Enterprise Information Services
Geographic Information Council
550 Airport Road SE, Suite C
Salem, OR 97301

2025 Zoning Layer Update	**Review Panel Score: 34**
Framework	It would be great to see the restrictions on the zoning layer be eliminated, making the generalized zoning designations publicly accessible would alleviate the need to maintain a public and private version of the zoning layer.
Policy	Well defined project that includes stakeholders, leverages DLCD in-kind match, and updates a dataset based on changes to Oregon Administrative Rules. The OAR changes make this a priority to ensure we have data that meets Oregon's regulatory requirements. Project supports the Governor's housing priority. Finally, it updates the data standard and creates a stewardship plan.
Technical	I didn't see mention of metadata in the proposal and don't remember if it was mentioned in the presentation.
Technical	Overall good project. Metadata was only missing piece. Imagine that may just be largely carrying over from existing metadata format.

2025 Zoning Layer Update

CONTRIBUTORS:

Prepared By Include primary project staff including agency or organization affiliation	
1. Karen Grosulak-McCord, Department of Land Conservation and Development 2. Sarah Marvin, Department of Land Conservation and Development 3. Randy Dana, Department of Land Conservation and Development 4. ISS4, Department of Land Conservation and Development	
Contact Name	***Contact Email***
Karen Grosulak-McCord	karen.grosulak-mccord@dlcd.oregon.gov

PROJECT DETAILS:

Expected Project Begin Date	**Expected Project End Date**		**Amount of Funding Requested**
03/01/2025	12/31/2025		$14,750

PRIORITY CRITERIA:

Project Objectives			
☒	Improve data quality or accuracy of existing Framework data element	☐	Increase update frequency of existing Framework data element
☒	Fill gaps in existing Framework data element, geography, or critical attribute(s)	☐	New data identified in Framework Program Work Plan as "Data Element for Future Consideration"
Priority Data Sets			
☐	Foundational data [1]set as currently listed in Framework Data Inventory		
☒	Ties directly to the Governor's priorities (Housing and Homelessness, Behavioral Health, Education and Early Learning)	☐	Ties directly to OGIC's data sharing priority layers (Parcel data, Address points, Road centerlines)
Standards and Stewardship			
☒	Creates or updates a stewardship plan		
☒	Creates or updates a data standard		
Framework Program Requirements (New datasets only) - NOT SCORED			
☐	Needed by multiple agencies (user-groups identified)	☐	Statewide data set
☐	Multiple use-cases identified	☐	Data required by statute

[1] Foundational Framework data elements are base geospatial data used for constructing a majority of Framework data elements and are required for achieving the highest levels of integration among Framework themes.

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PROJECT ABSTRACT

DLCD is the steward for the statewide zoning GIS layer and dataset, which is one of the most frequently requested datasets in the state. The zoning layer comprises a Framework dataset that is critical to understanding how Oregon's land use planning system shapes local implementation of zoning and land use and how local decisions scale-up to regional and statewide impacts. Oregon has seen significant changes in how residential zones are classified due to "middle housing" legislation, requiring a complete redefinition of residential zone classifications. DLCD is requesting Framework funds to help complete and improve the 2025 update to the zoning layer. Capacity provided by this grant allows DLCD to thoroughly collect and aggregate local data, review and revise generalized statewide codes and descriptions, revise the Zoning Extension of the Administrative Boundaries Standard, and create a stewardship plan, all to accurately reflect new laws and the changing conditions of local planning, especially as they relate to housing, a Governor's priority.

PROJECT NARRATIVE

Project Scope

DLCD created the first zoning layer in 1986, with more modern versions beginning in 2013. Updates were completed in 2017 and most recently, 2023. Datasets are collected through outreach to individual jurisdictions (cities and counties), requesting their local zoning GIS datasets. Once collected, these local datasets are then aggregated into a statewide dataset. Each jurisdiction has their own zoning codes and definitions, so to create a cohesive statewide layer that allows for regional and statewide analyses, local codes must be crosswalked into state codes. Each jurisdiction's individual local codes are evaluated and researched, then assigned a broader, generalized state code.

Zoning, especially as it relates to housing, is a focus for DLCD and a highly requested dataset. Because housing is one of the Governor's priorities, the importance of an accurate representation of residential zoning on a statewide scale in this layer is crucial to providing accurate regional and statewide analyses.

In 2019, House Bill 2001 significantly changed the way residential zones are classified by mandating "Middle housing," defined as duplexes, triplexes, quadplexes, cottage clusters, and townhouses. Middle housing legislation requires cities to reevaluate and update their residential zones to allow higher densities within their urban growth boundaries (UGBs) to accommodate more housing and more housing choices for greater affordability. Cities with UGB populations over 10,000 but less than 25,000 are required to allow duplexes in all residential zones within their UGB, and cities with UGB populations of 25,000 or more are required to allow middle housing in all residential zones within their UGB. This allows for a greater variety of housing choices and higher densities in zones where prior zoning codes allowed for fewer options and required lower densities.

In addition to needed zoning code classification revisions, there are gaps in the Framework dataset. Out of 241 cities and 36 counties, 29 jurisdictions do not currently share their zoning data publicly through the Framework zoning layer. A greater effort to obtain sharing agreements with these jurisdictions requires GIS staff to work with DLCD Regional Representatives and local jurisdictions' planning departments to build communication and trust in the sharing process, ultimately gaining sharing agreements.

Relationship to Oregon Framework

The zoning layer is a framework layer within the Administrative Boundaries theme. Because urban and rural development and conservation of farm, forest, and wild lands depend on what is allowed under statewide planning laws, and more granularly under local laws, GIS zoning data is an important determining spatial factor in planning processes. A variety of interests need the zoning layer, including state natural resource agencies, developers, and land use interest groups.

The Framework program promotes the availability and sharing of quality, statewide data. The improvements made to this dataset through this project are valuable to many state agencies and other public bodies, and the Framework program as a whole.

Expected Benefits

The expected benefits of this proposal would be a more accurate and complete zoning dataset, a new stewardship plan, and an updated Zoning Extension to the Administrative Boundaries Data Standard.

Accuracy: To quickly accommodate Oregon's changing housing landscape, the 2023 zoning dataset had to have a single, statewide, residential code for a wide range of residential densities for cities that rezoned for middle housing. This single zone severely limits the granularity required to perform meaningful analyses, such as tracking the amount, rate, and location of middle housing development. A robust update of the layer will include a more descriptive and accurate crosswalk, providing state agencies and other partners the ability to perform analyses and visualize current conditions with confidence. Analyses could include acreage of zones within specific geographies, prevalence of types of zones, changes over time, and other statistics.

Completeness: Because of time constraints and staff capacity, the 2023 update was not as robust as desired. Some counties chose not to share their zoning data publicly during the 2023 outreach campaign. In response, DLCD was forced (as in previous updates) to create two datasets: an internal state agency version with local and statewide zones, and a public version, with local codes removed and missing jurisdictions (those that chose not to share any data publicly), shown as "holes" in the dataset. With the goal of creating the most useful public dataset possible for this update, the jurisdictions who do not publicly share their data will be provided additional collaboration with and support from DLCD to secure more sharing agreements.

METHODOLOGY

DLDC proposes this project with four stages of development: 1) statewide zoning code review; 2) initial jurisdiction outreach; 3) data processing and QA/QC; and 4) update the standard and create a new stewardship plan.

Stage 1 - Statewide code review: Prior to data collection and processing, a review and establishment of new state codes, primarily residential, will be undertaken. The process will involve close coordination with DLCD's Housing Division to establish and define middle housing zones and a process for appropriately crosswalking local codes to statewide residential codes. The Framework Planning Workgroup, consisting of other state agencies and interested local and regional agencies, will be convened to help determine new codes. Newly created or refined codes will be incorporated into further processes.

Stage 2 – Initial outreach: City and county contacts will be gathered or confirmed through lists used in prior updates, other internal sources, online sources, and coordination with DLCD's nine Regional Representatives. A letter requesting updated data will then be sent to each city and county contact. These letters request local zoning data, which could come from a referral to an online web mapping application, database, or directly through the jurisdiction's GIS or planning department in the form of a shapefile or geodatabase. In some instances, cities contract the creation and maintenance of their zoning data out to the counties or regional governments such as COGs. Close coordination with all responsible parties is necessary to appropriately gather resources for a final product, especially with cities who have in the past chosen not to publicly share their data. Communication

with jurisdictions will be archived for future reference. Most communication from the 2023 zoning update was saved and stored locally to be used to guide communication in this proposal.

Stage 3 – Data processing and QA/QC: As datasets are sent in or downloaded from the internet, they will be saved to a "Raw Data" folder named with the date the datasets were downloaded. The dated folders with the data are then copied over to respective "Work Data" folder for that jurisdiction.

“Raw Data” folders are kept as-is, with data preserved exactly as they were sent from the jurisdiction. “Work Data” folders are data copied from “Raw Data” to be processed for the final product. All processes done to “Work Data” folder items are then documented in the individual text files.

Processing of data includes:

1. Creating a “process” text file in which to record actions taken on the data,
2. Projecting the data into the Oregon Lambert projection (EPSG 2992),
3. Repairing any topological errors with a python script, and
4. If a county sent a layer that also contained the zoning data for individual cities, those city polygons are exported out of the county data and saved into their own work data folder. The city polygons are then deleted from the county data.

A full project folder is then created. This folder contains all data and documents related to the project. Subfolders within the project folder include:

1. Ancillary: miscellaneous files related to the project,
2. Raw Data: folders for each jurisdiction containing data received,
3. Work Data: folders for each jurisdiction containing data processed as described below, and
4. Zoning_2025: an ArcGIS Pro project and the python notebook containing all scripts used in data processing.

The 2023 zone codes and descriptions for each jurisdiction are copied into a crosswalk spreadsheet. Newly obtained 2025 codes and descriptions are then also copied into the crosswalk and an attempt at matching codes or descriptions that are shared between the years is made. If the code and/or description existed in 2023 but not in 2025, 2025 is left blank. If the code and/or description in 2025 exists now but not in 2023, a new row is created.

The 2025 local codes are translated into generalized state codes, as found in the 2014 Zoning Standard and proposed codes as identified in Stage 1. If the 2023 code matches the 2025 code, the same cross-walked state code will be used for 2025 (except for some residential codes, as detailed below). If the 2025 code did not have a clear 2023 state code equivalent, research in the jurisdiction’s development code is conducted, and a decision is made as to the best fit. In many instances the research involves reviewing jurisdictions’ zoning code documents and outreach to city and county planners.

Some jurisdictions had not provided new data since the building of the 2013 or 2017 layers. In the 2023 zoning version, it was decided to use the features and zones from the 2013 or 2017 version, whichever dataset was latest, for those jurisdictions.

Residential codes were handled differently in the 2023 update because middle housing laws changed the way housing density for some jurisdictions is calculated, making densities used in the previous 2017 layer obsolete. For historical reference, the process below was used in the 2023 update for residential codes:

Cities with UGB populations 25,000 and over or Metro cities with populations over 1,000 and all counties within Metro: The value "Res." was created to crosswalk all 2023 local residential codes to the generalized state code field. The code description for "Res." was "Middle Housing: Metro cities population 1,000 / Counties within Metro / all UGBs population > 25,000."

Cities with UGB populations 10,000 – <25,000: Residential zones need to fit into density classes in the current Zoning Standard to be cross-walked to a state code. Because duplexes are now allowed in all residential zones, including single family zones, new densities allowed in a local zone needed to be recalculated, often resulting in that local zone being cross-walked to a higher density state code than in 2013 or 2017. All possible efforts to accurately calculate new housing densities were taken, however, if a zone's density did not fit neatly into values in the existing standard, a judgement call was made. This is why the zoning standard needs to be revised.

Cities with UGB populations under 10,000: Middle housing doesn't apply; local zone housing densities did not change.

In this 2025 update, middle housing jurisdictions will be carefully reviewed, and their residential codes cross-walked into revised, generalized residential codes as identified in Stage 1.

When data are collected, projected, and crosswalked, a script is used to create the final datasets. Because of sharing agreement differences between jurisdictions, a "Gov2gov" dataset, which is data that jurisdictions have given permission for state agencies to use internally but not publicly, uses the information in the zoning crosswalk spreadsheet to determine what values to apply to which features gathered from various sources into a dictionary of jurisdictional data. These pieces are then written to the final data set, counties first, then cities, so that city data will overlap county data in the final data set, taking selection precedence. A "Gov2Pub" (public) version then removes either local codes or all features, depending on the jurisdiction's preferences.

When the two final datasets are produced, DLCD's Housing Division will be provided with a copy to review and spot check for accuracy, with the goal of identifying potential errors visually on the map and from review of the final attribute table. Discrepancies identified in this stage will be reviewed and rectified before finalizing the dataset for publication.

Stage 4 –Update the data standard and create a stewardship plan: Because of previous modifications as well as new, 2025 residential zone modifications, the standard will require review and updates. As a stewardship plan does not exist for this dataset, the Planning Workgroup will both review and modify the standard and create a new stewardship plan.

Deliverables to be Funded by this Proposal

The primary deliverables for this proposal are an updated and accurate 2025 statewide zoning layer, an updated standard, and a new stewardship plan. The stewardship plan will define: DLCD as

the steward of the statewide dataset; local jurisdictions as the custodians of their data; the update frequency as every two years; and the methods by which the layer will be updated going forward.

Project Timeline

The project consists of four stages beginning in the first quarter of 2025. Statewide code review will occur through the first quarter with the help of an intern and internal staff. Initial outreach will take two quarters and will overlap with both code review and data processing, as jurisdictions respond on their own timelines. Data processing and QA/QC will occur throughout the second and third quarters, and the creation of the stewardship plan and update of the standard will span the third and fourth quarters. The final dataset should be completed by the end of the fourth quarter of 2025.

