

Utility Survey Exchange

Dr Neil Brammall 5th September 2017

Utility strikes are bad news

- Threat to life and limb:
 - Direct and indirect
- Interruptions to critical services
- Cost everyone time and money:
 - Societal cost = 29x direct cost







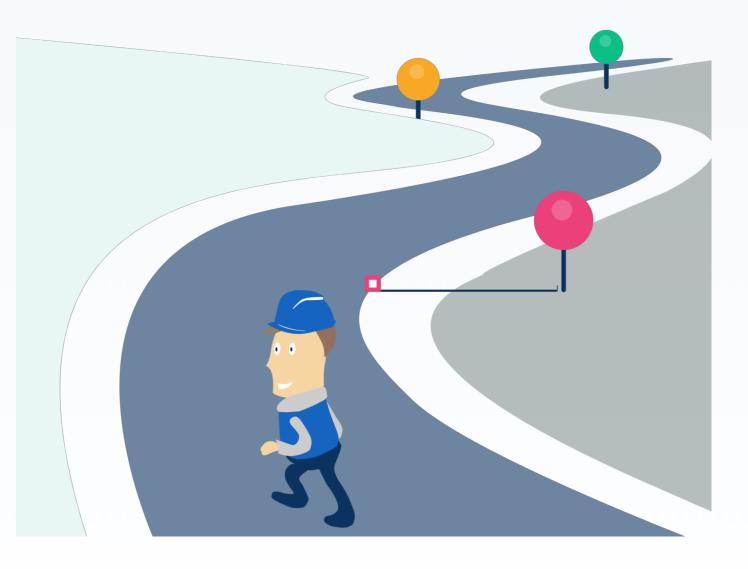
Inaccurate maps can cause utility strikes

- Utility plans are a crucial element of safe digging
- Routinely reported to be inaccurate or incomplete:
 - Common root cause of Utility strikes
- Positions recorded relative to features which may move
- Maintaining records is HARD
 - Changing environment

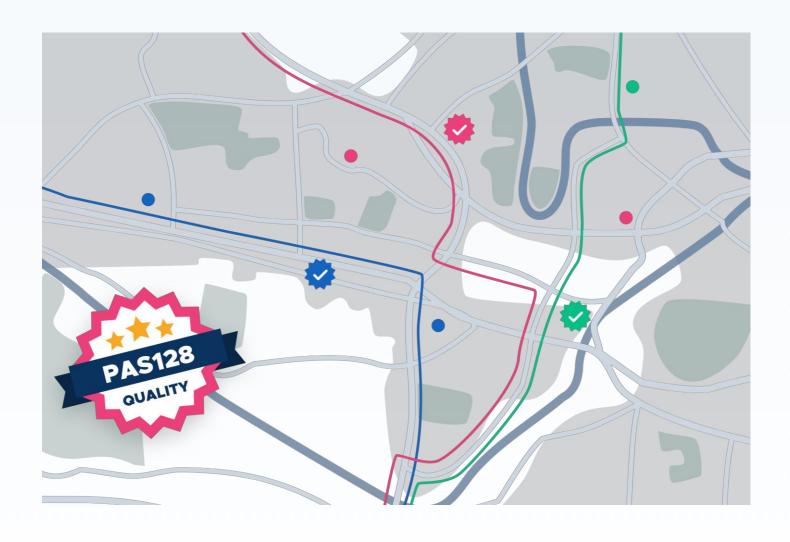


A journey, not a switch

- "One version of the truth":
 - The long-term vision is important, but won't happen overnight
- Every step towards it is a success
 - The first steps are the hardest
- We will have a mix of relative & absolute locations for a long time:
 - Data that "looks right" (in context, in 2D, on paper)
 - Data that "is right" (absolutely)
 - Two or more versions of the truth
- Accept (embrace?) the uncertainty...
 - ...and represent it properly
 - "It's on the map, so it must be true"
 - Visual grammar of uncertainty and ambiguity
 - Method; Quality; Confidence







