Use Case Document for Queue Warning System

Name of Use Case:	**Queue Warning System**
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Description:	QWS is designed for Clemson game day to help with the traffic flow.
Actors:	Driver, ITS Roadway equipment, Roadside Equipment, Vehicle OBE
Preconditions:	1.Driver should be able to receive information from Roadway equipment
	2.Communications between various systems are enabled and verified.
	3.All the equipment should be working.
Post conditions:	1.Driver receives information from Roadway equipment.
	2.QWS transmits information to other vehicles and infrastructure systems.
	3.QWS predicted the queue size on the Clemson game day.
	4.QWS disseminates Q-WARN information to other dynamic mobility applications
Flow:	1.The Queue Warning (Q-WARN) System informs the Driver of a downstream traffic queue in sufficient time to react safely.
	2.The Q-Warn System informs a driver coming towards Clemson that a queue has built up in the area.
	3.The Q-Warn System transmits information to other vehicles and infrastructure systems.
	4.The Q-WARN System disseminates Q-WARN information to other dynamic mobility applications.
	5.ITS Roadway Equipment monitors and controls traffic, also provides environmental monitoring.
	6.Remote Vehicle OBE provides a source and destination for information transfers between connected vehicle
	7.Roadside Equipment are used to send messages to, and receive messages from, nearby vehicles using Dedicated Short-Range Communications
	8.Vehicle OBE provides the vehicle-based processing, storage, and communications functions necessary to support connected vehicle operations.
	9.The Q-Warn System analyzes and evaluates itself in order to improve performance with time.
Requirements:	The following requirements must be met before execution of the use case
	1.Communications between various systems are enabled and verified.
	2.All the equipment should be working.

Use Case Diagram: