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TRB TRANSPORTATION RESEARCH BOARD

TRB Webinar: Successfully Communicating the Importance of Data Governance

May 18, 2022

2:00 – 3:30 PM



PDH Certification Information

1.5 Professional Development Hours (PDH) – see follow-up email

You must attend the entire webinar.

Questions? Contact Andie Pitchford at TRBwebinar@nas.edu

The Transportation Research Board has met the standards and requirements of the Registered Continuing Education Program. Credit earned on completion of this program will be reported to RCEP at RCEP.net. A certificate of completion will be issued to each participant. As such, it does not include content that may be deemed or construed to be an approval or endorsement by the RCEP.

ENGINEERING



REGISTERED CONTINUING EDUCATION PROGRAM

Purpose Statement

This webinar will share effective strategies to quantify benefits and communicate the importance of data governance to leadership.

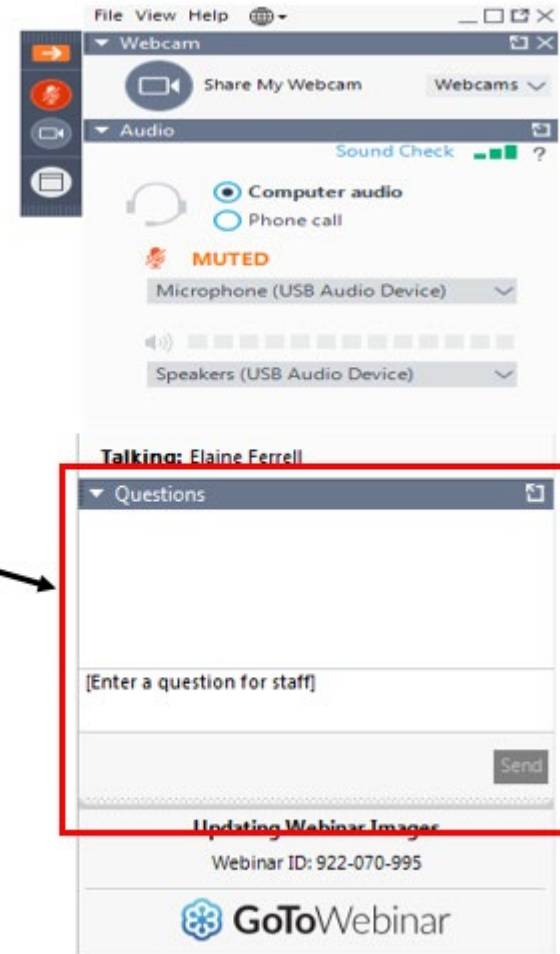
Learning Objectives

At the end of this webinar, you will be able to:

- Establish an understanding of data governance for agency-wide data
- Evaluate challenges and opportunities faced by some state DOTs
- Identify factors that lead to the successful implementation of data governance

Questions and Answers

- Please type your questions into your webinar control panel
- We will read your questions out loud, and answer as many as time allows



Today's presenters

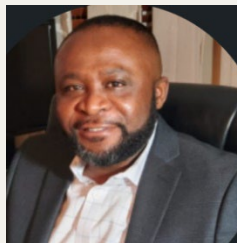


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The Value in Data Governance: MnDOT's Experience

Angela Boardman
Data Governance/ BIM Coordinator



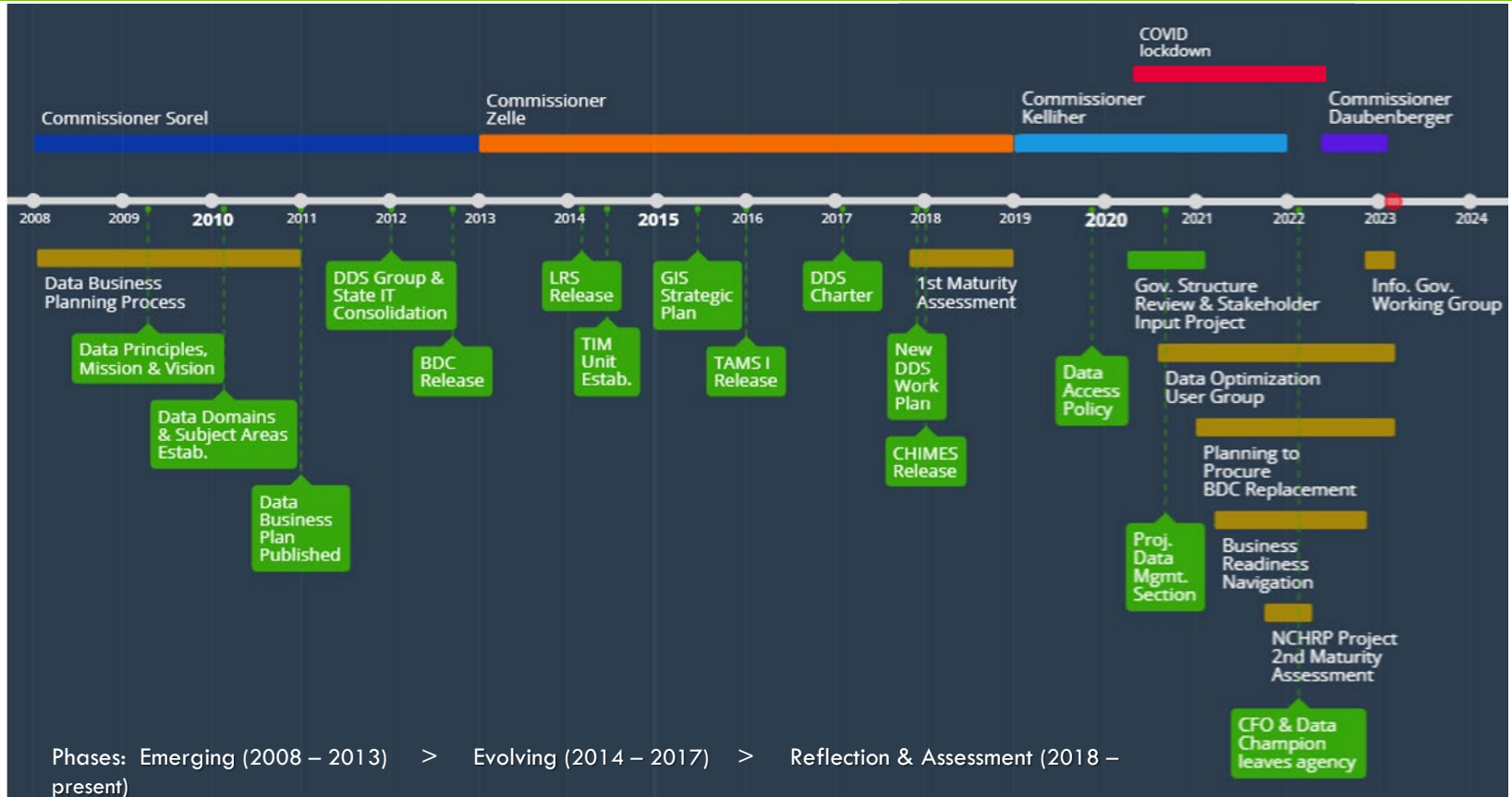
mndot.gov



Required inputs

- Recognition that data are assets & must be actively managed
- A framework: foundational elements such as guiding principles, mission, vision, & a strategic plan
- A formal governance structure: a committee or other decision-making body with clear authority, stewardship roles, defined responsibilities
- Resources: funding, time, SMEs
- Policies, standards, shared vocabulary, training, outreach, & enforcement

MnDOT's Data Governance Journey: 2008 - 2023



Emerging Data Governance at MnDOT

Data Business Planning Initiative (2008 – 2011)

Culminated in Data Business Plan, which outlined a governance framework that:

- introduced data management principles & vision, important definitions, & strategic goals
 - presented a new organizational schema for data (Domains/Subject Areas)
 - stipulated development of a Business Data Catalog (BDC) application (released 2012)
1. Data are valuable business assets
 2. Data will be accessible & shared as permitted
 3. Data will include standard metadata
 4. Data quality will fit its purpose
 5. Data definitions will be consistently used
 6. Data will not be unnecessarily duplicated
 7. Data management is everyone's responsibility



Challenges

- Getting the word out
- Identifying & training data stewards
- State IT consolidation

What are the benefits?

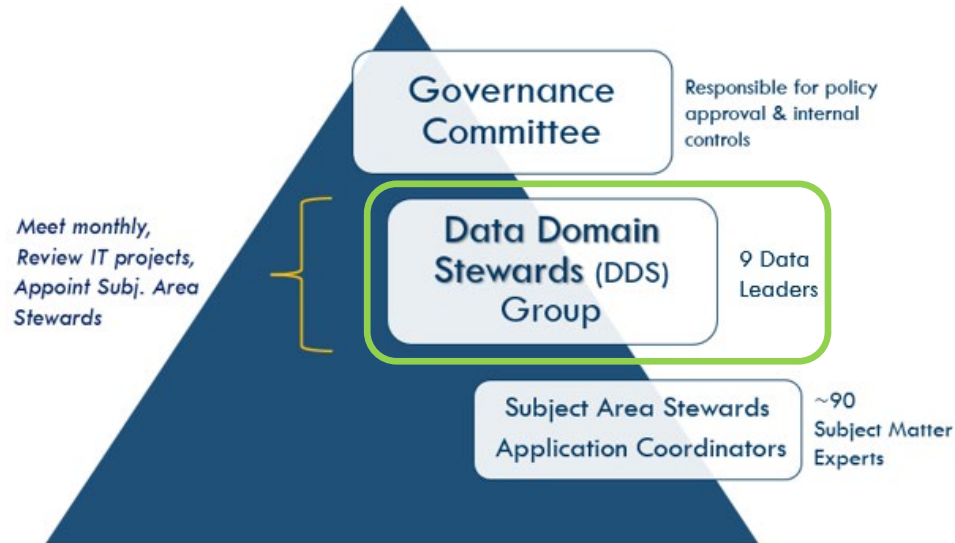


Why invest time & resources developing a framework, mission, vision, & plan?

