

Tracing Tramways

Application of GIS in Transport Archaeology

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Sydney's Trams



Sydney's Trams



SPIT TRAM TRACKS GO

The Transport Department will begin removing tram tracks in Spit Road, Mosman, this morning after the peak traffic.

Motorists are advised to use the alternative route to and from Spit Bridge through

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



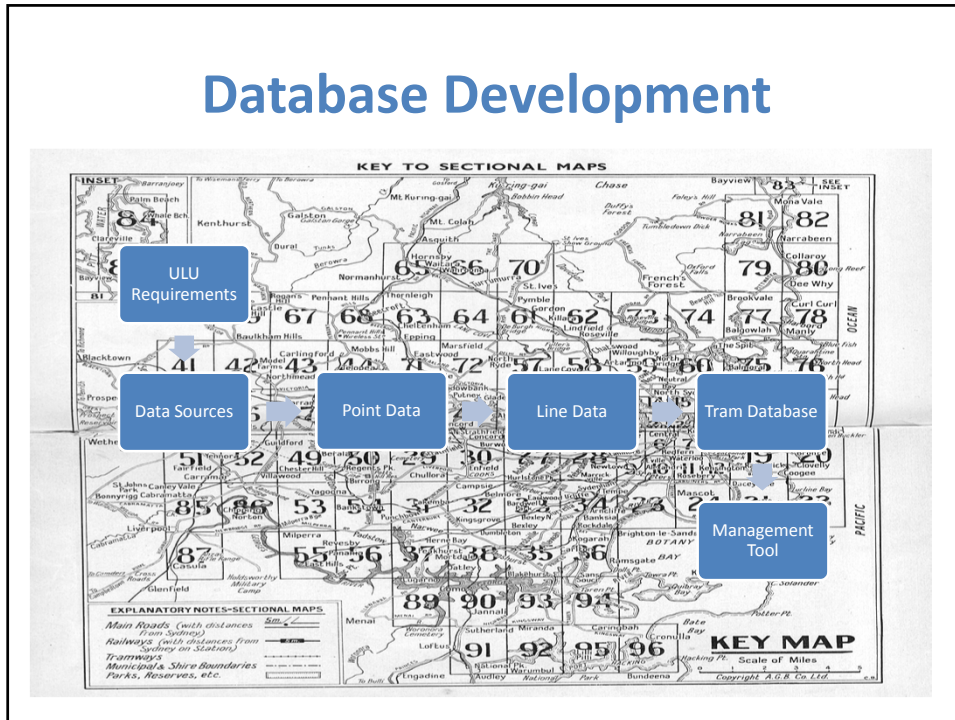
Today



