THE BEGINNING OF DATA GOVERNANCE

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ArDOT – GIS and Mapping
TEAM EFFORT

Operations
Environmental Planning
IT
Design
IDENTIFIED CHALLENGES/GOALS

- Data Standards
- Duplication of Effort
- Data Documentation
- Data Accessibility
- Communication
WHO’S IN CHARGE HERE?
WHO’S IN CHARGE HERE?

COUNTY
- County
- CO
- AHTD_COUNTY
- COUNTYNUMBER
- County_Num

ROUTE
- Route
- RTE
- ROUTENUM
- ROUTE
- ROUTENumber
- RouteNumber
- Road

SECTION
- Sectn
- SEC
- sectn
- sect
- SECTON
- SECTON
- Section
WHO’S IN CHARGE HERE?
WHO’S IN CHARGE HERE?

HEAD CHEF

HEAD CHEF

HEAD CHEF

HEAD CHEF

HEAD CHEF

HEAD CHEF
AND THEN…

WE’VE HAD A FEW FALSE STARTS
"Insanity: doing the same thing over and over again and expecting different results." - Albert Einstein
LET’S TRY SOMETHING DIFFERENT

December 2016

DATA BUSINESS PLAN

▪ Develop a plan for ArDOT to meet current and future business needs for data

▪ Comply with state and federal requirements

▪ Improve organization, collaboration, collection, analysis and reporting of data
FROM THE OUTSIDE LOOKING IN
ASSESS CURRENT STATE - SURVEY SAYS!

Arkansas Data Business Plan
Data Survey

233 Completed Responses Received
ASSESS CURRENT STATE - SURVEY SAYS!

What Was Asked?

Role with data/databases
- Collector: 25%
- Owner: 12%
- Other: 7%
- User: 56%

Who collects the data?
- Collect data internally: 56%
- Obtain data from another agency: 7%
- Purchase data from vendors: 1%
- Contractor collects data: 9%
- Other: 3%
- Not Sure/I Don't Know: 24%

Why is the data collected?
- To meet federal mandates: 33%
- To meet state requirements: 39%
- Support AHTD mandate, mission, or measures: 16%
- To address our own business needs: 3%
- Not sure: 0%
- Other: 9%

Confidence in data quality
- Somewhat Confident: 39%
- Extremely Confident: 33%
- Neutral: 16%
- Somewhat Unreliable: 3%
- Extremely Unreliable: 0%
- Not Sure/I Don't Know: 9%

Data documentation
- Yes: 72%
- Not Sure: 21%
- No: 7%

Data Storage and Access
- On a server: 45%
- On individual computers: 8%
- Hard copies: 4%
- In a specialized software: 5%
- Legacy mainframe data systems: 2%
- Outside agency: 2%
- Other: 5%
- Not Sure: 29%
ASSESS CURRENT STATE - SURVEY SAYS!

What Was Asked?

Data Sharing
- General Public: 16%
- Do not share: 3%
- Other Division/Districts: 40%
- Not Sure/I Don't Know: 32%
- External Organizations: 9%

Challenges in analyzing data
- Lack of geographical information: 24%
- Differing segment/location identification: 14%
- Different data formats: 11%
- Different data update cycles: 10%
- Other: 29%
- Not Sure/I Don't Know: 12%

Needs
- Staffing: 15%
- Funding: 10%
- Guidance: 14%
- Training: 20%
- Software/Tools: 18%
- Data dictionaries: 10%
- Other: 3%
- Not Sure/I Don't Know: 10%

Structure for managing data
- 27% No
- 14% Not Applicable
- 43% Not Sure
- 16% Yes

Data governance
- No: 34%
- Not Applicable: 16%
- Not Sure: 28%
- Yes: 22%
ASSESS CURRENT STATE - SURVEY SAYS!

A picture is worth...
ASSESS CURRENT STATE - SURVEY SAYS!

An Anonymous Survey Gets Some Honest Responses

- Access or permission to use data can be an issue
- Can't easily get usable financial data. Don't know what work is being done or planned for bridges.
- 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.
- Where is the data? What's the password? What format do you connect to?
- I use a lot of the databases around the Department. Many are hard to access and even harder to find.
I just wish the Cardinals were playing better baseball this year.
ASSESS CURRENT STATE
ARE WE MATURE?

**Safety Data Collection & Technical Standards**
- Completeness
- Timeliness
- Accuracy
- Uniformity / Consistency

**Safety Data Analysis Tools and Uses**
- Network Screening (Data)
- Network Screening (Method)
- Network Screening (Coverage)
- Diagnosis
- Countermeasure Selection
- Evaluation
- Accessibility

**Safety Data Management & Governance**
- People
- Policies
- Technology

**Safety Data Interoperability & Expandability**
- Interoperability
- Expandability
- Integration

**KEY**
- Current
- No Gap
- Small Gap
- Large Gap
ASSESS CURRENT STATE
ARE WE MATURE?

Data Management Maturity Model

Unaware
- No activities or improvements in technology, business processes, collaboration, culture, or organization
- Ad hoc activities and relationships
- Efforts are champion-driven

Initial
- Developing processes for data management and governance
- Limited accountability
- Training staff

Managed
- Processes Documented
- Performance is measured
- Organization and partners are aligned
- Program is budgeted

Integrated
- Improvements are Performance-based
- There is a formal Data Governance Program
- There are formal partnerships

Optimized
NOW WHAT?

Arkansas Safety & Mobility Data Business Plan

Final deliverables – October 2018
NOW WHAT? – TO DO LIST

- Adopt data management practices
- Conduct annual assessment of capability maturity
- Develop governance – documentation, charter, playbook, etc
- Data dictionaries/catalogs
- Develop and follow standards
- Advertise data – what, where, when

Sounds good...but who’s going to do it?
DON’T FORGET THE BIGGEST NEED
Big journeys begin with small steps

QUESTIONS?