

Since March 2020 the Cathedral has provided a combination of video recording and live streaming Sunday worship. Live streaming Sunday and special worship events are well ‘attended’ with the number of views this fall ranging between 50 and 75 per service. The November worship during Covid orange had 117 views and the fall ordination had 146. Comments and feedback indicate that the streaming is very much appreciated by those who do not attend every week (allowing others a chance to attend with the 50 or 80 maximum) and those who do not feel comfortable worshipping in person. The live streams keep Cathedral people engaged, nourished, and feeling a part of the church community.

We believe that video streaming should be part of the Sunday routine in the future, recommend that and request the funding for purchase and installation. This is an investment in the wider Cathedral community and an outreach tool that will appeal to those not currently part of a church family. To date, we have used a web camera and computer belonging to Peter Jacobs. Video editing, when it has occurred, again has used personal computers. There has been a steep learning curve regarding pricing and determining the specifics, but it has been successful, and we have used what we have learned to create this proposal. We want to proceed quickly in order to provide a higher quality solution which will be simpler to provide as soon as possible. To date Peter Jacobs and Kirsten McKnight have been operating the live stream, but we would add to those numbers and create a sign-up category to ensure each event is covered.

### **Video Cameras**

The past video quality is not good due to the quality of the web camera and there is no ability to focus in on readers, musicians, or other leaders. It is has been located near the back of the nave and cannot capture many elements of the various elements of the liturgy that it will be required to. We propose four cameras discretely positioned such that all aspects may be captured, from readers, sermons, the choir, organ console, worship band, to the high altar.

### **Sound**

Sound for the video streaming comes from the existing sound system and associated microphones. More permanent adjustments will be made to ensure the choir can be heard remotely as they are acoustically heard within the Cathedral.

### **Video Switcher and camera control**

Specialized video equipment is required in order to remotely control the position of the cameras and to select (switch to) the one to broadcast to the Internet. This modern equipment is easy to use, allowing the operator to produce a quality ‘live production’ that will greatly contribute to an enjoyable experience for those participating via the internet. The equipment produces the final product in the format required for YouTube redistribution.

### **Streaming Service Provider**

The Cathedral is currently using YouTube as the streaming service provider. While free to stream and replay following the event, it contains advertising and we have very few features to configure and

manage the services that we post. There are subscription services available and over time we will weigh the pros and cons of free versus fee. All Anglican churches in the Diocese that are developing similar solutions are facing the same questions and there may be an opportunity to select a unified approach.

**Financial Costs**

	Unit Price	Total
1 <a href="#">Video switcher, recorder and Streaming encoder</a> (4 HDMI Channel, Stream to Ethernet, Record 4 channels)	\$1,319	\$1,319
2 <a href="#">PTZOptics PTZ Camera 30X optical HDMI, SDI 1080P</a> (Pan - Tilt - Zoom camera remotely controled-no Operator)	\$2,499	\$4,998
2 PTZOptics camera stand	\$125	\$250
1 <a href="#">PTZOptics ElectronicPTZ Camera 4K Optics two SDI outputs</a>	\$689	\$689
1 Basic 1080P camera	\$300	\$300
2 Video Signal Converter	\$85	\$170
1 HDMI audio interface (HDMI in - out, Audio out)	\$70	\$70
1 Dell HDMI monitor for Switcher display	\$300	\$300
1 SSD USB external drive	\$200	\$200
1 <a href="#">Dell Desktop computer with Video Editing capability</a>	\$1,200	\$1,200
1 Dell HDMI monitor for Computer	\$300	\$300
1 Cabling and mounting hardware	\$500	\$500

Sub-Total	\$10,296
Tax	\$1,544
<b>Total</b>	<b>\$11,840</b>

The streaming and recording solution will require a permanent desk setup and a security/locking mechanism that has not been finalized. This would have to be in place before the Cathedral is open to the general public, but this should not delay moving forward to provide a quality streaming solution now.

Worship Committee in consultation with and thanks to Peter Jacobs