

Integrated Justice System Data Project: Justice Data Warehouse



Simply Put

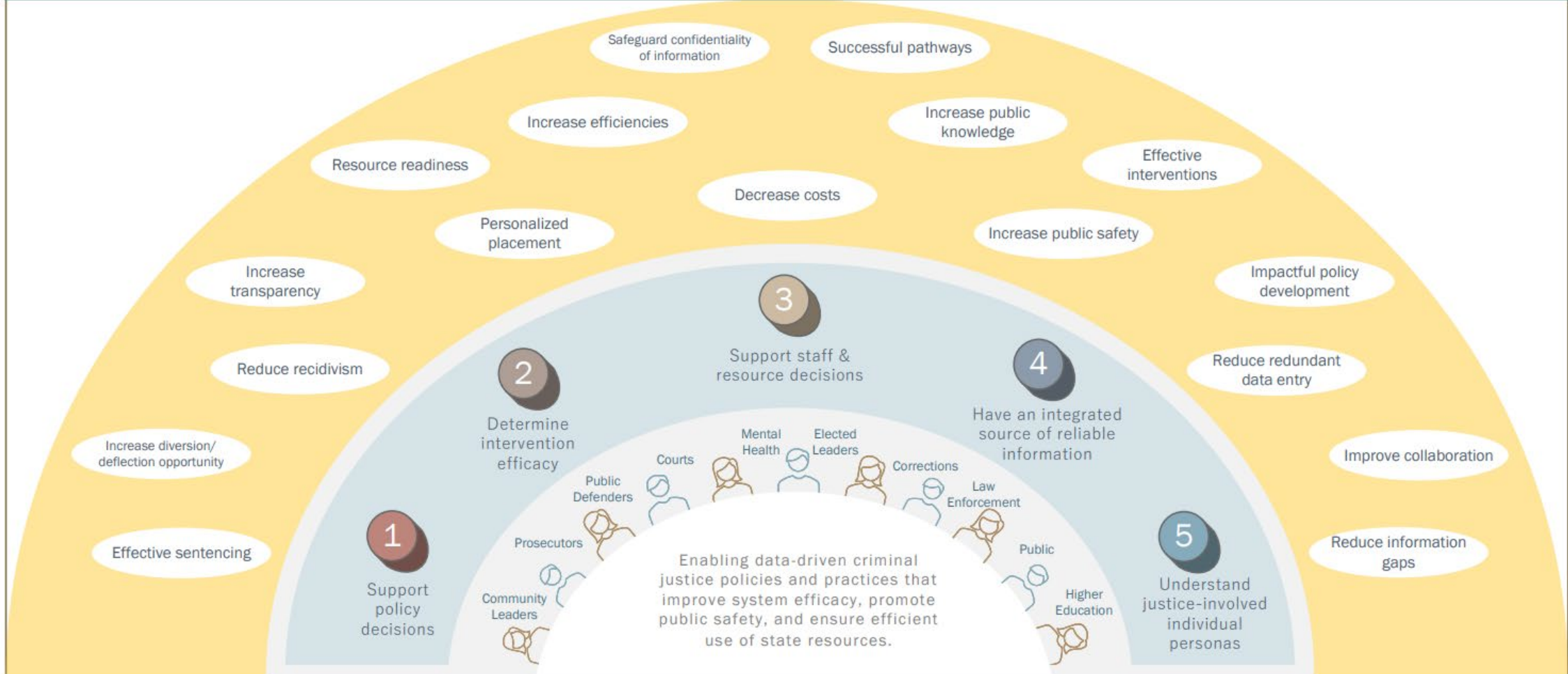
- **Take all the various disparate systems of data and put them in one place so that effective policy, funding and operational decisions can be made.**
- **Implement in a way that supports local partners.**
- **Find savings and efficiencies for state, local stakeholders and taxpayers.**

Getting started...

