

### **Advantages of Terrestrial Microwave over Satellite**

- Lower cost
  - Avoid exorbitant costs of leasing satellites (unless satellites are already owned by the customer)
- Reduced latency
  - Video is delivered with minimal delay. Satellite signals must travel significantly further with an average delay of 250 milliseconds for signals to travel to a geo-satellite and return to earth (this excludes video processing delay).
- Increased Flexibility
  - BMS terrestrial systems are easily reconfigurable for different power levels and frequencies.
  - BMS terrestrial systems are mobile and easily deployed wherever coverage is needed. Multiple satellites may need to be utilized for all the required coverage areas.
  - Video can be captured using light weight, mobile equipment in difficult-to-reach areas. Video can also be captured by moving aircraft, ships, and vehicles.
  - Aircraft with BMS digital microwave for line-of-sight (LOS) communications can also be equipped with a satellite tracking antenna for beyond-line-of-sight (BLOS) satellite communications when needed.
- Reduced Size & Weight
  - The RF link operates over a shorter distance and requires less power than a satellite equivalent. Lower power means less weight, smaller size and reduced power consumption.
  - Ground-based systems can use a tracking antenna for higher gain. Higher antenna gain results in lower transmit power requirements. This is less practical for satellite mounted antennas.