Lorie H. Tudor, P.E.

Director

Highway Commission Review & Advisory Subcommittee

November 17, 2021

C.

Efficiency Study Recommendations

Implementation Rules

FOCUS AREA
Organizational Structure

1 | Finalize KPIs and implement performance management

- Establish the ARDOT Key Performance Indicators (KPIs) Oversight Committee.

- Hold internal meetings with key ARDOT staff members to finalize development of operational effectiveness KPIs and recommend performance targets for each one that will support and evaluate ARDOT's accomplishment of its Strategic Plan.

- Solicit stakeholder comments regarding operational KPIs and performance targets.

- Make final adjustments to the operational effectiveness KPIs and performance targets based on the comments received.

- Develop a dashboard to monitor and evaluate how ARDOT is meeting the performance measure for each KPI.

- Develop annual review to identify successes and address areas of needed improvement.

2 | Strengthen knowledge management in anticipation of increased retirement

- The ARDOT Human Resources Division has been assigned the responsibility to oversee the implementation and long-term management of ARDOT's Knowledge Management Program.

- Continue reviewing all ARDOT positions to identify which ones are at risk of knowledge loss and identify responsibilities and associated processes, workflows, and critical areas of expertise.

- Continue with knowledge interviews and further develop methods for knowledge capture of high-risk work responsibilities, processes, and workflows.

- Identify staff in each Division or District who will be responsible for management of the knowledge captured and transfer of the knowledge to appropriate parties.

- Develop annual review of ARDOT's KM Program to ensure alignment with current processes and workflows.

FOCUS AREA
Portfolio Planning

3 | Publish status of construction projects and maintenance activities

- Evaluate existing reporting platforms currently in use and document project information provided through them.

- Identify additional project information that could be provided through currently used reporting platforms for construction projects and maintenance projects.

- Hold internal meetings with key ARDOT staff members to select project information that will be provided and how this information should be presented.

- Solicit stakeholder comments regarding project information that will be provided and how this information should be presented.

- Finalize project information that will be provided and how this information should be presented.

4 | Implement a platform that tracks all stakeholder inquiries to resolution

- Establish the ARDOT Customer Service Oversight (ACSO) Committee.

- Hold internal meetings with key ARDOT staff members and evaluate existing resources to identify the quantity, scope, and type of customer inquiries.

- Conduct a targeted survey of ARDOT inquiries to assess and analyze customer's needs.

- Establish goals for customer experience.

- Solicit stakeholder comments regarding the establish goals for customer experience.

- Select a consultant to provide software which can be integrated into ARDOT's website that allows input, tracking, and documentation of response to customer inquiries.

- The consultant provided software will provide a reporting structure that summarizes information regarding customer inquiries to ARDOT administration and the public.

- Establish metrics and performance measurements to evaluate customer service goals progress.

FOCUS AREA
Procurement

5 | Implement efficiencies in procurement and purchasing

Procurement of Construction Projects / Procurement of Equipment and Materials

- Select focus areas to evaluate related to this portion of the recommendation.

- Identify needed data to be able to evaluate the current processes and procedures.

- Identify needed data that is not currently tracked, identify and implement methods of capturing it.

- Evaluate current processes and procedures and document the best practices.

- Identify new or improved processes and procedures.

6 | Implement construction contractor performance measurement

- Establish the Contractor Performance Evaluation Committee (CPEC)

- Solicit stakeholder comments regarding the implementation of this recommendation.

- Identify metrics that define quality and desired performance.

- Develop guidance for the type or size of projects where this evaluation will be used.

- Establish protocols that ensure subjectivity.

- Develop a form to be used by the ARDOT Resident Engineer to document performance evaluation.

- Establish a review process of the final evaluation with the prime contractor.

- Establish an appeal process for the prime contractor.

- Finalize the process.

FOCUS AREA
Expenditures

7 | Implement project and portfolio management frameworks

Construction and Maintenance Projects

- Evaluate the need for a Construction Project Management Office.

- Evaluate the need for a Maintenance Project Management Office.

- Review existing planning and construction project and maintenance management protocols and software.

- Identify best practices in other states.

- Select identified systems and processes.

- Provide needed training to implement the selected systems and processes.

8 | Implement best practices in construction project design

- Establish formal procedures for practical design, value engineering, and a comparison of engineer's estimates against final cost.

