# Fairview United Methodist Church

Information Technology Ministry

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Over the last six years Fairview has invested in the future of its ministry with major upgrades to the technology infrastructure.  Upgrades to the internal network, accounting system, digital signage, sound system and altar lighting as well as an expansion of our HD video distribution to other areas of the building are major initiatives.  These enhancements were undertaken in parallel with major building renovations.  The technology design complements the renovations and builds an infrastructure that is easily expandable.  This concept is forward looking with a flexible expandable design based on industry standards.

## Fairview Network

Fairview has a business level Comcast connection to the Internet.  The Comcast modem is the edge of our internal network.  Our router supports a secure protected core office network and a secondary church wide network for wireless access to the Internet throughout the building.  The network has four access points that provide high performance Internet access to staff, members of the congregation and devices throughout the building.  Sunday school classes use this network to access online resources from laptops, tablets and LCD Smart TVs in the classrooms.  The social hall has a large LED Smart TV with direct access to the Internet, a sound system matched to the size of the room, DVD player and a separate portable sound/PA system.  The large Smart TV has a HD TV feed from the sanctuary HD system.

## Office Technology

The office network supports two office computers, staff laptops and sanctuary workstation along with wireless access to a high volume color/BW office laser printer.  In a move to offer more capability and better security, we converted to an online hosted accounting system (payroll, general ledger, membership) with a wide range of facilities allowing us to meet our changing needs without making the existing system obsolete.  This also allows staff and volunteers to access the accounting system from locations other than the church via an Internet connection.   This type of system provides us with a built in online backup at a secure server facility.

## Outdoor Digital Signage

In a move to reach out to the community and better serve our congregation, a large high quality digital sign was installed on the grounds of the church.  The sign communicates to the core office network via a dedicated wireless link.  The sign is programmable via an application that allows the scheduling of messages as well as special visual effects. This sign was unwritten quickly as a special project.  It has proved to be a favorite and very visible example of a progressive congregation.

## Sanctuary Computer and Video Design

The sanctuary has two large LCD TV panels on either side of the altar area, a panel for the choir, a panel at the back of the sanctuary that can serve as a teleprompter. In the chapel area adjacent to the sanctuary are two addition large LCD TV panels that present the same HD video feed as does the four panels in the sanctuary. The social hall has a fifth large LED TV with a feed from the sanctuary. This cluster of panels displays the output from the HD video distribution system. There are two primary video sources, the sanctuary computer and the remote controlled HD video camera system.



The HD video camera system allows on demand recording in HD of any activity in the sanctuary. As a service of our congregation, we provide HD video recording of weddings, funerals, plays, cantatas or other special events on demand. Our office has a high speed multiple disc (7) duplication system.

At the back of the sanctuary centrally mounted 12 feet above the floor is a Canon G20 HD video camera on a pan tilt mount. This camera is remotely controlled by the person operating the sound board. The camera can be pointed using a joy stick with remote zoom and record functions. A simple push button control switches the video feed from the HD camera live video to the output of our sanctuary computer. This is accomplished by a dedicated video network utilizing CAT6e cables to transmit the HD video up to 322ft. Any content displayed on the computer is available to the network for distribution.



Our main signage/announcement product is ProPresenter. Content can include photos of a youth trip, a YouTube video, websites, DVD content to text of hymns. If the computer can display it, the system can present it to the congregation. The large LCD TV displays a bright clear image without the problems associated with projectors.

## Sanctuary Sound System Upgrade

After in house attempts to solve a myriad of long term persistent sound issues failed, a special project was conceived to bring in a professional sound vendor and design a fully digital system. This system was designed to meet our current and the foreseeable future needs for the contemporary and tradition worship. The needs of musicians at the contemporary service were a high priority. We choose a Behringer X32 digital mixer. The X32 supports remote control via an iPad or similar mobile device. This feature rich and easy to use sound board has quickly become everyone's favorite. The IT ministries team is gradually learning to use the multitude of features. The clarity of sound has enhanced our worship experience and drawn rave reviews from the congregation.

The project was quickly underwritten with special giving. During the design phase it was determined that we needed to address a serious electric problem in the sanctuary. This dual approach produced a wonderful result solving a wide range of related issues associated with traditional analog systems.

**Sanctuary Digitally Controlled LED lighting**

After using the HD video system for a while and hearing complaints about inadequate light for reading.  It became obvious that the existing altar and choir lighting needed an upgrade.   Again we turned to professional vendor for advice.  We wanted more light, dimming and if possible color control.   New equipment just on the market gave us the features we desired with less power consumption and cool operation. We installed twelve (12) LED light fixtures in the choir area and four (4) Source Four ETC fixtures to light the front of the altar area.  This dramatically improves the video quality and provided the choir with the lighting they needed.  The ability to use lighting effects during normal worship times and for special events is a new aspect of our worship technology.

The lighting is controlled from a lighting console beside the sound board.  This controller provides full control over color and intensity. Additionally, programmable cues allow the user to preprogram lighting patterns for plays and special events.

**Website and Online media**

We have had a website since 2009. Our domain name is www.fairviewumcdanville.org

The website contains our newsletters and bulletins since 2009 in its archives.  Bulletins are posted as soon as possible prior to the upcoming Sunday. A video of the history of Fairview is available online at the website at https://vimeo.com/65508652 An online calendar of events is found on the website along with staff and ministry overviews.

RightNow Media is a recent online resource of Christian content available to the congregation and on the church computers/Smart TVs.