Table 1: Data types and sources

	Data source categories	Types of data	Uses	Sources	Access: Open / Managed (Mgd) / Mix	Machine Readable (M/R) / Offline (O/L) / Mix
	Geographic and administrative and accounting definitions, ID's and boundaries	Shapefiles, Way-ID's, OS codes, CIPFA codes, place and road names	Location accuracy, jurisdiction / responsibility, connecting between datasets	ONS; DHCLG; GOV.UK register; Ordnance Survey; OpenStreetMap; National Gazetteer, GeoPlace and OS MasterMap	**Mix**	**M/R**
	Physical highway network: geometry, inventory and condition	Roads, footways, cycleways, bridges, streetlights, cycle stands, cameras, sensors, bus stops, lines and signs, charging points, parking locations	Routing/navigation, asset management, value and budgeting of works, ensuring the network meets demands of all users	Condition and some assets: Highways Authorities; Geometry and some assets: OpenStreetMap; GeoPlace National Street Gazetteer and OS MasterMap	**Mix**	**Mix**
	Controlling use of, and restrictions on the network, temporary and permanent	Traffic Regulation Orders (Traffic Management Orders in London) e.g. HGV route restrictions, parking restrictions, road closures, bus lanes, 20mph zones, speed limits	Journey planning, satnavs, ITS applications and CAVs, traffic modelling and planning	Highways authorities	**Mgd***	**O/L***
	Managing disruptions and access to use of the network Accidents, incidents, impact of major events	Street works Road works Diversions Gritting routes	Helps planning, routing, congestion management, air quality, saves time, makes better use of limited resources Saves lives, reduces trauma, makes better use of healthcare resources Better management and coordination of capacity, incidents, works - network resilience	Highways authorities Separately held Mostly presented through Roadworks.org: free map view	**Mgd***	**M/R**
	Major works: spoil + containment locations + routes for infrastructure e.g. Crossrail, HS2, large housing developments	Construction design and management plans		Construction works data	**Mgd***	**O/L***
	Counting, measuring and monitoring traffic speed, density and flow (vehicles, cyclists, pedestrians, assisted users)	UTMC, ANPR, CCTV, MAC address harvesting, bluetooth / WiFi sniffing, movement monitoring, count surveys	Journey planning Reducing congestion and emissions, improving air quality Better management and coordination	Local authorities; mobile network operators; CAVs; companies with: satnav, ride hailing, app, vehicle tracking data; crowd-sourced data; freight/logistics companies	**Mix**	**M/R***
	Parking, fuelling and charging – off-street + on-street for cars, HGVs, bikeshare docking, seating	Parking spaces in real time, prices, locations, total capacity, vehicle type restrictions Cycle hire/docking locations, capacity Freight/HGV bays and parks Charging and refuelling facility locations for different fuel types	Helps planning, routing, congestion management, air quality, saves time, better use of resources, limits congestion caused by searching for amenities	Local authority equipment, private car park operators, CCTV, ANPR	**Mix**	**M/R***
	Air quality	C02, PM10, PM2.5, 'NOx' (NO, NO2) 03, CO, SO2, NH3, Pb	Public health	DEFRA and local authority equipment, weather stations, ANPR	**Open***	**M/R***
	Road safety data, including accident hotspots	Killed and Seriously Injured, 'Stats 19', Crashmap	Saves lives, reduces trauma, makes better use of healthcare resources, reduces congestion	DfT	**Open**	**M/R**
	Planning, purchasing, routing, licensing and controlling public transport and licensed providers operating on the network	**Rail, bus and coach data:** fares, timetables, routes and stops, real time movements and locations, **Licensed** taxi and coach drivers and operators / other providers	Journey planning, modal shift Public safety Transport planning and modelling	DfT NaPTAN stops, Traveline timetables and routes Fares: rail companies and some bus companies Stops, and bus routes, timetables: open Rail fares: open Bus fares: closed	**Mix**	**M/R***

** Mostly*