Figure 1: Project Stage Timeline

Project stage	2025 Q1	2025 Q2	2025 Q3	2025 Q4
Statewide code review				
Initial outreach				
Data processing & QA/QC				
Stewardship Plan & Standard				

Stewardship Overview

The zoning layer does not have a stewardship plan. Therefore, we propose that this document be developed alongside the 2025 update. Overwhelmingly, local governments prefer to be the custodian of their own zoning data, sometimes with the help of counties, contractors, or regional Councils of Government. This encourages individuals needing precise local zoning data to go directly to the local jurisdiction. Most jurisdictions, however, recognize the importance of a statewide dataset to provide regional and statewide analyses, and agree to share their data with DLCD to steward the statewide dataset with standardized and generalized codes.

The goal of a new stewardship plan would be to reinforce this relationship between state and local governments and establish a process and agreement of sharing and collaboration moving forward. Jurisdictions remaining unwilling to publicly share their data during this 2025 update might be persuaded in future updates with reassurance of standardization and process. DLCD's Urban Planner position will have primary stewardship responsibilities.

A 2014 Administrative Boundary Standard Zoning Extension exists and can be found here. The standard was endorsed by OGIC on June 18, 2014. After this update, the standard will require revisions due to new residential codes and edited attribute fields.

Data Storage and Distribution Plan

The final dataset will be delivered to DAS GEO as a service for publication on the GEOHub portal. DLCD will provide regular updates to this dataset as specified in the new stewardship plan.

The only restriction on this dataset is that local codes may not be displayed publicly. In addition, some jurisdictions do not share any of their data publicly, including generalized state codes. An updated data standard will clarify which fields are restricted to internal use, and which are provided to the public through the Framework product.

Commitment to Effort

It is understood that this layer is critical to many business needs for agencies throughout the state. With six letters of support included with this application, these accurate data are clearly desired. Beyond the ability for improved GIS products from DLCD to build capacity in local jurisdictions and other state agencies, the agency recognizes its own reliance on the zoning layer for virtually all internal analyses and is strongly committed to seeing this project through to completion. Because of this commitment, DLCD is providing in-kind support through dedicated staff time. The Urban Planner, GIS Specialist, and Measure 49 Specialist's time will be paid for by the agency. These staff hours come from DLCD's General Fund and add up to over 1400 hours.

Relevant Experience/Expertise of Project Team and Organizational Capacity

Karen Grosulak-McCord is the Urban Planner (Planner 2) and is responsible for both review of Post Acknowledgment Plan Amendments and various GIS work for the agency. She is the Administrative Boundaries Framework Implementation Team Lead. Karen will act as Project Manager for this proposal and has experience project managing the 2023 update to the statewide zoning layer.

Sarah Marvin is the Measure 49 Specialist (Planner 3) and splits her time between Measure 49 claim work and GIS work for the agency. She is the Land Use Land Cover Framework Implementation Team Lead. She has over 30 years' experience in GIS. Sarah will provide project management and technical expertise for the project and was a core participant in the 2023 update to the statewide zoning layer and the 2021 creation of the land use layer.

Randy Dana will lead the technical aspects of this project. Randy has over 20 years of experience as a GIS analyst and currently oversees the administration of the DLCD data library and various GIS projects for the Oregon Coastal Management Program (OCMP). Randy was the technical expert for the 2023 update of the statewide zoning layer and the 2021 creation of the land use layer. Ninety percent of his position is funded by the National Oceanic and Atmospheric Administration (NOAA), and funding through this request will allow Randy to dedicate a portion of his time on this project.

The agency is hiring an **ISS4 GIS Specialist** to assist the department in overall GIS needs and projects. The ISS4 is a full-time, permanent staff member, and recruitment for this position is scheduled for March 2024. A successful applicant will have the minimum qualifications of the ISS4 classification and will meet additional agency requirements such as GIS proficiency and scripting and modeling experience.

BUDGET JUSTIFICATION STATEMENT

The proposed project budget presented in Table 1 indicates a total Framework fund request of $14,750. This value equals the funds needed to support time spent on the project by a federally funded position totaling $2,430 and funds for an intern totaling $12,320. The agency will provide match dollars using three General Fund positions (Karen Grosulak-McCord, Sarah Marvin, and the GIS Specialist), for approximately $87,000.

BUDGET

Project Budget			
Budget Item	**Role/Task**	**Hour Estimate**	**Cost**
Federally Funded GIS Analyst (Randy Dana)	Data development; QA/QC; technical support	30	$2,430
Student and/or Temporary Workers (to be hired)	Initial research; data development; QA/QC; Outreach; Misc. support	616	$12,320
	Total FIT Estimated Hours	646	
Total FIT Funds Requested			**$14,750**
Budget Item – In-Kind Match	**Role/Task**	**Hour Estimate**	**Cost**
Urban Planner (Karen Grosulak-McCord)	Project management / meetings & coordination; initial research; data development; QA/QC; stewardship plan	470	~$26,000
M49 Coordinator (Sarah Marvin)	Initial research; data development; technical support; QA/QC; stewardship plan; meetings & coordination	470	~$34,000
ISS4 GIS Specialist (to be hired)	Initial research; data development; technical support; QA/QC; stewardship plan; meetings & coordination	500	~$27,000
	Total In-Kind Match Hours	1440	
	Total In-Kind Match Funds		**~$87,000**
Total Project Cost			**$101,750**

ADDITIONAL INFORMATION

Please see six letters of support attached to this proposal from the following agencies:

- Oregon Department of Agriculture
- Oregon Department of Forestry
- Oregon Parks and Recreation Department
- Oregon Department of Geology and Mineral Industries
- Oregon Department of State Lands
- Oregon Department of Fish and Wildlife

Oregon
Tina Kotek, Governor

Department of Geology and Mineral Industries
Administrative Offices
800 NE Oregon St., Suite 965
Portland, OR 97232-2162
(971) 673-1555
Fax: (971) 673-1562
www.oregon.gov/dogami

To: Oregon Geographic Information Council (OGIC)
From: Ruarri J. Day-Stirrat, State Geologist and Executive Director
Oregon Department of Geology and Mineral Industries
Date: February 22, 2024
Subject: Framework Data Development Grant Program

Dear Review Panel:

On behalf of the Oregon Department of Geology and Mineral Industries (DOGAMI), I am writing this letter to strongly encourage funding DLCD's proposal to the OGIC Framework Data Development Grant Program to update two very important data sets for the state: urban growth boundaries (UGBs) and zoning layers. The successful outcomes of DOGAMI's scientific studies are wholly dependent on a variety of accurate, complete, and fully verified GIS layers from DLCD, including UGB, zoning, land use, tax lots, estuary information, and others. These key GIS layers allow DOGAMI to both conduct primary investigations into geologic hazards, but also allow us to collaborate with DLCD with goals to understand hazard, determine risk, and find risk reduction opportunities in Oregon.

Sincerely,

Ruarri J. Day-Stirrat, PhD, State Geologist and Executive Director, DOGAMI

Cc: Jason D. McClaughry, Geological Survey and Services Program Manager

Oregon
Tina Kotek, Governor

Oregon Department of Fish and Wildlife
Director's Office
4034 Fairview Industrial Dr SE
Salem, OR 97302
503-947-6044
FAX: 503-947-6042
dfw.state.or.us

February 21, 2024

Brenda Ortigoza Bateman
Director, Oregon Department of Land Conservation and Development
635 Capitol Street NE, Suite 150
Salem, OR 97301-0050
Sent via email to: brenda.o.bateman@dlcd.oregon.gov

RE: OGIC Framework Data Development Grant Proposals from DLCD for land use planning layers

Dear ~~Director~~ Brenda Bateman,

The Oregon Department of Fish and Wildlife (ODFW) supports the Oregon Department of Land Conservation and Development's (DLCD's) two grant applications to the Oregon Geographic Information Council (OGIC) Framework Data Development Grant Program, which propose updates to two very important data sets for the state: urban growth boundaries (UGBs) and zoning layers.

Funding and development of these important spatial data layers helps DLCD better support Oregon's statewide land use planning system. Oregon's statewide land use planning system helps manage urban growth and protects farms, forestlands and natural resource lands – lands which also provide habitat for fish and wildlife. Decisions about how best to manage Oregon's growth and conservation of its natural resources depend on high-quality and up-to-date spatial information.

ODFW's mission is to protect and enhance Oregon's fish and wildlife for use and enjoyment by present and future generations. Our ability to protect and enhance fish and wildlife depends on the long-term sustainability of their habitats, which depends on how Oregon plans and makes decisions on its patterns of growth and development. ODFW has a vested interest in seeing these important data layers be updated, as the decisions that flow from this information can help guide Oregon's growth in ways that result in the best possible outcomes for fish and wildlife.

We understand that DLCD is submitting two applications to the OGIC, one for updating the UGB layer and one for updating the zoning layers. Both of these data sets are important and in need of updating. Please pass along ODFW's support for both applications to OGIC, and we look forward to our continued collaboration with DLCD as essential partners in the long-term resiliency of Oregon's communities, working lands, and fish and wildlife habitats.

Sincerely,

Curtis E. Melcher
Director

OREGON
DEPARTMENT OF
AGRICULTURE

Protect. Promote. Prosper.

Director's Office
635 Capitol St NE, Salem, OR 97301-2532
503.986.4550 | Oregon.gov/ODA

Oregon Geographic Information Council (OGIC)
Framework Data Development Grant Program

Council Members

We understand that the Oregon Department of Land Conservation and Development (DLCD) is submitting two grant requests that would help to update two very important data sets for the state. These include urban growth boundaries (UGBs) and zoning layers. The Oregon Department of Agriculture (ODA) supports these two requests and urges that these grants be authorized.

ODA routinely uses these two data sets in many areas of our work. Examples have included the monitoring and analysis of the effectiveness of land use tools used to protect agricultural lands, the impacts of past wildfire events to agriculture, analysis of individual land use proposals such as energy facility siting, the effectiveness of pest management actions and analysis of legislative and other policy issues related to urban growth boundary expansions, agritourism regulation, canola mapping and regional problem-solving initiatives.

The effectiveness, accuracy, and credibility of our work is dependent on up-to-date, accurate data. An update of these two data layers is key to maintaining the usability and credibility of these important data layers. ODA supports the DLCD grant request and encourages the OGIC to fund both proposals.

Thank you for considering our comments.

Respectfully,

James W. Johnson
Land Use and Water Planning Coordinator

Oregon
Tina Kotek, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 986-5200
FAX (503) 378-4844
www.oregon.gov/dsl

February 23, 2024

Brenda Ortigoza Bateman, Ph.D.
Director, Oregon Dept. of Land Conservation & Development
635 Capitol Street NE #150
Salem, OR 97301
By Email: brenda.o.bateman@dlcd.oregon.gov

Re: OGIC Grant Requests

Dear Dr. Bateman:

Thank you for your inquiry into whether the Department of State Lands has an interest in DLCD's grant applications to Oregon Geographic Information Council (OGIC) for updating UGB & zoning data layers. I have checked with our staff and the answer is a resounding yes! We fully support your grant applications.

The Department of State Lands (DSL) utilizes this GIS data layer information in a variety of ways. Urban growth boundary datasets are critical to DSL to understand areas of future growth so that we can plan for requests for services that we provide, such as wetland delineations, permitting, compensatory mitigation, and uses of Oregon-owned waterways. This dataset is important not only for analyses, but also to know where certain exemptions may or may not apply.

DSL also relies on zoning information to inform several Department rules and processes within the Removal-Fill program, such as whether a Removal-Fill permit is required, how wetlands and streams may or may not provide certain functions and values and how unavoidable impacts should be mitigated, and how mitigation payments to the Department are calculated. And, again, as with UGB datasets, the zoning dataset is helpful to know where certain exemptions may or may not apply, especially items like the agricultural exemptions that can apply on EFU zoned land.

Our Real Property program relies on datasets to help us determine state ownership of lands. Zoning changes and UGB delineations can change the value of our property and how we can manage it.

As you have noted in previous communications, having accurate spatial data is essential to understanding the effects of policy decisions that affect key elements of Oregon's land use planning system at regional and statewide scales, including housing, economic development, farm, forest, environmental sustainability, and natural hazard mitigation. And we have seen significant changes in how residential zones are classified due to middle-housing legislation and

the desire to increase the number of housing units for Oregonians. Using old wetlands and wetland soils datasets can be misinterpreted and misused in some analyses creating all sorts of chaos.

In summary, DSL fully supports the grant opportunities available to DLCD through OGIC and could benefit immensely from the upgrades this work would provide.

Sincerely,

Vicki L. Walker,
Director
Vicki.walker@dsl.oregon.gov

Cc: Dana Hicks, DSL Planning & Policy Manager
Jevra Brown, DSL Aquatic Resource Planner

Oregon
Tina Kotek, Governor

Department of Forestry
State Forester's Office
2600 State St
Salem, OR 97310-0340
503-945-7200
www.oregon.gov/ODF

February 12, 2024

Brenda Ortigoza Bateman, Ph. D., Director
Oregon Department of Land Conservation and Development
635 Capitol Street NE, Suite 150
Salem, OR 97301-2540

RE: Letter of Support – OGIC Grants

Dear Dr. Ortigoza Bateman,

The Oregon Department of Forestry (ODF) is pleased to express our full support for your grant applications to the Oregon Geographic Information Council (OGIC) aimed at updating the Urban Growth Boundary (UGB) and Zoning data sets. These crucial data sets play a pivotal role in the state's Framework Data, serving as indispensable resources that offer valuable insights to both ODF and the broader Framework community.

The UGB data is essential for managing urban development and delineating growth boundaries, while the Zoning data provides critical information on land use regulations and zoning designations. Keeping these datasets current and accurate is paramount for informed decision-making and sustainable land management practices across the state.
We extend our sincere appreciation to the Department of Land Conservation and Development (DLCD) for assuming the role of named stewards for this data. Their dedication to ensuring the reliability and accuracy of these datasets is commendable, and we are grateful for their ongoing efforts to maintain the integrity of the information that underpins key decision-making processes.

