Support of Voice over Internet Protocol (VoIP) services in wireless mesh networks requires implementation of efficient policies to support low-delay data delivery. Multipath routing is typically supported in wireless mesh networks at the network level to provide high fault tolerance and load balancing because links in the proximity of the wireless mesh gateways can be very stressed and overloaded, thus causing scarce performance. As a consequence of using multipath solutions, lower delay and higher throughput can be supported also when a given path is broken because of mobility or bad channel conditions, and alternative routes are available. This can be a relevant improvement especially when assuming that real-time traffic, such as VoIP, travels into the network. In this paper, we address the problem of Quality of Service (QoS) support in wireless mesh networks and propose a multipath routing strategy that exploits the Mean Opinion Score (MOS) metric to select the most suitable paths for supporting VoIP applications and performing adaptive load balancing among the available paths to equalize network traffic. Performance results assess the effectiveness of the proposed approach when compared with other existing methodologies.