

ORMAP Grant Application

| Section I. County and Grant Information | | | | | | | | | | | | | | |
|---|---|---|------|---------|----------|--|---------|-------------|-----------------------------|---------|-------------|-----------|---------|-------------|
| A. County: Lane | B. Funding Cycle: Spring 2009 | | | | | | | | | | | | | |
| C. Project will help meet ORMAP Goal(s): 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> | D. Fund Request: \$140,000.00 | | | | | | | | | | | | | |
| Section II. Summary of Project | | DOR Assessment | | | | | | | | | | | | |
| A. Brief Overview of the Request. | | <input type="checkbox"/> Pass <input type="checkbox"/> Fail | | | | | | | | | | | | |
| <p>This request seeks to continue the Lane County Assessor map conversion effort with the same intensity and strategy that has been successful since our Fall 05 Request (Contract 1534). Funds received will pay for one full time employee (FTE) at Public Works and one FTE at A&T. At Public Works a GIS Tech will create annotation and reference features for 300 maps. At A&T, staff will create features for another 250 maps and a Cadastral Cartographer will finish and approve all 550 deliverable maps. This will be the only map conversion grant request from Lane County until Spring 2010.</p> <p>This project follows our ORMAP business plan, and works in a regional GIS context. In this project we will be moving into a more populated portion of the county, with a higher density of maps with more taxlots on them. Our work on previous and current ORMAP projects has been on maps with a cumulative average of 22 taxlots per map. The area addressed by this grant will be in an area with a cumulative average of 82 taxlots per map.</p> <p>Our proven estimate for this work for the last three years is:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Task</th> <th style="text-align: right; padding: 5px;">Per map</th> <th style="text-align: right; padding: 5px;">550 maps</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">1. Creation of Annotation, Reference lines, Cartographic line features</td> <td style="text-align: right; padding: 5px;">7 hours</td> <td style="text-align: right; padding: 5px;">3,850 hours</td> </tr> <tr> <td style="padding: 5px;">2. Map finishing and review</td> <td style="text-align: right; padding: 5px;">2 hours</td> <td style="text-align: right; padding: 5px;">1,100 hours</td> </tr> <tr> <td style="padding: 5px;">... Total</td> <td style="text-align: right; padding: 5px;">9 hours</td> <td style="text-align: right; padding: 5px;">4,950 hours</td> </tr> </tbody> </table> <p>The total 4,950 hours equals 2.4 FTE. This request funds 2.0 FTE. In addition to the 2.4 FTE required to make the ORMAP 550 map deliverable, Lane County contributes an additional 1 FTE to help approach our business plan map construction goal of 800 maps per year. This one FTE is considered outside of the project since it is creating ORMAP deliverables beyond the scope of this grant.</p> | | | Task | Per map | 550 maps | 1. Creation of Annotation, Reference lines, Cartographic line features | 7 hours | 3,850 hours | 2. Map finishing and review | 2 hours | 1,100 hours | ... Total | 9 hours | 4,950 hours |
| Task | Per map | 550 maps | | | | | | | | | | | | |
| 1. Creation of Annotation, Reference lines, Cartographic line features | 7 hours | 3,850 hours | | | | | | | | | | | | |
| 2. Map finishing and review | 2 hours | 1,100 hours | | | | | | | | | | | | |
| ... Total | 9 hours | 4,950 hours | | | | | | | | | | | | |
| Scope and Deliverables | | | | | | | | | | | | | | |
| <i>Check</i> | <i>Deliverables</i> | <i>Brief description of the deliverables</i> | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | Taxlot Conversion | 30,000 | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | Tax Map Conversion | 550 | | | | | | | | | | | | |
| <input type="checkbox"/> | Control Points | | | | | | | | | | | | | |
| <input type="checkbox"/> | Scanning | | | | | | | | | | | | | |
| <input type="checkbox"/> | Reports | | | | | | | | | | | | | |
| <input type="checkbox"/> | Development | | | | | | | | | | | | | |
| <input type="checkbox"/> | Other Assistance | | | | | | | | | | | | | |
| <input type="checkbox"/> | Other Deliverable | | | | | | | | | | | | | |
| <input type="checkbox"/> | Hardware/Software | | | | | | | | | | | | | |
| B. Timeline (funding not to exceed one year from award date) | | | | | | | | | | | | | | |
| July 1, 2009 to June 30, 2010 | | | | | | | | | | | | | | |
| C. Costs of Total Project (add lines as necessary) | | | | | | | | | | | | | | |

