T-Mobile's 600 MHz Deployment

Frequency Coordination & Notification

April 2018 NAB

Spectrum Clearing and Engineering

Auction Results?

T-Mobile

- T-Mobile: Average of 31 MHz across the USA
  - $8 billion of ≈ $20 billion generated in the auction was paid by T-Mobile.
- dish
- Comcast
- AT&T
- Charlie Townsend
- Columbia Capital

Low band spectrum: travels further, penetrates buildings better, means cost-effective coverage across less densely populated areas.

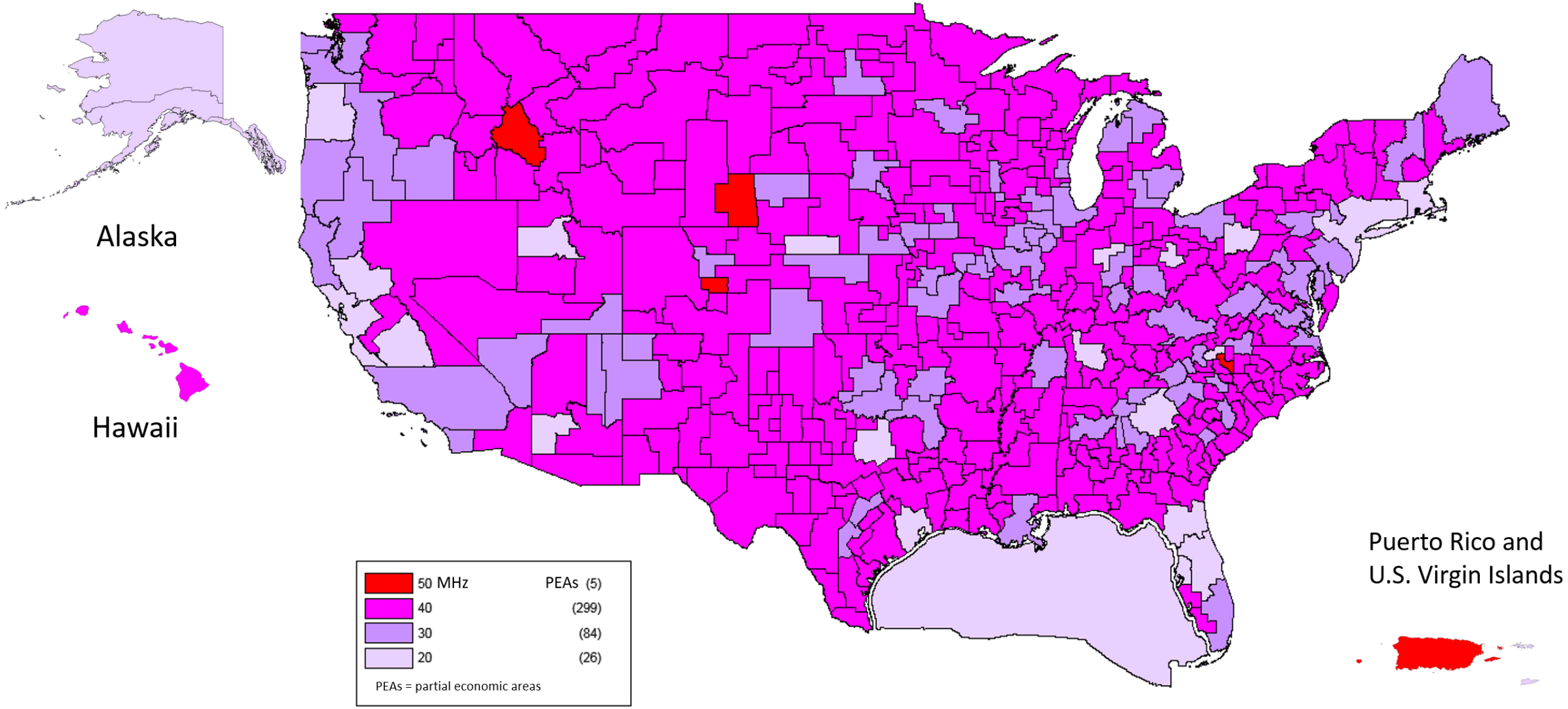
70 MHz

available in each Partial Economic Area (414 total PEAs across US)

