Introduction

In 2008 Wilson Pym May undertook a complete inventory survey of Cardiff City Centre to provide the client with an accurate and complete data set.

This case study is an example of the use of GIS, Inventory and Video Surveys being used to provide an effective solution.

Problem

In the last 10 years Cardiff City Centre has undergone a programme of major redevelopments including the Millennium Stadium and the completion of phase 2 of St David's Shopping Centre, all of which have had major impacts on the City Centre.

One of the key issues facing engineers was how to evaluate the existing street inventory, add new inventory items and integrate the new developments with Cardiff's existing street scape.

Solution

After initial consultation between the City and County Council of Cardiff and Wilson Pym May Limited a specification was put in place which would provide the client with a robust data set so that assets could be accurately evaluated along with a provision to maintain and update its inventory data in future years.

Wilson Pym May Limited developed a bespoke data collection system using ESRI software which enabled the collection of data but was also compatible with the clients existing data management system.

A tablet PC equipped with GPS receiver and camera was used to conduct the survey. All inventory items were plotted directly onto the mapping software with photos, attributes and a condition score recorded against each item. This was then backed up by a video survey allowing the client to have an overview of any road or road part.

Outcomes

This package of data has provided the client with the opportunity to proceed with a coherent system of renewals and improvements in the City Centre area.

There are many advantages to using this package of solutions to solve the problem faced by the City and County Council of Cardiff, these include:

- Accurate representation of inventory on a map.
- The ability to view photographs of items.
- Access to information on the condition of any asset.
- Quantifying the types or manufacturers of specific items.





