

# BUDGET NARRATIVE

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## **POLICY PACKAGE 101**

Title: ACCESS Database Replacement Project

Additional Oregon investment: \$212,500

***Governor's Budget: Recommended***

## **PURPOSE**

To implement the National Scenic Area Act, the Columbia River Gorge Commission must review land use applications and approve land use permits in Klickitat County, Washington, and oversee/review permit applications issued by the other five counties in the NSA that adopted the NSA management plan as an ordinance in their county (Wasco, Hood and Multnomah Counties in Oregon, and Clark and Skamania Counties in Washington). In order to carry out our day-to-day work, the Commission must track and monitor all contact with landowners, all permit applications, their denials or approvals, and if approved, compliance with all permit conditions. We must also track the locations of all proposed and existing developments within the NSA, their findings with respect to permit applications past and present, and impact on resources, and track all our correspondence in electronic and written forms.

For at least the last 15 years, we have used ACCESS as the main data base system to track and record all of our information. This data base system has been altered and adapted with different information fields added over time as planners needed to plug in additional information. There are currently over 100 fields, but they have not been consistently filled in over time so doing any kind of search has been difficult at best. In addition, it requires manual entry of data, does not have a search function that is easy to use, and is not linked to spatial data (GIS) in order to identify the locations of tax parcels/lots on maps. We also have hundreds of boxes of paper files for information that date back prior to the advent of the electronic database that have not been digitized and entered, thus making earlier records practically impossible to retrieve without countless hours of searching.

*After an initial review and several discussions with WA OCIO, WA Tech and OFM, and with Oregon OCIO, LFO and CFO in 2018, it was determined that the Gorge Commission's ACCESS data base system must be replaced. The Gorge Commission submitted a Policy Option Package to Oregon and a Decision Package to Washington for the 2019-2021 biennium for a total of \$425,000 (\$212,500 for each state). Washington approved funding of \$212,500 for 50% of the cost of the project, but rather than providing the funds directly to our agency, they were earmarked for the Gorge Commission in an "IT Pool" and subject to Oregon's approval of the match funding. In June 2018, although the Oregon Governor supported the decision package, it could not be approved since it was in an "IT Pool" and not part of the agency budget, therefore Oregon could not provide funding to match Washington funds that were not actually in the agency's budget. The Gorge Commission worked with the Oregon OCIO and CFO and was able to get it on the Ways and Means hearing scheduled in February 2020. Unfortunately, the hearing was cancelled and no budgets were passed, so the Gorge Commission lost the chance to initiate the project.*

The Gorge Commission is requesting funds for the 2021-2023 biennium to resume the request. Our goal is to assess our current workload and workflow using our current ACCESS database, identify the weaknesses, inefficiencies and gaps, and then design/configure a workflow

## BUDGET NARRATIVE

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solution that creates a new data base platform in “the cloud” that will increase our efficiency, accountability, transparency and will reduce our legal liabilities.

By making our data more electronically searchable and linked to our current GIS system, a new system configured to our current and future needs will assist the Commission to be more responsive and well-organized. We will be able to better serve the landowners, public, agencies and others who need information about specific parcels of land and development impacts on resources. We anticipate that we will also be more timely with a shorter response period. (The Commission already has an effective updated GIS, so we are not asking for funds to upgrade GIS but rather for a new data base system that could link up with the GIS in place.)

The Commission has a responsibility and need to track implementation of the National Scenic Area Management Plan for many reasons, such as:

- Ensuring *compliance* with all aspects of the Management Plan and land use rules among the six counties in the NSA
- *Monitoring* development trends, implementation effectiveness, and agency activities in six counties
- *Tracking* all the development that occurs in the six counties in the NSA
- *Enforcing* and issuing notice of violations if landowners are out of compliance with permit conditions, and working with them to resolve the violations
- *Tracking* and comparing scenic, natural, cultural, recreation and economic data to create a Climate Change Action Plan for the NSA, as a priority to respond to both state Governors’ priority to address and mitigate for climate change
- *Responding* to public records requests easily and efficiently within a short timeframe that is legally required
- *Satisfying Performance Measures* (for two states)

