

DATA INTEGRATION

Developing Dashboards and Advancing Data-Driven Decision Making

October 12, 2017



Agenda

1. Welcome and introduction
 - Urban Institute & ISLG
2. Allegheny County, PA
 - Kathryn Collins
3. Charleston County, SC
 - Kristy Danford
4. San Francisco, CA
 - Alissa Skog



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Why data integration?

Criminal justice "system"?

- Fragmented and reactive
- Numerous autonomous agencies
- Case specific rather than problem-oriented and strategic
- Heterogenous technology environments

- Silos of data
- Costly to share information
- Full picture on any one issue is missing



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What do dashboards offer?

- Break silos
- Build common language/definitions
- Provide access to live or up to date information and data
- Offer user-friendly variation in level of details, to be used:
 - At the operational level
 - By inter-agency working groups
 - By leadership



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ALLEGHENY COUNTY, PENNSYLVANIA



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History of Data Sharing

1. Integrated data warehouse
2. Public-facing information
3. Internal use
 - Integrated analysis
 - Individual level information



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Public Facing Information

The screenshot displays the Allegheny County Analytics website. The main content area features a section titled "HOMICIDES IN THE CITY OF PITTSBURGH, 2015-PRESENT" with a sub-header "HOMICIDES IN THE CITY OF PITTSBURGH, 2015-PRESENT". Below this, there is a map of Pittsburgh showing homicide locations. To the right of the map, there are filters for "Date Range" (set to "All Time") and "Map Style" (set to "Heatmap"). The map shows a concentration of red dots in the central urban area of Pittsburgh. Below the map, there is a table with columns for "Date Range", "Map Style", and "Homicides". The table shows data for "All Time" with a "Heatmap" style, resulting in 100 homicides. The website footer includes the "SAFETY - JUSTICE CHALLENGE" logo and the text "Supported by the John D. and Catherine T. MacArthur Foundation".

<https://www.alleghenycountyanalytics.us/>

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Integrated Analysis

TABLE 3: Offender Human Services Involvement, 2010 through 2016

HUMAN SERVICES INVOLVEMENT	2010	2011	2012	2013	2014	2015	2016	AVERAGE
Child Welfare as a Child	30%	31%	32%	32%	31%	32%	30%	31%
Child Welfare as a Parent	25%	25%	24%	23%	22%	21%	21%	22%
Drug & Alcohol Services	50%	51%	51%	50%	49%	49%	45%	48%
Mental Health Services	55%	56%	57%	56%	57%	58%	55%	57%
Drug & Alcohol OR Mental Health Services	65%	65%	67%	65%	66%	67%	63%	65%
Drug & Alcohol AND Mental Health Services	39%	41%	41%	40%	40%	40%	38%	40%
Public Benefits	76%	75%	74%	72%	71%	71%	65%	70%
Housing	6%	7%	7%	7%	8%	8%	8%	8%
Distinct Individuals booked in a year	13,419	12,522	13,157	13,562	12,667	11,824	11,957	12,503

SOURCE: Kulick, Emily, Chengyuan Zhou, Sophia He, and Erin Dalton. (forthcoming). "Data brief: Analysis of the Allegheny County Jail Population: 2013-2016". Allegheny County Department of Human Services.

Individual Level Information

The screenshot displays the Allegheny County Analytics website, showing individual level information for a client. The client's name is "Colleen Katherine". The page is divided into four main sections: "Basic Information", "Addresses", "Contact", and "Other Info". The "Basic Information" section includes fields for "Social Security Number", "Date of Birth", "MCI ID", "MCA Received Number", and "State MCI Number". The "Addresses" section includes a "Search This Address" button. The "Contact" section includes a "View All Data" button. The "Other Info" section includes fields for "Race", "Ethnicity", "Marital Status", and "Lives Assessment". The "School Activity" section shows "No School Activity for the client". The website footer includes the "SAFETY - JUSTICE CHALLENGE" logo and the text "Supported by the John D. and Catherine T. MacArthur Foundation".