- Establish the analysis which will identify benefits, cost savings, and return of investment from the use of practical design, value engineering, and a comparison of engineer's estimates against final cost.

- Establish processes which will identify needed changes to design approach for projects most likely to have change orders, that exceed estimated completion dates, and are likely to benefit from practical design solutions.

FOCUS AREA
Information Technology

9 | Build an IT Governance Structure to guide the Department's IT investments

- Establish an Information Technical (IT) Governance Committee made up of ARDOT leadership including the appropriate Assistant Chiefs and Division Head that reports through the Deputy Director and Chief Operating Officer to the Director.

- Establish a framework and charter for the committee.

- Establish governance focus areas and priorities.

- Establish needed subcommittees to address each focus area.

- Establish a framework and charter for each subcommittee.

- Establish frequency for committee and subcommittee meetings.

- Identify KPIs to evaluate performance.

10 | Implement mid-term IT initiatives that can optimize business operations

- Determine preliminary ARDOT data governance and application development standards.

- Complete the existing application and database inventory including known policies, procedures, training and database schema categorized by business function.

- Establish application and database scoring system based on business function relevancy, risks, and cost of ownership.

- Review and validate scoring assessment with internal subject matter experts.

- Create an overall assessment for all applications and databases in the inventory, which will, in part, evaluate the security and configuration of each one.

- Establish a phased approach for implementation based on the needed actions as identified in the assessment as follows:

  o Phase 1 – Retain as is or eliminate
  o Phase 2 – Re-engineer
  o Phase 3 – Migrate

11 | Develop critical pillars necessary to establish IT as an effective business partner

- Evaluate industry standards and protocols for Information Technology Project Management (ITPM).

- Select a preliminary set of ITPM tools, templates, and success metrics.

- Establish and provide training to staff members to implement the ITPM tools, templates, and success metrics.

- Complete implementation of the Information Technology Service Management (ITSM) already selected and installed at ARDOT including:
  - Service desk capabilities;
  - Service catalog management;
  - Risk management;
  - Asset catalog;
  - Project Management capabilities including tracking and reporting.

- Establish a multi-year long range plan for management and use of the ITSM.

12 | Ensure staff can develop in their careers at the Department

13 | Improve staff capabilities to align with current/future organizational needs

- Continue to monitor turnover and identify high turnover positions that are important to ARDOT's continuity of operations for accomplishment of the Strategic Plan.

- Continue implementing the existing Workforce Strategic Plan, and adjust as needed, in order to mitigate the impact of turnover and increase employee engagement.

- Continue to establish how pooled positions can be used to properly align our employee's compensation with their competencies and responsibilities.

- Identify and publicize the steps required for advancement within career paths with respect to competencies, experience, training, and certifications.

12 | Ensure staff can develop in their careers at the Department

13 | Improve staff capabilities to align with current/future organizational needs

- Consider the benefit of a compensation study.

- Evaluate the ACE employee performance evaluation process to ensure that the accomplishment of training, attendance, completion of projects and assignments, and increased competencies are taken into consideration.

- Continue to identify and fill training gaps, and prioritize training where it will have the most impact.

- Encourage supervisors to utilize employee development plans, including training and other activities, as part of the performance evaluation process.

12 | Ensure staff can develop in their careers at the Department

13 | Improve staff capabilities to align with current/future organizational needs

- Continue providing manager training both in-house and by utilizing our existing external partners.

- Implement a Leadership Development Program to further develop existing leaders at all levels, as well as to prepare future leaders.

- Continue cross-training in high turnover areas and for high turnover positions.

- Complete implementation of the Maintenance Training Academy, which offers formalized practical training, including but not limited to equipment operation.