- +Demonstrates that data are valuable agency assets (*formalizes data as an agency priority*)
- +Sets strategic direction for data
- +Educates staff about potential risks from lack of data management & benefits of intentional data management

Main DG Body

Supporting Organizational Structures



- **Information Governance (IG) Unit**
 - Supports DDS, BDC, document & records management, file storage, data clean-up
- **Technology Investment Management (TIM) Unit**
 - Prioritizes spending on IT projects
- **GIS Steering Team**
 - Governance of & investment in GIS data, training
- **Project Data Management Section**
 - AASHTO/CADD Steering Committee
 - 3D BIM Committee
- **Various *ad hoc* committees**

Challenges:

- **Staff time & funding**
 - Participation is voluntary
- **Ambiguous authority**

Roles & Responsibilities

Define data-related roles & accountability, e.g., CDO, Administrators, Committee Chairs, Program Directors, Data Stewards, SMEs, Technical Liaisons

- *Are data roles formalized in PDs or are they voluntary?*

Clarify the chain of command for data decisions:

- *To whom does the DG Board/Committee report?*
- *Do all DG Board/Committee Members vote, or are there also non-voting (advisory) members?*
- *Do Stewards need to be from a certain level of the organization, e.g., Supervisors, Managers, Office Directors, etc.?*
- *Who enforces compliance with DG policies?*

Why invest time & resources devising a governance structure?



What's the advantage of DG bodies?

- + Establishes accountability for data, *i.e.*, identifies data leaders & decision-makers, roles & responsibilities
- + Provides a central point of coordination for data initiatives; a mechanism for addressing & prioritizing data needs & maintaining compliance with statutes & reporting requirements
- + Authoritative voice for promoting agency-wide awareness of DG concepts with targeted communications & provision of training resources

Policies & Standards

MnDOT Policies

Policy Home Program Suggest Changes Contacts

Data Stewardship

MnDOT Policy DM002
[View/print signed policy \(PDF\)](#)

Policy statement

MnDOT will establish stewardship of its shared data to ensure its quality, reliability, integrity and shareability.

As-Built Deliverable

Home Bridge Drainage Facility Geotechnical Lighting

As-built

[As-built Feature Survey Memo Template](#) is a cover page for submitting WGS84 Lat Long survey data.

Pay Item Requirements

Deliverables should be emailed to: The Engineer and AsBuilds.DOT@state.mn.us.

Project Data Management Section-CADD Unit

Power GEOPAK & Projectwise Support

PDMS-CADD Home Help/Tips Contact Us

Cadd Resources and Data Standards

Disclaimer

This site is an access point to MnDOT's agency wide CADD resources and information for using MnDOT's Bentley ProjectWise system to access project data. The CADD resources are in the agency standard Bentley Power GEOPAK format. Use of these files allows designers to create CAD documents that adhere to MnDOT publication standards for engineering plans. The ProjectWise system may only be accessed by MnDOT staff and external partners who have obtained an access account from their MnDOT Project Manager.

Projectwise External Client Access

Anyone authorized to access MnDOT data through our Bentley ProjectWise system must be aware of the information and practices in the following documents.

- [Data management practices](#) for any MnDOT Bentley ProjectWise system user

Bentley License Requirement for External Partners Using MnDOT ProjectWise

As of May 8th, 2021 every external project partner connecting to MnDOT's Projectwise system must provide their own Bentley License and software.

Data Access Policy (2019)

- Internal access to public, MnDOT-owned, warehoused data
- No approvals required
- 2 warehouse environments (spatial & non-spatial)
- Required agreement on definitions for data-related terminology

Internal Access to MnDOT-Owned Public Data

MnDOT Policy #DM007
Effective Date: December 23, 2019

[View/print signed policy \(pdf\)](#)

Please go to the MnDOT Org Chart to find specific contact information: [Org Chart](#)

Responsible Senior Officer: Deputy Commissioner/Chief Administrative Officer
Policy Owner: Chair, Data Domain Stewards (DDS) Group
Policy Contact: Information Governance and BDC Coordinator

Policy statement

This policy provides the criteria governing MnDOT employee access to public, read-only data residing in MnDOT's [Common Data Environment \(CDE\)](#). MnDOT-owned data in the CDE that are classified as public and have been optimized for consumption shall be available to MnDOT employees who request access.

This policy does not govern:

- [BDC access](#) to transactional applications; shared drive folder permissions; and any onboarding or boarding processes that have traditionally been implemented through the Access Authority role
- Access to not public data
- Access to public data that are not final or have not been optimized for consumption ([see fig. 1.1](#))
- Access to non-MnDOT-owned data and systems, including enterprise systems owned by other state agencies (e.g., SWIFT and SEM44)

Users of CDE data are encouraged to consult subject matter experts—either the Application Coordinator or Subject Area Steward—for guidance on the interpretation and proper use of data. Employees who use data from MnDOT's CDE are responsible for following the standards for publication of any derive data, reports or analytics.

Reason for policy

Data from MnDOT's transactional systems are routinely published to a central repository for query and analysis. This policy clarifies the rules and standardizes the process for MnDOT employees to access



Best Practices for File-Naming

Successful file management begins with effective file-naming. Naming files in a way that describes what they contain helps employees stay organized, identify files easily, and find what they need quickly. The naming conventions in this document apply to the major [MnDOT file storage systems](#). However, some file storage systems or business areas have specific naming conventions that must be followed when working in those systems or areas.

The following naming conventions have been identified as best practices to achieve efficient file management at MnDOT. Work with your manager or supervisor to identify specific file-naming best practices for your business area.

MnDOT Standards & Data-Related Policies

- MnDOT [As-Built Special Provision](#)
- MnDOT [CADD Data Standard](#)
- MnDOT [Performance Measures](#)
- MnDOT [Standard Plans](#)
- MnDOT [Standard Plates](#)
- MnDOT [Standard Specifications for Construction](#)
- [MN Geographic Metadata Guidelines](#) (based on Federal standard)

- [Data Stewardship](#) (2012)
- [Secure/Appropriate Use of Electronic Resources & Technology](#) (2015; currently under revision; new online training module every two years)
- [Internal Access to Public Data](#) (2019)
- [Records Retention & Disposal](#) (updated 2020; limited training available; intranet resources)

“Best Practices” Standalone Documents

- [File Naming](#)
- [Guidelines for Information Technology \(IT\) Use](#)

Coming soon:

- E-mail deletion standard

“Data Hygiene”

Good data habits

Following commonly accepted practices inferred from the Data Management Principles:

- Do not store files on your desktop
- Store files in approved repositories
- Adhere to your agency’s retention schedule
- Whenever possible, send links instead of attachments in your emails
- Set aside time for regular clean-up of deleted email & ROT (Redundant, Obsolete, Trivial) files
- Perform QA/QC on datasets you produce or manage
- Monitor published data for relevance & currency
- Verify the suitability (fitness for use) of data you consume
- Follow file naming conventions
- Use authorized vocabulary
- Cite sources when publishing data products (*include the date & time the source data were retrieved*)



How does the agency benefit from data hygiene?

- Reduction of unnecessarily-stored copies & ROT, which
 - Minimizes the agency's storage footprint
 - Makes relevant data easier to find
 - Reduces turnaround time for data requests
 - Mitigates legal risk from being out of compliance with agency retention schedule
- Consistency in file naming & storage
 - Protection from unintentional data loss
- Improved data quality through active management



Business Data Catalog (BDC): An Asset Management Tool for Data

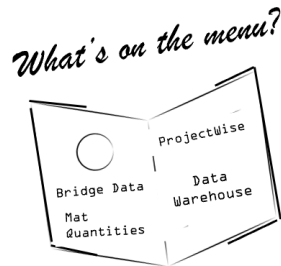
An inventory of agency data assets | Makes data discoverable

Users may search for data at different levels, e.g.,

- by specific data element (Contract Closeout Date)
- by dataset (a Bridge Locations feature class with both spatial & attribute data; Vendor information from the State Procurement Office)
- by system or application (AASHTOWare; CHIMES)
- by owner/creator (data collected by the Planning Section or data created by the Materials Office)
- by keyword (noise wall, estimate)

Users may not know what they're looking for, or if such a type of data even exists

A browsable inventory of data assets, grouped by subject area, allows users to see the organization's universe of data



Data Domains – a different way of thinking about MnDOT's data



Business Stakeholder/Customer - data about public & external partners



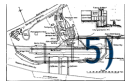
Financial - data about money



Human Resources - data about employees & applicants



Infrastructure - data about MnDOT's physical (built) transportation assets



Planning, Programming, & Projects - data about transportation projects



Recorded Events - data about occurrences on the transportation system (crashes, lane closures, maintenance work)



Regulatory - data about legal requirements



Spatial - data about locations



Supporting Assets - data about ancillary assets that affect the transportation system

MnDOT's Subject Areas, grouped by Domain

Data Domain

Human Resources

Subject Areas:

- ADA Title I Data
- Affirmative Action Data
- Applicant Data
- Complaint & Investigation Data - HR
- Employee Data
- Labor & Management Relations Data
- Position & Organization Data
- Training & Certification Data
- Workers' Compensation Data
- Workforce Management & Skill Data
- Workplace Safety & Health Data

Data Domain

Financial

Subject Areas:

- Budget Data
- Contract, Agreement, & Grant Data
- Contractor, Consultant, Grantee, Vendor & Supplier Data
- Debt Data
- External Audit Data
- Fund Data
- Local Government (State Aid) Financial Data
- Procurement Data
- Source (Revenue) Data
- Transaction Data
- Trunk Highway Road Construction Letting & Contract Data
- Use (Expenditure) Data

Data Domain

Planning, Programming, and Projects

Subject Areas:

- Construction Project Data (Hwy Construction)
- Cost Estimating, Cost Management & General Project Management Data
- Design & Geometric Data
- Environmental Process Data
- Information Technology (IT) Project Data
- Modal Plans & Project Data
- Project Scheduling Data
- Research Project Data
- Transportation Investment Management Data
- Value Engineering Data

Data Domain

Infrastructure

Subject Areas:

- Airport Data
- Bicycle Data
- Bridge Data
- Drainage Structure (Hydraulic) Data
- Interchange, Intersection & Section Data
- Parking Facility Data
- Pavement Condition Data
- Pedestrian Infrastructure (Sidewalk) Data
- Rail Crossing Data
- Right-of-Way & Contaminated Property Data
- Roadway Data
- Safety Feature Data
- Traffic Control Device & Technology Data

Data Domain

Spatial

Subject Areas:

- Boundary & Mapping Data
- Coordinate-based Data
- Feature Offset Data
- Imagery & Remote Sensor Data
- Linear Referencing Data

Data Domain

Regulatory

Subject Areas:

- Aircraft Registration Data
- Commercial Vehicle Regulation & Inspection Data
- Commissioner's Order Data
- Complaint & Investigation Data - Reg
- Data Practices Data
- Delegation of Authority Data
- Dispute Resolution & Settlement Data
- Enforcement Data
- Equal Employment Opportunity (EEO) Data
- Intergovernmental Affairs & Legislative Data
- Internal Audit Data
- Permit & Authorization Data
- Policy Data
- Prevailing Wage Data
- Records Retention Data
- Security Data
- Small Business Contracting Data
- Speed Limit Authority Data
- Tariff Data
- Title II & Title VI Data
- Tort Claim Data

Data Domain

Recorded Events

Subject Areas:

- Air Passenger & Flight Data
- Bicycle & Pedestrian Count Data
- Commodity Movement Data
- Construction Diary Data
- Crash Data
- Emergency Management Data
- Extraordinary Enforcement Data
- Global Sensor Data
- Maintenance Activity Data
- Material Testing Data
- Radio Communication Data
- Roadway Condition Data
- Subsurface Utility Marking Data
- Traffic Count, Traffic Monitoring & Weight Data
- Traveler Information Data

Data Domain

Supporting Assets

Subject Areas:

- Administrative Data
- Building & Facility Data
- Consumable Inventory Data
- Data Governance
- Equipment & Fleet Data
- Fuel Data
- Information Technology (IT) Inventory Data
- Library & Archive Data
- MnDOT Business Application Data
- Non-MnDOT Owned Asset Data
- Road Material Data
- Survey Control Network Data
- Tower Data

Data Domain

Business Stakeholder/Customer

Subject Areas:

- City & County Partner Data
- Customer Market Research Data
- Internal & External Communication Data
- Modal Stakeholder Data - Aeronautics/Airport
- Modal Stakeholder Data - Bicycle/Pedestrian
- Modal Stakeholder Data - Commercial Vehicle
- Modal Stakeholder Data - Passenger Rail
- Modal Stakeholder Data - Railway & Commercial Freight
- Modal Stakeholder Data - Waterway
- Tribal Partner Data



A searchable, curated resource for business information:

- Authorized terms & definitions
- SME contacts
- Data & application inventory
- Records retention schedule

Search the BDC

Advanced Search

About

Records Retention

Applications

BIA/COOP

Reports

Access to Data

BDC User Manual

MnDOT's Data Domains

Business Stakeholder/ Customer

Financial

Human Resources

Infrastructure

Planning, Programming, and Projects

Recorded Events

Regulatory

Spatial

Supporting Assets

Business Data Catalog

The Business Data Catalog is an interactive application accessible to all MnDOT staff. It is a metadata repository that stores and publishes descriptive information about MnDOT's data assets and supports the department's information governance efforts.

The BDC can help you:

- Search for data, applications, and records
- Understand data definitions and business terminology
- Locate and share data
- Obtain contact information for Domain & Subject Area Stewards

Contacts			
Topic	Contact Name	Contact Phone	Contact Email
BDC Content: Add, update, edit, or submit questions or feedback about the content	Angela Boardman BDC Coordinator	651-366-4822	Angela.Boardman@state.mn.us
Records retention schedule	Jennifer W. Witt Records Manager	651-366-3541	Jennifer.W.Witt@state.mn.us
Technical Support: Report errors or problems with the BDC	IT Service Desk	651-355-0200	IT Service Desk

Organizational Hierarchy of Data in BDC

DOMAIN

INFRASTRUCTURE DATA

Subject Areas

Airport Data
Bicycle Data
Bridge Data
Drainage Structure (Hydraulic) Data
Interchange, Intersection & Section Data
Parking Facility Data
Pavement Condition Data
Pedestrian Infrastructure (Sidewalk) Data
Rail Crossing Data
Right-of-Way & Contaminated Property Data
Roadway Data
Safety Feature Data
Traffic Control Device & Technology Data

Subject Area: Airport Data
Description: Data on the publicly-owned system of Minnesota airports.
Data Domain: [Infrastructure](#)
Point of Contact: [Ryan Gaug, Subject Area Steward](#)

+ List of Terms

+ List of Records

+ List of Applications

For each Subject Area,
MnDOT's Business Data
Catalog (BDC) stores related

- Terms
- Records
- Applications

Why invest time & resources developing & maintaining a data catalog?

- Provides a central source for authorized terminology (*promotes consistency!*)
- Provides a searchable inventory of all agency software systems & documented data flows
- Facilitates discovery & retrieval of data
- Gives employees a visible path to finding & understanding agency data resources



RFP!

MnDOT currently seeking a solution to replace the current homegrown BDC application

Want more sophisticated functionality that can automate update processes & more flexibility to present metadata

Current State: Reflecting, Re-imagining

By late 2019, existing DG structure becoming unproductive

- *Proliferation of data-related groups clouding decision-making authority*



Commissioner champions stakeholder feedback initiative; recommendations include:

- *Simplify decision-making by consolidating overlapping groups, clarifying roles & responsibilities, identifying decision-makers, considering a CDO ... and then,*

COVID hits & Commissioner leaves agency (“wait and see” mode until late 2022)

Effort resumes but difficult to create a new structure that satisfies everyone

- *New committee proposal awaiting review by leadership*

Incentives

What can an agency expect to gain from a Data Governance program?

ACCOUNTABILITY

Awareness of the strategic importance of data & acknowledgement of responsibility for being good stewards of public assets

EFFICIENCY

Process documentation, introduction of best practices, and data & system inventories that facilitate discovery & retrieval

RISK MITIGATION

Regular data clean-up & storage audits to maintain a well-organized data environment that is not cluttered by storage of unnecessary copies or undeleted records that should have been purged per the retention schedule

WORKFORCE DEVELOPMENT

Training resources, opportunities for ongoing learning, & continuous communication from leadership on the importance of treating data like other transportation assets

Making DG a Clear Priority

- ✓ Establish DG as a permanent program, not a project
- ✓ Anchor DG efforts in a neutral part of the organization with recognized decision-making authority
- ✓ Plan ongoing investment in DG (operations & procurement)
- ✓ Regular program evaluation (*i.e.*, maturity assessment) to measure effectiveness of DG efforts
- ✓ Represent & advocate: ensure visibility, *i.e.*, DG awareness, education/training, clear accountability, & consistent messaging from leadership

Thank You

Questions?

Angela.Boardman@state.mn.us



THE DATA



ARDOT's Move Towards Data Transparency and Governance

Presentation Agenda

- The Variety of Data
- Data Challenges
- A Path to Data Governance
- Celebrating Each Step



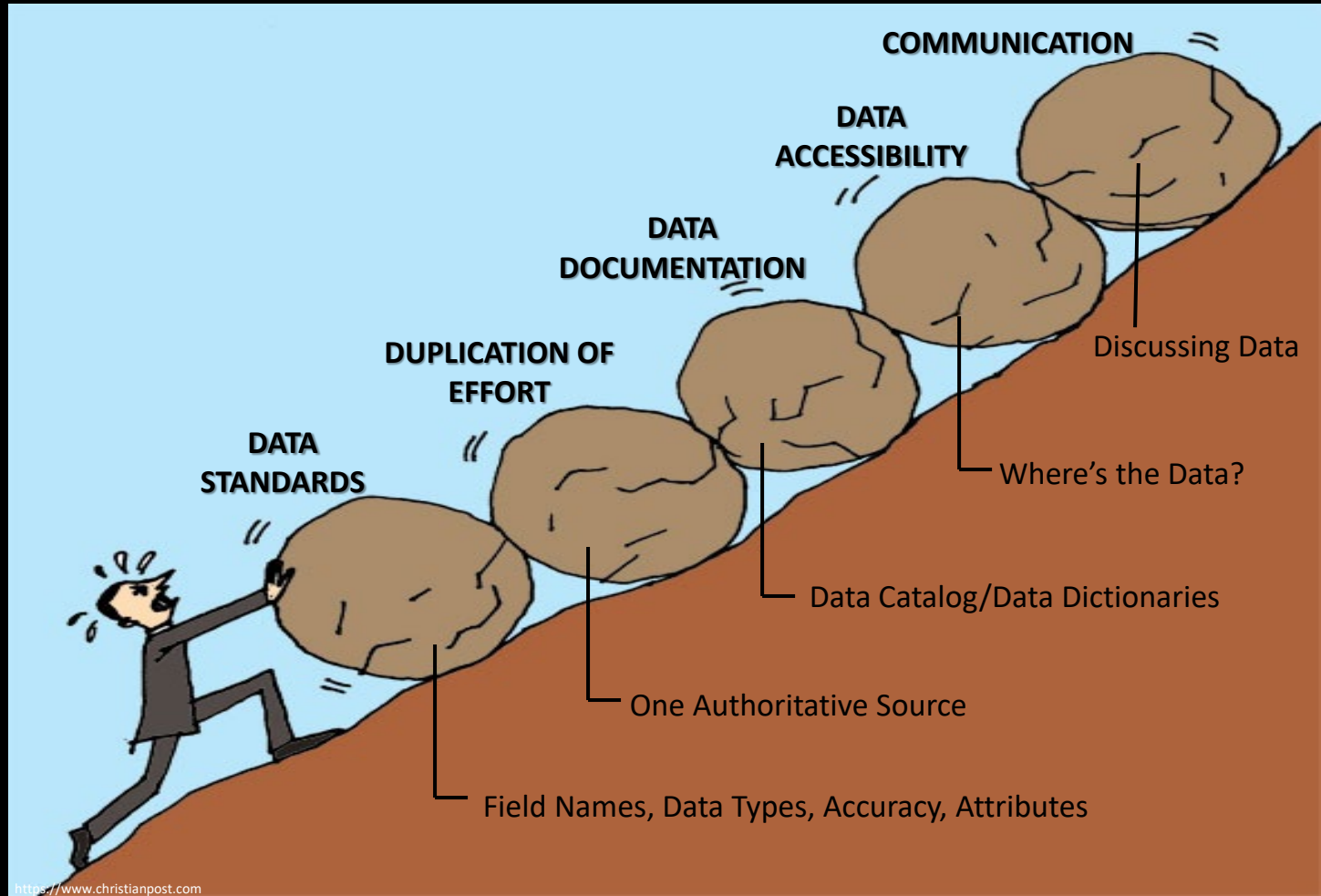
The Variety of Data

We've been discussing developing a formal process for organizing, documenting, and governing data for a **LONG TIME!**



- ARNOLD – LRS
- ADT
- Turning Movement
- Bridge
- Pavement
- Construction
- Crash
- Billboards
- Junkyards
- Signs
- Off-Site Areas
- Bike Ped
- ADA
- MIRE
- Soil Samples
- Boring Samples
- Weight Restriction
- NPMRDS
- Railroad
- Striping
- Lighting
- Signals
- Culverts
- Towers
- STIP
- ROW
- Fleet
- Skid
- Functional Class
- NHS
- Road Inventory
- Truck Volume
- Vehicle Classification
- FWD
- GPR
- ETC...