Replacing the ACCESS database will improve efficiency by standardizing our operating procedures in digital/online forms and eliminate cumbersome manual data entry/re-entry work for our planners, county planners in the National Scenic Area (NSA), and most importantly, landowners who require timely permits. A new system will centralize all historic case work, land use permit files and communications to enable both our planners and legal team to respond to requests for permits and multiple public record/ information requests rapidly (and with no errors or omissions), about how we are implementing the National Scenic Area Act to protect Gorge resources and support economic development.

How and why do we use ACCESS for our daily work?

*Record:* The Gorge Commission staff records all information in the current ACCESS data base for each permit application we receive in Klickitat County, as well as the development permits in each of the other 5 counties that adopted the NSA management plan in their

## BUDGET NARRATIVE

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ordinance. There are over 100 fields that may be applicable for any one permit application. Each county records information slightly different as well without consistent numbering.

*Search:* When staff are asked questions about past permits or applications, we must have a way to search the ACCESS data base and query it for special keywords. This is difficult to impossible at this point and requires manual manipulation of the fields by exporting them into an excel spreadsheet and then sorting the data. This is very time consuming and two people searching for the same information can sometimes get different results. When we need to find a specific development review/permit application, we run a report for a specific township, range and section, then we need to open all those to find the one we want, and even then we cannot always locate it easily. Currently we are using applicant or landowner last name for tracking files, but those change with ownership. Even parcel numbers and tax lots change over time. When landowners change for the same parcel, there is no history of the actions or advice the Gorge Commission staff gave those previous landowners since there are no fields for prior contact information or historical information. The time it takes to research information on a specific parcel can be very time-consuming for staff when there are many other job functions that planners need to do that are not being done.

*Generate reports:* We are often asked to compile information and present it to the public or to the Gorge Commissioners about development review/permit statistics, locations, how much land is still vacant and buildable, etc. and it is difficult to do these easily or with trust that we have all the files searched correctly and thoroughly. We have also received a significant number of public records requests recently which need to be done in a very timely way to respond to the “public records request compliance timeline” which can create hundreds of hours of work with our manual searches. This also leaves room for risk that we have not thoroughly searched our data base or paper files to respond completely to the requestor leaving the Commission vulnerable and out of compliance with the public records act.

### What are the limitations?

- The ACCESS database does not capture all the information we need and captures other information that is not critical because fields have been added over a decade by many different Commission planners and has never been “scrubbed” to clean up the information fields;
- Searching is very cumbersome and takes too much time, and results of the search data is not as reliable as we would expect;
- The data is not consistently entered because it is not a user-friendly system;
- It does not link to our current GIS which is needed to spatially locate the places/tax lot/parcels on maps that we need to research or to consider for a permit at that location; and
- Landowners and realtors ask for information and history on parcels they are either selling or buying, and the information may be incomplete or not easily viewable without going into separate Google Earth files rather than having the information linked to a geospatial location on maps that match our database information. The cumbersome search to answer questions on parcels creates

## BUDGET NARRATIVE

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frustration by landowners or others interested in parcel and land use designation information, affecting our performance measure for customer satisfaction.

- On the staff level, we are now employing early to mid-career land use planners who are more equipped, skilled, knowledgeable and proficient in using digital tools to do their work and are not accustomed to manual data entry and paper files that are not digitized and searchable. We have more than 20 years of paper files in archives and in the office that need to be digitized, and indexed since permits and past compliance issues are tied to the parcel and need to be identified when new permits are applied for—without manually searching through paper files, it is difficult to identify past problems on a parcel, that then would influence the permit that would be issued to a new landowner on that parcel.