As stakeholders in Oregon's geospatial community, we recognize the importance of collaborative initiatives that enhance the quality and accessibility of data. The support provided by OGIC through grant funding aligns with our shared commitment to advancing the state's geospatial capabilities and promoting effective resource management.

Sincerely,

Cal Mukumoto
Oregon State Forester

Oregon
Tina Kotek, Governor

Parks and Recreation Department
725 Summer St. NE, Suite C
Salem, OR 97301-1271
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Fax (503) 986-0794
stateparks.oregon.gov

February 23, 2024

Molly Gartrell Earle
Oregon Geographic Information Council

Dear Chair Molly Gartrell Earle,

I am pleased to write in support for the Oregon Department of Land Conservation and Development's (DLCD) requests for Oregon Geographic Information Council (OGIC) Framework Funding to build out the Urban Growth Boundary (UGB) dataset and update the 2025 statewide zoning data layers.

DLCD has consistently demonstrated a strong commitment to continual growth and refinement in their data and research. Their proposals to improve these datasets will ensure more current and reliable information that can be shared and utilized across the state. This type of data plays a pivotal role in comprehending the ramifications of planning and policy implications for Oregon Parks and Recreation Department (OPRD) and other land management agencies such as ours.

Specifically, the UGB layer and zoning layer projects will assist our park planning efforts by allowing us to understand the opportunities and limitations in the land we manage. We engage in land acquisitions, sales, exchanges and donations. Understanding the zoning of properties and where they are in relation to UGBs will streamline our evaluation and planning processes. As these datasets grow in accuracy, we will be able to leverage its expertise to provide much needed confidence as we evaluate properties during these transactions.

Funding for this dataset support will also offer another advantage in our management of the Willamette Greenway. Currently, the zoning mapping along the Willamette Greenway is split between multiple agencies and counties. An accurate and comprehensive resource is currently unavailable to aid in the development of recreational opportunities along this significant natural environment.

We fully support DLCD in pursuit of these projects and look forward to our continued collaboration to enhance recreational opportunities and improve stewardship of Oregon's special spaces. We strongly encourage OGIC to fully fund these requests.

Sincerely,


Lisa Sumption (Feb 14, 2024 10:48 PST)

Lisa Sumption
Director

Enterprise Information Services
Geographic Information Council
550 Airport Road SE, Suite C
Salem, OR 97301

Urban Growth Boundaries:
Corrections, Updates, and Improvements

Review Panel Score: 33

Technical	Overall good project. Took a couple points off for timeline (I suspect the historical GIS detective work might take longer than expected) and technical issues (I think there are inherently some things that are hard to foresee in terms of technical issues, especially as you dive into decades-old changes).
Policy	Proposal was the specific on desired outcome but unclear on how much effort is involved.
Policy	UGB boundaries are required by ORS and heavily used by many state agencies. These data are also needed to support the Governor's housing priority. The project leverages in-kind agency match dollars, updates the stewardship plan and creates a new data standard. The project will also create a more accurate and reliable dataset for all to use.

Urban Growth Boundaries: Corrections, Updates, and Improvements

CONTRIBUTORS:

Prepared By Include primary project staff including agency or organization affiliation	
1. Karen Grosulak-McCord, Department of Land Conservation and Development 2. Sarah Marvin, Department of Land Conservation and Development 3. Randy Dana, Department of Land Conservation and Development 4. ISS4, Department of Land Conservation and Development	
Contact Name	***Contact Email***
Karen Grosulak-McCord	Karen.grosulak-mccord@dlcd.oregon.gov

PROJECT DETAILS:

Expected Project Begin Date	**Expected Project End Date**		**Amount of Funding Requested**
07/01/2024	2/28/2025		$32,270

PRIORITY CRITERIA:

Project Objectives			
☒	Improve data quality or accuracy of existing Framework data element	☒	Increase update frequency of existing Framework data element
☒	Fill gaps in existing Framework data element, geography, or critical attribute(s)	☐	New data identified in Framework Program Work Plan as "Data Element for Future Consideration"
Priority Data Sets			
☐	Foundational data [1]set as currently listed in Framework Data Inventory		
☒	Ties directly to the Governor's priorities (Housing and Homelessness, Behavioral Health, Education and Early Learning)	☐	Ties directly to OGIC's data sharing priority layers (Parcel data, Address points, Road centerlines)
Standards and Stewardship			
☒	Creates or updates a stewardship plan		
☒	Creates or updates a data standard		
Framework Program Requirements (New datasets only) - NOT SCORED			
☐	Needed by multiple agencies (user-groups identified)	☐	Statewide data set
☐	Multiple use-cases identified	☐	Data required by statute

[1] Foundational Framework data elements are base geospatial data used for constructing a majority of Framework data elements and are required for achieving the highest levels of integration among Framework themes.

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PROJECT ABSTRACT

DLCD stewards the Framework Urban Growth Boundary (UGB) dataset. UGBs designate where cities expect to grow over a 20-year period, restricting urban development outside the boundary and encouraging development inside. The UGB stewardship charter requires DLCD "provide for the accountable, thorough, and documented stewardship of Urban Growth Boundaries." Accurate and complete spatial data is essential to understanding the effects of policy decisions on Oregon's land use planning system at regional and statewide scales, including housing, economic development, farm/ forest conservation, and natural hazard mitigation. The UGB dataset is critical to the work of Oregon's land use agencies, the Governor's Office, Legislative Offices, and local governments. Legislative staff recently requested a list of cities that would qualify for expansion based on their UGB history over the past 20 years under proposed Senate Bill 1537. Unfortunately, the UGB dataset is not accurate enough to reliably conduct the requested analysis. We are requesting Framework Grant funds to create accurate, annual layers from 2004 to 2024 by addressing gaps and inaccuracies from the earliest UGB data circa 1980 to 2024. This work includes creating an UGB extension data standard and updating the stewardship plan to ensure continuity in the UGB dataset into the future.

PROJECT NARRATIVE

Project Scope

All incorporated cities, in cooperation with counties and DLCD, established UGBs as part of their comprehensive plans in the 1980's in response to Senate Bill 100. UGBs demonstrate where the city plans to grow over the next 20 years. Each city must provide sufficient lands for residential, employment, recreational, and infrastructure uses within its UGB. When a city demonstrates a need to expand this boundary, they file a Post Acknowledgement Plan Amendment (PAPA) with DLCD. At the end of each year, DLCD publishes a statewide layer of each city's current UGB polygon. The most efficient way DLCD has found to create the annual layers is to add new amendment areas, attributed by effective date, to a cumulative, statewide, geodatabase of all amendments beginning in 1980.

DLCD took over stewarding the Framework UGB dataset from ODOT in 2009. The UGB data element consists of the annual, statewide layer of current boundaries with attributes conforming to the Administrative Boundaries data standard. The UGB data element does not have its own data standard. DLCD keeps annual layers published from 2010 to 2023 but infrequent prior versions back to 1980. Due to covid budget cuts, DLCD was unable to update the UGB amendment geodatabase with new amendments from 2020 to 2022, and instead only published two annual UGB layers for 2021 and 2022. DLCD needs to fill these gaps and update the data element to 2024.

Due to a variety of legacy issues and historic inaccuracies, the UGB dataset is unreliable for historic and current analyses. Sources of error include inaccurate boundary descriptions in PAPAs; misinterpretation of submitted descriptions or poor-quality maps; alignments to historic records that do not meet modern mapping standards; and disagreements about alignments that may not have been acknowledged. Current practice is that when errors are found, DLCD adds the linework to the amendments database, and attributes it with the current year. Due to limited resources, DLCD has not been able to research and attribute the corrections to the year in which the error was introduced, rendering accurate historical knowledge inaccurate. These issues make it impossible to confidently perform time-series analysis or make highly accurate estimates of location and area. DLCD proposes to create a UGB extension to the Administrative Boundaries standard with new attributes to facilitate detecting and fixing errors in the future.

Major goals for this project include:

1) Convene the Framework Planning Workgroup to create the UGB extension to data standard
2) Comprehensive research of UGB amendments from inception to present (~1980 – 2024)
3) Ensure UGB alignment with cadastral and physical boundaries where feasible
4) Work with cities to resolve geographic and attribute discrepancies
5) Update, fill gaps, and publish a series of annual UGB layers from 1980 to 2024
6) Revise stewardship plan to ensure dataset remains accurate and up-to-date in the future

Relationship to Oregon Framework

The statewide UGB data set is an integral data element of the Administrative Boundaries theme particularly with the City Limits, Zoning, and Comprehensive Plan data elements, as well as to the Land Use data element in the Land Use/Land Cover theme. The relationships of these data sets' boundaries to UGBs determines what land use regulations apply where. The proposed improvement of the UGB data set meets the following, three OGIC priorities and six criteria for Framework Program Data Development:

Project Objectives	• ***Improve data quality or accuracy of existing data element*** The UGB data set from 1980 to present is not accurate enough to answer critical change over time questions. DLCD will research PAPA records and work with cities to assess and correct linework and attributes from 1980 to 2024. • ***Close gaps in existing statewide data set - geography or critical attribute(s)*** Due to covid budget cuts, DLCD did not add amendments to the geodatabase from 2020-2023, instead creating two stand-alone layers for that period. This project will add missing amendments and produce revised, annual layers from the completed geodatabase. • ***Increase update frequency (Data are old and need to be updated.)*** The UGB stewardship plan requires annual updates to the UGB data set. In addition to filling past gaps, DLCD will update the data set to 2024.
Priority Data Sets	• ***Advances the Governor's priorities of addressing housing and homelessness*** The UGB dataset (along with the zoning and land use datasets) is critical to obtaining information needed to advance the Governor's housing production goal of 36,000 homes per year. Proposed legislation to carry-out that goal requires providing continuously accurate, current, and reliable annual UGB layers and attributes from 2004 to 2024 (see endnote 1).
Standards and Stewardship	• ***Updates an existing data standard*** DLCD proposes to create a UGB extension to the Administrative Boundaries standard with new attributes to facilitate detecting and fixing errors in the future. • ***Updates an existing stewardship plan*** DLCD will revise the stewardship methods and procedures to ensure continued accuracy and timeliness of the dataset going forward.

In addition to the six priority criteria, the UGB project meets the Strategic Plan for Geospatial Data Management major goals: 1) improve data sharing and accessibility; and 2) expand data governance. As demonstrated by the attached six letters of support, the overhaul and publication of the UGB dataset will improve data sharing by providing all Oregonians involved with and impacted by urban development with a reliable UGB dataset upon which they may implement their own work. Groups that use the statewide UGB dataset include state and local public bodies, non-profit organizations, land developers,

and residents. Additionally, the project includes creating a UGB data standard and revising the stewardship plan to ensure the UGB dataset remains accurate and timely for all users into the future.

The Framework Data Development Program is intended to leverage existing funds and efforts that develop, define, enhance, update, or integrate geospatial framework data. The UGB project meets these criteria by contributing in-kind-match in DLCD staff time more than double the amount requested.

Expected Benefits

A wide array of Oregonians will benefit from an accurate, complete, up-to-date UGB dataset. As one of the Governor's priorities, housing is a major focus for DLCD, and proposed housing legislation requires that DLCD be able to analyze UGB data going back 20 years.[i] Other Governor's priorities designed to build resiliency in communities also require accurate UGB data to support critical conservation and hazards work of the Oregon Department of Forestry, Oregon Parks and Recreation Department, Oregon Department of Fish and Wildlife, Department Geology Mines and Industry, Oregon Department of Agriculture, and Department of State Lands.

METHODOLOGY

DLCD is proposing this project with three stages of development: 1) Comprehensive UGB Records Research and Data Standard Revision, 2) Data Creation, Assessment, Corrections, and Validation, and 3) Stewardship and Standard Documentation / Publication of annual UGB layers 1980 to 2024.

Stage 1: Comprehensive UGB Records Research & Corrections and Data Standard Revision:

As described in the narrative, the UGB data set is built from acknowledged UGB amendments submitted by cities to DLCD. Amendments may be for expansions, subtractions, or swaps of land. Preliminary research of the PAPA database suggests more than 120 UGB amendments apportioned to 73 of the 218 cities outside of the Metro UGB (the research and corrections stages of this project do not include cities in the Metro UGB because the Metro Agency has a superior data program, and we will incorporate their data into the final geodatabase). Certain UGB amendments are tracked outside of the PAPA database through a different regulatory process, which will contribute to additional research time. There may be additional amendments that are not tracked anywhere due to mislabeling or never having been entered into the PAPA database.

OAR 660-018-0040(4) requires cities to submit specific data to DLCD with their UGB PAPA submittals, and since 2011, the requirements include GIS files. However, many cities do not submit these. From 1980 until 2016, cities submitted paper documents and forms for all planning amendments (i.e., UGBs, zoning, comprehensive plans, etc.) which DLCD entered into an older generation database. In 2014, DLCD built a modern, relational database to manage plan amendments, and in 2016 launched PAPA Online, the public portal through which cities may enter their amendments.

The completeness and quality of UGB data varies between these periods. We know of approximately 30 UGB amendments submitted to DLCD before 2014, and it is possible that additional UGB amendments exist in the archived records. DLCD's archive room houses thousands of PAPAs in paper form submitted prior to the inception of the modern PAPA database. Most of these paper amendments have been migrated to the PAPA database as historical records without the data completeness and quality of the modern submittals, and many are not linked to original documents that still require scanning and uploading. In addition to missing PAPAs, our preliminary research revealed mismatches between acknowledged amendments and the configuration of UGB shapes for that year, with amendments appearing in years before they were acknowledged. After the new database procedures were implemented, data quality greatly improved, however there are still discrepancies between the

Framework statewide layers and cities' interpretations of their UGBs, as well as suspected misalignments between UGBs, city limits, tax lots, and zoning.