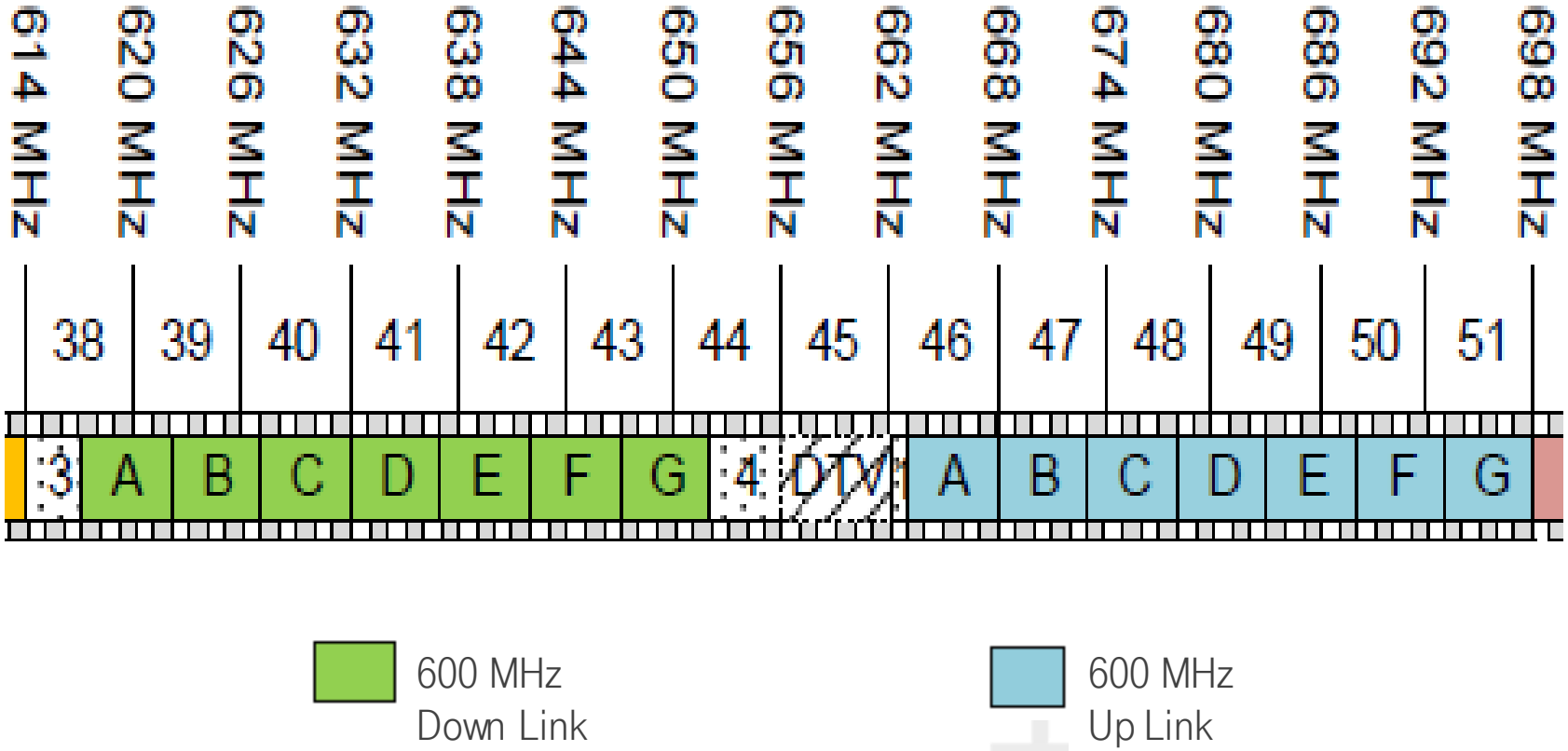
45%

of available spectrum

Auction Results for T-Mobile



UHF alignment with new Wireless Band (71)



Possible Interference Mechanisms

T-Mobile

T-Mobile concerns:

