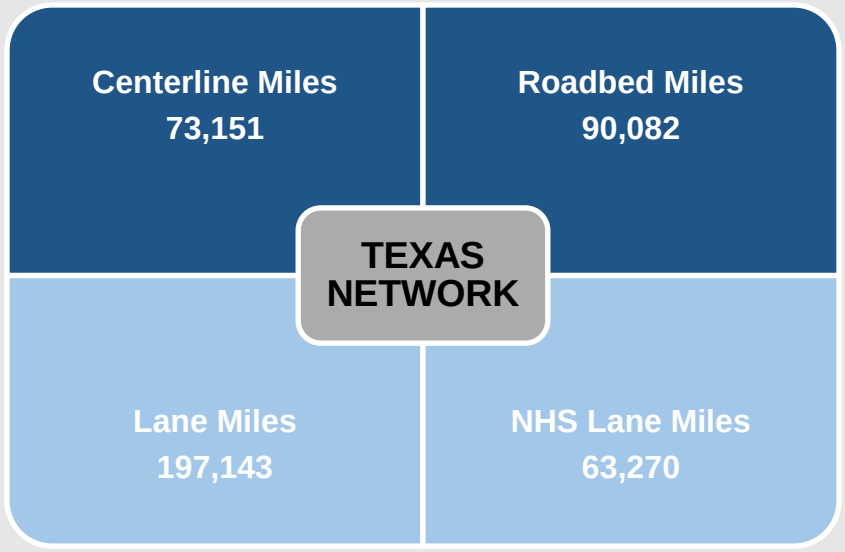
TEXAS DEPARTMENT OF TRANSPORTATION

STATE OF TEXAS REPORT

"A Report on Asset Conditions, Management, and Impacts"