DLCD will conduct a comprehensive search and systematic documentation of plan amendment records for the 218 cities outside of Metro to establish a complete, chronological set of acknowledged boundary changes from each city's first acknowledgment in the 1980's to the present. Additionally, we will inventory all geospatial data submitted by cities with their amendments and compare them to the acknowledged amendment descriptions.

DLCD will begin with a copy of the existing Framework UGB geodatabase containing amendments from 1980 to 2019. We will add new attributes to the geodatabase table to document the accuracy of the existing linework and attributes for each record, document corrections, and facilitate tracking of amendments into the future:

- PAPA database ID: number (convert the "DLCD" attribute)
- Jurisdiction Ordinance Number: text
- Jurisdiction Planning File Number: text
- Acknowledged acres: number, positive or negative
- Status of original linework: text, correct or incorrect
- Status of original date of acknowledgement: text, correct or incorrect
- Correct date of acknowledgement (for corrections and new records): date, new value

If original linework is incorrect, the same person researching and entering correction data in the table will add the new, corrected linework and corresponding attributes for an amendment. In addition to correcting errors in the existing geodatabase, DLCD will add to the geodatabase all new amendments starting in 2019 to address more recent gaps in data accuracy.

Concurrently with the research in stage 1, we will convene the Planning Workgroup to create a UGB extension to the Administrative Boundaries Data Standard to add attributes to the annual layer summarizing any amendments for that year for each jurisdiction, such as:

- Acknowledged UGB area by year: number, acres
- Acknowledged change in UGB area by year: number, positive or negative, acres
- PAPA database ID: number (comma-delimited list if multiple in year)
- Jurisdiction Ordinance Number: text (comma-delimited list if multiple in year)
- Jurisdiction Planning File Number: text (comma-delimited list if multiple in year)

These additions will facilitate detecting and fixing errors in the future and allow jurisdictions to link the Framework data to their databases.

Stage 2: Data Element Creation, Assessment, Corrections, and Validation

The Framework UGB data element consists of an annual, statewide aggregation of each city's final UGB configuration. Upon completion of the corrected and updated UGB amendment geodatabase, we will produce the draft 2024 UGB layer by selecting records in the geodatabase with an effective date before or equal to December 31, 2024, and amendment type "original" or "addition" and dissolving records on jurisdiction name. We will assess the accuracy of the 2024 layer by comparing it to 2024 shapefiles collected from cities. In addition to their acknowledged amendments, an unknown number of cities have revised their UGB data over the years without notifying DLCD or submitting a PAPA. Cities (or counties) may have introduced these missed changes from incorporating new surveying, especially in hilly terrain; correcting alignment errors to roads, tax lots, or city boundaries; or accidents interpreting the acknowledged boundaries. Where there are differences, we will consult with cities to determine

when and why they introduced changes. We will edit the UGB amendment geodatabase to add cities' changes that resulted from alignment corrections that agree with amendment descriptions and that are identified as valid updates.

Stage 3: Stewardship and Standard Documentation / Publication of annual UGB layers 1980 to 2024

The final phase of this project will include an update to the 2014 data stewardship plan and the creation of an UGB extension to the Administrative Boundaries data standard. The stewardship plan update will include establishing update protocols to ensure the dataset remains complete and current. The stewardship plan and standard extension will be reviewed and vetted by the Planning Workgroup, submitted to the Framework Coordinator for review and public comment, and submitted to OGIC for final review and approval. DLCD will publish the series of annual UGB layers to Oregon GEOHub, Oregon Explorer applications that use UGBs, DLCD's data webpage, and, in the future, DLCD's public-facing applications.

Deliverables to be Funded by this Proposal

The deliverables for this proposal are:

1. Corrected geodatabase of all UGB amendments from 1980 to 2024 with new attributes.
2. Complete series of annual UGB layers from 1980 to 2024.
3. New UGB extension to the Administrative Boundaries data standard.
4. Revised stewardship plan defining methods and procedures to keep the UGB dataset accurate and current going forward.
5. Updated metadata that meets OGIC's most recent standards.

Project Timeline

The UGB overhaul project consists of three stages beginning in July 2024. DLCD needs to meet reporting deadlines for the governor and legislature so we will be fast-tracking this project. The corrected datasets should be completed by the end of February 2025.

Project stage	2024 Q3	2024 Q4	2025 Q1
Comprehensive Research, Geodatabase Corrections and Data Standard Extension Creation			
2024 Data Element Creation, Validation with Jurisdictions, and Final Corrections (iterative process)			
Stewardship and Standard Documentation / Publication of annual UGB layers 1980 to 2024			

Stewardship Overview

A stewardship plan for the UGB layer already exists and can be found here . The plan was endorsed by OGIC on December 17, 2014, and names DLCD the steward of the layer and the individual cities as custodians of their respective UGB. In summary, DLCD is the long-term steward of the dataset and will update the layer annually. DLCD will update the stewardship plan with procedures that facilitate keeping

the dataset accurate and up-to-date. This Framework data layer is a Class B element because: 1) it depends on several datasets for correct alignment, and 2) the data features and attributes are updated frequently. However, this data layer has a score of 0 for dependencies (no Framework layers depend on the UGB layer), resulting in a Class B stewardship designation.

Data Storage and Distribution Plan

The final data layers will be delivered to the Geospatial Enterprise Office for distribution and storage on GEOHub portal. DLCD will provide regular, annual updates to this dataset as specified in the stewardship plan.

Commitment to Effort

The UGB data element is critical to many business needs for agencies across the state, garnering six letters of support included with this application. In addition to the importance of DLCD providing improved GIS products to local jurisdictions and state agencies, our own work relies on the UGB dataset for virtually all internal analyses and is strongly committed to seeing this project to completion.

Because of this commitment, DLCD will provide in-kind support of over 1,600 dedicated staff hours. Staff time committed to the project by the Urban Planner, GIS Specialist, and Measure 49 Specialist will be paid for by the agency. These staff hours come from DLCD's General Fund and total approximately $100,000.

Relevant Experience/Expertise of Project Team and Organizational Capacity

DLCD has a team of people prepared to participate in this project. These staff members are highlighted below.

Karen Grosulak-McCord is the Urban Planner (Planner II) and is responsible for both review of Post Acknowledgment Plan Amendments and a variety of GIS work for the agency. She is the Administrative Boundaries Framework Implementation Team Lead. Karen will act as Project Manager for this proposal and has experience project managing the 2023 update to the statewide zoning layer. This position is 100% funded by the DLCD General Fund and is part of the Community Services Division.

Sarah Marvin is the Measure 49 Specialist (Planner III) and splits her time between Measure 49 coordination and GIS work for the agency. She is the Land Use Land Cover Framework Implementation Team Lead. She has more than 30 years' experience in GIS. Sarah was a core participant in the 2023 update to the statewide zoning layer and the 2021 creation of the land use layer and will provide secondary project management and technical expertise for this project. This position is 100% funded by the DLCD General Fund and is part of the Planning Services Division.

Randy Dana will lead the technical aspects of this project. Randy has more than 20 years of experience as a GIS analyst and currently oversees the administration of the DLCD data library and GIS projects for the Oregon Coastal Management Program (OCMP). Randy was the technical expert for the 2023 update of the statewide zoning layer and the 2021 creation of the land use layer. Ninety percent of his position is funded by the National Oceanic and Atmospheric Administration (NOAA), and funding through this request will allow Randy to dedicate a portion of his time on this project.

The agency is hiring an **ISS4 GIS Specialist** to assist the department in overall GIS needs and projects. The ISS4 is a full-time, permanent staff member, and recruitment for this position is scheduled for March 2024. A successful applicant will have the minimum qualifications of the ISS4 classification and will meet additional agency requirements such as GIS proficiency, scripting, and modeling experience.

BUDGET JUSTIFICATION STATEMENT

The proposed project budget presented in Table 1 below shows a total fund request of $32,270 to support two positions. Framework funds will allow GIS staff in a federally funded position (Randy Dana) the ability to work on a statewide, non-federal project. The second position will be a part-time temporary or student internship. The agency will provide match dollars using three General Fund positions (Karen Grosulak-McCord, Sarah Marvin, and the GIS Specialist position) that total more than double the requested Framework funds.

BUDGET

The Project Budget table below provides the detailed budget proposed for the project. As mentioned in the Budget Justification, this proposal is designed to allow a federally funded GIS analyst to work on this project, because federally funded positions are not allowed to participate on non-federal projects without outside funding. The proposal also requires a temporary or internship position.

PROJECT BUDGET			
Budget Item	**Role/Task**	**Time**	**Cost**
Federally Funded GIS Analyst (Randy Dana)	Data development; QA/QC technical support; Stewardship plan; Meetings & coordination	180	$14,670
Student and/or Temporary Workers (to be hired)	Initial research; data development; QA/QC; Outreach; Misc. support	880	$17,600
	Total FIT Estimated Hours	1060	
		Total FIT Funds Requested	**$32,270**
Budget Item – In-Kind Match	**Role/Task**	**Time**	
Urban Planner (Karen Grosulak-McCord)	Project management / meetings & coordination; initial research; data development; QA/QC; stewardship plan	550	~$30,000
M49 Coordinator (Sarah Marvin)	Initial research; data development; technical support; QA/QC; stewardship plan; meetings & coordination	540	~$38,000
ISS4 GIS Specialist (to be hired)	Initial research; data development; technical support; QA/QC; stewardship plan; meetings & coordination	580	~$32,000
	Total In-Kind Match Hours	1670	~$100,000
		Total Project Cost	**$132,270**

OPTIONAL INFORMATION

Attached letters of support included from the following partner agencies:

- Oregon Department of Forestry
- Oregon Department of Agriculture
- Oregon Parks and Recreation Department
- Oregon Department of Geology and Mineral Industries
- Oregon Department of State Lands
- Oregon Department of Fish and Wildlife

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[i] Historical and current UGBs, Zoning, and Land Use datasets are required to accurately identify cities and lands that meet these legislative criteria for a one-time, UGB expansion for housing:

"**SECTION 50. City addition of sites outside of Metro**.
(1) Notwithstanding any other provision of ORS chapter 197A, a city outside of Metro may add a site to the city's urban growth boundary under sections 49 to 59 of this 2024 Act, if:
"(a) The **site is adjacent to the existing urban growth boundary of the city or is separated from the existing urban growth boundary by only a street or road**;
"(b) The site is:
"(A) **Designated as an urban reserve** under ORS 197A.230 to 197A.250, including a site whose designation is adopted under ORS 197.652 to 197.658;
"(B) **Designated as nonresource land**; or
"(C) Subject to an **acknowledged exception to a statewide land use planning goal relating to farmland or forestland**;
"(c) The city has not previously adopted an urban growth boundary amendment or exchange under sections 49 to 59 of this 2024 Act;
"(d) The city has demonstrated a need for the addition under section 52 of this 2024 Act;
"(e) The city has requested and received an application as required under sections 53 and 54 of this 2024 Act;
"(f) The **total acreage of the site:**
"(A) For a city with a **population of 25,000 or greater, does not exceed 100 net residential acres**; or
"(B) For a city with a **population of less than 25,000, does not exceed 50 net residential acres**; and
"(g)
(A) The city has adopted a binding conceptual plan for the site that satisfies the requirements of section 55 of this 2024 Act; or
(B) The added site does not exceed 15 net residential acres and satisfies the requirements of section 56 of this 2024 Act.

SECTION 52. City demonstration of need. A city may not add, or petition to add, a site under sections 49 to 59 of this 2024 Act, unless:
"(1) The city has demonstrated a need for additional land based on the following factors:
"(a)

(A) In the **previous 20 years** there have been **no urban growth boundary expansions** for ***residential use*** adopted by a city or by Metro in a *location adjacent to the city*; and

"(B) The city does not have within the existing urban growth boundary an ***undeveloped, contiguous tract that is zoned for residential use that is larger than 20 net residential acres*;** or

"(b) *Within urban growth boundary expansion areas for residential use adopted by the city over the previous 20 years*, or by Metro in locations adjacent to the city, *75 percent of the lands* either:

"(A) ***Are developed***; or

"(B) Have an acknowledged comprehensive plan with land use designations in preparation for annexation and have a public facilities plan and associated financing plan.

"(2) The city has demonstrated a need for affordable housing, based on:

"(a) Having a greater percentage of extremely cost-burdened households than the average for this state based on the Comprehensive Housing Affordability Strategy data from the United States Department of Housing and Urban Development; or

"(b) At least 25 percent of the renter households in the city being severely rent burdened as indicated under the most recent housing equity indicator data under ORS 456.602 (2)(g).

"SECTION 58. Alternative urban growth boundary land exchange.

(1) In lieu of amending its urban growth boundary under any other process provided by sections 49 to 59 of this 2024 Act, Metro or a city outside of Metro may amend its urban growth boundary to add one or more sites described in section 51 (1)(a) and (b) of this 2024 Act to the urban growth boundary and to remove one or more tracts of land from the urban growth boundary as provided in this section.

(2) The acreage of the added site and removed lands must be roughly equivalent.

(3) The removed lands must have been **zoned** for residential uses.

(4) The added site must be **zoned for residential uses at the same or greater density than the removed lands**.

SECTION 59. Reporting on added sites.

A city for which an amendment was made to an urban growth boundary and approved under sections 49 to 59 of this 2024 Act shall submit a report describing the status of development within the included area to the Department of Land Conservation and Development every two years until:

(1) **January 2, 2033**; or

(2) The city determines that development consistent with the acknowledged conceptual plan is deemed complete.

SECTION 60. Sunset.

Sections 49 to 59 of this 2024 Act are repealed on January 2, 2033.

