

A general guideline to help estimate bandwidth needs

Usage	Estimated Bandwidth Required
General Usages Checking emails, browsing websites, uploading photos, social media interaction, light video, or music streaming	3 Mbps per user
Video Conferencing Zoom, Skype, or other video conferencing tools	3 Mbps per participant
Live Streaming Streaming high-definition video content	Typically, 5 – 10 Mbps per device • Standard Definition (SD): 3 – 4 Mbps • High Definition (HD) 720p: 5 – 10 Mbps • Full HD 1080p: 10 – 20 Mbps • 4K: 25 – 50 Mbps • 8K: 50 Mbps+
Multi-device Demos	Typically, 5 – 10 Mbps per device, depending upon intended use Determine bandwidth for the intended use for each device and multiply the bandwidth by the number of devices.
File Downloads, Uploads, and Transfers	10+ Mbps, depending on file sizes The speed is less about the minimum requirement and more about efficiency.
Large File Downloads, Uploads, and Transfers (like raw video footage)	100 Mbps to 1 Gbps can significantly reduce transfer times
Editing/Production	100 Mbps to 1 Gbps depending on the complexity of the editing tasks and whether you're working with files stored locally or in the cloud.

Tips

Peak Usage: Estimate bandwidth requirements for peak usage times in your booth, not average use. This ensures smooth operation during the busiest times.

Number of Devices: Multiply the estimated bandwidth per user or activity by the number of devices expected to be in use simultaneously.

Buffer: Always add a buffer to your estimate (around 25 - 50%) to accommodate unexpected usage spikes or additional devices.

Venue Limitations: Check with the Las Vegas Convention Center for any limitations or maximum capacities they might have on bandwidth.

Conduct a Test: If possible, test your setup beforehand in a similar environment to gauge actual bandwidth usage.

Contact Cox Business. If you're unsure, the experts at Cox Business can provide a more tailored estimation based on your specific needs: 855-519-2624 or lvcc.orders@cox.com



