



CADENCE 247: SERVICE DEFINITION

Further Information: cadence.support@cityscience.com

WHAT IS CADENCE?

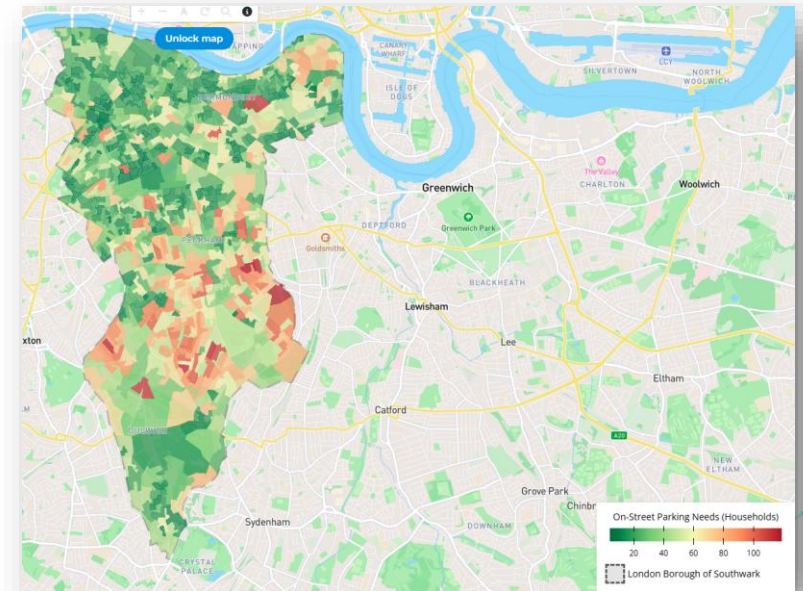


Cadence 247 is a real-time incident management and operational intelligence platform designed for highways authorities and traffic management teams.

It is a cloud-based geospatial system that uses our proprietary, award-winning platform, Cadence, to help local authorities record, track, and report network incidents without requiring specialist GIS training or complex software installations.

From incident logging to performance reporting and real-time network monitoring, Cadence 247 provides the tools needed to manage road networks efficiently and respond to incidents quickly.

Our system allows for instant incident capture with automatic geocoding and simplified real-time reporting for stakeholders.



OUR SERVICES



GIS Mapping & Visualisation The vital first step to spatial analysis is having the right data at your fingertips. Cadence houses 5,000+ curated UK planning-related datasets, maintained and updated continuously. We combine cutting-edge GIS technology with an intuitive interface, enabling users to create professional-quality maps in minutes

Real-Time Incident Management: The vital first step to effective network management is capturing incidents as they happen. Cadence 247 provides an intuitive map-based interface for logging incidents with automatic geocoding, severity categorisation, and action tracking: all updated in real-time and accessible across teams.

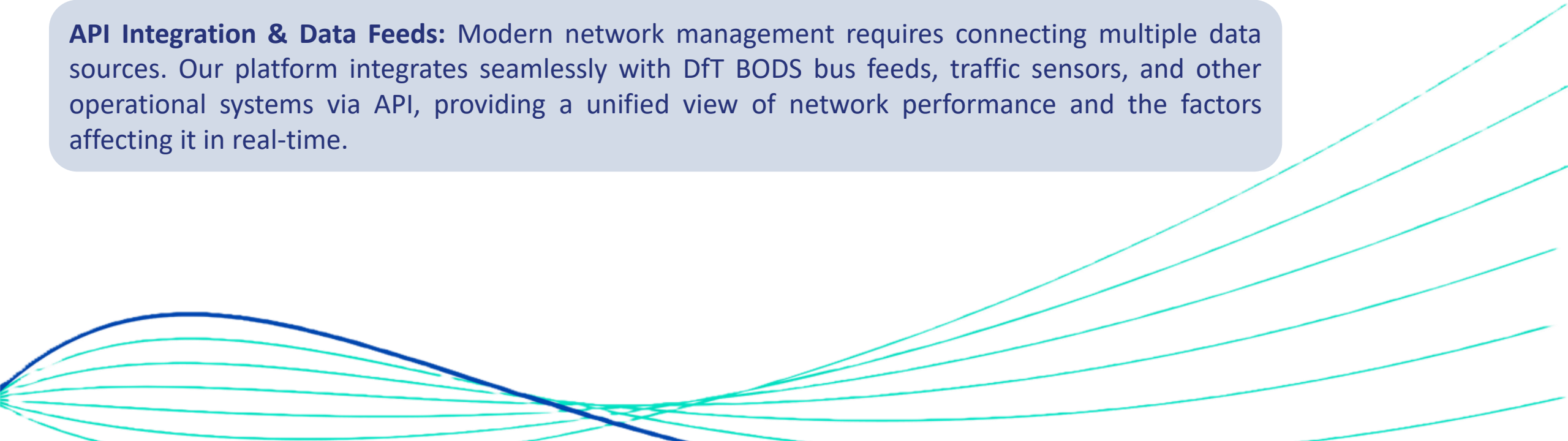
Operational Intelligence & Network Monitoring: Incident management is just the start. Our real-time operational dashboard integrates multiple network data feeds, from bus location tracking to traffic performance metrics. This turns complex operational data into clear, visual intelligence that supports rapid decision-making and reduces delays.