| Deliverable | Number of Items | Cost per Item | Total Cost |
|--------------------------|-----------------|----------------|----------------|
| Published Tax maps | 550 | 254.54 | \$140,000 |
| Published Mapped Taxlots | 30,000 | Included above | Included above |
| | | | |
| | | | |

D. Partnerships and Contributions (add lines as necessary):

| Partner | Contribution | |
|--|---|-----------|
| <u>Lane County Assessment & Taxation</u> | Project Oversight | \$ 14,000 |
| | .4 FTE Grant Contribution | \$ 28,000 |
| | 1.0 FTE Mapping Project Contribution | \$70,000 |
| <u>Lane County Public Works</u> Parcel Mapping Team Transportation Planning GIS Surveyor | Tax lot maintenance | \$ 25,000 |
| | Interagency project coord. & management | \$ 19,000 |
| | Plat registration | \$ 20,000 |
| | | |
| <u>Regional Partners</u> Eugene Engineering Springfield Engineering Lane Council of Governments | Plat cogo, registration, entry | \$ 16,000 |
| | Plat cogo, registration, entry | \$ 16,000 |
| | Tech Assist, DB Admin, Metadata | \$ 25,000 |
| | | |
| | Total | \$233,000 |

| | |
|---|---|
| A. Assessor's Signature & Date: | <i>See File Copy</i> |
| F. Fiscal Coordinator – Name & Contact Number: | Anette Spickard (541) 682-6798 |
| G. Project Coordinator – Name & Title: | David Cutting, Lead Cartographer |
| E-mail address: | David.Cutting@co.lane.or.us |
| Phone Number: | (541) 682-3854 |
| Mailing Address: | Lane County Assessment and Taxation 125 E 8 th Avenue Eugene OR 97401-2968 |

Section III. Detail Project Information –Answer all questions

A. Overview

- Describe what the project is trying to accomplish.**
This project ensures continued progress on the conversion of tax map production to ORMAP technical specifications
- Does this project relate to any previous ORMAP-funded projects? If yes, please explain.**

| | | |
|------|-------------|--|
| 1241 | \$59,245 | S/04- LC A&T funding Cartographer position to convert mapping to GIS |
| 1242 | \$40,000 | S/04- LCPW Air Photos, Project Coordination |
| 1284 | \$ 9,900 | 11/04- LC A&T for ESRI Arc/Info License |
| 1365 | \$17,113.10 | S/05- LC A&T funding Cartographer position to convert mapping to GIS |
| 1534 | \$70,000 | F/05- LCPW A&T map annotation, map index polygons, for Goal 4 maps |
| 1556 | \$67,000 | S/06- LC A&T funding Cartographer position to convert mapping to GIS |
| 1563 | \$ 5,000 | S/06- ORMAP ESRI Programmer's Grant |
| 1764 | \$70,000 | F/06- LCPW A&T map features for ORMAP Technical Standard maps |
| 1806 | \$70,000 | S/07- LC A&T funding Cartographer position to convert mapping to GIS |

| | | |
|------|----------|---|
| 1816 | \$25,000 | S/07- ORMAP ESRI Programmer's Grant |
| 1856 | \$70,000 | F/07- LCPW A&T map features for ORMAP Technical Standard maps |
| 1929 | \$36,025 | S/08 - LC A&T funding Cartographer position to convert mapping to GIS |
| 2204 | \$56,780 | F/08 – LC A&T & LCPW map features and map conversion |
| 2217 | \$ 2,035 | F/08 – LC A&T ArcMap tools development |

