

Arkansas Highway Commission Review and Advisory Subcommittee Meeting

Guidehouse Update

February 19th, 2020

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Project Scope

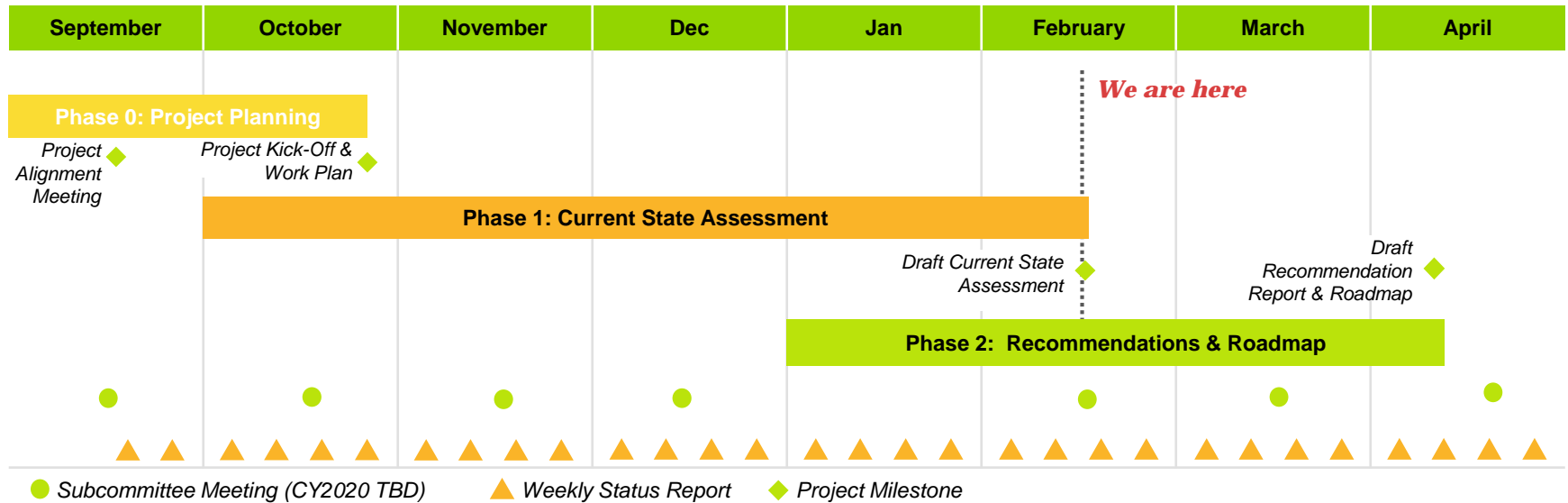
Key Objectives

- Provide an objective analysis of ArDOT's processes and procedures with a specific focus on procurement, projects, expenditures, and appeals processes
- Identify leading practices that will help ArDOT optimize its operations
- Identify operational and regulatory recommendations

Deliverables	Description of Deliverable
Project Work Plan	<ul style="list-style-type: none">• Document outlining tasks, durations, responsibilities, dependencies, and milestones
Current State Assessment & Initial Opportunities	<ul style="list-style-type: none">• Analysis synthesizing current state findings, emphasizing gaps in the current state; developing documentation to substantiate key findings; and highlighting potential areas of opportunity for the recommendation report
Future State Recommendations and Roadmap as well as Ongoing Support	<ul style="list-style-type: none">• Recommendations: Report identifying recommendations and related leading practices across our key focus areas and highlighting potential legislative updates• Roadmap: High-level plan that details how to execute the recommendations, including metrics to track progress and efficacy of recommendations• Ongoing Support: Assist with draft legislation and testimony, as needed

Project and Briefing Timeline

Project Timeline



February 2020

Provide background information on ArDOT organizational structure and operational platform to lay the groundwork for discussing Current State Findings

March 2020

Share findings from Draft Current State Assessment along with initial leading practice analysis

