



cts

TRAFFIC + TRANSPORTATION

CTS are one of the UK's most innovative independent transport data collection consultancies: as one of the market leaders we offer a full range of data collection services on a nationwide basis.

We have experienced teams of technicians and surveyors organised regionally throughout the UK, whose skills and in depth knowledge of the survey process ensure they are fully equipped to carry out the most complex of data collection exercises. Local knowledge is of great importance to us, meaning that geographical and regional expertise is conveyed straight to the client.

Our carefully developed training and appraisal schemes allow us to exercise consistent controls in our approach to data collection, regardless of survey size, type, or location. This enables us to complete surveys in diverse areas from The Shetland Islands to Central London.

We firmly emphasise research into new technologies and original, tailored solutions, maintaining our position at the cutting edge of developments in all aspects of the traffic survey industry.

CTS offer expert knowledge and execution of all types of transport data collection.

More information about our services can be found in the next few pages. If your survey requirements are not featured in the brochure please give us a call: our years of experience in the industry and innovative approach to data collection methods mean that we can tailor solutions to meet almost all requirements.

POLICY AND CONSULTATION

At CTS we believe that successful schemes have to be built on a solid foundation. We provide accurate and incisive results, quickly and effectively, upon which your work can be developed. We invest at every level in business and personal development, and dedicate sizeable resources to Quality Assurance, from procedural practices to Health & Safety, ensuring that our services meet the highest standards.

We operate a rigorous quality program in all aspects of our operation. This is based upon ISO principles, tailored to achieving the best possible service we can provide to our customers. An assessment is carried out on each project on completion, which is used to develop our procedures so that we are never standing still.

CTS has committed a large proportion of time to staff development and training. This means a dedicated, experienced team with an excellent knowledge of transport data collection takes your project through every stage of the data collection process, from devising survey methodology to the final processing and presentation of data.

If your project is in the early planning stages we are more than happy to provide a free consultation on the best methods to employ to obtain the optimum results. We can provide a variety of suggestions tailored to suit your requirements, and using your feedback can create a survey package which best suits your budget and time-scale.

DELIVERABLES

We appreciate that as with most things in life time is of the essence. To this end we will try and return most small to medium sized quotations within 24 hours of receipt. Accuracy and speedy delivery is at the core of our philosophy and service. A firm delivery timescale will be provided with every quotation. Over the last year 97.4% of results were delivered before or on the given delivery date. Small to medium sized projects will normally be forwarded within two to five working days and we always try to accommodate clients request.

The data we provide is in a form which is both comprehensive and to the highest standard. Results go through a series of validation checks before release to give you the complete confidence that any data is both concise and accurate. A written report is included with tables which outline methodology and site observations. Results are provided in both an electronic form and in hard copy. DVD's can be provided for work that is carried out by camera, giving you a permanent and verifiable record of field work. Results and tables can also be bespoke designed to your exact requirements. At all stages of each project we strive adapt our service to best fit your requirements.

MANUAL TRAFFIC SURVEYS

- *Manual Traffic Counts*
- *Origin & Destination Studies [vehicle registration plate and postcode matching available]*
- *Roadside Interviews [RSI]*
- *Multi-Modal Monitoring Studies*
- *Queue Length Assessments*
- *Traffic Management*
- *Bespoke Survey Design*

Our wealth of knowledge in all aspects of transport data collection means each work schedule is undertaken with the same attention to detail, regardless of size or complexity. Each project is designed to fit your specifications, and our supervisory team review training on a job-by-job basis to ensure field staff collect the data to exactly match your requirements.

We have a national network of over 1,000 experienced and trained site staff, recruited specifically for their suitability and experience – including those studying for transportation qualifications and retired members of professional organisations. Our personnel are highly observant, capable, and trustworthy in all aspects of their work.

Our ongoing supervisor training programme ensures all our supervisory staff are abreast of new survey techniques, contemporary legislation, and safety law. Each project, regardless of size, has a dedicated project manager and site supervisor who are responsible for the smooth running of work both on-site and in the office. We regularly review our methodology and outputs to ensure a constant program of improvements and accuracy. All our supervisors have proven themselves as excellent people managers in addition to having many years of experience in all aspects of data collection.

