## 5G Revolution



## TECHNOLOGY EMARLERS

## **MIMO**

**Software Defined Radio** 

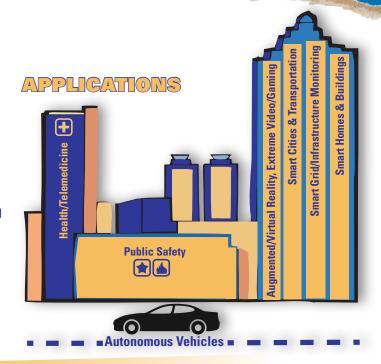
Higher Speed/Higher Efficiency Semiconductors: CMOS, GaAs, GaN

**Mesh Networks** 

**New Spectrum and Spectrum Sharing** 

**Network Functions Virtualization** 

**Wireless Sensors/Actuators** 





1000× Mobile Data Volume

100× Density (1 million connections/km²)

10 to 100× Connected Devices (50 to 500 billion)

10 to 100× End User Data Rates (10 Gbps)

30 to 50× Latency Reduction (1 mS)

99.999% Availability & 100% Coverage

10× Battery Life (10 years) for Low Power Devices

• < 600 MHz New Spectrum Available in Current Cellular Bands
• > 10 GHz New Spectrum Available at Millimeter Wave



