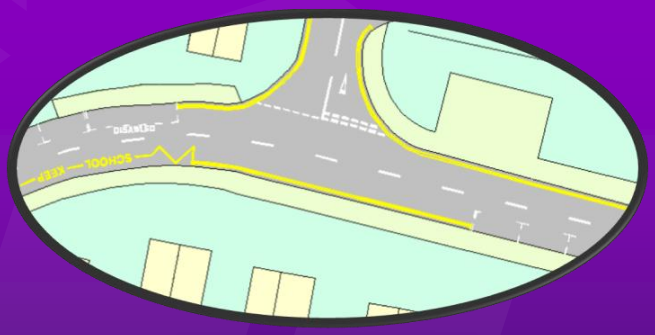
ParkMap and D-TRO



Presentation to MHA+

Simon Morgan
Principal Advisor
2 June 2026



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Agenda

ParkMap, Traffweb and Digital Traffic Orders

- My role in TROs, traffic signing, training and software.
- Overview of ParkMap and Traffweb
- What is meant by a digital traffic order
- How did D-TRO come about and what are the expected benefits and use cases?
- Progress on D-TRO to date
- Issues and possible remedies
- What about height limits, bus stops and ‘non-order’ items?
- How are temporary and permanent TROs handled differently?
- What will happen when the Statutory Instrument is published?
- What authorities need to do to prepare
- How Causeway software supports the requirements
- The future: will it eventually apply to all orders?
- Q & A



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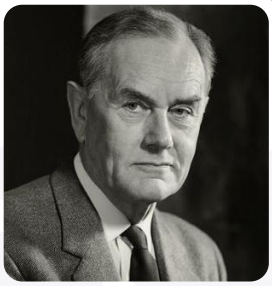
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Simon Morgan

MA, MSc, CEng, MICE, HonFIHE, FBCS, CITP



- 9 years in local government traffic engineering
- Introduced the first PCs (and wrote the software)
- Moved to Colin Buchanan and Partners
- Founded software offshoot: Buchanan Computing
- Involved with traffic signing software, training, legislation and guidance, including for DfT, Welsh Government and Transport Scotland
- Involved in digital traffic orders from the first discussions with GeoPlace and BPA in 2017
- Chair of Institute of Highway Engineers' Traffic Signs Panel
- Editor of IHE Sign Structures Guide
- Chair of traffic sign standards for BSI
- Principal Advisor at Causeway Technologies



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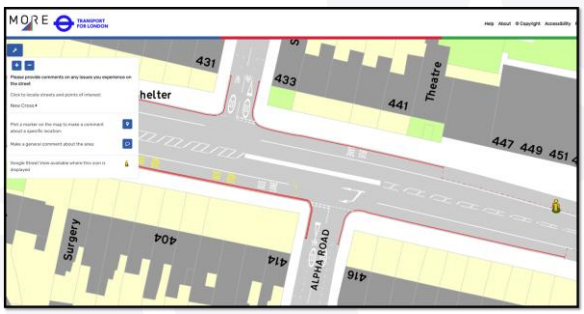
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ParkMap and Traffweb

The very first system that digitised traffic orders



- Bringing efficiency and accuracy to the complex world of Traffic Regulation Orders (TROs)
- Visualising and communicating orders in multiple ways
- Ensures legal compliance
- Links to Traffic Penalty Tribunal FOAM system for appeals
- Automatic generation of signs and lines
- Production of final legal documents, including notices, and orders ready for signing or sealing.
- **Traffweb**: public access for consultations, public queries and FoI.
  Covers collisions, safety and other data too.



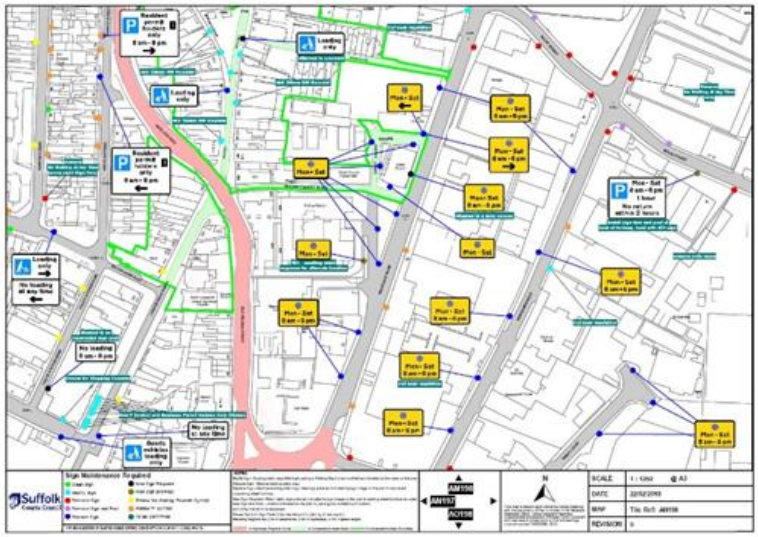
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ParkMap and Traffweb

