

St. Paul Evangelical Lutheran Church

Sharon Center, Ohio



A proposal on Video Streaming

Evangelism

- the spreading of the Christian gospel by public preaching or personal witness.



One of the best things to come out of the new normal
throughout the pandemic of 2020
has been our ability to evangelize beyond the walls of our sanctuary.

Gratitude for Innovation

With an immense amount of gratitude, we thank all the members of our congregation that explored innovative ways to continue to bring the word of God to the family of St. Paul and sharing that innovation with the greater populous ordered to shelter in place.

It is recognized that while these innovations have brought us regular Sunday services throughout the period of “shelter in place”, but the operation would not coexist with live in-person worship services without significant distraction and disruption. The immediate work-around has been to hold separate services, one for the video streaming and a second service for in-person worship.

Question:

As the threats of the pandemic passes and time allows us to transition back to full participation in-person services with cantors, choir, special music, children’s sermons and lectors... how can we continue to utilize video streaming of worship services as a benefit for our members and as an act of evangelism, while not being a distraction and disruption to the in-person congregation?

Solution:

The investment in a video system that provides remote controlled cameras that can be placed in locations that would not obstruct the view and can operate without distraction. A video system that can provide a full experience of the worship service with attention given to the quality of the audio from speakers, singers, piano/organ and other performers.



The philosophy of operation of this video system would be to serve as the eyes and ears of an observer of the worship service and share that view with the on-line community of congregation members who are unable to participate in-person as well as non-members that are in need of an on-line worship opportunity or those that are in search of a congregation to join.

Frequently Asked Questions:

How many cameras would be needed and where would they be? (see attached drawing)

This proposal includes the use of 2 remote controlled cameras that would be mounted on the back wall of the main sanctuary area. One camera would be placed toward the south side adjacent to and above the Audio/Powerpoint workstation. The second camera would be placed in the center of the wall just below the cross. These 2 camera locations will provide forward-facing views of activities at the altar and music performances. At this time there is not a reverse view toward the front or sanctuary entrance, but the system proposed will be able to accommodate future expansion to include the addition of a third camera.

How and where would the video system be controlled from? (see attached drawing)

A workstation would be established in the back corner of the sanctuary, separate from the Audio/PowerPoint workstation. The video system workstation would be a small computer style desk with 2 monitors, computer keyboard, audio mixer and video switcher. The system is designed to be operated by one person. The plan would be to position the desk and monitors to not be a distraction to others.

Can the existing Audio mixer and PowerPoint workstation be used?

The Audio/PowerPoint workstation needs to continue doing its specific part of the worship service and while its contribution to the service will become an element of the video stream, it would be too much for one person to operate both workstations. The proposed video system includes a separate audio mixer for the video stream because the audio mix feeding the speakers in & out of the sanctuary would have different settings than the audio mix needed for the video stream.

Are upgrades needed for the Audio mixer and PowerPoint workstation?

There are some upgrade adjustments needed within the audio connections to make the video system work independently, but overall while not absolutely necessary, the installation of the video system provides the best opportunity to upgrade the Audio and PowerPoint workstation and clean-up and clean-out the equipment that is currently in place. This proposed plan includes replacement of some components of the wireless microphone system, the addition of some microphones and the upgrade replacement of the computer for the PowerPoint slides.

Who would install the video system?

The plan is to fully configure and test the system off-site at the studios of Creative Technology, a video and film production company in Copley, before installing the system in the sanctuary. Installation of the system mostly consists of mounting cameras, running wires and connecting the video components which will be handled by church members with assistance donated from Creative Technology professionals.

Who would operate the Video Stream Workstation?

The plan would be to recruit a small group of individuals who can be trained on how to operate the video system and establish a rotational schedule.

Are there concerns with Privacy, Consent & Copyright with streaming a worship service?

