

Staff Report

CAMERAS IN CAMPUSTOWN

June 26, 2012

In July 2011, Council directed staff to report on the suggestion that security cameras be installed on the Campustown Clock Tower. Following that directive, Police Department staff met with the Student Affairs Commission and various stakeholder groups to gather input on this concept. There was general support for the crime prevention impact of camera systems, noting that they are very common in local businesses and on campus. Stakeholders suggested that images not be stored for long periods of time and that use should generally be limited to criminal investigations.

Existing Use of Cameras

The Police Department regularly partners with several businesses in Campustown that provide access to footage from cameras on their properties. Footage from these cameras is typically only accessed after a reported incident; and is not monitored live on a regular basis.

In early April, the Police Department worked with a vendor to temporarily mount cameras at Lincoln Way and Welch and at Chamberlain and Welch. Two cameras on Stanton were also made accessible to the Police Department. The cameras were used to monitor crowds during VEISHEA, and could view roughly a nine-block area. Images from these cameras were recently used to assist in identifying a suspect in an assault case that occurred on Welch Avenue.

Campustown Crime

Last year, these same nine blocks of Campustown saw 35% of the City's drug/alcohol crimes (419 incidents), 7% of property crimes (213), 13% of assaults/violent crimes (40), and 12% of other crimes (386). Cameras can assist the Police Department in addressing property crimes and assaults and provide an overhead view during large events. Cameras also have the potential to deter some criminal behavior. This can be enhanced with the use of signage warning that the area is under video surveillance.

How Cameras Could be Used

Police command staff would have the ability to review images from these cameras in the event of an assault, a missing person, or any other serious incident. Depending on the type of camera system, it may also be possible to allow a police supervisor to control the cameras' motion remotely via an Internet connection, either from their offices or in patrol cars. This may be useful if, for instance, there is a pattern of repeated vandalism to storefronts late at night. Video could be stored for approximately 30 days on a server, with each camera's memory unit able to store three to five days of footage as a backup.

Projected Costs and Sources of Funding

Cameras are available in standard and high definition. High definition provides the ability to see faces for recognition purposes. Standard definition provides the ability to identify colors and shapes, but not identification of individuals. The cameras are estimated to cost \$6,000-\$7,500 each for standard definition, and \$10,000-\$11,000 each for high definition (including installation).

In addition to the camera cost, there is an additional cost to transmit the camera images to a server. This can be accomplished by wi-fi connection (approximately \$2,000 per camera) or fiber optic connection (approximately \$5,000 per camera). While a wi-fi connection is less expensive, it does not allow for fluid motion to be captured. Instead, the video would show a series of still images. Wi-fi allows only a few cameras to be interconnected, while fiber optic cabling could allow up to 30 cameras on one network.

Estimated Costs Per Camera for Different Configurations

	Standard Definition	High Definition
Wi-Fi	\$8,000-\$9,500	\$12,000-\$13,000
Fiber Optic	\$11,000-\$12,500	\$15,000-\$16,000

The Police Department has received two grants totaling \$29,000 that were awarded specifically for surveillance equipment. Of this amount, \$20,000 must be used by September 30, 2012; and the remaining \$9,000 must be used by September 30, 2013. It may be possible to take a phased approach to maximize the use of grants. This could involve installing the network and a minimal number of cameras now, and adding more cameras as additional funds become available.

Lighting

One of the challenges of installing cameras in Campustown is that the High-Pressure Sodium (HPS) nostalgic-style streetlights produce a quality of light that makes it difficult to accurately determine the true color of objects. For example, an object that appears brown under the light may actually be red or blue in daylight. Therefore, cameras would be most effective with lighting that provides better color rendering. Lighting improvements would also have the benefit of improving conditions for eyewitnesses and law enforcement officials who might be on the street at night.

This winter, staff tested metal halide lamps retrofitted in the four existing fixtures at the corner of Welch Avenue and Chamberlain Street. These lamps produce a whiter light, but require annual replacement. They also consume more energy than HPS lamps.

Despite the lamp cost being fairly low, staff feels that the ongoing maintenance of these lamps would be undesirable. However, the whiter light from the test provided much better color rendering. Staff visited the area on several occasions and noted it was easier to see colors, objects, and faces more clearly than under HPS fixtures.

Another alternative to improve lighting in the area may be to replace the HPS lamps with LEDs lights. LEDs are costlier up front at an estimated \$1,500 per lamp for materials. However, the lamps would be expected to last 15-20 years before replacement and would use about 50% as much energy as the existing lamps. The LED fixtures are also closer to compliance with the Dark Skies Ordinance than the existing lamps. It would be possible to replace the road-side lamps with LEDs and remove the sidewalk-side lamps and arms completely, while still exceeding minimum illumination levels.



Existing Dual-Lamp Nostalgic-Style Lights



Converting the 100 block of Welch Avenue would require installing 18 lamps at an estimated cost of \$27,000 for materials and \$3,000 for labor (\$30,000 total). The fixtures could be matched to the color of the existing poles. Electric staff suggests that funding for these lights could come from the Smart Energy program, since the project would constitute an energy demand reduction.

Next Steps

If the Council agrees philosophically to the idea of putting cameras in Campustown, staff would ask for a motion directing them to develop a specific proposal to implement cameras. Staff would then identify the specific camera features and quantities that would be appropriate given certain budget parameters. Lighting options could also be explored in further detail.