Guidehouse

Arkansas Highway Commission Review and Advisory Subcommittee Meeting

Recommendations Report Presentation:
Summary of Recommendations and Findings

October 5, 2020

Organizational Structure - Current State Findings

Key Finding(s)	Supporting Evidence

Recommendation 1: Finalize KPIs

OS2.1: Current Key Performance Indicators (KPIs) are limited to system condition. Operational effectiveness is not yet being measured

- Of ArDOT's *41 Performance indicators, 17 emphasize on system condition; ~18* are focused on operational effectiveness with *~12 under development*
- *Strategic goals* and objectives *lack performance targets*
- *District and Division KPIs do not exist*
- There is *no operational plan to implement the Strategic Plan*

Recommendation 2: Strengthen Knowledge Management

OS3.1: SOPs are extensive, but not regularly updated

OS3.2: Minimizing knowledge loss is a strategic priority for ArDOT, but efforts are not mature

- ArDOT has *50+ SOP documents*
- There are *no standard protocols for developing and maintaining SOPs*. Instead, each division and district has their own internal protocol
- ArDOT has identified *knowledge transfer a High Priority Risk in it's TAMP*
- HR has developed a matrix to *identify key positions at risk for knowledge loss*, but the *next steps have not been finalized*

Guidehouse

| The recommendations and findings included in the presentation are a point in time representation and are subject to change. Also, Anticipated Impacts are estimates, directional in nature. Please see the assumptions slide in the appendix for further details.

GLOSSARY

KPI: Key Performance Indicators   SOP: Standard Operating Procedures

TAMP: Transportation Asset Management Plan

Portfolio Planning - Current State Findings

	Key Finding(s)	Supporting Evidence
Recommendation 3: Publish Construction and Maintenance Status	**PP1.2:** ArDOT's public communication related to project status, schedule, and budget is disjointed and inconsistent **PP2.3:** There is no formal structure to coordinate maintenance workplans to the general public or interested stakeholders	• ***The Department implemented changes to construction project prioritization, budget, and timing*** through ~56 amendments (from 12/2016) and ~11,150 change orders (from 2014) • ***ArDOT's public communications meet regulatory requirements,*** however, it is ***not clear*** that the Department has assessed ***whether they meet the needs of its stakeholders, constituents, and the general public***
Recommendation 4: Manage all Customer Inquiries to resolution	**PP3:** Although ArDOT is responsive to public inquiries, it only offers a limited number of tools to capture and track them	• iDRIVE Arkansas, and the Connecting Arkansas Program (CAP), ***provide mechanisms to capture customer inquiries*** • There is ***no comprehensive Department wide protocol or tool to capture customer inquiries and problems***, manage these inquiries, track a resolution, or measure impact to in-progress or planned work

Guidehouse

GLOSSARY

CAP: Connecting Arkansas Program

| The recommendations and findings included in the presentation are a point in time representation and are subject to change. Also, Anticipated Impacts are estimates, directional in nature. Please see the assumptions slide in the appendix for further details.

Procurement - Current State Findings

Key Finding(s)	Supporting Evidence
Recommendation 5: Implement efficiencies in procurement and purchasing	**PR1.2:** Low bid procurement is viewed by staff as a cultural and financial necessity **PR4.1:** ArDOT takes advantage of legislation that allows consideration of qualifications in some procurement **PR4.2:** Alternative contract methods have allowed ArDOT to influence contractor behavior **PR5.1:** ArDOT is not using data to understand procurement trends and identify efficient practices **PR5.2:** E&P has minimal authority to facilitate implementation of efficient procurement practices	• From 2014 – 2019, ArDOT levied ~*$20M in Disincentives/Item Deductions; ~$44M in Incentives* • ArDOT does not have formal protocols to **standardize decision-making** around use of specific strategies • ArDOT spends on average ~$24.4M and ~$12.7M in Small Order and Competitive Bid purchases per year • ArDOT does not have ***formalized policies to identify purchasing trends*** and establish term/supply contracts ***to yield savings***
Recommendation 6: Implement construction contractor performance measurement	**PR2.1:** Pre-qualification and bonding approximate likelihood of project completion, but do not screen for quality **PR2.2:** ArDOT's Standard Specifications (2014) mandate certain performance criteria, but do not screen for quality **PR3:** Opportunities exist to improve existing quality issues	• Performance bonds provide "***no guarantee against a contractor's marginal quality of work***, so long as the contractor's failures are not large enough to trigger a default," according to FHWA. • Current policies ***do not limit*** the ability of ***poor-quality contractors to compete for bids*** • ArDOT's 2019 TAMP identifies ***poor quality construction work as a "very high impact" risk factor*** for asset management • ***ArDOT does not formally monitor contractor quality***

Guidehouse

GLOSSARY

E&P: Equipment and Procurement Division   FHWA: Federal Highway Administration   TAMP: Transportation Asset Management Plan

| The recommendations and findings included in the presentation are a point in time representation and are subject to change. Also, Anticipated Impacts are estimates, directional in nature. Please see the assumptions slide in the appendix for further details.

