



# TEXAS DEPARTMENT OF TRANSPORTATION



## TXDOT OVERALL PMS PROGRAM

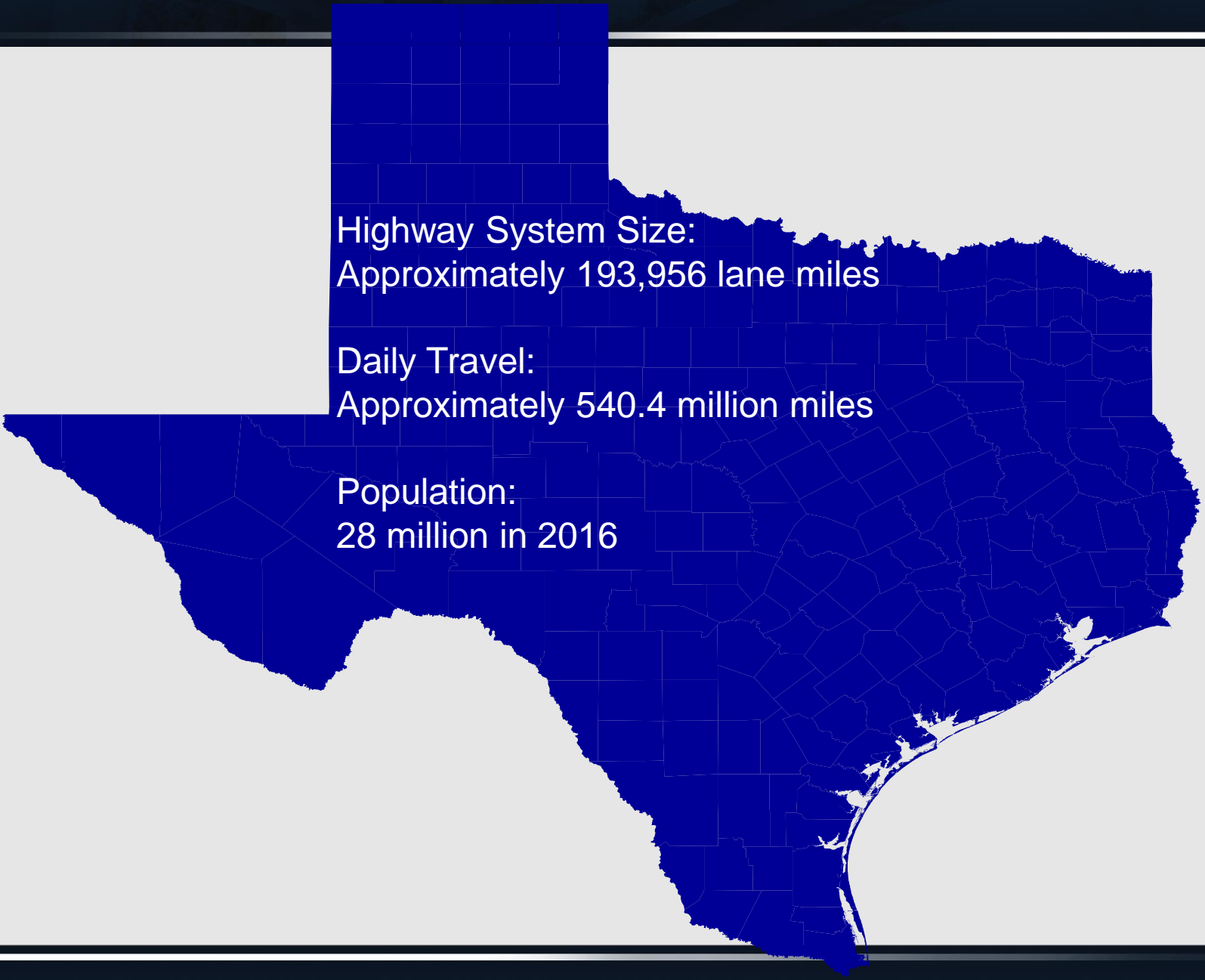
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Pavement Preservation Branch Manager  
Maintenance Division



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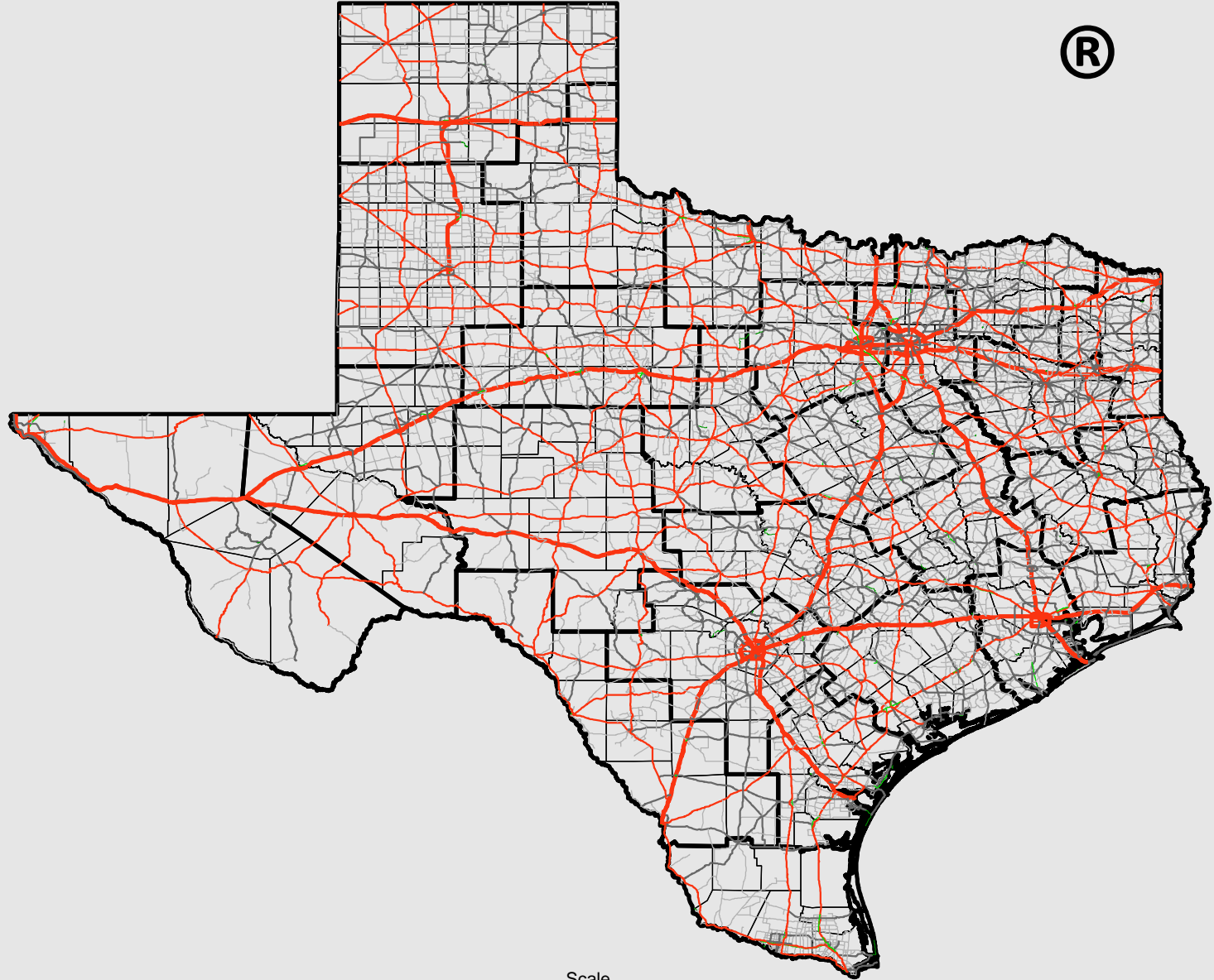


