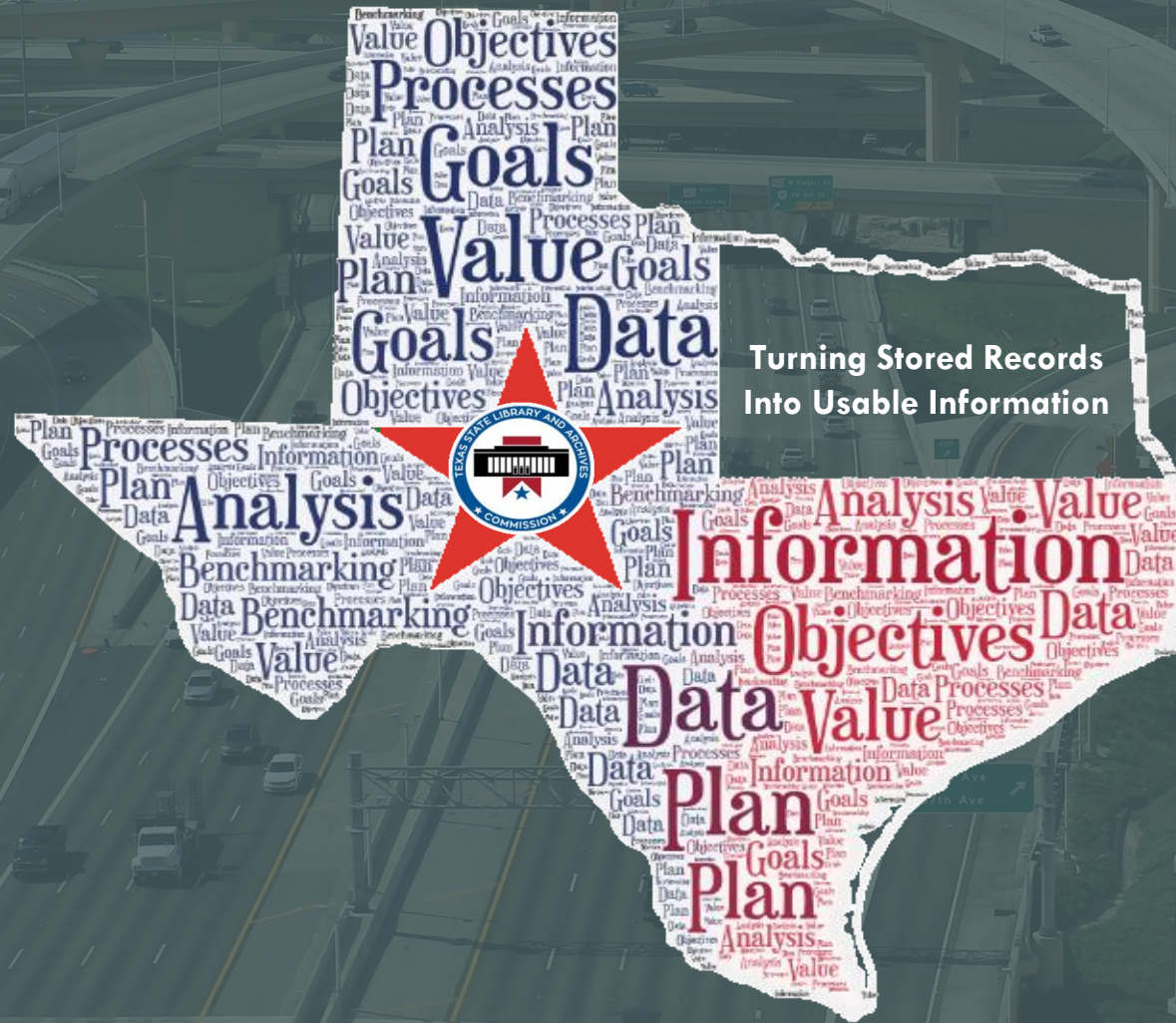


Unlocking the Potential of Government Records Data



Transform

PI

Change Mgmt

Why Measure

Data/Info

Takeaways



TEXAS STATE LIBRARY
AND
ARCHIVES COMMISSION



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Transform

PI

Change Mgmt

Why Measure

Data/Info

Key Takeaways



Data vs Information

Data is what you need to do ANALYTICS. Information is what you need to do BUSINESS.



Change Management

Change management is people focused.



Why Measure?

What gets measured, gets managed.



Process Improvement

Process Improvement is product focused.



Transforming Data Into Information

Louisiana Department of Environmental Quality and Louisiana Department of Transportation and Development Successful Transformations



Takeaways

Difference Between Data and Information



DATA

Data is raw, unorganized facts that need to be processed. Data can be something simple and seemingly useless until it is organized.

INFORMATION

When data is processed, organized and presented so that it is made useful, it is called information.

Data is an individual unit that does not carry any specific meaning.	Information is data that has been analyzed and presented in a meaningful manner.
Data doesn't depend on information.	Information provides context for data and enables decision making
Data can be qualitative or quantitative.	Information is accurate, complete, consistent, and timely

Transform

PI

Change Mgmt

Why Measure



Data/Info

Takeaways

Information Chaos

Transform

PI

Change Mgmt

Why Measure



Data/Info

Takeaways

Avoiding Information Chaos

Transform

PI

Change Mgmt

Why Measure

1

Keep it simple

2

Keep it relevant

3

Keep it clear

4

Provide balanced information

5

Provide timely information



Data/Info

Takeaways

The Importance of Measurable Data / Baseline Data

Transform

PI

Change Mgmt

Set realistic goals and measure progress towards them

2

Inform and motivate stakeholders to pay attention to certain issues

4

Shape expectations and communication strategies

6

1

Without baseline data it would be difficult to measure progress of a project and to assess the impact

3

Maintain accountability, informing what difference the project is making

5

Provide justification for policies

Why Measure

Data/Info

Takeaways

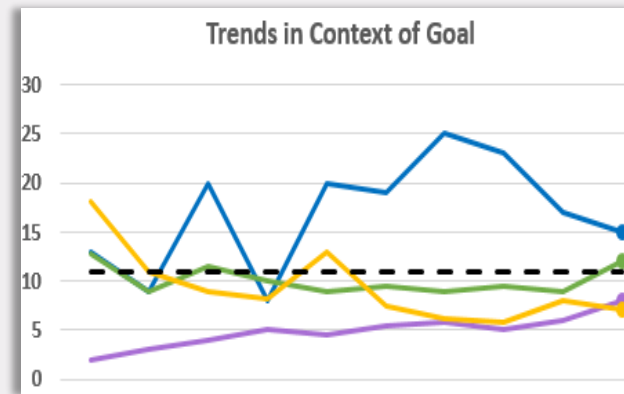
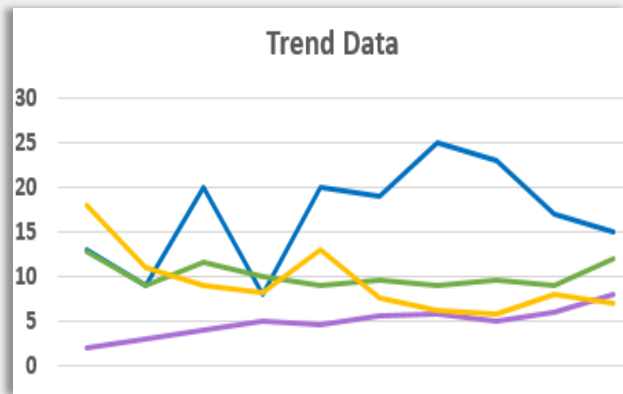
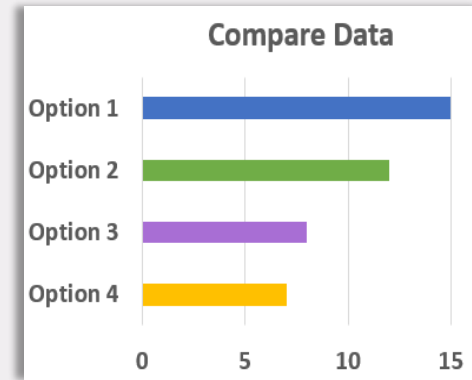
Visualization is Important

Transform

PI

Change Mgmt

Option	Value
Option 1	15
Option 2	12
Option 3	8
Option 4	7



Why Measure

Data/Info

Takeaways

Business Measures



Transform

PI

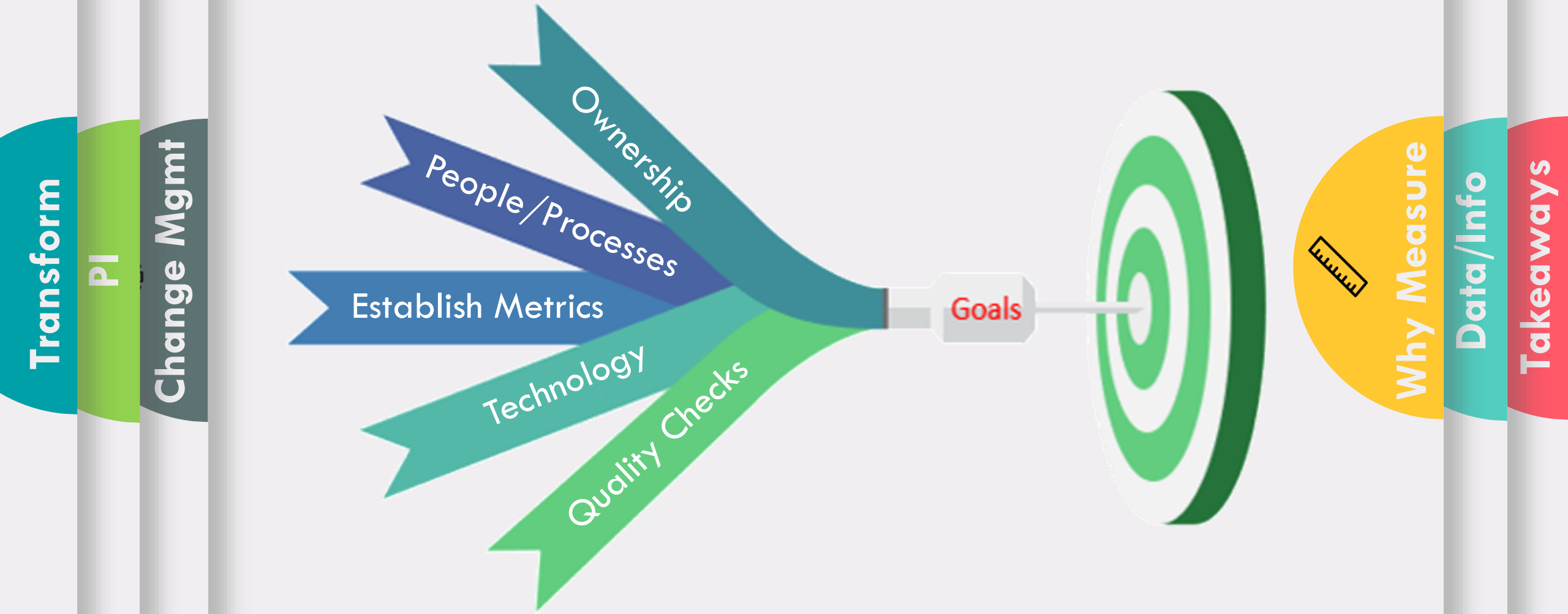
Change Mgmt

Why Measure

Data/Info

Takeaways

Data Governance is Key

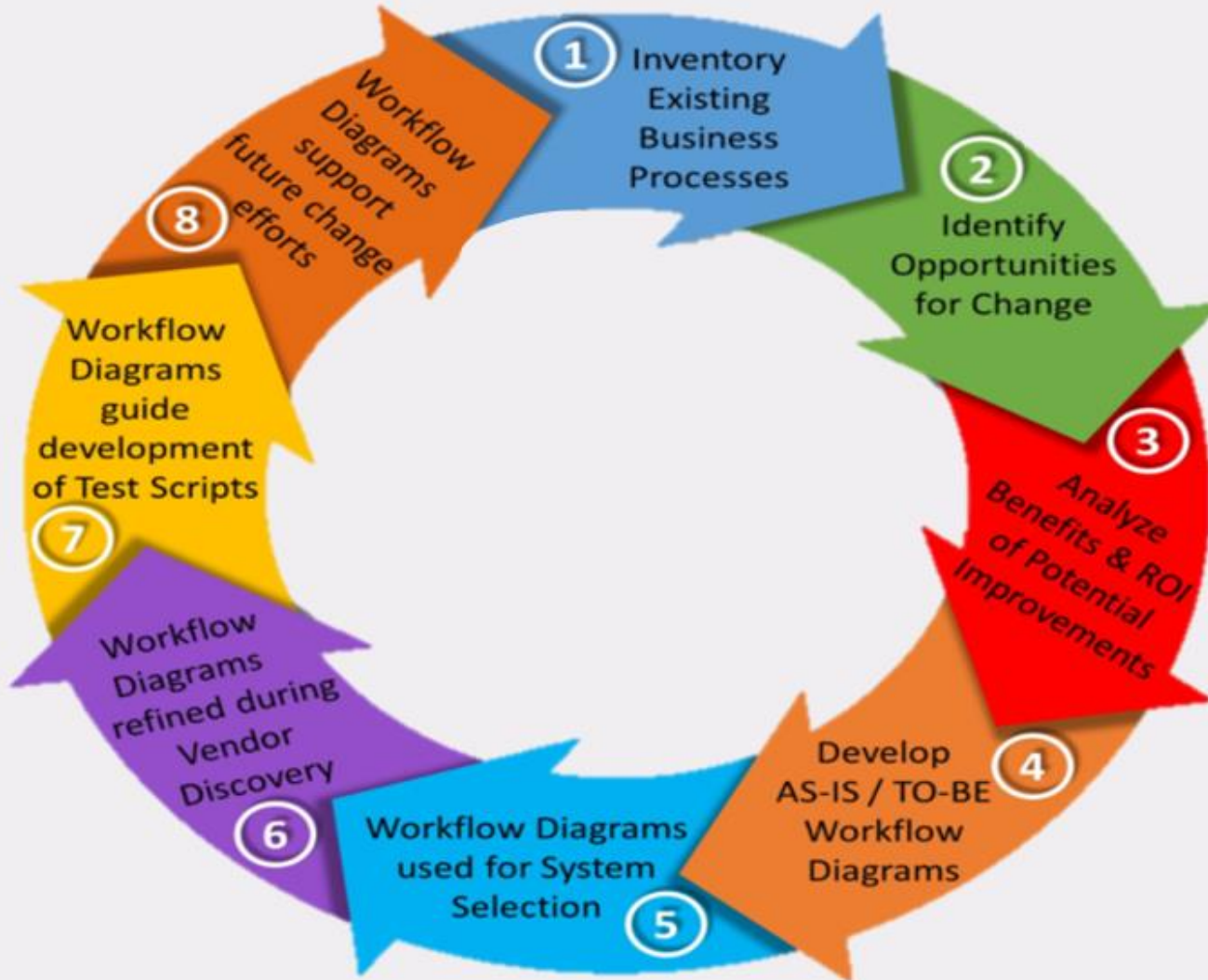


Change Management



The Prosci ADKAR Model

Process Improvement



Transform



PI

Change Mgmt

Why Measure

Data/Info

Takeaways

Transformation of Government Records Data



Electronic Document Management System



System of Engagement



Louisiana DEQ EDMS Application



Current State

- Outdated look and feel
- Steep learning curve
- Limited search capabilities
- Limited functionality
- Limited customization

Change Roadmap

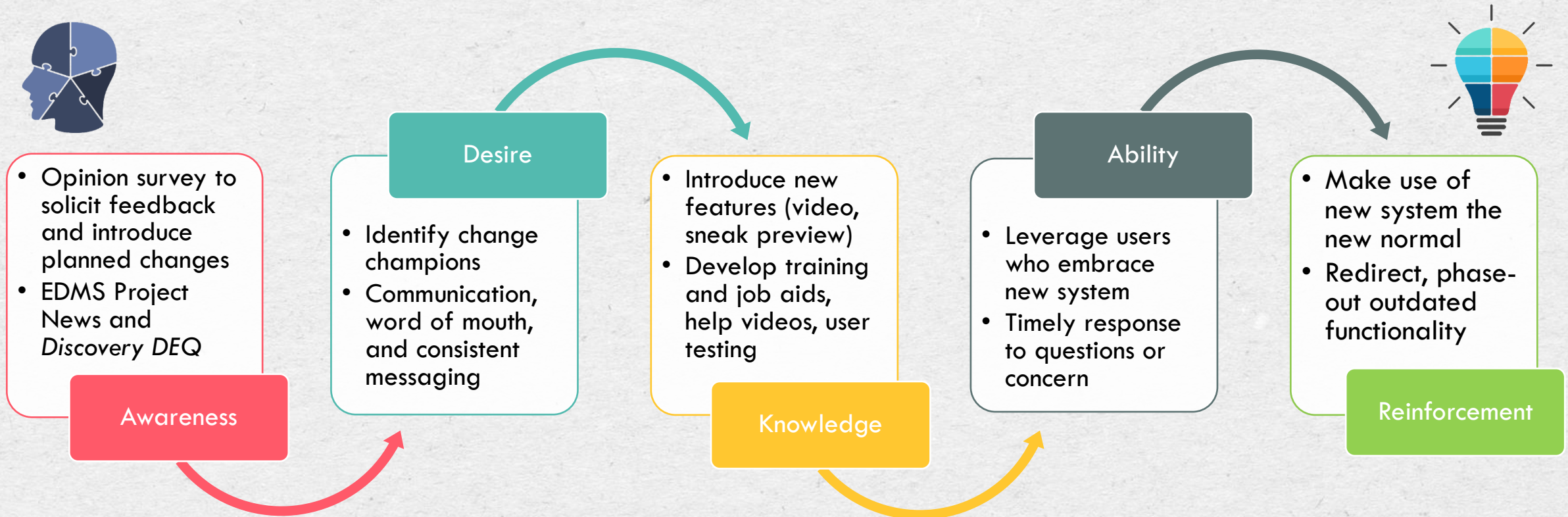
- Awareness
- Desire
- Knowledge
- Ability
- Reinforcement



Future State

- Modernized look and feel
- Easy-to-use, intuitive screens
- Expanded search capabilities
- Enhanced functionality
- New customization options

Louisiana DEQ EDMS Change Management



<https://edms.deq.louisiana.gov/edmsv2/quick-search>

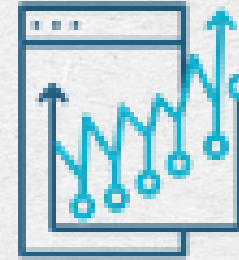
Louisiana DEQ EDMS Metrics

Google Analytics

EDMS leverages Google Analytics to track key statistics and demonstrate return on investment (ROI)

