Spatial Relational Dataset to a Spatial Linked Data Dataset

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Current State - Relational

- Number of dataset linked relationally with other information – including spatial information.
- Some values of fields come from pre-defined lists with application
- Most data is key values linked to lookup tables
- Spatial element is linked in the same way. Data is generally point or polyline

Next step – first step on Linked Data path.

- Identify those fields that have pre-set values.
  - Are they from a controlled set of data
    - For example – the number of lanes of road is defined in the Design Manual for Roads and Bridges along with an abbreviation – D2AR.
- Use the controlled data as a Controlled Vocabulary
  - Is the vocabulary available as a resource on line – does it have a URI to identify the possible values? If so use it, otherwise create the Controlled Vocabulary and publish it to a registry.

What about things that aren't finite lists?

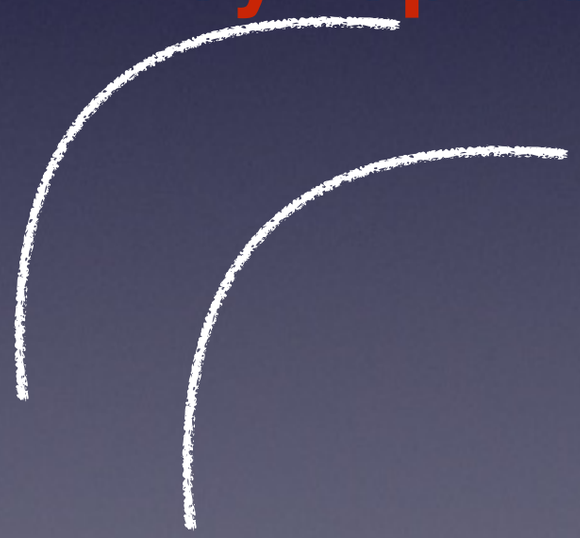
- This is where I start to struggle!
- In some cases we must be able to narrow the list down into a finite values – then follow the previous slide
  - In some cases a free text field like address could be narrowed into a finite (but long) list.
- Where we can't?
  - What do we do – I hope this conference helps me here.

What about Spatial Information

- My datasets are mostly point and Polyline but some Polygon data as well.
  - Assuming spatial information can be “coded” as LD – how do we go about?
- Comparing
  - 2 points to show that they are the same
  - 2 Polylines to show that they are the same
  - 2 Polygons to show that they are the same
- What tolerance should be used in the above process?

Picture to show comparison question

These two lines represent the same data but are not co-incident. How can we tell they represent the same information?



Conclusions

- Transport Scotland are taking small steps in the LD direction – path of travel
- Still some questions unanswered – this conference will answer some I hope
- Will we move to a LD enviroment
  - Not directly
  - In small manageable steps
  - To be determined timescle.

Thank you for your time!

- Questions – no more than 5 minutes