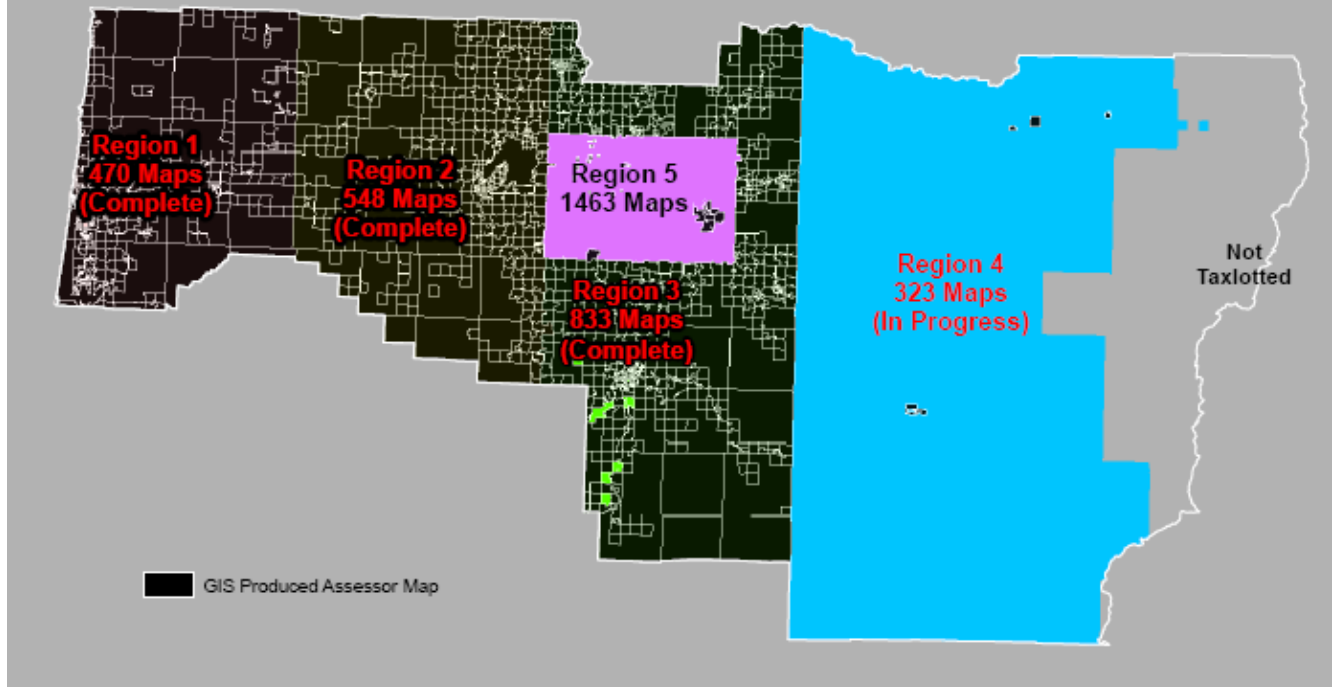
3. What is the status/outcome of the previous ORMAP-funded projects? (Please include contract numbers and a status map.)

Contracts prior to #2204 Complete and Closed
 #2204 Work has begun and will be completed by 6/30/2009.
 #2217 Contract with LCOG programmer is in process. To be completed 6/30/2009.

