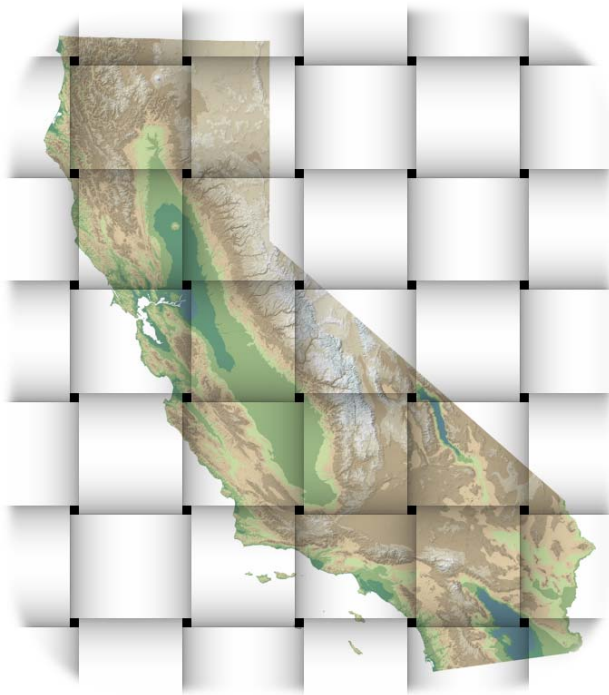


# California GIS Enterprise Strategy



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# Outline

- ◆ OCIO / GIO Background
- ◆ California GIS Task Force Report
- ◆ California GIS Council
- ◆ State IT Strategic Plan
- ◆ State GIS Plan
- ◆ Future Direction



# California GIS Task Force Report

## Four Primary Recommendations

- ◆ Establish the State Geospatial Information Office
- ◆ Direct Agencies to establish GIS Leads responsible for using data to align investments
- ◆ Establish a competitive grant program
- ◆ Develop an integrated outreach program

# OCIO / GIO Background

- ◆ SB 90 Creates the Office of the Chief Information Officer
- ◆ GIO Created as administrative action
  - Create the California Spatial Data Infrastructure
  - Set State Policy w/ respect to GIS
  - Lead coordination; CGIC, NGAC, NSGIC
  - Cross enterprise collaboration / Investment alignment



# GIS Council

- ◆ Framework Data Plan
- ◆ Strategic Plan
- ◆ Image Business Plan
- ◆ Homeland Security Working Group
- ◆ Governance Working Group



# GIO Future Direction

- ◆ Framework Data Focus
- ◆ Enterprise Collaboration Environments (CalAtlas and GIO Wiki)
- ◆ Data Strategy (address/geocoding)
- ◆ Strategy / Future Direction / Policy



# Framework Data Focus

- ◆ Primary focus on seven “framework” layers identified the CGIA data plan
  - Parcels
  - Imagery
  - Transportation
  - Elevation
  - Hydrography
  - Geodetic Control
  - Government Units



# Homeland Security Grant

- ◆ Data as a Service
  - Imagery
  - Roads
  - Landmarks
- ◆ Requirements Gathering / Pilot
- ◆ Build
- ◆ Next Grant



# Enterprise Collaboration Environments

- ◆ Cal-Atlas: Data steward and application developer project team collaboration support
- ◆ GIO Wiki: Enterprise GIS policy development



# Cal-Atlas

- ◆ A collaboration environment for cross enterprise development
- ◆ Supports development of geospatial data, web map services and utilities
- ◆ Platform for sustainable data and system maintenance
- ◆ Allows coordination of efforts across departments, Agencies, and with the broader California GIS community including local initiatives such as the regional GIS collaboratives
- ◆ Harnesses the combined efforts of a vibrant community of practice supporting federated development of the California Spatial Data Infrastructure



# Cal-Atlas Features

- ◆ Enterprise data library
- ◆ Task tracking
- ◆ Team mailing lists
- ◆ Project news feeds
- ◆ File update notification
- ◆ Metadata management
- ◆ Version control
- ◆ Package management



The Cal-Atlas site facilitates the coordinated and sustainable development, maintenance, licensing and sharing of geospatial data and web map services by California government agencies, partners and stakeholders. California government agencies work with the California GIS Council, regional GIS collaboratives and the broader California GIS community to define the data architecture, systems, standards, agreements and processes for a fully integrated and effective California Spatial Data Infrastructure.

**NEWS**

- [Why OpenStreetMap is Brilliant](#)
- [Report: State Stimulus Tracker Websites are Mediocre](#)
- [Programmable Web Asks: Will ESRI's Free API Draw in GeoWebbers?](#)
- [Nominations Are Open for NSGIC's Annual Conference Awards](#)
- [The Grill: GIS pioneer Jack Dangermond on the future of mapping technologies](#)

[More...](#)

**APPLICATIONS**

- [GeoFinder](#)
- [CEIC](#)
- [CMLUCA](#)

**ORGANIZATIONS**

- [CGIA](#)
- [GIS Council](#)
- [USGS](#)
- [FGDC](#)



**DISCOVER** »

geospatial data and services specifying location, keywords, data types and more.



**DOWNLOAD** »

geospatial data from the California Spatial Information Library(CaSIL).



**CONTRIBUTE** »

geospatial data, maps and related resources to Cal-Atlas so that others may benefit from your efforts.



**VIEW** »

maps and web applications using geospatial data to address complex issues in California .



## Cal-Atlas

### How to...

#### Create a Project

Produced by Monica Markel  
State of California  
The California Natural Resources Agency

April 2009

for  
<http://www.atlas.ca.gov/contribute.html>

### Contribute

#### [Contribute Data Products](#) »

The Cal-Atlas Project tool is a free service to California data developers. It includes features such as user lists, bug tracking, message boards/forums, task management, and a complete web-based administration interface. Resources are distributed via the Cal-Atlas Project tool when the appropriate metadata is provided.



# GIO Wiki

- ◆ Located at OCIO website
- ◆ Used by the GIS community to develop and publish enterprise policies

# Data Strategy

- ◆ OCIO has released a data strategy report
- ◆ Aligned with the OCIO Strategic Plan; Goal #4 “Information as an Asset”
- ◆ Comprehensive DAAS beginning with Geocoding



# Future Direction

- ◆ Data
- ◆ People
- ◆ IT Infrastructure
- ◆ Policy and Standards
- ◆ Products and Services

# Data

- ◆ Establish authority leads for each framework dataset as a matter of state (OCIO) policy
- ◆ Require geocoded data
- ◆ Increase GIS data availability by publishing state data as GIS data services
- ◆ Consolidate data reporting at Cal-Atlas
- ◆ Develop essential data services

# People

- ◆ Bring current GIS classifications into the 20<sup>th</sup> century
- ◆ Implement sound governance for data stewardship
- ◆ Define a small focused staff to direct GIO functions
- ◆ Outreach to Agencies to ensure data is consolidated at the Agency level
- ◆ Develop enterprise capacity at OTS



# IT Infrastructure

- ◆ Establish MSAs for GIS products and services making it easy for departments to implement
- ◆ Collaborate with science based computing at key locations (eg National Labs)
- ◆ Increase GIS capacity in Agencies and assure that this increase is strategically aligned and not duplicative
- ◆ Consolidate infrastructure at Agency levels where synergies can be achieved
- ◆ Implement data services which publish geographic data



# Products and Services

- ◆ Establish Cal-Atlas as the centerpiece of GIS for California
- ◆ Work with EA to define enterprise issues starting with Geocoding
- ◆ Ensure GIS data, services and metadata are published through a common portal (Cal-Atlas)
- ◆ Establish governance mechanisms leading to development of robust customer centric cross-enterprise services meeting the needs of many