Case 1: WMP on eNodeB

Case 2: WMP on UE

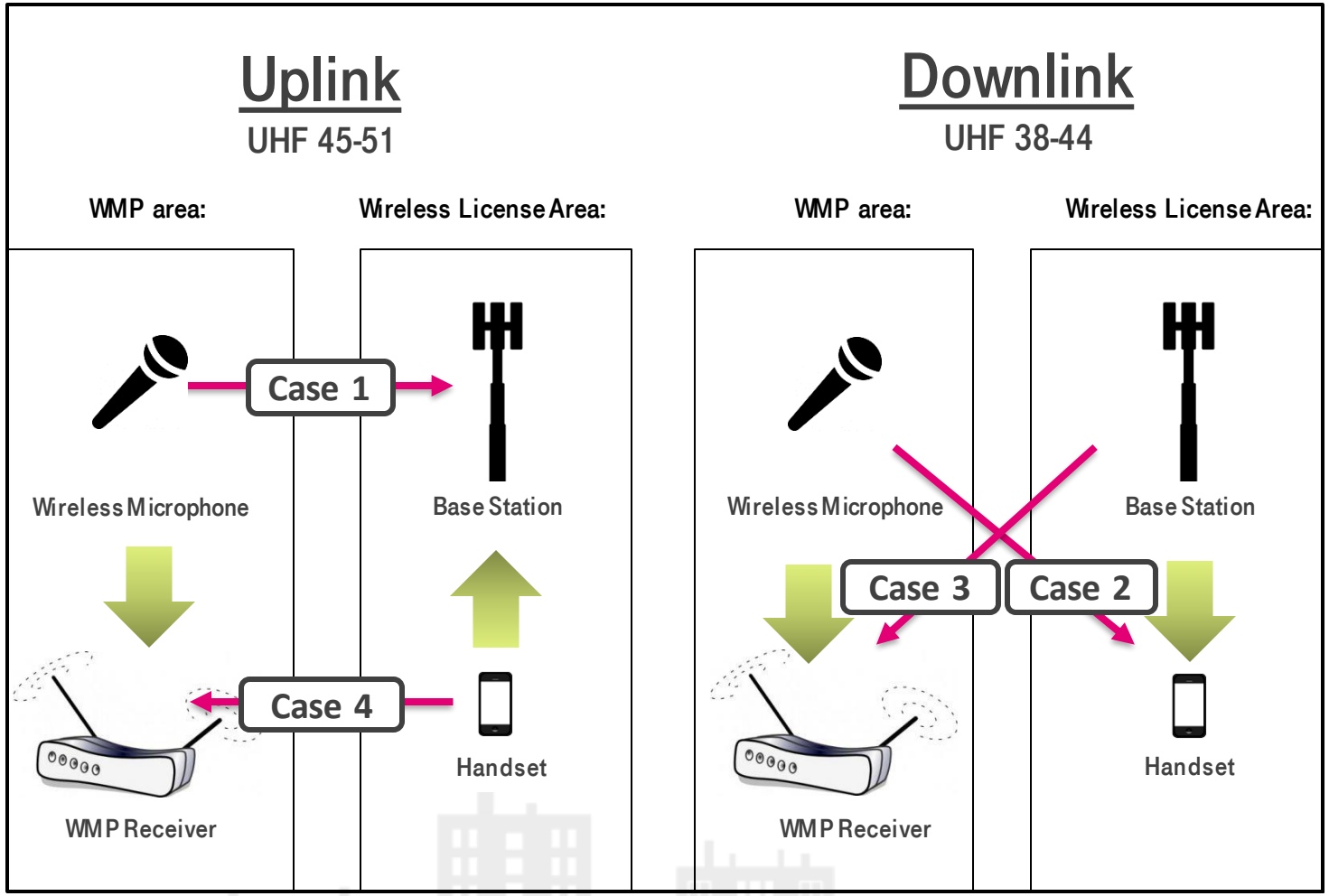
WMP concerns:

