SWOT ANALYSIS WORKSHOP

LANE COUNCIL OF GOVERNMENTS
AGENDA

Introduction
- Project Summary & Update
- Questionnaire & On-site Recap
- CPA Overview

Understanding SWOT
- What is a SWOT Analysis?
- Strengths
- Weaknesses
- Opportunities
- Threats

Question and Answer
Project Summary & Update
Project Purpose

Goal

Review and restructure the regionally shared GIS systems and services administered under the longstanding Cooperative Project Agreement (CPA).

Partnership Objective

Our objective is to develop strategic plan(s) that address the organizational components of an innovative, successful, and durable regional partnership that continues well into the future.

The Partners have established a **process framework and two advisory bodies for supporting this effort**. The bodies are the long-standing Regional GIS Coordinators committee (GIS Coordinators), consisting of GIS leads from the five partner agencies; and the CPA Partnership Development Steering Workgroup (Steering Workgroup), composed of program manager and director stakeholders and the GIS Coordinators.

Geographic Technologies Group Project Goals and Objectives

Review, plan, design and restructure the regionally shared spatial data systems and services administered under the longstanding CPA, with special focus on participation, governance, technology and an enterprise funding model.
Lane Council of Governments | SWOT Analysis Workshop

Project Summary & Update

Fundamental Steps to Regional GIS Strategic Planning
Designing a Multi-Agency Geospatial Data Services Framework and Restructuring a Multi-Jurisdictional Project Agreement

**PHASE I**
1. Telephone Interviews
2. Online Questionnaire
3. On-Site Kick-Off Meeting and Technology Seminar
4. Stakeholder Interviews
5. Stakeholder Identification & Description

**PHASE II**
6. SWOT Working Sessions (Nov. 30)
7. Needs, GAP, and Benchmarking Analysis Report (Jan. 18)
8. Two Options: Future Regional Models (Feb. 19)
We asked respondents if they could recall any instance(s) of inaccurate or incomplete data...

**Analysis:**
There is a need to evaluate certain data layers and develop a road map for clean-up and standardization.

Also, there is an opportunity to educate users on where to access the most reliable and up-to-date data (metadata).

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<table>
<thead>
<tr>
<th>“Yes” said: (from long survey)</th>
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<tbody>
<tr>
<td>- No parcel-specific comprehensive plan designations.</td>
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<tr>
<td>- Tax lot history</td>
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<td>- Aerial imagery (extent, scale, resolution)</td>
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<td>- Creeks, streams</td>
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<tr>
<td>- Tax/Parcels are often not placed in accurately</td>
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<tr>
<td>- Topography lines should be based on LIDAR data; more utility data; better building footprints and data</td>
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<td>- City-owned land, easements</td>
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<td>- Discrepancies between zoning map information and what is depicted on MapSpring.</td>
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<td>- Split zoning</td>
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<td>- Wastewater collection system, especially Springfield</td>
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<td>- Boundary lines of taxing district</td>
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<tr>
<td>- Streets ownership and jurisdiction</td>
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<tr>
<td>- Land use code assignments</td>
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<tr>
<td>- Bridges - seismic info, critical buildings - same</td>
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</tbody>
</table>
We asked respondents if they could recall any instance(s) of inaccurate or incomplete data...

Analysis:
There is a need to evaluate certain data layers and develop a road map for clean-up and standardization.

Also, there is an opportunity to educate users on where to access the most reliable and up-to-date data (metadata).

“Yes” said: (from short survey)
- Addressing
- Existing utility/public easements.
- Street view sometimes does not show where I have clicked on, it goes down the street...
- Easements seem to have a lot of spatial issues
- wastewater and storm water layers
- Inaccuracies - square footage, building completion dates, taxes current, etc
- Historical data for LLA and renumbered tax lots
- RLID addresses are not great for creating mailers. I would say 40% of addresses are returned by USPS.
- Agency ownership not always up-to-date
- Fire hydrant layer includes decorative hydrants or non-existent hydrants
- Parcel data had incorrect ownership listed
- 3 year old apt. complexes often need unit numbers
- Home builders - Buildable Lands Inventory
We asked respondents if they could recall any instance(s) of missing or unavailable data...

**Analysis:**
Again, an opportunity to educate users on where to access the most reliable and up-to-date data (metadata).

Also, need to ensure users know what data is available and provide a mechanism for them to request or provide new data layers.

