



Vix BeaconTM

INTELLIGENT TRANSPORTATION SYSTEM

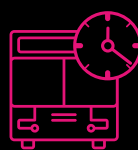
Vix Beacon ITS gives you control of your fleet.

Running a public bus service is challenging.

You want to ensure that all your buses deliver their scheduled routes, address any issues that cause delays, and communicate with riders and staff when things change.

To do that, you need technology you can rely on to provide accurate data so that you can build trust with your riders and your front-line staff.

With Vix Beacon ITS, you can:



Tell riders when the next bus is going to arrive

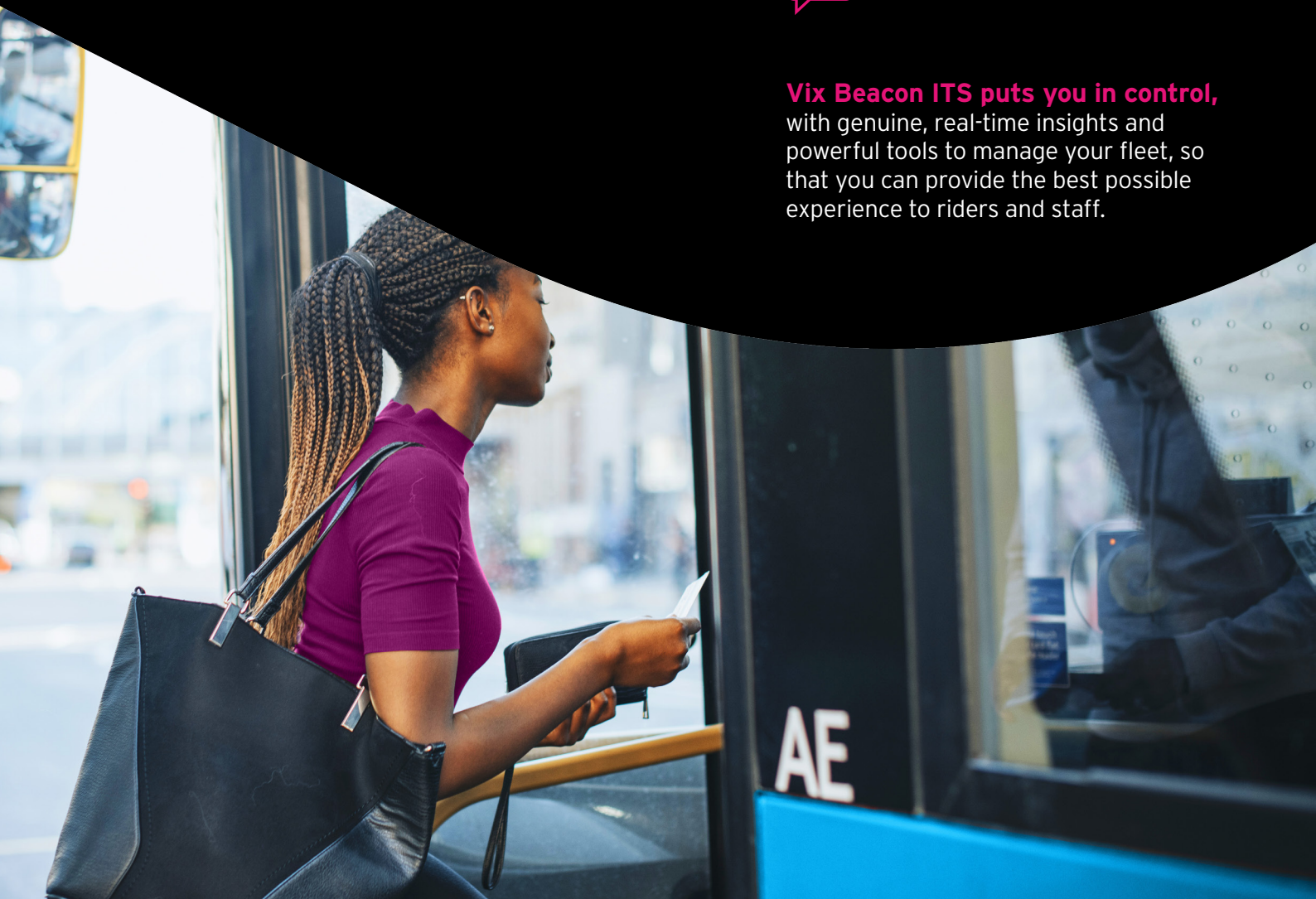


Track your vehicles and deal with issues in real-time



Communicate with drivers e.g. if they need to reroute

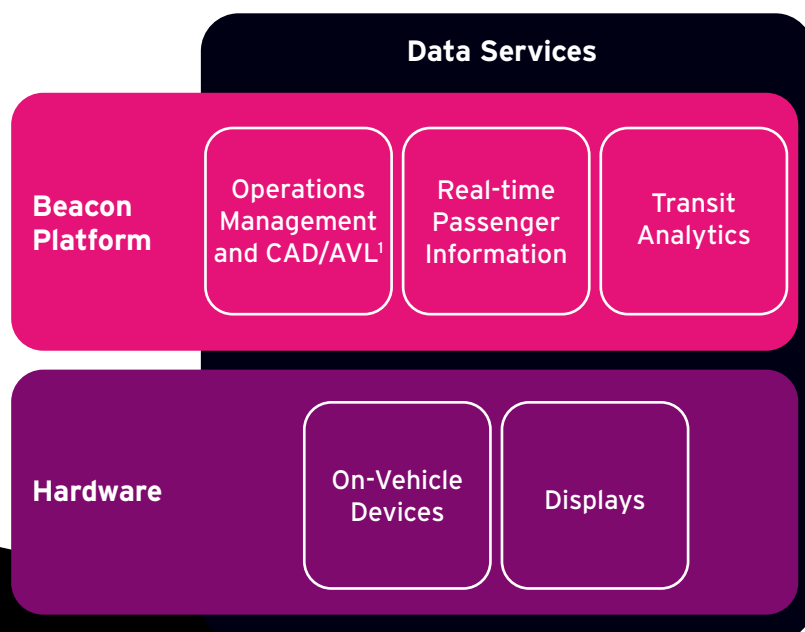
Vix Beacon ITS puts you in control, with genuine, real-time insights and powerful tools to manage your fleet, so that you can provide the best possible experience to riders and staff.



What is Beacon?

Vix Beacon ITS is a cloud-native, modular platform designed to manage and monitor your fleet, support drivers, and keep riders up-to-date on their journey.

You can use Beacon alongside our range of on-vehicle equipment and displays, or integrate with your own hardware as required.



¹Computer-Aided Dispatch / Automatic Vehicle Location

Why choose Beacon?

1. Data you can trust

Data is the backbone of managing bus operations. If the data quality is poor, everything else goes wrong – controllers don't have a full picture of what is happening, and riders get frustrated when their bus doesn't turn up at the predicted time.

Beacon's tried-and-tested prediction engine uses advanced algorithms combined with static and real-time data to generate accurate predictions. The system can ingest, validate, and consolidate high volumes of data from diverse sources, giving you the best possible picture of your operations in real-time.

