NCAT Partnership History

Tennessee Department of Transportation
2 Sections of 125 Gyration Superpave Mix with a TDOT BM-2 binder (25-mm) and D surface (12.5-mm) lifts.

- High gyrations -> low AC -> poor fatigue life
- Conclusion: Tennessee is a Marshall State.
2003

- 3 Sections
  - 75-gyration surface
  - SMA
  - OGFC

- All performed well, leading to trial projects of SMA and OGFC.

- Eventual widespread use of OGFC statewide
2006

- Continued traffic on 2003 Sections
  - 75-gyration surface
  - SMA
  - OGFC

- New surface section utilizing RAP
  - Successful section: leading to adoption of limited RAP use in Tennessee Surface Mixes.
Multi-state WMA and High RAP Study

Successful use of WMA encouraged approval of warm mix technologies for use on DOT projects in Tennessee.
2012

- Pavement Preservation Group Study Sponsor
- OGFC mixture with Shingles
- RAS approved for use in Tennessee limited at 5%, later reduced to 3%.
- Several Preservation methods adopted into growing Preservation Program.
2015

- Pavement Preservation Group Study Sponsor

- “Thick Thin-lift” Placed a typical TDOT TL mix (4.75mm) at a standard surface course thickness.

- Mix has performed well (little cracking or rutting), possible use of TL mixes in a more expanded role in the near future.
Pavement Preservation Group Study Sponsor

- Continue traffic on the TL section, with half of the section fog sealed.

- Continued observations on the durability of the TL mix as well as what effect on preservation fog sealing will have on traffic lanes.