ULU - Utility Location Unit

RTA - Roads and Traffic Authority of New South Wales

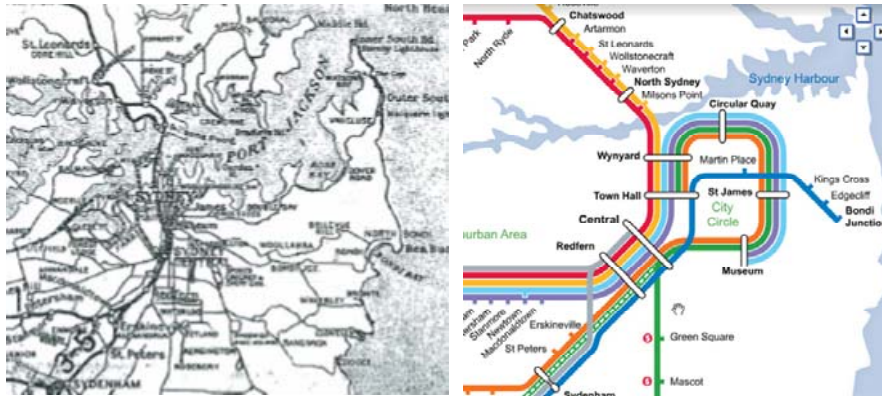
Database Development



Utility Location Requirements



Data Sources

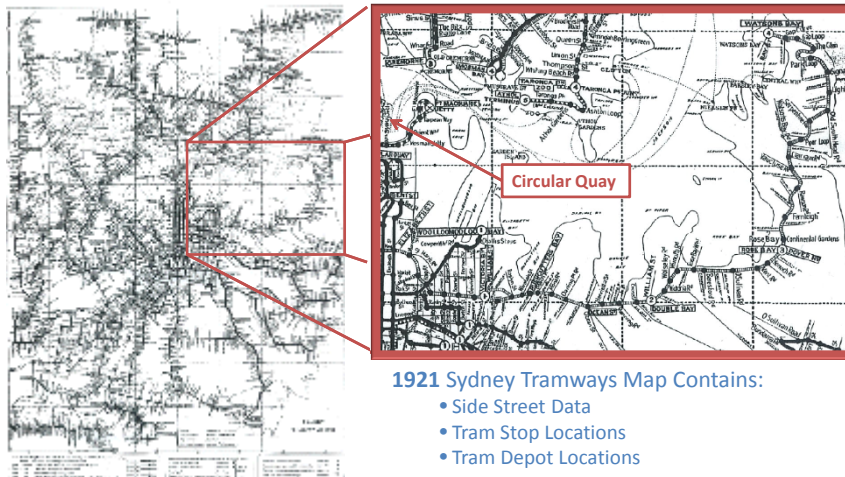


Tram Map 1937

Train Map 2010



Data Sources

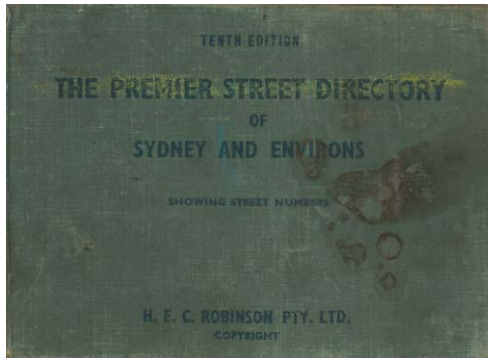


1921 Sydney Tramways Map Contains:

- Side Street Data
- Tram Stop Locations
- Tram Depot Locations



Data Sources

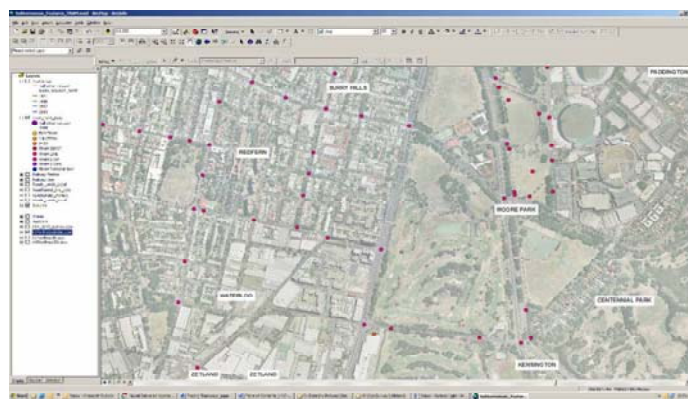


Data from:

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



Capturing Data

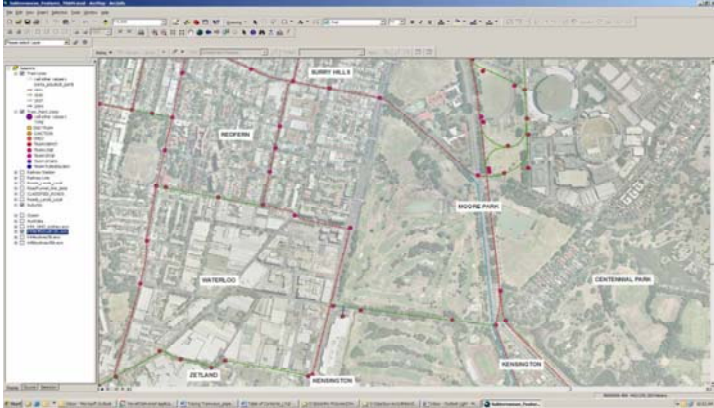


Tram_Point_Data

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



Capturing Data

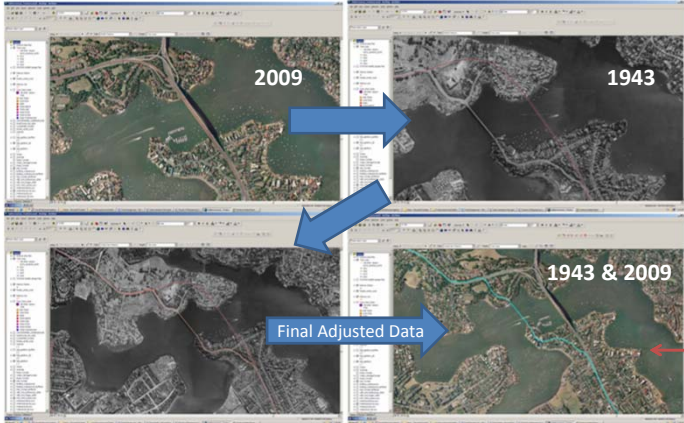


Tram_Line_Data

Connecting of points from Tram_Point_Data



Capturing Data



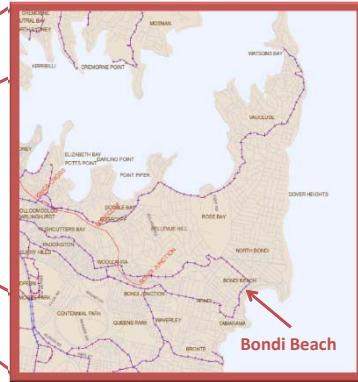
1943 Road and Bridge, 2009 Ortho Photo

1943 Road and Bridge network

Location: Fivedock, Sydney

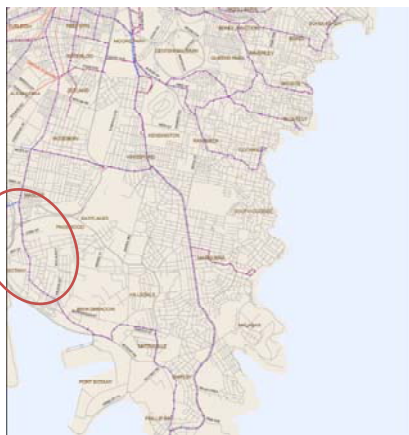


Final Database

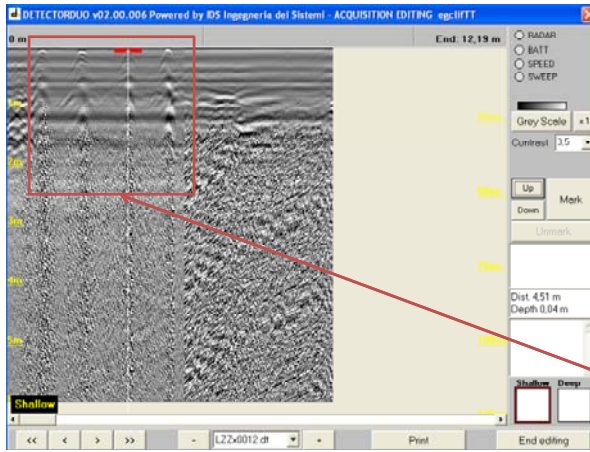


Management Tool

Job location: a tramline did once exist on the road



Management Tool

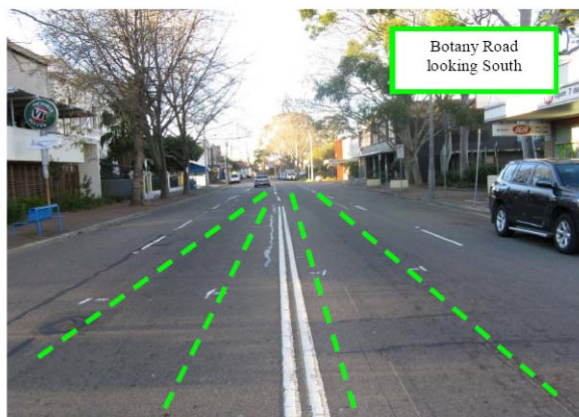


Ground Penetrating Radar (GPR)

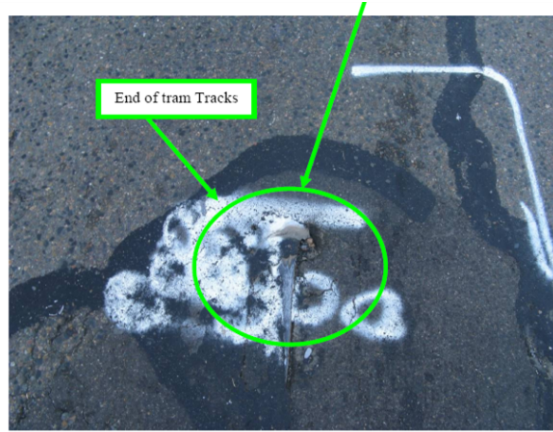
Two tram tracks identified by peaks



Management Tool



Management Tool



Management Tool



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