Highway System Size:  
Approximately 193,956 lane miles

Daily Travel:  
Approximately 540.4 million miles

Population:  
28 million in 2016

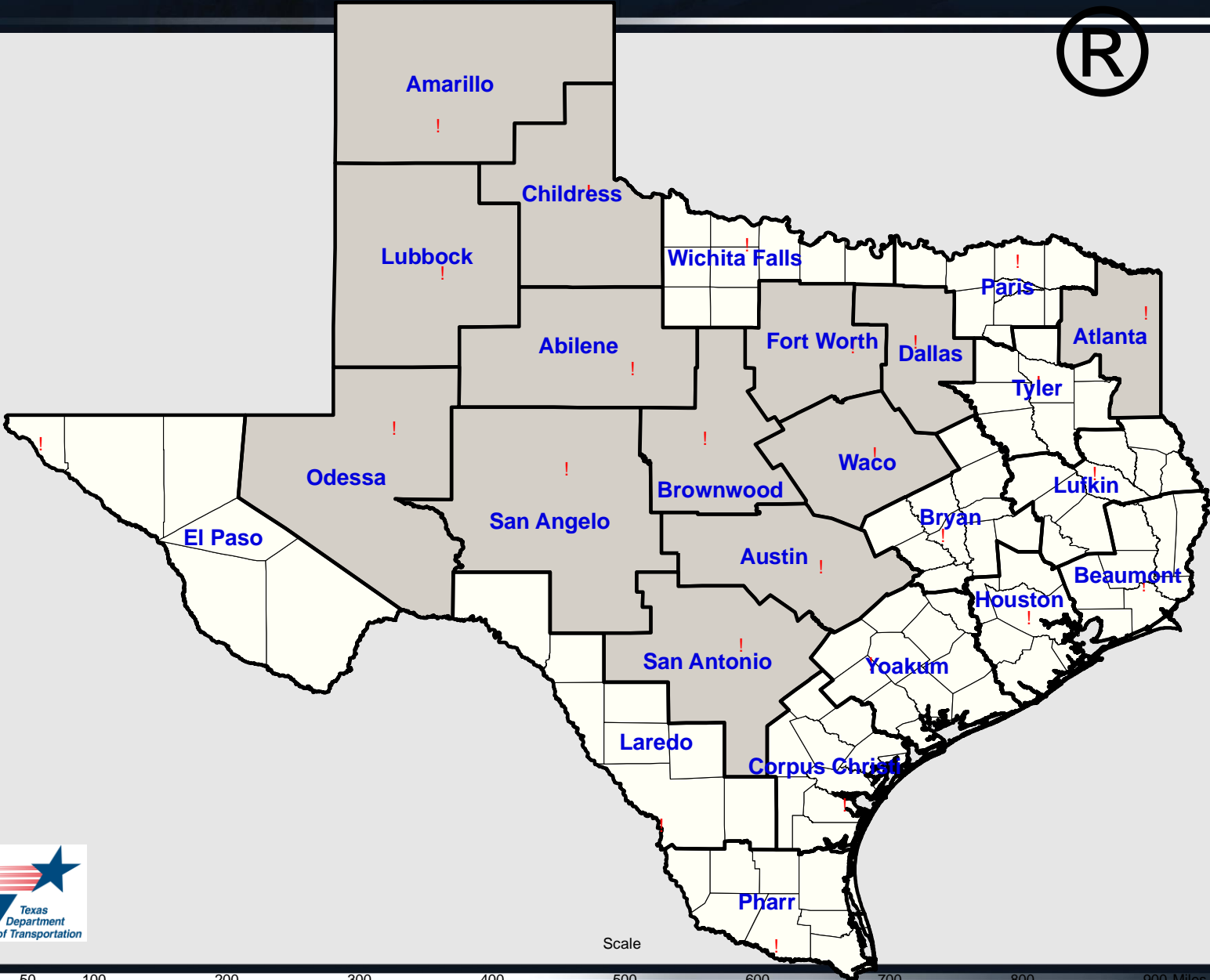
# Texas Highway System



Scale

0 50 100 200 300 400 500 600 700 800 900 Miles





Scale

0 50 100 200 300 400 500 600 700 800 900 Miles

# Equipment Group

- 4 Inertial Profiler / Rut Systems
- 7 Skid Trucks
- 4 Ground Penetrating Radar Air Launched
- 7 Falling Weight Deflectometer (FWD)
- Certify equipment and operators
- Certify pavement distress raters
- Equipment repairs and maintenance
- Quality control and verifications of data collected
- Verification and referee testing for item 585
- OBSI (On-Board Sound Intensity) testing
- Texture and Seal Coat Tester developed in house

# Equipment



# Pavement Management Group

- Manage PMIS database
- Manage pavement data collection and audit contracts
- Annual pavement condition report
- Annual skid report
- Support 4-year Pavement Management Plans
- Support wet surface crash reduction program
- Support fund allocations for UTP CAT1 and Routine Maintenance
- TAMP development and support
- Provide PA training classes
- HPMS data
- Answers questions from Administration and Legislature
- District support



# Data Collection Frequency

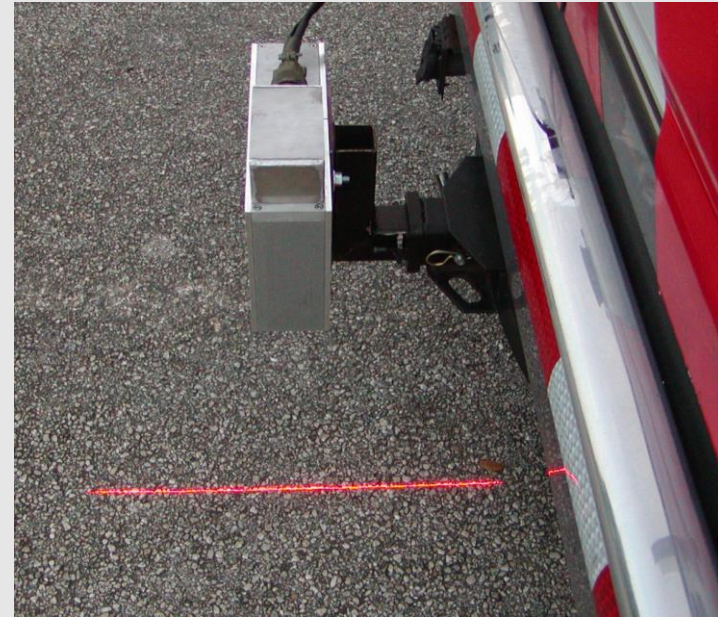
- Pavement Distress:**
- 100 percent per year
  - July – December
  - Statewide contract (Pathway)
  - 6% distress audit (district & TTI)

- Ride Quality / Rutting:**
- 100 percent per year
  - July – December
  - Statewide contract (Pathway)
  - 8% profile audit (district profiler operators)

- Skid Measurements:**
- 50 percent IH, 25 percent non-IH
  - September– August
  - District Skid equipment operators

- FWD Measurements:**
- As needed (for projects)
  - September – August
  - District FWD equipment operators

# Vehicle Mount 3D Texture Unit



- Micro and Macro-texture measurement.
- Operation speed: 0~70 mph.
- Texture depth resolution: 10  $\mu\text{m}$ .
- Total laser length: 20 inches (508 mm).
- Sampling every 0.248 mm or 102 samples/inch of travel.
- 100% longitudinal coverage.

