

Resources Work Group Funding Mechanism Recommendation

Purpose

This document provides the Oregon Geographic Information Council the recommendations of the Resources Work Group that will fund complete, statewide, ongoing Framework data and eliminate Framework data fees between public bodies. The information below will be used to assist OGIC in making a formal recommendation to the 2019 Legislature and in articulating the recommendation using the required legislative format and structure.

Need for Action

The development and maintenance of geospatial Framework data in a consistent manner statewide will enable the provision of consistent government services to all citizens. However, there is a significant shortfall between the funding that a comprehensive, statewide Framework data program needs for successful, effective operation and what public bodies are collectively able to provide now. OGIC and Department of Administrative Services (DAS) staff research reveals obstacles in Oregon public bodies' collective ability to create and maintain complete, statewide Framework data. These obstacles take several forms:

- missing data or “gaps”-- Oregon lacks the digitally comprehensive, geographically complete, and therefore fully functional GIS Framework required to meet public bodies' obligations for services provisioning;
- insufficient organizational capacity—public bodies lack capacity (data infrastructure, staff, technology) to maintain and share Framework data;
- fees public bodies charge each other -- public bodies have legislative and local ordinance-directed responsibilities that require geospatial Framework data. Some have funded the development and maintenance of that data, at least partially, with fees charged to other public bodies for sharing the data. This challenge complicates the development, standardization, and efficient use of data. Overcoming this obstacle requires both removing fees as barriers and ensuring that fee elimination is revenue-neutral to data producers and aggregators.

Recommendations Summary

There is an overall shortfall between the funding that a comprehensive, statewide Framework data program needs and what public bodies collectively are now able to provide. The full recommendation has multiple components that are described below. In summary, here are the items for OGIC consideration:

1. Tap Existing Fees
2. GEO Assessments (on state agencies)
 - a. GEO Policy Option Package
3. Debt Financing
4. Public/Private Partnership

Background

Recent Oregon law (ORS276A.500-515) authorizes the Oregon Geographic Information Council (OGIC) to serve as “...the statewide governing body for sharing and managing geospatial Framework data.” The law tasks OGIC with, among other responsibilities, submitting each biennium “...a plan and a budget for collecting, using, managing, sharing, and maintaining geospatial Framework data...” and recommending strategies for eliminating the fees that public bodies charge to other public bodies for geospatial Framework data under ORS 190.050 (fees for geographic data) or 192.324 (copies or inspection of public records). Framework data are geographic information that a public body, under applicable provisions of law or on the basis of scientific methodology, technical standards or technical expertise, creates, generates, provides or aggregates and that the Oregon Geographic Information Council, in consultation with the public body, identifies as necessary to support the business processes of a governmental agency. OGIC submits that the development and maintenance of geospatial Framework data in a consistent manner statewide will enable the provision of consistent government services to all citizens.

OGIC proposes to mitigate the obstacles to Oregon public bodies’ collective ability to create and maintain complete, statewide Framework data by putting in place a **data sharing program** that is fully funded at the statewide level. The obstacles revealed by OGIC and Department of Administrative Services (DAS) staff research provide key places for intervention and funding so that Framework data exists for the entire state, is well-administered over time by GEO (the agency best positioned to do so), and is shared **at no cost** among all Oregon public bodies. Once the program is functioning as described in this recommendation, Oregon public bodies will—collectively—realize future benefits by eliminating the cost of duplicated data development and the financing of operational misalignments.

Obstacles

Gaps in Existing Framework Data

Data gaps come in many forms. Gaps include geographies where no data exist; features without appropriate or standardized attributes (descriptive information captured in text, codes, classes, numbers, etc.); portions of data that are not standardized or inconsistent relative to the remainder of the dataset; and data categories, themes, elements, or layers that are necessary but do not exist. Data gaps are one of the primary obstacles to realizing Oregon’s Framework data sharing program. These obstacles are from multiple mechanisms and shortcomings including:

- lack of sufficient interest, sponsorship, or champions for the data
- lack of available funding
- confidentiality, liability or other institutional barriers

Insufficient Organizational Capacity

Insufficient organizational capacity interferes with public bodies’ collective ability to create and maintain complete, statewide Framework data across all levels of government. This cascading impact becomes apparent as one considers the development of Framework data and its lifecycle. Local level public bodies (e.g., cities, counties, special districts) are the *authoritative*, or ordinance-directed, sources for many data sets [add a table of some or all these data sets and a reference to the table]. At the regional level, only a handful of aggregating public bodies exist and they only operate over limited geographies, not the entire state. At the state level, agencies aggregate data for their needs, but no single public body is responsible for compiling all Framework data elements into a comprehensive statewide format. While

it is not required that a single public body have the latter responsibility, a single entity may be able to improve the outcomes by facilitating and coordinating the activities of the public bodies participating in the Framework data program. Once the data is initially developed, it must be maintained by the authoritative provider or the initial investment is quickly lost and the data has to be developed again from scratch. The same organizational capacity issues just mentioned affect the maintenance of data.

