Tracing Tramways
Application of GIS in Transport Archaeology

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Sydney’s Trams
Sydney’s Trams

Popularity of motor vehicle & a declining network post WWII resulted in the final tram line being closed in 1961.

Today

ULU - Utility Location Unit
RTA - Roads and Traffic Authority of New South Wales
Database Development

Utility Location Requirements
Data Sources

Tram Map 1937

ULU Requirements  ➔ Data Sources  ➔ Point Data  ➔ Line Data  ➔ Tram Database  ➔ Management Tool

Train Map 2010

ULU Requirements  ➔ Data Sources  ➔ Point Data  ➔ Line Data  ➔ Tram Database  ➔ Management Tool

Data Sources

1921 Sydney Tramways Map Contains:
- Side Street Data
- Tram Stop Locations
- Tram Depot Locations

Circular Quay

ULU Requirements  ➔ Data Sources  ➔ Point Data  ➔ Line Data  ➔ Tram Database  ➔ Management Tool
Data Sources

Data from:
- Street Directories: 1930, 1937, 1951 and 1954
- Ortho photo of Sydney (Source RTA): 1943

Capturing Data

Tram_Point_Data
Points (in pink) showing location of tram stops, tram depot and tram intersections
Capturing Data

Tram_Line_Data
Connecting of points from Tram_Point_Data

ULU Requirements Data Sources Point Data Line Data Tram Database Management Tool

Capturing Data

1943 Road and Bridge network Location: Fivedock, Sydney

ULU Requirements Data Sources Point Data Line Data Tram Database Management Tool

1943 Road and Bridge, 2009 Ortho Photo
Final Database

Management Tool

Job location: a tramline did once exist on the road
Management Tool

Ground Penetrating Radar (GPR)
Two tram tracks identified by peaks

Management Tool

Ground Penetrating Radar (GPR)
Two tram tracks identified by peaks
Conclusion

ULU Need:
A process to highlight the possible existence of historical tram infrastructure prior to ULU field investigation

ULU Solution:
A GIS tram database integrated into the units working methodology

Result:
GIS database derived from historical documents which provides a spatial and time reference of the historical Sydney tram network over the years 1921 to 1954

Final Comment