1. What interventions are working and what are less successful or not working.
2. Who is the average user/person in the criminal justice system?
3. Typical offender in the DOC system. Average/Modal (demographic information about these offenders)
4. How effective is sentencing?
5. Where are we duplicating data entry in more than one system.
6. Measurable outcomes on the success of programs
7. Release condition data for people that are released and put on conditions.
8. Identify which release conditions are working.
9. What is a reasonable condition based on the charge they are facing.
10. What is an average length from arrest to disposition?
11. OPD could build staffing models based on this data.
12. Recidivism – How many offenders and what they are charged with and what is the new offense before the first offense is settled.
13. Mental Health Services – Who has it and who doesn't. What counties are more successful and why.
14. Mental Health Interventions when they are incarcerated.
15. General awareness of services available in counties.
16. Investment in the Criminal Justice System and programs that are successful.
17. Have we seen a trend in the increase in car theft?
18. What is the difference between a one-time offender and a repeat offender?
19. Identify the factors to make the CJ system more efficient.
20. Provide the legislature with policy making accurate information.



MONTANA INTEGRATED JUSTICE DATA WAREHOUSE
BETTER INFORMATION for SUCCESSFUL OUTCOMES

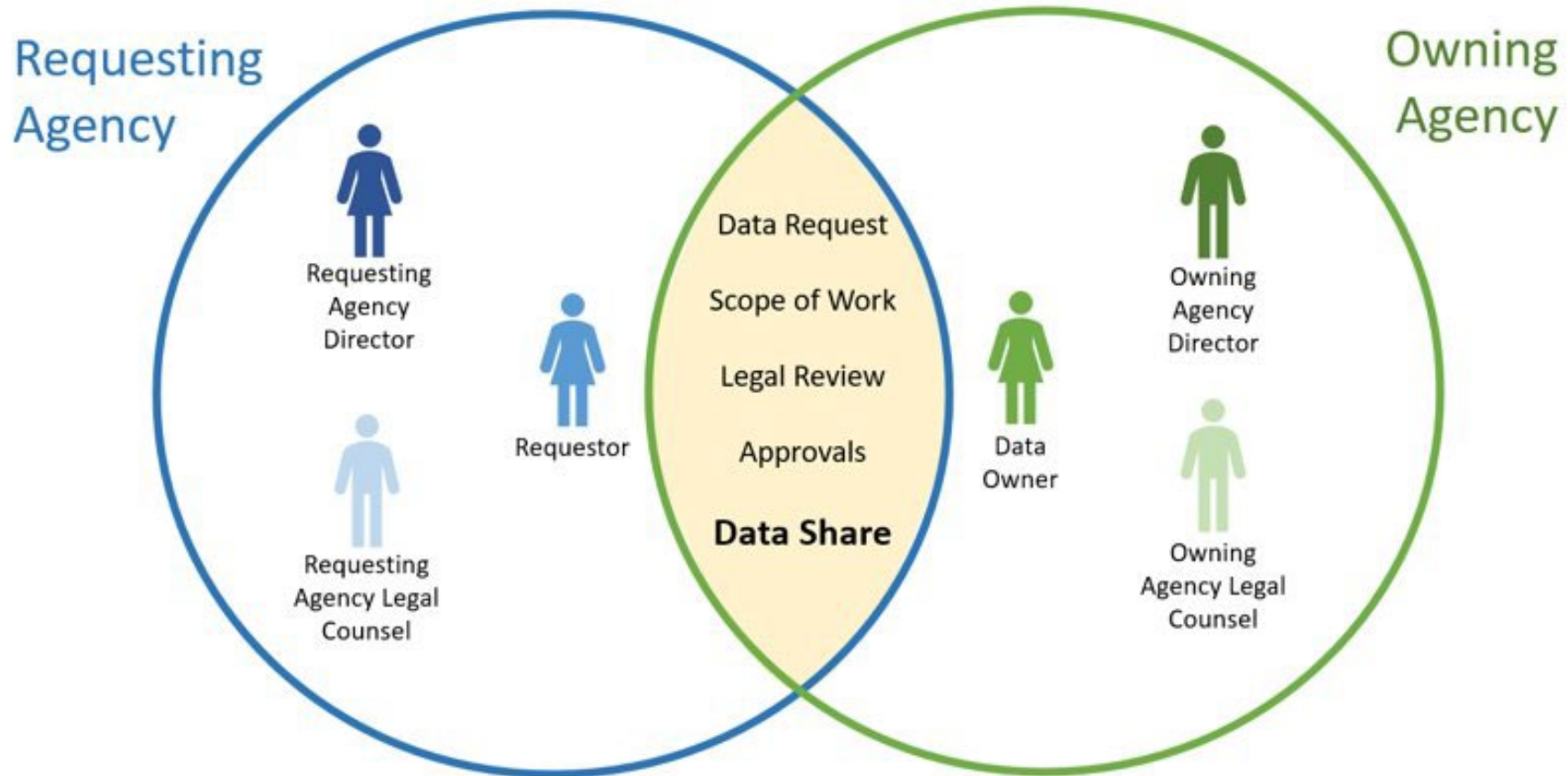


A collaborative project led by the Board of Crime Control

JDW Updates

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- Security access structure check successfully completed
 - Ravalli County LE data approx. 85% complete, CAD/RMS/JMS
 - Integration layer created for Ravalli County LE data—limited RMS
 - Acquired and are setting up AWS cloud environment
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- Working through use cases
 - Scope of Work conversations going on with Courts
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- Hiring process currently going on for Project Manager and second Data Warehouse Architect

Working With Stakeholders: The MOU Process



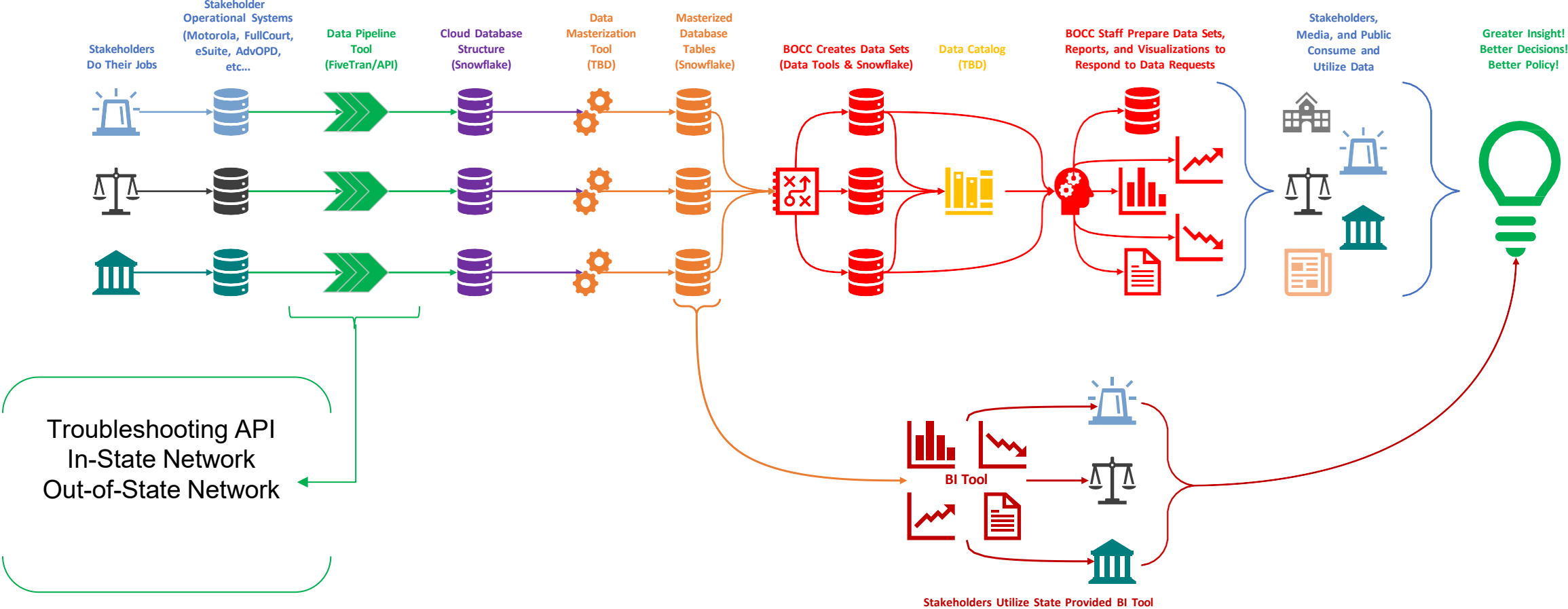
A Partnership Between Agencies...