Case 3: eNodeB impact on WMP

Case 4: UE uplink on WMP

Frequency coordination is not feasible

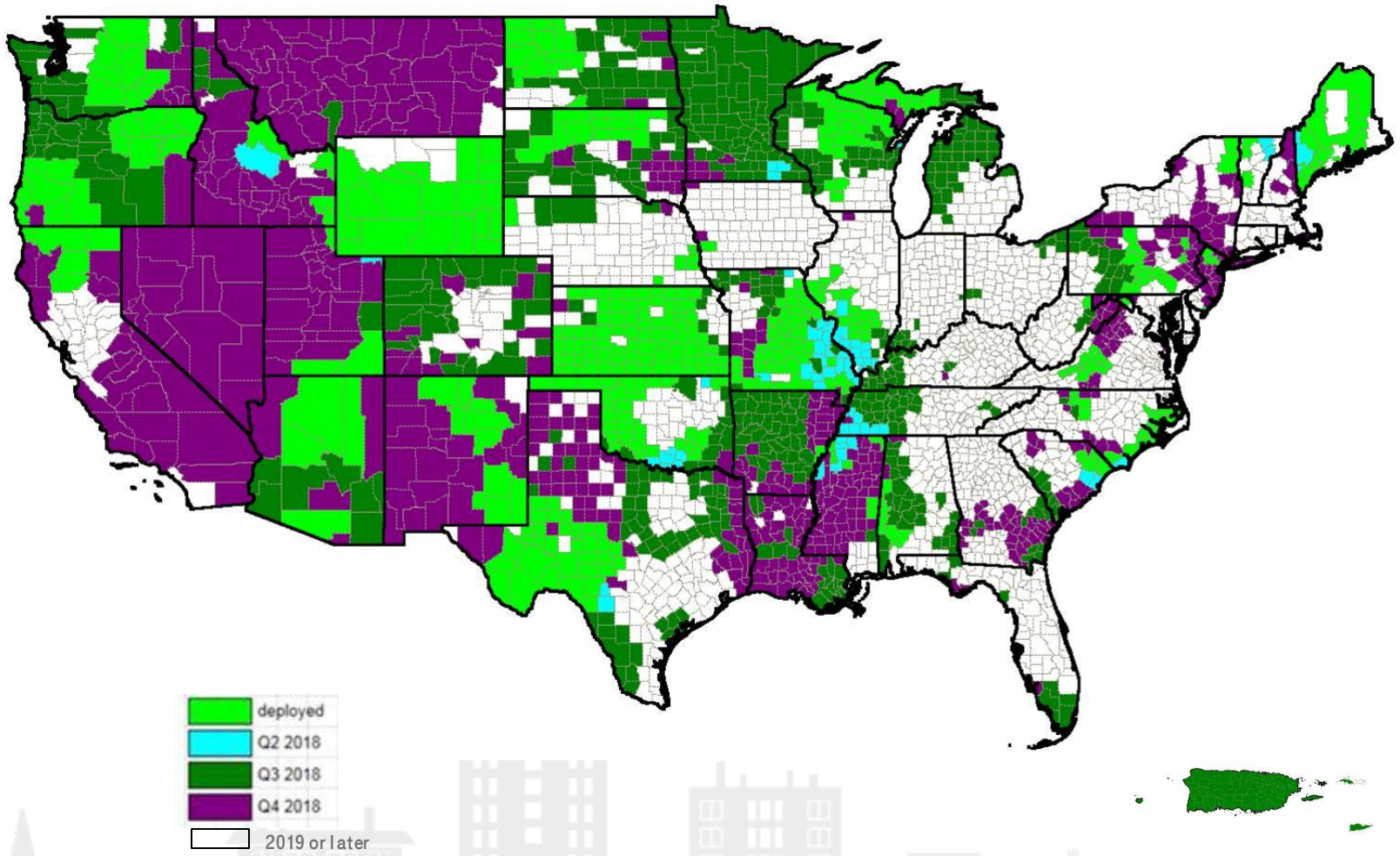
July 2020 is the latest....Will be much sooner



2018 LTE Deployment in 600 MHz

T-Mobile is continuously updating our county list:
https://howmobileworks.com/spectrum/

- New web site functionality – email sign up for notifications
- Avoid protected station contours
- Continued frequency coordination with BAS, LPTV, and translators
- 5G coming on 600 MHz !!!!



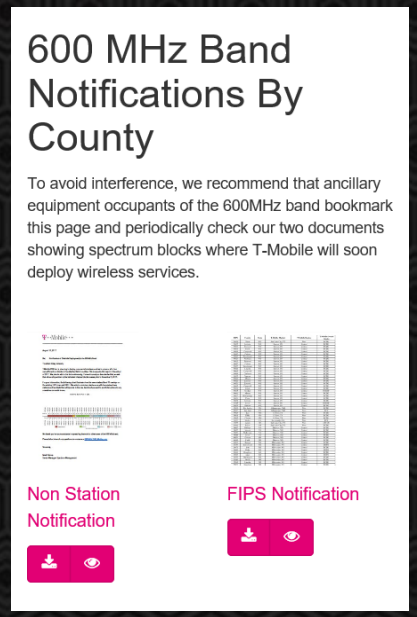
600 MHz Videos and Notifications

T··Mobile

4th Quarter 2017

1st Quarter 2018

2nd Quarter 2018



HowMobileWorks.com/spectrum

White Space Database Administrators

T-Mobile

Working with:

SPECTRUM BRIDGE
ENABLING UNIVERSAL SPECTRUM ACCESS

keybridge

T-Mobile Confidential

Repack Timeline

T-Mobile

2017	2018	2019	2020
2017 Phase 0: T-Mobile launched 600 MHz in 26 States!	More Phase 0 sites Working to move stations early November: Phase 1	April: Phase 2 June: Phase 3 August: Phase 4 September: Phase 5 October: Phase 6	January: Phase 7 March: Phase 8 May: Phase 9 July: Phase 10

Interference Analysis continues to protect full power stations.

T · · Mobile ·

The Un-carrier.

Thank you.