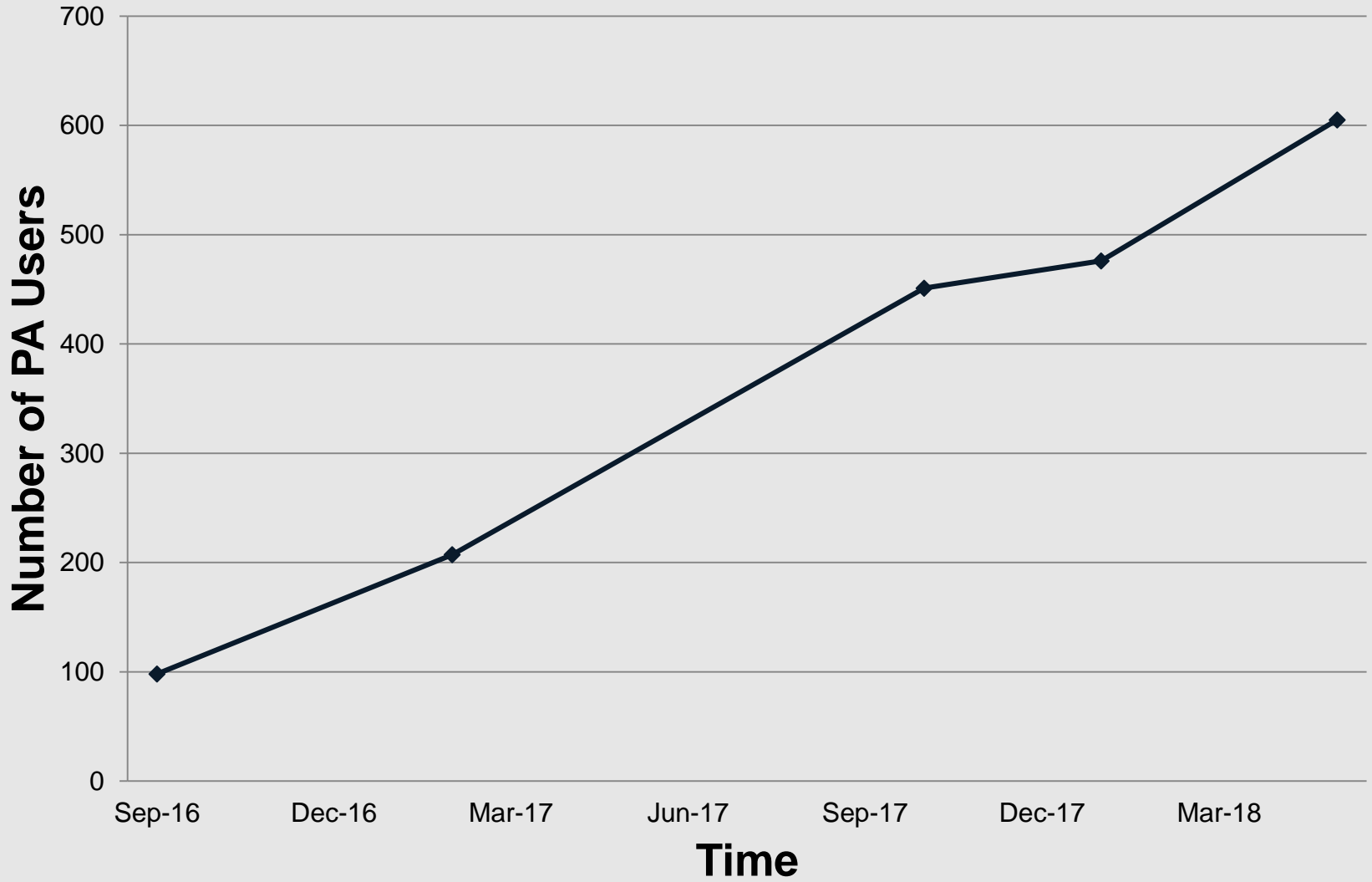
# Pavement Management System

## Pavement Analyst

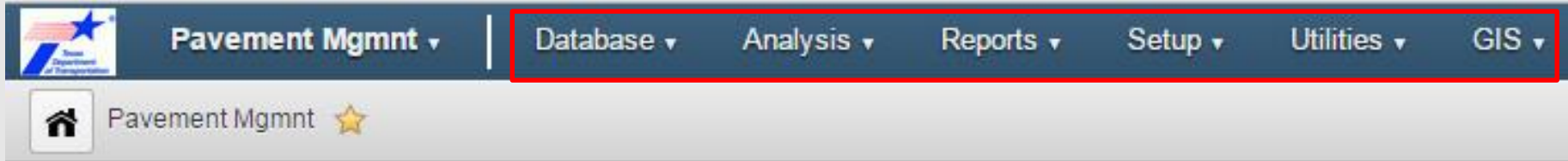
# The Agile Assets Pavement Analyst System

- The AgileAssets Pavement Analyst system replaced the mainframe PMIS and MapZapper. The Pavement Analyst went live statewide on September 1, 2016.
- This web-based system makes pavement-related and inventory data easily accessible, equips with powerful optimization tools to illustrate impacts of budget changes, and integrates with GIS to view pavement condition and pavement related projects on maps.

# System Users



# Six Modules



- Database: PMIS data and more
- Analysis: performance and network analysis
- Reports: annual report, detailed reports, etc.
- Setup: to support database and analysis etc.
- Utilities: dynamic segregation
- GIS: mapping functions

# PA Data Tables

The screenshot shows a web browser window with the URL [https://txpms.agileassets.com/PMS\\_TX/Kernel/w\\_main.jsp?AA\\_SID=5c98e7de-3868-4fe2-add5-baaae6e3ce49](https://txpms.agileassets.com/PMS_TX/Kernel/w_main.jsp?AA_SID=5c98e7de-3868-4fe2-add5-baaae6e3ce49). The application has a dark navigation bar with the following menu items: Pavement Mgmt, Database, Analysis, Reports, Setup, Utilities, and GIS. The 'Database' menu is expanded, showing a list of data categories: Condition Data, Construction, Crash Information System Data, Inventory, Static Tables, and TxPROS Permits. The 'Condition Data' category is further expanded to show: Condition Summary, Rut Data, Ride Data, Skid Data, Structural Strength Data, and Automated Distress. The 'Condition Summary' item is highlighted, and its sub-menu is open, displaying two options: Condition Summary Table and Condition Summary Graph Down the road.

# PA Data Tables



Pavement Mgmt ▾

Database ▾

Analysis ▾

Reports ▾

Setup ▾

Utilities ▾

GIS ▾



Pavement Mgmt > Database > Condition Data > Condition Summary > Condition Summary Table ☆

Menu ▾

FISCAL YE...	RESPONSIBLE DI...	SIGNED HWY A...	DIRE...	LANE CODE	BEGINNING DFO	ENDING DFO	DISTRESS SCORE	* CONDITION SCORE	RIDE SCORE	SKID SC...	CONDITION SUM...	IM...
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	193.470	193.995	100	100	2.5	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	193.995	194.495	100	90	2.0	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	194.495	194.995	100	100	2.4	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	194.995	195.495	100	100	2.3	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	195.495	196.056	100	100	2.6	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	196.056	196.556	100	100	2.7	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	196.556	197.056	100	100	2.5	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	197.056	197.556	100	99	2.2	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	197.556	198.059	99	99	2.4	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	198.059	198.559	86	86	2.9	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	198.559	199.059	88	88	2.7	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	199.059	199.559	86	86	2.7	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	199.559	200.067	86	86	2.3	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	200.067	200.567	86	86	2.7	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	200.567	201.067	86	86	2.4	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	201.067	201.567	86	86	2.9	0	<a href="#">Show Cond. Hist.</a>	
1997 ▾	06 - ODESSA ▾	SH0349 K	Both	0	201.567	202.162	96	96	2.5	0	<a href="#">Show Cond. Hist.</a>	