OUR SERVICES



Automated Reporting & Analytics: Manual reporting is time-consuming and error-prone. Cadence 247 generates automatic reports in real-time, replacing hours of Excel-based manual compilation with instant, accurate statistics. Export-ready outputs communicate network performance clearly to councillors, stakeholders, and partners.

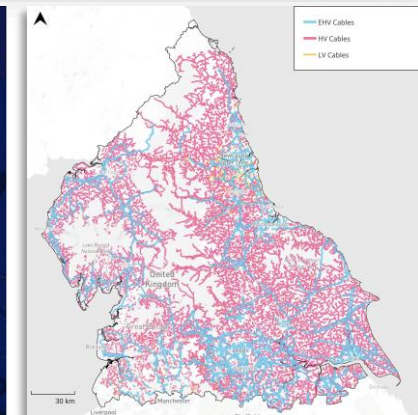
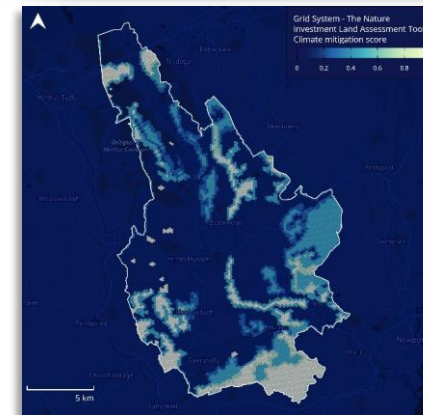
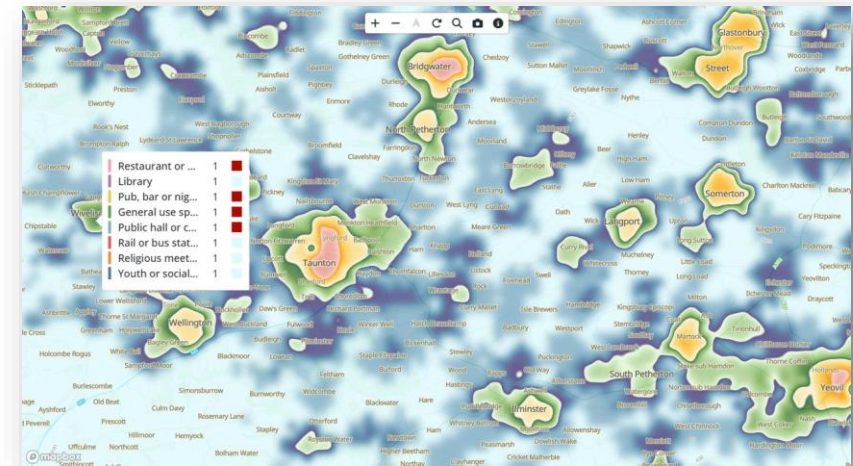
API Integration & Data Feeds: Modern network management requires connecting multiple data sources. Our platform integrates seamlessly with DfT BODS bus feeds, traffic sensors, and other operational systems via API, providing a unified view of network performance and the factors affecting it in real-time.