Act 739 - 2019

September 15, 2021 – November 17, 2021
HCRAS Review Complete

November 22, 2021 – January 3, 2022
Public Comment

  Rules Published on Website

  Notice of Availability

  - ✓ Display Ad in Newspapers
  - ✓ Social Media
  - ✓ Emailed
  - ✓ Mailed

January 4, 2022 – January 31, 2022
Comments Addressed

Rules

February 1, 2022 – Forward
Monthly Progress Report

IMPLEMENTATION OF THE
HIGHWAY COMMISSION REVIEW
AND ADVISORY SUBCOMMITTEE
RECOMMENDATIONS

September 16, 2021

ARKANSAS STATE
HIGHWAY COMMISSION
10324 Interstate 30
Little Rock, AR 72209
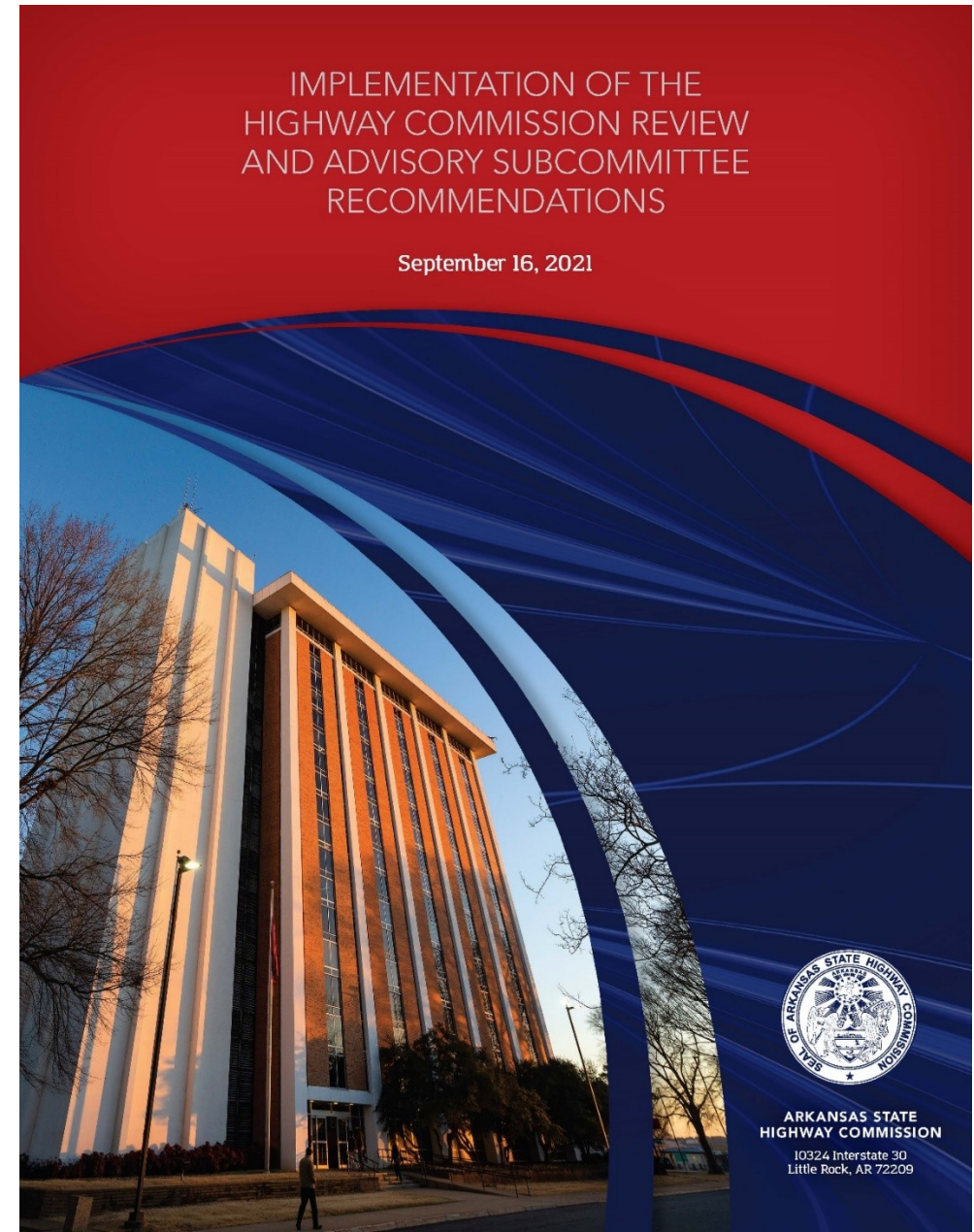
E.

