

LA County eGIS

Geography as a Utility

Mark Greninger

Geographic Information Officer

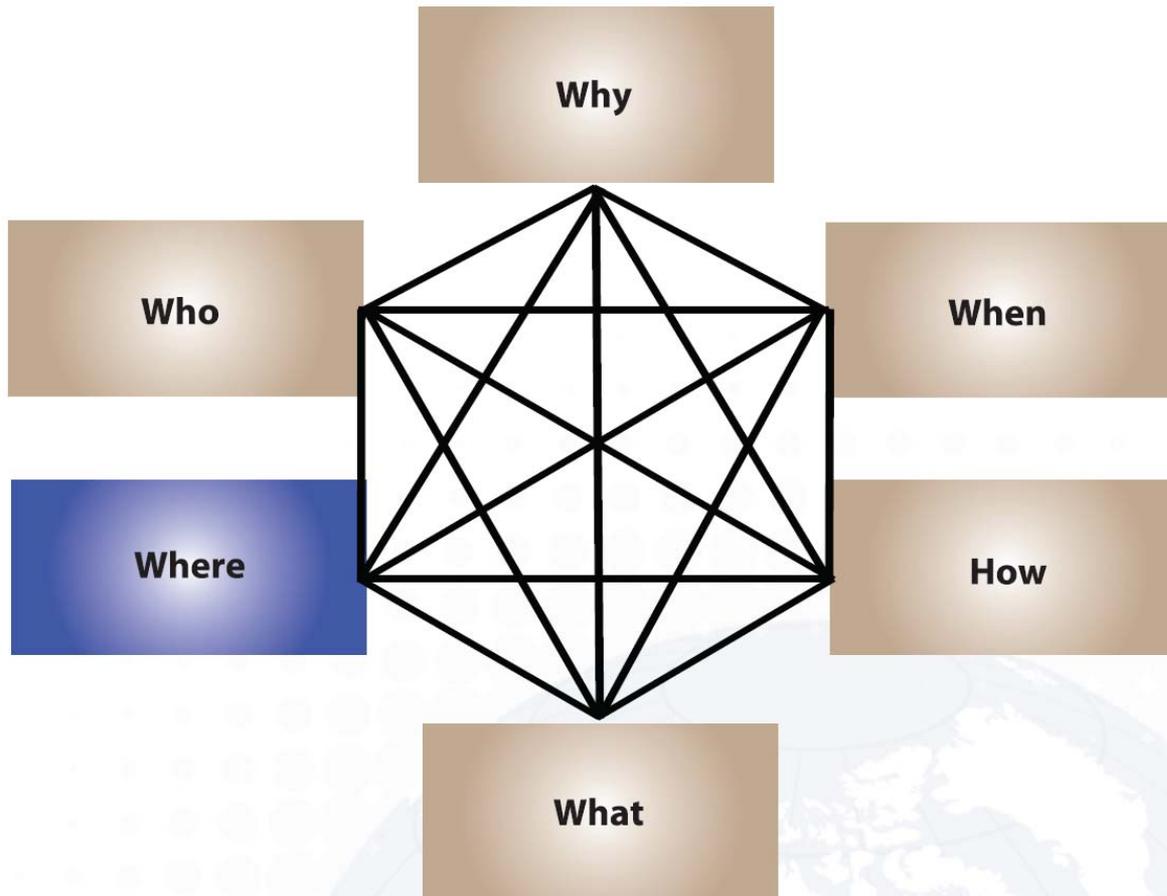
mgreninger@cio.lacounty.gov

<http://gis.lacounty.gov/eGIS>

What is GIS?

- GIS (Geographic Information Systems)
- Links information to geographic locations
 - Digital Map layers (parcels, roads, service locations, etc)
 - 90% of all data has a geographic component
- Support geographic visualization and analysis
 - Maps
 - Reports
 - Applications
- Yes – Google Earth is GIS!

GIS in context



Uses of GIS

- Tracking Program Results
- Facility and service location analysis
- Planning for Sustainable Communities
- 911 Response
- Determining Transportation Routes
- Routing Inspectors
- Understanding Population Demographics and Predictive Modeling
- Tracking Disease Incidence and Prevalence
- Mapping Sex Offender Registries and Crime Patterns
- 3-D Street and Building Modeling for Law Enforcement
- Management of Public Utilities
- Impact Analysis related to Weather, Flooding and Natural Disasters
- Allocating Resources
- Detecting Food Stamp Fraud

eGIS Guiding Principles

- **GIS is a utility**
 - Impacts every aspect of business
 - Supports departmental missions
 - Enables departments should focus on the business benefits, NOT the hardware and technology
 - Provides a single access point for ALL GIS needs
- **Enterprise GIS is a shared resource**
 - Leverages investments for maximum benefit
 - Allows cost sharing across the County
 - Reduces duplication of effort
 - Provides enhanced capabilities and faster deployment
- **Collaborative Management** - Guidance from the Enterprise GIS Steering Committee

eGIS Services

- Located at ISD
- Eight staff transferred from CEO Urban Research
- Approximately 15 Departments utilize eGIS services
- Services provided:
 - **eGIS Infrastructure Services** – Data Access, Infrastructure, Application Hosting, Web Services and Technical Support
 - **eGIS Development Services**

eGIS – Data Access

- Access to County *Spatial Data Infrastructure* (200+ layers)
- Central authoritative source for mapping and analysis.
Includes:
 - Aerial Imagery (LARIAC)
 - Addresses
 - Parcels
 - Roads
 - Jurisdictions (city boundaries, service areas)
 - Points of Interest (e.g., parks, fire and police stations)
 - Population Data (Census and Estimates)
 - County Service Locations
 - Complete list available at <http://gis.lacounty.gov/egis>
- Support for adding your data

eGIS – Infrastructure

- Hosted at ISD, ensures
 - Speed, reliability
 - Monitoring
 - Network security
 - Data security
 - 24/7 support
 - Disaster recovery
- Infrastructure
 - \$750,000 hardware and software investment
 - Supports over 130 simultaneous users
 - 80 Tb of storage

eGIS – Application Hosting

- Access to Geocortex software used for
 - Web-based geospatial analysis
 - Requires limited GIS expertise
 - No client software required
 - Rapid deployment
 - Web-based application management
- Custom site for each department
 - Includes departmental data for business requirements
 - Limited customization included
- Share benefits of other departmental customizations
 - Access to imagery
 - Upload Excel files
 - Export Tables and Reports

eGIS – Web Services

- GIS Web Services
 - County map and data access
 - Microsoft Virtual Earth
 - Access via non-County viewers (Google Earth)
- Web Services
 - Address (validation, geocoding, etc.,)
 - Routing
 - Identification and search
 - All future developed services
- Mobile access
- Not proprietary
- Unlimited Usage

eGIS – Technical Support

- Provide GIS technical assistance
- Provide GIS best practices
- Manage shared GIS software pool and licensing
- Organize and provide GIS training
- Access to external GIS expertise and information resources

eGIS - Benefits

- Single point of contact
 - Countywide data in one location
 - Single location for GIS support
- At least 50% reductions in cost
 - No hardware and software to acquire and configure
 - Lower staffing requirements
 - Reduction in burden on existing IT staff
- Faster deployment and deeper integration
 - Data, services, and support in place
 - Focus on integration and business benefits

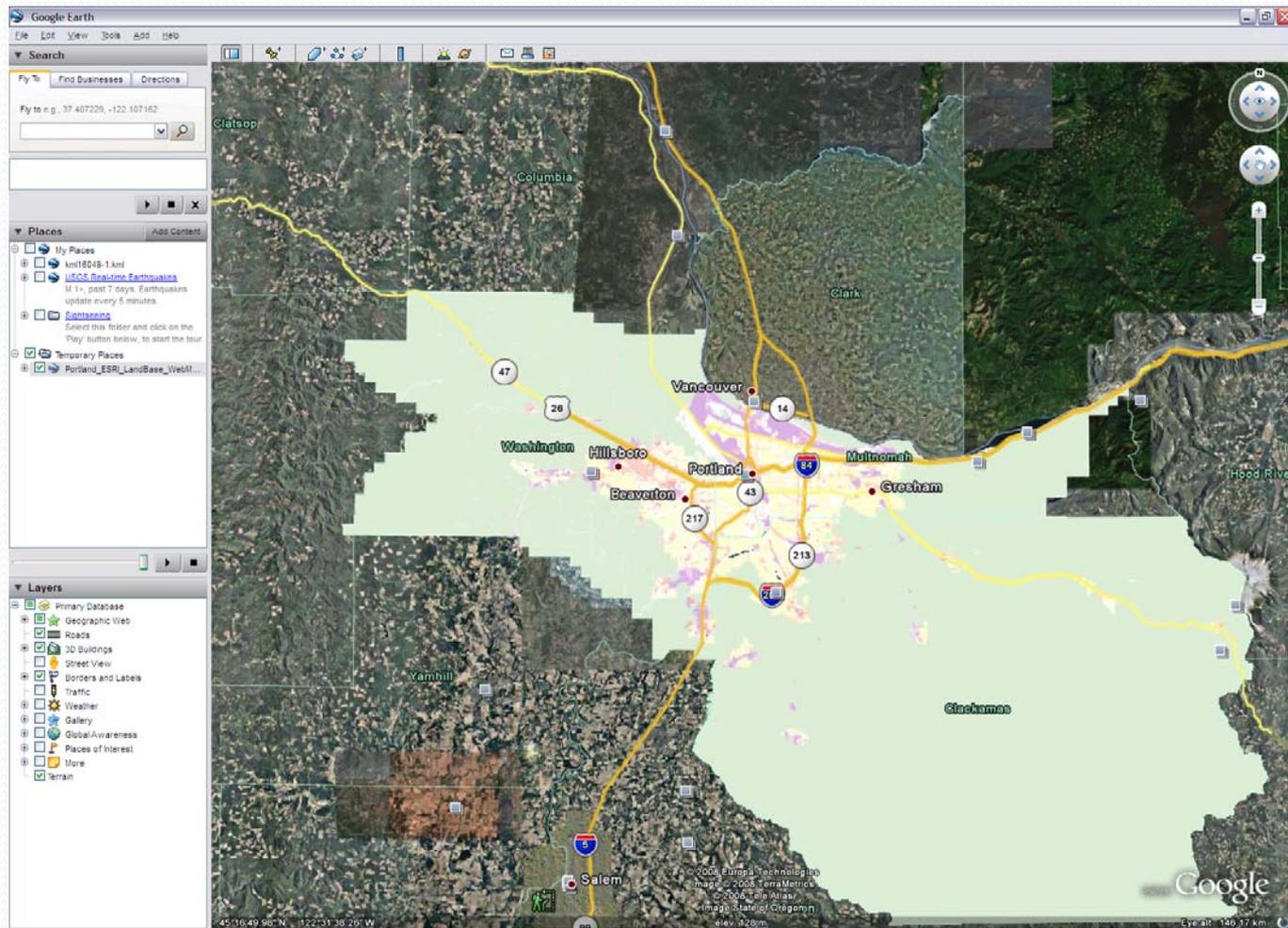
eGIS – Development Support

- Use as needed
- Custom Application Development
- Custom Data Development
- Data cleansing and reporting
- Custom population estimates

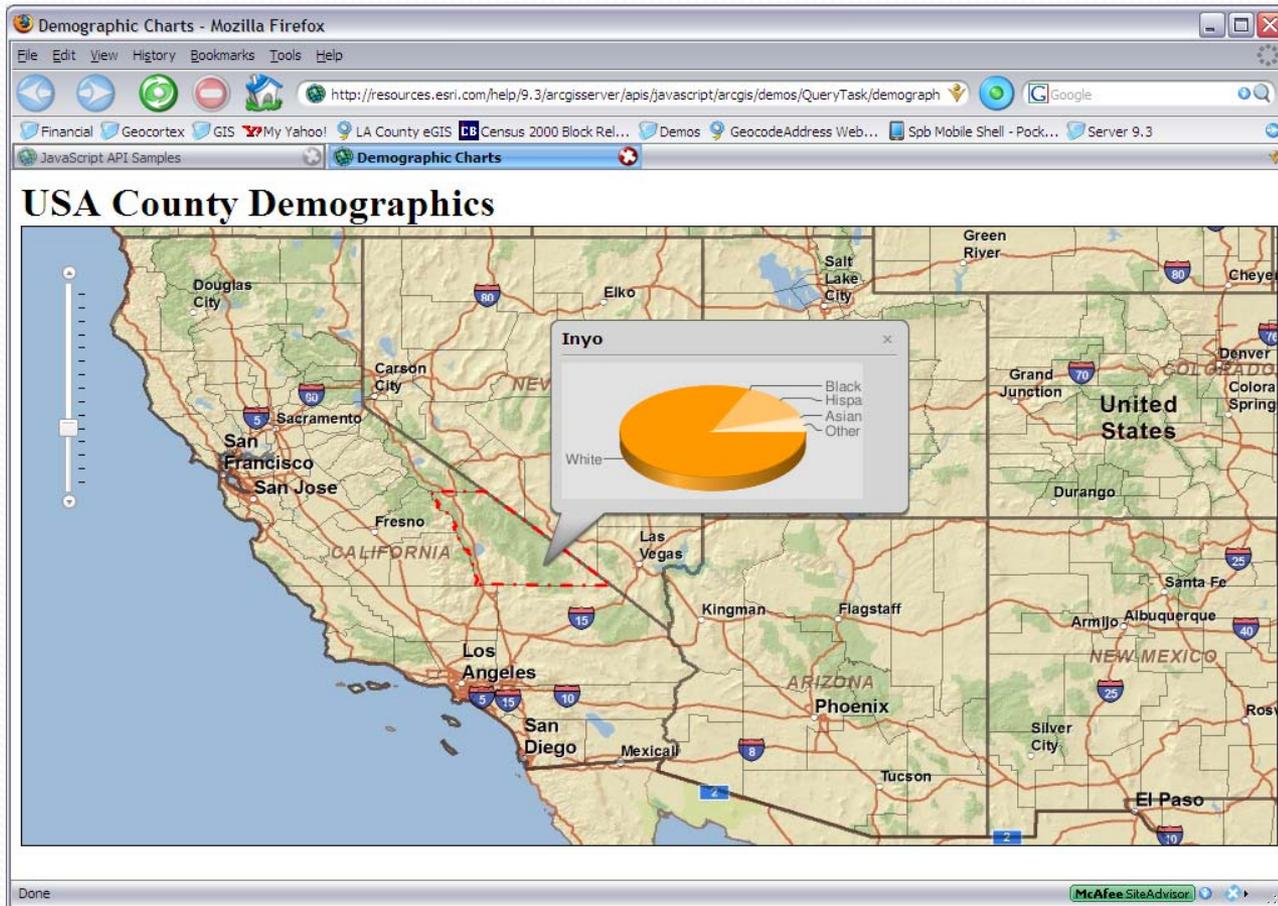
eGIS – Costs

- eGIS Infrastructure Services
 - Single line item at the department level
 - Cost allocations being finalized
 - Dependent upon department size and usage
- eGIS Development Services
 - Hourly rates

Example – Google Earth



Example – Javascript API





Questions?