Wisconsin Crime Prevention Practitioners Association

Security Cameras

Security cameras can be used to monitor activities in and around the building. Areas for cameras could be at points of entry, hallways, parking lots, and really any area that could afford extra monitoring. Many times these cameras are used after the fact unless you have someone monitoring the cameras all of the time. Because they are used after an incident and for evidentiary and investigative purpose we want to make sure that the cameras you select are worth the investment.
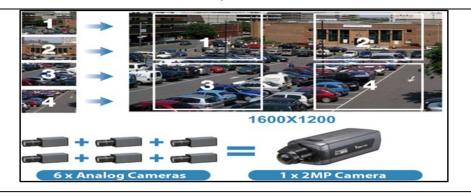
The main question to answer is *what am I hoping to capture on film?* Once you have that answer, then you can work on selecting the appropriate camera and system.
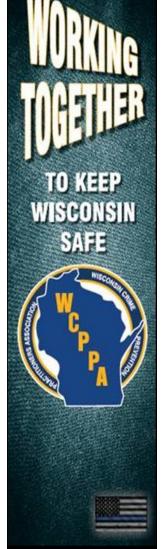
Security Camera Considerations

Lighting – The camera needs to be able to see what is being filmed. If you have an area that has periods of low light, you are going to need an infrared camera.

Quality – We have all seen the various police television shows where they are able to zoom in and obtain a license plate or even more. The ability to enhance an image is only as good as what is originally obtained. The higher the megapixel of the camera, the better the image and the greater area that is covered.

In this example the 2.1 megapixel camera has a much greater ability to clearly zoom in on the person.

In this example the 2 megapixel camera has a much greater area of coverage that is equal to 6 analog cameras.

Placement – Make sure the camera is picking up what is intended. In the retail setting, we see surveillance all too often from a camera placed high in a corner. Many criminals will go to lengths to hide their appearance from cameras, and the placement of these cameras makes any footage useless.

These two photos show the difference between a high mount and one that is more at eye level.

If you choose to identify cars coming onto the property, you are going to want to limit access control and set a camera that is specific to capturing license plates, which is going to be slightly higher quality than one that captures people in a hallway.

Camera Types – There are many types of cameras and housings available which are all dependent on where you are installing them.

Another camera type that has become popular in recent years is the **panoramic camera**. These cameras, which look similar to the one in the upper right, have the ability to capture an area in a 360 degree, 270 degree, or 180 degree field of view.

Portable Cameras - There may be times when you are concerned about certain areas that don't necessitate the installation of a permanent camera, maybe the funding is unavailable, or it is something that you need addressed immediately. Wildlife or trail cameras have become more common in security applications.

Data Storage – The amount of storage needed is going to be dependent on the size of the image (megapixels) and how long you plan on storing the image. Give consideration to storing the data at an offsite or cloud location to prevent someone from tampering with the server. Some systems also have the capability of only recording when the camera detects motion, which may be a way to save on data storage.

System Type— There are two types of closed circuit TV (CCTV) systems: **digital and analog**. The main difference between the two camera types is the way in which the video signal is delivered. **Analog cameras** turn the video signal into a format that can be received by a television or other receiver such as a DVR or monitor. An **IP-based camera**, also known as an IP network camera, digitizes the video signal using a specialized encoder that contains an onboard web server. This allows the IP camera to act as a net work device, thus allowing captured video images to be viewed not only through an existing network, but also through a web browser that can be accessed through the Internet.