LGITSA Workshop Notes - GIS GDA 2020

Introduction (Kym)
- Definition of a GIS datum provided: a set of reference points of known locations on the earth surface that allows us to generate a coordinate system (e.g. longitude and latitude or Easting and Northing).
- GDA94 will eventually be replaced by GDA2020. The shift from GDA94 to GDA2020 is approximately 1.8m
- ICSM responsible for modernising Australia's datum and are overseeing the move to GDA2020
- ANZLIC (spatial information council) has recently announced 30 June 2020 as the official adoption date
- Some SA government agencies have started to implement GDA2020. Cadastral data will be delivered in GDA2020 mid-2019
- Local government agencies should start planning their transition from GDA94 to GDA2020 soon
- Only one of the six local government agencies represented at the LGIT workshop by GIS staff has begun planning (Hugh Round, City of Salisbury)
- Tony Jordan (Mt Barker District Council) was unable to attend LGIT workshop but has made good progress and can share insight
- Considerations for GDA 2020 planning include:
    - GIS software
    - Database
    - Type of data
    - Web services
    - Conversion method
    - Related systems

GIS software
- Workshop attendees use various packages including ESRI, MapInfo, IntraMaps, Exponare, Spectrum Spatial Analyst
- Some of these may not be GDA2020 compatible e.g. Exponare so may be an issue going forward
- Other are compatible with GDA2020 e.g. MapInfo Professional, ESRI and IntraMaps
- Bottom line: agencies need to know whether their GIS software will support the new datum and if it doesn't start thinking about what they are going to do about it

Databases
- SQL seems to be the database of choice
- Some commonly used versions of SQL e.g.2016 are not compatible with GDA2020
- Important that conversion efforts not begun until SQL version in place is compatible with GDA2020
- It appears SQL 2019 will be will be compatible

Related systems
- Other core systems e.g. Assets are using GIS data

- Some are not compatible with GDA2020 e.g. Assets module of Technology One platform
- May need to consider updating the coordinates (e.g. Easting/Northing) stored in asset systems to GDA2020
- Important to ask whether the GIS data used by related systems need to be converted to GDA2020 i.e. does the difference between GDA2020 and GDA94 matter in the context of its use by these related systems – conversion might be unnecessary

Third party applications
- Probably best to leave looking at third party applications until GIS software and database in place are compatible with GDA2020

GIS datum conversion software
- FME software by Safe Software was touted by Matthew Luke from Yorke Peninsula Council for converting GIS datum from GDA94 to GDA2020. Others may include python and ogr/gdal scripts
- Do we need to convert both vector and imagery data?

Epoch dynamic GIS datum
- The need for a move from GDA2020 to Australian Terrestrial Reference Frame (ATRF) discussed
- GDA2020 will be fixed to epoch 2020 whilst ATRF will be dynamic i.e. refer to current "dynamic" rather than fixed epoch
- [ATRF implementation planned to be completed by 2023]

GIS Special Interest Group
- There was much interest in forming a GIS SIG (or GISSIG palindrome?) for SA local government agencies
- Wouldn't be a large group but valuable nonetheless
- Historically there have been SIG based around GIS software products but these have tended to fizzle – a software agnostic approach preferred
- LGIT already has an active SIG for information management
- This conference has also identified possibility of Power BI SIG
- LGIT can support the formation and maintenance of a GIS SIG using its existing professional networks