CRITICAL ROLE OF GEOSPATIAL INFRASTRUCTURE IN DRIVING NATIONAL ECONOMY

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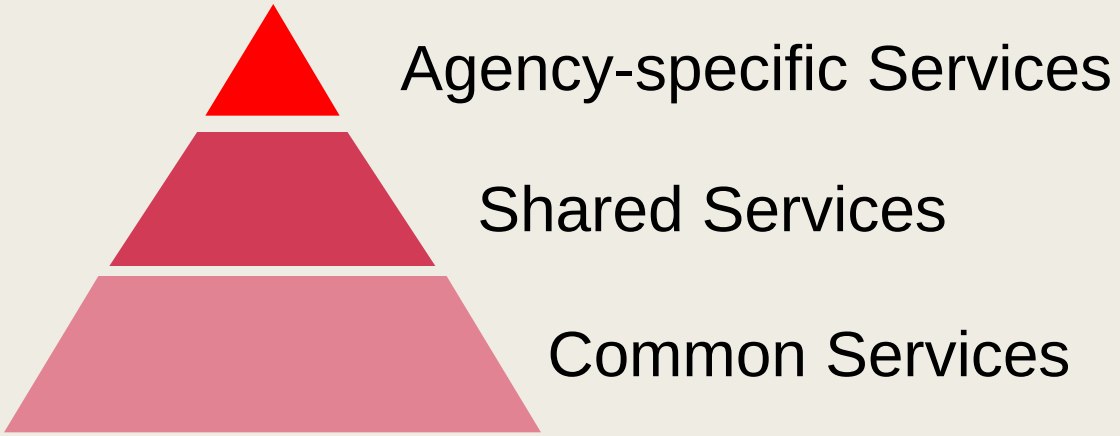
The Vision: A Robust National Geospatial Infrastructure Framework

- Coordinated, interoperable, standards-based ***data sharing***
- ***Leveraging*** organizational assets
- Improve ***readiness*** by facilitating data access
- Provide relevant and accessible ***capabilities*** to end users across the region

The Federated GIS Governance Model



The federated enterprise model balances three ways of managing GIS business for the state

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Service Types

Agency-Specific Services

Applications and services of a highly specialized nature for which there are no opportunities to add value through central management.