<< < 1 of 10000 total rows >>



Browser: <http://txdot4azpvap1/pathweb/?cycle=FY%202017&route=FM> PathWeb


File Edit View Favorites Tools Help

Share Browser WebEx

5.891 26.416

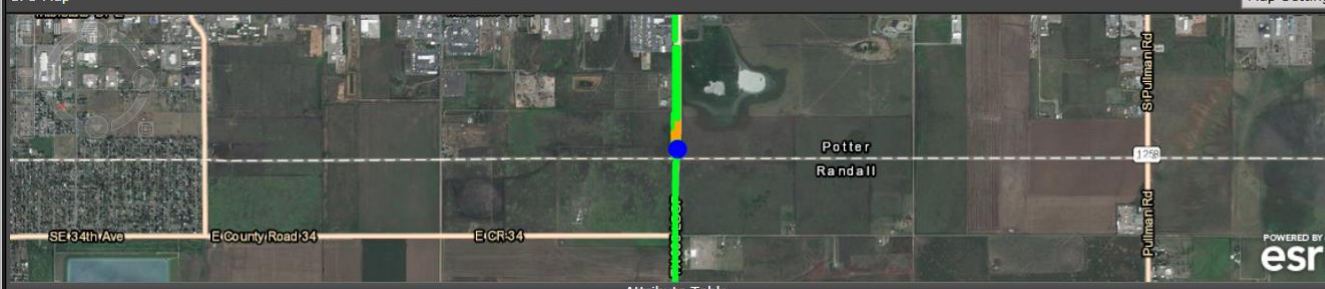
Find Road Section Help Change Direction Share this Location Save Current Images

Roadway



Route SL0335 L | County 188 | Milepost 26.853 | Dir Decreasing | Date 09/24/17

GPS Map Map Settings



Attribute Table

POWERED BY esri

Road Surface




Image Control PathWeb

- Perspective
- Right Shoulder
- Left Shoulder
- Rear View
- Road Surface
- IRI Graph
- Trans Profile Graph
- GPS Map

Play Speed

0.0 ft. Change Skip

Route: SL0335 L  
Direction: Decreasing  
Milepost: 26.853  
Latitude: 35.18383193  
Longitude: -101.74224883  
Ver. 2.6.10.0

Surface Elevation

# PA Analysis Tables

The screenshot shows a web browser window with the URL [https://txpms.agileassets.com/PMS\\_TX/Kernel/w\\_main.jsp?AA\\_SID=5c98e7de-3868-4fe2-add5-baaae6e3ce49](https://txpms.agileassets.com/PMS_TX/Kernel/w_main.jsp?AA_SID=5c98e7de-3868-4fe2-add5-baaae6e3ce49). The page features a dark navigation bar with the following items: Pavement Mgmt, Database, Analysis, Reports, Setup, Utilities, and GIS. The 'Analysis' menu is expanded, showing a sub-menu with 'Network Analysis' and 'Performance Analysis...'. The 'Network Analysis' sub-menu is further expanded, displaying a list of analysis tables:

- 4-Year Plan - COMPASS Staging Table
- 4-Year Plan - DCIS Staging Table
- 4-Year Plan - COMPASS Projects
- 4-Year Plan - COMPASS Invalid Locations
- 4-Year Plan - DCIS Projects
- 4-Year Plan - DCIS Invalid Locations
- 4-Year Plan - Treated Lane Miles by District
- Detailed Optimization Results
- Master Work Plan
- Network Master
- Optimization Analysis
- Section Strategies
- Section Current Needs
- Section Current Needs Export View

# PA Reports

Secure | https://txpms.agileassets

Pavement Mgmt ▾ Database ▾

Pavement Mgmt > Reports > Reports ☆

Reports- Tree View Menu ▾

- [-]  Reports
  - My Reports
  - Public
    - 1. Section Lists and Data
    - 2. Administrative Summaries
    - 3. Create Automated Rating Form
    - 4. Visual Data Action Report
    - Analysis and 4 Year Plan Reports
    - Annual Reports
    - Annual Reports By District
    - Mileage Summary Reports
    - NGM PRINT TEMPLATES
    - Status Summary Reports
  - Shared
  - Reports

## PERCENT OF LANE MILES IN GOOD OR BETTER CONDITION BY COUNTY

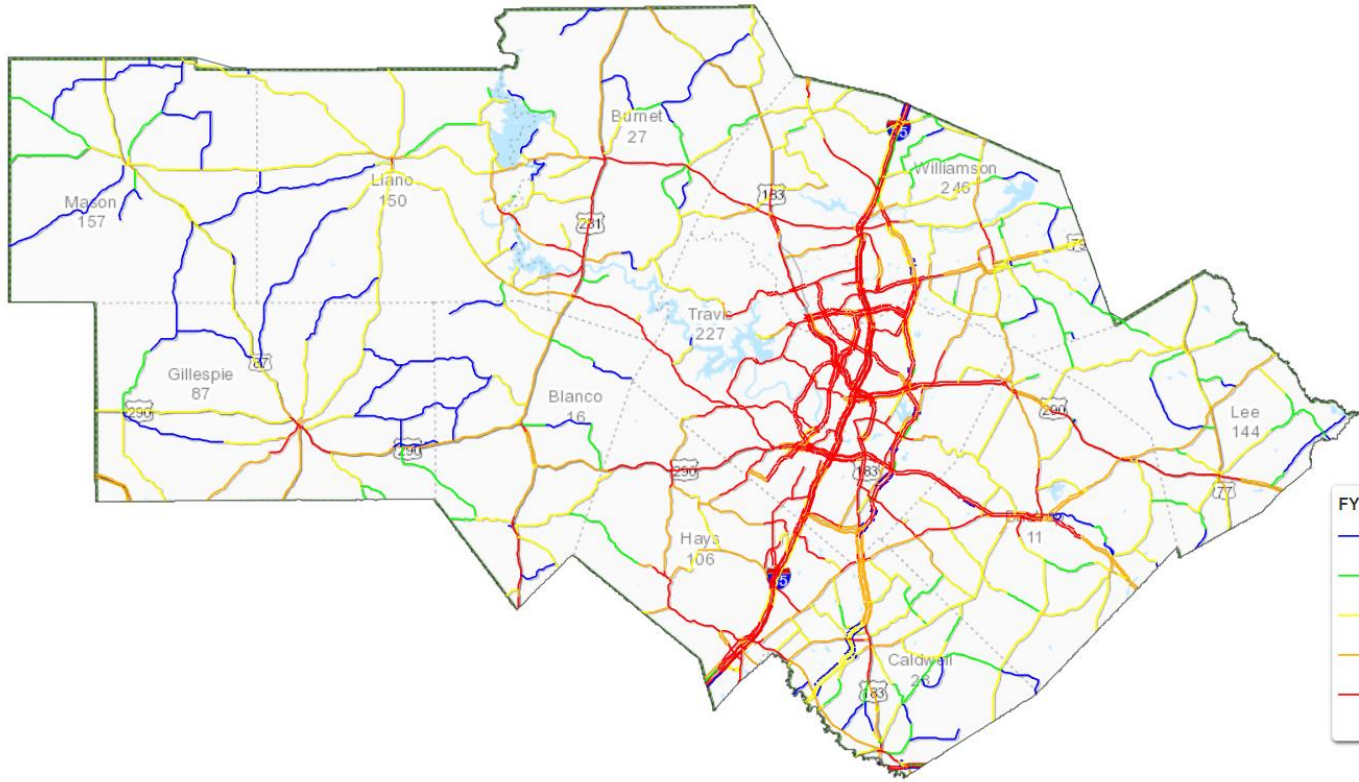
Fiscal Year: 2018 May 21, 2018 12:49  
 District: 01 - PARIS Page 1 of 1