Oregon
Tina Kotek, Governor

Department of Geology and Mineral Industries
Administrative Offices
800 NE Oregon St., Suite 965
Portland, OR 97232-2162
(971) 673-1555
Fax: (971) 673-1562
www.oregon.gov/dogami

To: Oregon Geographic Information Council (OGIC)
From: Ruarri J. Day-Stirrat, State Geologist and Executive Director
Oregon Department of Geology and Mineral Industries
Date: February 22, 2024
Subject: Framework Data Development Grant Program

Dear Review Panel:

On behalf of the Oregon Department of Geology and Mineral Industries (DOGAMI), I am writing this letter to strongly encourage funding DLCD's proposal to the OGIC Framework Data Development Grant Program to update two very important data sets for the state: urban growth boundaries (UGBs) and zoning layers. The successful outcomes of DOGAMI's scientific studies are wholly dependent on a variety of accurate, complete, and fully verified GIS layers from DLCD, including UGB, zoning, land use, tax lots, estuary information, and others. These key GIS layers allow DOGAMI to both conduct primary investigations into geologic hazards, but also allow us to collaborate with DLCD with goals to understand hazard, determine risk, and find risk reduction opportunities in Oregon.

Sincerely,

Ruarri J. Day-Stirrat, PhD, State Geologist and Executive Director, DOGAMI

Cc: Jason D. McClaughry, Geological Survey and Services Program Manager

Oregon
Tina Kotek, Governor

Oregon Department of Fish and Wildlife
Director's Office
4034 Fairview Industrial Dr SE
Salem, OR 97302
503-947-6044
FAX: 503-947-6042
dfw.state.or.us

February 21, 2024

Brenda Ortigoza Bateman
Director, Oregon Department of Land Conservation and Development
635 Capitol Street NE, Suite 150
Salem, OR 97301-0050
Sent via email to: brenda.o.bateman@dlcd.oregon.gov

RE: OGIC Framework Data Development Grant Proposals from DLCD for land use planning layers

Dear ~~Director~~ Brenda Bateman,

The Oregon Department of Fish and Wildlife (ODFW) supports the Oregon Department of Land Conservation and Development's (DLCD's) two grant applications to the Oregon Geographic Information Council (OGIC) Framework Data Development Grant Program, which propose updates to two very important data sets for the state: urban growth boundaries (UGBs) and zoning layers.

Funding and development of these important spatial data layers helps DLCD better support Oregon's statewide land use planning system. Oregon's statewide land use planning system helps manage urban growth and protects farms, forestlands and natural resource lands – lands which also provide habitat for fish and wildlife. Decisions about how best to manage Oregon's growth and conservation of its natural resources depend on high-quality and up-to-date spatial information.

ODFW's mission is to protect and enhance Oregon's fish and wildlife for use and enjoyment by present and future generations. Our ability to protect and enhance fish and wildlife depends on the long-term sustainability of their habitats, which depends on how Oregon plans and makes decisions on its patterns of growth and development. ODFW has a vested interest in seeing these important data layers be updated, as the decisions that flow from this information can help guide Oregon's growth in ways that result in the best possible outcomes for fish and wildlife.

We understand that DLCD is submitting two applications to the OGIC, one for updating the UGB layer and one for updating the zoning layers. Both of these data sets are important and in need of updating. Please pass along ODFW's support for both applications to OGIC, and we look forward to our continued collaboration with DLCD as essential partners in the long-term resiliency of Oregon's communities, working lands, and fish and wildlife habitats.

Sincerely,

Curtis E. Melcher
Director

OREGON
DEPARTMENT OF
AGRICULTURE

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Director's Office
635 Capitol St NE, Salem, OR 97301-2532
503.986.4550 | Oregon.gov/ODA

Oregon Geographic Information Council (OGIC)
Framework Data Development Grant Program

Council Members

We understand that the Oregon Department of Land Conservation and Development (DLCD) is submitting two grant requests that would help to update two very important data sets for the state. These include urban growth boundaries (UGBs) and zoning layers. The Oregon Department of Agriculture (ODA) supports these two requests and urges that these grants be authorized.

ODA routinely uses these two data sets in many areas of our work. Examples have included the monitoring and analysis of the effectiveness of land use tools used to protect agricultural lands, the impacts of past wildfire events to agriculture, analysis of individual land use proposals such as energy facility siting, the effectiveness of pest management actions and analysis of legislative and other policy issues related to urban growth boundary expansions, agritourism regulation, canola mapping and regional problem-solving initiatives.

The effectiveness, accuracy, and credibility of our work is dependent on up-to-date, accurate data. An update of these two data layers is key to maintaining the usability and credibility of these important data layers. ODA supports the DLCD grant request and encourages the OGIC to fund both proposals.

Thank you for considering our comments.

Respectfully,

James W. Johnson
Land Use and Water Planning Coordinator

Oregon
Tina Kotek, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 986-5200
FAX (503) 378-4844
www.oregon.gov/dsl

February 23, 2024

Brenda Ortigoza Bateman, Ph.D.
Director, Oregon Dept. of Land Conservation & Development
635 Capitol Street NE #150
Salem, OR 97301
By Email: brenda.o.bateman@dlcd.oregon.gov

Re: OGIC Grant Requests

Dear Dr. Bateman:

Thank you for your inquiry into whether the Department of State Lands has an interest in DLCD's grant applications to Oregon Geographic Information Council (OGIC) for updating UGB & zoning data layers. I have checked with our staff and the answer is a resounding yes! We fully support your grant applications.

The Department of State Lands (DSL) utilizes this GIS data layer information in a variety of ways. Urban growth boundary datasets are critical to DSL to understand areas of future growth so that we can plan for requests for services that we provide, such as wetland delineations, permitting, compensatory mitigation, and uses of Oregon-owned waterways. This dataset is important not only for analyses, but also to know where certain exemptions may or may not apply.

DSL also relies on zoning information to inform several Department rules and processes within the Removal-Fill program, such as whether a Removal-Fill permit is required, how wetlands and streams may or may not provide certain functions and values and how unavoidable impacts should be mitigated, and how mitigation payments to the Department are calculated. And, again, as with UGB datasets, the zoning dataset is helpful to know where certain exemptions may or may not apply, especially items like the agricultural exemptions that can apply on EFU zoned land.

Our Real Property program relies on datasets to help us determine state ownership of lands. Zoning changes and UGB delineations can change the value of our property and how we can manage it.

As you have noted in previous communications, having accurate spatial data is essential to understanding the effects of policy decisions that affect key elements of Oregon's land use planning system at regional and statewide scales, including housing, economic development, farm, forest, environmental sustainability, and natural hazard mitigation. And we have seen significant changes in how residential zones are classified due to middle-housing legislation and

the desire to increase the number of housing units for Oregonians. Using old wetlands and wetland soils datasets can be misinterpreted and misused in some analyses creating all sorts of chaos.

In summary, DSL fully supports the grant opportunities available to DLCD through OGIC and could benefit immensely from the upgrades this work would provide.

Sincerely,

Vicki L. Walker,
Director
Vicki.walker@dsl.oregon.gov

Cc: Dana Hicks, DSL Planning & Policy Manager
Jevra Brown, DSL Aquatic Resource Planner

Oregon
Tina Kotek, Governor

Department of Forestry
State Forester's Office
2600 State St
Salem, OR 97310-0340
503-945-7200
www.oregon.gov/ODF

February 12, 2024

Brenda Ortigoza Bateman, Ph. D., Director
Oregon Department of Land Conservation and Development
635 Capitol Street NE, Suite 150
Salem, OR 97301-2540

RE: Letter of Support – OGIC Grants

Dear Dr. Ortigoza Bateman,

The Oregon Department of Forestry (ODF) is pleased to express our full support for your grant applications to the Oregon Geographic Information Council (OGIC) aimed at updating the Urban Growth Boundary (UGB) and Zoning data sets. These crucial data sets play a pivotal role in the state's Framework Data, serving as indispensable resources that offer valuable insights to both ODF and the broader Framework community.

The UGB data is essential for managing urban development and delineating growth boundaries, while the Zoning data provides critical information on land use regulations and zoning designations. Keeping these datasets current and accurate is paramount for informed decision-making and sustainable land management practices across the state.
We extend our sincere appreciation to the Department of Land Conservation and Development (DLCD) for assuming the role of named stewards for this data. Their dedication to ensuring the reliability and accuracy of these datasets is commendable, and we are grateful for their ongoing efforts to maintain the integrity of the information that underpins key decision-making processes.

As stakeholders in Oregon's geospatial community, we recognize the importance of collaborative initiatives that enhance the quality and accessibility of data. The support provided by OGIC through grant funding aligns with our shared commitment to advancing the state's geospatial capabilities and promoting effective resource management.

Sincerely,

Cal Mukumoto
Oregon State Forester

Oregon
Tina Kotek, Governor

Parks and Recreation Department
725 Summer St. NE, Suite C
Salem, OR 97301-1271
(503) 986-0980
Fax (503) 986-0794
stateparks.oregon.gov

February 23, 2024

Molly Gartrell Earle
Oregon Geographic Information Council

Dear Chair Molly Gartrell Earle,

I am pleased to write in support for the Oregon Department of Land Conservation and Development's (DLCD) requests for Oregon Geographic Information Council (OGIC) Framework Funding to build out the Urban Growth Boundary (UGB) dataset and update the 2025 statewide zoning data layers.

DLCD has consistently demonstrated a strong commitment to continual growth and refinement in their data and research. Their proposals to improve these datasets will ensure more current and reliable information that can be shared and utilized across the state. This type of data plays a pivotal role in comprehending the ramifications of planning and policy implications for Oregon Parks and Recreation Department (OPRD) and other land management agencies such as ours.

Specifically, the UGB layer and zoning layer projects will assist our park planning efforts by allowing us to understand the opportunities and limitations in the land we manage. We engage in land acquisitions, sales, exchanges and donations. Understanding the zoning of properties and where they are in relation to UGBs will streamline our evaluation and planning processes. As these datasets grow in accuracy, we will be able to leverage its expertise to provide much needed confidence as we evaluate properties during these transactions.

Funding for this dataset support will also offer another advantage in our management of the Willamette Greenway. Currently, the zoning mapping along the Willamette Greenway is split between multiple agencies and counties. An accurate and comprehensive resource is currently unavailable to aid in the development of recreational opportunities along this significant natural environment.

We fully support DLCD in pursuit of these projects and look forward to our continued collaboration to enhance recreational opportunities and improve stewardship of Oregon's special spaces. We strongly encourage OGIC to fully fund these requests.

Sincerely,


Lisa Sumption (Feb 14, 2024 10:48 PST)

Lisa Sumption
Director

Enterprise Information Services
Geographic Information Council
550 Airport Road SE, Suite C
Salem, OR 97301

Statewide Historic Vegetation Update	**Review Panel Score: 30**
Technical	Overall good project. Took one point off on the technical side for the likely need of additional development of methods when running into historic reconciliation issues (e.g., instances where the timber map may be suspected to be more spatially or categorically precise).
Policy	Important that we complete datasets when the opportunity arises. This update will complete a dataset that will not need regular updates once complete. Project is described well and has multiple use cases. Also creates a stewardship plan for this dataset.

Statewide Historic Vegetation Update

CONTRIBUTORS:

Prepared By Include primary project staff including agency or organization affiliation	
1. Eleanor Gaines, Institute for Natural Resources, Portland State University, egaines@pdx.edu 2. Ray Brunner, Institute for Natural Resources, Portland State University 3. Karena Bayruns, Portland State University Sponsored Projects Administration, SPA_INR@pdx	
Contact Name	***Contact Email***
Ray Brunner	rbrunner@pdx.edu

PROJECT DETAILS:

Expected Project Begin Date	**Expected Project End Date**		**Amount of Funding Requested**
07/01/2024	12/31/2025		$19,067

PRIORITY CRITERIA:

Project Objectives			
☒	Improve data quality or accuracy of existing Framework data element	☐	Increase update frequency of existing Framework data element
☐	Fill gaps in existing Framework data element, geography, or critical attribute(s)	☐	New data identified in Framework Program Work Plan as "Data Element for Future Consideration"
Priority Data Sets			
☐	Foundational data [1]set as currently listed in Framework Data Inventory		
☐	Ties directly to the Governor's priorities (Housing and Homelessness, Behavioral Health, Education and Early Learning)	☐	Ties directly to OGIC's data sharing priority layers (Parcel data, Address points, Road centerlines)
Standards and Stewardship			
☒	Creates or updates a stewardship plan		
☐	Creates or updates a data standard		
Framework Program Requirements (New datasets only) - NOT SCORED			
☒	Needed by multiple agencies (user-groups identified)	☒	Statewide data set
☒	Multiple use-cases identified	☐	Data required by statute

[1] Foundational Framework data elements are base geospatial data used for constructing a majority of Framework data elements and are required for achieving the highest levels of integration among Framework themes.

TABLE OF CONTENTS

PROJECT ABSTRACT (200 WORDS)

Successful proposal abstracts to be posted to the GEO website.

The Statewide Composite Historic Vegetation layer is a composite of timber maps from the 1930s and General Land Office (GLO) records-based maps. The GLO-based maps largely include richer floristic data and provide a better reflection of pre-settlement conditions. Vegetation maps based on GLO records were completed 1994 and 2018. The Statewide Composite Historic Vegetation layer was created prior to the completion of all the GLO maps and it only includes the earlier GLO maps, (notably the Willamette Valley). The effort will integrate the more recent piecemeal GLO mapping efforts into the statewide vegetation map. Specifically, we will integrate maps of the Deschutes National Forest (mapped in 2016); Rogue, Lower Applegate, and Upper Illinois Valleys (2012); the Harney Basin (2013); the Oregon Coast (2018), and the Eastern Columbia Gorge (2010).