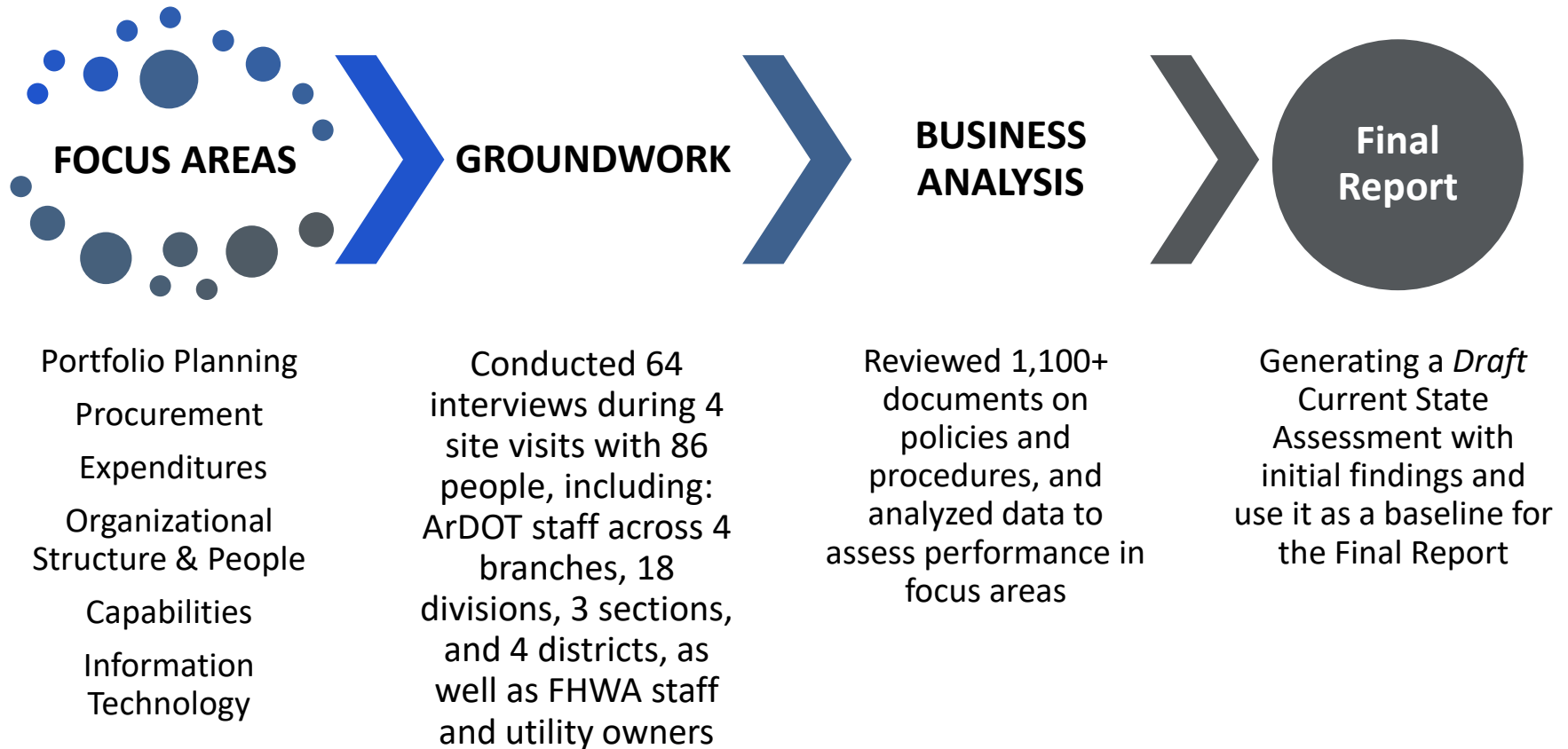
April 2020

Discuss Future State Recommendations and high-level