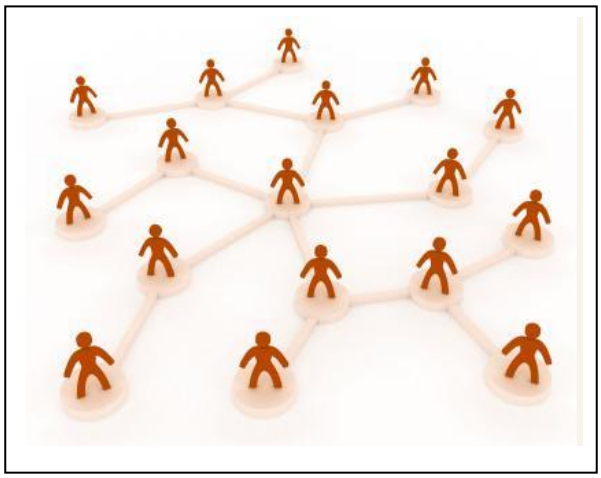
Social Network Theory and City Planning.

Networks are essential elements of every city and town. The city planning profession does not study, in my experience, the theory and practice of network design and management anymore than it studies *systems*…to the detriment of ourselves and our clients. **Social Network Theory** [SNT] can be augmented by **Metcalfe's Law**, summarized below. Though not intended for application to social systems, SNT is directly applicable to city planning in that networks with more "nodes" or participants, are more powerful than networks with fewer members.

Social networks, when purposefully employed, offer great possibilities for civic participation, community dashboards and multi-discipline planning teams. The social aspect of sustainability theory requires understanding social networks: their potential usefulness or harm. Social networks are inherent to every small city and town and can be constructive when understood and employed in the local planning process.

What Is Social Network Theory?

By Charlie R. Claywell Web Designer



Social Network Theory is the study of how people, organizations or groups interact with others inside their network. Understanding the theory is easier when you examine the individual pieces starting with the largest element, which is networks, and working down to the smallest element, which is the actors [or nodes in Metcalfe's Law].

LINK:
https://socialnetworking.lovetoknow.com/What_is_Social_Network_Theory#:~:text=Social%20Network%20Theory%20is%20the,element%2C%20which%20is%20the%20actors.

Metcalfe's Law.

"Metcalfe's Law" says that a network's value is proportional to the square of the number of nodes in the network. The end nodes can be computers, servers and simply people. For example, if a network has 10 nodes, its inherent value is 100 (10×10=100). Add one more node, and the value is 121. Add just one more and the value jumps to 144; networks experience non-linear, exponential, growth.

LINK: https://www.computerhope.com/jargon/m/metcalfe.htm