We will also tie metadata fields to each polygon in the resulting statewide map, indicating where the historic vegetation data is derived from and what dates it represents. Finally, we will write a Stewardship Plan for the Historic Vegetation dataset.

PROJECT NARRATIVE (2 PAGES)

The project narrative will become the Statement of Work for successful proposal agreements.

Project Scope

Brief overview of the proposed project. May include the project purpose, an introduction and/or background for the proposed project, and/or other relevant information that is not found elsewhere in the narrative.

The Statewide Composite Historic Vegetation framework layer is regularly used to understand historic changes in vegetation and the history of Euro-American settlement. As an example, Oregon Department of Fish and Wildlife uses the Historic Vegetation layer as a baseline to identify changes in habitat availability since European contact. This comparison is a vital part of the Oregon Conservation Strategy, and allows ODFW to document progress towards conservation of priority habitat types.

The Statewide Composite Historic Vegetation layer on GEOHub today does not reflect the best available information about historic vegetation in the state. Instead, it reflects the best available information from when it was last updated. The proposed effort will bring the dataset up to date with our contemporary knowledge of historic vegetation and provide transparency regarding the source data that each polygon was derived from.

The Statewide Composite Historic Vegetation layer is a composite of Andrews and Cowin timber maps from the 1930s and General Land Office (GLO) records-based maps. The GLO-based maps reflect conditions from as early as 1851 and usually include richer floristic data. Compared to the timber maps, they provide more information about earlier conditions. There are five additional historic vegetation maps made from GLO records that are not included in the current historic vegetation layer. This effort will reconcile these recent piecemeal GLO mapping efforts into an updated Statewide Composite Historic Vegetation map. Specifically, the effort will consider the following GLO-based vegetation maps that are not currently represented in the statewide historical vegetation layer:

- 2016 Deschutes National Forest
- 2012 Rogue Valley, Lower Applegate, Upper Illinois Valley
- 2013 Harney Basin
- 2018 Oregon Coast
- 2010 Eastern Columbia Gorge, Eastern Slope Mount Hood

The statewide historical vegetation layer is a composite built of multiple sources of historic vegetation data and this effort will further expand the number of sources in the updated map. To help stakeholders better interpret the final product, we will also tie a metadata field to each polygon, indicating where the historic vegetation data is derived from and the date(s) it represents.

Finally, we will develop a Stewardship Plan for the Historic Vegetation data element.

Relationship to Oregon Framework

Brief description of how the need for the project and how outcomes fit into the Oregon Framework Program. May include relevant themes and/or data elements, past Framework projects, or future relevant work efforts.

This project aims to improve the data quality of the Historic Vegetation framework data element. The current layer was built from the best available information on historic vegetation when it was made. Since then, additional portions of the state have been mapped from GLO records, so the GEOHub layer no longer reflects the best available information. This project will remedy that, updating the layer to integrate the best available information about pre-settlement vegetation and land cover. It will also add metadata to the data element, identifying the source and date of each historic vegetation polygon.

Expected Benefits

Describe how project deliverables and outcomes will benefit the Oregon Framework Program and the GIS community of Oregon. External benefits and priorities may also be included in this subsection.

Incorporating additional GLO survey data into the state layer will increase the accuracy and ecological nuance represented in the state layer. Historic vegetation provides an invaluable lens through which to understand human and ecological dimensions of our past, present, and future. As land managers and state decision-makers confront a rapidly changing climate, massive land use shifts, and mounting anthropogenic stressors, they often look to the recent past. The Statewide Composite Historic Vegetation and its contrast with contemporary conditions provides a valuable lens through which to understand current vegetation condition and trajectories as well as our cultural and political history. For example, our understanding of the magnitude of loss of prairie and savannah ecosystems in the Willamette Valley is heavily based on Historic Vegetation mapping. Most immediately, the Institute for Natural Resources plans to work with the Oregon Department of Fish and Wildlife to use an updated Historic Vegetation layer to reassess changes in land use and land cover since Euro-American settlement years to support the upcoming Oregon Conservation Strategy update. The Historic Vegetation layer is used to model historic vertebrate and plant species distributions across Oregon, allowing for comparison with current distributions and estimates of change over time.

The Statewide Composite Historic Vegetation layer on GEOHub today reflects a composite of vegetation conditions that span 86 years of rapid change, from 1851 (initial GLO surveys) to 1937. Adding metadata fields will allow GIS users to pinpoint the source and date of the historic vegetation. It will also facilitate future updates to the maps as more detailed information becomes available.

METHODOLOGY (6 PAGES)

Fully describe the planned procedures and protocols to be used to develop project deliverables. Describe technical issues that will need to be addressed (i.e., edge-matching, raster-image compression ratios, appropriate precision, and accuracy) and reference any Oregon or National standards project will follow.

For each of the five new GLO maps (Deschutes National Forest, Rogue Lower Applegate, and Upper Illinois Valley; Harney Basin; Oregon Coast; and the Eastern Columbia Gorge), we will:

1. Create a crosswalk between the GLO map vegetation classes and the VEGNAME classes that are used in the Statewide Composite Historic Vegetation layer.
2. Use the crosswalk to assign each polygon in the GLO map to a single VEGNAME class.
3. Replace the vegetation polygons in the current map with GLO polygons in the footprint of the GLO mapping.
4. Integrate the new layer into a seamless coverage. As was previously done for this layer, we will manually edit peripheral polygons to create a seamless and ecologically plausible transition between the two sources of data. Adjacent 1930s timber polygons will be reshaped following ecological and topographic boundaries to smoothly meet the GLO polygons without artificial discontinuities. The final layer will also be comprehensive, with no gaps and no overlap.

For the whole Historic Vegetation layer (including polygons that are not updated in this work), we will add two metadata fields to the attribute table for each polygon:

1. Source: This field will indicate the source of the historic vegetation information, the specific GLO mapping effort or the source quadrangle from the 1937 timber maps.
2. Date: This field will represent the date or date range of the historic vegetation data.

Finally, we will write a stewardship plan for this dataset that identifies a data steward and their responsibilities, as well as update and maintenance processes for the dataset moving forward. The current steward of this layer no longer works for the Institute for Natural Resources.

Deliverables to be Funded by this Proposal

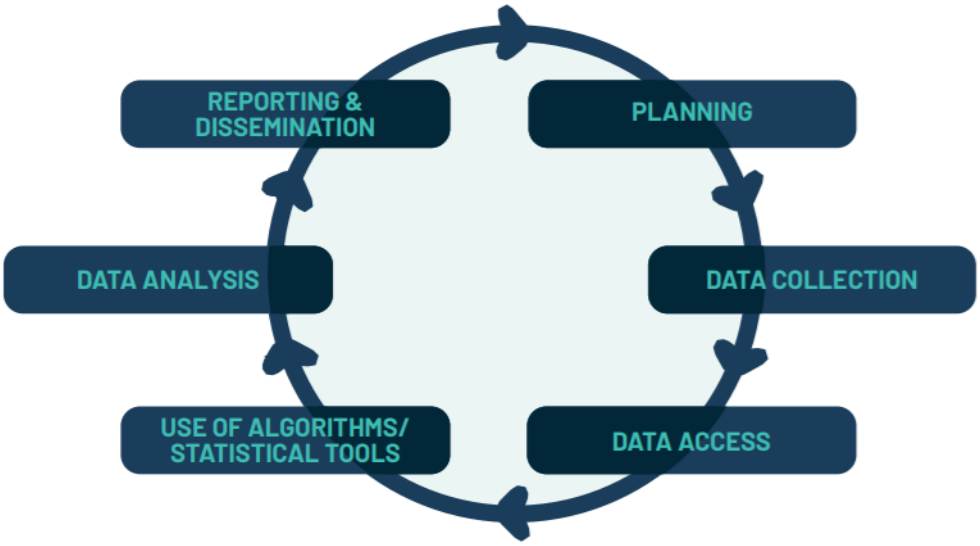
Brief description of project deliverables. All projects are required to include a stewardship deliverable. See supporting guidance under subsection “Stewardship Overview” for more information. If project is focused on an aspect of the data life cycle[2] beyond data collection (development), that should be clearly indicated in the proposal, including value of the approach.

The deliverables for this work will be:

- An updated Statewide Composite Historic Vegetation Layer reflecting the best available information about 1851-1937 vegetation and associated metadata.
- A Stewardship Plan to support the dataset moving forward.

[2] Data Life Cycle - https://aisp.upenn.edu/wp-content/uploads/2020/07/AISP-Toolkit_5.27.20.pdf

Figure 1. Data Life Cycle



Project Timeline

Document major milestones, tasks, and/or expected timeframes for deliverables and outcomes. Gantt charts are a simple but effective format for completing this subsection of the proposal but are not required. Example formats are provided in Appendix B.

Dates	Tasks	Deliverables & outcomes
Fall 2024	Vegetation Crosswalks	Create crosswalks between each of the five GLO maps and the VEGNAME classification in the Historic Vegetation Layer
Winter 2025	Burn in GLO maps	Replace the 1930 timber map polygons with the GLO polygons and clean up edges.
Spring 2025	Statewide Metadata Stewardship Plan Deliver Map and Plan	Fill Source and Date fields for each polygon. Write Stewardship Plan. Deliver Map and Stewardship Plan

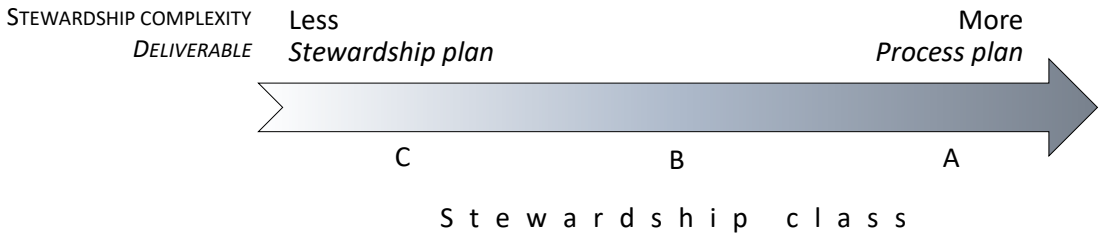
Stewardship Overview

This subsection of the proposal should briefly describe how data element deliverable(s) will be maintained and identifies the data steward. The subsection elaborates on and justifies the stewardship deliverable's content. The more information provided by the applicant in this section the better. More information suggests greater knowledge of the stewardship landscape for the data. If the landscape is unclear, this should be stated, along with information about how to elucidate said landscape.

All projects are required to deliver either a stewardship plan or a process plan that will lead to a stewardship plan and involves the proposing public body. The proposed work product's or data

element's *stewardship class*[3] will be the main determinant for the stewardship deliverable's content (Figure 1). Class C data elements require minimal stewardship documentation and therefore should identify a stewardship plan as a deliverable. Development of stewardship plans for Class A elements are likely to require more time and resources than are allowable under this program, therefore a *process plan* leading to a stewardship plan is required for these elements. Class B elements may or may not require a stewardship plan deliverable depending on the circumstances described in the proposal. Additional information on stewardship is available from the GEO website.[4]

Figure 1. Successful stewardship can depend on multiple factors.



This data layer is a Class B Stewardship element rather than a Class C element solely by virtue of having more than one data source. While there is more than one data source, we do not anticipate significant additions to the dataset in the future. We will write a stewardship plan as part of this work.

INR currently houses the Historic Vegetation layer. We don't know of any additional unexplored sources of historic vegetation data but we will consider additional historic vegetation data for inclusion as it becomes available.

Data Storage and Distribution Plan

Describe how deliverables will be stored, distributed, and any anticipated restrictions to distribution. In general, data products will be delivered to the Geospatial Enterprise Operations for storage and publication on GEOHub. If an alternative storage location is anticipated, identify the expected storage facility, and describe how the project deliverables will be distributed. Brief discussions of data security may be appropriate for this subsection.

The final updated layer and metadata will be delivered to Geospatial Enterprise Operations for storage and publication on GEOHub. There are no security concerns for this historic dataset.

Commitment to Effort

Describe actions and opportunities that indicate commitment by your organization or your proposal team for the project deliverables and outcomes. Information may include, but is not limited to, your organization's requirement for the project deliverables and activities related to the proposed project or its deliverables/outcomes.

[3] For stewardship class definitions, refer to the "Expert Key to Classify Framework Elements for Stewardship" https://www.oregon.gov/geo/Documents/Expert%20Key%20to%20Classify%20Framework%20Elements%20for%20Stewardship.pdf

[4] http://www.oregon.gov/geo/Pages/data-stewardship.aspx

The Institute for Natural Resources (ORS 352.808) works to deliver management-relevant information that informs discussions and decisions about the long-term stewardship of Oregon's natural resources, and works to advance centralized, science-based natural resource information for Oregon and the Pacific Northwest. As Oregon's Natural Heritage Program, we created both the existing Historic Vegetation layer and the GLO maps that are proposed for inclusion in the updated layer. We are committed to making the best available historic vegetation information available to GIS users and the lay public throughout the state.

Relevant Experience/Expertise of Project Team and Organizational Capacity

Describe the project team's skills and relevance to the project's success. Organizational resources, experience, expertise, etc. may be used to identify organizational capacity for the proposed project.

The INR Project Team is made up of Ray Brunner (Vegetation Ecologist), Andrew Christensen (GIS Analyst) and Eleanor Gaines (Director).

Ray Brunner has worked in plant ecology in the Pacific Northwest for more than 10 years. She earned a Master's of Science in Botany from the University of Wisconsin-Madison, where she studied decadal trends in native vegetation composition at Haleakala National Park. She is a PhD Candidate at Oregon State University in Botany and Plant Pathology, working on quantifying plant identification and detection errors in monitoring data. She has worked at Institute for Natural Resources as a Vegetation Ecologist since 2015, primarily on vegetation mapping projects. Her expertise includes plant community description and mapping, vegetation monitoring, field botany, GIS, and statistics.