Below is table and map and of current project status.

| Map Report | | 1/8/2009 | | |
|----------------------|---------------------|---------------------|-----------------|------------------------------|
| Map Type | Meet Specs | Not Meet Map | TotalMap | PercentCompleteMap |
| Detail | 152 | 211 | 363 | 42% |
| Supplemental | 21 | 76 | 97 | 22% |
| Township | 74 | 61 | 135 | 55% |
| Section | 1029 | 360 | 1389 | 74% |
| Quarter Section | 169 | 101 | 270 | 63% |
| Sixteenth | 452 | 960 | 1412 | 32% |
| Total | 1897 | 1769 | 3666 | 52% |
| | | | | |
| Taxlot Report | | 1/8/2009 | | |
| Map Type | Meet Spec TL | Not Meet TL | TotalTL | PercentCompleteTaxlot |
| Detail | 230 | 3 | 233 | 99% |
| Supplemental | 131 | 224 | 355 | 37% |
| Township | 2431 | 1640 | 4071 | 60% |
| Section | 24833 | 10193 | 35026 | 71% |
| Quarter Section | 6552 | 6448 | 13000 | 50% |
| Sixteenth | 24801 | 82239 | 107040 | 23% |
| Total | 58978 | 100747 | 159725 | 37% |

Lane County, Oregon
GIS Produced Assessor Map (1739/3600)
Project Status: 1/7/2009



B. Project Design – Current Proposal

1. Identify the ORMAP and the regional/county goal(s) that this project addresses.

Continued funding for the A&T Cadastral/GIS Technician, and the Lane County Public Works GIS Technician I, will ensure that Lane County A&T can create tax lot maps consistent with the ORMAP Data Exchange Standards, with the Department of Revenue Digital Cadastral Standards, and in conformity with ORMAP technical specifications. This work is consistent with the regional and departmental (A&T) goal of converting the A&T Map production and maintenance to the new mapping procedures. These procedures call for the mapping to be done in ArcGIS, using the accurate Lane County control data and tax lot base. All new mapping is being done in an enterprise ArcSDE geodatabase using the ESRI ORMAP parcel data model and map production and editing tools.

2. Describe in detail your technical approach to the project (mapping methodology).

The following is a technical summary of the process we are using to convert an A&T map from CAD to the GIS. The converted map conforms to the ESRI ORMAP Parcel Data Model and the ORMAP technical specifications:

A: Creation of Annotation, Reference lines, Cartographic line features by GIS Technician:

1. Select map to convert based on maintenance priority need.
2. Reserve the map by entering date and name in coordination database.
3. Open standard “Map Construction and Editing” map document using ESRI ArcMap.
4. Initiate versioned SDE gis data editing session.
5. Add CAD file as background layer, Re-project or adjust as needed.
6. Add optional vector source data (Original parcel mapping line work and annotation).
7. Select, copy, paste relevant vector cartographic lines to correct target layers and update attribute values.
8. Cogo reference line features to correct target layers and update attribute values.
9. Convert available vector annotation, paste into correct target annotation class, update attributes.

10. Join taxlot polygons to certified taxlot acre table. Calculate taxlotacre values to be used as Feature linked TaxlotAcreageAnno.
11. Digitize any other necessary annotation from image sources in CAD drawing.
12. Create TaxCodeAnno elements where needed.
13. Reposition annotation as needed.
14. Reconcile and post the edit SDE version to default SDE version.
15. Enter GISConvert date and map location data in coordination database.
16. Print GIS map. Attach copy of old CAD map. Route to review process.

B: Map finishing and review by Qualified Cadastral Cartographer:

1. Reconcile new map with map maintenance records and old CAD map.
2. Perform any deferred miscellaneous corrections on record.
3. Update CancelledNumbers and RevisionBox tables.
4. Perform standard checklist visual inspection.
5. Make any edits needed.
6. Enter map status and comments in coordination database.
7. Print map to paper and PDF file.

3. Describe the project deliverables. (DOR will bill against these deliverables)

This grant proposes creating the additional data layers for an estimated 30,000 tax lots that are needed to publish new maps in the GIS environment. The project deliverables will be 550 tax maps that meet ORMAP technical specifications completed within the term of the project. These maps will be produced with the ESRI ORMAP Map Production tool, published as PDF files and conveyed to DOR for use on the ORMAP web site.