State Data Stack

- Agency Operational Systems – Varies
 - Each Agency uses their own systems as normal
- Data Pipeline Tool
- Cloud Database Tool – Snowflake
 - Agency data available in cloud database
 - Data Prep and data transformations
 - Data shares to other stakeholders
- BI Tools
- Agency data available to analytics and visualization
- Data Catalog
 - Catalog of data sets, items, and products
 - Data governance applied
 - Alation

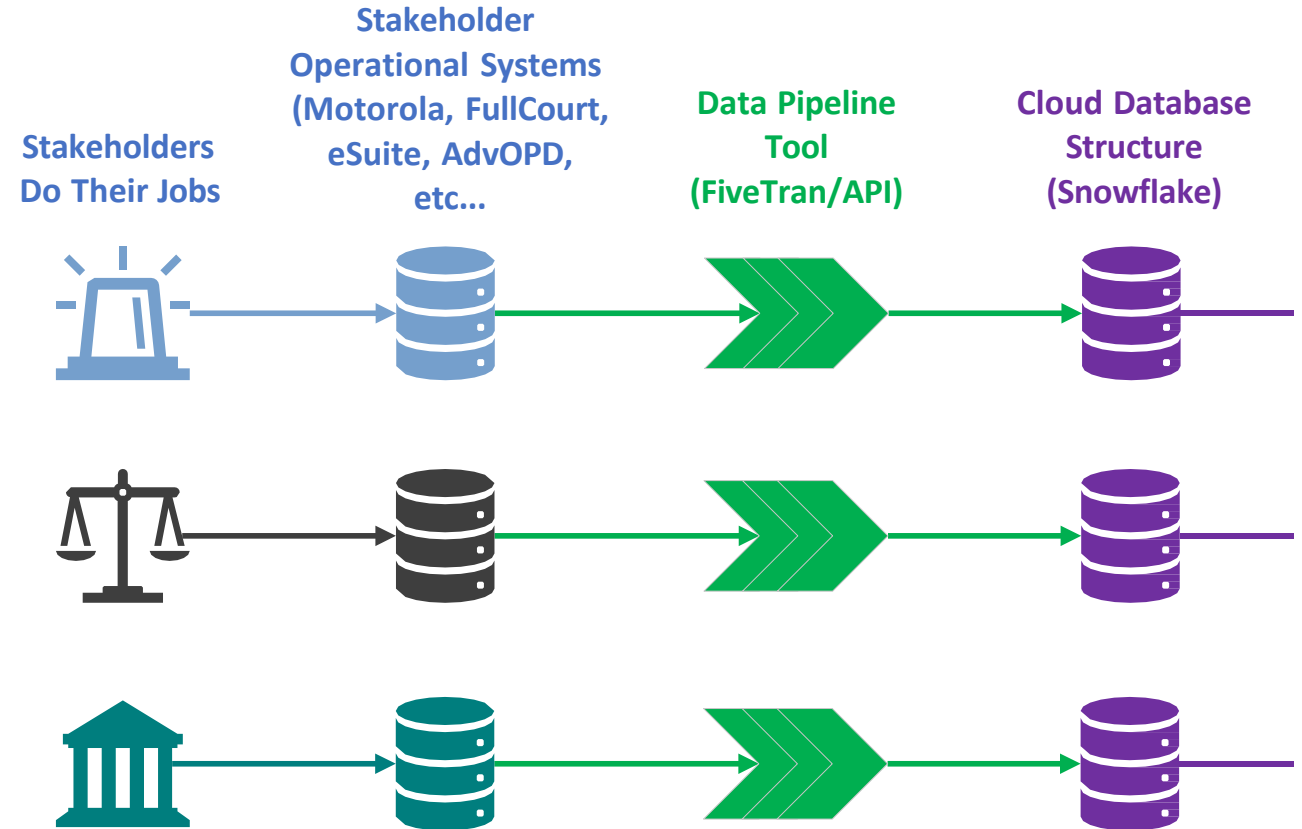


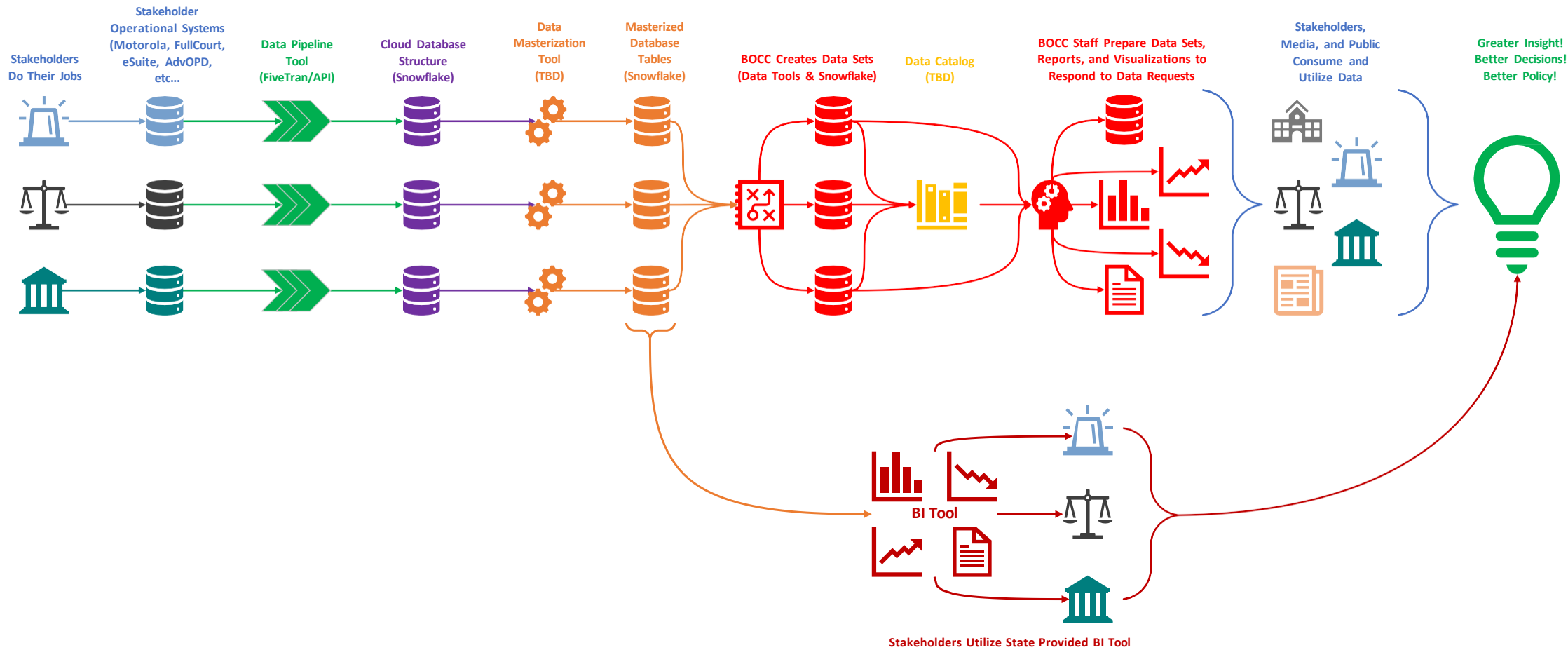
Integrated Justice System Data Structure



Getting Data from Stakeholder's Systems to Integrated Justice System Data Structure