**“Yes” said: (from long survey)**
- HUD CHAS data
- Eugene Parks, Rivers2Ridges public lands ownership
- May be available but not as easy to use, google street view
- Hydrography
- Farmland Protection Soils, Hazardous Materials, EPA/DEQ Brownfields, social services
- Google Earth aerial photos
- As the DBA, I do most of my work directly in the RLID data warehouse
- Parks GIS files specific to our work but not widely used by others
- Lane County has its own mapping applications
- Transit routes and stops. Get from LTD and share with other partners.
- Detailed boundary change information; official documents
- Right-of-Way
- MapSpring, plat layers: It would be helpful to have a "hot link" to plats
- Utility District Infrastructure
We asked respondents if they could recall any instance(s) of missing or unavailable data...

Analysis:
Again, an opportunity to educate users on where to access the most reliable and up-to-date data (metadata).

Also, need to ensure users know what data is available and provide a mechanism for them to request or provide new data layers.

“Yes” said: (from short survey)

- Oregon Emergency Management RAPTOR platform
- Ones that we’ve created in our service (not listed above)
- Historic data. No comprehensive current alternative exists.
- Employment
- See above
- Eugene street trees - now thru Collector
- Wastewater service lines - scanned connection cards
- EWEB info
- Data from EPA, DEQ, LTD Bus Stops, others
- Sometimes I need a better view of a property and have to use Google maps to see closer or around trees
- Buildings, Hydrology, and Surveys
- Several datasets that I ask Kyle Overstake to provide to me via an ftp site
- Parks and Open Space data is housed and maintained on the city of Eugene ArcGIS online account.
We asked respondents if they felt clear lines of responsibility had been delineated...

**Analysis:**
Responsibilities for managing GIS data along with a complete master data list, including coverage, is desired.

Some internal roles and responsibilities are well defined, but regionally, there needs to be further clarification.

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**"Yes" said: (from long survey)**

- We have a service level agreement between the Information Technology Dept. and the Development and Public Works Dept.
- Identified data custodian roles
- All agencies should maintain and store authoritative data and share it with the region via LCOG, except where there are special concerns with access. Many datasets are integrated by LCOG into a single, seamless layer (e.g. streets, addresses, etc.). LCOG staff function as a staff extension service and are contracted to assist in maintenance and storage of some agency data.
- County is responsible for parcel mapping. LCOG is responsible for many shared boundary/overlay layers. Some cities prefer to retain responsibility for their own boundary/overlay layers.
- A work in progress part of our strategic plan
- It would be helpful if the responsibilities for managing GIS data (and a comprehensive list/chart of layers and coverage) were developed and shared among CPA agencies
- Within Springfield IT, management is clearly defined; however on a regional level the roles are fairly organic.

**"Yes" said: (from short survey)**

- IGA with Lane County for GIS data maintenance and map generation
- CoE PWE specifies process for most Eugene GIS data
- I haven't read the CPA, would be helpful if we are taking a survey on it
- we use agreements
- We have very clear lines here
We asked respondents if their agency had established and documented any GIS protocols...

**Analysis:**
There are some GIS protocols that have been developed and shared regionally.

Additionally, each organization has their own policies. There is an opportunity for more coordination and collaboration surrounding policies and procedures.

“**Yes” said:** (from long survey)
- Electronic data acceptance standards
- Data maintenance procedures, AGOL best practices
- Over the years, LCOG has used a variety of means to share best practices with staff at member agencies.
- Documents have been developed to specify data distribution procedures and restrictions and data maintenance processes.
- GIS Strategic Plan
- Update schedules for certain layers are set

“**Yes” said:** (from short survey)
- IGA with Lane County, recently went to ePermitting with APO data
- PW has made some
- Agreements, protocols, disclaimers, etc.
- Each org has their own policies
- taxlot update agreements
We asked respondents if they have had any experience with the RLID.org training modules...

**Analysis:**
Users feel that RLID.org training is helpful, but some users have not attended a training for a number of years.

Additional training should be marketed to all RLID.org users, including videos and how-to clips for public users.

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“We said: (from long survey)

- Once when I was shown some new things in RLID ~7+ years ago.
- The new RLID maps
- Map Basic, One on one training
- I have been to a number of RLID trainings in my years as a title officer

“Yes" said: (from short survey)

- Long ago when it was first launched
- Initial introduction and it was well needed.
- Pictometry
- Navigation additions changes in last upgrade. Good
- Review of RLID upgrades. Training was pretty thorough.
- Technical software training - good.
- See new features - and excellent
- In previous role as Information Services Program Manager
- Long ago when it was first launched
We asked if they have ever interacted with LCOG for GIS tech support...