GIS MAPPING & VISUALISATION

Built for the public sector. Cadence is purpose-built for public institutions, combining geospatial precision with user-centred design to deliver transparent, audit-grade spatial intelligence. We understand public sector complexity and work alongside your teams to embed GIS across departments, turning data into clear, actionable insight. From regional monitoring to digital local plans, Cadence supports confident, data-driven place-making..

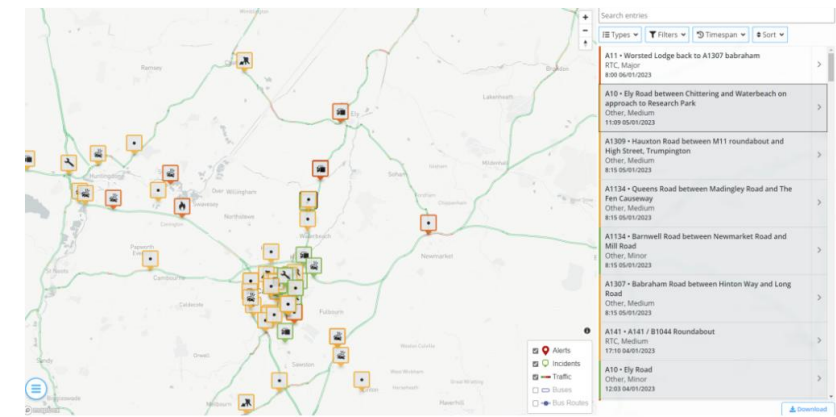
- **No-Code Data Upload & Integration:** We're more than just software. We're your strategic partner across the entire planning and analysis journey.
- **5,000+ Pre-Integrated Datasets:** We handle the complexity of data discovery and preparation so you don't have to. Our curated databank, built on best-in-class sources including OS, ONS, and specialist environmental data, offers granular, policy-relevant insights trusted by nearly 100 local authorities across the UK.
- **Real-Time Collaboration & Sharing:** Cadence's cloud platform keeps your maps live and shareable. Visual dashboards, team-specific projects, and instant web publishing foster cross-departmental collaboration and transparency. Monitor spatial patterns, set priorities, and share results in a way that resonates with all stakeholders.
- **Award-Winning Innovation:** Trusted by councils, Combined Authorities, and Strategic Transport Bodies nationwide. Winner of the CIHT Innovation Award and Masters of Modelling Awards, with nominations for Net Zero Innovation of the Year. Our platform transforms how organisations leverage spatial data for sustainable, inclusive growth.



REAL-TIME INCIDENT MANAGEMENT

Built for highways authorities. Cadence 247 is purpose-built for traffic management teams and network operators, combining geospatial precision with operational simplicity to deliver instant incident intelligence. We understand the duty of care requirements under the Traffic Management Act and work alongside your teams to modernise incident logging, turning manual spreadsheets into live, visual dashboards. From daily incident tracking to monthly trend analysis, Cadence 247 supports confident, data-driven network management.

- **Map-Based Visual Interface:** We're more than just incident logging software. We're your strategic partner for operational excellence.
- **Automatic Geocoding & Categorisation:** We handle the complexity of location coding and severity classification so you don't have to. Our intuitive interface allows users to record incidents by clicking on a map, with automatic categorisation by severity and actions taken (no manual coordinate entry required).
- **Common Operating View:** Cadence 247's cloud platform keeps all users informed in real-time. Shared dashboards, instant updates, and clear visualisation foster cross-team coordination and transparency. Monitor incidents as they happen, track responses, and share information in a way that reduces delays.
- **GovTech-Proven Innovation:** Trusted by highways authorities across the UK. Developed under the GovTech Challenge fund with Cambridgeshire County Council, proven to reduce reporting time from hours to minutes.