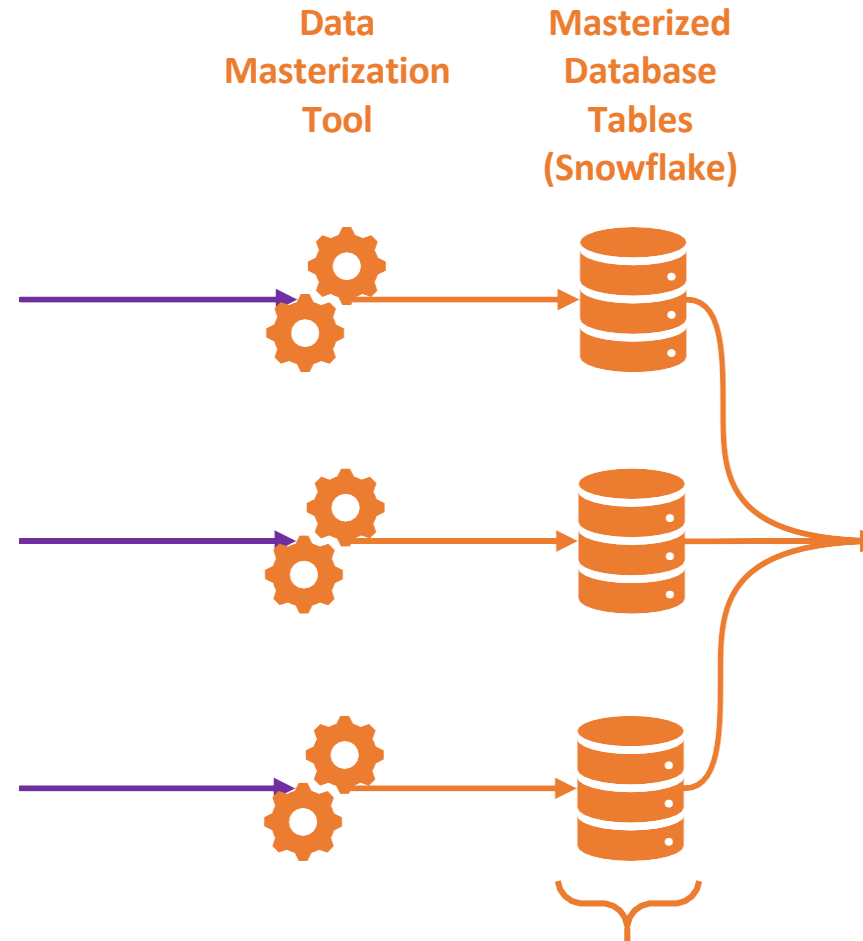
- Each stakeholder does their job as normal, ordinary business process
- Each stakeholder's operational systems are connected to a State owned Snowflake environment via a Data Pipeline tool
- Automatic data transfer