**Analysis:**
Most users reported excellent LCOG GIS technical support while others felt there was room for improvement.

Wide range of support offered by LCOG including, scripting, RLID assistance, data creation and updates, and more.

<table>
<thead>
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<tbody>
<tr>
<td>- Issues with logging in, understanding the data sets, helping with a query</td>
</tr>
<tr>
<td>- It hasn’t been good in the past, and should be left to the individual agencies.</td>
</tr>
<tr>
<td>- Asking LCOG for information about data in a GIS layers, asking them for the best source to get GIS data</td>
</tr>
<tr>
<td>- Years ago I would get info for veg enforcement vacant lot mass mailing</td>
</tr>
<tr>
<td>- LCOG GIS staff support each other</td>
</tr>
<tr>
<td>- ArcGIS SDE, Python programming, Geoportal metadata development and maintenance</td>
</tr>
<tr>
<td>- It is not great. Slow response.</td>
</tr>
<tr>
<td>- LCOG staff is helpful in answering questions about data, servers, versioning</td>
</tr>
<tr>
<td>- Server help, Lidar analysis</td>
</tr>
<tr>
<td>- Support regarding the Buildable Lands Inventory Model development</td>
</tr>
</tbody>
</table>
| - LCOG technical support is consistently excellent.

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<td>- Training/guidance for setting up our ArcGIS Enterprise services</td>
</tr>
<tr>
<td>- User support, positive experience</td>
</tr>
<tr>
<td>- Got help accessing data for S&amp;DS Needs Assessment</td>
</tr>
<tr>
<td>- When a certain application is not working</td>
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<tr>
<td>- GeoDART - Great</td>
</tr>
<tr>
<td>- To correct an error found within RLID. Quickly and professionally handled</td>
</tr>
<tr>
<td>- LCOG has helped alot with our recent Data Warehouse project</td>
</tr>
<tr>
<td>- Mapping our District for Board subdivisions</td>
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We asked if respondents knew of any instances unintentionally overlapping data upkeep responsibilities...

**Analysis:**
There is a need for more collaboration and coordination from a data maintenance perspective.

Instances of multiple organizations maintaining or storing data that should be centralized.

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<table>
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<td>• Development and land use data, easement data.</td>
</tr>
<tr>
<td>• Need clear lines of who does what and decentralized (x2)</td>
</tr>
<tr>
<td>• Tax lots -- we only need one definitive source and custodian</td>
</tr>
<tr>
<td>• I’m sure there are duplications between individual division level staff, departmental staff, city staff, and LCOG staff, but I don’t know of a specific thing.</td>
</tr>
<tr>
<td>• Yes, but minor instances, far surpassed by benefits.</td>
</tr>
<tr>
<td>• as local agencies enhance their own GIS resources, data is sometimes duplicated and is often inaccurate (specifically related to taxing district boundary changes</td>
</tr>
<tr>
<td>• Both cities and the county have, over the years, have duplicated GIS services that were already available thru LCOG. To say that there is waste and overlap would be a gross understatement.</td>
</tr>
<tr>
<td>• Again, maintaining multiple large imagery sets is wasting storage and backup capacity. Other areas include individual software and data procurement where we could achieve better pricing through shared agreements.</td>
</tr>
<tr>
<td>• Address, parcels, and many other datasets are copied nightly from RLID to lane county servers for use in web apps and for general use by Lane County GIS and other users.</td>
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We asked if respondents knew of any instances of unintentionally separated and duplicated data storage...

**Analysis:**
There is a need for more collaboration and coordination from a data maintenance perspective.

Instances of multiple organizations maintaining or storing data that should be centralized.