The RWG proposes that revenues be devoted to:

- Support current data creation and maintenance efforts in order to fill data gaps;
- Fund entities (local, state, and private) to create vital Framework data elements;
- Supplement GEO funding to create capacity to support the Framework data sharing program.

Fees Charged for Framework Data

Research into how public bodies use fee revenue or pay fees for Framework data revealed a nuanced picture. While some public organizations already freely share costly-to-produce data with other public bodies and absorb the data production costs, others depend on fee revenue to fund data creation, aggregation, and standardization. In addition, while GEO would prefer to use regional public bodies as data aggregators and standardizers to minimize transaction costs, not all regional bodies now provide such services. RWG thus proposes that revenues be devoted to mitigate multiple challenges:

- Replace fees between public bodies that ORS276A.500-515 will eliminate when it goes fully into effect;
- Fund a small share of existing data aggregation and standardization operations performed by public bodies to cover the costs of data they already share freely and to ensure that their data products remain available to all public bodies in the future;
- Start up new aggregation and standardization capacity for regional public bodies that do not yet have such services (any new services would be provided under OGIC's and GEO's governance by one or more of GEO, other public bodies, private for-profit firms, and private not-for-profit firms to seek the most effective solution possible).

Recommended Funding Mechanisms

The obstacles described above create an overall shortfall between the funding that a comprehensive, statewide Framework data program needs and what public bodies collectively are now able to provide. This section describes the proposed mechanisms for funding the Framework data program that the RWG researched to support OGIC's final recommendation to the 2019 legislature. One or more of these options will need to be moved forward in the process. However, the specific details of these options will be refined due to research slated to continue through the end of the calendar year. Details about each option are provided below.

1. Existing fees — The RWG proposes that OGIC recommends to the legislature a re-allocation of a portion of existing fees to Framework data purposes. There are about 2,500 fees administered by state agencies in Oregon. Those fees generate about \$2.5 billion each biennium. Many of those fees require geospatial Framework data to be properly administered. A review of each fee indicates that about \$750 million is generated each biennium from those fees that require geospatial Framework data. The RWG recommends that no more than 1% of all such fees be allocated for geospatial Framework expenses. This recommendation represents a redirection of

existing revenue being expended by all of these fee administrators to acquire such data from a variety of data providers. This revenue would support the development, aggregation, and maintenance of required authoritative Framework data from a single secure source which all fee administrators can access. This approach will reduce the cost of data acquisition for fee administrators. There are several different approaches that could be used to tap a small portion of existing fees. See Attachment A for details on the fee options OGIC should consider for recommendation to the legislature.

2. GEO assessments on state agencies — GEO currently uses an assessment methodology on all state agencies’ budgets to fund ongoing GEO operations related to storing geospatial Framework data and providing access through the Spatial Data Library. This assessment methodology should continue to be used, but *slightly enhanced* as described directly below (GEO POP) to fund ongoing costs related to secure provision of Framework data to all public bodies through a central data hub.

GEO Policy Option Package (POP) – A POP will be submitted via DAS to request the additional staff and infrastructure needed to stand-up the Framework data sharing program, as well as additional funding to provide for the ongoing operations and maintenance necessary for an expanded role in Framework data sharing. The POP specifics will be determined at a later date, depending on the outcome of related funding research. The POP will request that the additional funds be assessed to state agencies. Even if the Framework funding described in 1. above is not approved by the Legislature, the mandate to share Framework data securely between public bodies will remain in statute and GEO will need additional funding to enable and comply with that mandate. If the POP isn’t funded, it won’t be possible to comply with the statutory mandate.

Table 1 - Funding Alternatives Aligned with Budgetary Need

Funding Mechanism	Budgetary need				
	Framework data development	Framework data maintenance	Framework data sharing	GEO staff/admin (startup)	GEO staff/admin (ongoing O&M)
Existing Fees	preferred	preferred	preferred		
DAS GEO assessments					preferred
GEO Policy Option Package				preferred	preferred
Debt Financing	pending further research		pending further research	pending further research	
*Public-Private Partnership	pending further research	pending further research	pending further research		

3. Debt Financing - The RWG recommends that debt financing be used to the greatest extent possible over an eight year period beginning July 2019. (Debt financing is proposed in two 4-year phases to ensure the intended outcomes are achieved.) The bonds would be repaid with the revenue generated from fee re-allocations as described in #1 above. Once the debt is repaid, the fee revenue would likely be reduced, but would be continued at a reduced level in perpetuity to sustainably fund maintenance of Framework data by the hundreds of data providers. Research with the DAS Chief Financial Officer (CFO) will continue over the next few months to determine which expenditures can be capitalized and which types of bonds can be used. The results of this research will impact the specific dollar amounts, staff positions, and other operating expenses that are funded via the options presented in Table 1 above.
4. *Public/Private Partnership - Public/Private Partnerships (P3s) are currently being evaluated by the RWG and are viewed as a potential, long term funding solution. It is possible that over time, P3s may be able to augment or replace a portion of the proposed fee revenue. The basic conceptual model, currently implemented in Canada (Alberta, Ontario New Brunswick & BC) and in a few other countries, involves a private consortium of companies aggregating Framework data from all public bodies and using that aggregated data to create web-based products and services aimed at a variety of industries (e.g., energy, real estate, timber, health care, insurance). Companies in these vertical markets would subscribe to the products and services produced and the subscription revenue would be shared with all public bodies to fund continued provision of updated Framework data. The raw data would remain in the public domain.

