The objective of this thesis is therefore to address the problematic of Wireless Time Sensitive Networking for wireless vehicular networks. It will investigate abstractions, modelling and analysis of Wireless TSN and deterministic 5G V2X schedulers. The thesis will first survey the various components of vehicular networks impacted by stringent TSN requirements from vehicular applications. It will then identify their impacts on 5G V2X architecture, services and protocols. It will then focus on the URLL aspect of TSN requirements, and analyze the problematic of deterministic scheduling and resource allocations on 5G V2X standards, and propose and evaluate disruptive approaches supporting ultra-reliable and low latency guarantees. It will further investigate the trade-off between single-hop vs multi-hop 5G V2X communications for Wireless TSN, and address cross-layer benefits for joint topology/resource allocations, as particularly performed in other industrial wireless strategies. It will finally wireless TSN distributed resource managements between the individual 5G V2X schedulers and the multi-hop topology. Particular focus will be on reactive preemption of resources in individual schedulers, as well as rapid propagation of such preemption in multi-hop paths.