- Real time usage data
- Reports and analysis
- Prepare charts and graphs

<https://edms.deq.louisiana.gov/edmsv2/quick-search>

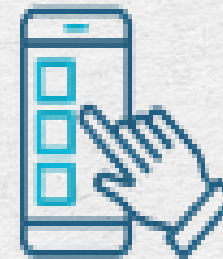


Usage

- Number of Users
- Number of Sessions
- Number of Page Views

Geolocation

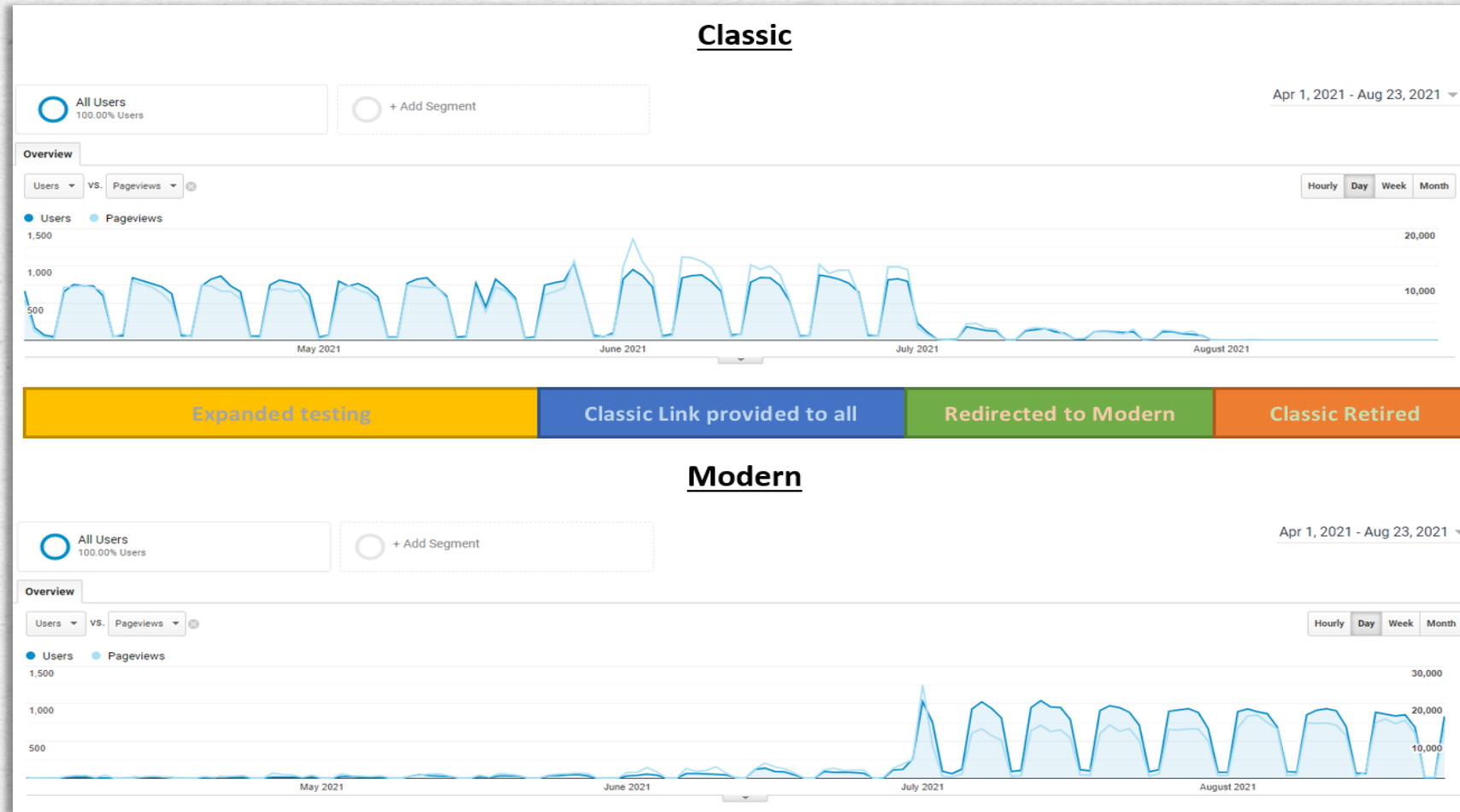
- Country
- State
- City



Feature Use

- Landing Pages
- Search Screens

Louisiana DEQ Statistics



Louisiana DEQ EDMS

Advanced Search

Clear Form

Search

3 Documents Found

Agency Interest (AI) AI Lookup

Document ID

Document Date

Activity Number

Description

Exact Match Any Word All Words | Fuzzy Match

Function

Media

Document Type

Document Subtype

Entry Date

Pages to

Louisiana DEQ EDMS

EDMS Search Records Requests Help Sign In

Advanced Search Results [Return to Document Search Criteria](#) [How to Video](#)

Show Filters Add Header on Download/Print

1 Page 1 of 1 100 items per page 1 - 3 of 3 items

<input type="checkbox"/>	Document ID	AI	Document Type	Document Subtype	Date ↓	Description	Media	Function	Pages	Prepared By
<input type="checkbox"/>	2801220	126340	Correspondence-Received	Green Cards	7/11/2005	7004 1350 0000 5460 3398	Air Quality	Permits	1	
<input type="checkbox"/>	2769915	126340	Permits	Final Permit	6/17/2005	Rescission letter	Air Quality	Permits	2	
<input type="checkbox"/>	2545918	126340	Permits	Application	12/17/2004	Exemption	Air Quality	Permits	9	

1 Page 1 of 1 100 items per page 1 - 3 of 3 items

<https://edms.deq.louisiana.gov/edmsv2/quick-search>

Louisiana DOTD's System of Engagement



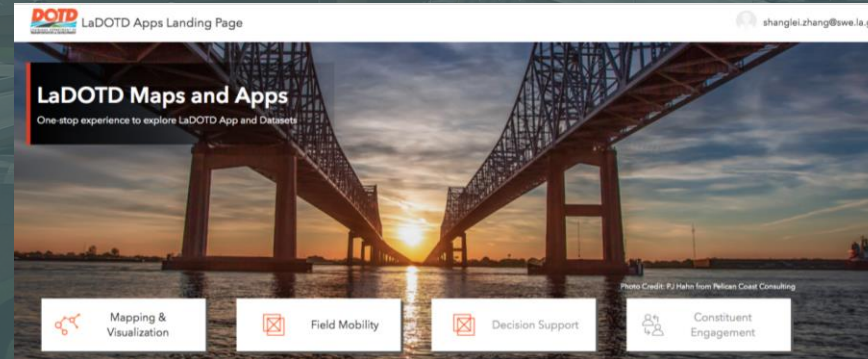
Brad D. Doucet
Director – DOTD Enterprise Support Services

Getting Started

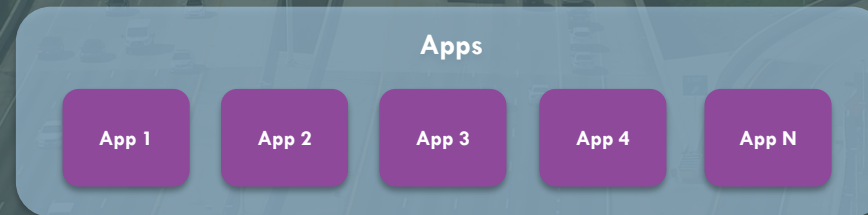
- Overall goal of providing DOTD with a centralized enterprise destination where employees and partners can consume, analyze, and contribute to enterprise data
 - Initial SoE discovery in Spring 2018
- Sought to enhance and leverage the DOTD Enterprise GIS infrastructure and maximize the use of technology that DOTD already owned
- With strong support from DOTD executives, we developed a strategy to leverage location as the key to connecting disparate business systems
 - SoE implementation kicked off in Fall 2018