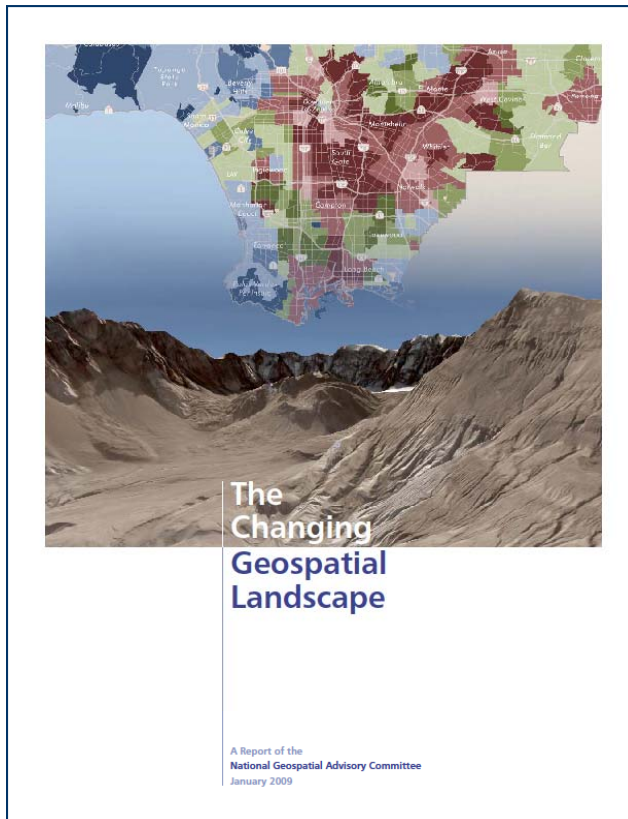
# Policy Standards

- ◆ Set Statewide Standards relating to GIS
- ◆ Work through the GIS Council to vet and recommend standards
- ◆ Through state Policy Memo's ensure GIS usage is focused on a handful (rather than dozens) of core technologies
- ◆ Ensure that enterprise development fosters standards established

# National Issues

- ◆ National States Geographic Information Council (Imagery for the Nation)
- ◆ National Geospatial Advisory Committee
- ◆ Congressional Research Service Paper
  - <http://www.fas.org/sgp/crs/misc/R40625.pdf>
  - House Natural Resources Committee Subcommittee on Minerals and Energy hearing on geospatial governance

# NGAC National Geospatial Strategy Paper



<http://www.nascio.org/events/2009annual/discovery/NGAC->

[TheChangingGeospatialLandscape.pdf](#)



