T-Mobile’s 600 MHz Deployment

Frequency Coordination & Notification
April 2018 NAB

Spectrum Clearing and Engineering
Auction Results?

- **T-Mobile:** Average of 31 MHz across the USA
  - $8 billion of ≈ $20 billion generated in the auction was paid by T-Mobile.

- **Media Companies:**
  - 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
UHF alignment with new Wireless Band (71)

- Down Link: 600 MHz
- Up Link: 600 MHz
Possible Interference Mechanisms

**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*
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

4th Quarter 2017

REPACK NEWS
Achieving the Vision for Expanding Mobile Broadband

1st Quarter 2018

REPACK NEWS
Uncarrier Moves to Expand Broadband

2nd Quarter 2018

600 MHz Band Notifications By County

To avoid interference, we recommend that ancillary equipment operators of the 600MHz band bookmark this page and periodically check our two documents showing spectrum blocks where T-Mobile will soon deploy wireless services.

HowMobileWorks.com/spectrum
White Space Database Administrators

Working with:

[Logos for Spectrum Bridge: Enabling Universal Spectrum Access] [Logo for Keybridge]
Repack Timeline

2017

- 2017 Phase 0: T-Mobile launched 600 MHz in 26 States!

2018

- More Phase 0 sites
- Working to move stations early
- November: Phase 1

2019

- April: Phase 2
- June: Phase 3
- August: Phase 4
- September: Phase 5
- October: Phase 6

2020

- January: Phase 7
- March: Phase 8
- May: Phase 9
- July: Phase 10

Interference Analysis continues to protect full power stations.
The Un-carrier.
Thank you.