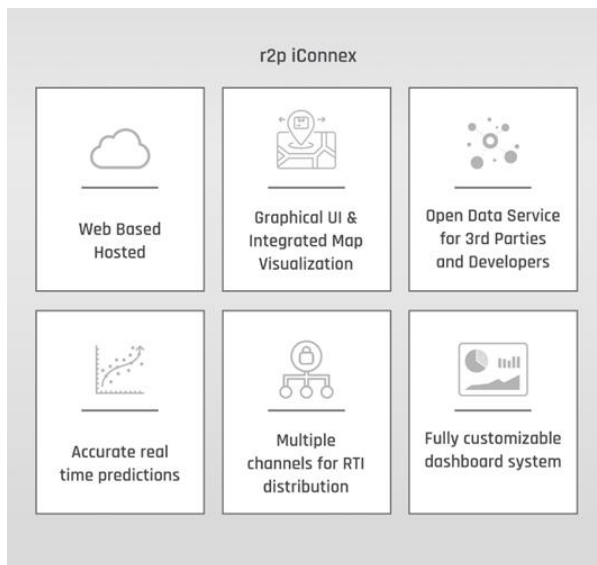
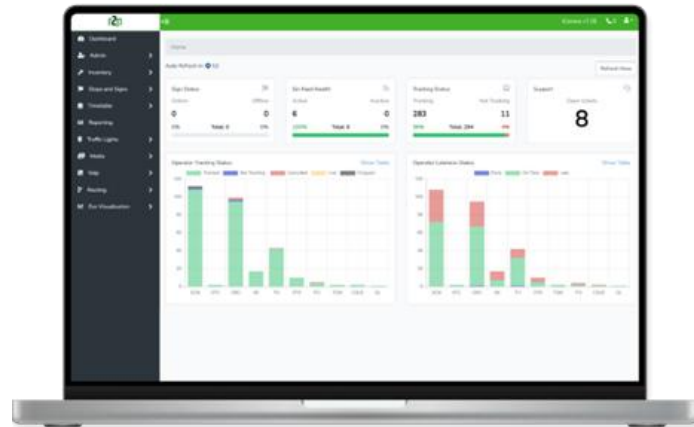




iConnex RTI Platform

What is iConnex?

iConnex is a comprehensive, secure, easy-to-use Real-Time Information (RTI) System that helps councils and bus operators give passengers accurate, real-time bus arrival information. It shows where buses are, when they will actually arrive, and helps keep services running smoothly. By tracking buses live, iConnex helps improve reliability, reduces uncertainty for passengers, and supports better



planning of bus routes and timetables.

iConnex brings together data from multiple sources and shares it across bus stops, onboard displays, websites, apps, and more, ensuring passengers always get up-to-date information. It also gives operators powerful tools to monitor performance, spot delays, and quickly respond to issues.

Key Benefits

- Accurate real-time bus arrival information passengers can trust
- Easy-to-use dashboard with integrated map visualisation for managing bus performance, routes, RTI displays and monitoring performance
- Works with many different display hardware manufacturers and data sources
- Feeds multiple channels for RTI data distribution
- Fully web-based and hosted

iConnex's core components are:

Data Broker

The iConnex Data Broker acts as the central integration and distribution layer for all RTI data, ingesting, validating, normalising and managing both static and real-time feeds from multiple sources. It consumes timetable data (TransXChange, NeTeX, BODS), stop and locality data (NaPTAN/NPTG), live vehicle location data (primarily SIRI-VM, but also other formats), and disruption messaging (SIRI-SX/SM). The Data Broker continuously manages feed subscriptions, data quality, version control and failover, ensuring a single, consistent and authoritative RTI dataset. This consolidated dataset is then securely redistributed to displays, third-party systems, APIs, web channels, UTM/TSP systems and external consumers, providing a scalable, resilient “single source of truth” for real-time passenger information.

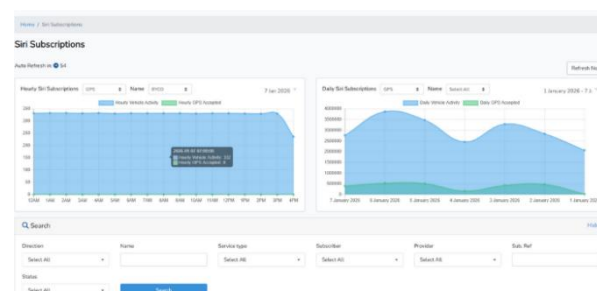
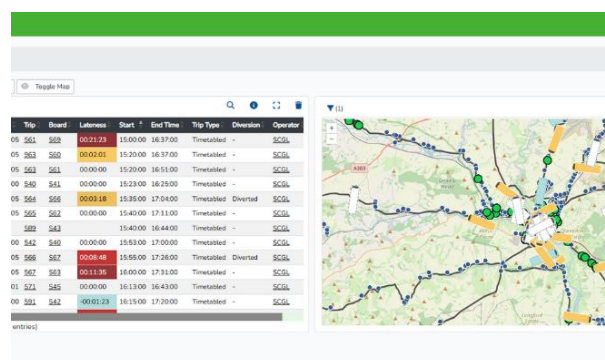
Prediction Engine

The iConnex Prediction Engine converts raw tracking and timetable data into highly accurate, continuously updated arrival and departure predictions. It matches live vehicle positions to scheduled journeys using sophisticated rule-based and GPS-assisted matching, then calculates ETAs using weighted statistical models combining short-term real-time conditions, historical performance, and scheduled timings. Predictions dynamically adapt to congestion, dwell behaviour, diversions, cancellations, vehicle replacements and data loss, updating downstream outputs in milliseconds. The engine continuously self-learns by analysing prediction accuracy and bias, automatically adjusting model weightings to improve performance over time, delivering industry-leading accuracy for on-street displays, APIs, third-party systems and traffic signal priority applications.

Operations and System Management Dashboard

iConnex is managed via the powerful web-hosted system portal. It allows users to manage, monitor and report of all systems within its operational control.

Within the base module, Board Monitor and Map View allows users to visualise in real time the tracking and lateness performance of the vehicles, as well as the local bus stops and live arrivals.

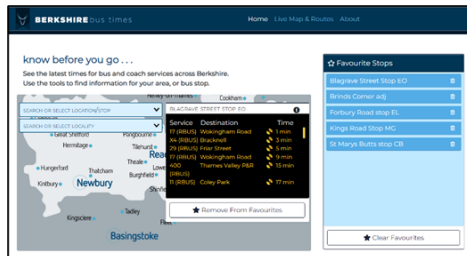


Users can also monitor and report on the third-party service provider data feeds into iConnex (eg BODS, SIRI VM/SM, NaPTAN, and TXC) and the status of connected displays.

Additional iConnex Modules

Content Management System (“CMS”)

The CMS enables the editing and configuration of content on all forms of displays and the integration of media components (eg images, video and audio).

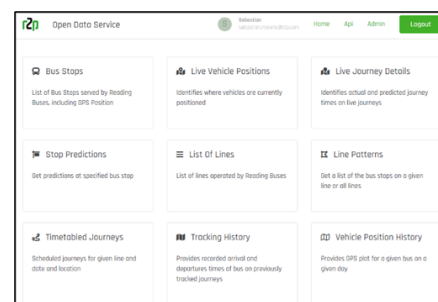


Journey Planner

A mobile-friendly website (“public web interface” or “PWI”) operated for local authorities to enable passengers to easily look up their bus route, choose a stop, and see live arrival and departure times.

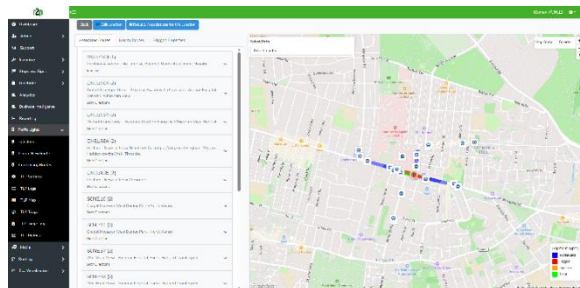
Open Data Service (“ODS”)

The ODS is a hosted web page available for third parties to obtain real-time arrivals and departures information for buses within the specified area, through a standard API.



Traffic Light Priority (“TLP”)

The TLP module boosts bus punctuality by giving automated, conditional priority at traffic lights only when justified. An intelligent engine evaluates each bus in real time - using factors like lateness, route progress, and passenger load - then requests priority from the urban traffic management & control (UTMC) system only when thresholds are met. Priority requests follow a controlled, geofenced process and automatically clear once a bus passes the junction or conditions change.



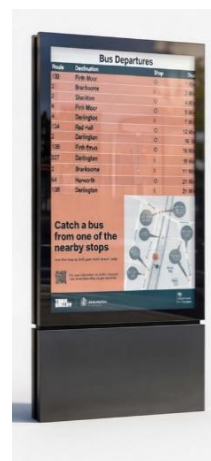
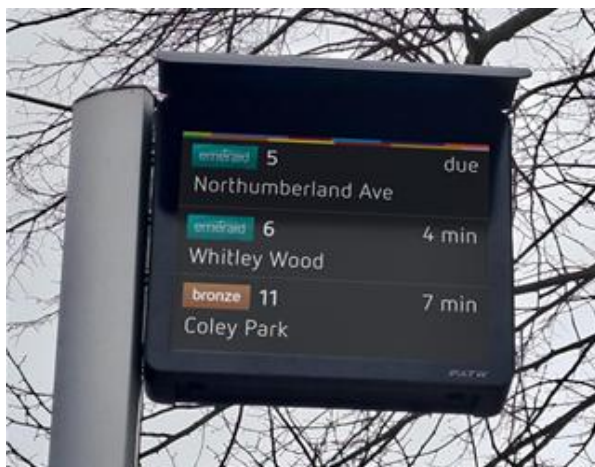
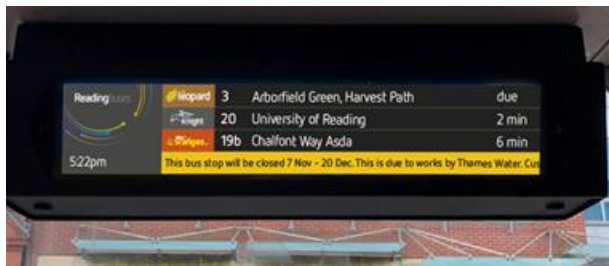
Reporting and Analytics

The Reporting module helps authorities and operators measure and analyse how well bus services follow scheduled timetables by comparing real vehicle movements with planned routes and stops. A simple reporting interface lets users filter by time period, route, vehicle, stop, operator, or timing point to review network-wide trends or analyse specific services. The system also distinguishes genuine operational delays from tracking or data-quality issues, ensuring accurate performance results.



On Street Solutions

Bus Stop / Interchange Passenger Information Displays



r2p can interface with or supply and manage many different types of bus stop and interchange passenger information displays. These can be installed in shelters, mounted on poles or walls, or provided as freestanding totems. These are available in a variety of dimensions as well as IP and IK ratings to suit the location. Supported technologies include LED, TFT, and low power (eg E-Ink) which can be mains, battery or solar powered.

Audio Announcement Push Buttons

This allows visually impaired passengers to independently confirm they are at the correct stop, understand which services are due, and identify whether the approaching bus is the one they need. Audio announcements are provided only when the button is pressed, helping to keep noise levels low while still offering clear and accessible information.



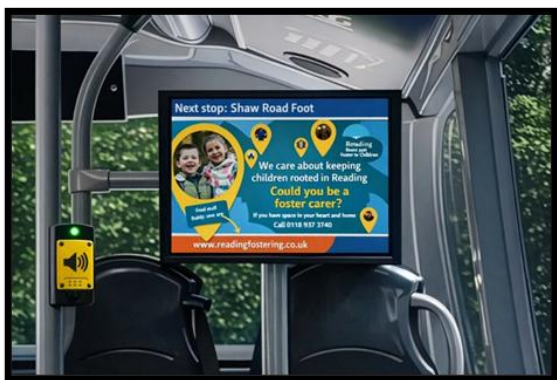
Upgrading Legacy Displays

iConnex can integrate with existing RTPI displays. Over the past 17 years, r2p has successfully upgraded and operated thousands of on-street passenger information displays, taking responsibility for their ongoing operation and maintenance. r2p's approach is to maximise the economic life of existing assets, delivering comprehensive upgrades beyond simple integration, including replacement of control hardware and, where required, communications, display components, power systems, and housings.

On Bus Solutions

On Board Units (“OBU”)

The OBU is the central hub for on-bus systems, connecting passenger displays, destination signs, the driver interface, and ticketing. Using mobile connectivity and GPS, it supplies accurate, high-frequency real-time vehicle locations to the RTI system for live information and operational monitoring. Multiple OBU variants support different operational needs, ensuring reliable connectivity and scalable fleet deployment. Different OBU variants are available to suit varying operational requirements, ensuring reliable connectivity and scalable deployment across mixed fleets.



On Board Displays

r2p provides internal RTI bus displays for:

- Route and Destination Information
- Next Stop Announcement
- Final Stop information
- Diversion information

On Board Audio (incl Hearing Loops)

Audio announcements can mirror visual

next-stop information via integrated speakers. r2p also installs and supports DfT-compliant hearing loop systems to enhance accessibility for hearing-impaired passengers.



Automatic Passenger Counting (“APC”)

r2p delivers APC as a managed, end-to-end service integrated with on-board and back-office systems. Over-door sensors count boarding and alighting passengers, with data processed on board, linked to the correct vehicle, route, stop and journey, then securely transmitted for analysis. r2p provides all hardware, installation, integration, configuration and support.

CAN Bus Interfacing & Door Sensors

To enhance RTI and APC accuracy, r2p installs CAN Bus and door sensors. CAN Bus provides data such as speed, odometer, ignition state, ramp deployment and door status via non-intrusive clamps feeding the OBU. Where door data is unavailable, r2p fits sensors to align counts with door-open events, avoiding false counts on crowded buses.