

**Bollobás, Béla; Brightwell, Graham**

**Cycles through specified vertices.** (English) Zbl 0780.05033

*Combinatorica* 13, No. 2, 147-155 (1993).

The authors relax a minimum degree condition on a graph which guarantees long cycles and consider a set  $W$  of vertices with degree at least  $d \geq 1$ , in a graph  $G$  with  $n$  vertices in total. Without imposing any further conditions on  $G$ , it is shown that there is a cycle in  $G$  containing at least  $\lceil \frac{|W|}{\lfloor n/d \rfloor - 1} \rceil$  vertices in  $W$ . Extremal graphs are produced to show that the result is best possible.

Reviewer: [R.E.L.Aldred \(Dunedin\)](#)

**MSC:**

**05C38** Paths and cycles

**05C35** Extremal problems in graph theory

Cited in **2** Reviews  
Cited in **30** Documents

**Keywords:**

extremal graphs; long cycles

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**References:**

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