COUNTY	GOOD OR BETTER (70 - 100)		RATED LANE MILES	PERCENT RATED LANE MILES	TOTAL LANE MILES
	LANE MILES	PERCENT			
60 - DELTA	320.1	90.90 %	352.1	100.00 %	352.1
75 - FANNIN	833.8	84.89 %	982.1	99.48 %	987.3
81 - FRANKLIN	328.6	97.07 %	338.6	100.00 %	338.6
92 - GRAYSON	947.4	75.11 %	1,261.4	99.39 %	1,269.1
113 - HOPKINS	847.6	88.08 %	962.4	99.90 %	963.4
117 - HUNT	1,172.9	87.58 %	1,339.3	98.73 %	1,356.5
139 - LAMAR	891.6	89.31 %	998.3	99.50 %	1,003.3
190 - RAINS	249.7	93.15 %	268.1	99.63 %	269.1
194 - RED RIVER	709.2	94.53 %	750.3	99.84 %	751.5
<b>01 - PARIS</b>	<b>6,301.0</b>	<b>86.88 %</b>	<b>7,252.5</b>	<b>99.48 %</b>	<b>7,290.8</b>

## PMIS MILEAGE SUMMARY

Fiscal Year: 2018.0 May 21, 2018 12:47  
 District: 01 - PARIS Page 1 of 1

COUNTY	CENTERLINE MILES	ROADBED MILES	LANE MILES	VMT
60 - DELTA	166.0	176.1	352.1	169,072.9
75 - FANNIN	480.8	486.3	987.3	791,913.1
81 - FRANKLIN	135.2	167.2	338.6	594,228.4
92 - GRAYSON	456.7	621.2	1,269.1	3,812,516.0
113 - HOPKINS	381.4	471.4	963.4	1,776,036.4
117 - HUNT	527.6	656.1	1,356.5	3,016,528.5
139 - LAMAR	442.2	480.1	1,003.3	1,225,603.8
190 - RAINS	133.8	134.6	269.1	349,000.7
194 - RED RIVER	374.7	374.7	751.5	387,692.0
<b>01 - PARIS</b>	<b>3,098.3</b>	<b>3,567.5</b>	<b>7,290.8</b>	<b>12,122,591.9</b>



**FY2018-ADT**

- 1 - 500 VEH/DAY
- 501 - 1,000 VEH/DAY
- 1,001 - 5,000 VEH/DAY
- 5,001 - 10,000 VEH/DAY
- OVER 10,000 VEH/DAY



# 4-Year Pavement Management Plan

# Pavement Management Plan Objective

- Develop a comprehensive and uniform pavement management plan which is roadway specific to the greatest extent possible, and is fiscally constrained.
- Generate Pavement Condition Projections based on a financially constrained plan, which can be used to assess the impact of the appropriated funding.

# Pavement Management Plan Timeline

- Preliminary plans due by **May 30<sup>th</sup>**
- Plan reviews done by **June 15<sup>th</sup>**
- Final plans due by **July 1<sup>st</sup>**
- Draft report by MNT on **August 1<sup>st</sup>**
- Final report by **August 31<sup>st</sup>**

# Pavement Management Plan

Year of the project (2019, 2020, 2021, 2022)

- 2019 & 2020 Project Specific
- 2021 & 2022 Project Specific or place holders



# Routine Maintenance

- Sealing Cracks
- Edge Maintenance
- Patching/Pothole Repair
- Level-up
- Strip/Spot seals
- Milling
- Joint Repair
- Isolated Base repair
- Concrete Repairs

# Treatment Levels for Flexible Pavements

- Preventive Maintenance
  - Seal Coat / Chip Seals
  - Thin Overlay 2" Thick or Less
  - Mill and Inlay 2" or less
  - Hot In-Place Recycling
  - Micro-surfacing/Slurry Seal
  - Scrub Seal
- Light Rehabilitation
  - Overlay Greater Than 2" Thick But Less Than 4"
  - Mill and Inlay between 2" to 4"
- Medium Rehabilitation
  - Overlay Between 4" and 6"
  - Mill and Inlay Greater Than 4" But Less Than 6"
  - White-topping
- Heavy Rehabilitation
  - Overlays Greater than 6"
  - Mill and Inlays Greater than 6"
  - Full Reconstruction
  - Full Depth Reclamation (pulverization and stabilization) new HMA surface
  - Full Depth Reclamation (Pulverization and add new base) new seal coat surface

# Treatment Levels for CRCP

- Preventive Maintenance
  - Half Depth Repair/ Full Depth Repair
  - Diamond Grinding and Grooving
  - Thin ACP Overlays 2" thick or less
  
- Light Rehabilitation
  - ACP Overlay Greater than 2" and Less than 4"
  
- Medium Rehabilitation
  - ACP Overlay Greater than 4" and Less than 6"
  
- Heavy Rehabilitation and Reconstruction
  - Rubblization & Overlay > than 6"
  - Bonded Concrete Overlay
  - Unbonded Concrete Overlay

# Treatment Levels for JCP-CPCD

- Preventive Maintenance
  - Diamond Grinding and Grooving
  - Joint and/or Crack Sealing
  - Half Depth Repair
  - Slab Replacement
  - Thin ACP Overlays 2" thick or less
  
- Light Rehabilitation
  - ACP Overlay Greater than 2" But Less than 4"
  - Dowel Bar Retrofit & Grinding
  
- Medium Rehabilitation
  - ACP Overlay Greater than 4" But Less than 6"
  
- Heavy Rehabilitation
  - Full Reconstruction
  - Rubblizing and ACP Resurfacing Greater than 6"
  - Bonded Concrete Overlay
  - Unbonded Concrete Overlay

# 4-Year Plan Reviews

- Construction Projects
  - PM & Rehab projects 4 years
  
- Maintenance Projects
  - PM & Rehab projects 4 years
  - Routine MNT Years 0 & 1
  
- Surface Age Map
  
- Skid Data & Wet Surface Crash Reduction Report

# Integrate with Other Systems

- DCIS (Design and Construction Information System)
  - DCIS is the TxDOT's automated information system used for planning, programming, and developing projects. DCIS is an essential part of preparing construction projects for contract letting. Project information such as, work description, funding requirements, and dates for proposed activities can be found in DCIS.
- MMS (Maintenance Management System)
  - MMS captures and monitors maintenance plans and provides data for informed decision making.
- CRIS (Crash Records Information System)
  - Locations over presented with wet surface condition crashes.

