

# Abstract

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## **Developing a Quasi-Temporal GIS for Archival Map Data**

**Track:** Application Development

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Despite considerable research, GIS remain two-dimensional (atemporal), limiting historical research. A prototype, “quasi”-temporal ArcView 3.x extension adds temporal functionality for the capture, analysis and display of historical data derived from archival maps. The composite database model used is inherently inefficient in terms of database structure, but modern computer hardware is sufficiently powerful to overcome this limitation, making temporal analysis feasible.

A methodology of using archival maps for temporal information only (presence/absence or 'temporal location' as opposed to spatial location) expedites historical database construction.

A case study (Fairhaven, WA) illustrates the possibilities and limitations of the extension and archival map data.

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