We use a wide range of “off the shelf” software alongside our own bespoke programs, which have been developed to provide us with comprehensive data validation and problem solving solutions, providing robust reports, formatted to your



requirements. We can also offer complex analysis of results, tailored to requirements of each project.

CTS have a fully equipped and qualified traffic management team, so all work requiring traffic control can be dealt with in-house – and all surveys are carried out to Health & Safety Executive, Department for Transport, and Police standards as a matter of course. This is of particular importance with reference to RSI surveys, as Traffic Management can be altered quickly and efficiently to fit in with site specific conditions.

These effective processes work together to ensure that our data is robust and accurate, no matter what type of survey.



CAMERA SURVEYS

- *High Mast Recordings [up to 80 ft]*
- *Multiple Camera Installations*
- *Long Duration Studies*
- *ANPR Surveys*
- *Origin and Destination Studies*
- *Low Level Camera Surveys*
- *Journey Time Surveys*

It is with regards to camera surveys that CTS innovative nature really comes into its own. We have a vastly experienced camera installation and analysis department that has developed a unique and bespoke analysis system.

We use only digital recording equipment, doing away with cumbersome video tapes. This allows us to adopt much more flexible techniques when analysing recordings, saving both time and cost. Recordings are provided on DVD as standard, although VHS can be provided if preferred.

We specialise in surveying complex junctions and gyratory systems by multiple camera installations. This has included multiple grade separated motorway interchanges and a 13 arm gyratory, negating the need for more costly and potentially less reliable origin/destination surveys by registration number.

We have a variety of different camera mounting methods, allowing us to film in the most difficult and inaccessible of spots. Our equipment is discreet and unobtrusive, meaning that normal behaviour will not be altered by the presence of cameras. This also ensures the cameras are not hazardous to pedestrians or other road users in even the busiest spots.

We use the latest high quality day/night camera units that allow surveillance in periods of bad light and throughout the night in the most poorly lit of locations. Our self contained units do not require power to be taken from external sources and are designed to carry out long duration surveys of up to two weeks.



We also have automatic number plate recognition systems (ANPR) which can be deployed on origin/destination studies or journey time surveys.

Journey time surveys can also be carried out by a combination of GPS and in-car camera. Our system records average speeds and longitude/latitude positioning throughout the vehicle's journey between pre-defined points. The in-car camera provides a "driver's eye" view, allowing journeys to be viewed in full, giving perspective of delay points and potential bottlenecks along given routes. This technique has also been used successfully on bus journeys, giving technicians additional analysis tools with which to work with, as opposed to more traditional methods of collecting journey time/delay data.

Our ANPR systems also allow the analysis of large swathes of journey data throughout given time periods, by recording the registration details of all passing vehicles at pre-defined points.

We can incorporate our camera systems to work with any required type of surveillance brief.



SURVEYS BY AUTOMATIC COUNTERS / SPEED SURVEYS

- *Tube Based Counters*
- *Loop Counters*
- *Speed Gun Surveys*



We have a range of tube based automatic counters that can be installed at suitable locations throughout the UK. They can record classified directional volume data and speed data to a huge variety of different parameters.

We can also provide data using speed guns, producing 85% percentile information.

CTS attention to detail regarding both accuracy and safety allow us to offer an efficient and professional service in all aspects of ATC work.

We can arrange the installation of Loop sites and can also provide maintenance, collection of data and servicing of permanent loop sites.



MARKET RESEARCH

- *Face to Face Surveys*
- *Household Interview Surveys*
- *Questionnaire Distribution*
- *Postal Surveys*
- *On-Line Surveys*
- *Telephone Surveys*
- *Focus Group Recruitment*
- *Market Research Analysis*

CTS have many years of experience in providing a wide range of market research services.

All our surveys are custom designed in order to achieve maximum response. We use our expertise in this type of survey to appraise and make suggested improvements to questionnaire forms prior to commencement of all market research surveys, as required.

Interview personnel are selected for their communication skills and proven experience in market research. All surveys are carried out to Market Research Society specifications, and data is stored and disposed of in full compliance with the Data Protection Act.

