

# ORMAP Grant Application

Section I. County and Grant Information			
A. County: Clackamas		B. Funding Cycle: Spring 2009	
C. Project will help meet ORMAP Goal(s): 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 X 5 <input type="checkbox"/> 6 <input type="checkbox"/>		D. Fund Request: \$35,000	
Section II. Summary of Project			DOR Assessment
A. Brief Overview of the Request.			<input type="checkbox"/> Pass <input type="checkbox"/> Fail
This project is a continuation of Clackamas County's ORMAP Business Plan. The funds requested for this period are to be used to digitally capture, rectify, and prepare for map production approximately 3,000 rural tax lots as defined under ORMAP. Note that Clackamas County voluntarily took a significant reduction in the Spring 2008 request.			
Scope and Deliverables			
Check	Deliverables	Brief description of the deliverables	
X	Taxlot Conversion	Conversion of paper plats and surveys using COGO or digitizing techniques for rural tax lots to a GIS layer.	
<input type="checkbox"/>	Tax Map Conversion		
<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)			
Will be completed by June 30, 2010			
C. Costs of Total Project (add lines as necessary)			
Deliverable	Number of Items	Cost per Item	Total Cost
Tax Lot Conversion (COGO/Rectify/Annotate/QC/ complete for map production)	3,600	\$19.40	\$70,000* (see note below)
County contribution (Detailed below)			\$55,000
Total for project			\$125,000
D. Partnerships and Contributions (add lines as necessary):			
Partner	Contribution		
Clackamas County Surveyor	\$40,000 – Control points		
Clackamas County Assessor's Office	\$15,000 - New plat maintenance, plat and deed research, quality control, cartographic QC.		
*Clackamas County GIS	\$35,000 – Matching funds to the ORMAP contribution for tax lot mapping. \$35,000 request plus \$35,000 matching for \$70,000 total		

<b>A. Assessor's Signature &amp; Date:</b>	
<b>F. Fiscal Coordinator – Name &amp; Contact Number:</b>	Eric Bohard 503-723-4814
<b>G. Project Coordinator – Name &amp; Title:</b>	Eric Bohard Division Manager
<b>E-mail address:</b>	<a href="mailto:ericboh@co.clackamas.or.us">ericboh@co.clackamas.or.us</a>
<b>Phone Number:</b>	503-723-4814
<b>Mailing Address:</b>	Technology Services 121 Library Court Oregon City, OR. 97070

**Section III. Detail Project Information –Answer all questions**

**A. Overview**

**1. Describe what the project is trying to accomplish.**  
 Clackamas County is continuing to undergo a tax lot enhancement project to increase the relative precision of our current tax lot GIS data layer. Though Clackamas County has a complete digital GIS tax lot layer, some of the previous GIS mapping efforts are simply “cartoon” representations of ownership tax lots and have a wide level of accuracy confidence. Hence, the focus of this project is to complete re-mapping tax lots in the County to meet the accuracy levels described in ORMAP technical specifications.

**2. Does this project relate to any previous ORMAP-funded projects? If yes, please explain.**  
 Yes, this project is a continuation of the on-going tax lot enhancement project explained above and in the business plan. All previously funded ORMAP projects relate to one another which expands on the outcome of the previous projects. In this particular project, we will continue rural tax lot re-mapping, having completed urban areas.

**3. What is the status/outcome of the previous ORMAP-funded projects? (Please include contract numbers and a status map.)**  
 Clackamas County has made good progress in re-mapping tax lots from a Goal 2 product to one that meets or exceeds ORMAP accuracy requirements. Areas that are complete all have annotation and rectified to ORMAP technical specifications. When we say a tax lot is complete, it is 100% complete to technical specifications. This project continues the rural and resource lands tax lot re-mapping.