OPERATIONAL INTELLIGENCE & NETWORK MONITORING



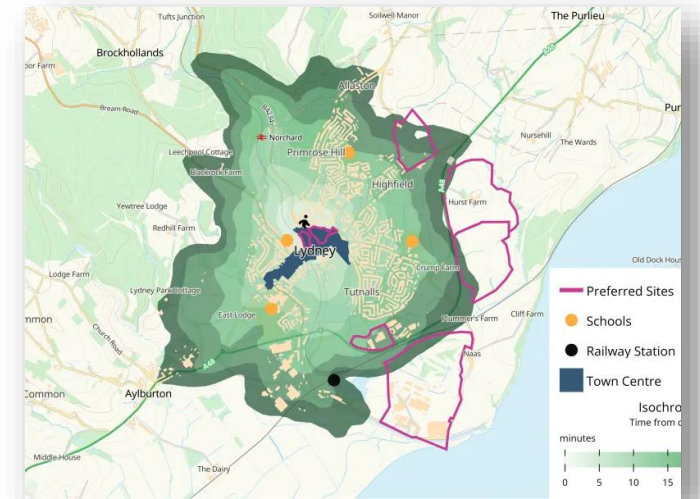
Turn network data into actionable intelligence. Static incident logs don't tell the full story about network performance. Cadence 247 is more than an incident management system: it's a real-time operational platform that visualises, tracks, and reports all manner of network information, helping authorities understand performance patterns and respond proactively. Our operational intelligence functionality is built on core principles that guide authorities through every stage of network monitoring:

Real-Time Data Feeds: Live API connections to bus location systems (via DfT BODS), traffic sensors, and operational networks provide instant visibility of network performance, showing which buses are running ahead, behind, or on schedule.

Geospatial Visualisation: Clear geographical interfaces show where issues are occurring, helping teams understand spatial patterns and identify hotspots requiring intervention or infrastructure improvements.

Performance Analytics: Track network performance over time, identify trends, attribute delays to specific incident types, and generate insights that support infrastructure investment decisions and operational improvements.

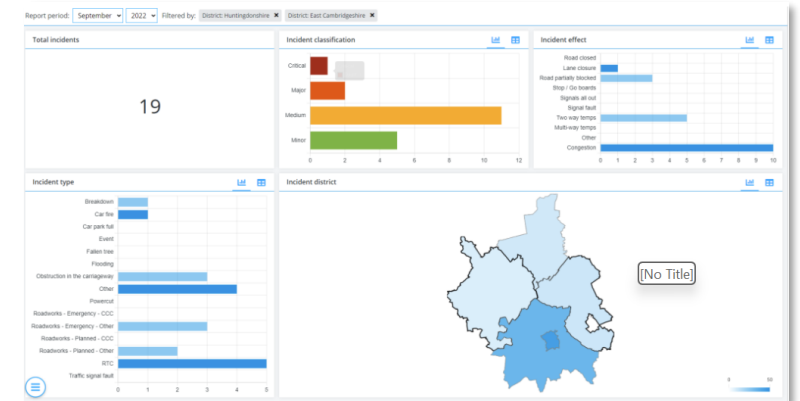
Integration with Existing Systems: Connect seamlessly to your existing operational data sources, creating a unified view without replacing legacy systems or requiring complex data migrations.



AUTOMATED REPORTING & ANALYTICS

From manual spreadsheets to instant intelligence. The challenge isn't just logging incidents; it's turning data into meaningful reports quickly. Manual Excel systems take hours each month, risk errors, and delay information. Cadence 247 makes reporting instant and automated. **We don't just record incidents: we deliver analytics.** Our platform generates comprehensive reports automatically, improving accuracy and timeliness so councillors, stakeholders, and partners receive clear, up-to-date information immediately.

- **Faster Updates:** Incidents logged on the map are instantly available in reports. No manual data entry into separate spreadsheet systems. No waiting for monthly compilation cycles.
- **Easier Reporting:** Pre-configured report templates provide automatic statistics across the county. One-click exports generate professional reports ready for distribution to management, elected members, or external partners.
- **Increased Accuracy:** Geocoded data eliminates coordinate transcription errors. Real-time updates ensure reports always reflect current information. Audit trails track every incident and action for accountability.
- **Reduced Maintenance:** Cloud-based system requires no manual spreadsheet updates or version control. Automatic data validation reduces errors. System updates are deployed centrally without disrupting operations.