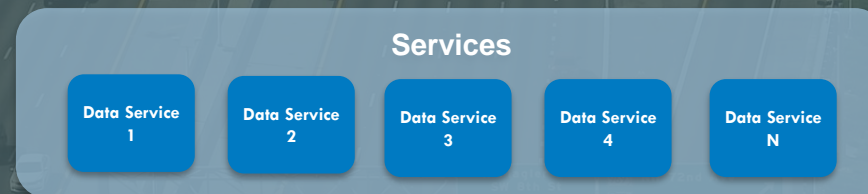
DOTD System of Engagement (SoE) Approach



A single destination to find/share apps & content



Suite of apps utilizing one or more web services



Reusable services to access data from business systems



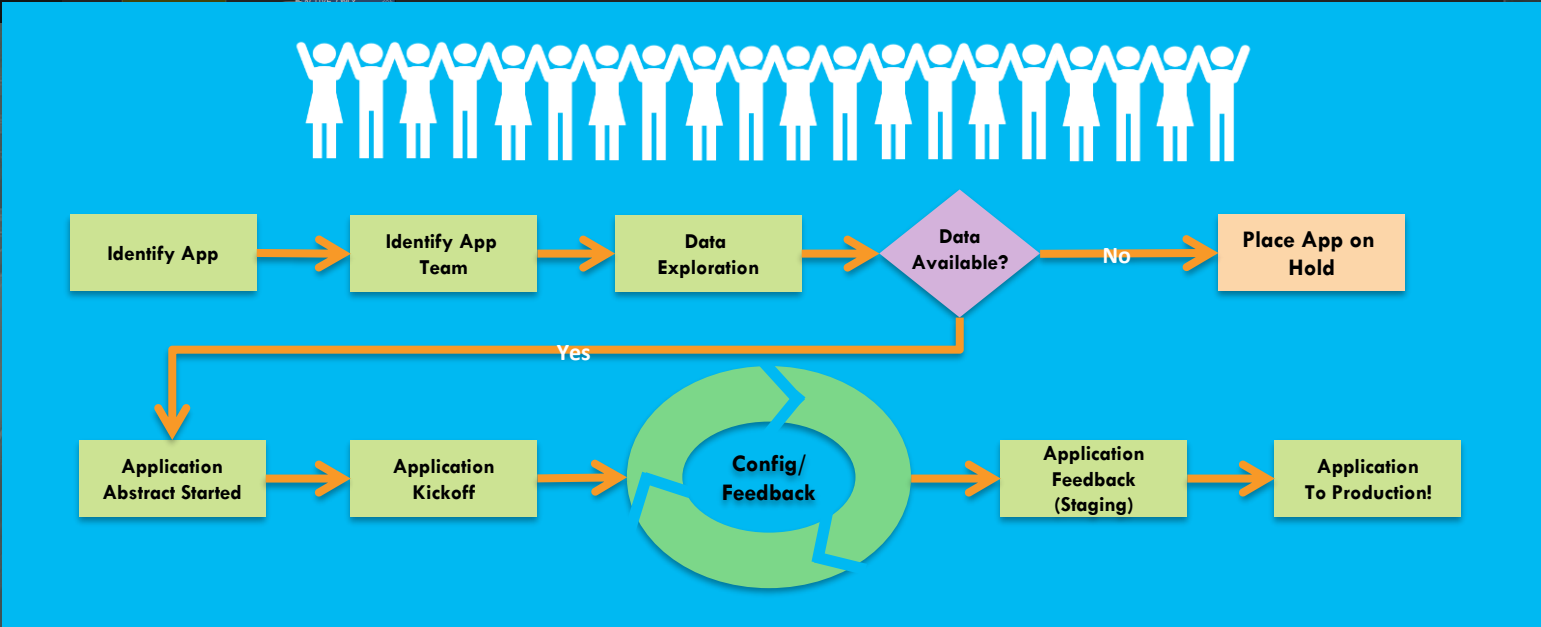
Leverage existing systems



LaDOTD Production ArcGIS Enterprise

External-facing Production SoE Environment

External Users ArcGIS Online



10.90.50.165	ArcGIS Data Store	S-PMDB-DTGIS001
ArcGIS Data Store v.10.7	ArcGIS Data Store v.10.7	10.90.50.159
Relational & Tile Cache	Spatiotemporal	SQL Server 2016