# Construction Projects (DCIS)

Menu ▾

DCIS FISCAL YEAR	DCIS YE...	DCIS PROJECT ID/CSJ ▲	DCIS WORK TY...	COUNTY	TREATMENT TY...	ORIGINAL EXPENSE COST	EXPENSE CO...	LAYMAN'S DESCRIPTION
2019	2019	000102055	REHAB ▾	72 - EL PASO ▾	MR ▾	12500000	\$12,500,000.00	MILL AND INLAY
2019	2019	000305050	PM ▾	195 - REEVES ▾	PM ▾	30074	\$30,074.00	SEAL COAT
2019	2019	000305051	PM ▾	195 - REEVES ▾	PM ▾	27120	\$27,120.00	SEAL COAT
2019	2019	000305052	PM ▾	195 - REEVES ▾	PM ▾	142363	\$142,363.00	SEAL COAT
2019	2019	000306090	PM ▾	195 - REEVES ▾	PM ▾	37263	\$37,263.00	SEAL COAT
2019	2019	000306091	PM ▾	195 - REEVES ▾	PM ▾	30430	\$30,430.00	SEAL COAT

<< < 1 of 3955 total rows >>

Menu ▾

SIGNED HWY AND ROADBED ID	DIRECTION	LANE CODE	BEGINNING D...	ENDING DFO	HIGHWAY ROADBED ID	COMMENTS	USER UPDATE	DATE UPDATE
SH0020 R	Asc.	0	14.345	18.374	R		I-FYP-DCIS-Imp...	4/5/2018
SH0020 L	Desc.	0	14.345	18.374	L		I-FYP-DCIS-Imp...	4/5/2018

# Maintenance Projects (MMS)

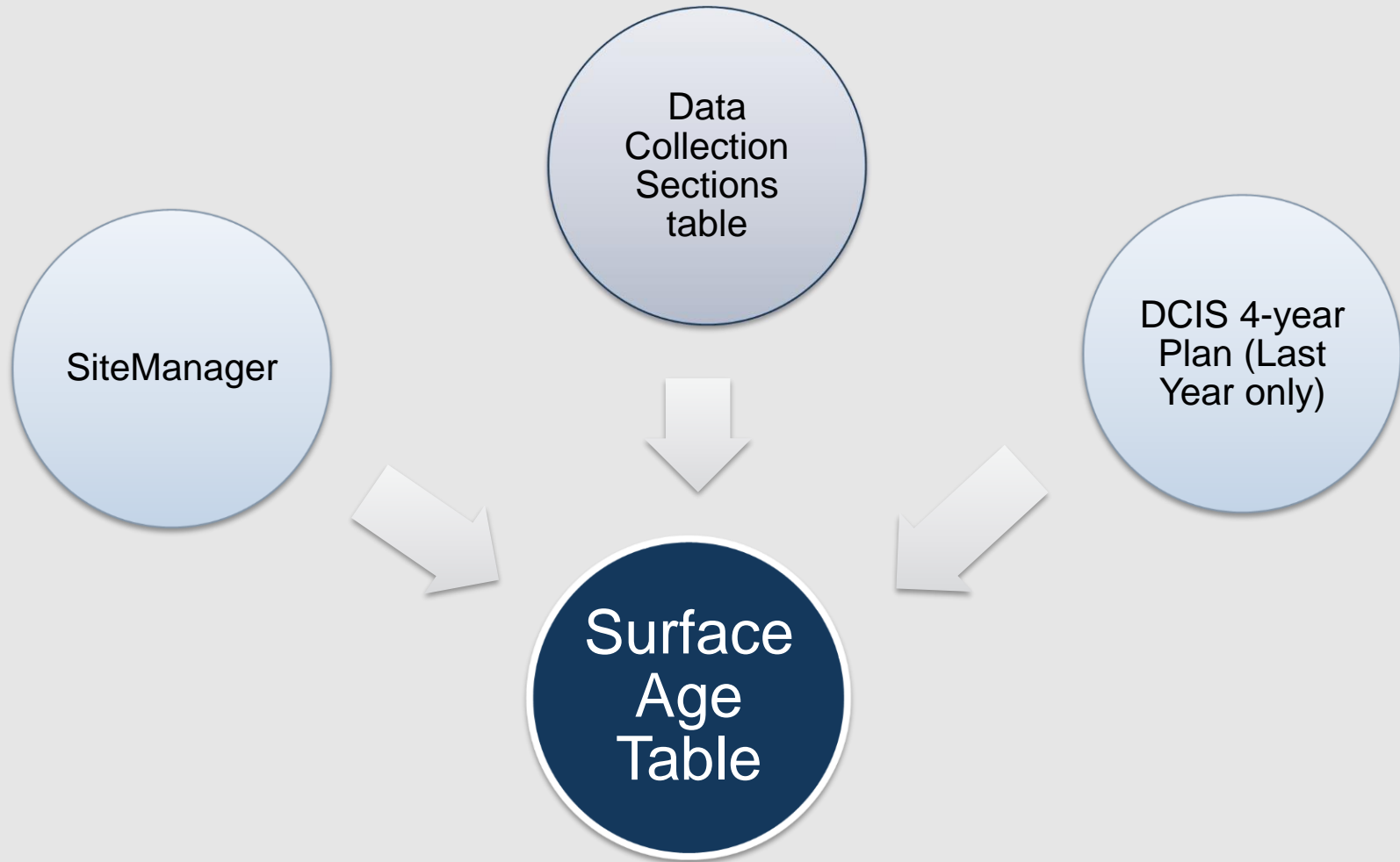
FISCAL YEAR	* PROJECT ID	CONTRACT NUMBER	TREATMENT TY...	* ACTIVITY	ACTIVITY DESC	ORIGINAL WORK CO...	WORK COST	FROM DE...	TO DESC
2018	RMCTYL2018052832		ROUTINE MAINT	P07 - Edge Maintenance	Edge Maintenance	25000	25000	Assist	Maintenance crew
2018	RMCTYL2018052832		ROUTINE MAINT	P10 - Adding or Widening Paver	Adding or Widening	5000	5000	Assist	Maintenance crew
2018	STFTYL2018052802		ROUTINE MAINT	P09 - Pothole Repair	Pothole Repair	2000	2000	Various Locatio	In Anderson County
2018	STFTYL2018055261		PM	P01 - Pavement Leveling	Pavement Leveling	624000	624000	US 175	S of US 175
2018	STFTYL2018058617		ROUTINE MAINT	P01 - Pavement Leveling	Pavement Leveling	186208	186208	SH 155	FM 321
2018	STFTYL2018058618		LR	P10 - Adding or Widening Paver	Adding or Widening	268000	268000	SH 155	ACR 326
2018	STFTYL2018058619		PM	P05 - Full Width Seal Coat	Full Width Seal Co	56000	56000	FM 3328	FM 320
2018	STFTYL20188620		LR	P02 - Milling	Milling	70356	70356	.5 mile north of	.3 miles north of FM 321
2018	STFTYL2018029917		LR	P02 - Milling	Milling	191083.38	191083.38	US 287	Anderson County Line

<< 8 of 5090 total rows >>

SIGNED HWY AND ROADBED ID	DIRECTION	LANE CODE	BEGINNING D...	ENDING DFO	ACTIVITY	HIGHWAY ROADBED ID	COMMENTS	USER UPDATE	DATE UPDATE
FM0019 K	Both	0	0.102	5.908	P01 - Pavement Leveli...	K		COMPASS FYP Location data	4/5/2018



# Surface Age



# Editable Fields

Secure | https://txpms.agileassets.com/PMS\_TX/Kernel/w\_main.jsp?AA\_SID=1effadbc-f52b-4136-880a-dfff38c60c3e&window\_id=tx\_pmis\_dcs\_con

Pavement Mgmt ▾ Database ▾ Analysis ▾ Reports ▾ Setup ▾ Utilities ▾ GIS ▾

Pavement Mgmt > Database > Construction > TxDOT PMIS DCS Construction Data ☆

Save Data Retrieve Data

Filter applied

ENDING TRM DISPLACEMENT	PROJECT CSJ	REVISED PROJECT CSJ	COMPLETION DATE	REVISED COMPLETION DATE	WORK CODE	REVISED WORK CODE	COMMENTS	ATTACHME...	USER UPDATE	DATE UPDATI...
1.500	029703022		10/10/2008		OV - Overlay					
2.000	029703022		10/10/2008		OV - Overlay					
0.500	029703022		10/10/2008		OV - Overlay					
1.000	029703022		10/10/2008		OV - Overlay					
1.500	029703022		10/10/2008		OV - Overlay					
1.999	029703022		10/10/2008		OV - Overlay					
0.500	029703022		10/10/2008		OV - Overlay					
1.000	029703022		10/10/2008		OV - Overlay					
1.500	029703022		10/10/2008		OV - Overlay					
1.998	029703022		10/10/2008		OV - Overlay					
0.500	029703022		10/10/2008		OV - Overlay					
1.000	029703022		10/10/2008		OV - Overlay					
1.500	029703022		10/10/2008		OV - Overlay					
1.847	029703022		10/10/2008		OV - Overlay					
0.500	029703022		10/10/2008		OV - Overlay					
1.000	029703022		10/10/2008		OV - Overlay					
1.500	029703022		10/10/2008		OV - Overlay					
2.143	029703022		10/10/2008		OV - Overlay					

