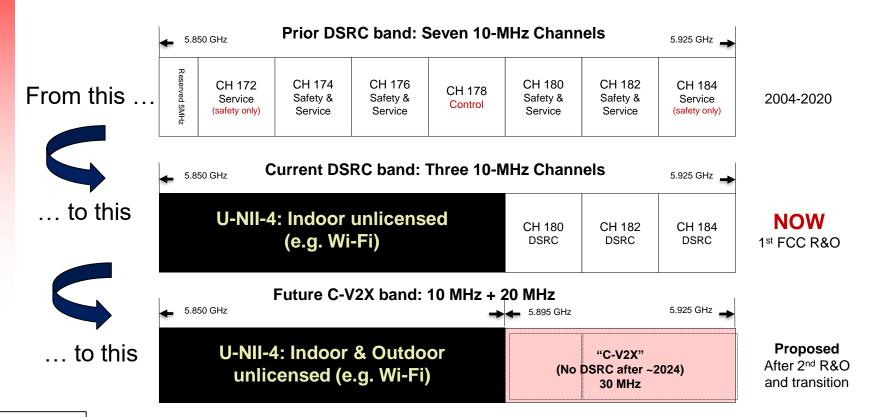


Connected Vehicle Breakout

John Kenney Director, Toyota InfoTech Labs John.Kenney@Toyota.com SIP-adus Workshop, November 2021

FCC 5.9 GHz Rulemaking





Deployment Uncertainties



- 2nd R&O completion timeline, and final decision details
- Timeline for transition of technology
- Interference risk
- Potential improvement of 5G NR V2X over LTE V2X
- Automaker deployment plans
 - In 2019 one Automaker announced 2022 LTE V2X deployment
- Infrastructure Owner Operator (IOO) Plans
 - A few states have announced plans to deploy some LTE V2X

Application Implications: What fits?



Industry discussions indicate likely applications for 30 MHz:

Applications probably supported	Applications probably not supported
V2V: Basic Safety Message	Pedestrian safety (P2V)
I2V: Signal state/Map	Platooning (V2V)
Signal preemption	Collective perception/sensor sharing (V2V, I2V)
Road conditions	Cooperative maneuvers (V2V, I2V)
GPS corrections	Other advanced applications

See also ITS America Webinar on the Future of V2X:

https://itsa.org/event/the-future-of-v2x-30-mhz-application-map-webinar/