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Internal Drivers

- Jail Collaborative
 - Reentry program
- Leadership in Courts and County
 - Pretrial Services created in 2007
 - Evidence-based practices in supervision
 - Collaborative projects (e.g., representation at first appearance, early termination of supervision, one judge policy)
- Focus on data driven decision-making
 - Internal CQI and QA processes

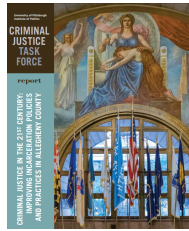


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External Drivers

- Criminal Justice Task Force
- Key Recommendations*

- Appoint a panel to review progress implementing recommendations
- Create criminal justice coordinator position
- Build real-time data tools to manage the overall system



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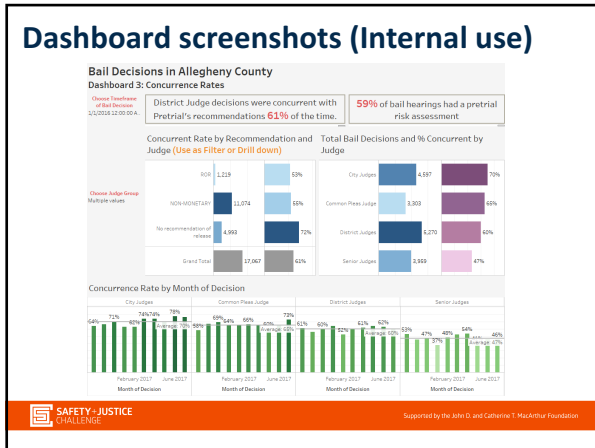
Dashboards:

- Part 1: Diversion**
 - Dashboard 1: Offender Diversion
- Part 2: Bail**
 - Dashboard 2: Bail Setting
 - Dashboard 3: Recommendations from Pretrial Services
 - Dashboard 4: Concurrence Rates
- Part 3: Court**
 - Dashboard 5: Charges and Sentencing
 - Dashboard 6: Court Time to Disposition
 - Dashboard 7: Court and Supervision Fees
- Part 4: Jail**
 - Dashboard 8: Jail Population Overview
 - Dashboard 9: Jail Capacity
 - Dashboard 10: Jail Bookings
 - Dashboard 11: Jail Releases and Length of Stay
 - Dashboard 12: Alternative Housing (AH)
- Part 5: Offender Reentry**
 - Dashboard 13: Jail Collaborative Participant and Outcome Dashboard
- Part 6: Probation**
 - Dashboard 14: Probation Detainers
 - Dashboard 15: Caseload Trends

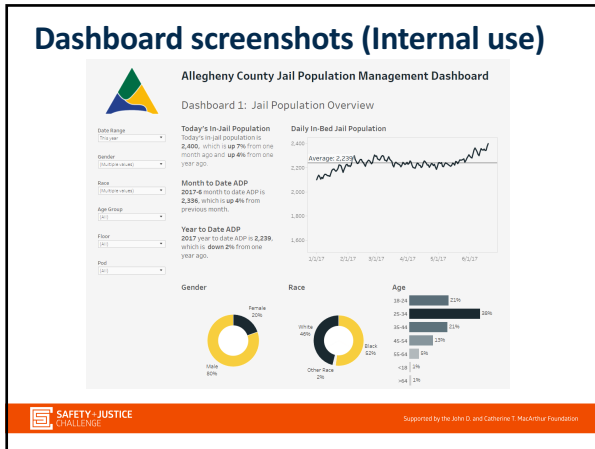


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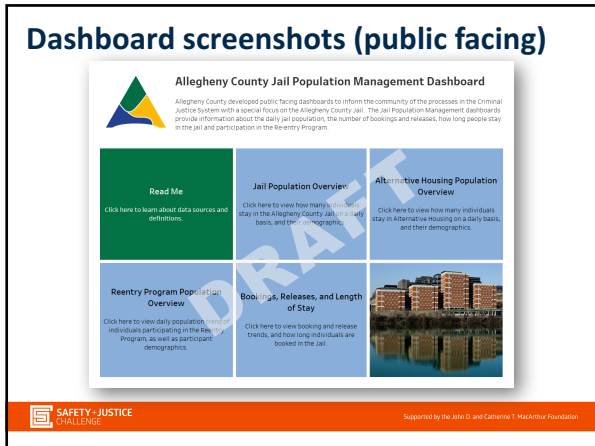
Dashboard screenshots (Internal use)



Dashboard screenshots (Internal use)



Dashboard screenshots (public facing)




Questions?