# Long Range Possibilities

- ◆ Start with the views of customers
- ◆ Consider the arc of history



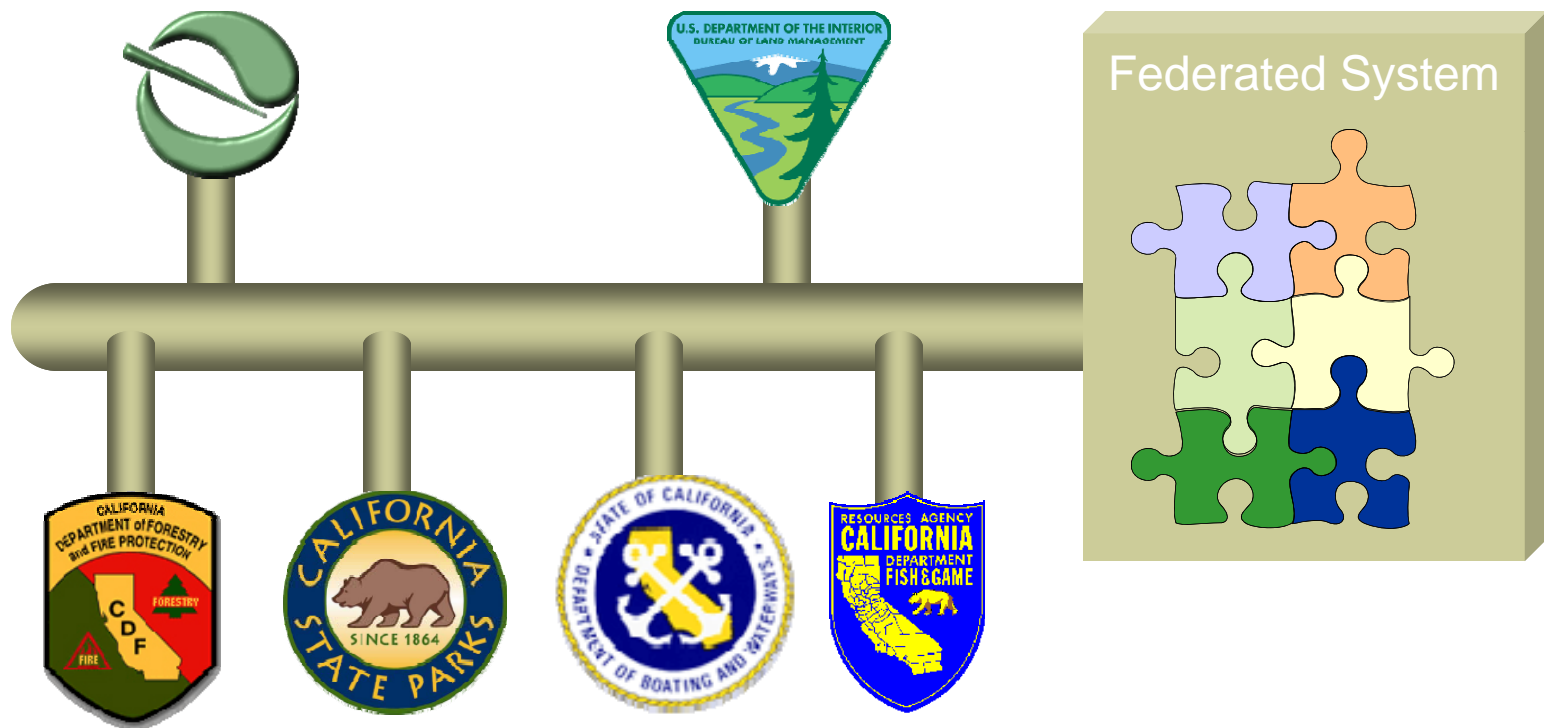


# What is an Information Infrastructure?



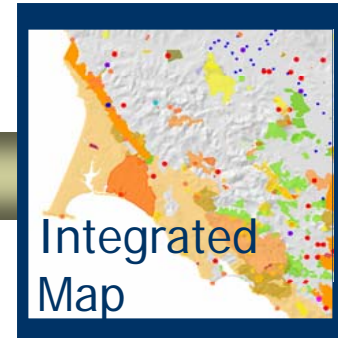
- ◆ Hardware?
- ◆ Operating systems?
- ◆ Programming languages?
- ◆ Software?

# Information Centric Design



**Service Oriented Architecture** – a software design that uses programs and data distributed over a network.

# Diverse Information Integrated in Context



Base Map



Fire History



Public Lands



Stressors





# Is this approach the end of the boxes?



- ◆ It can't be if our missions are to be served.
- ◆ All it changes is the flexibility of our service.



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# Programs remain in firm control, deciding & managing...

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- ◆ Appropriate use
  - Intended use of the data
- ◆ Licensing and Intellectual Property Rights
  - Control who can access the data
- ◆ Metadata
  - Information on all of the above to accompany each data set
- ◆ Data maintenance
  - Keeping the data up-to-date and accurate
- ◆ Service levels
  - Level of availability that a user/subscriber can expect



# Contact Information



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