People and Processes

DOTD Core Team	Esri Team
-----------------------	------------------

Infrastructure

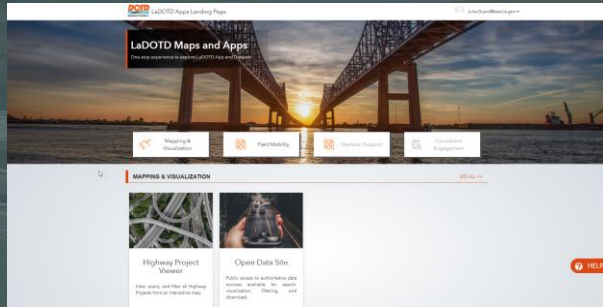
DOTD Core Team	Esri Team
OTS	

Data Integration

DOTD Data SMEs	Esri Team
DOTD Core Team	

Snapshot of Apps Released in First Cycle

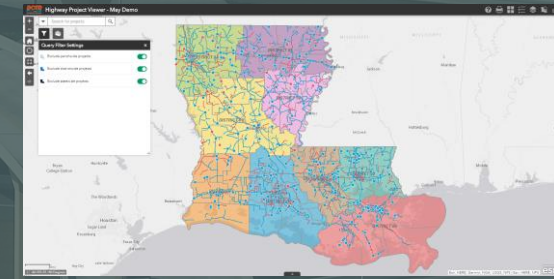
Landing Page



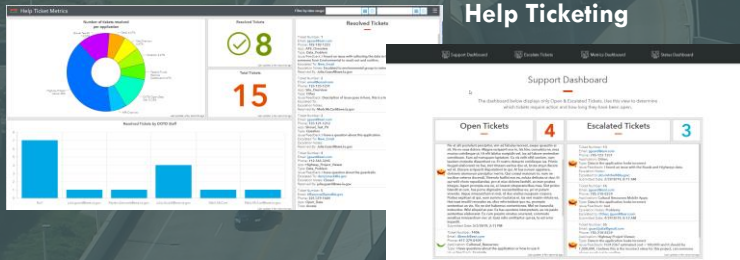
511 Road Closure



Highway Project Viewer



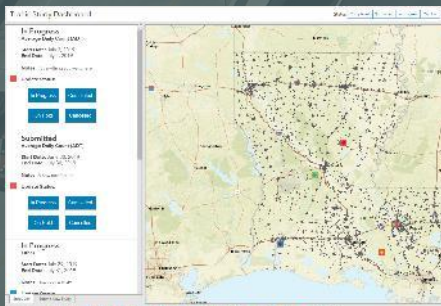
Help Ticketing



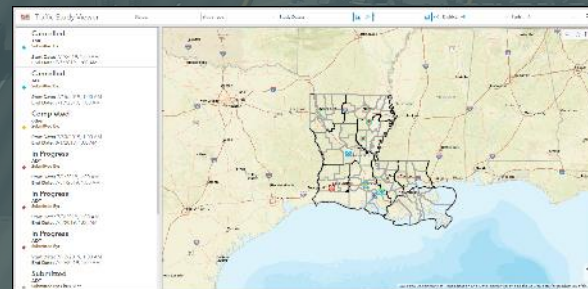
Open Data



Traffic Study Viewer



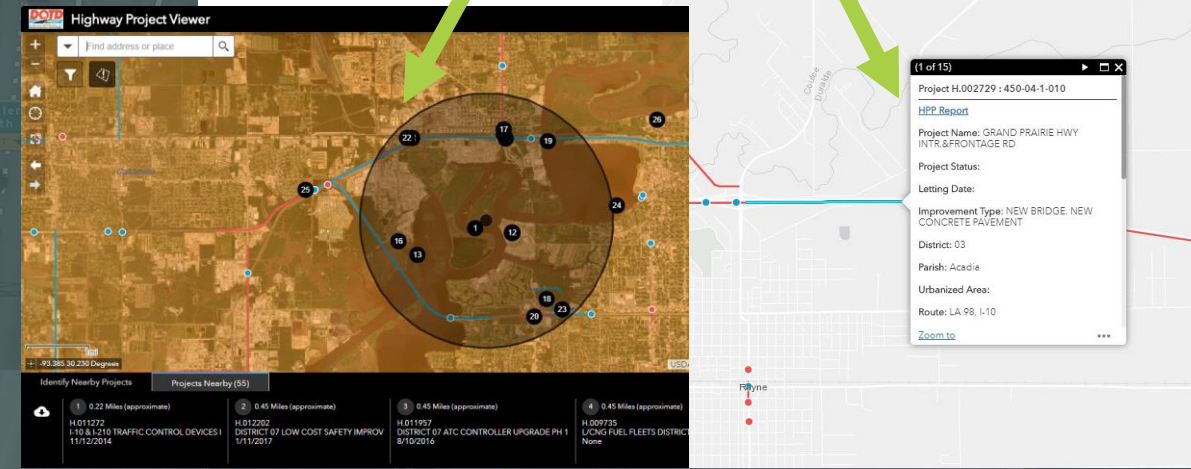
Traffic Study Scheduler



LADOTD Letting List - 4/15/2019 - Project Number H.009354

PROJECT	:H.009354	BROAD STREET CORRIDOR BIKEWAY	RR	NA	ENVIRON 12/21/2018 APP PCE
FEDERAL	:H009354	CONSTRUCTION OF BIKE LANES, A MULTI-USE PATH AND CROSSINGS	COE	NA	SURVEY
DESIGNER	:	BRIDGE:	CG	NA	P-PLANS
PROJ MANAGER	:NUNES, BRIAN	ROAD:	WQC	NA	R-W-MAP
REMARKS 1	:		CGN	NA	F-PLANS
REMARKS 2	: NATIONAL RECREATIONAL TRAILS PROJECT		CUP	NA	R/W
			SSP	NA	UTIL
			LEV	NA	PDD
			REL	NA	PS&E
			LOC	FEDREV 12	

Notes
BROAD STREET CORRIDOR BIKEWAY



Impactful Example of Early Success

- Paper forms converted to field mobility apps
- Diagrams created in Paint now use Ops Dashboard for automation
- Enterprise Sites pulls 10 apps together seamlessly
- Significant labor hours saved

Shovel Test Pit Form

Date: 7/11/18 Project Number: H-00-763 Project Name: Blackwater Bayou Bridge

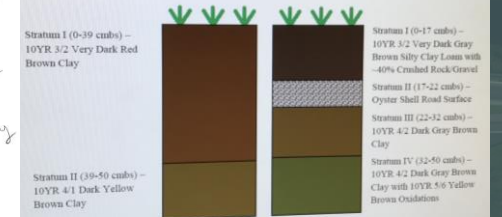
Transect # 1 Recorder: KE, RD include the following information for each STP: depth, munsell, soil description, artifacts present

STP# 1 Photo 290
 10YR 5/3 BR
 SI LO
 dark brown oxidized
 10YR 7/1 light grey
 SI LO
 mixed w/ 10YR 5/6 YEL BR
 in mixing
 50cm's unexcavated

STP# 3 Photo 20
 10YR 8/3 DR BR
 SI LO
 10YR 4/4 light YEL BR
 SI CL
 10YR 4/6 BR YEL
 SI LO
 10YR 5/6 si lo
 unexcavated

Notes: Sterile, Photo 290, gravel driveway

was situated above a 5 centimeter thick layer of Oyster shell road fill. A stainless clothing strap (N-1) and a piece of modern plastic (N-1) were identified in the upper 22 centimeters. The items identified during shovel testing were considered to be out of context due to disturbances and were not collected. Shovel testing did not identify any items that could yield further information about the context or presence of archaeological site 161V27.



Soil Bands Viewer (Environmental)

See soil band information that has been collected during Shovel Pit Testing on a web viewer.

[VIEW APPLICATION](#)



Wetland Delineation Data Viewer (Environmental)

See information that has been collected on Louisiana Wetlands within a web viewer.

[VIEW APPLICATION](#)



APE Overview Form (Environmental)

Collect information for the Area of Potential Effects (APE).

[VIEW APPLICATION](#)



Structure Identification Form (Environmental)

Collect information for structure identification.

[VIEW APPLICATION](#)



Shovel Test Pit Form (Environmental)

Archaeology application for collecting information for shovel test pits (STPs).



Feature Identification Form (Environmental)

Cultural Resources application for identifying features.



Wetland Delineation Collection App

Collect information for wetland delineation samples and photos.