SafetyAndJusticeChallenge.org

CHARLESTON COUNTY, SOUTH CAROLINA



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Where we started...

Data

- Charge based
- No consistent personal identifier
- Protected information
- Continuously changing information
- Several old information systems doing their own things
- Interagency network

Use of Data


- Operations
- Outputs
- Limited personnel to do analysis
- Analysis rarely done across information systems




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One Step at a Time


1	2	3	4	5
Find place to start	Make the best of it	Grow internal capacity	Launch centralized database	Get better every day
What's possible?	500-1,000+ hours with JMI's HELP	Hire one DBA and get started	Replicate JMI findings	Additional enhancements and continued improvement

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16 Contributing Sources Sharing Specific Data Elements Monthly+


- **Law Enforcement:** Charleston County Sheriff's Office, Charleston Police Department, North Charleston Police Department, and Mt. Pleasant Police Department
- **Summary Courts:** Charleston County Magistrates, Charleston Municipal Court, North Charleston Municipal Court, and Mt. Pleasant Municipal Court
- **General Sessions:** Charleston County Clerk of Court, Ninth Circuit Solicitor, Charleston County, Ninth Circuit Defender, Charleston County
- **Jail:** Charleston County Sheriff's Office, Sheriff Al Cannon Detention Center
- **Three additional growing databases:** Pretrial Services, Officer Risk Tool and Court Reminders




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Current Capacity


- **Publications**
 - Annual report (2014-2016) and 2017 midyear
- **Performance measures (SQL)**
 - Jail use
 - Strategy specific
 - Historic database for aggregated trend analysis
- **Dashboards under development (Power BI)**
- **Expanded analysis and research (e.g. pretrial outcomes)**



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Lessons Learned and Challenges

- **Data will never be perfect. Do the best you can with what you've got and then keep improving.**
 - Wishes: Consistent PID and Always Accurate Data Entry
- **Find creative solutions within challenging dynamics.**
 - Problem solve with the best sources (i.e., data and people)
 - Triple+ check logic and findings
- **Value the time it takes to digest and communicate findings.**
 - Overly complicated analysis may lead to little action
 - Data is only as good as our ability to use it



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Questions?



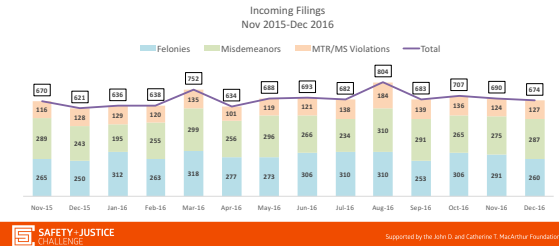
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SAN FRANCISCO, CALIFORNIA

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Data-Driven Prosecution

DA Stat: Modeled on COMPSTAT, a performance management system that is used to reduce crime and achieve other department goals





Justice Dashboard

- Project of the San Francisco Sentencing Commission, Recidivism Workgroup.
- Help policymakers better understand incarceration, supervision, and criminal justice system contact trends in San Francisco.
- Provide information to safely decrease jail usage, and reduce racial and ethnic disparities in San Francisco's criminal justice system.

Data Collection

- The Justice Dashboard is populated with **administrative data** from the SFDA's case management and Sheriff's jail management systems.
- Utilize **statistical software** to minimize data challenges.


Addressing Data Gaps

Name	Rank	% Hispanic
Morales	63	93.23
Murphy	64	2.34
Cook	65	2.17
Rogers	66	2.62
Gutierrez	67	93.33
Ortiz	68	93.11


→

Name	Hispanic	Recode
Morales	1	Hispanic
Murphy	0	White
Cook	0	Black
Rogers	0	White
Gutierrez	1	Hispanic
Ortiz	1	Hispanic


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Data Sharing / Integration

- Dashboard enjoys **high-level support** through the Sentencing Commission.
- Partnership with **UC Berkeley** bridges capacity and technological constraints.
- All members sign a **Data Use and Communications MOU** to govern access to and use of the data during the pilot phase.


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Data Use

- Multi-agency participation and review is critical for **data quality control & confidence** in the results.
- Use a **pilot phase** to demonstrate the benefit of the Dashboard and cultivate agency buy-in.


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Questions?



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