Agenda

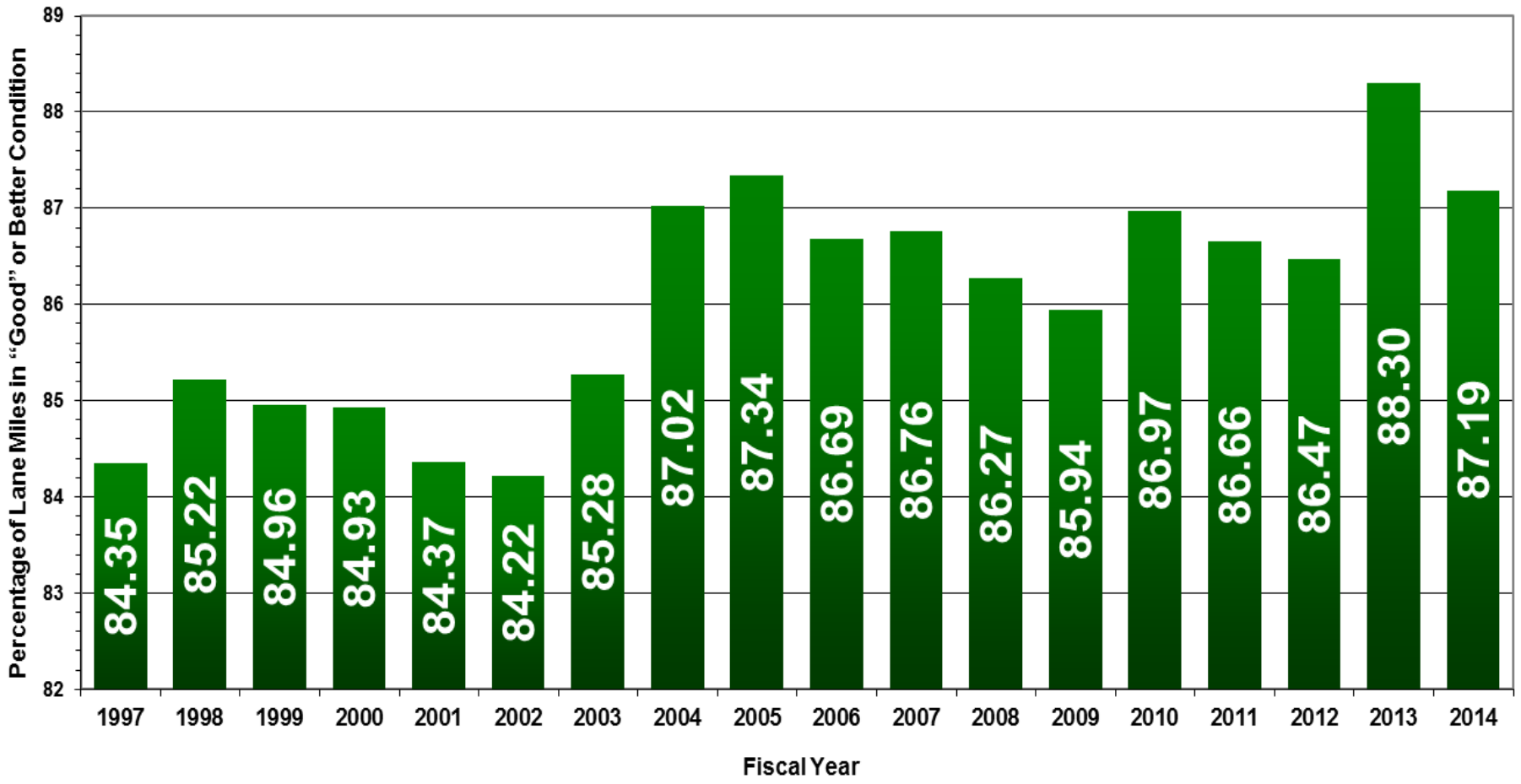
Pavement Asset Conditions



Pavement Asset Conditions

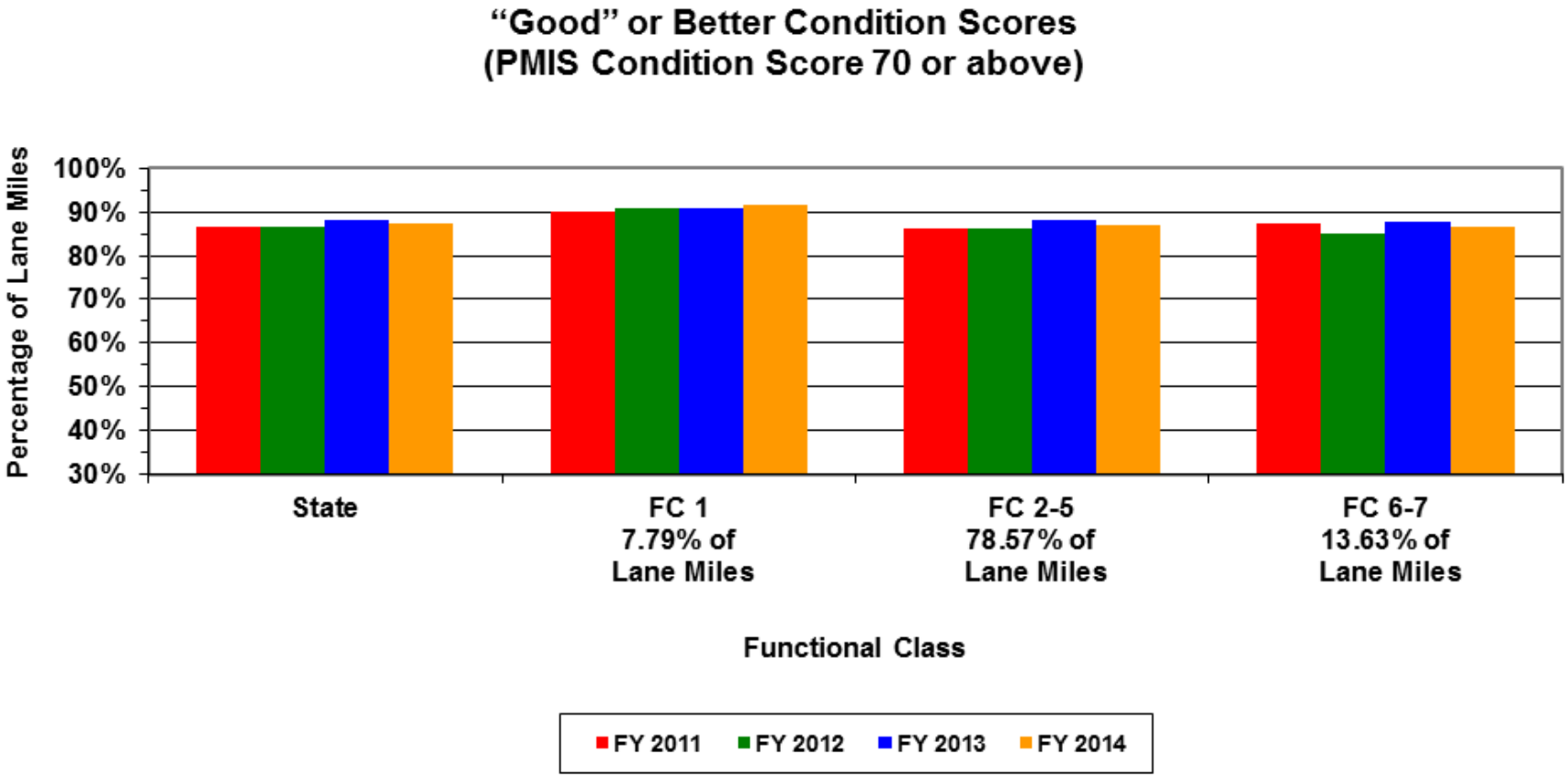
FUNCTIONAL CLASSIFICATION				
Functional Class (FC) FHWA Code	1	#2-#5	#6-#7	NHS
Lane Miles % of Network	8%	78%	14%	32%
Vehicle Miles Traveled % of Network	33%	66%	1 %	74%

Pavement Asset Conditions



Overall Statewide Pavement Condition Scores

Pavement Asset Conditions



FC 1: Improved FC 2-5: Declined FC 6-7: Declined

TxTAMP

PHASE 1: DEVELOP

INITIAL TAMP

- 75% Complete
- Capture existing asset inventory and condition.
- Examine future asset condition targets.
- Conduct a gap evaluation.
- Perform financial and investment analysis.
- Conduct risk analysis.

PHASE 2: IMPLEMENT

LIVING TAMP

- 5% Complete
- Identify TAMP assignments and tasks as a result of gap evaluation and risk analysis.
- Establish a work-plan and communication tool to address these assignments and tasks.
- Track results.

PHASE 3: MANAGE

SUSTAINABLE TAMP

- 5% Complete
- Align performance targets with functional asset expectations.
- Align performance targets with “External Impacts” to deterioration rates.

TxTAMP PROJECT MISSION

“To align system performance with financial resources and meet Department performance measures while improving cross asset relationships for the greater good.”

