

Southeastern Pavement Preservation Partnership

April 25-26, 2007 Raleigh, North Carolina

TDOT Pavement Management System

The TDOT Pavement Management System is based in the Highway Pavement Management Application (HPMA) by Stantec. It was instituted in 1997. Our input data consists of smoothness (IRI) and distress data collected by Mandli Communications. Rutting data is collected but not incorporated into the final analysis.

The IRI data is converted in to a Present Serviceability Index (PSI scale from 0 to 5 with 5 being the best).

The distress data is shown as Pavement Distress Index (PDI) and is calculated by deducting values for the various distresses. The scale for PDI is the same as for PQI. We collect data on 7 different distresses:

- Fatigue Cracking
- Longitudinal Wheelpath Cracking
- Block Cracking

TDOT Pavement Management System

- Transverse Cracking
- Longitudinal Lane Joint Cracking
- Longitudinal Non-wheelpath Cracking
- Patching

The PSI and PDI are combined to give an all-around index called the Pavement Quality Index (also from 0 to 5). This score is reported for each state highway. By itself, the PQI score is not used to select resurfacing candidates.

Our targeted resurfacing cycle is at 11 years for Interstates and 13 years for all other State Routes.

STATISTICS

INVENTORY - Interstate and State Routes

- 13,797 roadway miles
- 35,008 lane miles

PAVEMENT PRESERVATION OPTIONS USED

- Crack Sealing
- Fog Sealing
- Microsurfacing
- 1.25" Asphalt Overlays
- Slurry Seals
- Sand Seals

PAVEMENT PRESERVATION OPTIONS BY PERCENT OF USE

- 1.25" Overlays (99.99%)
- Crack Sealing (00.01%)
- Others (00.00%)

BACKGROUND

"The industry has had major layoffs," said Kent Starwalt, a lobbyist for the Tennessee Road Builders Association.

He said a "perfect storm" hit the industry hard in the past few years, with a slow economy, rising prices, TDOT's road funds cut last year and rainy weather.

About \$85 million is proposed in the TDOT budget for resurfacing, up from \$73 million this year.*That's still lower than the \$100 million the year before.

At the same time, the \$65 million taken from the roads fund to balance the state's overall budget last year is proposed to be taken from it again.*

Over the past six years about 720 jobs have been eliminated at TDOT (mostly field staff).

At the same time, Tennessee was just recognized for being among states with the nation's best roads in smoothness of ride, markings, construction detours and other categories.

Overdrive magazine polls more than 700 truck drivers nationally each year. Tennessee was listed as No. 3 in the latest survey, with Texas as the best, followed by Florida. Georgia was at No. 4. Tennessee has been in the top five since the poll began 13 years ago. (Thursday 02/12/2004 © Nashville Tennessean)

FAST FORWARD to 2007: Highway budget remains stagnant PLUS:

Tennessee Legislature fails to pass open container law = loss of \$60 million dollars in Federal funds for road construction. Additional Federal funding delays + increased costs = fewer road construction projects. TDOT now using Federal funds for NHS resurfacing = cutback on total resurfaced miles due to safety improvement expenditures required.