Excerpt in blue are from the website of GuideOne Insurance

Privacy – *Someone attending or participating in a local church service may not wish to appear in a broadcast to the world through a live stream of the service. Here are a few ways to respect members' privacy while live streaming:*

Raise awareness. *While there is generally no reasonable expectation of privacy in a worship service that is open to the public, it's a good idea to let attendees know that services will be broadcast via live stream or digital recording – this way, they can determine the amount of information they're comfortable providing if, say, they want to make a prayer request or share a health update regarding a fellow member of the congregation. You can accomplish this through signs and/or notices in the church's bulletin, newsletter, electronic newsletter and other communications.* Written consent is not necessary if informed consent is achieved through door signs, church bulletins and a PowerPoint disclaimer before the service. Every opportunity should be provided and be more deliberate to provide informed consent for those participating in activities at the altar such as the choir, brass ensemble, special music, lectors, assisting ministers, etc....

Create "no video" zones. *Designate specific places or areas within the worship center where video does not reach so members who don't want to appear on video can comfortably gather there.* Since the cameras will be situated on the back wall of the main sanctuary area, the back rows of seating will be beyond any view of the cameras. The cameras also can be programmed with limits to their range of view.

Get permission. *Exercise particular care with minors. Avoid putting their names and images on the live stream, or, at the very minimum, proceed only with authorization from their parents or guardians.* For minors, written consent may be desirable and could be included in other paperwork for participation in events such as Vacation Bible School.

This is why the philosophy of our video stream is to concentrate on the activities at the altar and wide views of anyone in the pews is only incidental and typically not a view of faces. If there is a concern for portions of our worship service that would expose participants faces (such as Communion or Sharing of the Peace) the video selection can be shifted to the PowerPoint slide or other graphic.

The issue of copyright is not a new consideration for our worship services, but the inclusion of music and lyrics in an on-line video stream may require increased levels of existing license agreements.

Would the video stream still be on Facebook Live?

The proposed video system can stream directly to Facebook Live, Youtube Live and other on-line video sources as well recordings can be saved by the system for upload to other services. Currently the bandwidth of the internet connection is appropriate for a single live video streaming connection, but other social media services can be uploaded to following the initial live feed or as internet connection technology improves more opportunities are available.

What else will this video system offer?

The plans for the video system include the opportunity for playback of other video. This opens up the possibility to include pre-recorded segments, event videos such as Vacation Bible School or Youth Group Mission Trips and promotional opportunities for outreach programs such as the Sharing Center.

Are there other opportunities for utilizing the video system?

Outside of regular Sunday services, the video system and streaming capability can be an option to video stream on-line other events held in the church sanctuary, such as weddings, funerals, special music events or other types of meetings or events.

What will this video system cost? (See attached spreadsheet)

The attached spreadsheet provides the proposed equipment and current best prices available. The spreadsheet provides the cost for the Video system and then in addition is the proposed costs for upgrades to the Audio and PowerPoint system. There are some costs for upgrading and replacement of Audio components and some installation components that will need to be determined during installation which is why a 10% contingency amount has been added to the final Project Total.

Are there ongoing costs?

The video system proposed does not require any subscription services and there are no major ongoing operational costs that can be foreseen. There will be some costs for wireless microphone batteries that should be replaced often to provide uninterrupted operation. There would likely be increased costs associated with the levels of licensing for music and copyrighted materials.