implementation Roadmap

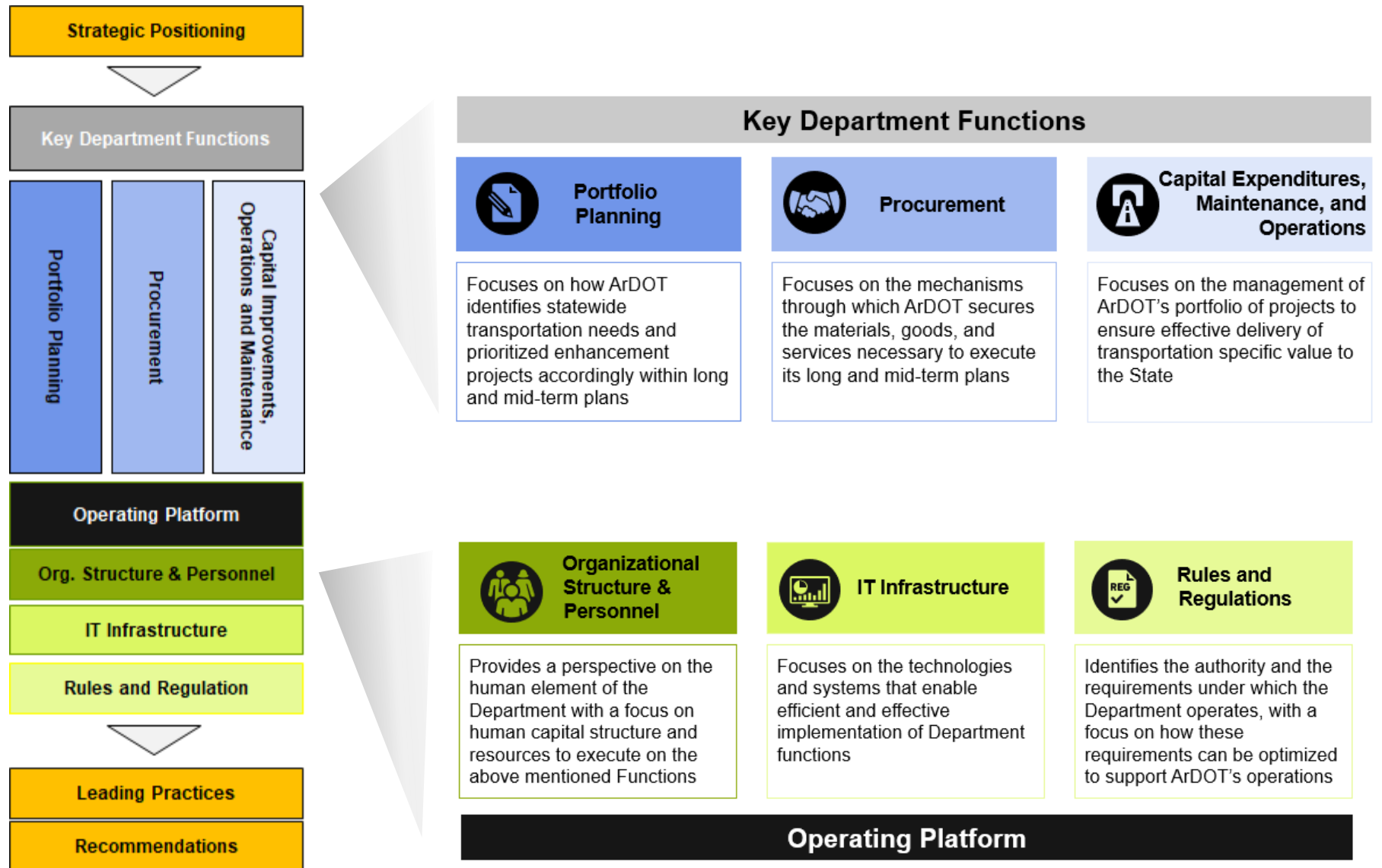


Project Update: Approach

Project Approach