2. Next-generation user experience

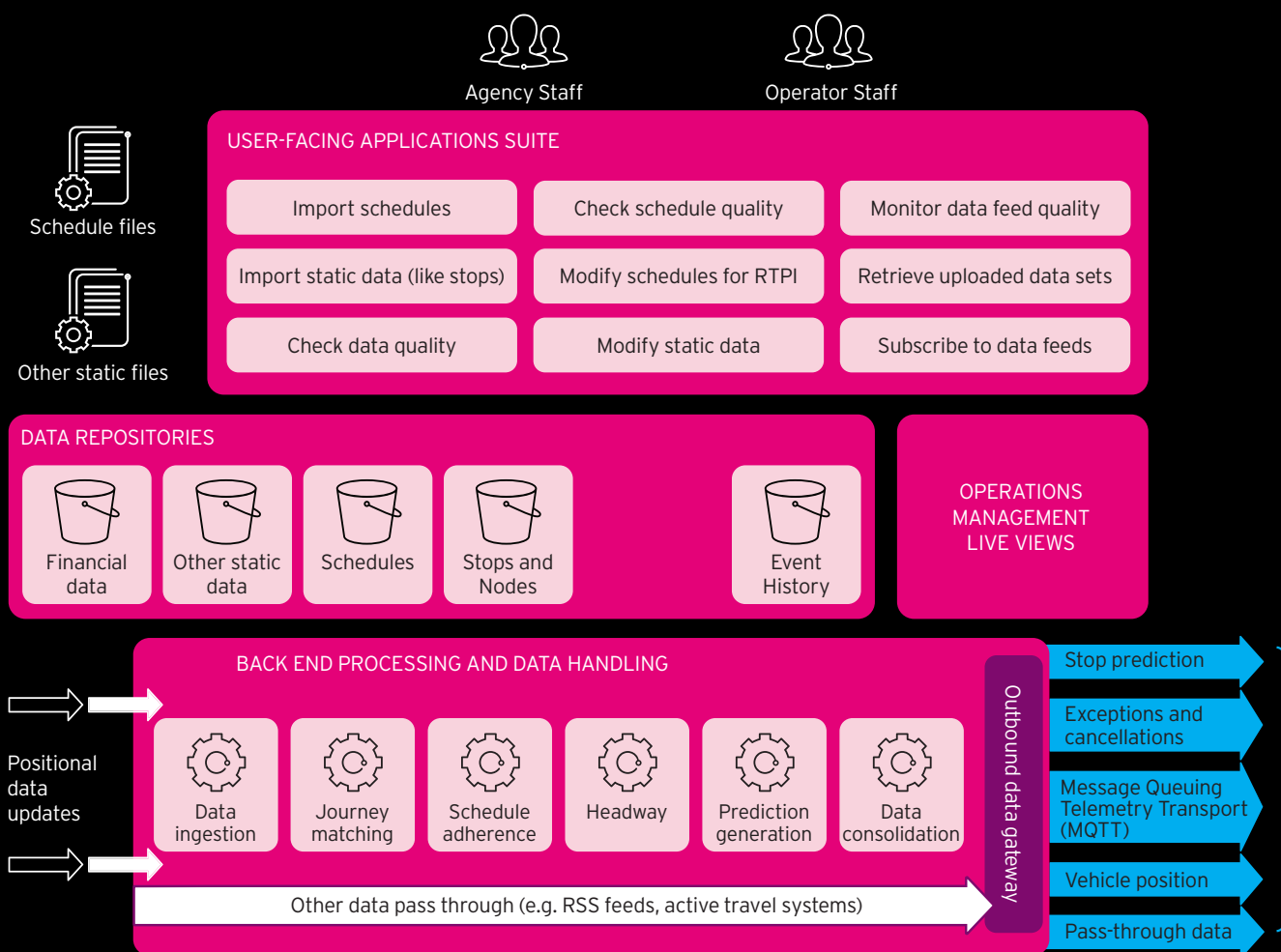
Simple, sleek, secure: the Beacon platform features a fresh and modern interface, with a mobile-responsive design making it easy for dispatch and operations staff to manage their fleets and communicate with drivers and riders. The interface is highly configurable, allowing controllers to tailor alerts and select widgets to suit their needs.

3. Get the most value from your existing technology

In a world of complex, interdependent transit systems and technologies, intelligent transportation systems must be open, flexible and able to fit into existing ecosystems.

Beacon's cloud-native, modular platform is designed to seamlessly integrate with your existing technology, so you can get the most out of your existing estate and technology investments. Choose what you need now, and update as needed in the future. No matter the size of your agency, Beacon can scale with you.

Data Services



Manage your data

Beacon Data Services centralizes service data, including schedules and live positional information, providing timely, targeted and useful data to a variety of systems. This can include real-time passenger information systems and displays, journey planners and mobility platforms, as well as fleet management systems, dashboards and reports.

Accurately predict bus times

Our market-leading prediction engine generates dependable predictions, matches >97% of journeys, and provides schedule adherence and headway statistics.

Reduce delays

Help buses get to the next stop faster using Traffic Light Priority (TLP) with integrations into urban traffic management control systems (UTMC).