Interviews have been weighted with respect to differing demographic parameters. We have a variety of different software available to process and analyse the data with, including Snap, a market research standard. We can analyse and format the data to various different levels producing accessible charts and graphs for ease of use within your project.

We also offer multilingual personnel, with Welsh, Mandarin, Cantonese, Polish, Telugu, Hindi, and Urdu a speciality. CTS have also arranged a variety of different focus groups to look at various transport issues. This has included a Welsh speaking group looking at various public transport access issues that affected residents in small towns in North Wales.

CTS Traffic & Transportation Ltd are members of the Market Research Society.



PARKING SURVEYS

- *Parking Provision Audits, both on-street and Car Parks*
- *Accumulation and Stay Duration Surveys*
- *Entry and Exit Counts*
- *Controlled Parking Zone Surveys*
- *Parking Inventory Surveys*
- *User Questionnaires*

There is every increasing pressure on parking demand in urban areas, and also the need to balance the facilities required for thriving commercial areas with a switch to more sustainable usage of our urban centres. In light of this, CTS can put together a program of surveys that will collect the best information to allow in depth appraisals of existing and future requirements.

CTS have lent their techniques to a variety of differing parking studies. These have included numerous inventory surveys that have checked parking restrictions currently in force, with additional information regarding current legal and illegal usage. Recently we have conducted a number of inventory and usage surveys of onstreet parking around the Emirates stadium on behalf of Arsenal Football Club during match times.

We also have various methods of collecting accumulation and stay duration data, including the use of ANPR systems. You can rest assured that the most appropriate methodology will be used on a case by case basis.



PUBLIC TRANSPORT SURVEYS

- Reliability and Performance Appraisals
- Footfall Counts
- Passenger Interviews
- Journey Time / Delay Surveys
- Concessionary Fair Monitoring
- Accessibility Surveys
- Interchange Facilities/ Car Parking Audits

With increasing investment into the public transport system on national and local levels, it is crucial that planners understand public accessibility and patterns of usage of transport systems to enable funding and provision to be directed effectively. CTS have developed wide ranging public transport monitoring skills. Our portfolio includes large scale rail and bus projects, journey time surveys, and multi-modal studies.

Examples of our work include the West London Tram Scheme on behalf of Transport for London and several long term footfall, reliability, and customer satisfaction studies for the strategic authority in the West Midlands.

A variety of techniques have been employed on differing studies. This has included manual and camera methodologies. All public transport surveys are thoroughly planned and synchronised around timetables to ensure the best results.

CTS have for the past three years been approved under Network Rails “Link Up” scheme for carrying out work on-board passenger trains.



PEDESTRIAN & CYCLE SURVEYS

- *Footfall Surveys*
- *Pedestrian Crossing Delay and Counts*
- *Desire Line Surveys*
- *Cycle Path Usage*
- *Interview Surveys*



The promotion of the use of sustainable methods of transportation has been a key aspect of CTS’s data collection work. We have worked in cooperation with a number of bodies on projects as diverse as large retail outlet access to the National Cycle Network in areas right through the UK.

We also have extensive experience when it comes to collecting data involving reconfiguring junctions to make them more pedestrian or cycle friendly. We have developed sophisticated techniques with reference to analysing crossing areas for “desire lines”. Our work has involved examining stretches of highway that are over a kilometre in length to assess the requirements for non-motorised users.

A variety of techniques have also been employed with reference to usage of a range of different facilities: from retail and leisure to major transport interchanges. This allows the leaseholder to assess current usage from a number of differing perspectives, and to plan for future development.

CTS will assess each project on a case by case basis to tailor our solutions for the maximum benefit to you.



Complete Transport Solutions was founded in 2002, and in the following years has become one of the market leaders in transport data collection. We attribute this to our consistent record of providing innovative solutions and a cost effective and reliable service.

We have an extensive client base reaching all areas of the UK, including a significant core of clientele in Central London. From local authorities to multinational companies, government agencies to consulting engineers, we supply results – no job is too big or too small.

CTS is dedicated to data collection, yet we also possess a wealth of experience in transportation planning. With a full understanding of the reasons behind transport data collection our staff are able to ensure that the data collected is relevant and concise – keeping the costs to our clients low and delivering results as quickly as possible.

For further information, or a copy of our policies and practices, please contact:

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