Professional Background

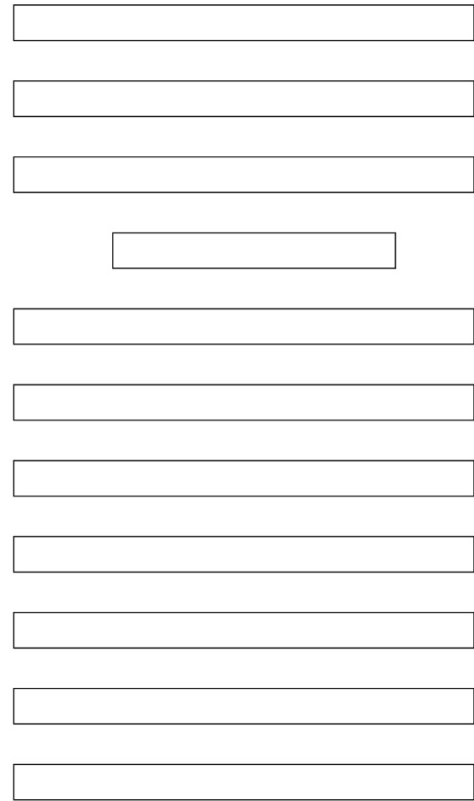
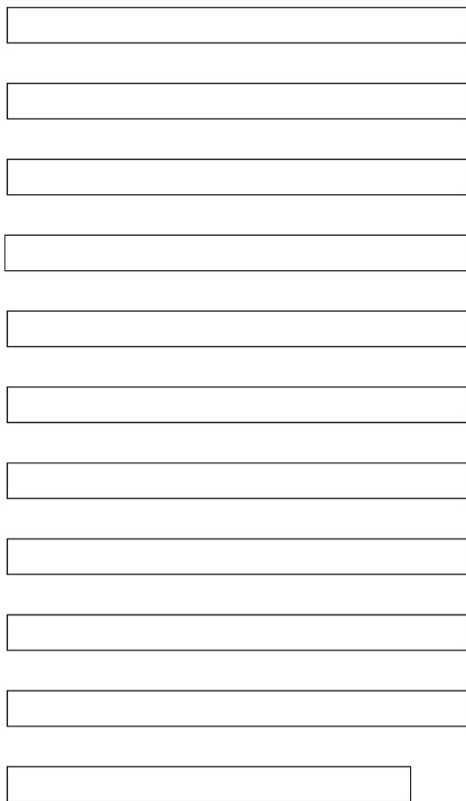
John Strock has put this proposal together along with advice and guidance from his co-workers and engineers at Creative Technology in Copley, Ohio. John has worked for this company, in the video production industry for over 35 years and Creative Technology has custom developed multi camera systems for Live Streaming video for corporate clients. Creative Technology produces corporate communications, national and local advertising, social media content and visual presentations for judicial support with offices in Copley, OH and San Francisco, CA.

Organ &
Piano

Alter Table

Choir

Pulpit



Camera 2

Camera 1

This pew moved
here from along
the back wall
behind the
Video Workstation.

Powerpoint
& Audio Mixer
Workstation

Proposed
Video
Streaming
Workstation

Plenty of space for
Wheelchairs
and added chairs
when needed.

| | Description | Equipment | Quantity | Price Per | Total |
|--------------|---|--|----------|-------------|-------------|
| Video | | | | | |
| | Pan Tilt Zoom Cameras | PTZOptics Live Streaming Cameras - PTZ Cameras with SDI, HDMI and IP Control + PoE (30X-SDI, White) | 2 | \$ 1,799.00 | \$ 3,598.00 |
| | Wall mount bracket for Camera | HuddleCam PTZOptics Wall Mount Bracket Small Universal White HCM-1 | 1 | \$ 59.99 | \$ 59.99 |
| | Ceiling mount bracket for Camera | HuddleCamHD Universal Ceiling Mount for PTZ Camera | 1 | \$ 60.00 | \$ 60.00 |
| | SDI Coax Cable for Cameras | Belden 1505A RG59/20 SDI Cable (per foot) White | 100 | \$ 0.68 | \$ 68.00 |
| | SDI to HDMI converter | FERRISA Micro Converter SDI to HDMI(with Power Supply),3G-SDI/HD-SDI/SD-SDI to HDMI Converter Adapter,SDI in HDMI out SDI Loopout,1080P Video Audio Splitter,Support HDCP 1.3 for Camcorder Camera to TV | 2 | \$ 38.99 | \$ 77.98 |
| | BNC Connectors for Coax Cables | Kings 2065-2-9 75 Ohm BNC Connector for Belden 1505A 1506A and Gepco VPM2000 | 8 | \$ 1.79 | \$ 14.32 |
| | Ethernet Cable Connectors | Platinum 202016J EZ-RJ45 Cat 6 Connector and Strain Relief Combo Kit, 50-Pieces | 1 | \$ 43.25 | \$ 43.25 |
| | Raw Ethernet Cable for Camera Control & Component Connections | Monoprice 102333 Cat6 Ethernet Patch Cable - Network Internet Cord - RJ45, Stranded, 550Mhz, UTP, Pure Bare Copper Wire, 24AWG, 100ft, White | 1 | \$ 19.99 | \$ 19.99 |
| | Video Switcher | Blackmagic Design ATEM Mini Pro HDMI Live Stream Switcher | 1 | \$ 595.00 | \$ 595.00 |
| | Joystick style Controller for Cameras | AmazonBasics Xbox One Wired Controller - 9.8 Foot USB Cable, White, Version 2 | 1 | \$ 24.99 | \$ 24.99 |
| | Video Conversion device for extending video feed to other areas of the church | Blackmagic Design BMD-SWATEMMINISBPR ATEM Streaming Bridge H.264 Video Converter | 1 | \$ 245.00 | \$ 245.00 |