Cultural Resources Data Viewer (Environmental)

See information that has been collected for Cultural Resources on a web viewer.

Shovel Test Pit Form (Archaeology)

Basic Info

Shovel Test Pit Form

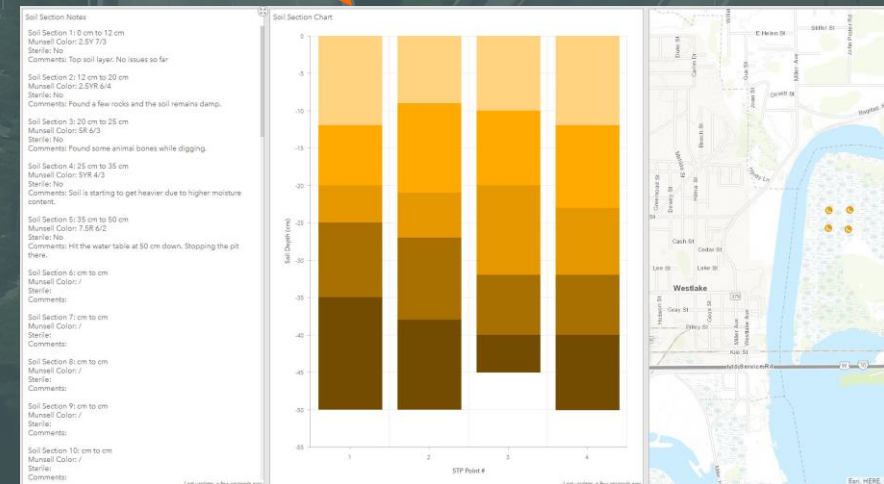
Include the following information for each STP: Depth, Munsell, Soil Description, Artifacts Present

STP #

What is the total depth of the hole?

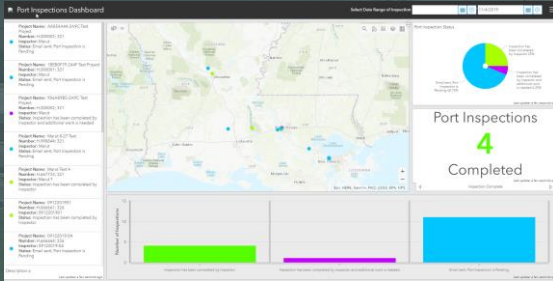
Soil Section 1

STP Photo Form



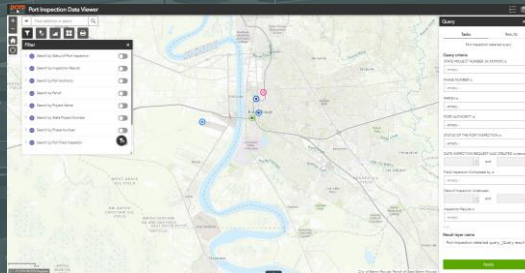
Snapshot of Apps Released in Second Cycle

Port Inspection Data Dashboard

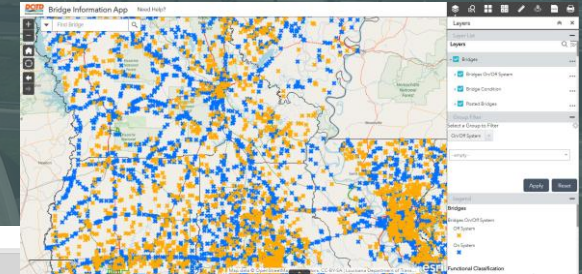


Port Inspection Form

Port Inspection Data Viewer



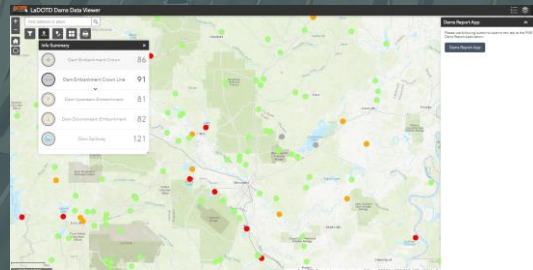
Bridge Information Tool



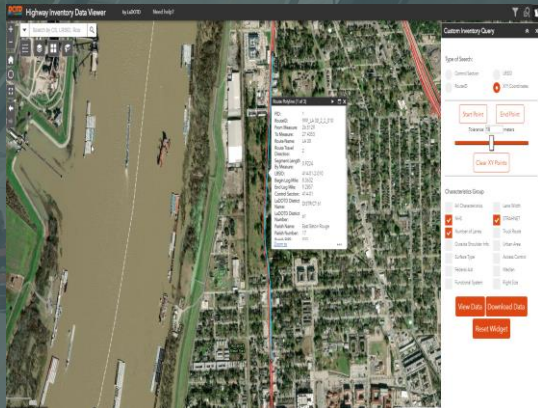
Federal Funds Balance

HPP Fund	Grouping	Unobligated Balance (FY)	Federal FY Appropriation (cum)	Est. Construction Cost	Fed Share (yrs)	Fed Share (DC)	ECFY Fund Balance
FRONTIER	FORMULA FUNDS	\$ 23,536,167.00					
HSP	FORMULA FUNDS	\$ 46,491,723.00	\$ 763,344.00	\$ 763,344.00	\$ 763,344.00	\$ 624,148.00	\$ 1,139,196.00
HOVTRN	FORMULA FUNDS	\$ 1,306,128.00	\$ 2,000,000.00				\$ 1,286,128.00
HSPF	FORMULA FUNDS	\$ 43,261,911.00	\$ 3,057,200.00	\$ 198,825.00	\$ 198,825.00	\$ 198,433.00	\$ 4,805,000.00
RAIL HE	FORMULA FUNDS	\$ 9,946,200.00	\$ 2,100,176.00				\$ 1,846,024.00
RAIL PD	FORMULA FUNDS	\$ 4,486,202.00	\$ 2,191,176.00				\$ 4,486,202.00
RSP	FORMULA FUNDS	\$ 4,271,076.00	\$ 1,602,407.00				\$ 4,271,076.00
STP-33K	FORMULA FUNDS	\$ 1,827,712.00	\$ 2,363,171.00	\$ 1,041,363.00	\$ 623,999.00	\$ 945,143.00	\$ 1,542,994.00
STP-34K	FORMULA FUNDS	\$ 9,988,860.00	\$ 1,801,458.00				\$ 1,894,960.00
STP-35K	FORMULA FUNDS	\$ 110,980,660.00	\$ 6,902,072.00	\$ 6,911,000.00	\$ 6,911,000.00	\$ 6,911,000.00	\$ 103,069,662.00
STP-35K	FORMULA FUNDS	\$ 4,432,000.00					\$ 4,432,000.00
STP-36K	FORMULA FUNDS	\$ 4,000,102.00	\$ 1,200,000.00				\$ 4,000,102.00
STP-37K	FORMULA FUNDS	\$ 4,300,401.00	\$ 2,437,481.00				\$ 4,300,401.00
TOTALS		\$ 205,845,208.00	\$ 21,284,074.00	\$ 4,644,687.00	\$ 1,595,820.00	\$ 1,471,389.00	

