

CONTINUOUSLY REINFORCED CONCRETE PAVEMENT

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Oregon began using Continuously Reinforced Concrete Pavement (CRCP) in the early 1960's. By 1983, many sections of CRCP reached their anticipated service life of twenty years. Therefore, research on CRCP in Oregon was conducted from 1984 through 1988. Recently, the findings from the research have been published by the Oregon State Highway Division (OSHD) in a final report titled, "Condition Monitoring of Continuously Reinforced Concrete Pavement," March 1991.

The research project consisted of a four-year study of twenty-seven CRCP sites on Oregon state highways. Most of the pavements were between fifteen and twenty-five years old when the last distress survey was conducted in 1988. Some of the sites have endured nearly fifteen million ESAL's and continue to perform well.

A comparison was made of distress observed in the field to distress predicted by equations developed for Texas and Illinois pavements. Oregon's CRCP show significantly less distress than those equations predict. Thus, Oregon's CRCP have a longer service life (time to full depth overlay), than the twenty years anticipated.

Oregon is reported to have some of the best CRCP in the nation. The use of corrosive deicers has been very limited on roads and bridges in Oregon. The current OSHD position is "salts" are not to be used within one-half mile of CRCP; this "prohibition" of corrosive deicers on CRCP in Oregon is expected to keep Oregon as a national leader of quality CRCP.

Conclusions from recent research conducted for the Strategic Highway Research Program (SHRP) indicate the tracking of salt by vehicles is greater than one-half mile but less than one mile. Therefore, an expected recommendation from the SHRP is "salts" not be used within one mile of concrete reinforced with steel. Consequently, the OSHD is considering recommending that "salts" not be used within one mile of CRCP.

If you want a copy of the CRCP report or need additional information, please contact:

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