4. Will this proposal fund staff that is doing work other than ORMAP projects? If so, describe how the time and cost will be tracked for the different projects.

This proposal will fund staff doing work other than that funded by ORMAP. The grant will fund the equivalents of one full time employee (FTE) from A&T and one FTE from Public Works for a period of one year. Feature creation and map finishing/review will be rotated among the GIS Technician and Cadastral Cartographer staff. Individual Cadastral Cartographers will indicate the “printed” status of maps in the project tracking database. This database will be reconciled periodically with GIS data records. Taxlot deliverables will be the sum of taxlots for those maps converted based on a 7/03/08 inventory. Time spent is recorded in the appropriate work items for individual timesheets.

5. Who will be doing the work (county staff, contractor, DOR staff, etc.)? Please define their role(s).

Lane County Assessment and Taxation cartographers and Lane County Public Works GIS technicians, will be doing the work.

6. Define the role of the County Cartographer in the project.

The County Cartographer prioritizes maps to be converted, sets design and procedural standards, documents procedure, coordinates improvements to the editing and production tools, oversees quality assurance, maintains conversion progress data, and resolves cartographic issues.

7. Describe the maintenance plan for this product.

We use a standard maintenance process in place at Lane County Assessment and Taxation for cadastral data.

- Maintenance requests (recorded documents and annexation requests) are logged into the assessor’s database and prioritized for completion in the mapping system.
- Plat data entry cogo work and spatial registration is done by local jurisdiction surveyors per the regional Parcel Maintenance Agreement.
- Taxlot changes are processed in GIS by A&T cartography for portions of the county in GIS map production.
- Taxlot Maintenance is performed in GIS by Public Works in portions of the county not in GIS map production based on fortnightly reports from A&T.

- Annexations are solely processed in GIS by A&T cartography.

8. Will this comply with Oregon Cadastral Data Exchange Standard?

Our product is compliant with *Oregon Cadastral Data Exchange Standard*

9. Describe where this project fits within the County’s overall mapping/GIS work plan.

This project is consistent with the GIS partner's regional tax map creation strategy developed by the Lane Regional GIS Tax Lot Subcommittee and Parcel Mapping business plan. This strategy calls for the migration to the ArcGIS environment to create and maintain tax lot data and assessor maps. The plan also calls for using ArcSDE and the ESRI ORMAP Parcel Data Model to build and maintain these maps and data.

10. Provide a project timeline with milestones or phase-completion dates

-----Note Bold entries have been completed. -----

- 12/01/2006** Begin A&T maintenance of Region 2
- 01/01/2007** Complete GIS mapping for Lane County Region 1
- 04/01/2007** Document Maintenance Procedure steps
- 05/01/2007** Craft agreement for Eugene, Springfield Plat entry into Cadastral map maintenance
- 09/30/2007** Begin A&T GIS maintenance for Lane County Region 3
- 10/31/2007** Complete GIS conversion for Lane County Region 2
- 12/01/2008** Begin A&T GIS maintenance for Lane County Region 4
- 01/01/2009** 50% of County maps converted (ORMAP Goal 3)
- 06/30/2009 Begin A&T GIS maintenance for Lane County Region 5 (Metro)

11. Does this project promote partnerships, if so, with whom?

This project promotes two levels of partnerships within our region. First, it promotes and builds on the strong partnership between Lane County A&T and Lane County Public Works. These two departments are at the forefront of maintaining the new ORMAP technical standard tax lot data and are doing this in a coordinated, multi-departmental environment. Secondly, the plat data warehouse/plat processing procedures have been implemented by the Regional GIS partners and are promoting strong partnerships between Lane County, City of Eugene, City of Springfield and Lane Council of Governments. These partnerships are the key to eliminating the redundant digital plat data creation that has occurred among the various agencies.

