470–512 MHZ TRUNKED MOBILE OPERATION

§ 22.651 470-512 MHz channels for trunked mobile operation.

The following channels are allocated for assignment to transmitters providing trunked public mobile service within the specified urban areas. All channels have a bandwidth of 20 kHz and are designated by their center frequencies in MegaHertz.

Houston

488.0125	491.0125	488.0875	491.0875	
488.0375	491.0375	488.1125	491.1125	
488.0625	491.0625	488.1375	491.1375	
New York-Northern New Jersey				
473.0125	479.0125	473.1625	479.1625	
473.0375	479.0375	473.1875	479.1875	
473.0625	479.0625	473.2125	479.2125	
473.0875	479.0875	473.2375	479.2375	
473.1125	479.1125	473.2625	479.2625	
473.1375	479.1375	473.2875	479.2875	

[59 FR 59507, Nov. 17, 1994; 60 FR 9891, Feb. 22, 1995]

§ 22.653 Eligibility.

Only licensees already authorized to provide trunked mobile service or their successors in interest are eligible to apply for additional use of these channels for trunked mobile service, and then only in the urban areas already authorized.

$\S 22.657$ Transmitter locations.

The purpose of the rules in paragraphs (a) and (b) of this section is to define the areas in which the 470-512 MHz channels are allocated for public mobile use. The purpose of the rules in paragraphs (c) through (f) of this section is to reduce the likelihood that interference to television reception from public mobile operations on these channels will occur. The protected TV station locations specified in paragraphs (d), (e)(1) and (f) of this section are the locations of record as of September 1974, and these do not change even though the TV stations may have been subsequently relocated.

(a) Base transmitter locations. Base transmitter locations must be within 80 kilometers (50 miles) of the designated locations in this paragraph. Mobile transmitters must not be operated at locations more than 129 kilometers (80 miles) from the designated locations in this paragraph. Note: All

coordinates are referenced to North American Datum 1983 (NAD83).

Urban area	N. latitude	W. longitude
Houston, TX New York, NY-NE NJ	29°45′26.8″ 40°45′06.4″	95°21′37.8″ 73°59′37.5″

- (b) Mobile area of operation. Mobile transmitters must not be operated at locations more than 48 kilometers (30 miles) from all associated base stations.
- (c) Protection from intermodulation interference. Base transmitter locations must be at least 1.6 kilometers (1 mile) from the current main transmitter locations of all TV stations transmitting on TV channels separated by 2, 3, 4, 5, 7, or 8 TV channels from the TV channel containing the frequencies on which the base station will transmit. This requirement is intended to reduce the likelihood of intermodulation interference.
- (d) Adjacent channel protection from mobile transmitters. Base transmitter locations must be at least 145 kilometers (90 miles) from the applicable protected TV station locations specified in this paragraph. This requirement is intended to provide a 0 dB minimum desired to undesired signal strength ratio at the Grade B contour of an adjacent channel TV station. Note: All coordinates are referenced to North American Datum 1983 (NAD83).

Control trans- mitter fre- quency range	Protected TV station location	TV channel
470–476 MHz.	Lancaster, PA, 40°15′45.3″ N. Lat. 76°27′47.9″ W. Long	(15)
476–482 MHz.	Scranton, PA, 41°10′58.3″ N. Lat. 75°52′19.7″ W. Long	(16)

- (e) Co-channel protection from mobile transmitters. Base transmitter locations must be at least the distance specified in paragraph (e)(2) of this section from the applicable protected TV station locations specified in paragraph (e)(1) of this section. This requirement is intended to provide a 40 dB minimum desired to undesired signal strength ratio at the Grade B contour of a co-channel TV station.
- (1) The protected TV station locations are as follows (all coordinates are