

Here's a general guideline to help you estimate your bandwidth needs.

Usage	Estimated Bandwidth Required
<b>General Usages:</b> Checking emails, browsing websites, uploading photos, social media interaction, light video, or music streaming	<b>3 Mbps per user</b>
<b>Video Conferencing:</b> Zoom, Skype, or other video conferencing tools	<b>3 Mbps per participant</b>
<b>Live Streaming:</b> Streaming high-definition video content	<b>Typically, 5 – 10 Mbps per device.</b> <ul style="list-style-type: none"> <li>• Standard Definition (SD): <b>3 – 4 Mbps</b></li> <li>• High Definition (HD) 720p: <b>5 – 10 Mbps</b></li> <li>• Full HD 1080p: <b>10 – 20 Mbps</b></li> <li>• 4K: <b>25 – 50 Mbps</b></li> <li>• 8K: <b>50 Mbps+</b></li> </ul>
<b>Multi-device Demos</b>	<b>Typically, 5 – 10 Mbps per device, depending upon intended use</b> Determine bandwidth for the intended use for each device and multiply the bandwidth by the number of devices.
<b>File Downloads, Uploads, and Transfers</b>	<b>10+ Mbps, depending on file sizes</b> The speed is less about the minimum requirement and more about efficiency.
<b>Large File Downloads, Uploads, and Transfers (like raw video footage)</b>	<b>100 Mbps to 1 Gbps can significantly reduce transfer times</b>
<b>Editing/Production</b>	<b>100 Mbps to 1 Gbps</b> , 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](mailto:lvcc.orders@cox.com)