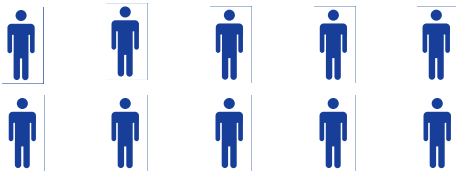
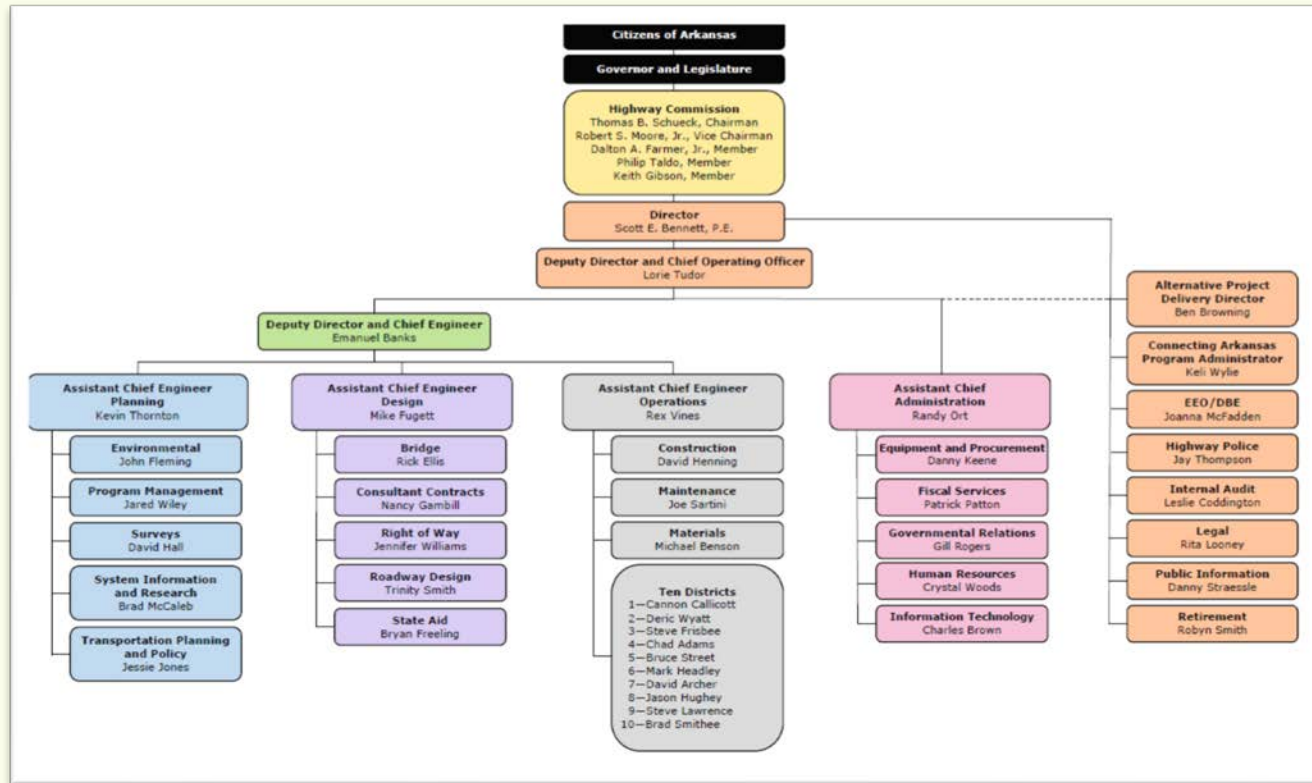
Project Framework