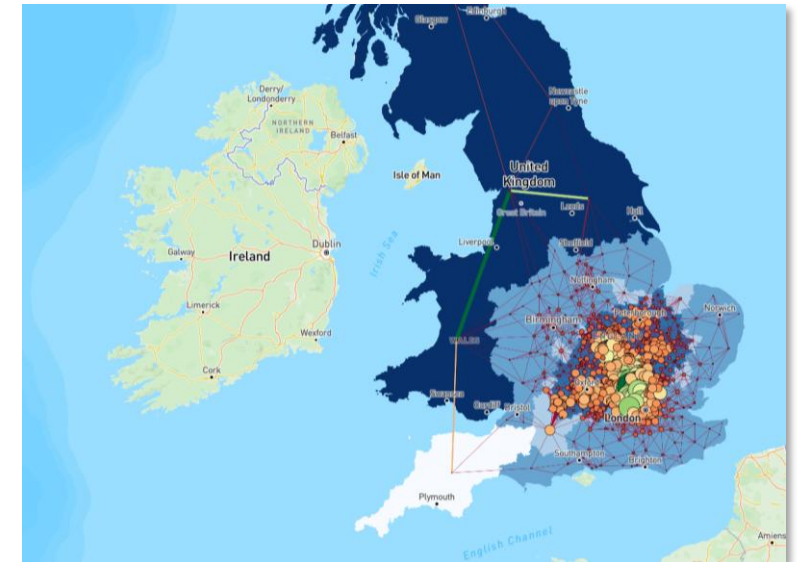
API INTEGRATION & DATA FEEDS

Building connected network intelligence infrastructure. Modern network management requires integrating multiple data sources. Cadence 247's API connectivity brings together incident data, vehicle locations, traffic sensors, and operational systems into a single geospatial interface, covering data integration, real-time visualisation, cross-system interoperability, and automated monitoring. This provides clear visibility of network performance and actionable intelligence for both immediate response and long-term planning.

What are the benefits of Cadence 247's Integration Approach?

For highways authorities, Cadence 247 delivers value in two ways:

- **Unified Operational View:** Many authorities struggle with siloed systems: incident logs in spreadsheets, bus data in separate feeds, traffic information in standalone platforms. Cadence 247 consolidates multiple sources into a single map-based interface, highlighting where resources should be focused without requiring expensive bespoke development.
- **Real-Time Decision Support:** Rapid incident response requires understanding full network context—what's affecting the area, how delays propagate, which interventions work best. Cadence 247 enables comprehensive situational awareness from multiple data streams, revealing incident impacts quickly and supporting both tactical decisions and strategic infrastructure investment.



Case Study: Cambridgeshire County Council

Overview

Cambridgeshire County Council pioneered the use of Cadence 247 to modernise incident management under their Traffic Management Act duty of care. Previously using manual Excel-based systems to record and categorise incidents, the council faced challenges with time-consuming reporting, delayed information dissemination, and communication effectiveness. Working with City Science under a GovTech Challenge fund, they deployed Cadence 247 to transform their incident management process. The platform provides a real-time dashboard allowing users to record and analyse geospatial incident data with automatic geocoding and severity categorisation. As information is geocoded, county-wide statistics can be quickly reported, and all users share a common operating view of incidents and actions as they happen. Beyond incident management, bus feeds from DfT's BODS protocol were integrated via API, providing real-time visibility of bus locations and performance.

Outcomes

Cambridgeshire County Council deployed Cadence 247 and decided to fully migrate to the new system. Our solution delivered a step-change in ease of capturing and reporting incidents. Moving from Excel to a visual-spatial interface allows users to quickly identify incidents without looking up coordinates in separate GIS systems. Users can now accurately investigate and attribute delays in real-time, while automatic report generation provides instant analytics that previously took hours to compile manually..

Client Review

"The Cadence 247 solution offered us not only a map-based visual aid, but an automatic report generated in real-time, which in just a few months has already become an invaluable tool for us. The feedback we have had from our Councillors, Stakeholders and Partners has been very positive, mainly citing the ease of use and understanding of the data" – Richard Burnett, Traffic Management Centre Manager, Cambridgeshire County Council



Cadence Case Studies: <https://cadence.cityscience.com/case-studies/>

Cadence 247 Case Study: <https://cityscience.com/case-study/cadence-247-cambridgeshire/> ;
<https://cityscience.com/news/2023-03-22-cambridge-announcement/>



Sign up to get access to Cadence for a free trial here:

