errors stemmed from attorneys concluding that class B misdemeanor convictions under old Utah Code Sections 41-6-44 and 41-6-45 were ineligible.



False Negative Code Error: code says ineligible, legal expert disagrees

False Negative Code Errors (N=101)

The majority of False Negatives missed by CfA's algorithm were due to Infractions not being included in the code (N=27).

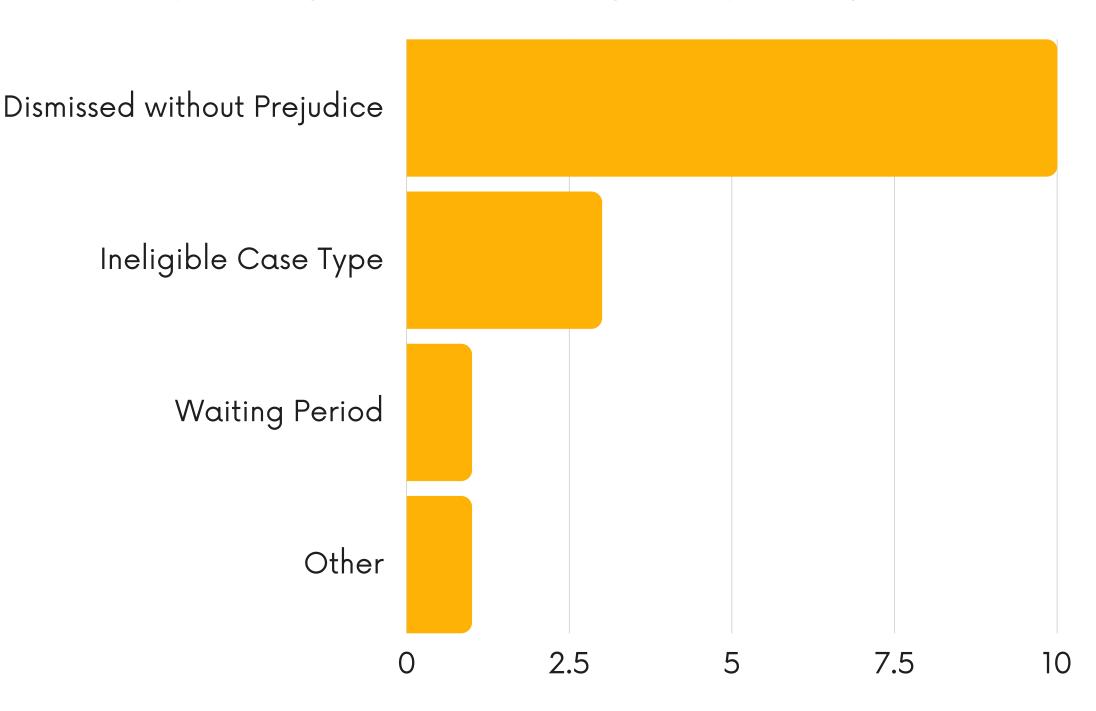


COUNT OF ERROR REASONS

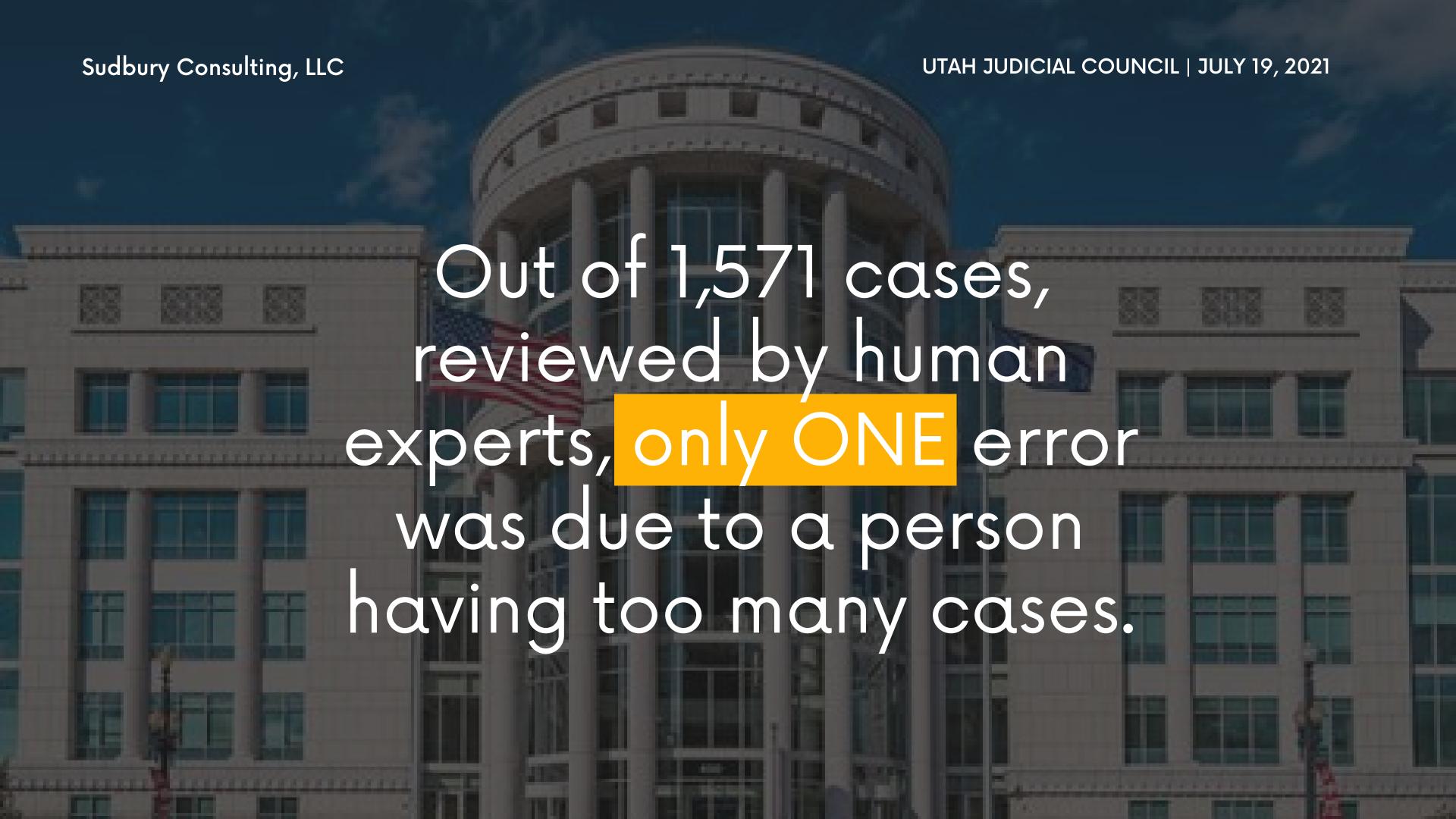
False Negative Human Error: code says ineligible, second legal expert agrees

False Negative Human Errors (N=15)

The majority of False Negatives missed by attorneys were due to cases being Dismissed without Prejudice (N=10).



COUNT OF ERROR REASONS



Summary & Next Steps

1 Initial Match

Code for America's case identification had an initial accuracy rate of 86%.

2

False Positives

Only 6.5% of cases were false positives, and upon second review, only 3.5% of cases were true false positives.

3

Next Steps

Reasons for all false positives have been identified and we are working with the AOC and CfA to adjust the code.

