#### 27. BUS EXCHANGE

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Corporate Plan Output: Advice to Council	

The purpose of this report is to provide an update on the operation of the Bus Exchange.

The Bus Exchange at the Crossing, together with related bus route changes, has now been in operation for two months and for the most part is working well. There have been some finishing touches still to complete and a number of small defects requiring correction, but there has been overall a very favourable response from bus users and the public generally.

## **Building Matters**

The building shell and fitout contracts have been practically completed and settled with the exception of some minor furnishings, fittings and defects to be rectified. Although these items and retentions are still held in the budget, the project is still in sound shape financially and expected to return a good saving on budget, however finalisation of these issues is likely to take several months.

Cycle Lockers: City Design have a brief for pricing, design, implementation with a projected completion date of 30 April to coincide with the other changes; 18 individual mesh enclosed cycle lockers, under the car park ramp.

### **Bus Exchange Security Cameras**

Vaughan Penney, Traffic Systems Technician reports:

In the design stages of the Bus Exchange it was recognised that it would be necessary to have an effective and efficient Closed Circuit Television System installed in the Bus Exchange. Its role would not only have to be an efficient Security System but also a working tool for the use of the bus controllers.

A working group was set up comprising City Council Staff and with input from Environment Canterbury a CCTV system was designed and developed. Working within a tight budget for the system it is pleasing to report that the project was successfully completed \$2000 under estimate, and the system was in operation for the opening of the Exchange. The Television System comprises 15 cameras strategically located throughout the Exchange area; these cameras are a combination of both fixed and Autodome with four 21-inch monitors located in the bus control room. Autodome cameras are fully automated dome cameras with high-speed zoom, focus and pan tilt; a joystick in the control room can control these functions. All video pictures entering the control room are recorded on tape 24 hours a day.

It was recognised that with large volumes of people using the Exchange crime prevention was an absolute necessity, not only to make the public feel safe but also to deter would be criminals. To date the system has proved highly successful both in crime prevention and as an operational tool. There have been some incidents in the Exchange and these have been captured on videotape and the tapes handed to the police. As an operating tool the CCTV System is proving invaluable; it allows the bus controllers to view the comings and goings of the buses through the Exchange from inside the control room. With the ability to watch the buses on the TV monitors the bus controllers are capable of running the Exchange manually if the RTI is unavailable.

Due to the success of the CCTV as a bus monitoring tool, Environment Canterbury is investigating the extension of the CCTV system outside the Exchange. This will enable the bus controllers to monitor all bus activities in both Lichfield and Colombo St as well as the Exchange.

### **Real Time Information**

Over the holiday period there was some media focus on the fact that the bus tracking and real time information system was not yet running, and on 16 January a briefing paper on this matter was sent to all Councillors with copies to the media. The following paragraphs update that briefing paper.

It will be recalled that this is a brand new system, which involves the provision of equipment both on all the buses using the Bus Exchange, and a computer and software operated at the control room in the Exchange. The contractors, Connexionz Ltd, are a small local company which successfully out bid a number of international proposals, with a new locally developed idea which is very cost effective, simple conceptually and able to be inexpensively extended system wide.

The purpose of RTI is to give passengers up-to-date information about the arrival time of their buses, not unlike the situation for arriving and departing aircraft at airports. This is part of the overall Public Passenger Transport Strategy adopted by both Councils for the improvement and updating of the public passenger transport system. Other elements of the strategy include improved bus stop infrastructure, improved design and quality of vehicles, route changes and improvements such as new on-bus ticketing machines and a smart card ticketing system due for inauguration later in the year. Taken together, these measures will make buses more modern, convenient and accessible for the people of the Christchurch area.

The decision to introduce RTI to Christchurch at this time was made because the new operating system for Public Transport in the central city requires that buses spend much less time at the bus stops. One means to achieve this is to facilitate quicker boarding of passengers which the RTI system can assist by allowing passengers to be ready and waiting to board when their bus pulls up to the stop.

Also the RTI system allows passengers to reduce the amount of time spent waiting at a stop, by the passengers taking opportunities of a few minutes to do other activities before their bus arrives. This has the flow-on benefit of slightly reducing the demand on waiting space and facilities required at the stops.

At this stage RTI displays have been erected in both lounges in the Exchange, and in Colombo St at the base of the ramp into the Exchange and in Ballantynes shop windows. At a later date it is envisaged that shopkeepers and cafe owners in the vicinity will install their own RTI monitors so that their customers will know what time their buses are due.

Stage 1 of the programme has been the installation and commissioning of RTI in the vicinity of the Exchange, later stages will extend the system out to the suburbs, to main stops on all routes.

It was not possible for the RTI system to be operable from the commencement of the bus exchange for a number of reasons. These included some delays in supply of hardware by subcontractors (the display screens), but more particularly the need to obtain real world operational information for programming purposes, only possible after the buses started using the Exchange. This latter task has taken time to accumulate and verify, involving a cooperative effort from all the bus operators, Environment Canterbury and Connexionz. There have also been practical issues to overcome relating to the automatic opening of the lounge doors, and ensuring that buses always go to the door (the stop) as specified by the system. All parties agreed that in order to ensure long term public confidence in the system, it should not "go live" until it is functioning consistently and accurately.

Extensive testing was undertaken before the Christmas break, and with key personnel going on holiday, it was decided to hold over the completion of commissioning until their return to work on 15 January. The network RTI system being developed has been based on the system already in use on the Airport service. However, with the extensive nature of our bus network this has required greater operator intervention than expected, and at times has proven somewhat restrictive for flexibility of bus operations, e.g. introducing an additional bus on a route to get a service delayed by traffic congestion, for instance, back on time.

Further testing has been undertaken, and on Monday 29 January, the public screens in the off street part of the Exchange (Platforms B & C) were switched on. They are now in daily use, but are continuing to be monitored to ensure accuracy is maintained. The on- street screens, (Platforms D & E) are still subject to testing and again will be switched on when all are satisfied that the system is operating consistently and accurately. The closeness of the present Cathedral Square terminus for some on-street routes does place some limitations on the accuracy of displays that will be finally resolved when the buses move out of the Square in April.

In the meantime Environment Canterbury staff have been successfully using a public address system on a temporary basis to advise people of the correct stop for their buses in the Exchange building. The bus stops on Colombo Street are still operating satisfactorily without either RTI or a public address system, as the changes in the number of bus services through these stops has not changed significantly as yet. (The November 2000 changes affected principally services using the Bus Exchange building.) The final shift of services from the Cathedral Square Terminus planned for April this year will introduce many more services to the Exchange, including the stops on Colombo St.

It has been the right decision to delay turning on the public screens of the RTI system until all parties were satisfied that the possibility of error has been minimised. Rather than risk losing long-term public confidence, it was better to wait and get it right.

# Chairman's

**Recommendation:** That the information be received.