Pioneered using maps in place of text schedules

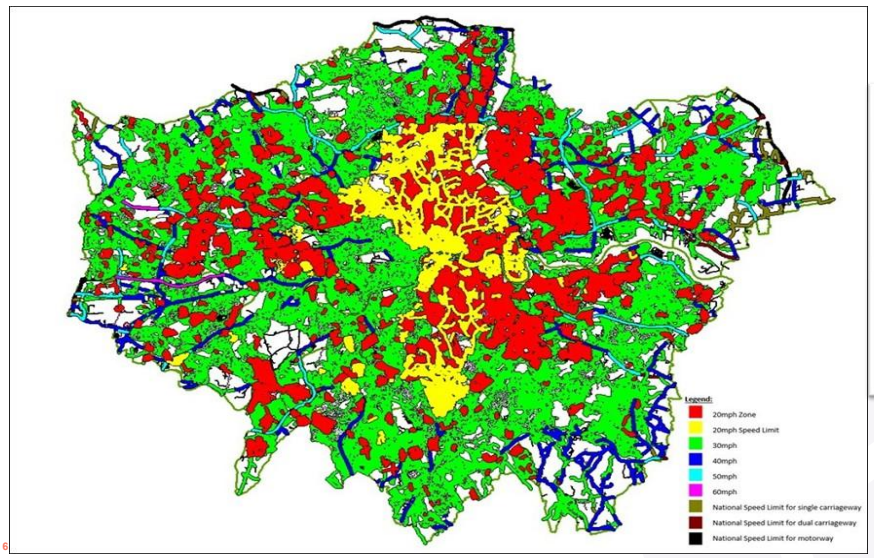




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Digitising speed limits for London from 2014 onwards

The very first digitised moving traffic orders, based upon Buchanan's ParkMap, surveying by Buchanan Consultants

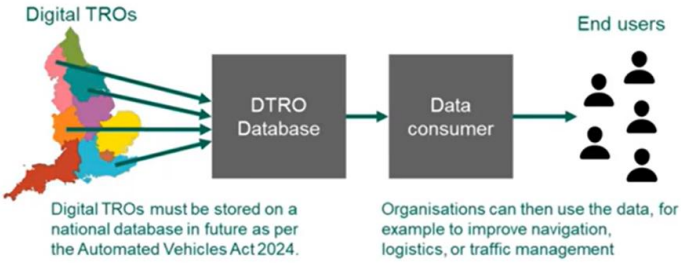




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What is D-TRO?

A DfT initiative for recording and disseminating TRO information in England



- **At a high level:**
  - API-first service
  - Data Specification
    - Data Model
    - JSON Schema
    - Example Files
- **Technical webinars focus on potential and planned improvements to the service through our feedback channels**
  - GitHub
  - User Research
  - 1-to-1 sessions
  - Conferences

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What is D-TRO?

A central repository for a summary of all TROs in England, temporary and permanent

- Intended to cover everything that needs a TRO under the Road Traffic Regulation Act 1984
- Both permanent and temporary measures and temporary notices
- In discussion since 2017, initially as an initiative by GeoPlace, British Parking Association and Buchanan Computing (now Causeway)
- DfT took over in 2019 (initially called TRO Alpha)
- Legislation in Automated Vehicles Act 2024
- Expected benefits:
  - Automated and connected vehicles
  - Improved compliance
  - Intelligent Speed Adaptation in vehicles – improved safety
  - Planning bus diversions
  - Diversions and routing for temporary closures
  - Enforcement (but full sealed order still needed)
  - A single source of truth