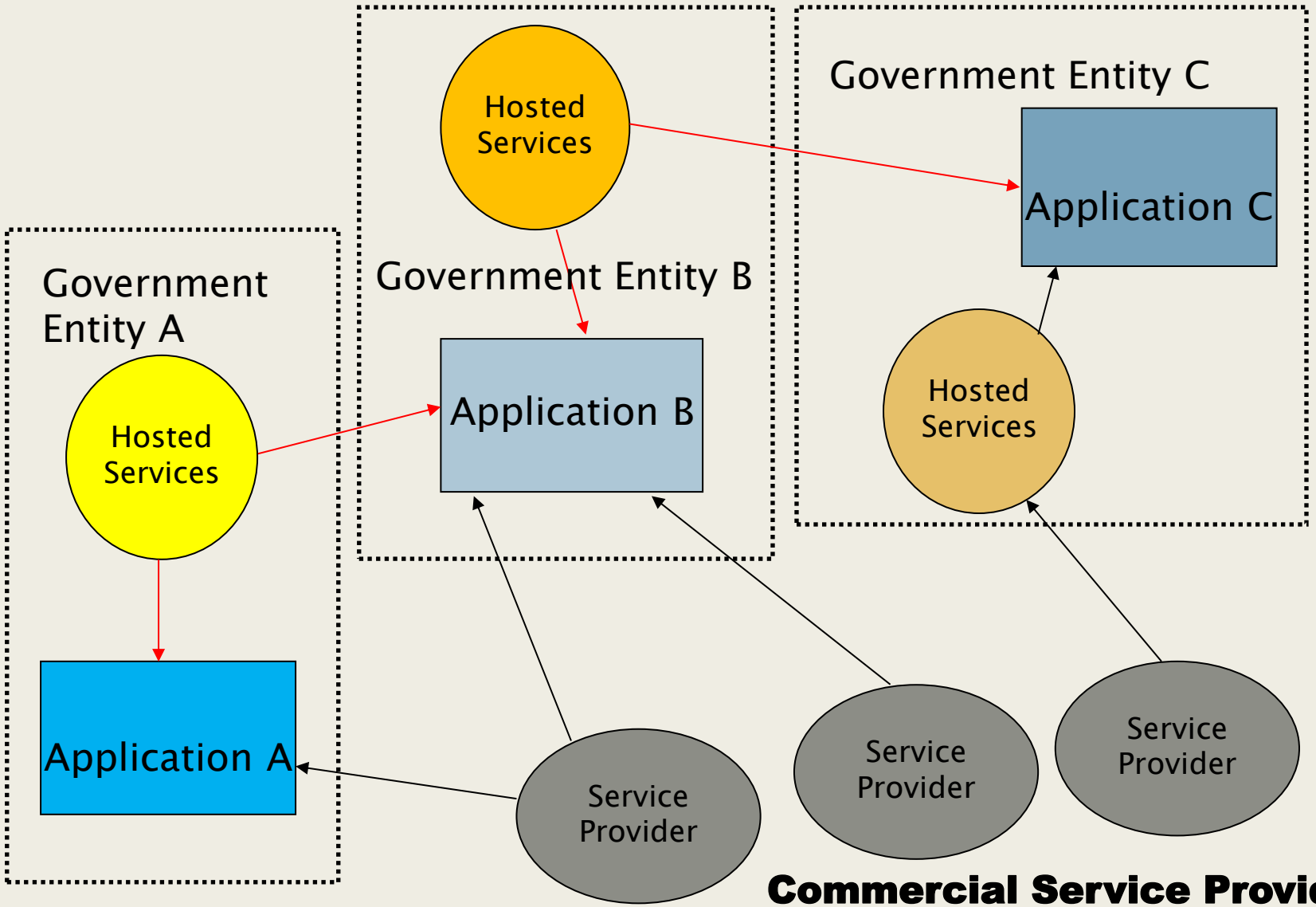
Shared Service

Services and applications required by more than one enterprise partner, and managed by one entity to improve service and efficiency.

Common Services

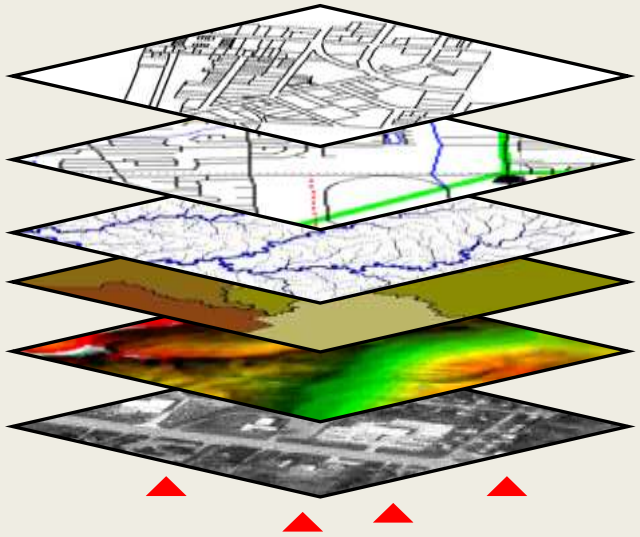
Services and applications common to all enterprise partners, and managed by one entity for all agencies and jurisdictions to improve service and/or reduce costs.

Shared Services Concept



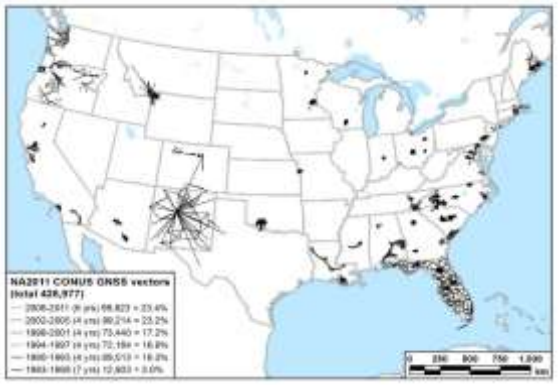
Example:
To define, maintain & provide access to the **National Spatial Reference System (NSRS)** to meet our Nation's economic, social & environmental needs.