A digital workflow system in a new database platform would help us to scan all our paper files, index them with keywords, and protect them to preserve 34 years of our institutional knowledge. It would enable seamless collaboration between our staff planners and Commissioners by moving knowledge management from the hands and memories of our tenured (older) support team, into easily searchable, indexed, cross-referenced and visually tagged datasets. This will be a major improvement over the mix of hard copy (not searchable), email, phone and “office knowledge” (procedures and history stored only in the memories of our most tenured staff) workflow we have inherited from our past. It will make all our work grounded in our GIS data, with simple and intuitive visual interfaces and be searchable.

### What is the problem we are trying to solve?

After an initial cursory review and several discussions with WA OCIO and WA Tech, it was determined that the Gorge Commission’s ACCESS data base system needs to be replaced. The Gorge Commission is requesting funds to:

- assess our current workload and workflow using our current ACCESS database,
- identify the weaknesses, inefficiencies, and gaps, and then
- design/configure a new data base platform in “the cloud” that will increase our efficiency, accountability, transparency and will reduce our legal liabilities.

By making our data more electronically searchable and linked to our current GIS system, a new system configured to our current and future needs will assist the Commission to be more responsive and well-organized. We will be able to better serve the landowners, public, agencies and others who need information about specific parcels of land and development impacts on resources. We anticipate that we will also be more timely with a shorter response period. (The Commission already has an effective updated GIS so we are not asking for funds to upgrade GIS, but rather for a new data base system that could link up with the GIS in place.)

In recent years geographic information systems (GIS) have become essential tools for planning and resource protection professionals. Spatial data allows us to visualize and predict change, and to plan more wisely for the NSA region based on patterns of use, sensitive areas,

## BUDGET NARRATIVE

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and accessibility for citizens. We currently have very well operating GIS and ESRI licenses with a half-time GIS expert on our staff who is knowledgeable in how to use it as a planning tool.

Nearly every project and workflow we perform at the Gorge Commission is based around a specific place within the National Scenic Area. GIS linked to a comprehensive, relational database provides several advantages to staff including:

- An intuitive map-based visual search for tabular data (as opposed to requiring specific text or alpha-numeric based searches).
- The ability to directly enter the results of spatial analysis into the tabular component of the database.
- Easily viewing and transferring of spatial data collected in the field into the database.
- Saving time by negating the need to locate and search paper or non-linked online maps.
- A “spatial reference” allowing subject sites to be seen in comparison to adjacent areas. Staff will be able to “see” past projects near any new project areas and quickly access the tabular data related to those legacy projects.

Our current “ACCESS” data management system is out of date and does not allow us to geographically reference our development permit files and is not easily used to query for information needed to develop trend information or respond to public records requests.

- The ACCESS database is comprised of several previous databases linked together. As a result, there are many duplicate and blank fields in the master copy; simple queries are extremely time consuming and result in errors. On several occasions, two different staff members have run simple queries and received two different results for important reporting metrics.
- Without spatial reference for development projects, there is no reliable way to track decisions. This is because there is no unique identifier in our current database. Each county uses different tax lot, parcel and address formatting, and some have changed over time. Property owners/applicant names change through time. Even parcel boundaries and tax lot lines change in the National Scenic Area. Our planning staff are expected to have the full permitting history on a property as part of the development review process for new developments. Unfortunately, we often rely entirely on the applicant to provide us with that information as they are willing and able. As the NSA manager, we need to have the most up to date and searchable data base to perform our jobs accurately and be of assistance to the counties as well as provide transparency of our decisions for public records requests.

An example of how we can improve: With the help of an unpaid intern for a few weeks, we conducted a pilot project that was labor intensive but useful. We were able to spatially reference a fraction of the Commission’s development reviews with our GIS. The result was an instant time-saver and improved information – the planner could immediately see on a map any previous decisions made for a parcel or in the area around it. *For the unmapped areas*, a planner must now query the database on several fields in hopes of finding records of past decisions or use the “find” function in our electronic records (only some of these are searchable files). As time goes on, we will continue reviewing several county decisions each week (over 120 a year) but we are unable to map those decisions in space. The Commission requests a new database system that will track and integrate spatial information as part of our daily development review activities.