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|--------------|--|---|---|-----------|-----------|
| Audio | | | | | |
| | Audio Mixing Board for LiveStream | Mackie ProFXv3 Series, 16-Channel Professional Effects Mixer with USB, Onyx Mic Preamps and GigFX effects engine - Unpowered (ProFX16v3) | 1 | \$ 499.99 | \$ 499.99 |
| | Microphone Splitter | ART S8 8-channel Microphone Splitter | 1 | \$ 279.99 | \$ 279.99 |
| | Audio Cable from Splitter to LiveStream Audio Board | KIRLIN Cable MT-815-5M 5-Meter 8-Channel Multi-Track Snake Cable XLR Male to XLR Female | 1 | \$ 45.32 | \$ 45.32 |
| | Short Audio Cables from Splitter to House Audio Board | Monoprice 4-Channel XLR Male to XLR Female Snake Cable Cord - 3 Feet- Black/Silver with Metal Connector Housings Plastic and Rubber Cable Boots | 2 | \$ 11.47 | \$ 22.94 |
| | Cables to connect LiveStream Audio Board to Video Switcher | LinkinPerk 3.5mm to 6.35mm TRS Stereo Audio Cable - 6ft | 2 | \$ 10.39 | \$ 20.78 |
| | Quality Headphones to monitor audio mix | Audio-Technica ATH-M30x Professional Studio Monitor Headphones, Black | 1 | \$ 69.00 | \$ 69.00 |
| | Secondary Headphones to monitor streaming feed | JLab Audio Neon Folding On-Ear Headphones Wired Headphones Tangle Free Cord Noise Isolation 40mm Neodymium Drivers C3 Sound (Crystal Clear Clarity) Black | 1 | \$ 16.99 | \$ 16.99 |
| | 2 Suspended Microphones for Choir Area | Shure CVO-B/C Centraverve Overhead Cardioid Condenser Microphone | 2 | \$ 89.00 | \$ 178.00 |

[illegible]

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| UPGRADE to existing systems | | | | | |
| | | | | | |
| | Replacement microphone for wireless system. (Lapel Mic) | Audio-Technica AT899cW Subminiature Omnidirectional Condenser Lavalier Microphone | 1 | \$ 169.00 | \$ 169.00 |
| | Bell Tower Microphone | Shure Instrument Condenser Microphone, Black (SM63) | 1 | \$ 123.75 | \$ 123.75 |
| | Microphone Wind Screen | Shure Instrument Condenser Microphone (RK229WS) | 1 | \$ 21.95 | \$ 21.95 |
| | Shock Mount for Microphone | Shure A53M - Shock Stopper for SM81, SM86, KSM141, KSM137, 16A, VP64 and SM63 Models,Black | 1 | \$ 29.95 | \$ 29.95 |
| | | | | | |
| | Mini Computer for Powerpoint | Intel NUC NUC8i3BEH Mini PC/HTPC, Intel Core i3-8109U 3.0GHz, 8GB DDR4, 240GB SSD, Windows 10 Pro, WiFi, Bluetooth, 4k Support, Dual Monitor Capable (i3 NUC Tall 8GB RAM + 240GB SSD) | 1 | \$ 479.95 | \$ 479.95 |
| | | | | | |
| | Microphones | | | | |
| | Microphone Stands | | | | |
| | | | | | |
| | Microphone Cables | MCSproaudio XLR Cable 25FT Low Z Male to Female 3 Pin XLR Mic Microphone Cable, 5 Pack | 1 | \$ 37.99 | \$ 37.99 |
| | | | | | |
| | | Upgrade of Existing systems Total | | | \$ 862.59 |
| | | | | | |
| | | Total of Video System and Audio/PowerPoint Upgrades | | | \$ 8,181.39 |
| | | | | | |
| | | 10 percent cost overrun and install contingency | | | 818.139 |
| | | | | | |
| | | Proposed Project Total | | | \$ 8,999.53 |