Review of Annual Expenditure of Revenues – Act 416 Report

Act 416 - 2019

Motor Fuel Tax	$ 58 Million
Electric and Hybrid Vehicle Registration Fees	$ 2 Million
Casino Revenue	$ 35 Million
Total to A_RDOT	**$ 95 Million**

Dedicated to System Preservation

Annual Expenditure Report

SFY 2021 **ACT 416 REPORT**
TO THE GOVERNOR AND LEGISLATIVE COUNCIL
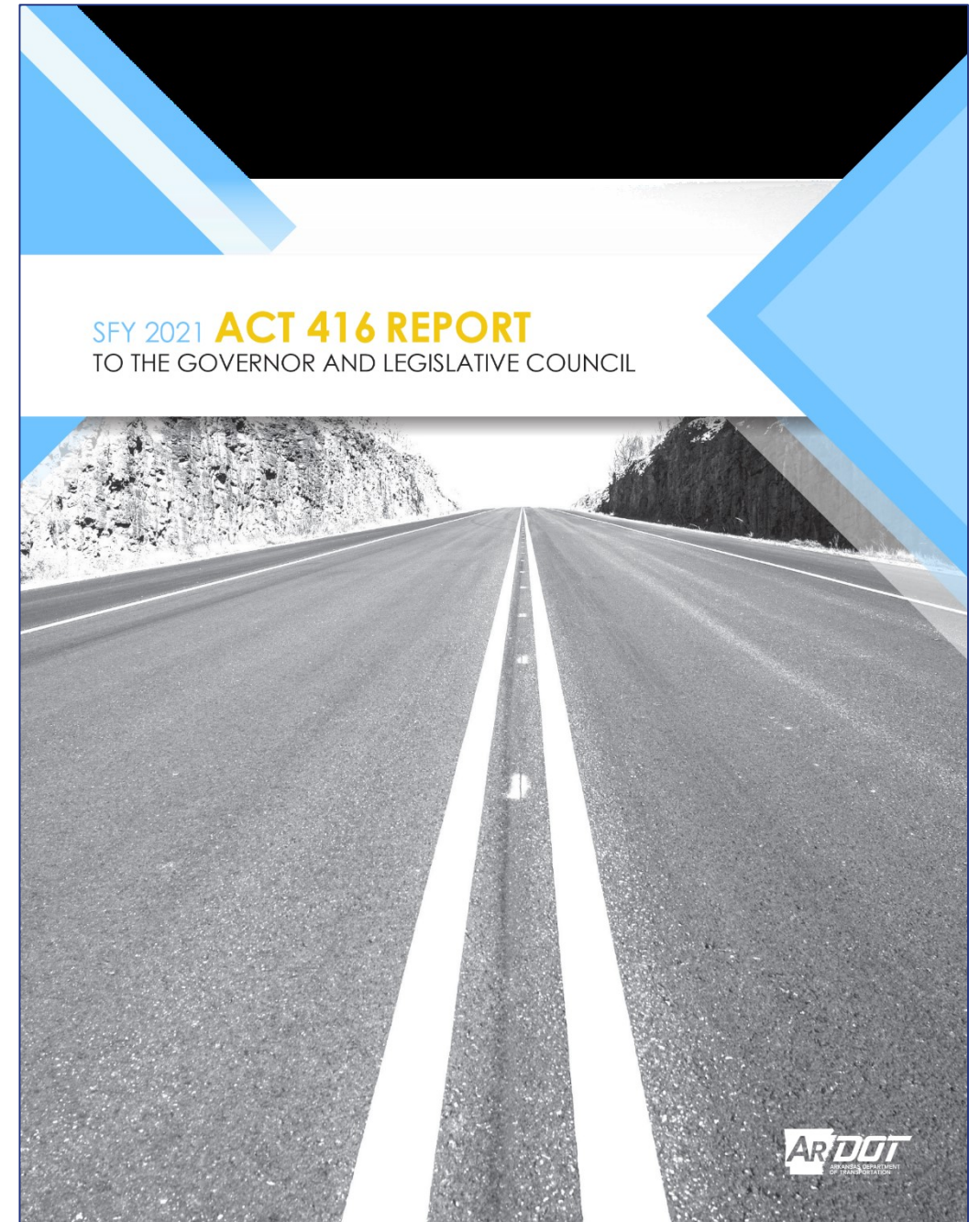
D.
Report on the Progress of Projects > $10 M

SFY 2022 1st QUARTER
REPORT TO THE

Highway Commission
Review & Advisory Subcommittee

B.
Interstate 40 Hernando Desoto Bridge After Action Report

I-40 HERNANDO DESOTO BRIDGE
EMERGENCY REPAIR AND INSPECTION

After Action Report

PREPARED FOR:

Arkansas' U.S. Congressional Delegation
Governor Asa Hutchinson
Arkansas State Legislature
Arkansas Highway Commission

PREPARED BY:

ArDOT
ARKANSAS DEPARTMENT
OF TRANSPORTATION

Introduction

May 11, 2021

Emergency Repair Team assembled within 24 hours

Reopened on August 2, 2021

Cost - $10 Million
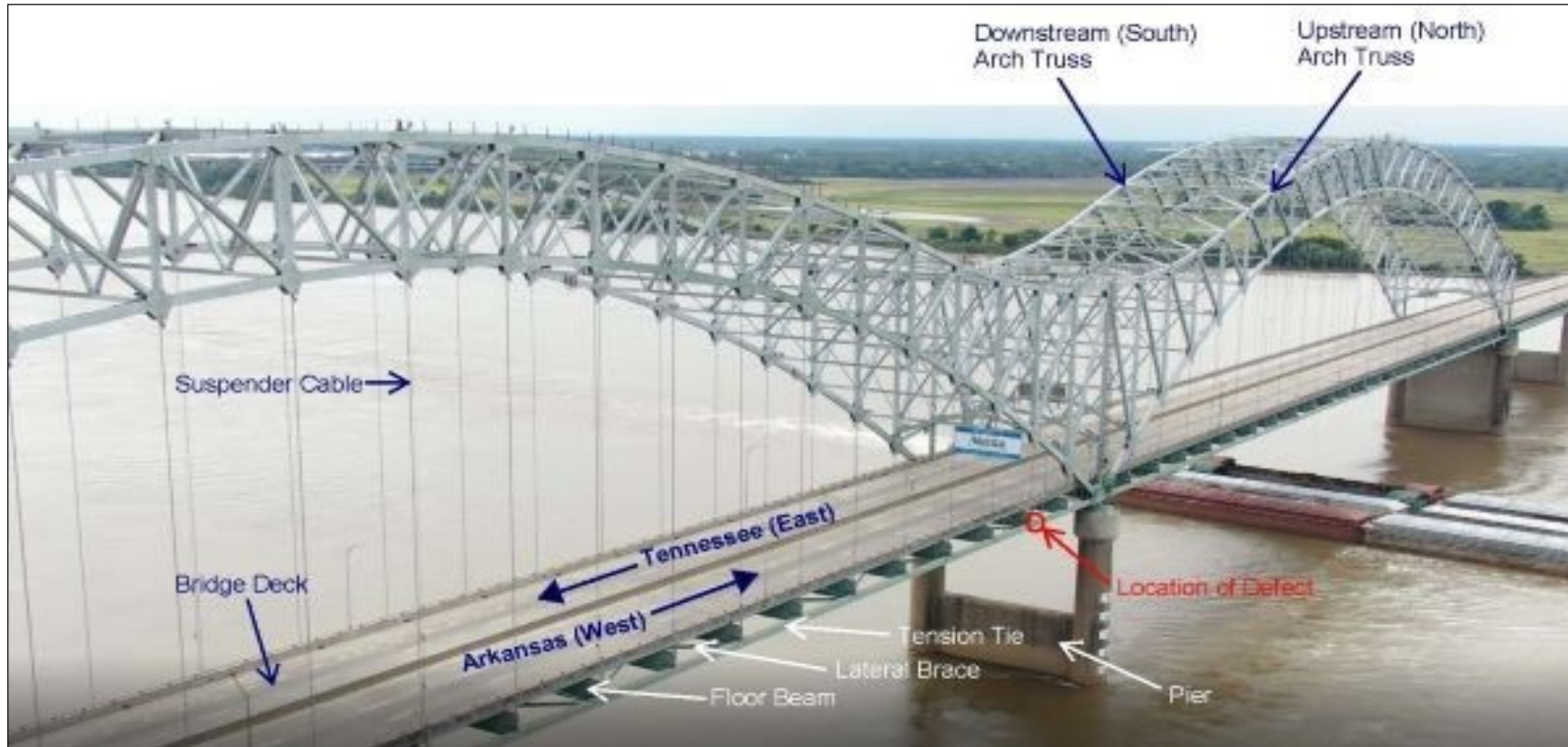
ARDOT Internal Investigation