# BUDGET NARRATIVE

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Public records requests: We currently have a public records request for all the permits issued in the NSA that had cultural resources found. Due to confidentiality, we cannot release that information, so they requested all the permits where cultural resources were not found. Of the thousands of permits issued since the beginning of the NSA, this was a daunting and laborious task without a database that can easily query for specific information needs. This one public records request required more than 300 hours of manually searching and documenting information when it could be much simpler with a modern, updated data management system.

## **HOW ACHIEVED**

A new data base system will improve workflow and will represent many benefits to the public by improving the Gorge Commission's effectiveness and efficiency:

- **Opportunity:** Digital workflow will unlock efficiencies freeing up both our own staff, as well as our county planner counterparts, from tedious manual data entry and re-entry. When up and running, our customers such as landowners and realtors, would be able to submit their applications on our website and we will seamlessly index and link every application to prior related cases visually (e.g. on same, or adjacent land; or under a prior landowner, etc.). Abandoning paper archival for fully digitized, and searchable documents embedded into our workflow will bring efficiencies to everything we do by making the entire 'story' of every case easily accessible. It will also make it easier to cross-reference all the information with our county planners and to then search and acquire information on trends and cumulative impacts on resources.
- **Priority:** With upcoming retirements of highly tenured staff in the next two years, achieving improved and digitized workflow with all our prior cases, current backlog and emerging cases stored in a standard format, will help us mitigate two risks that have grown pressing in the last few years:
  1. More public records requests, more liability exposure if we do not adequately fulfill the requests in a timely way according to state regulations; and
  2. Institutional knowledge at risk as tenured staff retire

We have hired and trained new planners, whose expected tenure with us may be 3-5 years each since younger workers change jobs more frequently than those who worked at the Gorge Commission for their entire career in the past. In the future decade, we will be relying on short-tenured planner staff, making it critical that we avoid wasting time on repeated training and development work that does not pay off for the Commission when those young planners leave for new opportunities. We are getting ahead of the problem by moving the rules and procedures of our work out of paper binders and managers' memories into digital forms/workflow. It will be easier for future employees to understand and use when they come aboard and will achieve greater efficiency and seamless collaboration with citizens, county planners, external experts (e.g., cultural and environmental review experts) and even our landowner applicants, and will be preserved/indexed for easy access. This move from paper and email to a digital workflow will free up our very limited 3.5 planners from low value manual and repetitive data entry work, to much more expedited case management that we are reviewing. It will also improve our performance metrics.

# BUDGET NARRATIVE

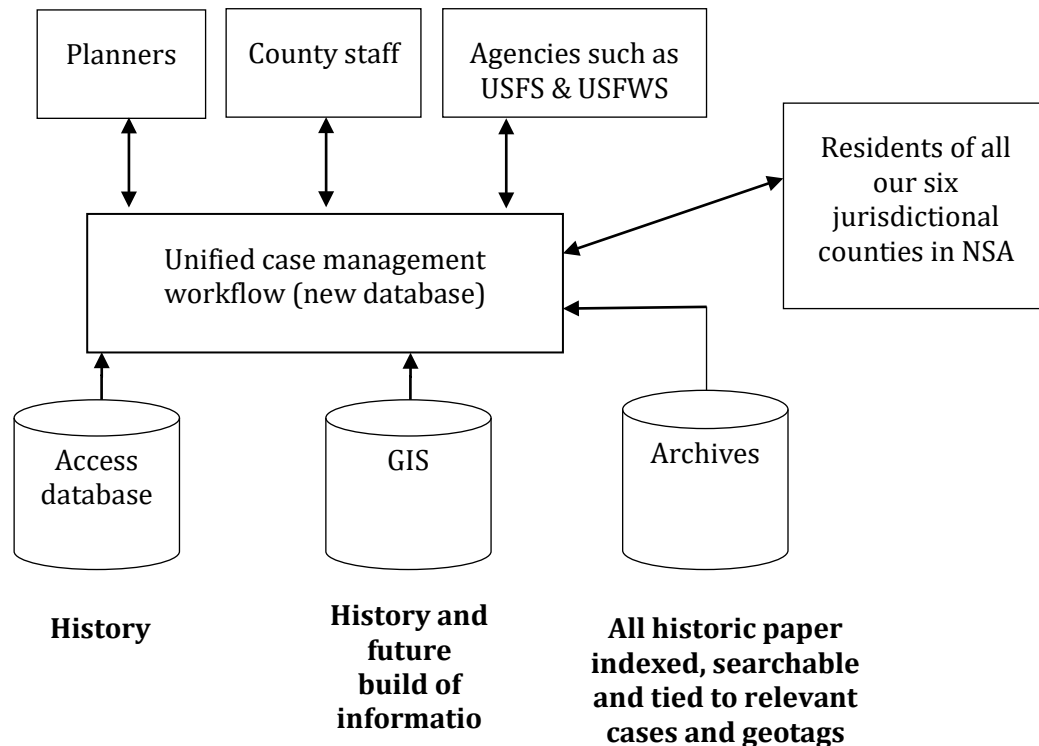
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## Recognizing the problem:

We proposed this request as a Policy Option Package in the 2019-2021. As I stated above on the first page, this request was funded by Washington but was not matched by Oregon, so we could not move forward with any aspect of this project without any additional funding.

As Executive Director, with our limited staff capacity, and high demand for work deliverables, I had not previously had to analyze our current ACCESS database until we had some recent public records requests that required an inordinate amount of staff time to fulfill. I decided to conduct a cursory workflow analysis of our current processes to better understand inefficiencies that impact our client/landowners and where they can be improved. We have also received several public records requests that have been cumbersome to fulfill given our paper-based system of information management. By becoming more efficient and reducing repetitive work and data entry, I estimated we will save planner time to focus on more critical tasks to assist landowners, follow-up on compliance issues and do more enforcement of NSA permits, as well as spend more time and attention focused on finalizing the Gorge 2020 Management Plan update that is required by the National Scenic Area Act every 10 years, and not spend so much time on redundant time consuming administrative work.

## What is our proposed solution?



# BUDGET NARRATIVE

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If funded, we propose to execute the following steps in 2021-23 for Phase 1. In addition, Phase 2 is included below in italics to demonstrate our awareness that this is a significant undertaking for the agency that will not be completed in one biennium. The Gorge Commission would work with both Oregon EIS and Washington OCIO to synchronize the “stage gate” process and technology budget requirements for accountability of funds invested:

## Phase 1: 2021-2023 Biennium

1. Issue a Request for Proposals and hire a contractor would complete a full needs assessment of how we use ACCESS for our daily work and identify the limitations and gaps
2. Based on results of the needs assessment and gap analysis, issue a Request for Proposals and hire a contractor to design a new cloud-based workflow and data management system that would meet our needs as a land use regulatory agency and be linked with our current GIS
3. Engage a Quality Assurance specialist for each step of the process
4. Issue a Request for Proposals to hire a project manager to oversee steps 1-3.
5. Establish a Governance Committee to assure effective communications between the Commissioners, staff and vendors.

## *Phase 2: 2023-2025 Biennium*

- 6. Migrate all our current data in ACCESS to the new system*
- 7. Scan, digitize, geo-referenced and index all the past paper archival files to merge with the new database*
- 8. Identify a project manager (either contractor or staff) to oversee the migration and management of the day to day operations of the new data management system*
- 9. Quality assurance vendor to assure there is external review*
- 10. Maintenance and operations over time with either external contractor or internal staff person*
- 11. Revamp the Commission website to make information publicly available*
- 12. Engage an organizational change management consultant to assure new database system is integrated into new workflow*

This customized new database system will be designed to meet the day to day needs of the Gorge Commission and will greatly benefit Gorge-area landowners and other Gorge stakeholders with more accurate information that is more easily accessible. It will improve staff efficiency, reduce risk of lost data or being out of compliance with response time to public records requests, and will increase the amount of time available for our planners to conduct other essential work such as being able to follow up on complaints, do post-permit compliance monitoring, taking enforcement actions when violations are identified, and be more involved and engaged with public stakeholders and agencies that rely on Gorge Commission’s data and input.



