Fault Model for the Clemson Gameday Queue Warning System (CGDQWS)

The fault model for the Clemson Gameday Queue Warning System shows a collection of things that could go wrong in the CGDQWS by capturing all possible errors that could be generated or propagated among the system components before, during or after implementation. The table below shows a detailed description of CGDQWS fault model.

S/N	Error Event	Component	Error Type	Propagation (Description)
1	No environmental situation data from Roadway Equipment	Roadway Equipment	No Service	Roadway Equipment like Sensors, CCTV Cameras is the source of error which is propagated to the Traffic Management Center.
2	No signal from Roadside Equipment	Roadside Equipment	No Service	Roadside Equipment is the source of the error which is further propagated to the Traffic Management Center
3	Loss of Electrical Power to the Vehicle OBE device	Vehicle OBE	No Power	Vehicle On-Board-Equipment is the source of the error which propagates to the Roadside Equipment and to other parts of the system
4	Incorrect Driver Information	Vehicle OBE	Commission Error	Vehicle Driver is the source of the error which is propagated to Vehicle Data Bus
5	No signal from remote OBE	Remote OBE	No Service	Remote On-Board-Equipment of other vehicles act as the source of the error which is propagated to Vehicle OBE
6	No warning signal from the Traffic Management Center	Traffic Management Center	No Service, No Value	The Traffic Management Center act as the source of the error which is propagated to the Roadside Equipment
7	Roadside Equipment failed to enunciate queue warning information	Roadside Equipment	No Service	The Roadside Equipment act as the source of the error which propagates to the Vehicle OBE and Traffic Management Center
8	No transportation	Traffic	No Service	The Traffic Management Center

	Information data for TIC	Management Center		acts as the source of the error which is propagated to the Transformation Information Center
9	Wrong signal from the Vehicle Data Bus	Vehicle Data Bus	Value Error	Vehicle Data Bus acts as the source of the error which is propagated to other vehicle systems like Ethernet, CAN, LIN
10	Wrong data from Traffic Operation Personnel	Traffic Operation Personnel	Value Error	Traffic Operation Personnel is the source of the error which is propagated to the Traffic Canagement Center