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<td>• parcel file acreage and tax lot acreage; wetlands; possibly zoning at LCOG vs zoning at city; land use</td>
</tr>
<tr>
<td>• I believe Eugene Parks has this situation with some of their data, and possibly Rivers to Ridges ownership data.</td>
</tr>
<tr>
<td>• Development and land use data, easement data.</td>
</tr>
<tr>
<td>• Copies of tax lot data, copies of zoning layer</td>
</tr>
<tr>
<td>• Park planners and habitat restoration</td>
</tr>
<tr>
<td>• Numerous write-offs between agencies. Uncodified plans for aggregation pipelines.</td>
</tr>
<tr>
<td>• Parcels created using COGO traverse by City staff and then subsequently modified by County Assessor staff</td>
</tr>
<tr>
<td>• Parcels, easements, streets, zoning, plan designations, city limits.</td>
</tr>
<tr>
<td>• Some cities maintain their own city limits and/or zoning and do not always communicate changes to LCOG so data can occasionally get out of sync.</td>
</tr>
<tr>
<td>• Not sure, as I don’t know the update processes that go into maintaining LCOG’s data, roads, tax lots, zoning, city limits. I think that LCOG has old Springfield data on their server (archived, I suppose) that nobody uses, but might be afraid to get rid of it. Bike Facilities. I’m not sure how that is being actively maintained.</td>
</tr>
<tr>
<td>• More of an internal organization issue than a CPA issue</td>
</tr>
<tr>
<td>• Imagery is a very good example of where we maintain multiple, duplicate copies throughout the region.</td>
</tr>
<tr>
<td>• Address, parcels, and many other datasets are copied nightly from RLID to lane county servers for use in web apps and for general use by Lane County GIS and other users.</td>
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We asked respondents to rate the effectiveness of current regional GIS governance...

**Analysis:**
Although effective, there is room for improvement regarding the current regional GIS governance. The current governance is not effective and needs to be re-defined and implemented.

We asked respondents to rate effectiveness of current regional GIS services...

**Analysis:**
Many users feel they are receiving effective regional GIS services. As noted previously, there is a desire to better collaborate regarding data ownership, storage, and maintenance, but overall users are pleased with the services provided.
• Pervasive budget and funding challenges across all levels of Oregon governmental agencies – negative impact on maintenance and growth of service delivery
• Low awareness as to what LCOG can offer
• No internal LCOG staff are available or tasked with marketing LCOG services or subscription to RLID to generate additional revenue
• Two staff at LCOG focus on grant writing, but they are not related to GIS at this time
• To the extent possible, LCOG is focused on building and maintaining relationships
• Prospect for increased service delivery at LCOG would benefit from some rebranding and the development and articulation of a value proposition
• The CPA needs to have a well-defined mission and vision
• The service delivery needs to be updated to fully align with Partner Agency needs
• There is a need for greater accountability and improved communication
• Access to Image Server, GeoAnalytics Server, and GeoEvent Server are desired
• All users access RLID and rely on it daily
• Regional Annexation and Boundary (RABITS) business process once supported by LCOG has been discontinued
• Regional imagery acquisition efforts are not being coordinated
• Unnecessary data duplication across five agencies could be reduced with better data consolidation
• Desire to leverage basemap services, but they need to support disconnected environments

• Small increase in cost for EWEB is understandable, but there is not a desire for a large change in the funding model

• There needs to be funds set aside to support the rebuilding of RLID

• Currently pull data from RLID weekly – need to continue to have this functionality

• Rely heavily on services provided as part of the CPA and don’t want to lose current tools and access
• Have access to skilled staff and don’t want to lose that accessibility
• There needs to be an evaluation of each Partner’s annual share
• Regional sub-committees and user groups no longer exist – this is something that is needed
• Esri software evaluation prior to Partner’s implementing – would allow them to know whether it is “safe” to deploy or if they should wait – there is a desire for this to resume
• Regional project coordination is not as evident as it once was – example: transition from NAD 27 to NAD 83
• Heavy usage of RLID and a desire to maintain this access
• There is a desire to have an annual think tank – SWOT – amongst all of the Partner’s
• Don’t know where to get reliable metadata about GIS data layers
• Desire to feed data back to RLID during an EOC event so it can be shared regionally
City of Springfield

- Would like to have access to more historical data (deeds, surveys, plat maps)
- Need access to reliable metadata; need a process for users to be able to easily update this information
- Desire for a more structured approach to training and education
- Need better communication to ensure all Partners are aware of what is being worked on and accomplished
- Desire to have a data model established that will support data sharing with the State
- Use RLID frequently to compare market data; data from RLID is fed into Accela
- Believe the City’s share is a fair value for what is received
- The current structure has been outgrown and needs to be modernized to better support all users
CPA Overview

Purpose

The purpose of the Lane County Regional Cooperative Project Agreement (CPA) is to provide central shared GIS resources that reduce costly and wasteful duplication while maximizing collaboration and opportunities to share data, systems, tools, methods and technical know-how across Lane County. A desirable result is that the CPA partners are better able to focus their limited GIS resources on respective agency priorities while maintaining a common operating platform of inter-connected assets.
CPA Overview