- Latitude
- Longitude
- Height
- Scale
- Gravity
- Orientation
- Time Variations

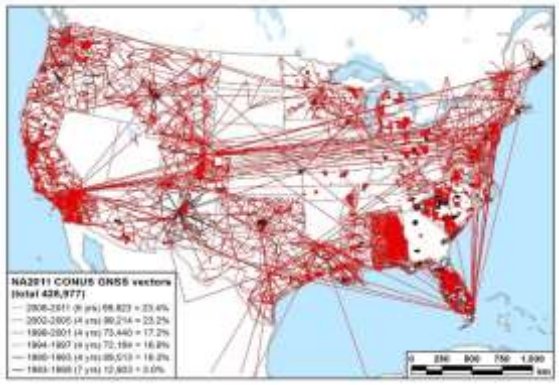


e.g. Updating the NSRS over Time

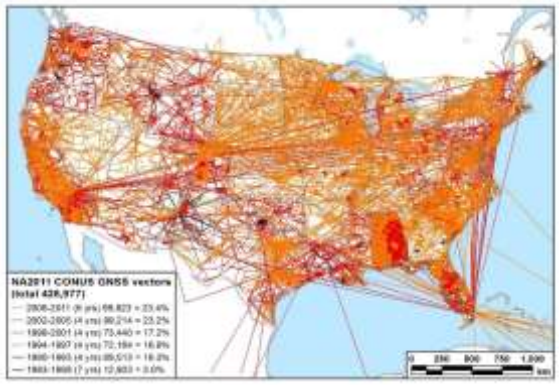
1983 to 1989



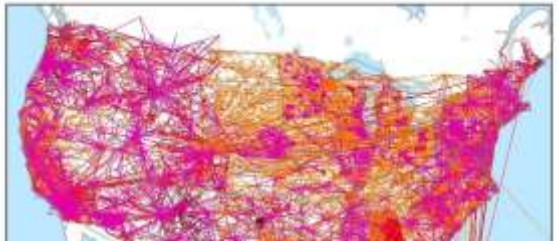
to 1993



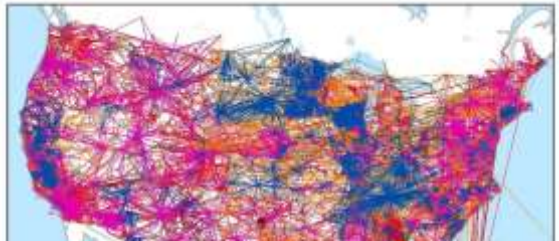
to 1997



to 2002



to 2005



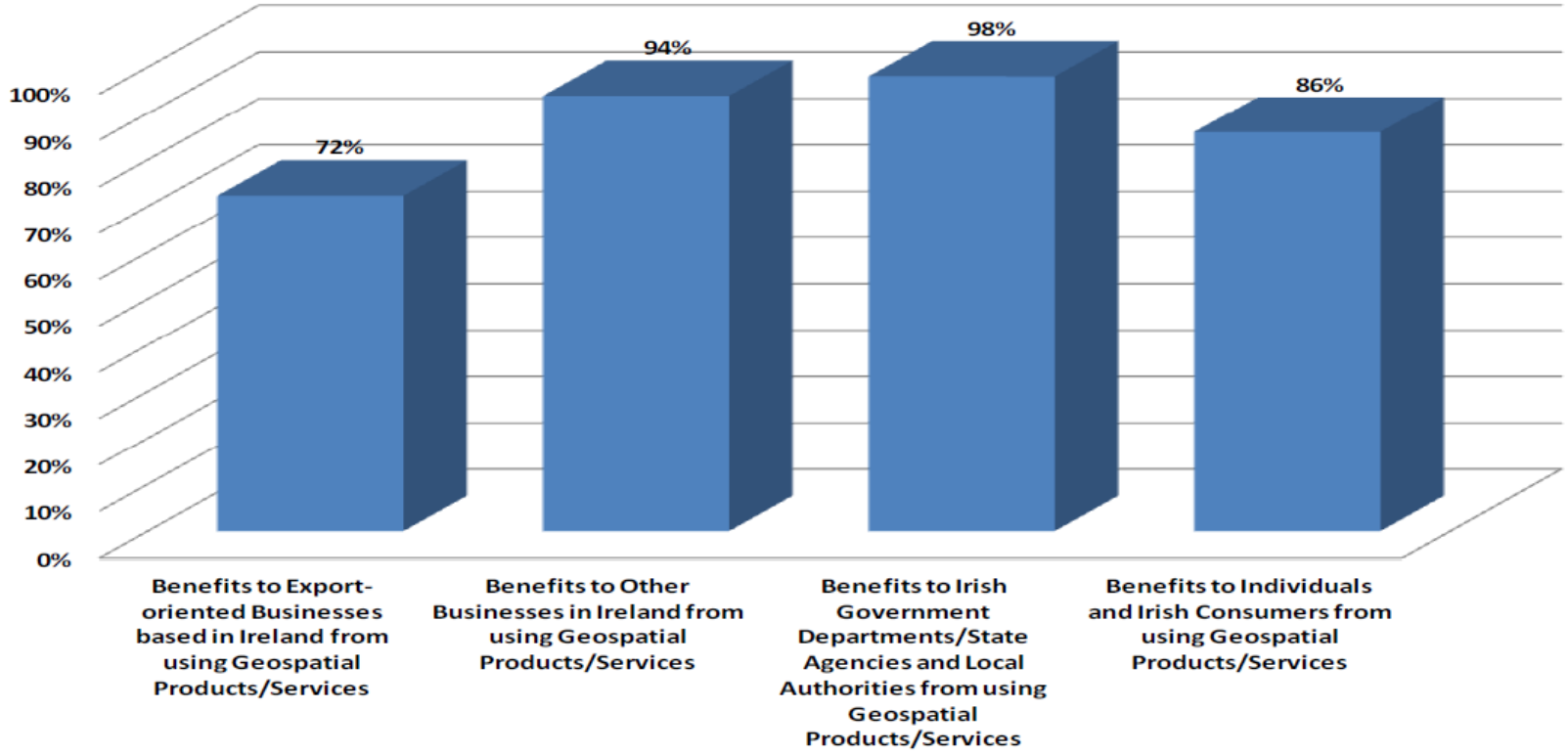
to 2011

Geospatial and Economy?

- **the cost savings** in the public and private sectors (reduction in administrative costs in public service provision, intensifying competition by lowering search costs)
- **the value of time savings** (use of geospatial navigation devices in guiding individuals to their location)
- **the impacts on competition and innovation** (role of GIS in stimulating innovation)
- **specific areas of impact** (e.g value of lives saved from faster emergency response times and reduced)
- **improve aspects of planning and decision making** (not amenable to quantification) - interactive visualization and decision-support tool to directly support economic planning.

The Case: Ireland (2014)

Percentage of Survey respondents who indicated Significant or very Significant Potential User Benefits arising from the provision of Geospatial Products/Services in Ireland

