# KANSAS CONCRETE PAVEMENT TECH DAY

## SPS-2 - WHAT IS IT?

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Abilene Kansas
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# SPS-2 - WHAT IS IT?

# SPS-2 IS A PAVEMENT PRESERVATION EXPERIMENT

## TRANSPORTATION POOLED FUND

# WHAT IS A POOLED FUND?

A Pooled Fund is an opportunity for the states to become involved in large projects with a smaller individual state investment

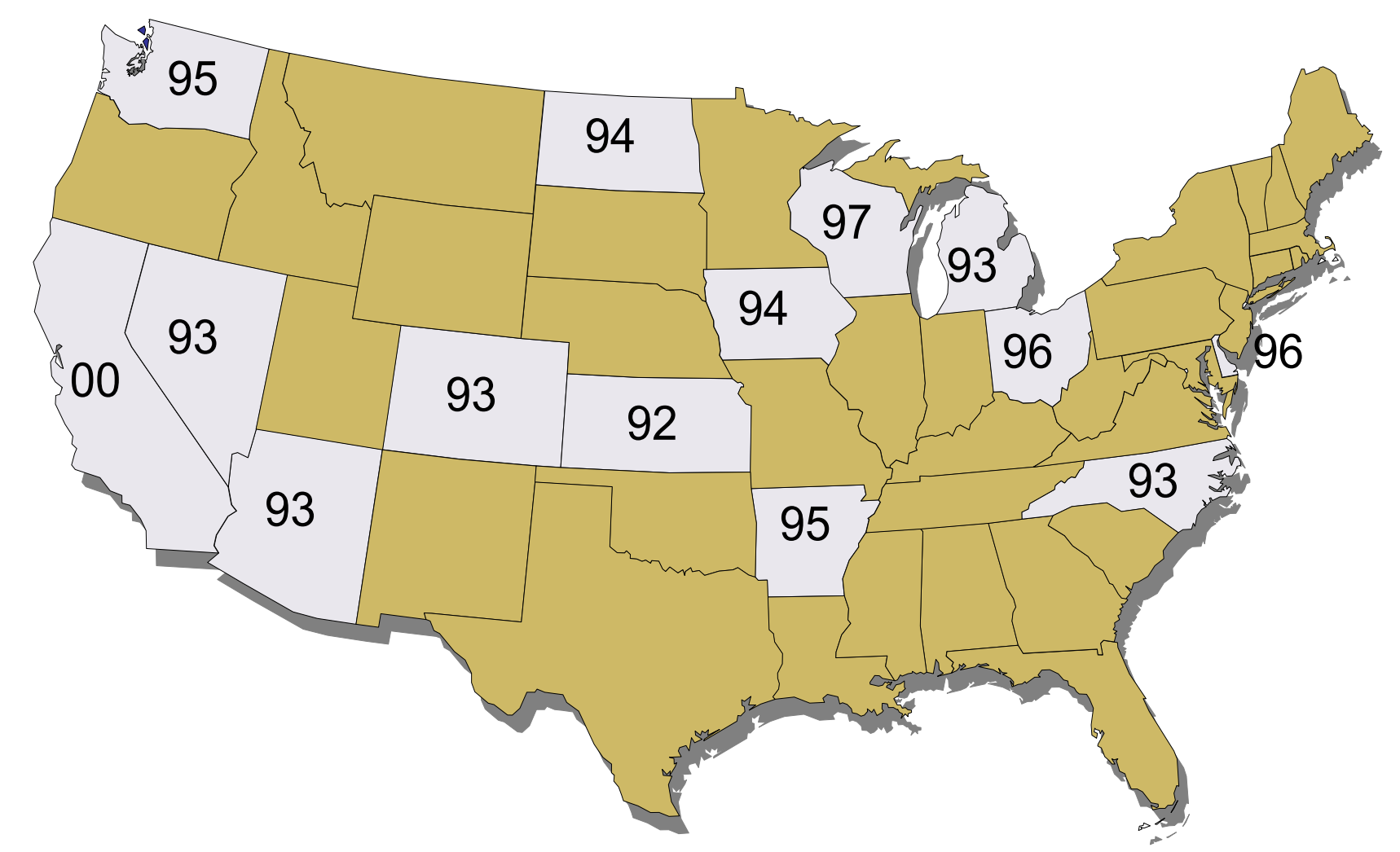
# LTPP SPS-2 EXPERIMENT IS THE MOST COMPREHENSIVE ON GOING CONCRETE RESEARCH EFFORT IN THE NATION

WITH AN INVESTMENT OF $20 MILLION

SPS-2 WAS STARTED IN 1992

FOURTEEN STATES CONSTRUCTED PROJECTS

# THE 14 STATES



# WHAT MAKES THE SPS 2 SPECIAL?

Sampling and Testing of Materials

Monitoring the Materials Throughout Construction

Monitoring the Pavement Performance Throughout the Service Life

Extensive Material Characterization

Performance Monitoring

Environmental and High Quality Traffic Data Collection

# STUDY FACTORS FOR RIGID PAVEMENT

- Concrete Thickness of 8 and 11 inches
- Base Type
  - Lean  Cement Base
  - Dense Graded Asphalt Base
  - Permeable Asphalt Treated Base
- Flexural Strength of 550 psi and 900 psi
- Slab Width of 12 feet and 14 feet
- Temperature – Freeze and No Freeze
- Precipitation – Wet and Dry
- Subgrade – Fine and Coarse

# KANSAS BUILT THE FIRST ONE IN 1992

# WHAT’S NEXT?

# TPF 5(291)

# THERE ARE 7 STATES COMMITTED AT THIS TIME

Arizona, California, Colorado, Georgia, KANSAS, North Carolina and Washington.

# THE NEW PROJECT OBJECTIVES

Develop a Second Tier Experiment

Define Proper Intervention Timing and Strategy

More Effective Infrastructure Management

Pavement Life Extension

Develop Tools for Determining Strategy and Pavement Life Extension

# OPPORTUNITIES

Life Extension of Concrete Pavement

Development of PMS Triggers

Improved Ride Quality

PCCP Design Life Verification

Comparison of Structural Capacity to Remaining Service Life

Sealant Research

Texture Durability

# OPPORTUNITIES

Material Property Changes Over Time

Measurement of Solar Reflectance

Rolling Resistance Measurement

Evaluation of Joint Opening Movement

Curl and Warp Analysis

Development of Best Preservation Techniques and Materials

Evaluation of Non-Destructive Test Devices


# Kansas

## Department of Transportation