## BUDGET NARRATIVE

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A new database management system will help formalize our institutional knowledge by moving procedures into a digital workflow process and make all prior records indexed and searchable. It will reduce time that is now spent on data re-entry. Digital workflows are more intuitive and can be made entirely map-based, enabling greater leverage from our current GIS investment. By reducing reliance on our older ACCESS database system and introducing a more digital workflow, we will attract and keep planning staff that are more accustomed to digital web-based applications, and would also allow us to harmonize work procedures with the six counties we work with and respond to questions from the public, landowners, county, state, local and federal government agencies and two legislatures, and solve land use issues with better and more accurate data analyses.

### **QUANTIFYING RESULTS**

- **General Citizens/Landowners:** The Gorge Commission works with many landowners seeking permits to develop their land, rebuild a home, plant a vineyard or many other types of development activities. In order to do any kind of improvements on their land, they need to get a permit from the Gorge Commission in Klickitat County. Given the growing economy, there are double the requests for permits in 2019-2021 than there were in the 2015-2018 time periods, with still only 1 staff to do the reviews. The queue is long, and each permit may take six months to one year from start to finish since they are complicated to meet all the requirements of the National Scenic Area Act. However, if we have a new database system that is linked to GIS, we will have access to more accurate records and allow us to geolocate the site of the development on the parcel. An upgraded system will help us search faster and more efficiently to answer questions about past developments on the parcel and deed history. If we can further integrate our data base with our website, the owners-- or potential owners --of a parcel can search the information themselves faster rather than scheduling an appointment with a planner. This will greatly reduce frustration by people seeking information or who are not close to the Gorge Commission office in White Salmon but are still in Klickitat County. For all landowners who interact with the Gorge Commission, we have feedback forms that can be written by hand or downloaded off our website. However, we hope to build in an evaluation section that would be part of the application much like other entities survey customer satisfaction—to make it easy for them to respond and for us to track the performance metrics more reliably.
- **County Planners:** Each of the other 5 counties that adopted the National Scenic Area ordinance have their own data base for their development reviews. Although they may be different than the new data base system the Gorge Commission develops through Salesforce.com or another product, they are all searchable and linked to GIS and the Gorge Commission would be able to better access their information and download it onto our system. By being able to more easily share information and clarify geographic locations of parcels, it will be easier to conduct development reviews and determine consistency with the management plan and resource protection.
- **Public Records requestors:** As mentioned earlier, the Gorge Commission has received many public records requests over the years, but currently we have three ongoing requests that are requiring a significant investment in staff time to pour through electronic files and paper archives. Once the new data base system is up and running, and all records have been digitized, indexed and searchable by keywords, the public records requests will be more thorough, faster and more reliable to get the information that is being requested.

# BUDGET NARRATIVE

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This will result in more transparency and accountability. A new database management system will make it feasible for us to fulfill public records requests much more rapidly and with less risk of errors/omissions, thus curbing the cost of accountability in an increasingly litigious environment, while also reducing our legal liabilities.

## What are we purchasing?

1. An industry standard, customizable, off the shelf cloud-based (“SaaS”) workflow license (or subscription) with enough capacity for all our planners and support staff.
2. Consulting support to define the workflow to be realized in this workflow, and how to integrate it with:
  - Legacy ACCESS case tracking information
  - GIS information (visual, maps)
  - Adobe archive of our rulings and prior litigation
3. Consulting support to evolve and maintain the unified case management system over the next decade.

## Consequences and Alternatives

Option #1: Continue As Is (ACCESS database, separate GIS, lots of paper archives). Although this is the least expensive option, there are several drawbacks.