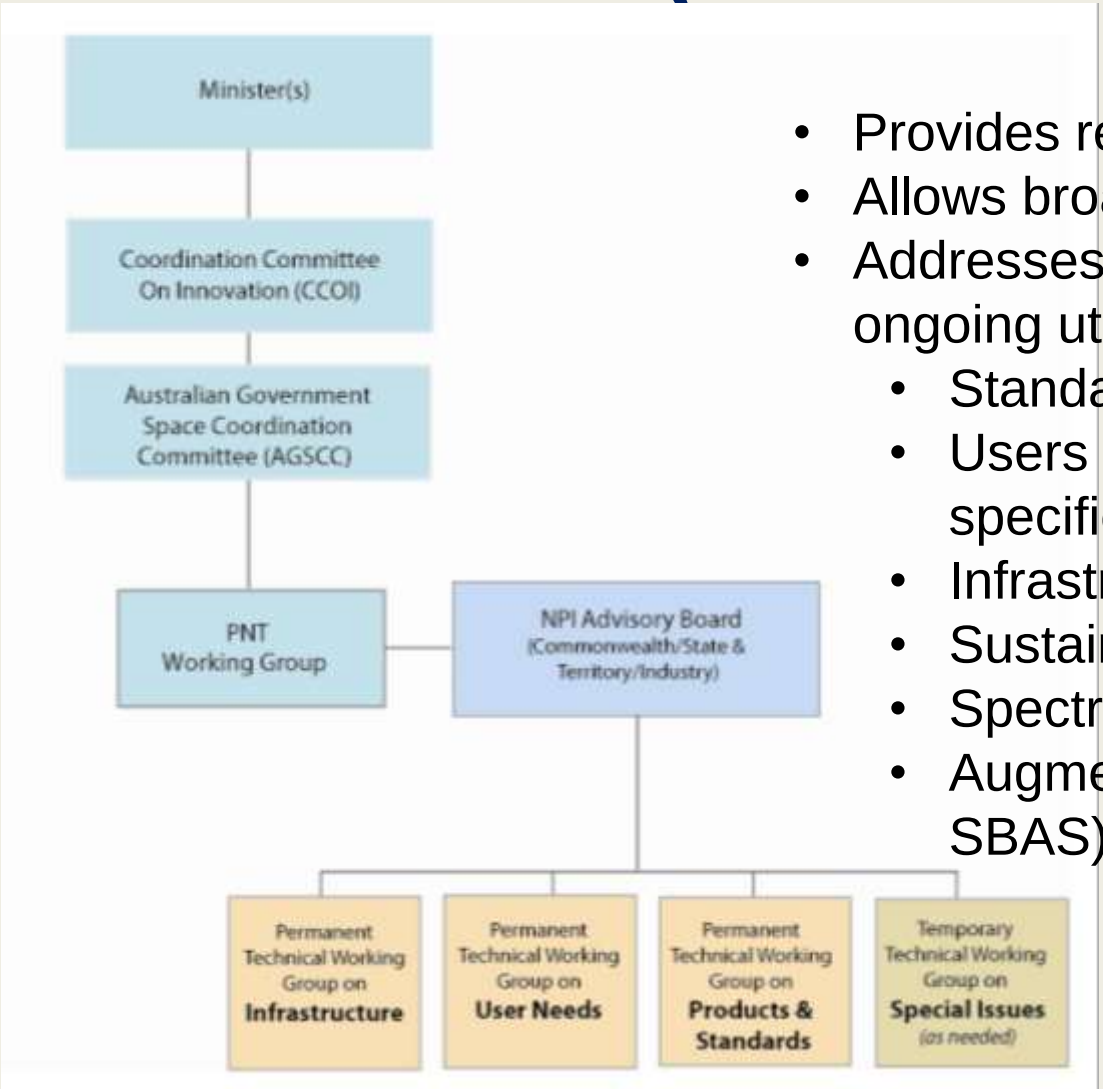


Source: Indecon Confidential Survey of GI users and suppliers

GNSS Positioning Transforming Australian Industry

Precise satellite positioning technology will potentially add up to 2.1% to Australia's gross domestic product by 2030 through productivity gains in mining, construction and agriculture alone

National Positioning Infrastructure Governance (Australia)



- Provides reporting to Government
- Allows broad participation
- Addresses key implementation and ongoing utilisation issues
  - Standards
  - Users needs analysis (products specification)
  - Infrastructure design
  - Sustainability models
  - Spectrum Management
  - Augmentation delivery method (eg. SBAS)

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