Background

- Original CPA was established in September 2000
- Regional Executive Group (REG) – policy board comprised of the executives from the five partner agencies
- Coordination and implementation of REG policies was performed by the Regional Information Officers (RIO) – comprised of the information system managers of the five partner agencies
- Regional Technology Partnership (RTP) – comprised of four service providers
  - Regional Information Systems (RIS) – run by Lane County
  - Area Information Record System (AIRS) – primarily administered by Lane County
  - Regional Telephone Consortium – run by LCOG
  - Regional GIS – run by LCOG
- Common Mapping Steering Committee (CMSC, later called the Regional GIS Steering Committee) – formed under the CPA to approve the annual regional GIS work plan, develop policies regarding shared GIS, and oversee the GIS Coordinators Committee
Background

- Regional GIS is the only service area still in existence – overseen by the GIS Coordinating Committee
- The only remaining executive group is the RIO – meets regularly
- The CPA has not been revisited in quite some time
- It has not kept pace with the changing needs, expectations, and local capabilities of the participating agencies nor other consumers of RLID data and accompanying services

Summary of Goals

- Develop a strategy and structure for the CPA that closely aligns with stakeholder needs
- Re-establish the governance structure
- Thorough evaluation of available products and services
- Develop a mechanism for evaluating technology needs and decisions
- Design and adopt a manageable and scalable funding model
CPA FY19 Work Activities Overview ($898,940)

- **Shared Regional Systems** – sustain RLID and shared regional GIS data and systems assets ($664,340)
  - Hardware/Software Fund ($80,000)
  - RLID Data Warehouse ($145,000)
  - RLID GIS Data and Systems ($109,000)
  - RLID Website ($258,340)
  - RLID User Support ($72,000)
- **Shared Data Maintenance** – assemble and maintain critical shared regional GIS data files ($101,600)
  - Master Site Address File ($53,600)
  - Shared Regional Boundaries ($24,000)
  - Regional Metadata Content Maintenance ($24,000)
- **Regional Coordination** – coordinate RLID program and regional GIS opportunities for partner agencies ($79,000)
  - RLID Program Management ($42,000)
  - Regional GIS Coordination ($37,000)
- **Regional Projects** ($54,000)
  - CPA Partnership Redesign ($30,000)
  - Orthoimagery & Lidar Acquisition Projects ($24,000)
Understanding SWOT
Understanding SWOT

**Strengths**
- What advantages do you have? What do you do better?
- What unique resources do you have access to?

**Weaknesses**
- What good opportunities can you spot? What are some interesting trends?
- Are there any changes in population profiles, lifestyles, etc.?

**Opportunities**
- What can you improve? What can you avoid?
- What factors prevent sales? Which employees need improvement?

**Threats**
- What obstacles do you face?
- What are your competitors doing? Is GIS technology threatening your position?
Understanding SWOT

**STRENGTHS**

- What is working well?
- What do we do better than anyone else?
- What unique successes have we had?
- What do people in your organization see as GIS strengths?
- Examples
  - High level executive commitment to using technology to solve problems
  - Basemap files already created
  - Widely used online mapping and data sharing
  - Basic understanding and experience of GIS within multiple agencies, departments, and divisions
  - Good network infrastructure
  - Reliable, usable existing data
  - Technology-friendly executive management
  - Progressive IT department
WEAKNESSES

• What could you improve?
• What should you avoid?
• What are people in your department/agency likely to see as weaknesses?
• Examples
  • Missing potential of GIS to reduce costs and improve services because not aligned with IT and business strategy
  • Limited advanced GIS technical skills among staff
  • Existing software outdated
  • No clear understanding of the potential benefits of GIS
  • Poor IT infrastructure
  • Little usable data
  • History of unsuccessful technology decisions
  • High employee and/or management turnover
Understanding SWOT

**OPPORTUNITIES**

- What good opportunities can you spot?
- What interesting trends are you aware of?
- Examples
  - Create portfolio of GIS projects to improve services and reduce costs
  - Facilitate collaboration and knowledge sharing among agencies/Partners
  - Good pilot project candidate
  - Data-sharing agreement
  - Organization-wide technology upgrade
  - “Photo ops”
  - Services to the Public Via the Internet
  - Expanding Partner and subscription base
THREATS

- What obstacles do you face?
- Are quality standards or specifications for your job, products or services changing?
- Is changing GIS technology threatening your position?
- Could any of your weaknesses seriously threaten your ability to get your job done?
- Examples
  - Competition for funding from other new technology initiatives
  - Lack of buy in for GIS from selected executives
  - Budget shortfalls
  - Hardware crises
  - Management/staff turnover
THANK YOU

LANE COUNCIL OF GOVERNMENTS