1163-37-552 **Gangaram S. Ladde*** (`gladde@usf.edu`), Department of Mathematics and Statistics, University of South Florida, 4202 East Fowler Avenue, CMC 342, Tampa, FL 33620-5700. *A Foundation for Dynamic Binary State Processes.* Preliminary report.

By introducing the concepts of forward and backward dynamic flows, important structural, quantitative and qualitative features are investigated in systematic and coherent manner. Several examples are give to illustrate role and scope of the concepts. The binary state potential energy and activation processes are special cases of dynamic flow plows processes. The byproduct of this initiates a study of conceptual dynamic network systems in a coherent manner. In fact, it provides a basis for dynamic algorithm for investigating binary digital state dynamic processes in a systematic and unified way. The modeling dynamic approach is based on historical development of classical models of McCulloch-Pitts, biological and social processes coupled with feedback process in neural network. This in general provides an alternate approach. (Received September 10, 2020)