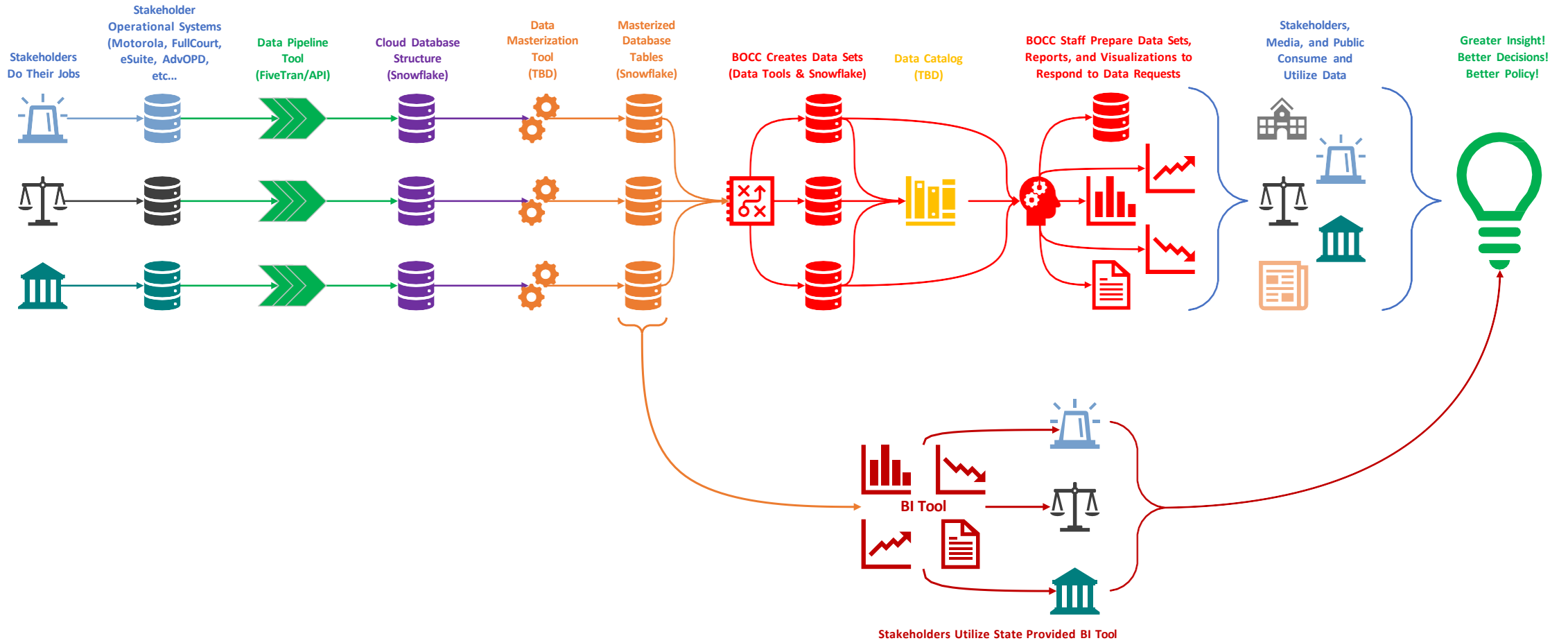




Preparing Stakeholder Data

- Stakeholder data will be masterized
 - Masterized record = “golden record”/single source of truth
 - Data cleaning, normalization, and unique IDs applied/created
- Masterized data will reside in a Snowflake instance/view available to MBCC staff
- In-process of acquiring Alation



