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**Talmage J Reid\*** (mmreid@yahoo.com), Department of Mathematics, University, MS 38677, and  
**Haidong Wu**, Department of Mathematics, University, MS 38677. *On the number of edges meeting vertices of degree  $k$  in minimally  $k$ -connected graphs.*

We give a lower bound on the number of edges meeting some vertex of degree  $k$  in terms of the total number of edges in a minimally  $k$ -connected graph. This lower bound is tight if  $k$  is two or three. The extremal graphs in the case that  $k = 2$  are characterized. We also give a lower bound on the number of elements meeting some 2-element cocircuit in terms of the total number of elements in a minimally 2-connected matroid. This lower bound is tight and the extremal matroids are characterized. (Received October 03, 2000)