Project Update: Laying the Groundwork

Organizational Structure and Personnel



~3,724 FTE



~\$425.4M
FY20 Budget

\$340.9M Operating
\$84.5M Federal Match



26 Divisions and
Independent Sections



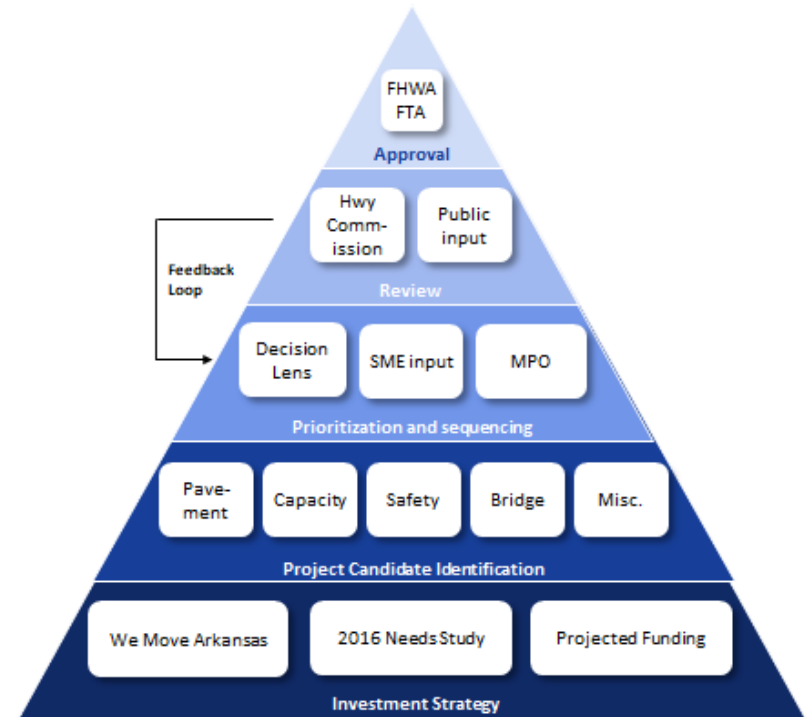
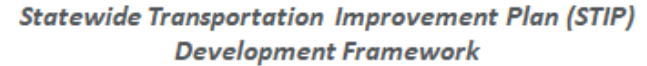
10 District Offices
33 Resident Engineer
Offices
86 Area Offices

Construction Planning and Maintenance Planning

Construction Planning

Construction Planning — Key Observations

- ArDOT has adopted a system preservation approach to the State's transportation investments
- ArDOT allocates 80% of Statewide Transportation Improvement Program (STIP) funding to System preservation and 20% to Capital Improvements
- STIP identifies projects that are regionally significant or utilize federal funding
- Current STIP spans 2019 – 2022 and identifies ~724 projects and represents ~\$2.77B in investments
- Local and statewide generic projects represent an additional \$1.12B in investments
- Currently there are ~135 active projects representing ~\$2.14B in value