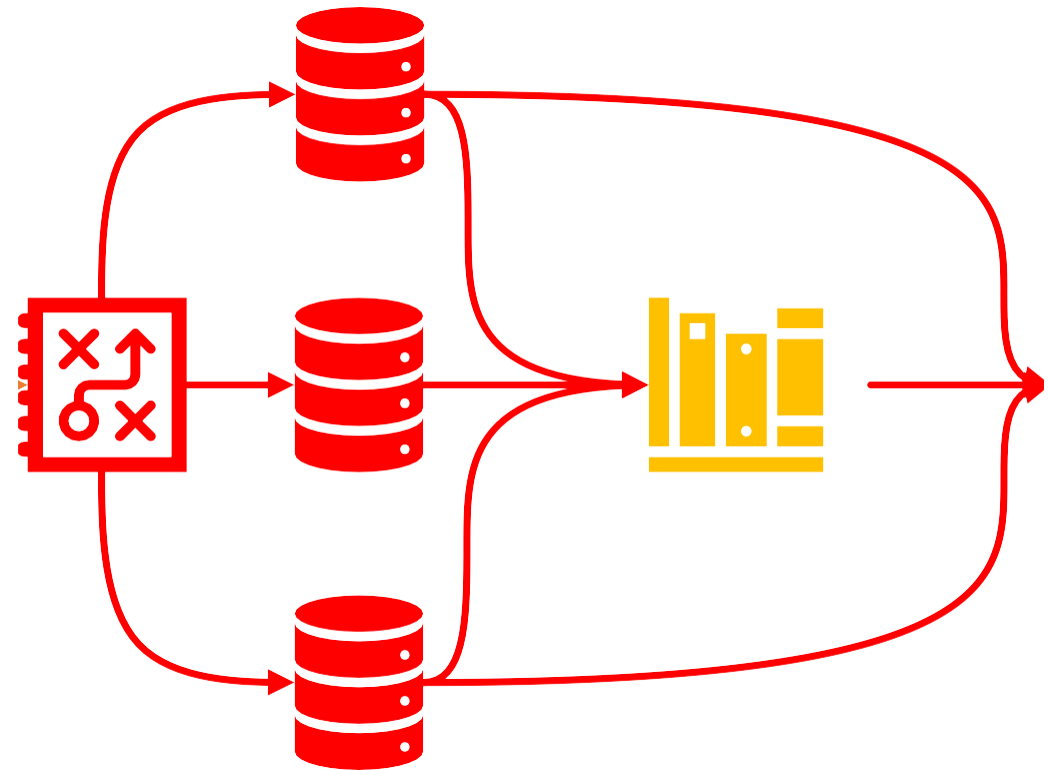


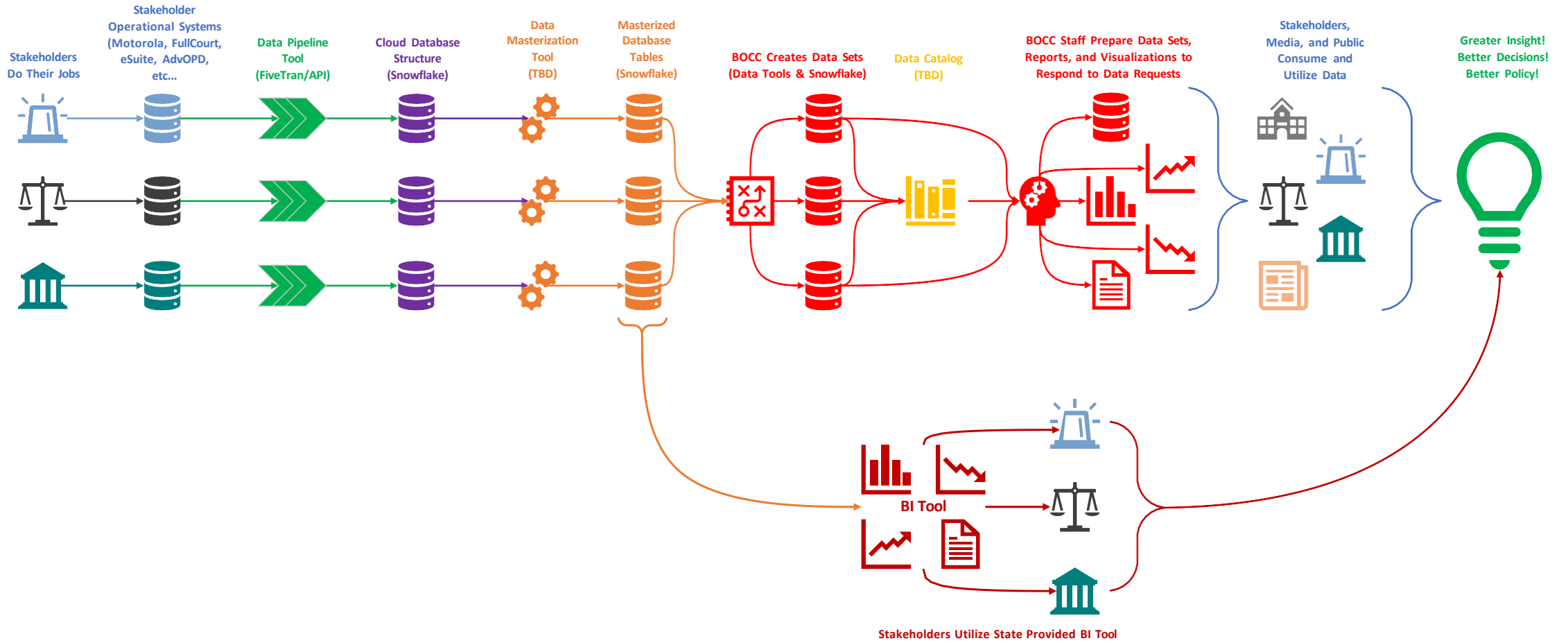
MBCC Creates Data Sets and Populates Data Catalog

- MBCC pulls from shared masterized data to create datasets
- MBCC populates a Data Catalog tool with available data
- Data Governance applied via data catalog
 - Governance ensures data is up-to-date and security and permissions are enforced

**MBCC Creates Data Sets
(Data Tools & Snowflake)**

**Data Catalog
(TBD)**





Looking Ahead...

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- Continue to work with CentralSquare to get remaining 15% of Ravalli County LE data
 - Continue to build out Ravalli County LE integration layer, data QA
 - Continue setting up AWS cloud architecture for various data ingestion methods
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- Continue to work through use cases
 - Progress through MOU process with Gallatin, Cascade, and Courts
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- Onboarding Project Manager and second Data Warehouse Architect