- Crack Visible 2019

- Lead Inspector Terminated

- Crack Visible 2016

- Verified Equipment Capable

- Terminated Inspector Responsible 2016, 2017, 2019, 2020

- Management Failed to Address Concerns

- Inspector in 2018 – Verbally Counseled and Additional Training

- Program Lacked Adequate Internal Controls

2019

2021

Federal Highway Administration Bridge Inspection Program Assessment

BRIDGE INSPECTION PROGRAM ASSESSMENT

ARKANSAS DEPARTMENT OF TRANSPORTATION

FINAL REPORT

BY

FEDERAL HIGHWAY ADMINISTRATION

November 8, 2021

U.S. Department of Transportation
Federal Highway Administration

18 Recommendations

- ✓ Quality Control and Quality Assurance
- ✓ Inspection Procedures
- ✓ Load Rating Procedures
- ✓ Scour Appraisals
- ✓ Inspection Resources

18 Commendations

Fracture Investigation

I-40 Hernando deSoto Bridge
Fracture Investigation
Memphis, Tennessee

FINAL REPORT
October 7, 2021
WJE No. 2021.3178.1

PREPARED FOR:
Michael Baker International

PREPARED BY:
Wiss, Janney, Elstner Associates, Inc.
330 Pfingsten Road
Northbrook, Illinois 60062
847.272.7400 tel

- Wiss, Janney, Elstner Associates, Inc. (WJE)
- Removed Fractured Portion

Removal of Fractured
Pieces from the Tie Girder

Core Sample Removed

Figure 14. Removal of fractured pieces from tie.

Figure 15. View from inside tie showing core sample removed from groove weld.
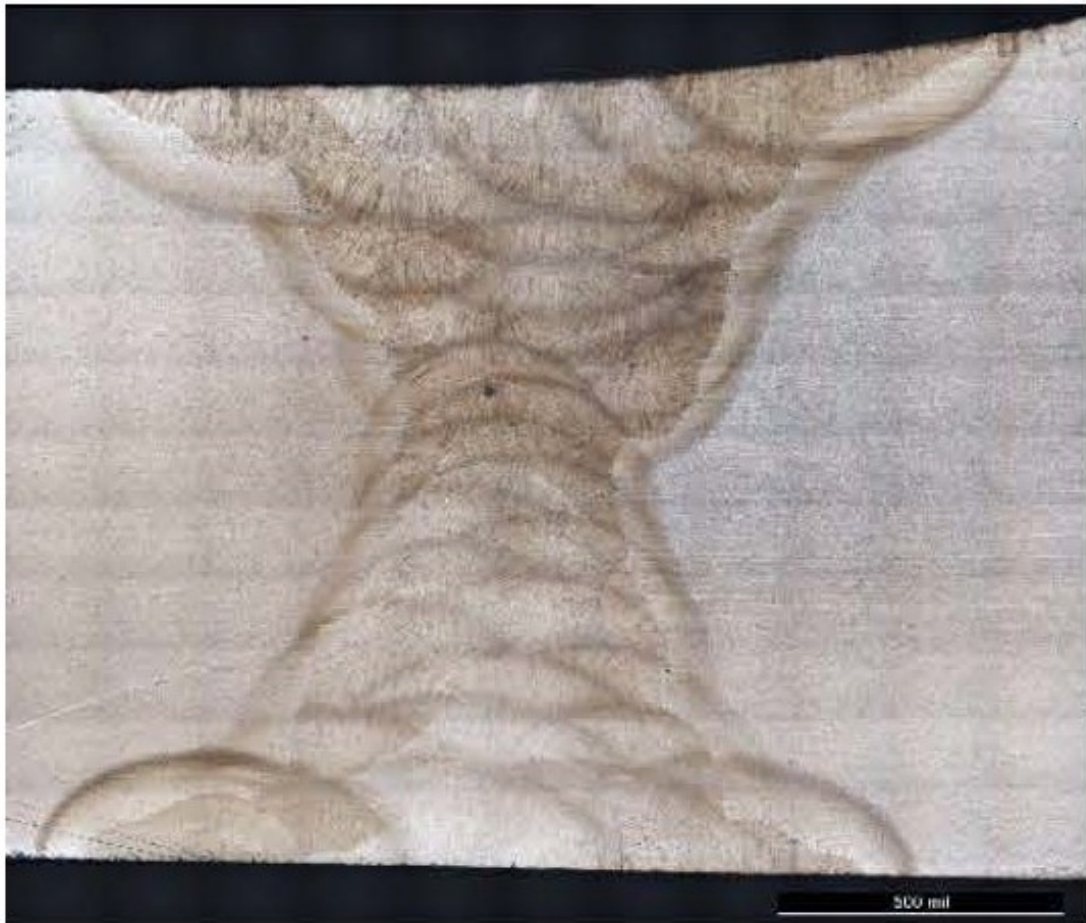
Good Weld