Deploy quickly

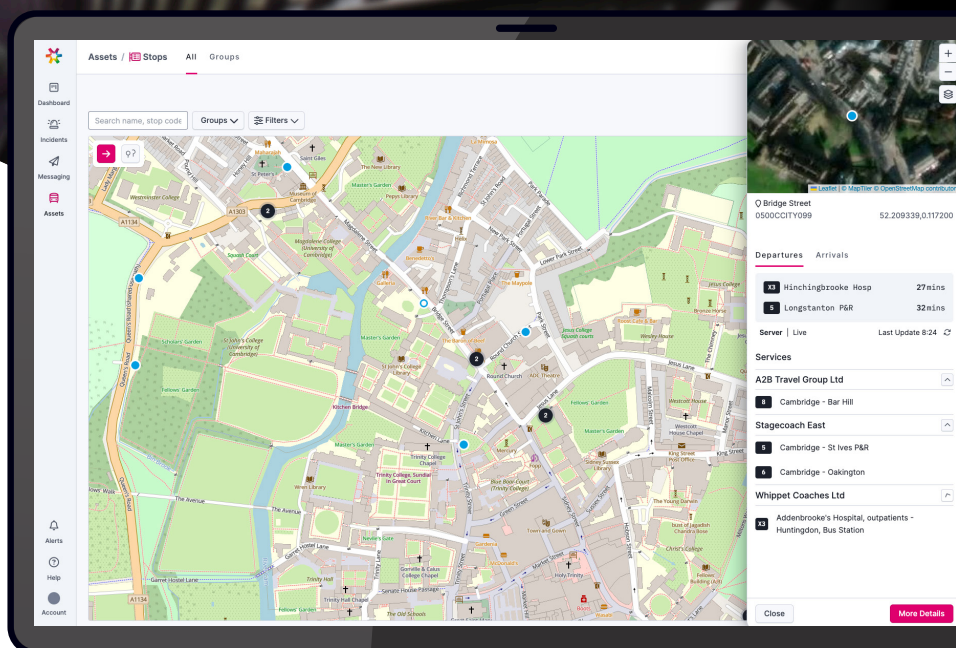
Beacon Data Services is hardware-agnostic, meaning no equipment changes are necessary to get started.

Real-Time Passenger Information



Keep your riders up-to-date on their journey by delivering information through APIs, mobile apps, websites, and physical displays on-bus, on-street and in the station. Our services cover installation and preventive and reactive maintenance.

Control your entire estate through a single platform, including precise real-time predictions, schedules, and cancellations, plus configuration for alternative feeds like news, weather, infotainment, and advertising.



▲ Manage displays and messaging via the Beacon Content Management System (CMS)



Improve the passenger experience

Build trust with your riders and help them to better plan and make changes to their journey with the right information at every stage of their trip.



Manage complex information networks

Beacon supports a secure multi-operator environment with restrictions to ensure no conflict in messaging, while APIs provide data to third-party integrators. Automated real-time data flow cuts supervision and costs for both operating systems and third parties.

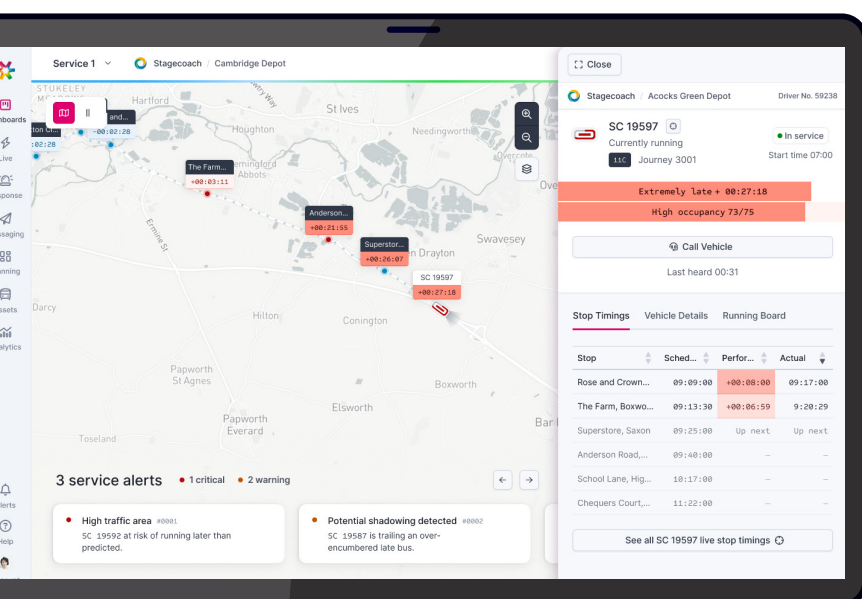


Monitor, maintain and repair

Monitor your sign estate in real-time and quickly address any issues. The system logs all user actions for auditing.

Operations Management & CAD/AVL

Empower operators to monitor and adjust transit operations in real time.



▲ Track vehicles in real-time.

Track and manage your fleet

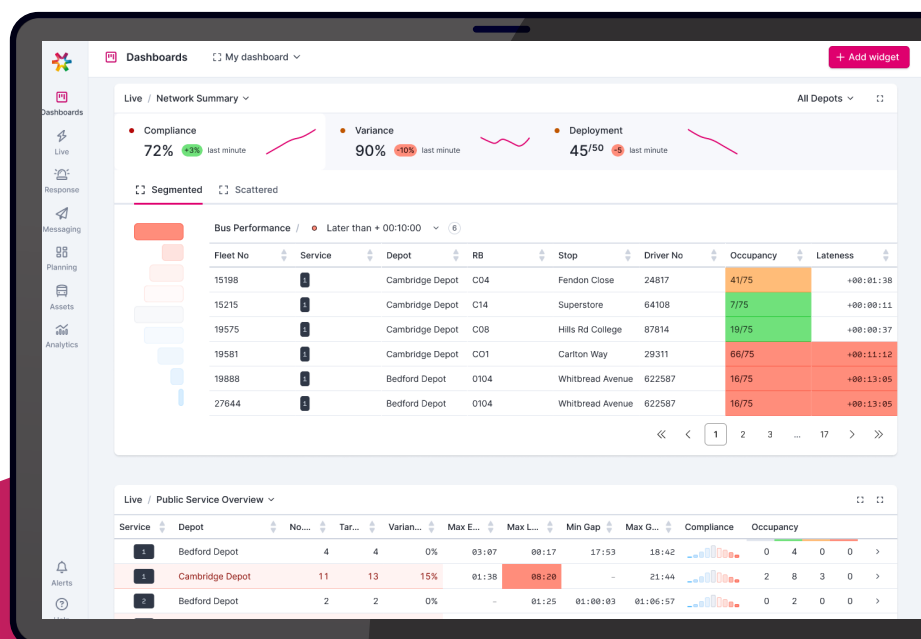
Track vehicles in real-time for an at-a-glance view of schedule adherence, KPI tracking, journey time tracking and passenger occupancy. Intelligent alerts help spot and address issues such as vehicles being off-route quickly and efficiently. Plus, manage incidents and investigate complaints with history playback.

Configure to suit your needs

Beacon's dashboards include highly customizable alerting thresholds that users can color code, the ability to filter by operator, contract, service, area and corridor on maps and monitoring screens, and a schedule view to manage operational changes, cancellations and detours.

Enable franchise management

For transit agencies and authorities with multiple contractors running bus services in their transport network, Beacon enables individual bus operating companies to view their own data only while the managing agency/authority has an overall view.



▲ Configure dashboards to display critical information.