Data Challenges

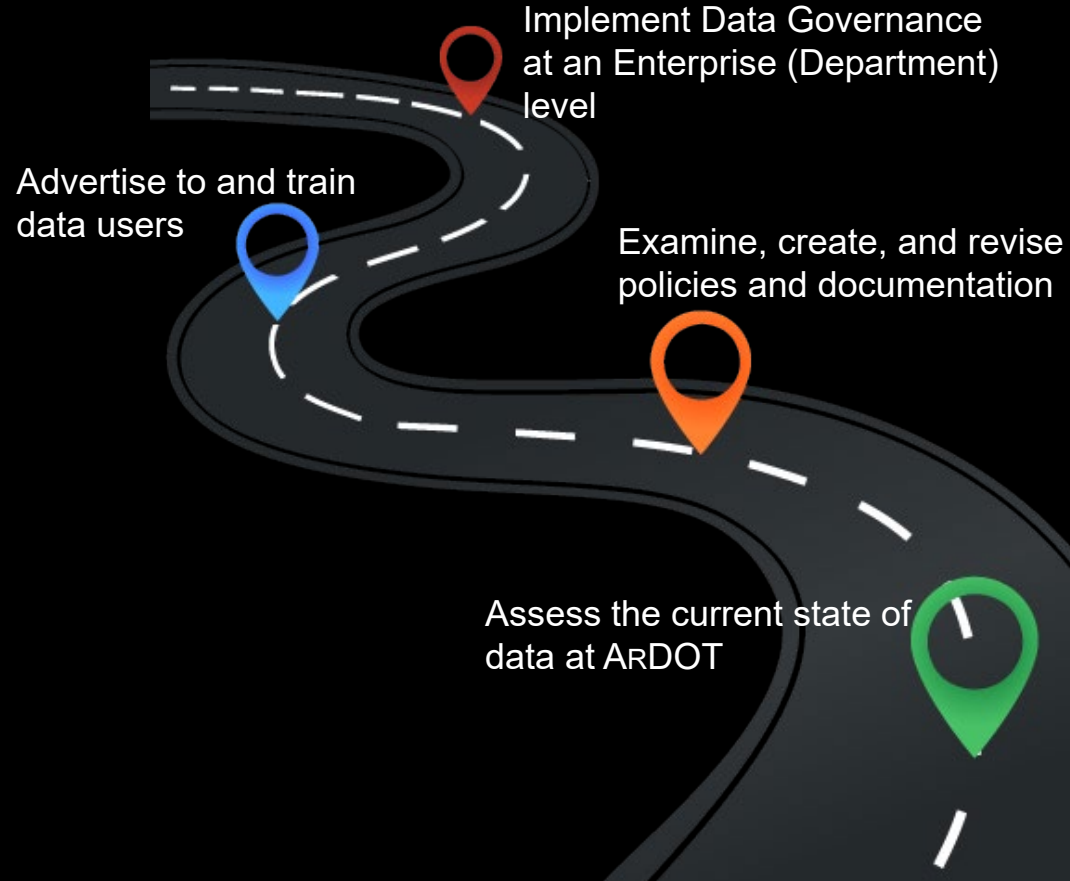


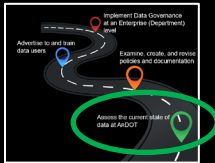
Data Challenges



<https://www.linkedin.com/pulse/too-many-cooks-corporate-kitchen-brigette-hyacinth/>

A Path to Data Governance

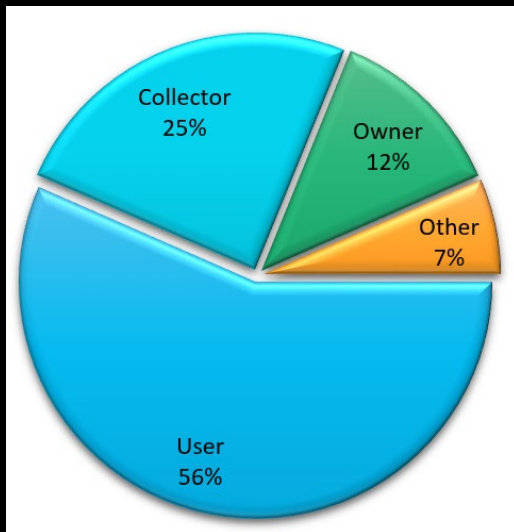




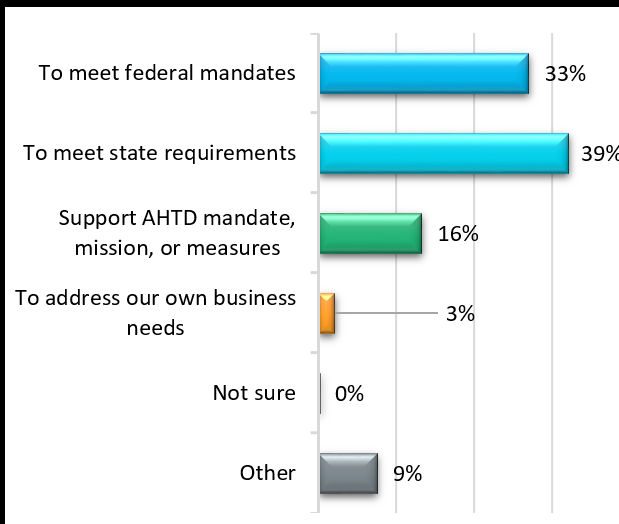
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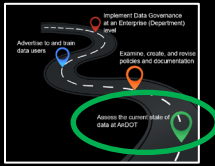
DATA SURVEY 2017

ROLL WITH DATA?



WHY DATA COLLECTED?

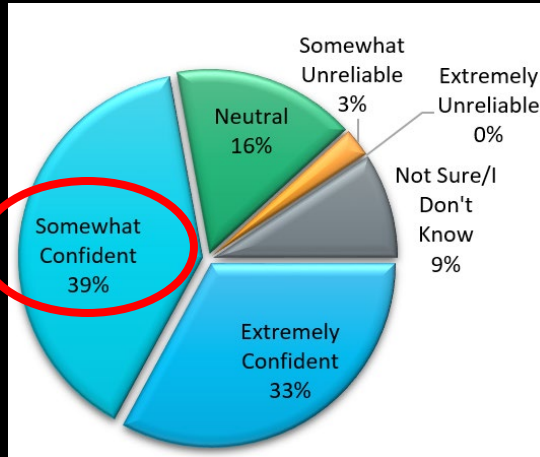




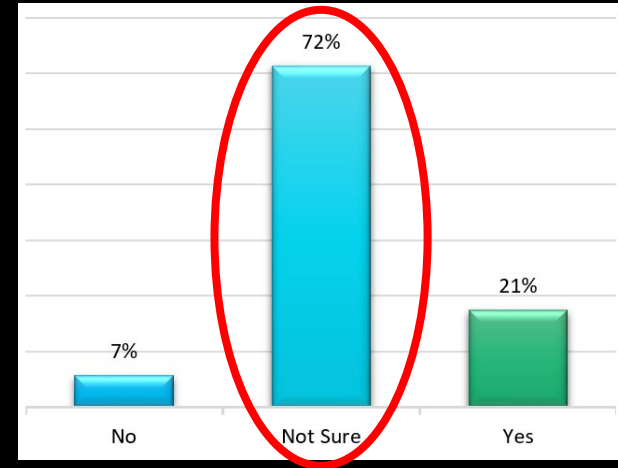
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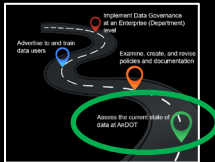
DATA SURVEY 2017

CONFIDENT IN DATA?



DATA DOCUMENTATION EXISTS?

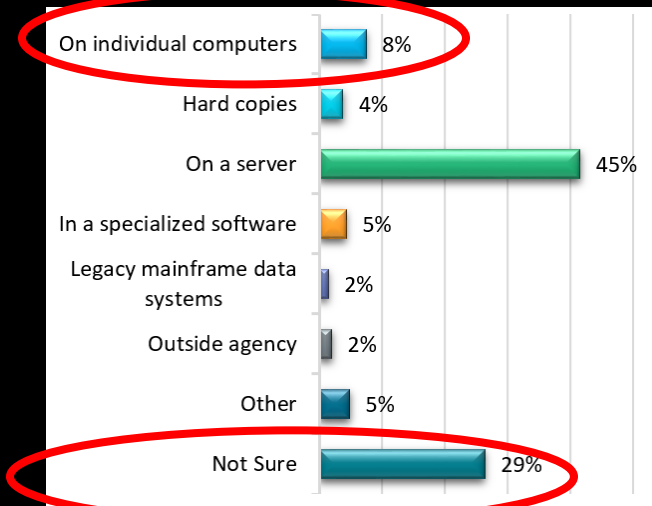




A Path to Data Governance

DATA SURVEY 2017

WHERE'S THE DATA?



DATA NEEDS?