# Crash Data & Wet Surface Crash Reduction Data

Secure | [https://txpms.agileassets.com/PMS\\_TX/Kernel/w\\_main.jsp?AA\\_SID=2d34ea89-1a23-4485-b0](https://txpms.agileassets.com/PMS_TX/Kernel/w_main.jsp?AA_SID=2d34ea89-1a23-4485-b0)

Pavement Mgmt ▾ Database ▾ Analysis ▾ Reports ▾ Setup ▾ Utilities ▾ GIS ▾

Pavement Mgmt > Database > Condition Data ☆

Menu ▾

FISCAL YEAR	RESPONSIBLE DISTRICT
2018	18 - DALLAS

- Condition Data ▾
- Construction ▾
- Crash Information System Data ▾
  - Crash Data
  - Wet Surface Crash Reduction Data
  - Wet Surface Crash Reduction Map Data
- Inventory ▾
- Static Tables ▾
- TxPROS Permits

# PA 4-Year Plan Maps / Pavement Management System

Secure | [https://txpms.agileassets.com/PMS\\_TX/Kernel/w\\_main.jsp?AA\\_SID=a6a2d209-5954-4af1-a33e-8ddc](https://txpms.agileassets.com/PMS_TX/Kernel/w_main.jsp?AA_SID=a6a2d209-5954-4af1-a33e-8ddc)

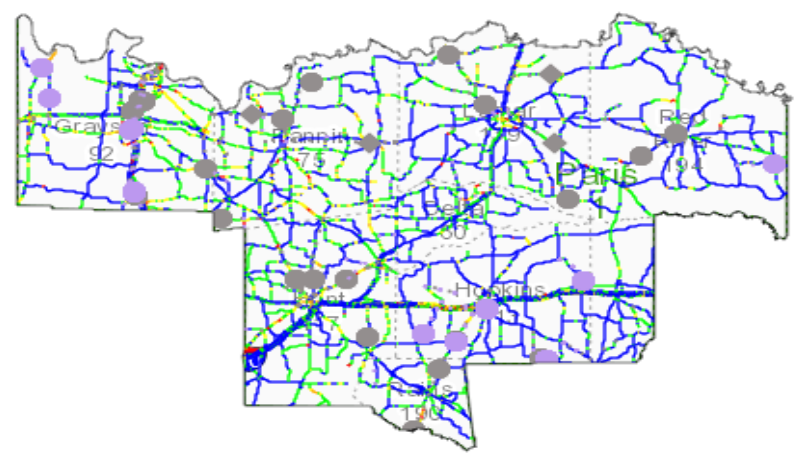
Pavement Mgmt | Database ▾ | Analysis ▾ | Reports ▾ | Setup ▾ | Utilities ▾ | GIS ▾

Pavement Mgmt > GIS > GIS Explorer ☆

The 4 Year Plan 2018

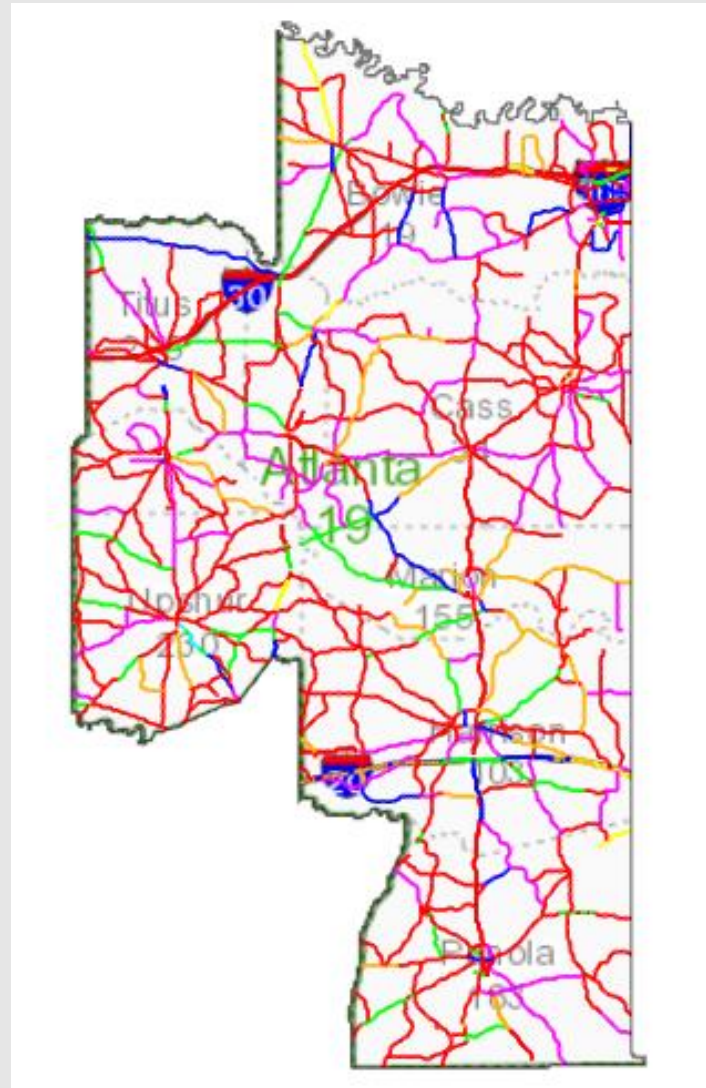
DISTRICT\_NAME = 01 - P... Cro

Layers	+ Layer	+ Group	Map Filter
2018 CMPS 4YP PM AND REHAB	▼	👁️	⋮
2018 DCIS 4YP PM AND REHAB	▼	👁️	⋮
2018-2019 4YP ROUTINE MAINTENANCE	▼	👁️	⋮
2018 DCIS 4YP PROJECT	▼	👁️	⋮
2019 DCIS 4YP PROJECT	▼	👁️	⋮
2020 DCIS 4YP PROJECT	▼	👁️	⋮
2021 DCIS 4YP PROJECT	▼	👁️	⋮
2022 DCIS 4YP PROJECT	▼	👁️	⋮
2018 CMPS 4YP PROJECT	▼	👁️	⋮
2019 CMPS 4YP PROJECT	▼	👁️	⋮
2020 CMPS 4YP PROJECT	▼	👁️	⋮
2021 CMPS 4YP PROJECT	▼	👁️	⋮
2022 CMPS 4YP PROJECT	▼	👁️	⋮
CONDITION SCORE CLASS 2017	▼	👁️	⋮



# Surface Age Map

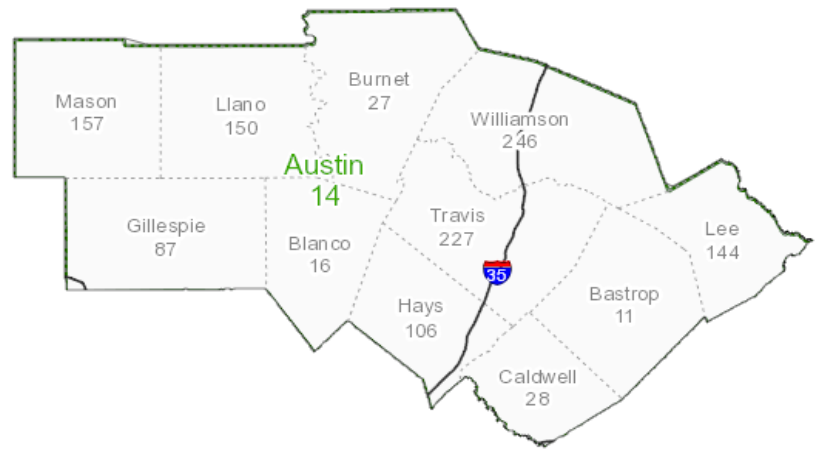
- Districts have a tool to create a surface age map.
- Surface Age map could help districts plan future projects.



