

## Technical Memorandum

To: Steve Gramm, SDDOT  
Study Advisory Team

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Subject: Level of Service Policy Guidance

This memorandum provides recommended policy guidance for level of service characteristics of county highways. Level of service is a qualitative measurement of the relative ease of travel experienced by road users. Level of service (LOS) A indicates travel unimpeded by traffic congestion while LOS F indicates traffic flow failure and extreme congestion. A description of the LOS spectrum is shown below:

- A – free flow, low traffic density
- B – minimum delay, stable traffic flow
- C – stable conditions, movements somewhat restricted due to higher volumes, but not objectionable for motorists
- D – movements more restricted, travel speeds begin to decline
- E – traffic fills capacity of the roadway, vehicles are closely spaced, incidents can cause serious breakdown
- F – forced flow with demand volumes greater than capacity resulting in breakdown in traffic flow

The South Dakota Department of Transportation Road Design Manual sets the minimum level of service for rural minor arterial roadways at LOS B and rural collector roadways at LOS C. Setting a level of service goal involves consideration of driver expectation and the ability to fund highway construction. A minimum level of service of C provides a reasonable compromise between free traffic flow and infrastructure cost. Therefore, the minimum level of service for the Hughes County highway system is set at LOS C.