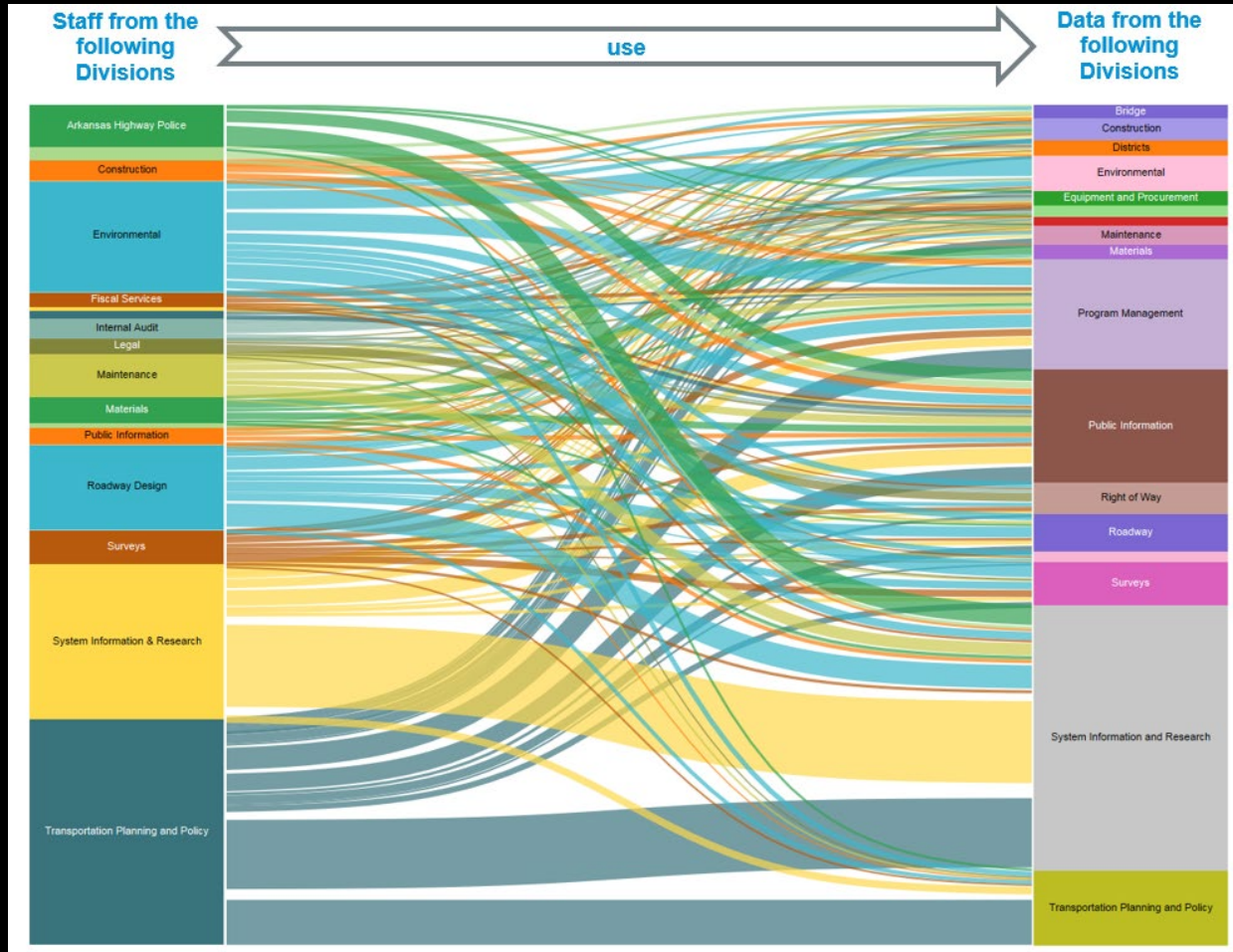


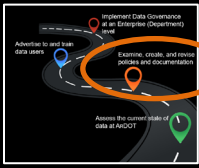
A Path to Data Governance

DATA SURVEY 2017

- Access or permission to use data can be an issue
- I have to flip through so many pages to get to the information I need
- It would be better if you could find all the information in one location. It's not user friendly.
- Like most places, you almost have to know who to call to be able to locate the data you need.
- I use a lot of the databases around the Department. Many are hard to access and even harder to find.

A Path to Data Governance





A Path to Data Governance

DATA CATALOG

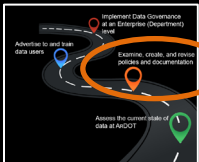
- Lists All Available Data Sets
- Where is the Data
- Clarify Owners
- Information to understand the purpose and how to use the data

DATA DICTIONARY

- List/Definition of attributes
- Type Field (Text, Number, etc...)
- Number characters allowed
- Information expected/required
- Temporality and limitations



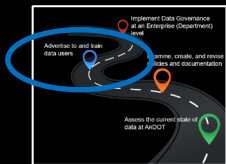
METADATA



A Path to Data Governance

“METADATA
IS A
LOVE NOTE
TO THE FUTURE”

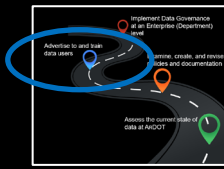
Unknown



A Path to Data Governance

Advertising Data

- **Talk about data**
- **Data Catalogs/Data Dictionaries**
- **Internal and/or External news releases/e-mail blasts**
- **Posters, brochures, and fliers**
- **Outreach and presentations to others such as “Lunch n’ Learns”, Identified Stakeholder meetings, etc...**



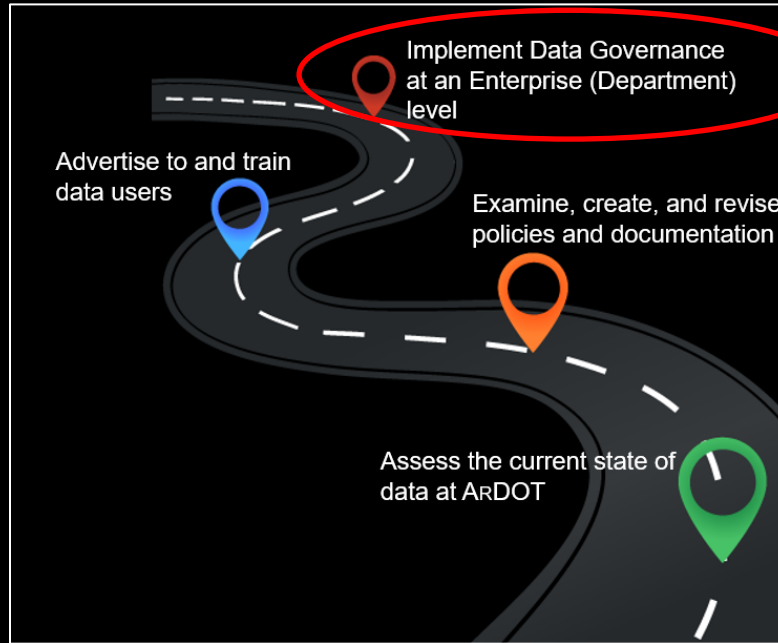
A Path to Data Governance

Data Training

A Beginners Guide to GIS and Spatial Data at ARDOT

- Exercises to understand how data can displayed and analyzed
- Exploring ARDOT's Data Resources with questions at the end of each exercise
- Updated regularly to keep up with changes

A Path to Data Governance



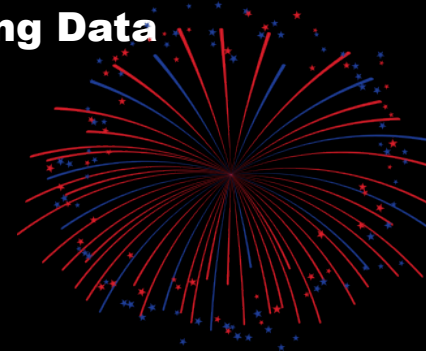
We'll get there... 😊



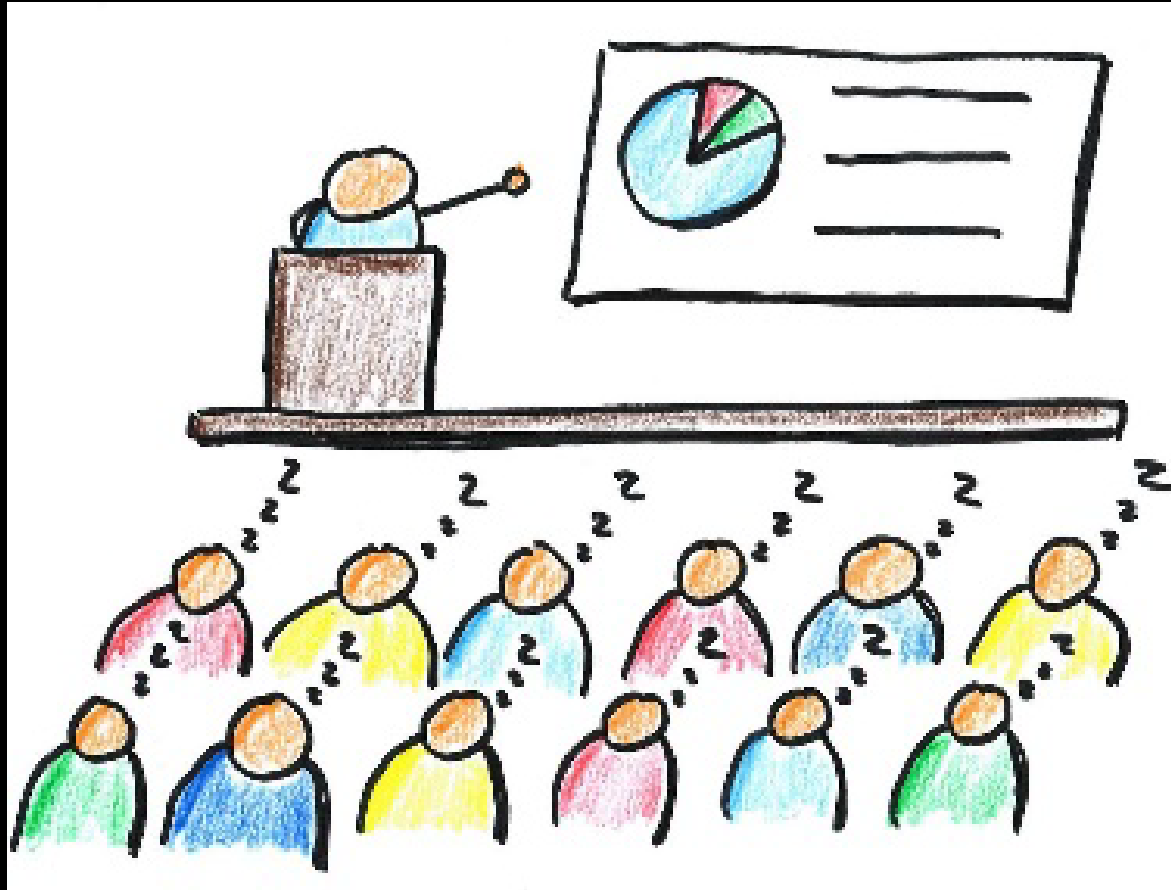
Celebrating Each Step



- **95% of all spatial data across ARDOT is ARNOLD compliant**
- **We have a great historic archiving system for many datasets**
- **The relationship between our IT Division and Data Owners/Users is incredible**
- **ARDOT Administration supports moving Data Governance forward**

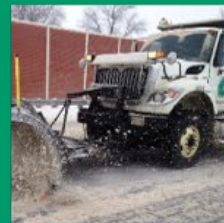


Talking about data isn't always exciting...



