Hub and spoke networks imply a tradeoff between congestion and service levels, and are important to understanding the nature of the contemporary airline industry. Further, the hub and spoke network is emerging as the central component of airline network planning and since such a strategy promises to channel a greater proportion of flights to a smaller number of major airports, it follows that the potential for air system congestion will continue to rise. In this paper, the relationship between hub and spoke networks and congestion is analyzed.