Andrew Christensen has worked at the Institute for Natural Resources since 2019. He is a Master of Science in Geography candidate at Portland State University, where he has focused on riparian ecology and the effects of new methods of revegetation on stream restoration effectiveness. He has worked as the GIS Analyst on projects focused on conservation, species distribution, and land use monitoring.

Eleanor Gaines is the Director of the Institute for Natural Resources at Portland State University. She has coordinated Snowy Plover monitoring along the central and southern Oregon Coast for many years, and her PhD research examined the effects of management on Oregon's Snowy Plover productivity and population growth. She has worked on conservation and mapping projects throughout her career and she is passionate about conservation biology, species status assessment, and distribution mapping.

Institute for Natural Resources (INR) staff created the Statewide Composite Historic Vegetation dataset and the newer GLO maps and INR still houses the documentation and source data for these efforts. Ray Brunner has taken over the Ecology program at INR and has been primarily working on Vegetation Mapping projects since 2015. Jimmy Kagan and John Christy led much of INR's historic vegetation mapping. Both are now retired but still doing some work with INR and able to answer questions if needed. INR also has significant GIS computing resources and expertise that can be applied to this work.

BUDGET JUSTIFICATION STATEMENT (1 PAGE)

Explain the need for each line item in the budget. Successful statements will convey why the costs are necessary for project success. Please note that OGIC will reimburse only the direct project costs; indirect costs cannot be reimbursed. See OGIC's indirect cost policy.

Overview

This project will use existing Institute for Natural Resources computing resources, so the sole cost is to support staff time to do the proposed work. Specifically, Ray Brunner will work on the vegetation crosswalks and metadata fields, Andrew Christensen will burn the GLO maps into the Statewide Composite Historic Vegetation Layer and Eleanor Gaines will administer the grant.

Salaries

Ray Brunner, Vegetation Ecologist (1 person month). Funds are requested to support effort during the project period equivalent to one month of full-time work. Brunner will work on the vegetation crosswalks, creating crosswalks between each of the five GLO maps and the VEGNAME classification in the Historic Vegetation Layer. Brunner will also fill Source and Date fields for each polygon, and write the Stewardship Plan. The cost estimate is based on Institutional Base Salary with a 3.5% anticipated inflation escalation.

Andrew Christensen, GIS Analyst (1 person month). Funds are requested to support effort during the project period equivalent to one month of full-time work. Christensen will burn the GLO maps into the Statewide Composite Historic Vegetation Layer and clean up edges. The cost estimate is based on Institutional Base Salary with a 3.5% anticipated inflation escalation.

Eleanor Gaines, Director of the Institute of Natural Resources (0.05 person month). Funds are requested to support effort during the project period equivalent to 0.05 month of full-time work. Gaines will oversee the financial and administrative requirements for the grant tracking and reporting with Portland State University's Sponsored Projects Administration Office. The estimate is based on Institutional Base Salary with a 3.5% anticipated inflation escalation.

OPE/Fringe benefits

PSU charges the actual cost of each fringe benefit direct to sponsored projects. However, it uses a fringe benefit rate based on expenditures, which is applied to salaries and wages in budgeting fringe benefit costs under project proposals. Fringe Benefits are based on two components: a fixed dollar figure for medical and dental benefits and a variable percentage for such items as retirement contributions, FICA, and unemployment compensation. Portland State University's fringe benefit rate estimates are consistently calculated using the individual's expenditure data from our financial system to identify the total fringe benefit costs for each individual in relation to the individual's salary.

BUDGET (1 PAGE)

- Identify funds from partners, other project related funds, matching funds, etc.
- Estimate of in-kind match
- Identify any unfunded activities
- Include information about any planned contracting
- Example budget formats are provided in Appendix A

	FTE	Monthly Salary	Project Months	Salary Cost	OPE Rate	OPE Cost	Total Cost
SALARIES	%						
Ray Brunner, Ecologist	1.00	$5,449	1.00	$5,475	0.87	$4,763	$10,238
Andrew Christensen, GIS Analyst	1.00	$5,449	1.00	$5,475	0.50	$2,738	$8,213
Eleanor Gaines, Project Manager	1.00	$7,517	0.05	$378	0.63	$238	$616
Total Salaries				$11,328		$7,739	**$ $19,067**
TOTAL DIRECT COSTS							**$ $19,067**
TOTAL COST							**$ $19,067**

OPTIONAL INFORMATION (2 PAGES)

- Related Oregon Revised Statutes (ORS) and Oregon Administrative Rules (OAR)
- Relevance of project to broad-scale efforts to improve service provisioning to Oregonians by government and other public bodies
- Relevance towards Governor's Priorities
- Relevance towards OGIC's Priorities
- Letters of support or participation (not included in page count)
    - At least one support letter from a relevant Framework Implementation Team indicating endorsement or sponsorship of the proposal is recommended.

Oregon
Tina Kotek, Governor

Department of Fish and Wildlife
Habitat Division
4034 Fairview Industrial Dr SE
Salem, OR 97302
Phone: 503-947-6000
Fax: 503-947-6330
www.dfw.state.or.us

February 29, 2024

Eleanor P. Gaines
Director, Oregon Biodiversity Information Center (ORBIC)
Institute for Natural Resources, Portland State University
PO Box 751
Portland, OR 97207
Sent via email to: egaines@pdx.edu

RE: OGIC Framework Development Program Grant Proposals for historic vegetation map

Dear Director Gaines,

The Oregon Department of Fish and Wildlife (ODFW) supports the Oregon Biodiversity Information Center's grant application to the Oregon Geographic Information Council (OGIC) Framework Data Development Grant Program, which proposes to update historic vegetation maps for Oregon, bringing more precise data into the state-wide historic vegetation layer to better describe historic habitat and establish a more accurate baseline from which to track change in habitats over time.

The landscape in Oregon has changed dramatically since the arrival of Euro-American settlers in the 1850s from impacts including invasive species, fire suppression, development, and climate change. The state-wide historic vegetation layers are a key information source for ODFW's assessment of the quality and accessibility of the habitats that Oregon's fish and wildlife rely on. Efforts to map historic vegetation help to quantify the magnitude of change and can help to highlight key areas for restoration or conservation. Improvements to this layer allow for a more accurate accounting of vegetative changes over time and may highlight impacts to at-risk or declining habitat types that support Oregon's wildlife.

ODFW's mission is to protect and enhance Oregon's fish and wildlife for use and enjoyment by present and future generations. Our ability to determine the long-term success or failure of conservation actions and identify trends for fish and wildlife habitat on the landscape that require conservation intervention depends on relevant information developed by partners like ORBIC.

Please pass along ODFW's support for ORBIC's application and we look forward to our continued collaboration on data and information that supports fish and wildlife habitat conservation.

Sincerely,

Davia Palmeri
Land Resources Program Manager

Enterprise Information Services
Geographic Information Council
550 Airport Road SE, Suite C
Salem, OR 97301

Upgrade Building Footprints Dataset of Oregon	**Review Panel Score: 19**
Framework	Attribution added to building footprints is a could be a strong project. However, proposal is missing critical Framework components, such as standards and workgroups, that could help to support the data steward in this work while also building a more robust and multi-use dataset. Introduction of attributes should be carefully considered, as duplicated datasets will quickly lead to discrepancies and will introduce more questions than it answers.
Framework	I think it is important to decouple adding critical facility data to the building footprints from updating and developing standards for the building footprints. This proposal would have scored higher if the critical facilities component was not included. It would be great to see a resubmittal which focuses on exploring the world of available building footprint datasets, evaluating them and picking the best one, and developing a collaborative process with local governments to review that data or contribute their own. Incorporating the Hood River data could be a test case for this newly defined process.
Framework	While the updated dataset proposed here may be beneficial, there are too many objectives, or tasks, to be attainable as stated in the proposal. Considerations should be made for currently existing and available datasets to avoid duplication or confusion. Coordination with data stewards of existing datasets, such as schools or police departments, etc., would be advised for support.
Technical	Building footprints is an important element sought by many. The hope was expressed by members of the technical review committee that some form of this proposal could be accepted by OGIC and funded. Perhaps the proposal can be scaled down to focus on a few items, like a process for updating building footprints, and include a requirement to complete the data standard?
Technical	This project is missing some components, such as identifying why existing point data for critical infrastructure (e.g., HIFLD) isn't sufficient as-is, and how data will be accurately maintained and updated in a cost-effective manner. I think a trimmed down proposal would be more suitable at this point, such as establishing and implementing a workflow to update the existing building data annually. Before tackling the critical infrastructure, a survey of what data already exists should be undertaken, as well as elaboration of the added

Upgrade Building Footprints Dataset of Oregon	**Review Panel Score: 19**
	value of having that data associated with specific building polygons (rather than the point or parcel that already exists).
Technical	While the applicant and his agency have demonstrated the ability to compile building footprints into a GIS dataset, we still don't have a completed standard or a plan to develop one. This is consequential to a technical review of this proposal since it defines the features and their attributes that are being compiled. It's also the basis from which to create a stewardship plan.
Policy	(1) Dataset is Framework Data Inventory designated as secondary not foundational as incorrectly listed in proposal. (2) Needs data standards and additional work on stakeholder engagement and stewardship. (3) Can provide great value if the data standard, stewardship, and community engagement more strongly addressed.
Policy	Building footprints are very important to Oregon and need both an OGIC-endorsed data standard and stewardship plan. The work required to create these plans would provide the foundation for 1) creating a dataset that meets many user cases and 2) creating a dataset that can be easily and reliably updated on a consistent basis. This is not an easy dataset to aggregate and manage which is why these documents are so fundamental to the project. However, this project does not deliver either of these documents as a deliverable. All of the datasets proposed to be updated have specific stakeholders or stewards that should be part of the project, but they are not. Critical Facilities is not a dataset in the Framework Inventory.
Policy	DOGAMI should consider revising this proposal to focus on just the building footprint dataset (not state-owned buildings or critical facilities) and complete the data standard, methodology to update the dataset, and completion of the stewardship plan.
Policy	It was unclear the exact scope of the project. Presenter referenced a lot of use case scenarios but did not specify clearly what they would use this grant for.

Upgrade Building Footprints Dataset of Oregon

CONTRIBUTORS:

Prepared By Include primary project staff including agency or organization affiliation	
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PROJECT DETAILS:

Expected Project Begin Date	**Expected Project End Date**		**Amount of Funding Requested**
07/01/2024	06/30/2025		$51,148

PRIORITY CRITERIA:

Project Objectives			
☒	Improve data quality or accuracy of existing Framework data element	☐	Increase update frequency of existing Framework data element
☒	Fill gaps in existing Framework data element, geography, or critical attribute(s)	☐	New data identified in Framework Program Work Plan as "Data Element for Future Consideration"
Priority Data Sets			
☒	Foundational data [1]set as currently listed in Framework Data Inventory		
☐	Ties directly to the Governor's priorities (Housing and Homelessness, Behavioral Health, Education and Early Learning)	☒	Ties directly to OGIC's data sharing priority layers (Parcel data, Address points, Road centerlines)
Standards and Stewardship			
☒	Creates or updates a stewardship plan		
☐	Creates or updates a data standard		
Framework Program Requirements (New datasets only) - NOT SCORED			
☒	Needed by multiple agencies (user-groups identified)	☒	Statewide data set
☒	Multiple use-cases identified	☐	Data required by statute

[1] Foundational Framework data elements are base geospatial data used for constructing a majority of Framework data elements and are required for achieving the highest levels of integration among Framework themes.

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PROJECT ABSTRACT

DOGAMI published a statewide geodatabase of building footprints called the Statewide Building Footprints for Oregon, release 1.1 (SBFO-1.1) (Williams, 2023). The SBFO is a compilation of building footprint datasets obtained from public agencies and from an edited version of Microsoft Bing Buildings for areas that did not already have existing building footprint data.

While this dataset is extremely beneficial in its current state, the next logical addition to the dataset are attributes about the buildings. Some buildings, like hospitals, fire, police, and schools, are critical in emergency response during and after a disaster. State-owned buildings are another facility type that are crucial to a functioning emergency response where people's needs are being met.

DOGAMI proposes to attribute these buildings as separate feature class datasets derived from the SBFO and attribute them with information relevant to their function. We will also coordinate with Hood River County to incorporate their newly developed building footprints into the SBFO. We will use this update opportunity to develop methods for future updates or stewardship of the database. The result will be foundational improvements to critical facilities and state-owned buildings and will provide an efficient and effective means of updating the statewide dataset in the future.

PROJECT NARRATIVE

The project narrative will become the Statement of Work for successful proposal agreements.

Project Scope

The purpose of this project is to update and improve the existing Statewide Building Footprints for Oregon, release 1.1 (SBFO-1.1) geodatabase (Williams, 2021, 2023) by creating two additional feature class datasets and updating the SBFO-1 with more recent building footprints for Hood River County, while developing a method for future updates (stewardship).

The first task will be to create a feature class dataset with every state-owned (or leased) building footprint in Oregon. We will acquire point data (Lat/Long) of state-owned buildings from the Oregon Department of Administrative Services (DAS), join the points with the specific SBFO-1 footprints, and transfer and refine the attributes relevant to the state-owned buildings.

The second task will be to create a feature class dataset with every critical facility (defined here as schools, hospitals, police, and fire) in Oregon. We will acquire critical facility locations and attributes from various published county and statewide risk assessments and other existing datasets (e.g., DOGAMI Open-File Report O-07-02 Statewide seismic needs assessment: Implementation of Oregon 2005 Senate Bill 2 relating to public safety, earthquakes, and seismic rehabilitation of public buildings; Lewis, 2007). We will also transfer and refine the attributes relevant to the critical facilities.

Finally, we will incorporate building footprints recently developed by Hood River County into the SBFO-1.1. Methodology will be developed so that we can efficiently preserve existing building attributes while also updating newly developed buildings or remove buildings that have been demolished.

The deliverable of this proposed project will be a new SBFO-2 geodatabase published by DOGAMI in our Digital Data Series and made available through the DOGAMI (https://www.oregon.gov/dogami/pubs/Pages/index.aspx) and GEO Framework websites and a report describing the updates and the stewardship plan.

Relationship to Oregon Framework

The building footprints are related to many other themes/datasets within the framework data. The buildings footprints are directly related to the following framework themes and the data elements within: Addresses and Buildings, Administrative Boundaries, Cadastral, Land Use/Land Cover, Preparedness, and Utilities.

This project will result in critical facilities and state-owned buildings datasets for the state and will comprise additional data elements in the "Addresses and Buildings" theme in the Oregon Framework Program. In addition, this project will provide an efficient means for updating the SBFO as new building footprint data becomes available. Hood River County's building footprint data will be used to develop methods for performing updates that are efficient and preserve attributes of buildings that already exist in the SBFO. These will form the baseline datasets for further refinement through FIT Workgroup consensus.

The proposed building footprints datasets (SBFO-2) will complement a wide array of datasets currently in the Oregon GIS Framework. By building upon spatial relationships the building footprint datasets can link to datasets from emergency management to planning to environmental management to business development. For example, the number and types of buildings within a community that are within a geologic hazard zone is a simple relationship that is intrinsic to building locations and other datasets.

Expected Benefits

While analyses using census blocks or cadastral data can answer questions about the land, the quality of spatial analysis results can be greatly improved when combining land data with highly accurate and current building locations. The benefit of high-quality spatial data only improves when attributes about building data (critical facilities and state-owned) of vital importance are also included. For example, in the world of natural hazard risk analysis, information that is based on census blocks, such as number of residents or building value, is aggregated across a wide area. Site-specific data, like building locations, can provide a much better picture of the level of vulnerability from a hazard for a given community.

These results can assist planners to make better informed decisions regarding lowering risk to natural hazard for their community. An up-to-date statewide building footprints dataset will also allow for the easy integration and joining to other statewide datasets, such as the recently published tax lot parcel data, without the need to adjust or conform the data during use in emergencies. Adding datasets of critical facilities and state-owned will further improve the quality of analysis that can occur.

METHODOLOGY

To accomplish the proposed three tasks, DOGAMI will use Esri's Arc PRO software. The first task will be to create a new feature class dataset (Oregon State Owned Buildings) within the geodatabase with every state-owned (or leased) building footprint in Oregon. We will acquire point data (Lat/Long) of state-owned buildings from the Oregon Department of Administrative Services (DAS). These points with be spatially joined with the Oregon State Owned Buildings polygons. We expect some points will need to be manually joined. After the successful join, the attribute data will be transferred to the building footprint polygons. We will likely refine some of the attributes based on what fields are available from DAS.

The second task will be to create a second feature class dataset (Critical Facilities) within the geodatabase with every critical facility (defined here as schools, hospitals, police, and fire) in

Oregon. We will acquire critical facility locations and attributes from various published county and statewide risk assessments and other existing datasets including DOGAMI Open-File Report O-07-02 Statewide seismic needs assessment. Again, the mostly point data will be spatially joined with the Critical Facilities polygons. We expect some points will need to be manually joined. After the successful join, the attribute data will be transferred to the building footprint polygons. We will likely refine some of the attributes based on what fields are available from the acquired datasets. As part of the work for the state Natural Hazard Mitigation Plan of 2020, DOGAMI developed a statewide buildings footprint dataset of critical facilities. We also took state-owned facilities point data and merged those into building footprint, this too was part of the mitigation plan work. Since these data were used in the analysis but were not published, the level of quality of the datasets (e.g. standardization of attributes) were not necessary. Funding for this project will allow us to: firstly, update these building footprint datasets with current information and secondly, we would be able to develop attributes that are both useful and relevant to these specific data types.

The third task will be to remove and replace the existing building footprints in Hood River County (SBFO-1.1) with a recently developed Hood River County building footprints dataset into the geodatabase. Methodology will be developed when updating Hood River County so that we can efficiently preserve existing building attributes while also updating newly developed buildings or remove buildings that have been demolished. This will provide a means to make regular updates to the SBFO very quickly and without impacting attribution of buildings currently in the SBFO that do not need updating. In other words, developing a method beyond simply replacing all of the buildings in a given county with new ones.

Deliverables to be Funded by this Proposal

The deliverable of this proposed project will be a new SBFO-2 geodatabase published by DOGAMI in our Digital Data Series and made available through the DOGAMI (https://www.oregon.gov/dogami/pubs/Pages/index.aspx) and GEO Framework websites and a report describing the updates and the method for future updates. The specific deliverables of this project will be:

- Oregon State Owned Buildings feature class dataset including relevant attributes. These will include a shared unique identifier with the general statewide building footprints feature class dataset.
- Critical Facilities feature class dataset with relevant attributes. These will include a shared unique identifier with the general statewide building footprints feature class dataset.
- Updated general statewide building footprints feature class dataset with new buildings from Hood River County.
- Method for future updates to the SBFO (part of the Stewardship)
- SBFO-2 Geodatabase with metadata the SBFO.
- An open-file report describing the data and documenting the methods and results.

Project Timeline

The project is estimated to require approximately 12 months to complete. Below is a generalized project timeline with tasks.

Task	2024 Q3 & Q4	2025 Q1 & Q2	2025 Q3 & Q4	2026 Q1 & Q2
Data development (critical facilities and state-owned buildings)				
Method and data development (SBFO update)				
Data QA/QC				
Metadata and Documentation				

Stewardship Overview

As previously described, part of the proposed project will be to develop methodology for updating future versions/releases of the SBFO that can efficiently preserve existing building attributes while also updating newly developed buildings or remove buildings that have been demolished. This will provide a means to make regular updates to the SBFO very quickly and without impacting attribution of buildings currently in the SBFO that do not need updating. In other words, developing a method beyond simply replacing all of the buildings in a given county with new ones.

DOGAMI plans to publish the new SBFO geodatabase and assure it is widely available by placing it on our website for download by anyone. This will be the second version of the SBFO by DOGAMI and thus a sign of our commitment to data stewardship.

Because DOGAMI already works with all communities in Oregon to understand natural hazard risk, there is a collaborative network in place. Building footprints are sometimes developed by a community, for example the Lane Council of Governments (LCOG). During a recent project in Lane County, DOGAMI created building footprints and delivered the data to LCOG, who in turn performed further updates that were returned to DOGAMI and went into the SBFO-1.1 (Williams, 2023).

DOGAMI plans to continue to update the SBFO geodatabase as funding allows. At this point, an update method will be developed and put into place. With the method established, we will work with the theme and data element framework implementation teams and the communities in Oregon to develop a stewardship plan in the future.

Data Storage and Distribution Plan

The Statewide Building Footprints Dataset of Oregon will be updated and delivered to the Geospatial Enterprise Office for distribution and storage. It will also be stored, and available to download from the DOGAMI Publications Center (https://www.oregon.gov/dogami/pubs/Pages/index.aspx).

Commitment to Effort

One of DOGAMI's primary commitments to the legislature (via key performance measure, KPM #1. Hazard & Risk Assessment Completion) is to produce and publish building-level natural hazard risk assessments for every city in the state. To make progress on this measure DOGAMI needs

consistent and high-quality building footprint data. DOGAMI also recognizes the importance of sharing existing building footprint data with the broader Oregon GIS community and sees this funding opportunity as an ideal mechanism to do so.

Relevant Experience/Expertise of Project Team and Organizational Capacity

As an agency, DOGAMI acts as the data steward for the Oregon Lidar Consortium. In fulfilling this role, DOGAMI has a team of geospatial professionals with many years of experience working with highly complex geospatial data.

DOGAMI will draw upon several years of experience of building footprint digitization, including developing and publishing the SBFO in 2021 and updating it 2023. This experience includes heads-up digitization and building footprint polygonizing derived from lidar. The project team will include Matt Williams as the principal investigator. Matt has conducted several countywide natural hazard risk assessments, which make heavy use of building footprints and assessor's data.

BUDGET JUSTIFICATION STATEMENT

The primary cost for the proposed tasks is the salary of the principal scientist/project manager and GIS analyst salary. The only external cost is for Gneiss Editing, a Portland-based copy-editing company whom DOGAMI uses to edit all publications released by the agency. They will review and copy-edit the open file report before it is published. DOGAMI realizes approximately $17,000 of uncollected indirect costs based on the total budget of the project.

BUDGET

Project title							
	FTE	**Monthly Salary**	**Project Months**	**Salary Cost**	**OPE Rate**	**OPE Cost**	**Total Cost**
SALARIES	%						
Project Manager / PI	1.00	$ 7,368	.45	$ 3,313	.6858	$ 2,272	$ 5,585
Publications / Reporting	1.00	$ 7,368	1.12	$ 8,284	.6858	$ 5,681	$ 13,965
GIS Analysis	1.00	$ 7,464	2.25	$ 16,784	.5687	$ 9,544	$ 26,328
Technical Reviewer		$ 10,570	0.28	$ 2,971	.6056	$ 1,799	$ 4,770
Total Salaries				$ 31,352		$ 19,296	**$ 50,648**
SUBCONTRACTS							**Cost**
Gneiss Editing							$ 500
Total Subcontracts							**$ 500**
TOTAL DIRECT COSTS							**$ 51,148**
TOTAL COST							**$ 51,148**

OPTIONAL INFORMATION

The current DOGAMI Strategic Plan outlines our mission and goals. The natural hazards goal is "Create and compile comprehensive assessments of natural hazards and community vulnerability, and promote

risk reduction strategies to build resilient communities." Updating building footprints is directly helping to achieve this goal.

Some communities in Oregon have GIS, skills, and funding in place to create building footprints, but many communities do not. Because of this disparity, development of a statewide database assists these underserved communities.

One of the three priorities of the Governor of Oregon is Housing and Homelessness. Knowing where all of the existing buildings are located and if they are owned by the State of Oregon will assist in this priority. Building footprints is a secondary framework data element.

We provide the following letters of support:

- Matthew Crall, Planning Services Division Manager, Department of Land Conservation and Development
- Jake Edwards, GIS Coordinator, Hood River County Community Development

REFERENCES

Lewis, D., 2007, Statewide seismic needs assessment: Implementation of Oregon 2005 Senate Bill 2 relating to public safety, earthquakes, and seismic rehabilitation of public buildings: Oregon Department of Geology and Mineral Industries Open-File Report O-07-02, 140 p. https://www.oregongeology.org/pubs/ofr/p-O-07-02.htm

Williams, M. C., 2021, Statewide Building Footprints for Oregon, release 1.0: Oregon Department of Geology and Mineral Industries Digital Data Series SBFO-1. https://www.oregongeology.org/pubs/dds/p-SBFO-1.htm

Williams, M. C., 2023, Statewide Building Footprints for Oregon, release 1.1: Oregon Department of Geology and Mineral Industries Digital Data Series SBFO-1.1. https://www.oregongeology.org/pubs/dds/p-SBFO-1.1.htm

Oregon
Tina Kotek, Governor

Department of Land Conservation and Development
635 Capitol Street NE, Suite 150
Salem, Oregon 97301-2540
Phone: 503-373-0050
www.oregon.gov/LCD

February 29, 2024

To: OGIC Grant Review Panel
Copies to: William Burns, Engineering Geologist, DOGAMI
Matt Williams, DOGAMI
Jason McClaughry, Geological Survey and Services Manager, DOGAMI
Ruarri Day-Stirrat, State Geologist and Executive Director, DOGAMI
From: Matthew Crall, Planning Services Division Manager

Subject: Framework Data Development Grant Program: Building Footprints

The Oregon Department of Land Conservation and Development (DLCD) strongly supports the application from the Oregon Department of Geology and Mineral Industries (DOGAMI) to the Framework Data Development Grant Program to fund the update and improvement of the Building Footprints Data Element. The update would include:

- Adding attributing for all state owned buildings, schools, fire, police, and hospitals
- Linking building footprints to rapid visual screening seismic vulnerability data
- Updating Hood River County with new building footprints dataset

A complete and accurate statewide building footprints data set is a high priority for DLCD. We would use the data in most of our programs including:

- Supporting the governor's priority of building 36,000 housing units
- Determining what land is developed and undeveloped
- Inventorying buildable lands
- Tracking changes in development over time
- Identifying critical assets for hazard mitigation and recovery
- Preparing local natural hazards mitigation plans
- Supporting cities and counties in the National Flood Insurance Program
- Conserving farm and forestlands
- Maintaining our own Framework data element: Land Use

Matthew Crall
Planning Services Division Manager

Hood River County Community Development
Planning, Building Codes, Code Compliance & GIS
601 State Street, Hood River OR 97031

ERIC WALKER, DIRECTOR
(541) 387-6840 • plan.dept@hoodrivercounty.gov

February 29, 2024

Matt Williams | Geohazards Analyst
Oregon Department of Geology and Mineral Industries
800 NE Oregon St., Ste. 965
Portland, OR 97232

RE: Statewide Building Footprint Dataset

Dear Matt:

Hood River County Community Development Department is pleased to offer its support to the Oregon Department of Geology and Mineral Industries' (DOGAMI) grant proposal to update the current statewide building footprint dataset (SBFD). The SBFD has been particularly helpful in analyzing natural hazard risk to the people and structures within Hood River County. It is vital that this dataset remains current and accurate. There are currently numerous local governments who acquire and manage their own building footprint layers. It is important that a process is developed where local governments can submit updates to the Oregon Geospatial Enterprise Office and have current buildings included in the statewide layer.

Hood River County looks forward to supporting the improvement of the SBFD throughout Oregon. Thank you for your efforts.

Sincerely,

Eric Walker, Director
County Community Development

cc: Jake Edwards, County GIS Coordinator