

**Pickering, John**

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**From:** Pickering, John  
**Sent:** Wednesday, March 10, 2004 5:08 PM  
**To:** Purvis, Keith; Whitfield, Robert; Amy Mood; Brad Fletcher; David Seal; Reese, John; Richard Pittman  
**Subject:** FW: lane closure policy

For your information regarding lane closures on Interstate type highways.

-----Original Message-----

**From:** Pickering, John  
**Sent:** Wednesday, March 10, 2004 5:06 PM  
**To:** Wallace, Ken  
**Cc:** Reeves, Kent; May, Ricky; Lewis, Brad; Portera, Joy; 'FHWA - Jeff Kolb'; 'FHWA - Wellborn, Larkin'; Foster, David  
**Subject:** RE: lane closure policy

I like District Five's approach to lane closures. It appears you guys have done some homework regarding this issue. The 2000 Capacity Manual does suggest you can use 1600 pc/h/ln; however, it goes on to explain other conditions that may reduce this base value such as number of trucks, unusual types of work (rubber-necking factor), entrance ramps within 500 feet of a lane closure, and lane width.

I am in agreement with what you said about using the 1500 to 1600 v/h/ln; however, when any of the above factors are involved, that number should be reduced to 1200 to 1400 v/h/ln by applying professional judgment.

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-----Original Message-----

**From:** Wallace, Ken  
**Sent:** Wednesday, March 10, 2004 4:30 PM  
**To:** 'FHWA - Jeff Kolb'; 'FHWA - Wellborn, Larkin'; Foster, David; Pickering, John  
**Cc:** Reeves, Kent; May, Ricky; Lewis, Brad; Portera, Joy  
**Subject:** lane closure policy

Attached are our current lane closure policy, Chapter 22 of the Highway Capacity Manual and an email from Roger McWilliams on a project in Hinds Co. from 2002.

In recent years, Dist. V has struggled with work zone traffic congestion mitigation in the Jackson area. In 2001, during some overlay projects, it became apparent that we would have to address lane closure restrictions on construction projects to prevent contractors from closing lanes of traffic during peak flow times and causing significant backups.

During the next year or so, with Roger McWilliams' help, we developed a system by which to try

and identify those times of day which should be restricted for lane closures – peak flow times. (Email from Roger for a project on I20 west attached).

In our current policy (attached); FHWA does not have to approve a short term closure. A short term closure is defined as one that does not extend through a peak period. In order to know these peak time periods, you must have a sampling of the traffic counts at that location. I try to get at least a week of counts so that Fridays and Saturdays can be looked at closely too. From experience on the telephone with irate drivers, I can tell you that there is definitely more traffic on Friday afternoons than most any other time. Also, most contractors want to work on Saturdays so I look at those days too.

Initially, Roger suggested we use around 1750 vph as the cutoff as to when we would implement a restriction or consider that the beginning of the peak flow. Thru trial and error, I've slowly reduced that number down to about 1250 v/h/lane (for a 2 lane to 1 lane) in the metro area because of the numerous interchanges, etc. I would like to continue to try to identify the peak times of traffic flow on each project in order to hold construction costs down. If there are a few hours during the day that the contractor can work, we should try to take advantage of that. I think the 1200 – 1300 v/h/lane is a good estimate of the threshold at which we should use a lane closure restriction. We have some projects coming up soon where we will have 3 lanes closing to 2 lanes. I would think a conservative number would be about 1500 – 1600 v/h/lane in this case based on the HCM.

Obviously, there are other things we are doing for mitigation such as changeable message signs (with radar), contracts with the highway patrol and local police departments for police patrol and, most importantly, design the project using precast barriers to try to keep two lanes of traffic at all times. But there are times when this will not work, especially on mill/overlays.

I'm sending this email to be sure we are in agreement with the method I'm using of identifying peak flow times. If we can avoid peak flow times then we will only have to consider short term closures. I would think that long term closures will have to be dealt with during the design of the traffic control and, as the policy states, need FHWA approval.

*Ken Wallace*  
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*District V - (601)683-3341*