The statutory structure to enable P3s exists in Oregon and is currently used by ODOT for bridge development, as an example. The RWG sees this as an option for a later time, after the fee revenue option has been worked out and implemented. This option could be used to supplement funding needed for data maintenance. More research will be conducted to firm up this recommendation, but the RWG believes it could play a role in the overall OGIC recommendation on funding to the Legislature. OGIC must decide by the start of the 2019 legislative session if it should be included in its recommendation to the legislature as an option to be developed at a later time. In the near term, this funding mechanism will undergo further research, evaluation, and review to support OGIC's final decision.

Required Funding & Funding Source

The RWG estimates that \$XXX million over an eight-year period is necessary to fund the Framework data sharing program including data development, limited-duration (LD) personnel, hardware, software, and contracting services. Following an initial start-up phase, ongoing costs for personnel and operational expenses will be required to maintain the data over time and provide continual management and access to the data. Ongoing costs are estimated to be \$0.Y million annually. The startup costs and ongoing operating and maintenance costs are outlined below.

Table 2: Proposed Annual Framework Data Revenues by Type and Source

	Debt Service on Startup Costs	Operating Costs			
	Fee Revenue	Fee Revenue	GEO Assessments	Total Annual	Total Annual Fee-Only
Annual Revenue	X,XXX,XXX	YYY,000	ZZZ,000	T,TTT,TTTT	F,FFF,FFFF

Detailed Cost Structure

{complete this section after RWG finalizes estimates}

Start-Up, One-Time Costs (over three-to-five-year period)

- Technology Infrastructure
- Data development (including contractors, services from other organizations)
- Data sharing (standardization, transmission, etc.)
- Other (DAS costs for start-up, e.g. limited-duration staff, project management)

Ongoing Costs

- Licensing
- Data maintenance (ongoing services/purchases)
- Data sharing (ongoing data exchange services)
- GEO permanent staff
- Debt service (if applicable)
- Other (future enhancements)

{Insert table of amount by source}

Governance, Accountability Mechanisms, and Performance Measures

Any significant use of public revenue requires accountability and oversight. ORS276A.500-515 enables OGIC to be the main overseer, in conjunction with GEO staff, of Framework data revenues and expenditures. OGIC proposes to ensure accountability and effective use of the proposed state revenues through a number of mechanisms:

- OGIC programs will use Oregon’s already-established “stage gate” oversight workflow to ensure effective decision-making and expenditure control;
- OGIC and GEO will distribute Framework funds to public bodies under the auspices of grant programs, contracts, and Inter-Governmental-Agreements (IGAs);
- OGIC will develop and apply performance measures to its activities, including activities it funds;
- OGIC will report regularly to the legislature per ORS276A.500-515.

Table 3 Version Control

Version	Date	Description	Who
0.4	7/5/2018	Version distributed to the RWG in preparation for the 7/9 meeting	JFrkonja
0.8	7/11/2018	This version incorporates comments and revisions made to version 0.4, as well as revisions by Rachel and Jeff distributed on 7/9, after the RWG meeting. Cy and Theresa incorporated Rachel's and Jeff's revisions and made their own revisions.	Tburcsu
0.9	7/12/18	Eliminates placeholder revenue needs in narrative and Figure 2 since the detailed estimates aren't done yet. Distributed to RWG for discussion at its July 16 meeting.	JFrkonja
0.11	7/16/18	Revisions based on 7/16 meeting with the RWG.	R. Smith / C. Smith

Attachment A: Supporting Information

Fee Alternatives Examined

The RWG examined a variety of mechanisms for tapping into existing fees. The options presented below are for OGIC to consider. The following table describes each funding mechanism in more detail.

Table 5 Fee Alternatives

Fee Option	Legislative Lift	Stakeholder Lift	Issues
Tap All Fees	Large – requires a 3/5 vote of legislature	Large – need to persuade everyone of value	Is a 3/5 vote feasible?
Tap Mission-Aligned Fees – revenue to OGIC/GEO	Large – requires changes to lots of laws and rules (one for each fee)	Medium – need to persuade to increase fees	Will entities trust OGIC/GEO with revenue?
Tap Mission-Aligned Fees – revenue to administering agency	None (?)	Large – need to persuade to increase fees AND do the work	Could be “required” by legislature, or not.