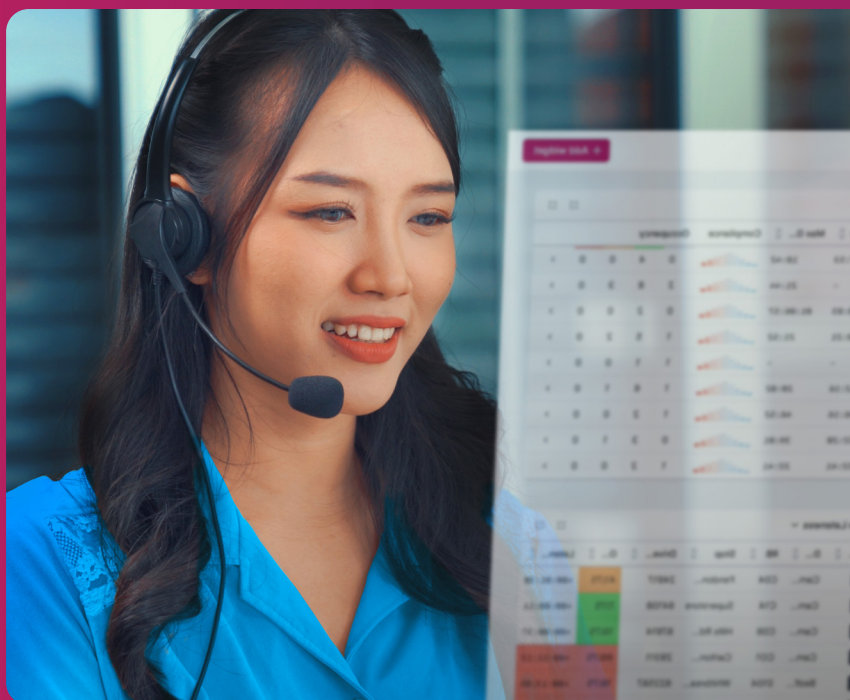
Operations Management & CAD/AVL

Make life easy for your controllers

Beacon gives controllers the tools they need to manage day-to-day fleet operations as well as rich data to monitor performance over time. Assign drivers to vehicles, easily see which vehicles are early, late or off route, and fix vehicle equipment faults remotely.

Make life easy for your drivers

Our system is a driver's companion, enhancing safety and the overall experience. The vehicle's daily trips can be sent to the vehicle automatically, so the driver doesn't have to interact with the system. They simply get in and drive.



Driver	Operation	Safely operate the vehicle. Follow the route on-map, and view schedule adherence and headway.
	Non-driving time	Access to the full application suite, including pre and post-trip inspection.
	Exception handling	Disruption and incident management. Receive diversion guidance and communicate with dispatchers.
Dispatcher	Operations	Track and monitor the network and vehicles in real-time. Understand issues with live map views, corridor/service headway management and intelligent alerts. Address issues e.g. amend routes and trips, communicate with drivers.
Management	Reporting	Identify changing user patterns and opportunities for growth. Use data to support business cases for investment.

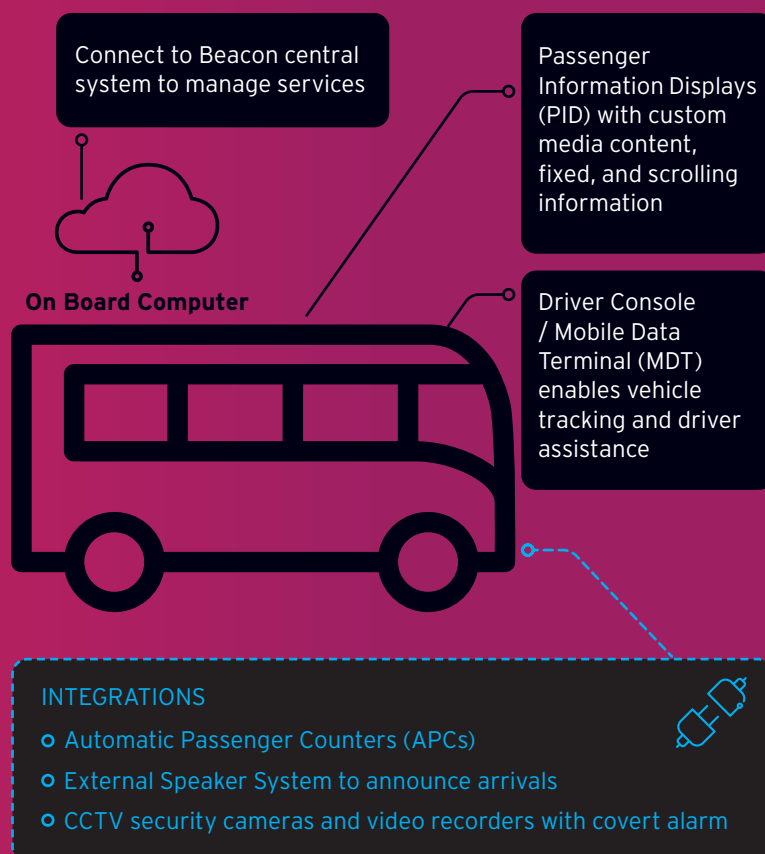
On-Vehicle Devices

CAD/AVL vehicle technology empowers drivers and informs riders. With modular designs and ITxPT (Information Technology for Public Transport) compatibility, we offer a diverse range of cost options for your operation's needs.

You can integrate the Beacon platform with your existing hardware or upgrade as required.

ITxPT compatible on-vehicle hardware, applications and interfaces

- Driver comms
 - Voice Over Internet Protocol (VoIP)
 - Text messaging
- Fleet Management System (FMS) Gateway connections for Controller Area Network (CAN) and vehicle status data
- Next stop audio and visual announcements
- Automatic Passenger Counting (APC)
- CCTV
- Walkaround checks
- Fare Collection service or integration
- Destination sign integration



On-Street Displays

We offer a variety of on-street displays, including battery, solar and mains powered, plus options for rich media, to provide up-to-date information to riders even in remote locations.

Displays for every situation

- e-Paper
- TFT
- LED



Transit Analytics

The Analytics package delivers swift operational insights to ensure compliance and measure the performance of your network.



Get insight into fleet movement, network usage, and transit operations.

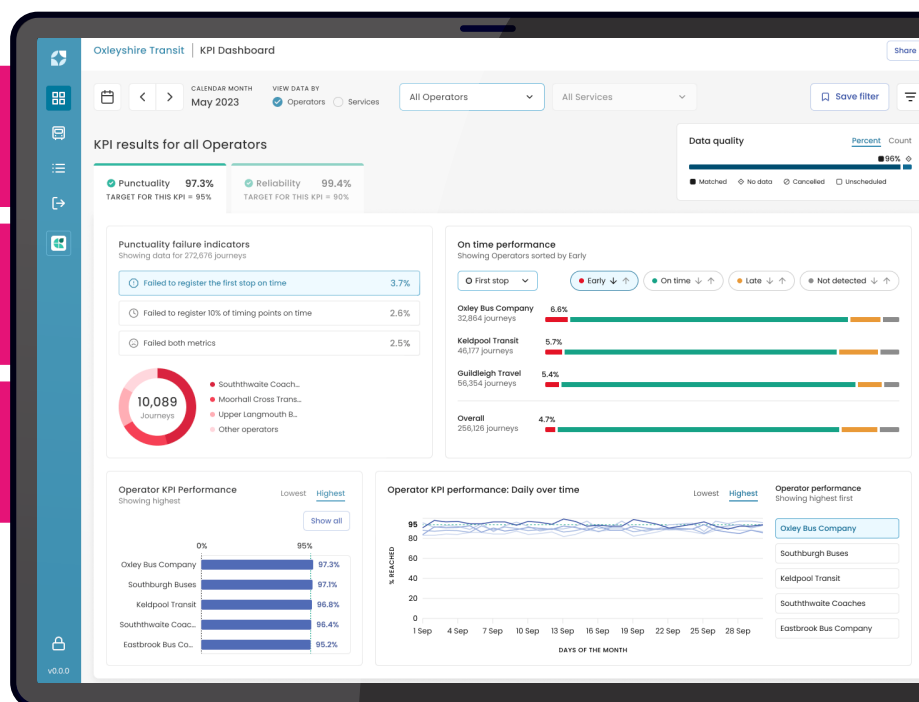


Ensure compliance and measure performance against KPIs.



Anticipate future needs through analytics, transit demand forecasting, and reports.

The Beacon Transit Analytics package includes an integration with Mosaïq Insights, provided by our sister company Snapper Services.



▲ Measure performance against key metrics such as reliability and punctuality





About Vix.

Vix Technology is the global leader in intelligent transportation systems, automated fare collection, and transit analytics. With customers in 200 cities around the world, Vix embraces the complexities of modern public transit to create best-in-class fleet management, ticketing and passenger information solutions for transit agencies and operators.

Vix is passionate about connecting people and communities, combining an open, collaborative mindset with cutting-edge technology to make public transport more accessible and more cost effective for all.

For more information, visit: www.vixtechnology.com