# Skid Data & Wet Surface Crash Map

Wet Surface Crash 4YP | DISTRICT\_NAME = 14 - A... | Crop

- Layers
- FY2016-TOTAL WET PAVEMENT CRASHES
  - FY2016-TOTAL CRASHES
  - FY2016-PCT Wet surface Crashes
  - FY2016-RAW SKID DATA
  - FY2015-RAW SKID DATA
  - FY2014-RAW SKID DATA
  - FY2013-RAW SKID DATA
  - REFERENCE MARKERS
  - TXDOT ROUTES



# Optimization Analysis

Secure | https://txpms.agileassets.com/PMS\_TX/Kernel/w\_main.jsp?AA\_SID=2d34ea89-1a23-4485-b023-63fc14fd66f&window\_id=pms\_optimization

Pavement Mgmt Database Analysis Reports Setup Utilities GIS

Pavement Mgmt > Analysis > Network Analysis > Optimization Analysis

Save Reload

\* Setup Results Constr Results Report Summary Reports

Find Scenario

\* Scenarios Menu

\* ANALYSIS TYPE  
Multi-Constraint

HAS RESULTS

\* YEAR OF CONDITION DATA  
2018

ANALYSIS LENGTH (Years)  
4

\* SAVE DETAILS

\* DECISION TREE SET  
CTR Tree

Analysis Scope

WORK PLAN TYPE  
4 YearPlan Combined Compass/DCIS

<< < 1 of 282 total rows >>

Yearly Financial Parameters Menu

YE...	DISCOUNT RATE	INFLATION FACTOR
1		0

<< < 1 of 4 total rows >>

Constraints Menu

IS OBJECTIVE	CONSTRAINT COLUMN	CONSTR. TYPE	CONSTRAINT LIMIT VAL...	CONDITION THRES...	SCENAR...	ADD CONSTR
<input checked="" type="checkbox"/>	CONDITION SCORE PERFORMANCE	Weighted Avg				
<input type="checkbox"/>	TREATMENT COST	Total	8,187,960.9998		1 County	
<input type="checkbox"/>	TREATMENT COST	Total	6,487,651.4102		1 County	
<input type="checkbox"/>	TREATMENT COST	Total	8,786,335.5401		1 County	
<input type="checkbox"/>	TREATMENT COST	Total	3,531,260.5492		1 County	
<input type="checkbox"/>	TREATMENT COST	Total	11,425,429.2297		1 County	
<input type="checkbox"/>	TREATMENT COST	Total	7,755,507.1985		1 County	
<input type="checkbox"/>	TREATMENT COST	Total	15,794.0000		1 County	

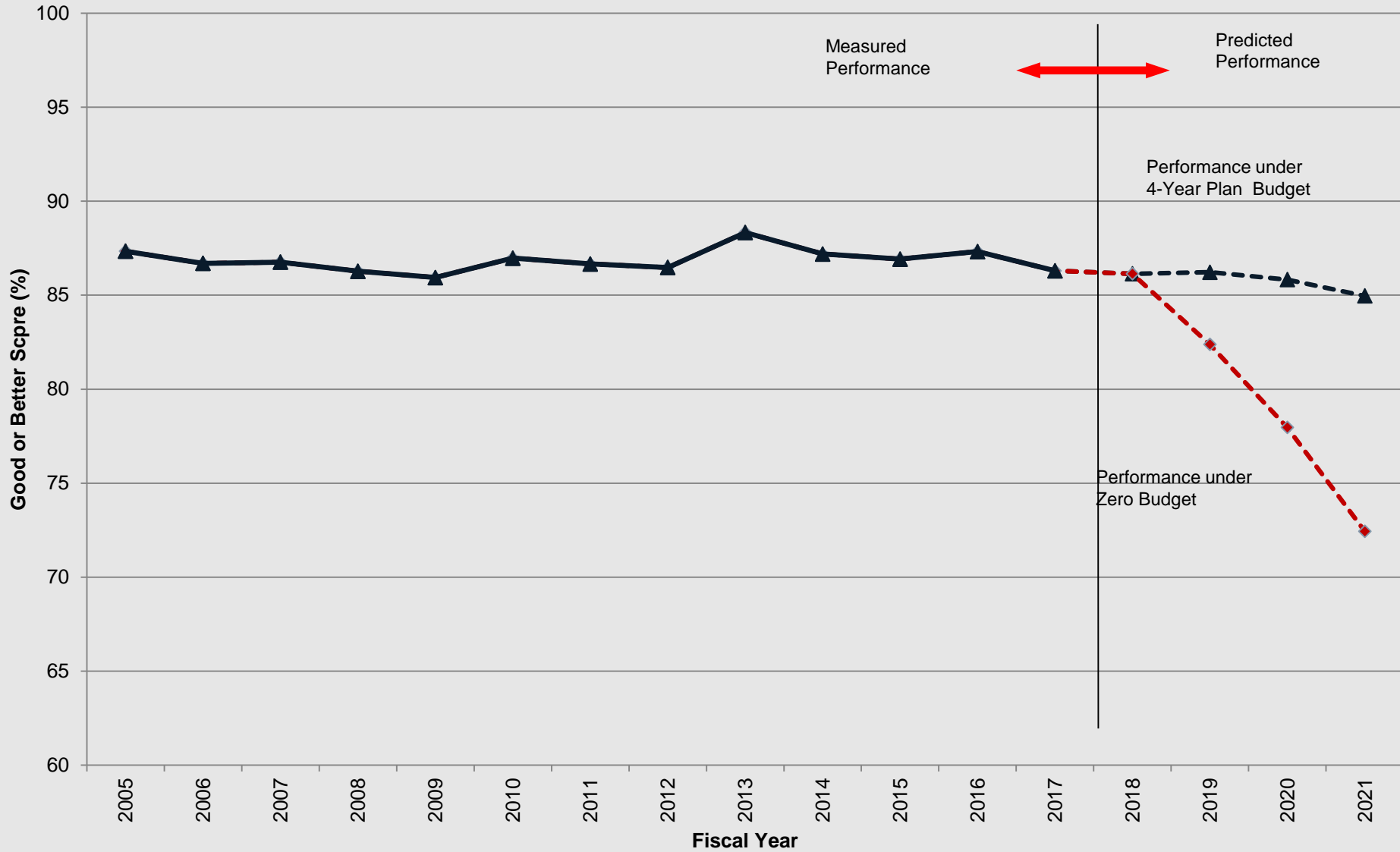
<< < 1 of 1017 total rows >>

Reporting Functions Menu

CONSTRAINT ...	CONSTR. TYPE	CONDITION THRESHO...	ADD CONSTR.	CONSTRAINT SUBDIVISION

<< < 0 of 0 total rows >>

# Pavement Management Plan Results





# Pavement Management Plan Results

