

COUNTY ENGINEER'S PERSPECTIVE – PLANNING AND DESIGN FOR THE FUTURE

**2008 Road Dust Management Conference
San Antonio, TX**

By

Ken Skorseth

SDLTAP Program Manager

THE ISSUES

- **Dust Control/Stabilization will likely increase**
- **Very few projects are actually designed.**
- **Need better guidance on product compatibility with varying aggregate and soil types.**
- **A great need for a guide at the operations level for road prep and application of products.**

Dust Management Vs Thin Asphalt?



Failure in one year!!





Another Built Last Year – Failing This Year Project



A Remarkable Contrast!

A Chloride Stabilized Road Since 1994!



Without Adequate Funds for Base Improvement and Paving – Stabilized Gravel is an Alternative.



Maitland Rd – Lawrence Co, SD



Heavy Residential Traffic & Continued Development



A Model of Successful Gravel Stabilization for 17 Years



One Section of Maitland Rd With Asphalt Surface



But, Not all Dust Control/Stabilization is Successful!

Near failure of dust control in two months

Gravel - Product Compatibility Issues?



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2% Crown on Surface - Wrong Design!



Almost Complete Failure of an Organic Oil



This product has worked well on other projects. Why?

**And Finally the Control of
Preparation and Application -**

This Road is Not Ready for Surface Treatment



A Positive Contrast – Next Five Slides



**High Quality Surface
Gravel**

6-21-85

Aggressive Surface Preparation



Very good material nicely shaped with 1 ½ to 2 inches of loose material ready for treatment.

4% Crown



Prewetting is Often Needed When Treating Dry Aggregate.



Finally – Good, Controlled Application



When Projects are Done Well – The Performance is Excellent