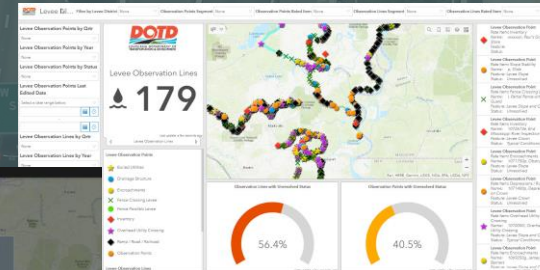
Dams Data Viewer



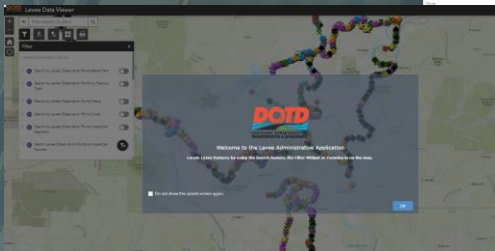
Highway Inventory Data Viewer



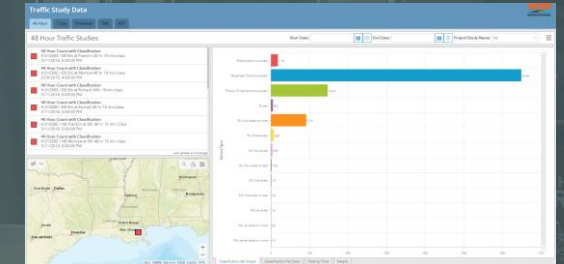
Levee Data Dashboard



Levee Data Administrator



Traffic Study Data Dashboard



Another Impactful Example of Success

- Search, query, and export data on bridges
- Data is pulled from multiple authoritative sources and accessed through a single application
- Provides basic information for bridge projects, bridge inspections, bridge roadways, posted bridges, scour critical bridges, and more!

Bridge Application Demo

Bridge Information Viewer - Need Help?

ON: 051880

Bridge Identification		
Bridge Key	Recall Number	Project Number
011700017000001	051880	007-16-003
NBI 09: Border Bridge Structure Number	NBI 08: Structure Number	NBI 01: Maintenance Responsibility
011700017000001	051880	01
NBI 02: Owner	Call Log Mile	Loc ID
01	0.00	001-1041-070

Bridge Location		
NBI 07: Facility Carried by Structure	NBI 06: Feature Intersected	Latitude
US2710	MISSISSIPPI RIVER	32°20' 42.60"
Length	NBI 09: Location	Contour/Section
511.11' 25.00"	1.1 MI W OF US 41	00-10
NBI 00: Highway Agency District	Parish Number	NBI 003: Parish Code
013	013	013
State Code	NBI 09A: Border Bridge: Neighboring State Code	NBI 09B: Border Bridge: Neighboring State Code
01	0	0

Bridge Specs		
NBI 02: Deck Width	NBI 04: Structure Length	NBI 07: Year Built
60.00	101.00	0179
Bridge Type	Required Posting	On/Off System
SCANT	0	ON
NBI 03: Bridge Median	NBI 01: Design Load	NBI 070: Bridge Posting
0.00	5	5
NBI 05: Minimum Vertical Clearance OVER Bridge Roadway	NBI Category	SHPO Number
0.00	Inventory Rating	11100533
File Length	Rating Program	Rating Remarks
0.00	0	MAINTAINED BY MISSISSIPPI RIVER MEM
Type Rating	NBI 035: Structure Flared	NBI 04: Flare Code
0	0	0000
NBI 106: Year Reconstructed	Posted Load Limit	NBI 113: Scour Critical Bridge Component Inspection
1999	0	0
NBI 046: Number of Approach Spans	NBI 09B: Border Bridge: Percent Responsibility	P/W Deck
0	0	0
NBI 04B: Structure Type	NBI 04B: Structure Type	NBI 108B: Type of Membrane
0	0	0
NBI 109C: Deck Protection	NBI 107: Deck Structure Type	NBI 108A: Type of Wearing Surface
0	0	0
NBI 037: Historical Significance	NBI 076: Length of Structure Improvement	NBI 066: Inventory Rating Factor
0	0	0
InventoryRating_Load	NBI 005: Method Used to Determine Inventory Rating	MidSpanVerClearance
0	0	0
NBI 050A: Curb or Sidewalk Width: Left Side	NBI 045: Number of Spans in Main Unit	NBI 044A: Structure Type
0	0	0

Bridge Information Viewer - Need Help?

Find Bridge

Layers

- Bridge Lines
- Bridges
- Roadway Information
- Projects
- Functional Classification
- Boundaries

Group Filter

Select a Group to Filter

On/Off System

Legend

Bridges

- Bridges On/Off System
- Off System
- On System

Bridge Information Viewer - Need Help?

Find Bridge

Layers

- Bridge Lines
- Bridges
- Roadway Information
- Functional Classification
- Boundaries

Group Filter

Select a Group to Filter

On/Off System

Apply

Reset

Legend

Bridges

- Bridges On/Off System
- Off System
- On System

Key takeaways

- About **50** new apps have either been released or are in process to be released soon
- About **1,500** unique SoE Portal user accounts created
- Some of the most viewed individual SoE apps to date include:
 - Open Data – Over **10,000** views
 - Dams Collector App for Contractors – over **1,750** views
 - Bridge Information Viewer – over **1,700** views
 - Levee Data Viewer – over **1,500** views
 - HIDV – over **1,350** views



Key takeaways

- **The growing collection of interconnected SoE apps, organized by business function, are improving decision making and saving time in the search for data and insight across DOTD and for our partners**
- **As more SoE apps are developed, the functionality of existing apps are expanded, and more authoritative data sources are tapped, the more users of the SoE at DOTD can incorporate these tools into their daily work processes**
- **The SoE is serving DOTD in our ongoing efforts to achieve our mission of delivering a safe and reliable infrastructure system that enhances mobility, economic opportunity, and public confidence**





TEXAS STATE LIBRARY
AND
ARCHIVES COMMISSION

Questions?



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Access Sciences*

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Brad D. Doucet

*Director - Enterprise Support Services
LA DOTD*

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