TxTAMP

Phase 1: Develop
Draft initial TxTAMP complete July 2014…

Phase 2: Implement
Address risks and gaps July 2014 to July 2015…

Phase 3: Manage
Final initial TxTAMP functioning July 2015, so on

TxTAMP Project Goal

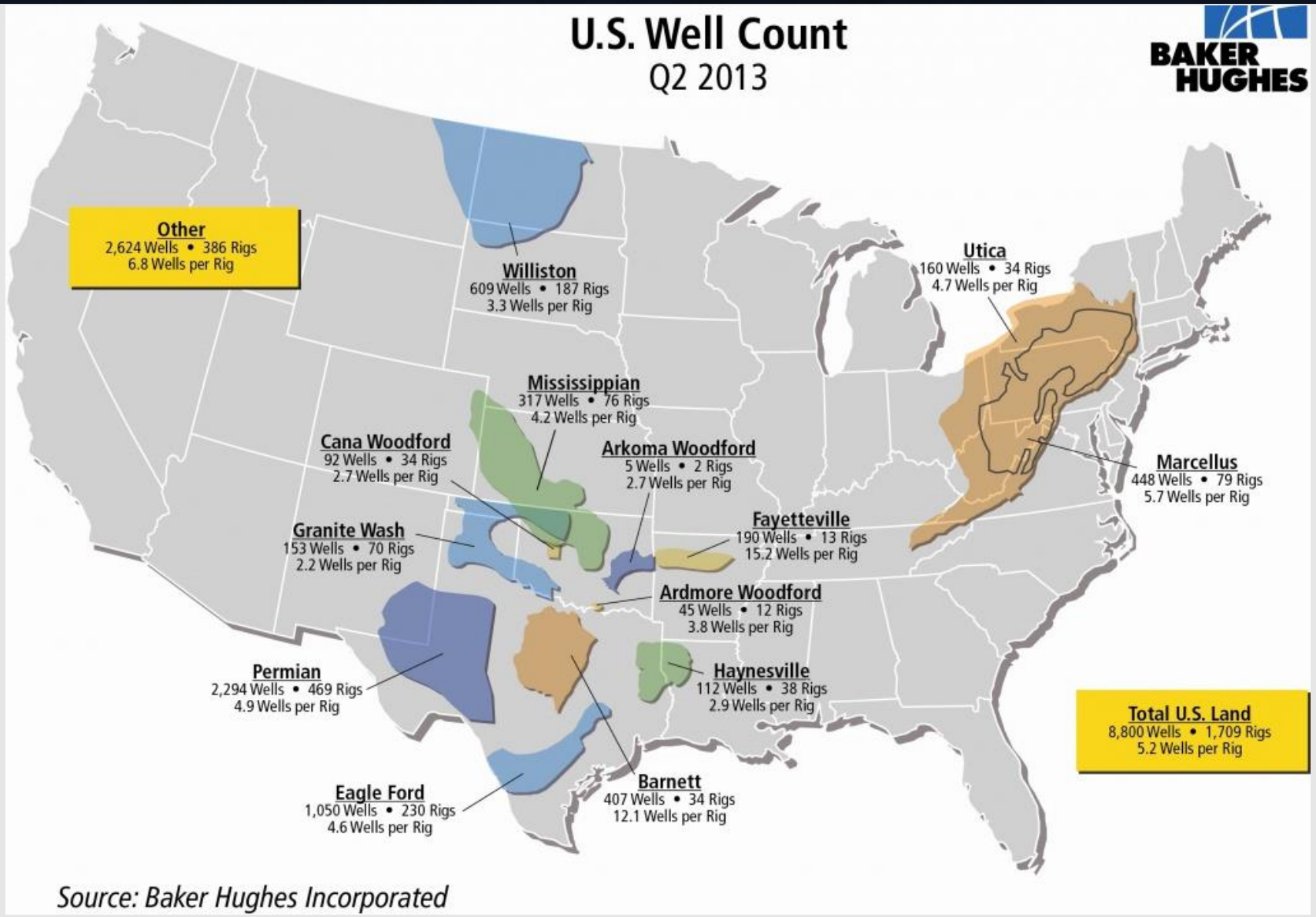
"To have a fully functioning TAMP which will improve project, policy, and investment level decision making and ensure TxDOT is federally compliant."

