

# In-Place Recycling in Kansas



# KDOT Demographics

- 10,300 mile state system, 26,100 lane miles
- Average 350 projects per year over last 5 years
  - Average \$520 million per year on all projects
  - Average \$180 million per year on pavement preservation (over 1,200 miles)

# State Animal – American Buffalo



# HIPR



# KDOT's Experience with HIPR

- Surface recycle – 2” heat/mill and 1” heat/scarify
- Surface course – chip seals, HMA overlay, bonded wearing course, microsurfacing
- 85 projects over last 5 years, 1,280 miles
  - Total project cost = \$144 million
    - Surface recycle + ARA = \$79 million
- Remixing job scheduled for 2015

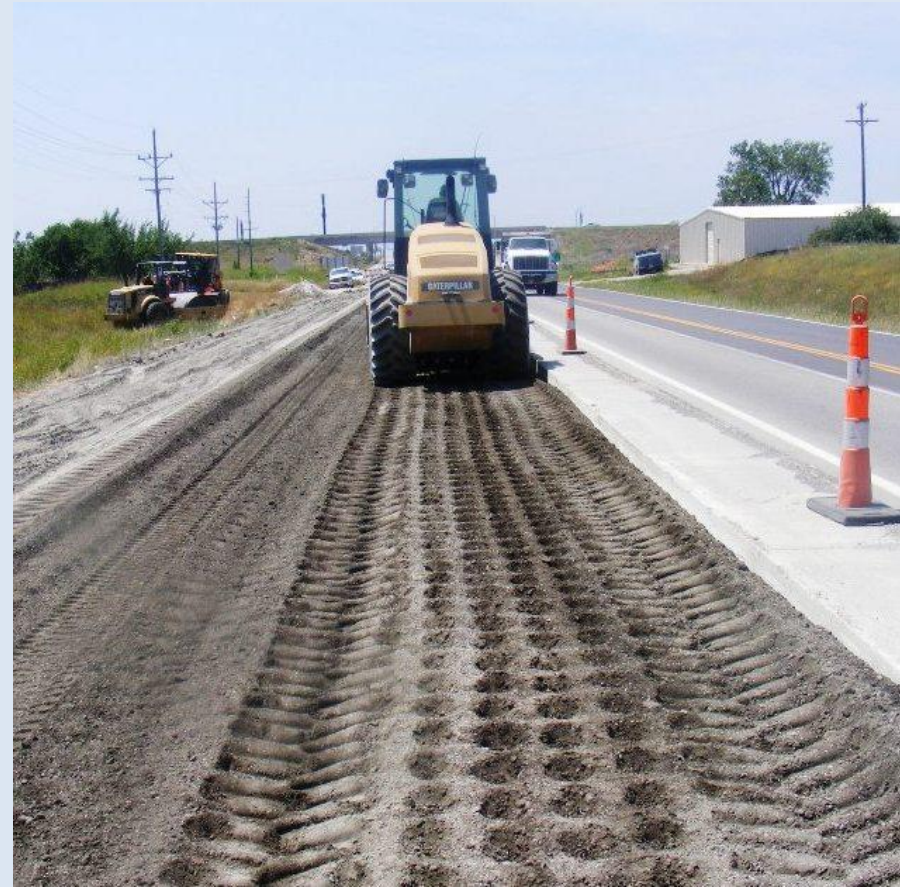
# CIPR



# KDOT's Experience with CIPR

- 4" CIPR using lime/emulsion with  $\geq 1.5$ " HMA overlay
- 5 projects over past 5 years, 56 miles
  - Total project cost - \$18.4 million
    - CIPR + lime + emulsion = \$5.0 million

# FDR





# KDOT's Experience with FDR

- No projects let with FDR
- Change ordered on two projects over last 5 years
  - One with 7" FDR – existing HMA base degraded during construction
  - Other with 12" FDR – existing HMA base in poor condition
  - Cement Stabilized