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Site Design

- Channel/frequency planning
- When to use TDD vs FDD (asymmetric DFS)
- When to use DFS vs Fixed Frequency
- Collocation antenna separation minimums
- Techniques to combat interference

- Under normal conditions use Asymmetric DFS
- Radio will automatically chooses best channels
- Radios will change channels to avoid interference without user intervention

- Use fixed frequency mode in complex hub sites where there are existing FDD radios that are not frequency agile
- Choose frequencies that are close to the center channels of the existing FDD radios
- In clear LOS applications use of single pole antenna is preferable.
- Minimum recommended antenna separation 10' from other 5.8GHz antennas
- Available Center Channels for TX and RX (MHz)

5745	5765	578	5805
5750	5770	5	5810
5755	5775	579	5815
5760	5780	0	5820
		579	5825
		5	
		580	
		0	

- Use connectorized radios and the largest antennas possible. Consider High Performance Antennas
 - Larger antennas provide a narrower beam and higher gain. This provides the maximum rejection of undesirable signals.
- Use natural obstructions to shield antennas from each other.
 - (i.e. air conditioning units, penthouses, etc.)
- Design networks to achieve maximum angular discrimination when possible

Collocation antenna separation minimums

