1040-05-58 **Ronald J. Gould*** (rg@mathcs.emory.edu), Dept. of Mathematics and Computer Science, Emory University, Atlanta, GA 30322, and **Ralph J. Faudree**, **Michael S. Jacobson** and **Colton Magnant**. *Distributing Vertices on Hamiltonian Cycles.*

Let G be a graph of order n and $3 \leq t \leq \frac{n}{4}$ be an integer. Recently, Kaneko and Yoshimoto provided a sharp $\delta(G)$ condition such that for any set X of t vertices, G contains a hamiltonian cycle H so that the distance along H between any two vertices of X is at least $n/2t$. In this paper, minimum degree and connectivity conditions are determined such that for any graph G of sufficiently large order n and for any set of t vertices $X \subseteq V(G)$, there is a hamiltonian cycle H so that the distance along H between any two consecutive vertices of X is approximately $\frac{n}{t}$. Furthermore, we determine the δ threshold for any t chosen vertices to be on a hamiltonian cycle H in a prescribed order, with approximately predetermined distances along H between consecutive chosen vertices. (Received January 18, 2008)