**APPLICATION OF A DATA MANAGEMENT SOLUTION TO INCREASE THE QUALITY AND CONSISTENCY OF BUS SERVICE DATA**

NCC first deployed the technology in 2011, although the technology had previously been developed with Scandinavian transport authorities. The solution was used initially to import data directly from bus operators who had their own scheduling software using the TransXchange (TXC) data interchange format. A simple to use and web-based scheduling package has also been commissioned by NCC and made available for all bus operators to use, which is typically used by medium and smaller bus operators who do not have access to a scheduling package of their own.

With Hogia’s technology at the heart of the NCC public transport data management system, the Council was able to reduce the staff requirement for handling public transport data from 5FTE to 1.5FTE.

**APPLICATION**

The technology enabled NCC to make a dramatic improvement in its data management process, significantly reducing the number of staff needed, while increasing data quality. The technology validates and checks data for consistency and accuracy, before consolidating and exporting to third-party systems using UK and international data interchange standards. NCC extended the system to provide a ‘data broker’ function, which feeds multiple third-party systems with consistent data, ensuring the public receives the same information via all distribution channels.

NCC has retained the capability to distribute both scheduled and real-time departure information, even though in 2014 it closed-down its original RTPI system due to reductions in available budget. Data is fed into the new solution from bus operators’ own Automatic Vehicle Location (AVL) systems, from which real-time vehicle information is determined.

By feeding vehicle location and journey details from on-vehicle ticketing systems directly into the Hogia solution, NCC has been able to add significant value to the Department for Transport funded rural smart card ticketing pilot project by avoiding the necessity to fit additional AVL equipment to the buses in order to deliver RTPI.

The technology also enables a single member of staff to deliver service deviation (long-term schedule changes) and disruption information (short-term schedule changes) consistently across all multi-media distribution channels.

The technology can be delivered as a ‘cloud’ solution enabling customers to have just the functionality they require.

**BENEFITS**

Norfolk County Council realised several benefits from the solution:

- Return on investment achieved before the predicted 3-year break-even point;
- A reduction in staff requirement to handle public transport data from 5FTE to 1.5FTE;
- Improved staff morale from removing mundane data entry and checking tasks;
- The process of entering bus schedule data and converting to suitable data formats for third-party downstream systems used to take up to three weeks. This is now completed in hours (even with the reduction in staff resources);
- Greater accuracy is achieved in the data made available for downstream systems, e.g. Traveline, and in the production of bus stop information (both expensive to correct when the data is found to be incorrect post-production);
- Improved data accuracy means the operational tracking of vehicles is maximised (raised from circa 60% of vehicles tracked to circa 95%+);
- NCC is the first local authority in the UK to offer all operators a data entry tool for the generation of electronic schedule data, as will be required by the Bus Services Bill, particularly benefitting small and medium sized operators.

**Further information:**

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