Maintenance Planning

Historical Budget

Annual Work Program Computation

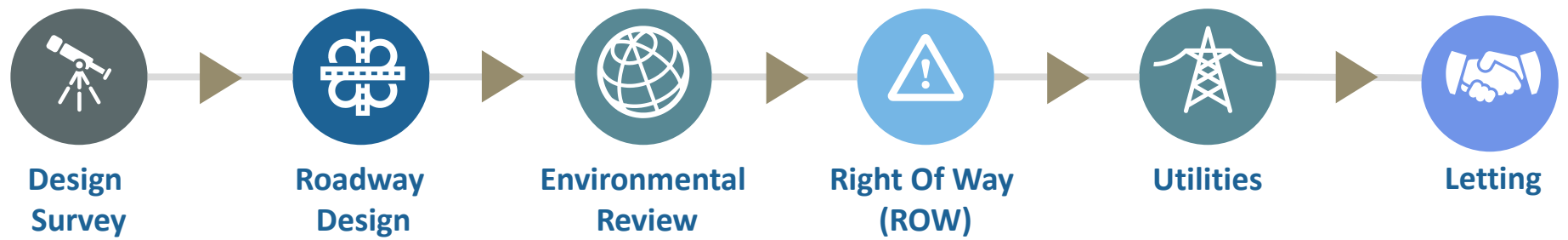
Activity Schedule

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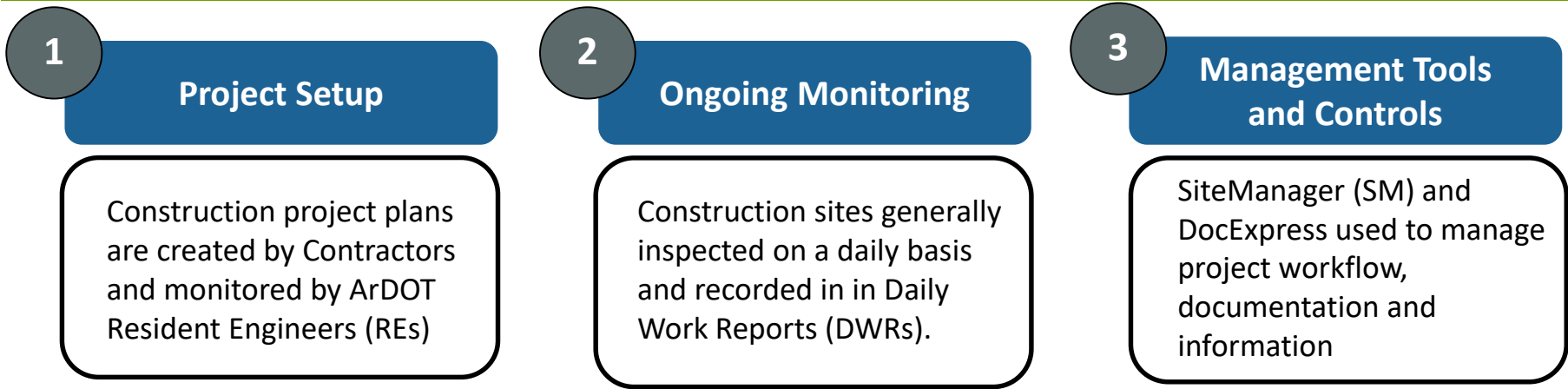
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Construction Management and Maintenance Operations


Pre-Construction Execution




Construction Monitoring




Maintenance



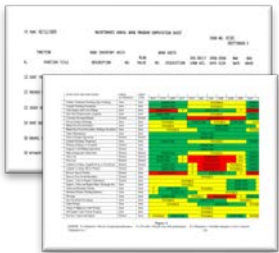
~\$222M
FY20 Budget



~2,300
FTE



Maintain ~ 17,000 miles
1 Maintenance Division
10 District Offices
86 Area Offices



Manage to budget and historical activity schedule

Procurement

Services Procured	Responsible Division	Governing Laws and Policies	Expenditures
Construction Projects	Program Management (Planning)	<ul style="list-style-type: none"> Governing Laws – Federal and State Transportation Laws Procurement Policy - Lowest responsive (prequalified) Bidder with Bid aligned to 2014 Specifications Book Policy reviewed and approved by Federal Highway Administration 	<ul style="list-style-type: none"> From 2015 – 2018, ArDOT accepted ~970 projects representing ~\$2.81B in Expenditures
Pre-Construction Engineering Services	Consultant Contracts (Design)	<ul style="list-style-type: none"> Governing Law - Federal and State Transportation Law Procurement policies – Qualifications based competitive procurement Policy audited by Federal Highway Administration (last review – 2016) Requested by individual divisions 	<ul style="list-style-type: none"> From 2015 – 2019, ArDOT spent ~\$100M on Professional Engineering Services From 2015 – 2019, ArDOT spent ~\$44M on Operations Support
Equipment, Supplies, Goods	Equipment and Procurement (Administration)	<ul style="list-style-type: none"> Governing Law – State Transportation Law Procurement policy - Aligns to Arkansas State Procurement Law Primarily driven by Districts and Divisions 	<ul style="list-style-type: none"> From 2015 – 2019, ArDOT spent ~\$122M on Small Order Purchases (under \$20K) From 2016 – 2019, ArDOT spent ~\$98M through competitive purchasing
Alternative Construction	Alternative Project Delivery	<ul style="list-style-type: none"> Governing Laws – Federal and State Transportation Laws Procurement policies – Design/Build and Construction Manager General Contractor use qualifications-based procurement methods Federal High Way Administration authorizes projects, approves procurement 	<ul style="list-style-type: none"> I-30 Crossing – Anticipated costs for Phase 1 are ~ \$600M



Project Update: Emerging Themes

Emerging Themes

Emerging Themes

1

Governance structure and cultural factors may limit department oversight and transparency

2

Lack of Enterprise approaches may inhibit department's effectiveness in portfolio planning and managing associated project expenditures

