

Real Time Passenger Information - Belfast

The Real Time Passenger Information (RTPI) system in Belfast was commissioned with ACIS in 2002. Over the 7 year period to present, there has been significant and consistent investment in the system, both by Translink and Roads Service.

The Belfast system operates using low band radio coverage. Each bus is fitted with a radio unit, an ACIS proprietary processor, a GPS antenna and a link to the customer ticketing system, in this case Wayfarer. At the beginning of each journey, the driver enters the individual journey into the Wayfarer, which in turn sends this journey data to the ACIS processor where it is matched to a pre-loaded timetable. The ACIS processor then sends details of this matched journey back to the central systems via the radio link every 30s. The vehicle position, recorded from the GPS antenna, is also sent as part of this data. This allows a controller to view the known location of every bus in the fleet – to within 30s.

The radio system not only relays the data through to ACIS central systems, but also to the local displays on the street. Each display is also fitted with a radio unit and an ACIS processor. These displays use the GPS position of the bus to work out when it will arrive at the stop. The prediction also allows for variations in traffic intensity by using the last few journeys to calculate the arrival time. So, when a display reports a bus will be there in 14 minutes, the public can be sure that a bus will arrive in 14 minutes rather than the historical 'wait and hope' schedules.

The contract in Belfast, as with so many of ACIS' BusNet systems, started along a trial number of routes with a few displays dotted in and around Belfast City Centre. It has since expanded year on year at quite a pace. The system is now of a significant size covering the entire Translink Metro fleet and a number of Ulsterbus vehicles. In total this gives 340 vehicles with RTPI technology fitted. We also have almost 180 passenger information displays throughout the city. This has allowed ACIS to build a trusted, strong working relationship with both Translink and Roads Service.

RTPI Technology delivers:

- Improved reliability
- Improved security
- Reduced travel times
- Improved confidence in public transport
- Increased bus patronage
- Reduced carbon emissions
- Create and deliver sustainable travel plans critical for new developments
- Assist traffic management reporting

All major routes within Belfast are fitted with Traffic Light Priority equipment. There are currently 107 junctions fitted with this technology. This allows buses which are running unacceptably late to request a green light at junctions to allow them the opportunity to catch up with their schedules.

TLP Technology delivers:

- Increases in Buses Running to Schedule
- Reduced Journey Times
- Reduced Fuel Usage
- Reduced Vehicle Emissions
- Increased Customer Satisfaction

Achieving Modal Shift

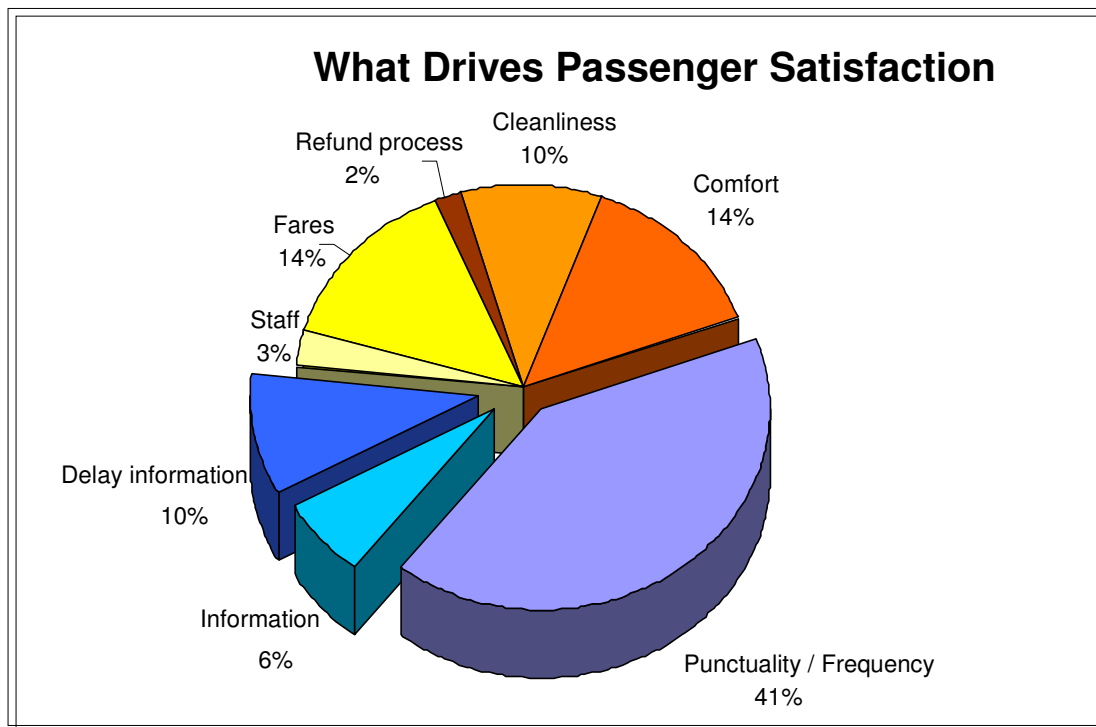
'If bus journey times were cut by half through bus priority measures, 26% of car users say they would very likely travel more by bus'

'Commission for Integrated Transport 2002'

'In the right circumstances, with the necessary commitment and support, bus use can be increased dramatically'.

'Transport White Paper 2004'

Information and Punctuality Increase Customer Satisfaction



About ACIS

ACIS is the leading UK based provider of integrated information systems in passenger transport applications. ACIS employs over 175 staff and has its principal offices and extensive Research and Development facilities in Cambridge whilst installation and maintenance services are delivered through a network of local depots.

The ultimate ACIS solution is based on extensive experience built over many years and in many systems. Across the United Kingdom, ACIS are currently partnering with all seven Passenger Transport Executives (PTE's), 46 regional and local authorities, 15 regional airports and all the major UK bus operating companies.

- ACIS systems are currently tracking in excess of 8,000 buses
- 16 regional international airports use ACIS as their operating system provider
- The ACIS Interchange solution is installed in over 60 passenger interchanges including Europe's largest bus and coach facility – Victoria Coach Station
- We provide passengers with real time information wherever, whenever and however they choose through 55,000 information points including, Websites, Digital TV platforms, and innovative Smart displays in private homes
- Our systems receive over 8,000 daily SMS requests.
- The wider ACIS solution portfolio includes Systems Integration, UTM, Real Time Information Systems, Electronic Passenger Information and comprehensive system management tools that help to deliver high quality, high capacity public transport
- We can provide a range of real time travel information via multiple media to compliment quality bus stop infrastructure and improve the passenger experience
- The ACIS bespoke design service can help you to create dedicated travel information centres for residents and visitors, to encourage sustainable modes of travel