12. Describe any innovations that will be utilized by this project.

- This project builds on and leverages the ESRI ORMAP Parcel Model, the ESRI ORMAP Parcel Edit tools and the ESRI ORMAP Map Production tool.
- Implementation of Lane Regional Plat Data Warehouse: a regionally shared depository for digital plat data in a CAD format.
- GIS to CAD converter for Plat Data Warehouse data.
- Plat Tracking database. This is an Access-based plat tracking application that allows each of the regional GIS partners to track the progress of a plat, record their own work on the plat, and notify other agencies when the plat has been recorded, registered, updated on the A&T map, and updated in the GIS plat and tax lot features.
- CAD to SDE GIS annotation conversion tools written by Lane A&T Cartography staff with LCOG help.

13. Detail Costs (who is paying for what).

Lane County Assessment & Taxation

| | |
|--------------------------------------|-----------|
| Project Oversight | \$ 14,000 |
| .4 FTE Grant Contribution | \$ 28,000 |
| 1.0 FTE Project Mapping Contribution | \$ 70,000 |

Lane County Public Works

| | | |
|-------------------------|---------------------------------------|-----------|
| Parcel Mapping Team | Tax lot maintenance | \$ 25,000 |
| Transportation Planning | GIS Interagency project coord. & mngt | \$ 19,000 |

| | | |
|-----------------------------|---------------------------------|-----------|
| Surveyor | Plat registration | \$ 20,000 |
| Regional Partners | | |
| Eugene Engineering | Plat cogo registration, entry | \$ 16,000 |
| City of Springfield | Plat cogo, registration, entry | \$ 16,000 |
| Lane Council of Governments | Tech Assist, DB Admin, Metadata | \$ 25,000 |
| ORMAP | | |
| Spring 2009 Project Request | Map Conversion | \$140,000 |
| Total | | \$373,000 |

C. Quality Control

1. Who will be responsible for quality control?

Lane County Assessment and Taxation Cadastral Cartographers will be responsible for quality control.

2. Will county cartography staff review the deliverables?

County Cartography staff will review the deliverables as part of the quality control process. In addition, county cartographer staff will administer the standardized tests for ORMAP technical standards assurance, when these tests are available.

3. Will there be a review by Department of Revenue cartography staff?

If requested.

4. Describe quality control procedures.

Qualified Lane County A&T Cadastral Cartographers finish maps begun by Lane County Public Works staff. The finishing procedure requires completion of a checklist of quality control tasks. Maps begun by a qualified A&T Cadastral Cartographer are reviewed by another A&T Cadastral Cartographer for quality control using the same checklist mentioned above on request. When the standardized ORMAP technical standards tests are available, these tests will be run on all completed maps.

D. Data Availability

Identify this product’s restrictions on data sharing or licensing issues.

All data produced under the ORMAP program is available to the public in accordance with the data access standards developed by Lane County Information Services and adopted by the Lane County Commissioners. A copy of this document is available upon request.

E. Background Information

Any other information that you feel may help support the project. Please attach an updated copy of your county’s ORMAP business plan if it has not been updated on the ORMAP website.

G. Other Issues - Please identify.

Lane County has done field survey work and/or survey record research along the entire Lane County Boundary. The results were submitted to neighboring county surveyors in 2004. Initially the neighboring surveyors agreed on the Lane County established boundary. Because of continued ORMAP funded boundary work, Linn and Lincoln counties have reported that further research is required. Lane believes it would be beneficial to do a follow-up review with Benton, Douglas, Deschutes, and Klamath counties as well.

Submit completed forms to:

| | |
|-------------|----------------------------|
| Mail | Contact Information |
|-------------|----------------------------|

ORMAP Project Coordinator
Oregon Department of Revenue
Property Tax Division - CDOT
955 Center St. NE
Salem OR 97301-2555

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Fax: 503-945-8737
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