THANK YOU

CREATING & IMPLEMENTING A DATA GOVERNANCE FRAMEWORK



OHIO DEPARTMENT OF
TRANSPORTATION

TIMELINE

Lighting tower failure
propels usage of GIS tools

Collector Program
takes off

TAMP Certified
2018

DG Office
Created

DG Office
Restructured

2011

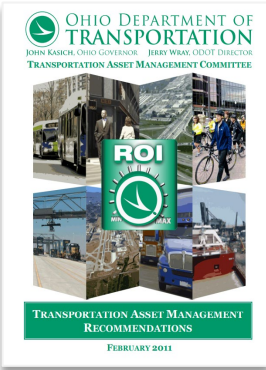
2014

2015 - 2016

2017

2019 - 2020

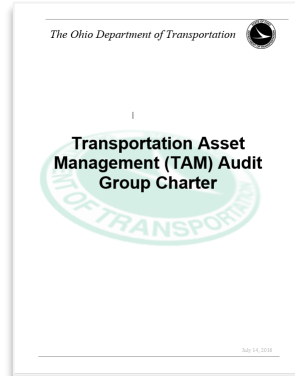
2021 -



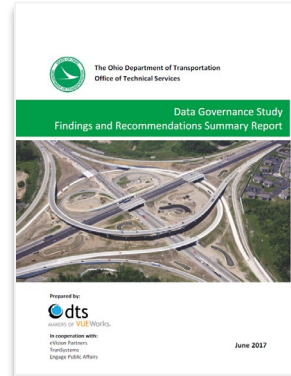
TAM data standards
identified as needed



Enterprise
Architecture
Study recommends
Formalized DG



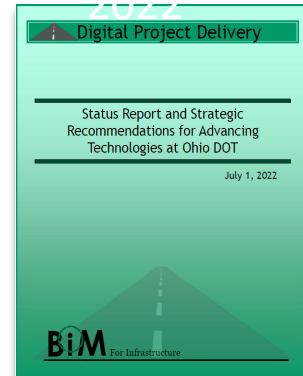
TAMAG
Formalized



DG Study,
Capability Maturity
Recommendations



DG Framework
Implementation
Project



BIM Strategic
Recommendations

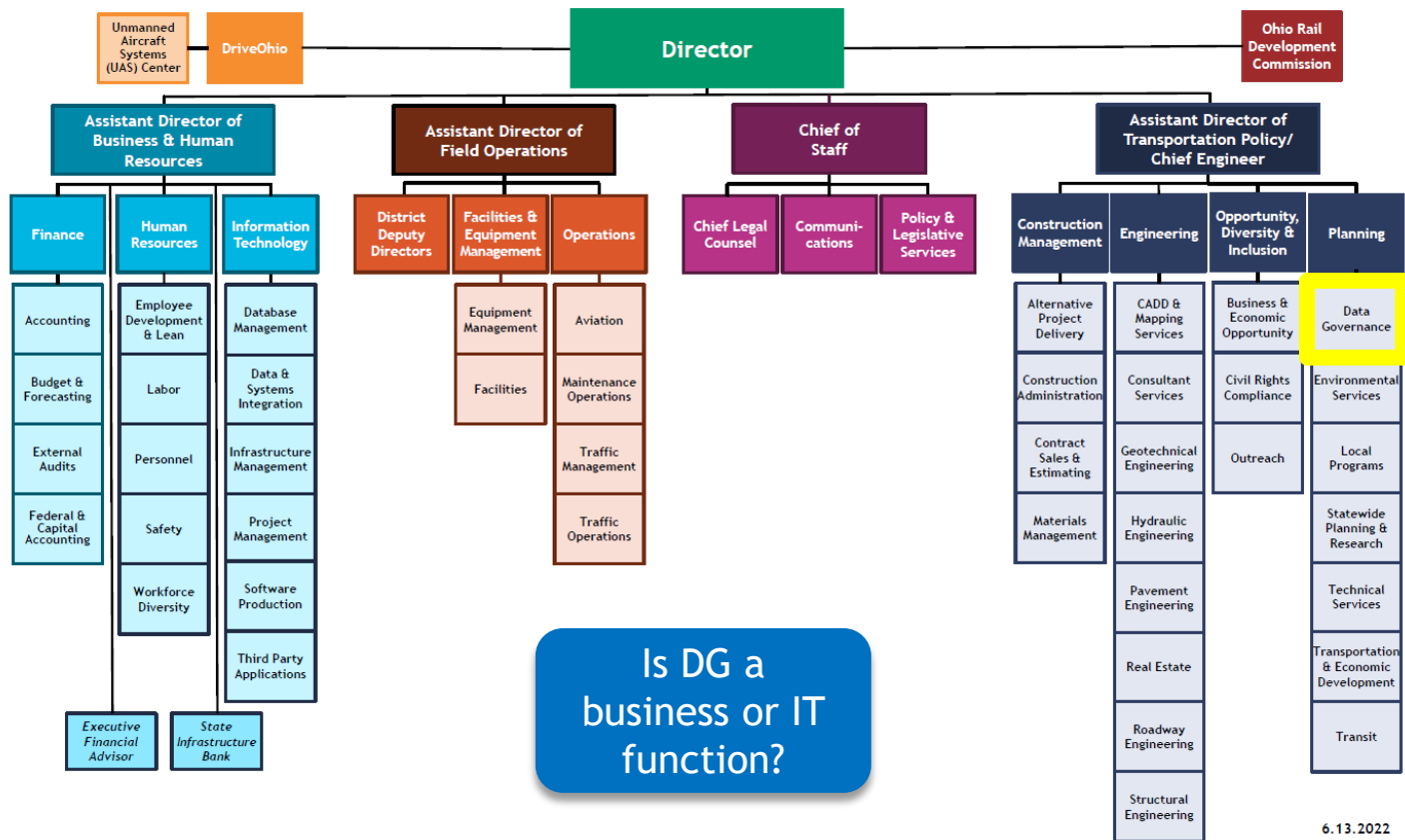
DG FRAMEWORK IMPLEMENTATION PROJECT



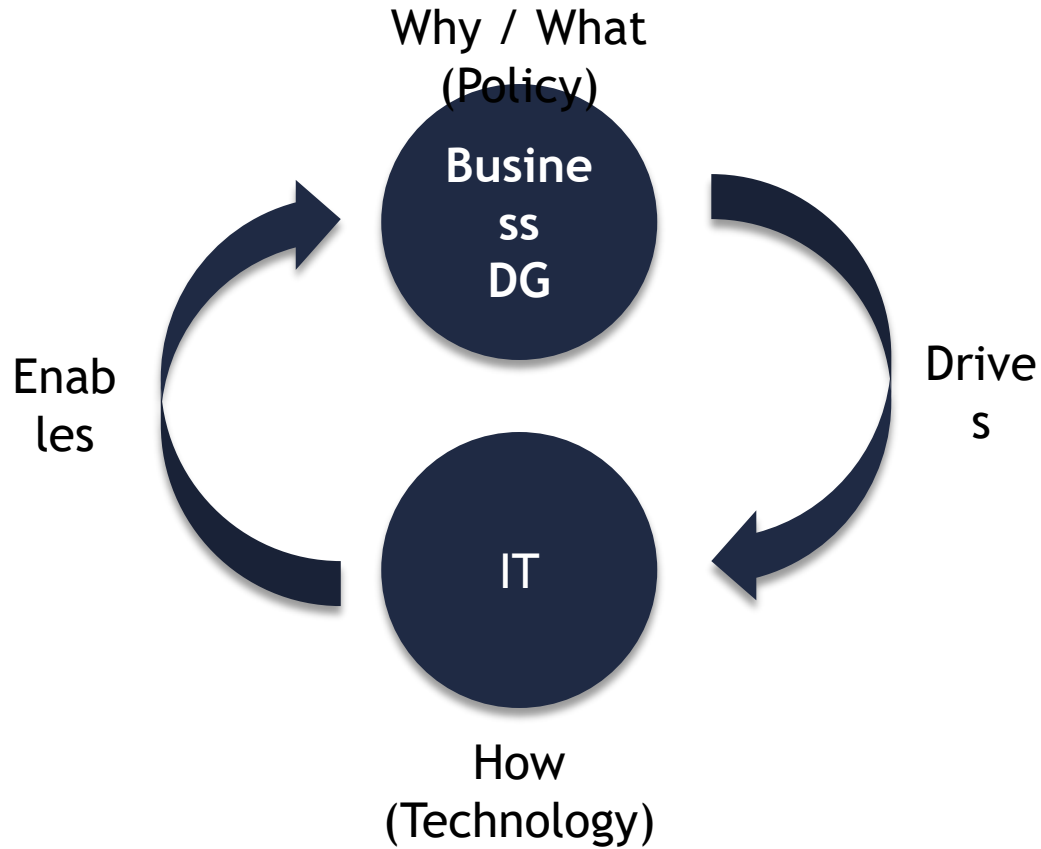
Deliverables

1. Establish a DG Framework
2. Review current Enterprise Architecture
3. Organizational Change Management Plan
4. ODOT Resource Structure
5. Review DoIT's Organization Structure
6. Review skillsets to support DG
7. Create Data Governance Committee
8. Develop data governance policy (in progress)