3

Beyond measures of system condition ArDOT lacks Key Performance Indicators to guide strategic planning and operational effectiveness initiatives

4

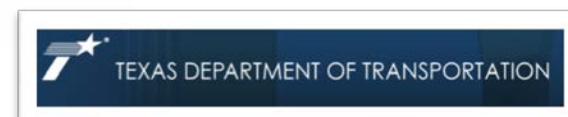
ArDOT's Human Capital and IT platforms are not sufficiently developed to meet current and future needs

Leading Practices Review

National



Regional



Next Steps

- 1** | Finalize current state findings and leading practice analysis, and identify preliminary recommendations
- 2** | ***March HCRAS Meeting*** - Share findings from Draft Current State Assessment along with initial leading practice analysis
- 3** | Finalize recommendations and high-level implementation roadmap
- 4** | ***April HCRAS Meeting*** - Discuss Future State Recommendations and high-level implementation roadmap
- 5** | May onwards – Provide ongoing support as needed

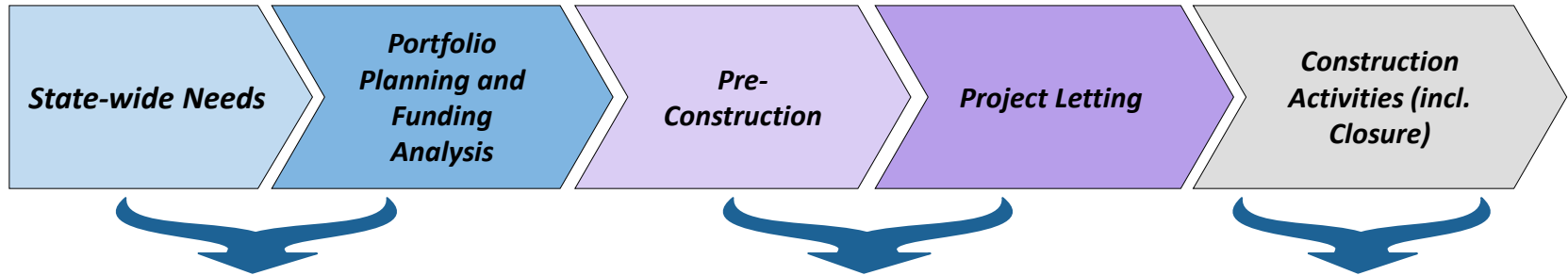
| Questions

| Appendix

Construction Project Lifecycle - Background

Portfolio Planning

Project Management



Purpose

- Collection of necessary information to inform Project candidate identification
- Selection and prioritization of Projects along with necessary funding allocations

- Creation of roadway and bridge construction plans
- Acquisition of necessary environmental approvals, ROW, and utility relocations
- Selection of contractors to complete the project

- Monitoring of roadway construction work to ensure projects are delivered on time, on budget, and with quality

Primary Divisions

Program Management

Systems Information and Research

Transportation Planning and Policy

Surveys

Environment

Roadway Design

Bridge

ROW

Project Management

Construction

Materials

District Office Resident Engineers

Construction Monitoring – Project Changes

Project Changes – Qualifying Reasons

Actual Pay quantity items and Field measured quantities differ from Bid amounts & Item Deductions

Incentives/Disincentives and payment adjustments accrued for timeliness of project completion and quality of work and materials

Significant changes to Project Design: Geometric or Structure Design, significant changes to Contract pay items; Environmental Impact; ROW; Traffic Control

Contractor has not satisfactorily completed the project by the contract end date – Liquidated Damages (LD) are assessed to cover ArDOT's monitoring costs

