

Urban

1. **Roads/access paths identification & classification ---- AOI: Brisbane CBD**

The classification of road network is typically set sight on major Highways, State Routes, and easy discernable major roads within metros & the surrounding suburbs. However, different types of roads, easement and access pathways may not be generally available. How can we utilise high resolution satellite imagery to potentially create datasets of all types of roads, easements and access pathways that would enable emergency service vehicles to have a better route planning to reach places where lives are at stake? Having a more comprehensive dataset of such would also enable better routing services for future transport related use cases.

2. **Refining urban planning process by leveraging multi-thematic information layers approach---- AOI: Sydney CBD**

Considering the possibility of utilising multi-thematic information layers, how can we gain effectiveness of social infrastructure planning & optimization by incorporating high resolution satellite imagery with some of the layers (but not limited to) listed below?

- Asset type classification
- Transport connectivity classification layers
- Utility and other service infrastructure related information layer
- Land titles information
- Population density and census data etc.

3. **Tree canopy classification, tracking & analysis in the urban settings ---- AOI: Liverpool City Council CBD**

With the vision of having 'Greener Spaces Better Places', how do we help the local government area (LGA) in keeping track of the tree canopy inventory and ascertain the green/grey ratio that it was aiming for by utilizing high resolution satellite imagery?

4. **Urban heat island effect tracking & analysis ---- AOI: New Sydney Airport Construction**

Western Sydney is rapidly expanding and bringing forward challenges related to livability, biodiversity, urban heat island effect and an increasing demand on natural resources such as water. How can we leverage high resolution satellite imagery to identify some of these problematic areas and potentially offer solutions tackling these problematic areas?