Current progress and expenditure history. Prior to the Fall 2006 ORMAP contract, all efforts were to re-map urban tax lots. Since then, beginning with the Spring 2007 contract, the efforts have shifted to rural tax lots. A breakdown of our status of the funded projects is as follows: (please note that in 2003, Metro added approximately 5,000 tax lots to the Urban Growth Boundary. Also, in 2004, the new city of Damascus was created shifting approximately 5,300 tax lots from a rural designation to an urban designation).

Urban/UGB Tax Lots (less Damascus): (\$230,500 approved funding - all previous contracts since the inception of ORMAP not including the contracts below)

Total Urban Tax Lots:	100,045
Tax Lots Completed (COGO, rectified, and annotated)	100,045 (100%)

City of Damascus Tax Lots: (\$40,000 approved funding, contract 1524)

Total Tax Lots:	5282
Tax Lots Completed:	5282 (100%)

Rural Tax Lots: (\$49,000 approved funding, contracts 1801, 1849, 1922)

Total Rural Tax Lots:	45,000
-----------------------	--------

Tax Lots Completed: 9,630(21%)

Resource Tax Lots: (Nothing requested yet)

Total Resource Tax Lots: 300

Tax Lot Completed: 0

## **B. Project Design – Current Proposal**

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

This project is Clackamas County's effort to reach Goal 6 within the ORMAP timeframe. Regionally, we see GIS data layers being captured using more precise methods (i.e. GPS), hence the need to have a more precise base layer is very evident. Our region considers the primary base layer to be tax lot ownership and is the foundation for all other regional GIS layers. The goal of the region is not only to have a common GIS tax lot data layer in similar formats, but to as accurately as possible to depict the location of ownership. Clackamas County has participated in Metro's RLIS program since its inception and continues to be a regional player as a GIS data provider.

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

We will use COGO tools to re-map those areas that have suitable data. Trying to re-map every rural tax lot using COGO tools is not practical since actual surveys and plats are widely scattered in the rural area. In those areas where COGO tax lot capture is practical, high quality ground control will be acquired. The process and criteria used to COGO capture rural plats is modeled on the urban tax lot capture design we developed. These captured platted areas will act as "anchors" or a foundation as areas with known accuracy. Next, deeds, surveys, orthophotography, and existing tax lot maps will be used to "fill in" the areas in-between the anchors. As we build the rural tax lots between the anchors, ground control will be acquired more sparsely to insure the non-platted rural tax lots are within ORMAP accuracy standards. COGO methods will be used whenever practical.

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

This project will deliver 3,600 additional re-mapped tax lots using our technical approach and rectified to control meeting ORMAP rural tax lot standards.

### **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.**

No, all funds will be used exclusively for the ORMAP project. ORMAP funds will be used to cover costs of contractor(s) and County personnel working exclusively on this project. All Clackamas County personnel staff time working on ORMAP projects is recorded on daily time cards and stored in the official County time keeping records.

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

We have secured a contractor to assist us with re-mapping rural tax lots. L-3 Communications was selected from a competitive RFP process in December 2007. They will be building rural tax lots using a variety of approved methods. Clackamas County staff will QC all work before it is accepted.

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

The lead cartographer is responsible for quality checking the deliverable from the contractor and all work done by internal GIS staff. He also provides technical support with discrepancies in ownership. His staff also maintains the data once it is published.

### **7. Describe the maintenance plan for this product.**

Tax lot maintenance procedures are currently in place, primarily done by the A&T Cartographers. Maintenance inputting new plats, lot line adjustments, surveys, etc. is done the same as all other tax lot capture as defined above. All maintenance is performed daily and it is our goal that all new plats are entered in the tax lot layer within 10 working days.

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

All ORMAP data has been and will continue to be created in ESRI software is directly portable to all exchange files supported by ESRI GIS software. All data complies with the most recent ORMAP data exchange standard.

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

Long before ORMAP, Clackamas County saw the need to enhance the tax lot base layer in its GIS. Though the County has a complete tax lot layer in their GIS, the accuracy, especially when evaluated against better controlled GIS data, is unacceptable for most appraisal and assessment needs. This project is very important to the future success and usability of the County's GIS. It will offer a higher degree of confidence for users of the GIS data and will allow more County departments to use the data.

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

This project has been phased by geographic area starting with cities within the Metro Urban Growth Boundary, followed by unincorporated urban areas within the UGB. We then completed cities outside the Metro UGB to urban mapping standards. Finally, we are currently working on the unincorporated rural area. Our schedule is as follows for the remaining tax lot enhancement project.

Based on current resources, we estimate completion of Goal 6 in April 2015. Thus far, we have completely remapped or near completion 76% of the total.

- To date, 115,000 tax lots have been captured in our GIS, leaving approximately 35,700 tax lots left, all rural and resource level tax lots.
- Until the Spring 2012, rural tax lots will be captured at the rate of 3,600 per 12 month period. This figure is based on projected County matching funds to a realistic ORMAP contribution.
- Starting in Spring 2012, a significant increase in production to 6,800 tax lots per year is proposed which will finish all tax lot capture and map production by April 2015.

Milestones are defined as the completion of each of these tasks within each phase.

- Plats are gathered from source County offices
- Capture plats and surveys with the most appropriate method (COGO or digitizing)
- Plats and surveys are quality controlled
- Work with the County Surveyor to acquire ground control
- Tie plats and surveys to ground control
- Annotation
- Final quality control

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

The deliverables from this project are used by many agencies as a base to map infrastructure and other details. Typical agencies outside the County who have entered into partnership agreements include water districts, utilities providers, school districts, community planning organizations, and a variety of state and federal agencies.

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

It is our hope that the new ORMAP geodatabase design will be used with this project. All tools developed by ESRI and the ORMAP sub-committee will be implemented.

Tax maps will be converted using the ORMAP Parcel editing tool which is under development at this time. Clackamas County GIS staff has committed time to resolve coding issues.

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

Approximately 28% of this project is paid by ORMAP funding. The remaining will come from County resources. The County's Survey Office is providing ground control at county expense. The County Assessor's Office provides labor to input new plats for the maintenance portion of the over all ORMAP project plus QC.

Direct costs, those invoiced to us from our contractor(s) and direct staff time on the ORMAP project, will comprise the bulk of expenses for this project and will be evenly split between the County and ORMAP.

### C. Quality Control

**1. Who will be responsible for quality control?**

All Quality Control is the responsibility of Clackamas County's Departments of Assessment and Taxation and Technology Services, GIS Division. Both review all work before it is accepted.

**2. Will county cartography staff review the deliverables?**

Yes. The cartography staff in the Assessor's Office performs the final QC. They insure all components are present and correct for map production to DOR standards and Clackamas County standards.

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

That is arranged by A&T cartographers. DOR Cartography staff have come to the county to review our technique and process and are always welcome to see what we are doing with tax lot capture.

**4. Describe quality control procedures.**

The quality control process is very extensive. A quality control checklist has been developed for those entering the COGO information and for those checking it. All ground control is evaluated as to its level of survey accuracy for the plat rectification process. If customary ground control is not available, rectified orthophotos are used. Plats controlled in this manner will be revisited when better ground control is obtained. Plats are never rubber sheeted. The County Surveyor resolves any errors that occur when rectifying to ground control (i.e. gaps and overlaps). In summary, all quality control efforts will meet or exceed ORMAP Technical Specifications.

### D. Data Availability

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

All data produced under the ORMAP program is freely available through a Data Sharing Agreement to other government agencies. Clackamas County has entered into an IGA with the State for data sharing. All publication of this data, particularly via the Internet, must comply with all Clackamas County policies and disclaimers as adopted by County Administration or the Board of County Commissioners. All data is governed by a data licensing agreement.

### 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.

**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	Tel: 503-945-8493 Fax: 503-945-8737 <a href="mailto:or.map@state.or.us">or.map@state.or.us</a>

# ATTACHMENT 1 ORMAP PROJECT STATUS FEBRUARY 2009