Transportation Asset Impacts: Energy Sector

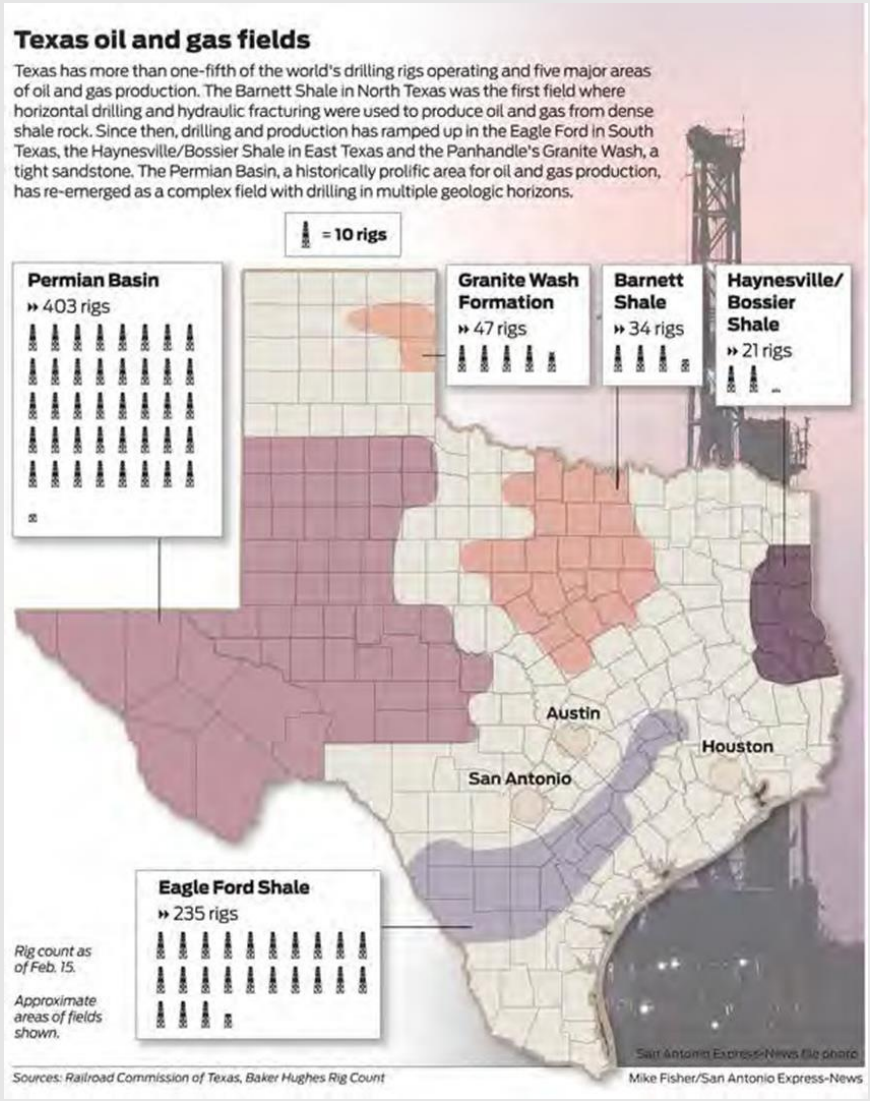
Energy Sector Roadway Impacts

Energy Sector Roadway Impacts

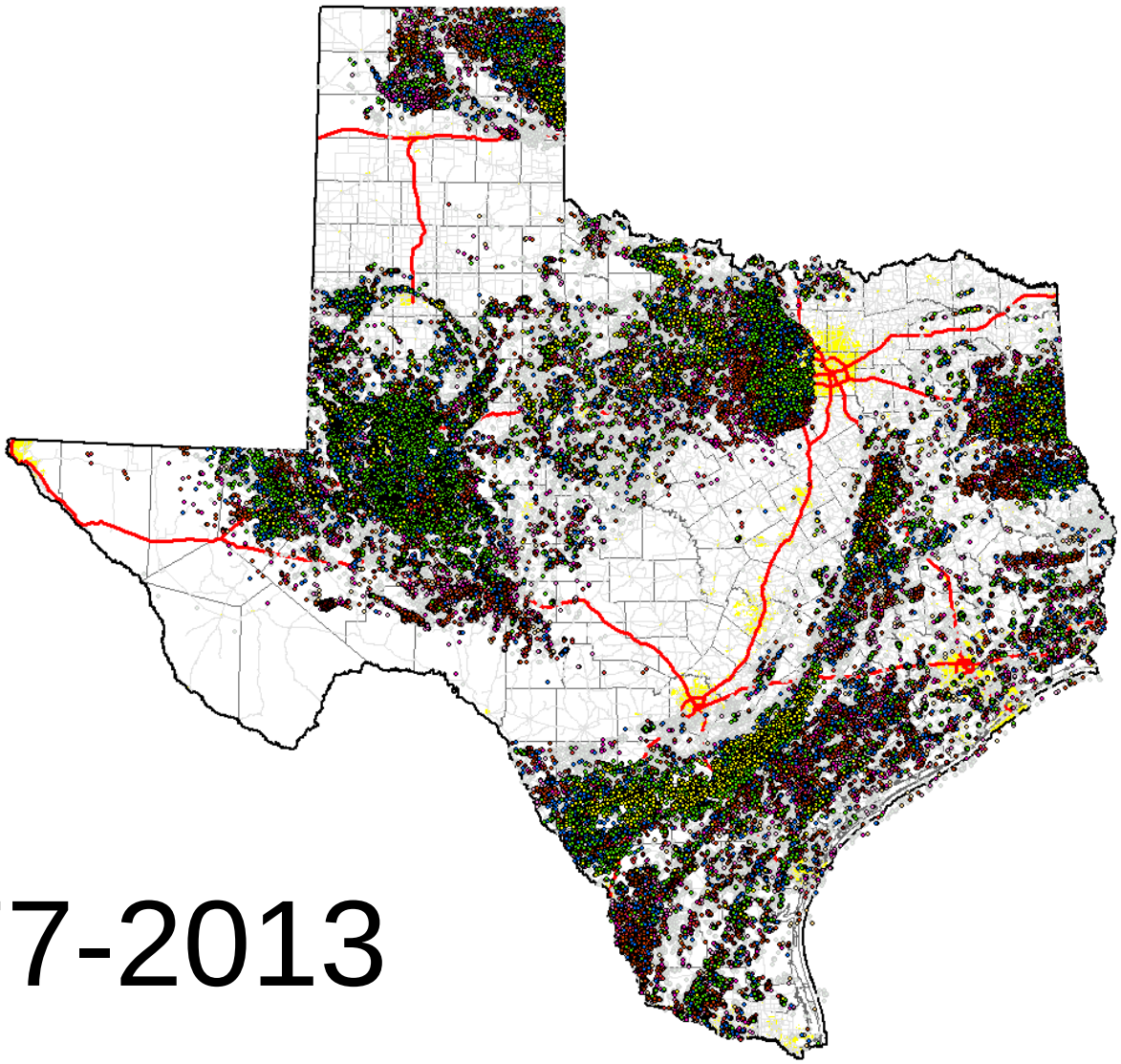
Nationwide Production



Texas Oil and Gas Regions



Statewide Well Production



1977-2013