Expenditures - Current State Findings

Key Finding(s)	Supporting Evidence
Recommendation 7: Implement project and portfolio planning frameworks	**EX1:** Project development, construction, and maintenance functions present unique resource management challenges **EX4:** The construction project development process may be enhanced through formalized project management tools **EX5.1:** Existing project management tools may have broader applications for construction staff **EX5.2:** Change orders are not formally reviewed **EX 6:** Scheduling and evaluation of maintenance activities may be improved through the use of project management tools	• *The Department budgets ~$40M* for Planning, Design, and Construction monitoring Activities, yet, *Mechanisms* to *match STIP projects* with these *budgets and resources are "homegrown" or non-existent* • *Target costs* associated with executing pre-construction, construction monitoring or maintenance activities *do no exist*
Recommendation 8: Implement leading practices in construction project design	**EX2.1:** Formal protocols around the use of practical design are lacking **EX2.2:** ArDOT has not taken advantage of the full benefits of Value Engineering **EX3.1:** Engineer's estimates are not formally evaluated to identify future design cost efficiencies	• *Absent formal documentation* around its iteration of practical design, ArDOT is *unable to implement leading practices*, *show cost savings*, and sustain critical knowledge management • ArDOT completes *2.2. VE studies per year and realized a total savings of $377k since FY2015,* which puts *ArDOT below the national average* • The cost of Change Orders directly tied to "Plan Omissions/Errors" has averaged $3.1M from CY2014 to CY2019

Guidehouse

GLOSSARY

STIP: Statewide Transportation Improvement Plan   VE: Value Engineering

IT - Current State Findings

Key Finding(s)	Supporting Evidence
Recommendation 9: Build an IT Governance Structure to guide ArDOT's IT investments	**IT2.1:** ArDOT has not developed a Governance Structure to ensure IT investments support objectives, manage enterprise risk, and meet external stakeholder needs **IT2.2:** There is no overarching enterprise architecture or blueprint to standardize, organize, and align IT infrastructure and solutions with business goals	• ArDOT continues to *increase its IT investment* as the IT Budget has *increased* dramatically *from ~$9.2M in FY16 to ~$23.5M in FY20* with Operating Expenses and Equipment costs being the biggest Drivers. • A review by a 3rd party consultant, *Info-Tech*, revealed that there is an *"Unclear decision making process"* and "no IT Governance" for these expenditures • Enterprise Architecture *is siloed organizationally* with this *responsibility residing with each of the divisions and districts* that primarily "own" their respective IT platforms and solutions
Recommendation 10: Implement mid-term IT initiatives that can optimize business operations	**IT1.1:** ArDOT appears to be approaching data center modernization phases, but without a formal integration plan **IT1.2:** ArDOT has preliminarily identified software needs, but efforts to align IT purchases across the Department has not been universally implemented	• ArDOT has prioritized the *Mainframe upgrade, Oracle implementation, several storage and server infrastructure upgrades* • ArDOT deploys *~263 applications,* has *300+ databases (DBs),* and an unknown amount of data stored locally on staff computers • Internal strategic planning documents reveal a *lack of alignment between IT solutions purchases*, as well as *poor data quality* and difficult data access • *10 instances in FY19 of significant IT spend without prior IT involvement*

Guidehouse

GLOSSARY

DB: Databases

| The recommendations and findings included in the presentation are a point in time representation and are subject to change. Also, Anticipated Impacts are estimates, directional in nature. Please see the assumptions slide in the appendix for further details.

IT - Current State Findings (Cont'd)

Key Finding(s)	Supporting Evidence
Recommendation 11: Develop necessary pillars to establish IT as an effective business partner	**IT2.3:** ArDOT lacks a service catalog and defined service level expectations, yielding confusion on what IT will deliver, when, and how support is distributed **IT2.4:** ArDOT's efforts to establish a project management infrastructure to ensure effective delivery of IT projects is still in its infancy	• Internal strategic planning documents reveal a *lack of clarity around core IT service offerings* • It does not appear that the IT division has established service level agreements (SLA), *nor tracks performance against these SLAs* • ArDOT has recently restructured its IT Department to *include a Project Management Office (PMO)* • ArDOT *has not adopted* any formal Project Management *(PM) standards or protocols* to help drive IT Project delivery

Guidehouse

GLOSSARY

SLA: Service Level Agreement   PMO: Project Management Office   PM: Project Management

People Capabilities - Current State Findings

Key Finding(s)	Supporting Evidence

Recommendation 12: Ensure Career Development

PC1.1: Recruitment and retention are challenges

PC2.1: Dissatisfaction with compensation

PC2.2: Strong Competition for talent

PC3.2: Flexible work strategies exploration

PC4.1: Career paths not defined nor communicated

PC4.2: Performance evaluations not understood or trusted

- *Turnover rate has increased* from *~6% (2016) to ~9% (2019),* with average tenure of Central Office staff *dropping from 6 to 2.5 years* (FY15 – FY19)
- *54%* of staff *definitively agree* that *"Employee retention is important at the Department"*
- Although *career paths are known informally, staff lack clarity* on precisely how their *career can develop*
- *53% of staff definitively believe that they can advance* their careers at ArDOT

Recommendation 13: Improve Staff Capabilities

PC3.1: Staff have positive relationships with managers

PC5.1: Training is offered, but lack formal learning pathways

PC5.2: On-the-job training is preferred, but difficult to institutionalize

- *74%* of staff *definitively trust their manager*
- A *~10% gap* exists in *measures of favorability* between *division/district and executive leadership*
- *58% of staff* definitively agree that they have *received an adequate amount of training* and only slightly more found the training useful
- There are *no formal learning pathways* that align training with job competencies, performance evaluations, or career ladders.