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Progress on D-TRO to date

- GeoPlace & North Highland reports 2018
- Project announced early 2024
- Private beta service went live: October 2024
- Public beta service: September 2025
- Draft Statutory Instrument for consultation: February 2025
- By February 2026:
  - 74,000 D-TROs published
  - 200 publishing organisations registered
  - 110 data consumers registered



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Issues and possible remedies

- Producing the final Statutory Instrument is more protracted than expected
- Controversial issues have included:
  - the need to notify starts and stops for temporary orders
  - The need to say whether an order affects a bus route
- New Burdens Process looked at the financial implications for authorities to comply. As a result, there may be some funding, but this isn't yet clear.
- Difficult to get Wales and Scotland on board
- Multiple versions of the data structure – getting more complex
- Large consolidation orders are too big currently – they will need to be split by the communicating software
- Somewhat vague on georeferencing: "OS grid references, USRN, any other information … in the D-TRO data specification".
- Geographical querying isn't easy
- Local government reorganisation will affect TRAs
- Lots of regulatory measures aren't covered: Bus stops, box junctions, default speed limits with no TRO.
- Will only cover new orders initially.



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What's not covered in D-TRO

Speed limits

- 30 mph due to street lighting
- 60 mph on single carriageway unlit roads
- 70 mph on dual carriageways and motorways
- Limits imposed by bylaws (bridges, etc.)

Kerbside restrictions without a TRO

- Bus stop clearways
- School entrance clearways
- Zig-zags at pedestrian crossings
- Yellow box junctions
- Central double white lines prohibit parking

Height limits

- Mostly not covered by TROs
- Really important, as there are over 1600 bridge strikes per year in Britain
- **Causeway** working with Oxfordshire to provide all height limits to D-TRO

Other potential omissions

- Dual carriageways
- 1847 TPCA temporary closures
- Anti-terrorism TROs (S22C)
- Paid on-street parking (S45)?

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How are temporary and permanent TROs handled differently?

Requirements in draft SI of January 2025

Permanent

- Notify at notice of proposal stage and notice of making stage
- Timescale: within two working days (but asap after making)

Experimental (Section 9)

- Notify each change during the experiment within two working days

Temporary (Section 14 orders and notices)

- details of any **alternative route** available for diverted traffic:
  the name and/or number of each road included in the alternative route and the sequence of unique street reference numbers (USRNs) comprising the alternative route
- the **start time** & **stop time** of each provision in the order or notice,
- the actual time that the order or notice ceased to have effect
- Timescale: Overnight changes: by 10.00 the next day
  Other changes and starts & stops: within 2 hours

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What can authorities do to prepare?



When the SI is published, you may have only 3 months to comply

Funding

- Talk to you Local Government Association representative
- Assess the cost of any data collection, checking and recording needs

IT

- Talk to your Digital Service Provider (DSP), such as Causeway
- If you have different systems for temporary and permanent orders, consider moving to a single supplier
- Established software packages are likely to be already compatible with D-TRO (but it's a moving target, so how up-to-date are they?)
- **CausewayOne Network** and **ParkMap** are already working well and supplying the majority of D-TROs to DfT

Data quality and organisation

- Does it need checking/updating/consolidating?
- Do you have up-to-date moving orders, or only kerbside?

Temporary orders

- Do all your TTROs go though your software (e.g. CausewayOne Network) or are some handed informally?
- Do your contractors and statutory undertakers already notify starts and stops (already required for Street Manager)?

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Causeway connectivity and assistance for D-TRO

- Developers of **ParkMap**: the most widely used UK system for making traffic orders and linking to **D-TRO**
- **CausewayOne Network** manages streetworks and permits and connects to **D-TRO** and StreetManager
- Supplier of leading software for sign and road marking design: **SignPlot**, **Causeway Sign** and **Causeway Line**
- Top UK provider of training on Traffic sign design and Traffic Order making
- Consultancy services relevant to TROs, including order drafting, consultation and data capture

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The future



In-car devices…

- will become more important than road signs for human drivers and autonomous vehicles

Legacy orders

- DfT will eventually legislate for all old orders to be input to D-TRO
- This may happen mostly naturally as consolidations are made

Non-order regulatory measures

- A lot of interest already in height restrictions
- For Intelligent Speed Adaptation (already standard in new vehicles) full speed limit coverage is needed.
  Rural roads without TROs can be guessed.
  Street lighting areas more of a problem, but data is available in most authorities

Full GB coverage

- Wales and Scotland (and perhaps NI) might come on board eventually

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Thank you

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