Infrastructure Damage

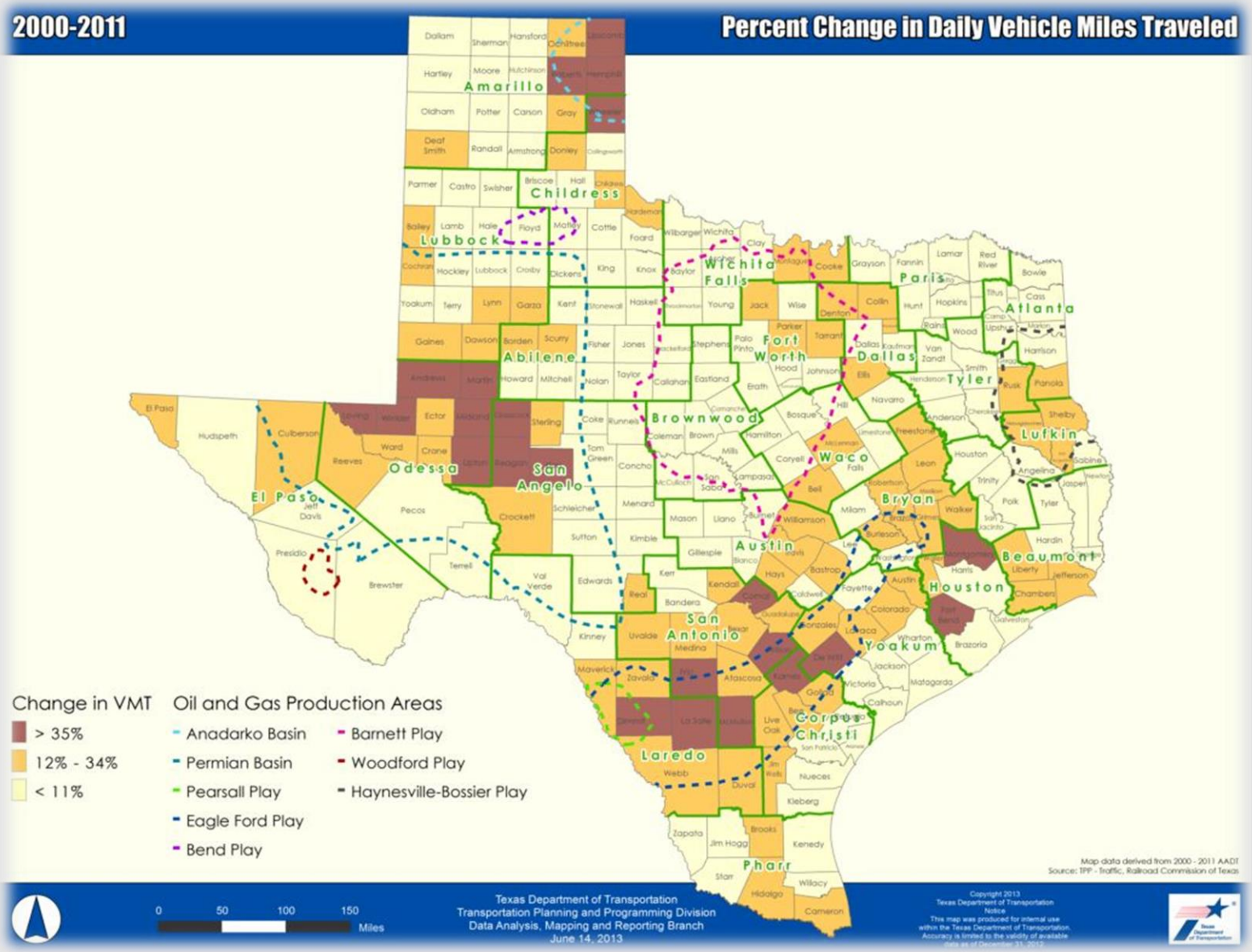
Rutting and Edge Failures

Surface Damage and Deformation

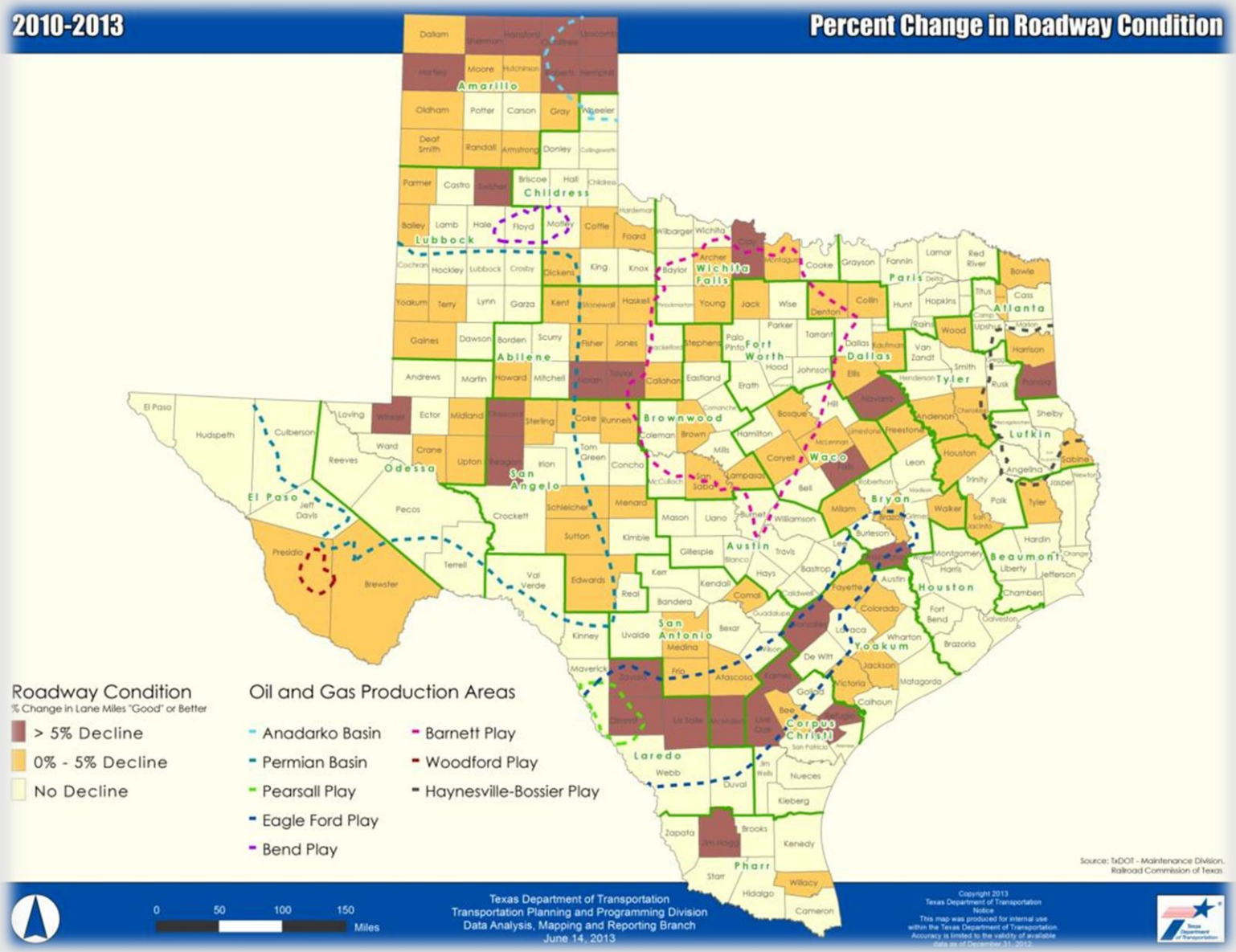
Fatigue Cracking and Failures

Edge Drop Offs and Erosion

Traffic Growth Related to Growing Energy Activity



Pavements Condition Impacts



Conclusions, Remarks and Lessons Learned

- Statewide pavement condition is being maintained while experiencing extremes from energy sector impacts
- TxTAMP on target to be compliant with MAP21 implementation requirements

- Energy sector activity increasingly impacting roadway assets
- Challenge to measure energy sector impacts with rapidly changing activity

- Developing a knowledge base of pavement treatments and structural sections for energy sector vehicles
- Using protective strategies to mitigate roadway deterioration