In 2003, Ozsváth and Szabó defined the concordance invariant $\tau$ for knots in $S^3$ as part of the Heegaard Floer homology package. In 2011, Sarkar gave a combinatorial definition of $\tau$ and proof that $\tau$ gives a lower bound on the slice genus of a knot. We define a $\tau$ invariant for links. Using techniques similar to those of Sarkar, we show that the $\tau$ invariant can be an obstruction to a link being slice. (Received August 10, 2015)