Key elements of our services:

- Junction modelling (TRANSYT, LinSig and VISSIM)
- Traffic signal design
- Bus Priority
- Cycling and Pedestrian Facilities
- Traffic signal controller specifications
- Factory acceptance testing
- Installation oversight
- Operational verification
- Site acceptance testing
- Maintenance supervision
- UTC, SCOOT and MOVA design and management

Mott MacDonald
Traffic Control

At Mott MacDonald, we have a team of specialists who provide the focus for our technical expertise in traffic signal control and management systems for roads, with experience of designing and operating traffic signals and UTC systems.

We are able to provide a full service in relation to traffic signal design and installation. Our team of engineers and technicians have worked on a wide variety of projects within the UK and overseas with schemes covering all aspects of feasibility, design, installation and operation.

Traffic Control

Mott MacDonald has been extensively involved in the feasibility, consultation and design of numerous traffic engineering schemes. We are able to produce simulation models of designs and we seek to liaise closely with clients and affected parties (e.g. traders, residents, transport operators) in developing workable solutions. Our project experience covers both UK and international projects in areas such as Guyana, Bulgaria, Uganda, Ghana, India and South Africa. This enables us to interchange ideas and initiatives from various parts of the world.

Some of our key clients include:

- Highways Agency
- Department for Transport
- Transport for London
- Inter-American Development Bank
- Local Authorities
- BAA
- European Union
- Private Developers
- South Wales Trunk Road Agency
- World Bank
- Department for International Development
- Private Developers
- Investment Banks

Our teams seek to provide cost effective traffic control solutions in order to tackle today’s road safety and congestion problems. Mott MacDonald has experience of designing a range of traffic control schemes. We have an extensive track record of traffic signal improvements, development for bus priority programmes, Light Rapid Transit systems, signal inventory and performance review. We have also carried out various research projects for the Department for Transport (DfT), including a recent guidance note on Signal Controlled Roundabouts and Traffic Signal Controller Specification Forms.

We are well versed in various traffic signal operating systems for urban traffic control (UTC) networks and SCOOT, as well as isolated systems such as MOVA.
Through our partnership contracts with local authorities and current management of the Highways Agency Area 2 and Area 4 we have a vast experience in the installation and maintenance of traffic signals. This has included the responsibility of all traffic signals on the Motorway and Trunk Road Network, between Kent and Devon. Our skill in optimising the efficient operation of signal installations and networks is further demonstrated in our ongoing support to BAA at Heathrow Airport.

Mott MacDonald has been instrumental in the introduction of ‘Passively Safe’ products to the traffic signals industry. We have been involved in guidance on the development and use of ‘crash friendly’ signal poles and electrical isolation systems, which have been shown to reduce the severity of injury collisions with signal control furniture.

Health and Safety is at the core of everything we do and our safety training and internal quality system support this. All of our traffic signal engineers hold National Highway Sector Scheme 8 and CSCS cards.

Recent Projects Include:

**Department for Transport, New Guidance for Signal Controlled Roundabouts** – Mott MacDonald recently produced a new ‘Guidance Note’ for the DfT on signalised roundabouts for practitioners. This new Local Transport Note provides technical guidance for practitioners in the industry. The initial two year research project involved extensive traffic modelling using software tools such as VISSIM, PARAMICS, TRANSYT and LinSig.

**Highways Agency, Traffic Control Support** – Mott MacDonald has been supporting the Highways Agency for a number of years and we have been responsible for updating numerous traffic control standards within the UK. Other tasks have included a review of the Type Approval process, the trial of Intelligent Amber Arrows, a review of the use of Part Time signals and undertaking a nationwide road show to all Highways Agency Areas and local authorities to ensure that MOVA is now being applied on all new trunk road traffic signal installations.

**Bus Rapid Transit Scheme, Accra, Ghana** – We have recently completed the traffic engineering input into the design of a new BRT scheme along a key corridor within Accra. Project involved traffic signal design, road safety, junction assessments using LinSig and TRANSYT.

**Kampala Northern Bypass, Uganda** – Developed and tested new junction designs for Kampala Northern Bypass, Uganda. Improved junction designs were developed for the existing roundabouts on the bypass including traffic signals operation and grade separation where necessary.

**Georgetown, Guyana** – Tested and designed new traffic signal junctions for the East Bank Demerera Public Road and for Sheriff St, Georgetown in Guyana. The junctions were designed to be compatible with North American standards and also to blend in with the existing junctions. The traffic signals were specified to operate on Extra Low Voltage and to be solar powered.

**Sofia, Bulgaria** – Provided traffic engineering support to the Municipality of Sofia, Bulgaria, including the production of a Traffic Signals Guidance document and TRANSYT modelling of two main corridors into the city centre to develop junction options and public transport priority proposals.