Defective Weld

Welds Repairs During Fabrication

Defect - Undetected
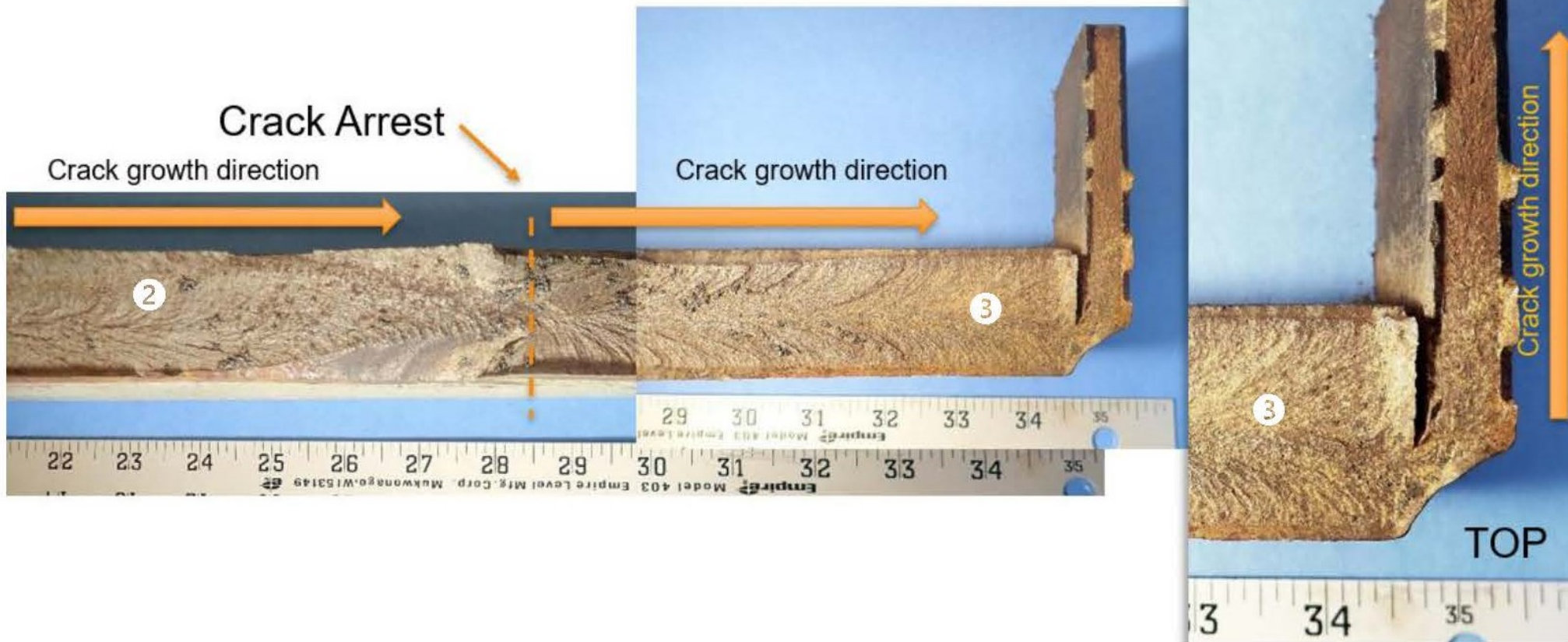
- Three Phases

- Cold Temperatures, Stress, Live Loads

- Reoccurrence Unlikely

- Ultrasonic Testing

Conclusion

- New Management

- Reorganize

- Create Oversight Committees

- Additional Personnel

- Professional Engineers

- <u>Shall</u> Rotate Inspectors

- FHWA Recommendations

- Consultants

- Ultrasonic Testing

www.ardot.gov