

# FACT SHEET: SMARTBUS TECHNOLOGY



In 2008, \$290 million was allocated within the State Government's Victorian Transport Plan for the continued delivery and expansion of the SmartBus network.

Technology that has never before been used in Victoria's bus network is now available on SmartBus routes to help keep buses running on time and to keep passengers up-to-date on bus arrival times.

## Traffic light priority

If a SmartBus is running late, the SmartBus system will communicate with the VicRoads traffic control system to automatically request priority at traffic lights. When it is safe to do so, priority at the traffic lights will be provided by extending the green light phase to assist the SmartBus to continue through the intersection and allow it to remain on schedule.



## Real-time passenger information signs

New Passenger Information Displays (PIDs) are located at high-use bus stops to provide real-time information on the arrival of the next SmartBus. They display the current time, the route number and destination of the next two SmartBus services, and the estimated minutes until their arrival. A push button triggers an audible message of the same information to help passengers who have a vision impairment.

At some stops the button needs to be pushed twice – once to activate the system and once again for an audible message.

Larger PIDs are installed at train and tram interchanges to also display real-time information on connecting train and tram services. Other bus stops are equipped with smaller, 'next-bus' displays in the SmartBus totem.

On-board audible and visual messages announce next stop information to bus passengers. As a bus arrives at a stop, external speakers advise waiting passengers of the route number and destination of the bus.





### Keeping track of SmartBus vehicles

Using the new technology, positions of all SmartBuses are tracked in real time so that predictions of arrival times on information displays at bus stops are continually updated. These predictions take into account unusually heavy traffic, accidents, road works, or temporary diversions.

Each SmartBus is fitted with a computerised unit that enables the bus location to be tracked by a control centre. This tracking information is provided using satellite signals from the Global Positioning System (GPS) receiver within the bus.

The bus odometer is used to help with tracking in areas where the satellite signals may not be available. This information is constantly sent back to the control centre via the mobile phone network.

Bus operators are able to monitor the progress of SmartBuses as they make their way around their routes. Travel time data collected by the SmartBus system provides operators with better information to plan new and improved timetables which keep up with patronage and traffic changes.