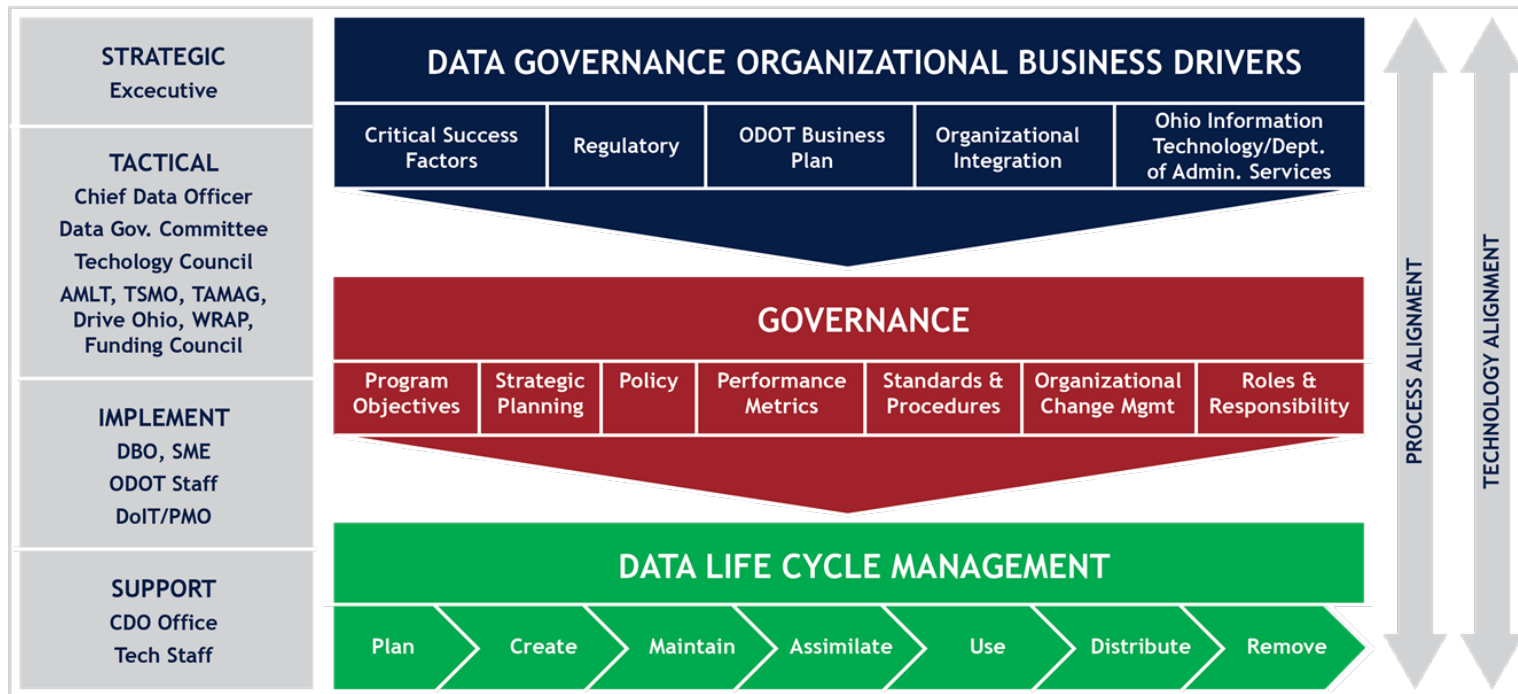
ODOT DG STRUCTURE



DG / IT RELATIONSHIP



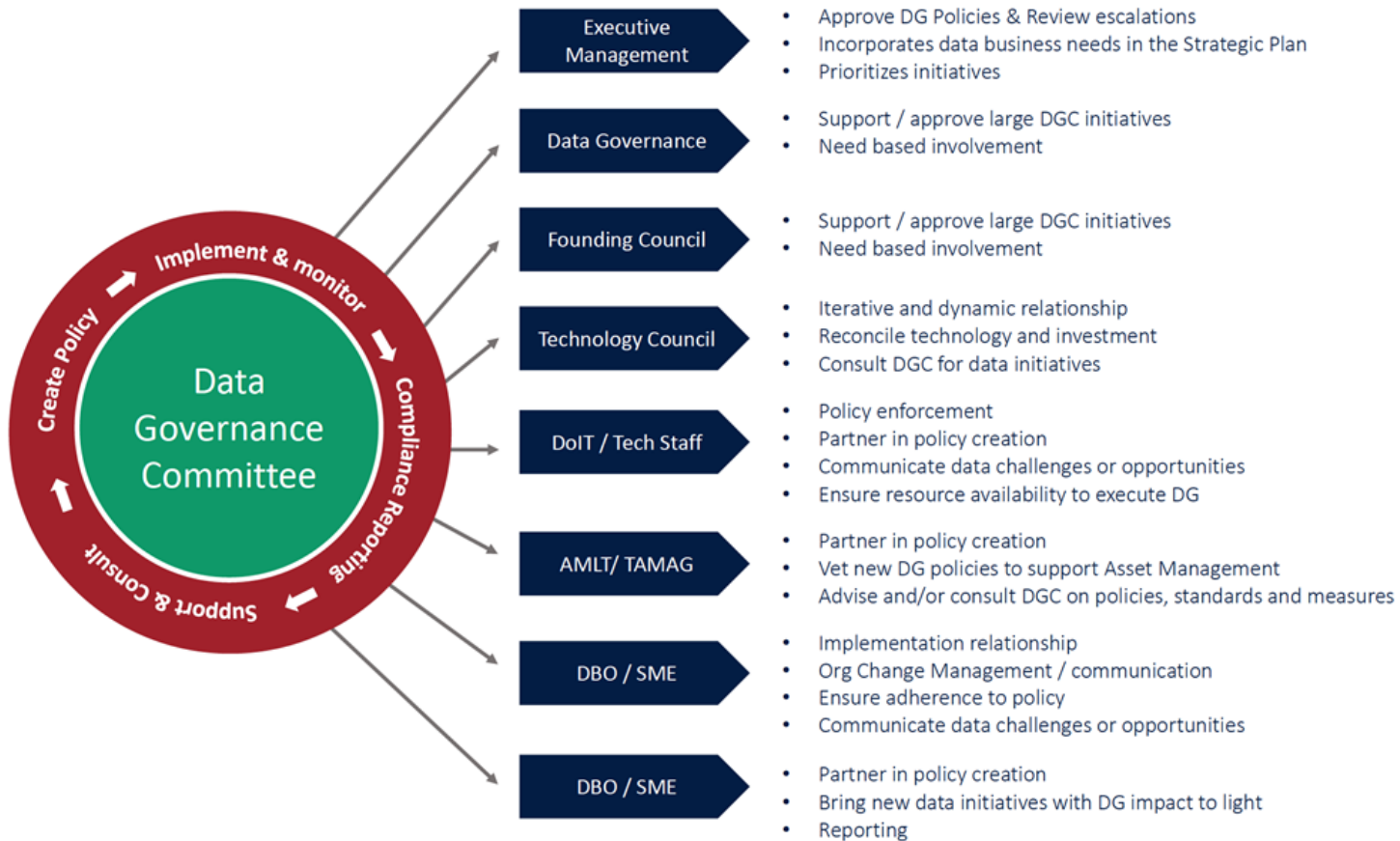
DATA GOVERNANCE FRAMEWORK



Framework Definition: Establishes **guidelines** and **rules of engagement** for **business** and **management activities** of enterprise data.

Formalizes data life cycle interactions between people, process, and technologies to support positive outcomes

ODOT DG ROLES & POSITIONS



DG STRATEGIC PLAN

STRATEGIC OBJECTIVES

- Establish enterprise standards
- Implement standards
- Create Data Business Plans
- Systems Integration / Reduce Data Silos
- Master Data Management / Metadata Catalog
- Manage Unstructured Data
- Monitor DG standards compliance
- Define resource, skills, roles, responsibility
- Enterprise data-warehouse

POLICY

Privacy Impact Assessment Policy

- Established 4/17/2015
- Based on ORC Section 125.18
- Originally assigned to IT
 - DG Office now responsible

Approved:

Jerry Wray
Director



Policy: 28-016(P)
Effective: 4/17/2015

Responsible Division: Information Technology
Supersedes Policy: 28-016(P) Dated: 11/24/08

PRIVACY IMPACT ASSESSMENT POLICY

POLICY STATEMENT:

Increased connectivity of computers and databases makes more data available to individuals, businesses, and agencies. As a result, the potential for unauthorized disclosure, modification, or destruction of personal, financial, business, and other data also has increased. The department shall create privacy impact statement prior to the implementation of any information technology data system. Privacy impact statements consist of a Privacy Threshold Assessment (PTA), a Privacy Impact Assessment (PIA), or both.

AUTHORITY:

Ohio Revised Code (ORC) 125.18; ORC 149.011; ORC 149.434; ORC 1347

REFERENCES:

IT Bulletin ITB-2008.02, "Privacy Impact Assessments"

Ohio IT Policy ITP-B.11, "Data Classification"

Executive Order 2007-0135

Ohio IT Standard ITS-SEC-01, "Data Encryption and Cryptography"

SCOPE:

All Districts, Divisions, Offices, and Contractors at the Ohio Department of Transportation. Any personnel who won, manage, or maintain any ODOT-owned information systems that reference, use, or store sensitive data. Any electronic data records that are stored on or pass through ODOT's systems.

BACKGROUND AND PURPOSE:

The most effective way to protect information and systems, in terms of both implementation and costs, is to incorporate privacy and security into the architecture of each. Adding privacy and security after initial development can be more costly and problematic. State agencies are required to create privacy impact statements in accordance with Section 125.18 of the Ohio Revised Code. Performing a Privacy Threshold Analysis (PTA) or a Privacy Impact Assessment (PIA) upon the collection of new types of information, or at the beginning of the development or acquisition of a new information system that maintains personally identifiable information, will help a state agency to determine most, if not all, of the necessary security controls.

