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?
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!

APRIL 2017

Arkansas Data Business Plan
Data Survey

233 Completed Responses Received
ASSESS CURRENT STATE - SURVEY SAYS!

What Was Asked?

Role with data/databases

Confidence in data quality

Who collects the data?

Why is the data collected?

Data documentation

Data Storage and Access
ASSESS CURRENT STATE - SURVEY SAYS!

What Was Asked?

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

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

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
- No: 27%
- Not Applicable: 14%
- Not Sure: 43%
- Yes: 16%

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

An Anonymous Survey Gets Some Honest Responses

- 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 Level
- Desired Level
- 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
- 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? – 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?
WHO? – PROPOSED MODEL

Enterprise Data Governance Committee

- Deputy Director & Chief Operating Officer
- System Inf. & Research
- Trans. Planning & Policy
- Maintenance
- Fiscal Services
- Computer Service
- Enterprise-wide GIS
- Program Management
- Surveys
- Bridge
- Right of Way
- Construction
- Materials

Key Division Heads

Issues & Recommendations

Data Governance Liaison

Policies, Procedures & Guidance

Technical Working Group - Safety
- Business Owners

Technical Working Group – Infrastructure Condition & Asset Maintenance
- Business Owners

Technical Working Group – Reliability and Air Quality
- Business Owners

Technical Working Group – Enterprise-wide GIS
- Business Owners

Technical Working Group – Others TBD
- Business Owners
Big journeys begin with small steps

QUESTIONS?