

GBM Mobile case study

Mapping safer routes to school with GBM Mobile

Greater Manchester Transportation Unit saves over £26,000 and 70% site project time using GBM Mobile and MapInfo



Background

The Greater Manchester Transportation Unit, based in Central Manchester, provides a full range of services in transportation data, information, planning and research for the ten Greater Manchester local authorities. The team's problem solving capabilities enable the GMTU to deliver innovative solutions in a cost effective way on both a strategic and local level.

The challenge

The Greater Manchester Transportation Unit was commissioned to undertake an audit of the physical condition of the footpaths & junctions around 90 schools within Rochdale, under a project heading 'Sustainable Modes of Travel to Schools'. The information gathered would provide a picture of the walking routes to schools, which would not only assist in future planning but also be made available to the pupils through a website. Here, children will be able to use the tool to plot their routes and the routes of their friends to encourage them to walk or cycle to school. The intention is to help increase the numbers of pupils taking greener transport options but also help them to choose the most direct and safest route.

The GMTU needed to build a transport network using MapInfo GIS software for an 800m radius (Normal Walking Distance) of each school. They focused on the footpaths and road junctions within residential areas as the most likely routes children would take and developed a traffic light system to grade the condition of each.

The existing survey solution comprised a paper map to mark out the routes and make the annotations. A large number of these maps would be required per school due to the area to be covered and the detail the surveyor needed in order to follow routes and annotate. Each surveyor would need to walk the route with these maps making notes and then complete a summary form of their findings for each map.

dottedeyes.com

Dotted Eyes Ltd • Hanbury Court • Harris Business Park • Stoke Prior • Bromsgrove • B60 4JJ
Tel: 01527 556920 • Email: info@dottedeyes.com

Dotted Eyes Ltd is registered in England and Wales. Reg no: 04471760

Project outline

Greater Manchester Transportation Unit needed an efficient, user friendly solution for capturing data on the move to enhance their problem solving capabilities.

Solution

GBM Mobile integrated with MapInfo

Benefits

- Easy to use, familiar user interface
- Seamless data transfer process
- Clear audit trail
- Saves time - frees up resource
- Accuracy is significantly enhanced



Greater Manchester Transportation Unit



Paper records would then have to be transposed into MapInfo manually back at the office. This would be time consuming, costly and potentially prone to inaccuracy.

A time saving, simple solution was key to this project, so it was decided that a PDA solution would be required, to help minimise the manual intervention and give the GMTU the capability to carry out the project quickly and efficiently.

The solution

Using the skills of GMTU and the Dotted Eyes team, and working with the GBM Mobile hand-held device, in conjunction with MapInfo software, the GMTU were able to quickly and accurately plot the routes available to pupils and highlight any potential problems with those routes. With no programming skills required, the simple user interface allows the surveyor to accurately mark the point required, annotate with any comments or select from a pre-populated drop down list of common complaints or remarks.

Unsafe pathways, broken railings, dangerous fences or even trees and bushes that have grown over a footpath can all be recorded on the move. A photo can be taken en-route and associated with a point of interest instantly, this is then uploaded to the main database without further intervention.

Return on investment

The GMTU team discovered that using this method awarded huge time savings compared to the traditional method of plotting the information on a paper map. By capturing the data electronically surveyors could accurately plot more routes in a day. In fact, the site project estimate for manually compiling this information was calculated at 10.5 months, using the GBM Mobile solution it actually only took 3.5 months – a saving of 70%.

In addition to this, the solution offered a dramatic reduction in office project time, as information gathered out on the street could be transferred seamlessly to the MapInfo software, which meant that incredibly the team could cut a 6 month office project estimate by 5 months.

Recognition of success

Michael Atkinson of the Transport Analysis and Surveys team stated, "Estimated costs for the project were £45,000; to achieve these results at a cost of £18,500 and 7 months ahead of schedule is a fantastic outcome for us and, of course, for our client"

The survey results are easily translated onto the website using Map Extra, allowing students and their parents to plan the most suitable routes to school.

For more information, please visit dottedeyes.com/mobilegis

dottedeyes.com

Dotted Eyes Ltd • Hanbury Court • Harris Business Park • Stoke Prior • Bromsgrove • B60 4JJ
Tel: 01527 556920 • Email: info@dottedeyes.com

Dotted Eyes Ltd is registered in England and Wales. Reg no: 04471760 Issue 1.0 October 2010



Robust hand held device

"Key to the success of this project was the ability to record the information whilst out on site. Plotting the data electronically reduced the estimated project time by more than half." - Michael Atkinson, Transport Analysis and Surveys team