BUILD SMART CITIES WITH HIGH TECH
RICHMOND GOES FOR $10 MILLIONS AWARD
Disaster forecast, rapid response, mobile app and smart home
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On Thursday, City of Richmond held Richmond Smart Cities Ideas Fair on KPU campus, presenting to the community how City Hall, together with the business community, are trying to meet challenges in the future with the aid of high technology. In collaborating with City Hall, a high tech company captures the conditions of earth surface and sea surface by means of satellite technology, to forecast earthquakes and flooding threats. Another university teacher, together with some students jointly develops a smart home system, building Richmond to become a smart city by employing energy saving concepts.

SATELLITE SYSTEM PROJECTS/FORECASTS EARTHQUAKE AND FLOODS

Spokesperson for City of Richmond Ted Townsend indicated Richmond includes the development of a smart hub in its recommendations for the contest. A smart hub not only increases the responsiveness of a municipality to material emergencies, but also improves the quality of life for its residents. As an example, he indicated it could promptly notify the residents of the evacuation routes and shelter locations in the event of emergencies. Moreover, taking into consideration of the ethnic diversity of Richmond community, emergency alerts will be administered in multi-languages.

MDA, a local high tech company, which specializes in space and defense, currently in partnership with City of Richmond, acquires [earth] plate movements via satellite navigation system. In the event of a disaster, it is able to give advance notice to residents where to exit. An engineer of that company, Robert Armstrong, pointed out the company has a special team of image analysts, which profiles the conditions of earth surface and sea surface by analysing the data transmitted by satellites. The satellites are able to capture less than 1 millimeter movement of earth plates. In the event of a probable major earthquake, City Hall will be notified to give advance notice to the public of the evacuation routes. Satellite system is able to detect if the sea level rises. With imminent flooding threats, residents would be advised to evacuate timely.

Liu Xin, a teacher of KPU Computer Science Program, led his students to work on building a smart home system for four months. It is able to remote control the temperature and humility of a house. It is able to even shut off some home appliances for the sake of energy saving and emission reduction. The idea has prompted many residents to come forward making further enquires. Liu Xin said, by pressing the smart home app on a mobile phone, the homeowner is able to shut off home appliances such as lightings even when the homeowner is out of City of Richmond.

Moreover, the system also comes with motion detection, and the homeowner will promptly be advised if anyone breaks and enters the premises. It also helps the police in cracking down crimes. KPU Director of Computer Science Program, Wu Aihua said a city is made up of many families;

Richmond could hence be turned into a smart city by making the smart home system prevalent in local families.

Ted Townsend said City of Richmond will submit the presentation for Smart Cities Award on March 5, and the results of the contest are expected to be available by end of this spring. Some smart programs would still proceed even City of Richmond did not win the challenge.