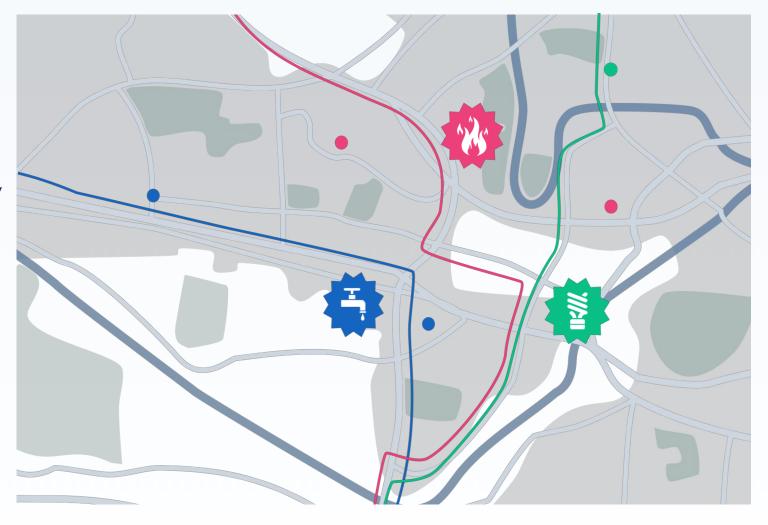
Good quality data is captured every day

- High quality, high accuracy survey data
- Skilled practitioners in a vibrant sector
- PAS128; PAS256:
 - Standards-based best practice
- Absolute coordinates
- Quality/Confidence metadata

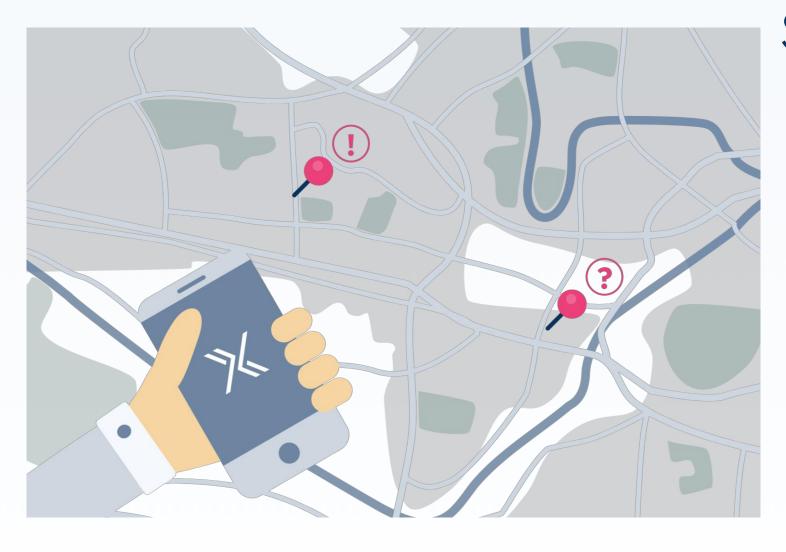


Controlled Sharing

- Wouldn't it be great if all this high accuracy survey data was available to the asset owners?
- Controlled sharing of specific survey data with the relevant asset owner
- Enters into existing QA and onboarding process
- "Is it better than what we've got?"
 - Comparison tools and metadata
 - "Either/Or"; "As well as"
 - (Embrace the uncertainty and represent it properly)
- Underlying authoritative data improves incrementally and enters into circulation
- Attack a root cause of Utility Strikes







Simple Field Reports

- Unidentified Buried Objects; Map Discrepancies; Excavation Notifications; (Incidents?)
 - Routed to the relevant parties
- Doesn't have to be super accurate:
 - Make it simple; make it happen
 - Locational accuracy will improve over time
- The question:
 - Does it improve our knowledge of underground assets?
- The answer:
 - YES! (in enough cases to make it worthwhile)



Carrots work better than sticks

- We aspire to a community of benign self-interest
- All parties incentivised to act in a way that supports their interests while promoting a greater good
- Contributors are rewarded
- Beneficiaries are required to contribute







- Controlled, secure circulation of high-accuracy survey data
- Instant feedback from the field
- Support the journey from Relative to Absolute
- A community of benign self-interest
- Reduce Utility Strikes through circulation of better data

Please join us on our journey!

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