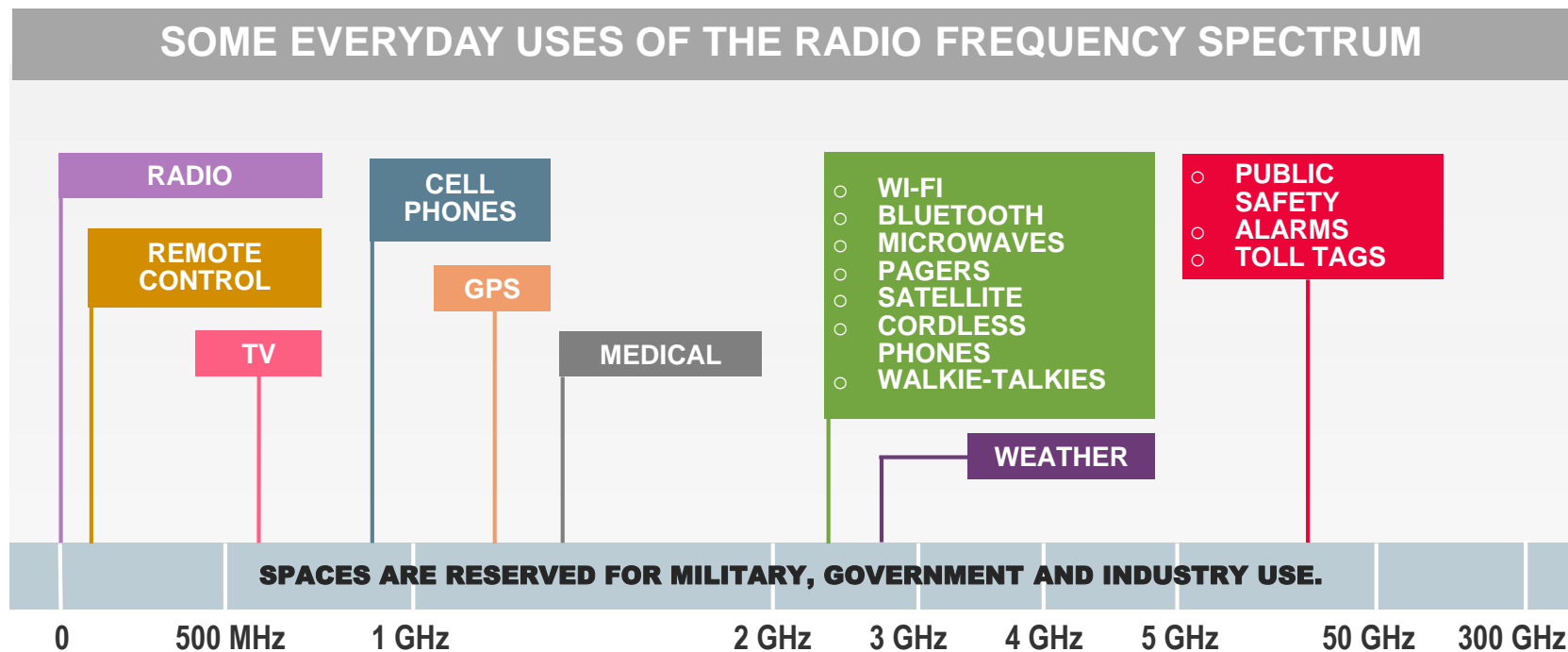


Antennas are designed for Frequencies



Wireless Protocols Frequency

| | |
|--|----------------------|
| Wireless Charging | 6.78 MHz |
| NFC/RFID | 13.56 MHz |
| Zigbee/Sigfox/Zwave/Neul/Lora | 915 MHz (868 MHz Eu) |
| BT/BLE/WiFi/Zigbee/Thread/6Lo WPAN/Wireless Hart | 2.45 GHz |
| WiFi | 5.8 GHz |

Sources: New America Foundation, FCC

ISM Bands

Frequency

- Data rate (channel capacity) is a function of protocol, **frequency** and power. The higher the frequency, the greater the amount of data that can be transferred
- Additionally, the different types of communications use different frequencies to avoid colliding with each other