PRIVACY IMPACT ASSESSMENT - AUDIT

Progress



Date	Total In Scope	Overall Completed	% Remaining	% Pending	PTAs Completed	PTA Pending	Research Ongoing
10/31/2022	192	32%	56%	12%	61	23	108
11/30/2022	206	39%	50%	12%	80	24	102
12/30/2022	210	41%	51%	7%	87	15	108
1/31/2023	194	54%	38%	8%	104	16	74
2/28/2023	189	62%	29%	10%	117	18	54
3/31/2023	191	64%	27%	9%	122	18	51
4/28/2023	195	69%	14%	8%	134	15	27

Long Term (in progress)

- Full Ohio Revised Code review
- Create documented Standard Operating Procedure (SOP)

• SOP

POLICY

Data Governance Policy

- Replace standalone Privacy Impact Policy
- Currently in progress / review

Purpose

- Recognize data as central to agency operation, mission
- Need enterprise management to minimize risk
- Formalize responsibilities

Approved:

Jack Marchbanks, Ph.D., Director

Policy: 20-006(P)

Effective: XX/XX/XXXX

Responsible Division: Planning

Supersedes Policy: 28-016(P) Dated 4/17/2015

DATA GOVERNANCE POLICY

I. POLICY STATEMENT

The Ohio Department of Transportation increasingly relies on data and information to achieve business objectives effectively and efficiently. These efficiencies are often accomplished by sharing data across internal business units as well as with external partners. While data sharing enables innovation it creates opportunity for intentional or unintentional data misuse, potentially exposing the department to various risk. The department shall implement a data governance program to organize and manage enterprise data to minimize data misuse risk.

II. AUTHORITY

DAS 900-01 Public Records Policy
DAS IT-07 Electronic Records Management
DAS IT-13 Data Classification
DAS IT-14 Data Encryption and Securing Sensitive Data.
Ohio Revised Code Chapter 1347
Section 1347.01 - Personal information systems definitions.
Section 1347.05 - Duties of state and local agencies maintaining personal information.
Section 1347.07 - Using personal information.
Section 1347.071 - Placing / using information in interconnected or combined systems.
Section 1347.10 - Wrongful disclosure.
Section 1347.15 - Access rules for confidential personal information.

III. SCOPE

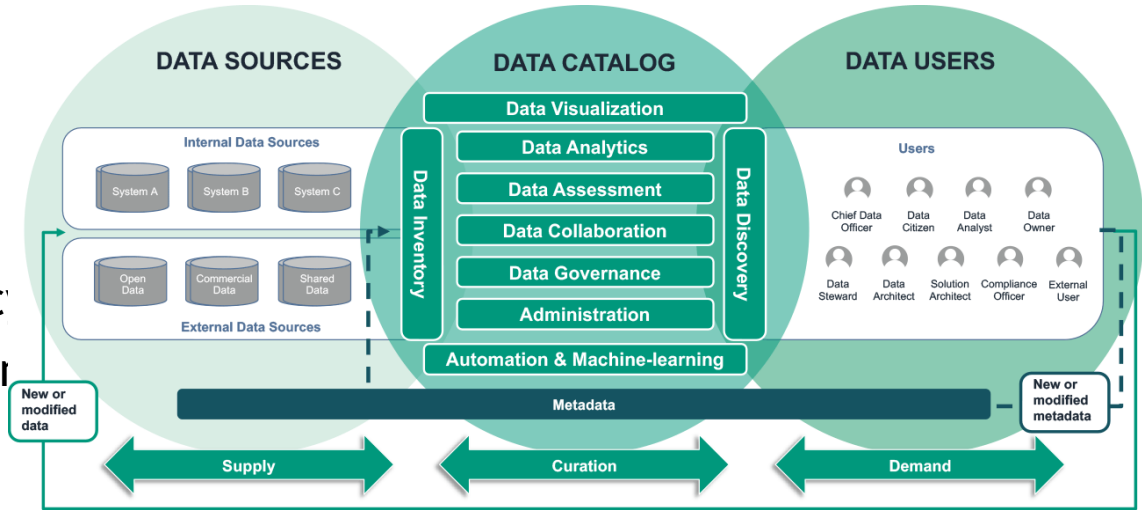
The provisions of the policy set forth in this document apply to all ODOT personnel, including employees, temporary staff, contractors and third-party vendors involved with ODOT data and information systems. All ODOT personnel shall support, participate, and promote ODOT's data governance policies and processes.

If, at any time, a portion of this policy conflicts with a state law or regulation having jurisdiction over ODOT, the law or regulation shall take precedence over that portion of the policy. The rest of the policy shall remain in effect.

DATA CATALOG

Benefits

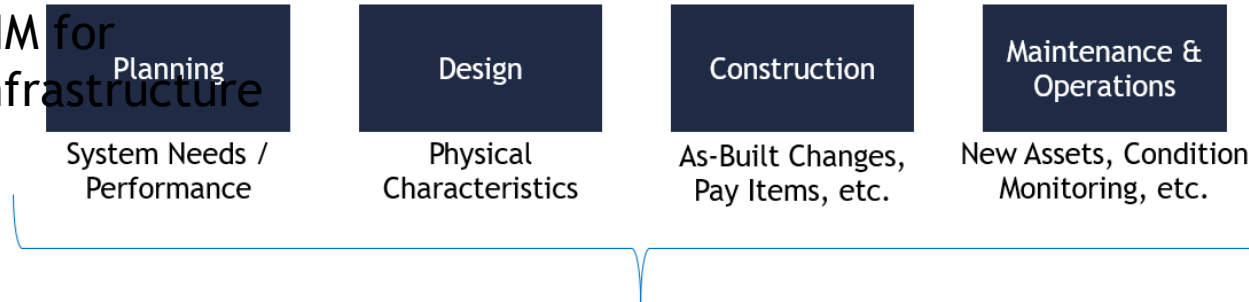
- Data Search & Discovery
- Data evaluation & analysis
- Data lineage
- Track data security & privacy
- Data integration management
- Data Curation / Lifecycle management
- Data Quality monitoring
- Metadata management



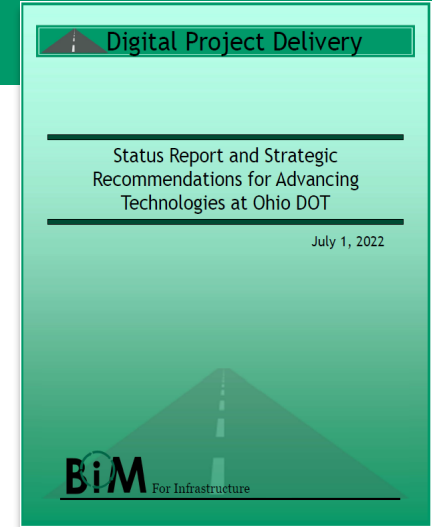
BUILDING INFORMATION MODELING (BIM)

Objectives

- Smart Plans
- Advanced 3D Models
- As-Built
- BIM for Infrastructure



Holistic Model of
Asset Lifecycle



OTHER INITIATIVES

Knowledge Management Plan

- Working HR & LTAP
- Piloting methods to capture key business process

Data Literacy

- Provide education on data, data analysis
- What tools are available

Data Availability

- Sharing data to cross-State agency data platform



THANK YOU

Ian Kidner, GISP
Chief Data Officer
Ohio Department of Transportation
Office of Data Governance
ian.kidner@dot.ohio.gov

Today's presenters

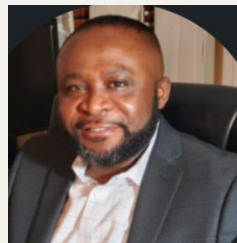


Angela Boardman
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Arkansas DOT

Ian Kidner
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Ohio DOT



Dr. Richard Boadi
richard.boadi@wsp.com
WSP

Upcoming events for you

July 8-11, 2023

TRB's National Conference on
Transportation Asset Management

July 23-26, 2023

TRB International Conference on Low
Volume Roads

[https://www.nationalacademies.org/trb/
events](https://www.nationalacademies.org/trb/events)

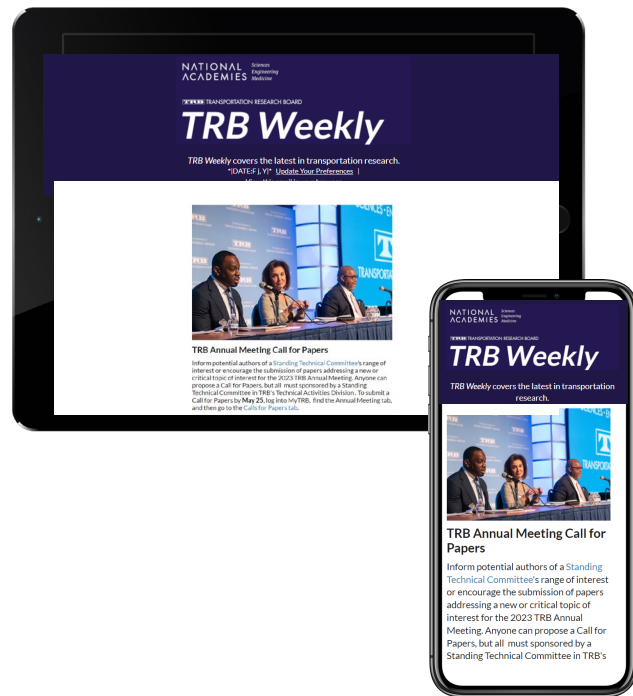


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Get involved

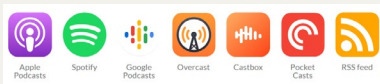
<https://www.nationalacademies.org/trb/get-involved>

- **Become a Friend of a Standing Technical Committee**

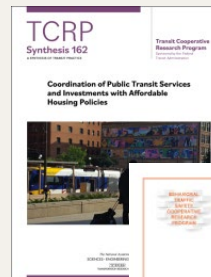
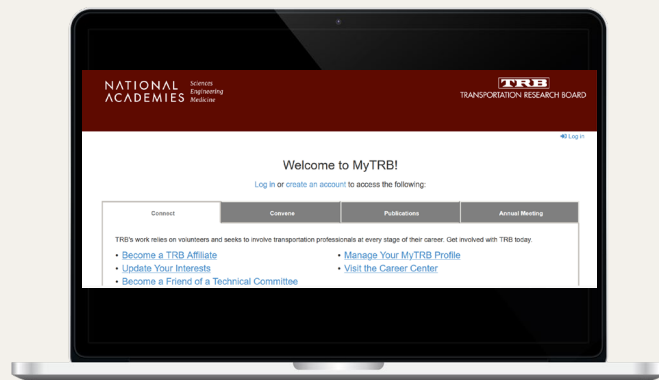
Network and pursue a path to Standing Committee membership

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