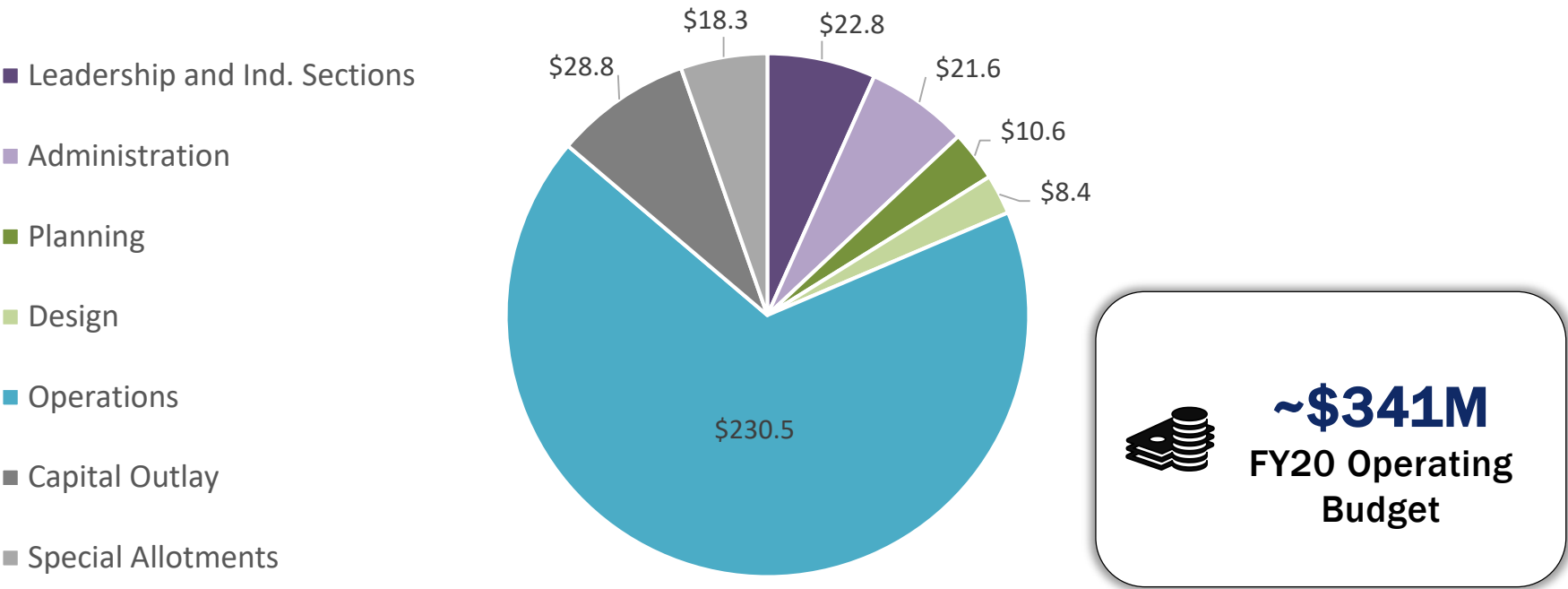
Project Changes – Approval and Documentation

Change	Approval/Documentation
Continuation of Work	Resident Engineer (RE) approval and Change Order (CO) not required
Change < \$20k and minimal impact to Project	Not an official CO, RE approval, Documentation Required
Change <\$75K or Significant impact to Project	Official CO, District Engineer approval, Documentation Required, FHWA concurrence
Change >\$75k	Official CO, Assistance Chief Engineer approval, Documentation Required, FHWA concurrence

ArDOT FY2020 Budget

Projected FY2020 Operating Budget*

FY2020 ArDOT Operating Budget (Millions)



Key Observations

- ArDOT also receives ~\$58.4M in support from Federal and other sources for its operating budget
- ArDOT is projecting that it will have ~\$84.5M available for Federal matching to support projects
- Combined with projected Act 1 Revenues (between ~\$28.6M and ~\$48M), and Act 416 Revenues (~\$70.3M), ArDOT projects that it will have between ~\$183.4M and ~\$204.8M State funds available for projects
- ArDOT anticipates that the FY2020 Federal aid available for STIP projects to be ~\$502M**
- Approximately \$222M of ArDOT's Operations budget is focused on Maintenance Activities

* FY2020 "Operating Budget" File data based on Operating Budget information provided by ArDOT and June 12, 2019 Highway Commission presentation

** Federal Obligation Limit sourced from ArDOT's FY2020 Federal Obligation Plan