

## Matchmaking in Calderdale

Calderdale Metropolitan Council wanted to migrate their Local Land Charges (LLC) records into the planning system used within their Planning Service. As they had already created a full digital complement of Basic Land and Property Units (BLPUs) Calderdale did not want to create new spatial extents for the LLC records, instead the intention was to match the address data held within each LLC record to their Local Land and Property Gazetteer (LLPG) and automatically generate the desired extents.

Unfortunately as we all know, the best laid schemes etc etc! The address data held in the LLC database had no defined address structure and was in some cases inaccurate or partial. When Calderdale conducted trials with their address-matching software they found that only a low level of matching could be achieved without extensive manual intervention. With insufficient internal resource available to check the 30,000 LLC records within the desired timescale, Calderdale selected CDR Group to carry out the address-matching on their behalf. (CDR had previously carried out projects such as the digitising of Land Terrier records for Calderdale).

In consultation with Calderdale, CDR proposed a methodology whereby the address information in each LLC record would be compared not only to the LLPG data but also to a number of other sources of address information in order to maximise the chances of obtaining a match. In the case of a successful match to the LLPG, the address held within the Gazetteer was transferred to the LLC record so as to standardise the address data. In all cases the location of the match was checked by the operator, who also assigned a confidence value to the address match.

The sources of address information used were, in order of importance:

Calderdale's Local Land and Property Gazetteer

Calderdale's Basic Land and Property Units - these occasionally contained additional information not held in the LLPG

Ordnance Survey's AddressPoint data

Map Sheet references - many of the LLC records held a reference to the associated Ordnance Survey half kilometre square

Text strings extracted from Ordnance Survey MasterMap data

CDR's proprietary data-processing software (written in MapBasic and working in conjunction with MapInfo Professional software) presented the operator with details of the LLC record and facilitated a series of automated searches through each source of address information in turn allowing the operator to select the best possible match. The location of this match was then displayed on screen against a background of OS MasterMap mapping for the operator to verify that the spatial location was sensible for the record concerned. Where a single individual LLC record referred to a number of properties, the software generated multiple records to be matched successively to each property.

This procedure resulted in 81% of the LLC records being matched to an LLPG record with a High confidence level and a further 6% being matched with a Good confidence level. Only 365 records were not matched at all.