- Planners increasingly devote time to manual data re-entry and searching old files with help from support staff (as our institutional knowledge is only partly codified). Our management plan updates, community engagement and enforcement backlog are slowed down since our core staff is investing administrative time with using an older, cobbled together data base.
- When our most tenured staff retire within the next 2 years, we will lose a large (and indispensable) body of “institutional knowledge” – that will be detrimental to a small agency like the Commission. Therefore, this project needs to move forward in 2021-23 before we lose critical knowledge of our business processes and where all the paper files are located.
- Greater liability from the rising tide of public records requests as citizens/stakeholders/lawyers increase their demands and bring greater scrutiny to the information we provide. We risk errors and omissions if we continue to field requests by piecing together (manually) our case records. Our responses now are slower than they can be, irritating our requestors, while taking our staff time away from active case load to do the management plan review and attend to other permitting activities. The Commission is at risk being in violation of the “timely response” required by Oregon public records law. One current public records request has taken months, so far, of the attorney’s time to pull together the information needed to respond to the public records request.

# BUDGET NARRATIVE

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We engaged an IT expert to help us think through how to transform/modernize our database and the two following alternatives were considered:

Option #2. Eliminate ACCESS and upgrade to “SQL” and integrate “Tableau” (these are high functioning data systems)

- We lack in-house skill to maintain SQL or effectively use Tableau
- Licensing costs for SQL plus Tableau are higher
- Future modifications will be expensive as Tableau skill pool is in high demand
- Web access (new forms) plumbed to our SQL will need custom development
- Tableau support within GIS may be eliminated over time

Option #3. Leave ACCESS as is, stop maintaining it and move/migrate all past and future records into a cloud-based system such as Salesforce.com (an example). After doing an initial needs assessment and gap analysis, we will be able to determine the best product to serve our needs. Initially, other small agencies use Salesforce and seem satisfied. Only after the initial needs assessment phase will we be able to find the right workflow solution:

- We only need 8 Salesforce seats (if Salesforce is determined to be the best option)
- Database is inbuilt within Safesforce.com
- Forms are easy to configure
- We can create web pages (accessible by county and citizen stakeholders) very easily/cheaply
- Salesforce.com has plug-ins to surface GIS data visually
- Salesforce.com can embed Adobe links to integrate our legal archive

***Option #3 is the preferred alternative because it is scalable to the needs of the Gorge Commission. Option #2 uses data base platforms that may be too sophisticated for the Gorge Commission’s needs (overkill since we are not that complicated).***

Performance Measure(s):

- Percentage of customers rating their satisfaction with the agency’s customer service as “good” or “excellent”; overall customer service, timeliness, accuracy, helpfulness, expertise and availability of information.
- Percentage of Commission Development Reviews in which Commission staff spend no more than 72 workdays to make a decision after the application is deemed complete. When Commission staff require a different design or additional information from the applicant or a federal, state, or local agency, the days waiting for that information are not included in the 72 workday staff decision period.

## **STAFFING IMPACT**

No additional FTE are associated with this policy package. For Phase 1, contractors with expertise will be hired. The implementation of a new cloud-based system will occur in Phase 2 and a request for an in-house project manager will be included at that time.

# BUDGET NARRATIVE

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## REVENUE SOURCE

The Commission seeks general funds from the State of Oregon; the Commission also seeks commensurate general fund support from the State of Washington.

### Projected Budget:

The projected budget below is 50% of the total cost because Washington general funds will fund the other 50% of Phase 1, if approved by the Washington Legislature:

<b>Information Technology Items</b>	<b>FY 2022</b>	<b>FY 2023</b>
<b>Consulting Services to develop database platform and new workflow</b>		
Current ACCESS analyses/needs assessment	\$35,000	
Workflow Project Management	30,000	\$40,000
Begin Workflow Solutions Re-Design (FY 2023)		60,000
Quality Assurance vendor for each step	22,500	25,000
<b>Total Cost</b>	<b>\$87,500</b>	<b>\$125,000</b>

*Oregon's share - \$212,500 for biennium*