

## Appendix C: IT Partnership Opportunities

### BACKGROUND

On April 30, 2025, the CRD Board (Board) directed staff to report back with specific recommendations on “[exploring] partner opportunities (e.g. shared IT infrastructure and programs)”.

The CRD delivers many of its services through partnerships with other organizations and levels of government. Examples include the Regional Emergency Management Partnership (REMP), government-to-government partnerships with First Nations, and the Climate Action Inter Municipal Advisory Committee. The CRD also has a track record of leading regional initiatives in technology and communication infrastructure. These efforts have typically centred on shared digital infrastructure, emergency communications, and public safety technology that benefit municipalities and electoral areas across the capital region. Such initiatives include:

- *Intramap Enterprise Geographic Information System (GIS) and IntraMAP Platform:* In 2001, the CRD developed (and has since maintained) a regional GIS platform to centralize spatial data and make it accessible through an online mapping interface. This platform provides unified, up-to-date regional maps that combines multiple databases into a single tool. It supports a wide range of planning activities, from parks to utilities planning, and has received ESRI Canada awards in 2007 and 2011 for enhancing regional information sharing.
- *Orthophotography Initiative:* Launched in 2005, this initiative captures high-resolution aerial images of the region every three years. The resulting shared dataset supports land development, climate resilience analysis, floodplain management and infrastructure planning. This work is funded by a coalition of CRD services, municipalities and other government partners, such as the Department of National Defence.
- *Data Sharing Agreements:* The CRD regularly enters into data sharing agreements with public sector organization, academic institutions, First Nations, and consulting firms. These agreements support a wide range of initiatives, including planning, environmental monitoring, infrastructure, and academic research. Between 2023 and 2025, 35 such agreements were signed.
- *Capital Region Emergency Service Telecommunication (CREST):* In the early 2000s, the CRD helped establish CREST to modernize and unify radio communications for emergency responders across Greater Victoria. CREST now manages radios and tower infrastructure for all municipalities and emergency services in the region. With CRD support, a major technology upgrade was completed in 2020.
- *Amateur Radio Coordination:* As part of its emergency preparedness program, the CRD supports a region-wide network of trained amateur radio volunteers who provide backup communications during emergencies, particularly in rural and island communities. This effort is coordinated by the CRD-chaired Capital Regional Emergency Radio Coordinators Committee.

- *911 Service Coordination and implementation of the Next Generation 911 (NG911)*: The CRD was the first jurisdiction in North America to implement Enhanced 911 in 1988 and continues to lead regional 911 service delivery. It manages the regional service bylaw, oversees infrastructure, and contracts E-Comm for call answering and dispatch services. In 2019, the CRD opened the South Island 911/Police Dispatch Centre in Saanich, consolidating three centres into one modern, resilient hub. The transition to NG911 is currently underway.

In addition to advancing these initiatives, since 2023, staff have participated in regular meetings with Chief Information Officers (CIOs) and IT Managers of local governments based on Vancouver Island. The purpose of these discussions, which were re-initiated in 2023 following a hiatus, is to share insights, ideas and challenges, and collaborate on solutions and other matters of common interest. For example, through this group, staff have been advancing the development and alignment of key IT policies including Multi-Factor Authentication (MFA) adoption, Artificial Intelligence (AI) usage guidelines, and the integration of Privacy Impact Assessments (PIAs) and Security Threat and Risk Assessment (STRAs) into governance practices. These collective efforts enhance consistency across organizations and build resilience and trust in the regional technology environment.

Staff have also recently re-established their participation in the Municipal Information Systems Association BC (MISABC), where they are contributing as participants and speakers on panels, reinforcing the CRD's commitment to collaboration, knowledge sharing, and thought leadership within the broader municipal IT community.

Earlier this year, staff also engaged with the BC Ministry of Environment regarding their approach to using AI and Large Language Models (LLMs) within the public sector. These conversations focused on the Ministry's transition from traditional, document-heavy, and manual information retrieval methods to a modern, AI-enabled framework capable of delivering real-time insights across decades of complex regulatory and environmental data. This shift presents an opportunity to augment decision-making while reducing the cognitive and administrative burden on staff, freeing up capacity for deeper analysis, consultation and stewardship. The Ministry highlighted that key considerations around transparency, privacy compliance with the *Freedom of Information and Protection of Privacy Act* (FOIPPA), and internal governance remain critical to ensure responsible implementation of such technologies.

## **PROPOSED NEXT STEPS**

The CRD is well positioned to take on a leading or convening role to identify additional opportunities for close collaboration with regional partners to increase resilience and lower long-term operating and maintenance costs. Options that could be explored are listed below.

### *Option 1 – Cooperative Purchasing Partnership*

Over the past several years, major software vendors have increased their licensing and maintenance fees at above-inflation rates, on average between 8% and 15% annually. Many of these vendors are widely used across local governments, creating widespread challenges in managing these escalating costs. In recent discussions, numerous CIOs have indicated that they are actively reviewing their funding models and cost containments strategies in response.

To address this, there are potential opportunities to achieve greater efficiency through cooperative purchasing and aggregation of collective spend. Many vendors' pricing models are volumes-

based, meaning that larger, consolidated purchases can unlock preferential pricing. The CRD could explore shared strategic procurement initiatives to leverage these economies of scale. If successful, this approach could generate substantial savings for commonly used services such as standard computing software licences, print services, and more.

The Province of B.C. already facilitates similar arrangements for Crown Corporations and Health Authorities, allowing them to access provincial agreements. A comparable model could be extended to local governments. Typically, such an initiative would require a dedicated administrative lead to manage the agreement(s) and be the intermediary between vendors and participating municipalities and regional districts. A coalition of partners could also advocate for access to the provincial agreements. This represents a significant opportunity to reduce cost and improve procurement efficiency. Staff estimate that it would take 12 to 24 months to see progress on this option.

### *Option 2 – Artificial Intelligence/Local Large Language Model in Partnership with the Province*

CRD staff could seek opportunities to work with the province to build a local AI/LLM system that could be used by multiple municipalities. This foundational model would be leveraged by other local governments to develop their own LLMs, tailored to their own context, while providing common AI governance policies, tools and technical standards for the region. This approach could reduce duplication of effort, lower barriers to adoption and enable municipalities of all sizes to access responsible and affordable AI technology.

By pursuing this approach, the CRD would align with the province's strategic investments in AI and digital modernization, ensuring that our region benefits from shared expertise, infrastructure, and funding opportunities. A locally hosted or regionally governed LLM would provide stronger assurances around data residency, privacy, and compliance with FOIPPA, while reducing reliance on external vendors.

One way to advance this would be to leverage existing platform technologies to build, train and run the LLM. Using these proven platforms could enable an accelerated implementation, while ensuring security, and reducing the risk and cost of developing infrastructure from the ground up. At the same time, these technologies can be customized and governed under provincial and municipal frameworks, ensuring that the model reflects local context and public-sector requirements. Staff estimate that it would take six to 12 months to see progress on this option.

### *Option 3 – Leveraging Technology Capabilities*

The CRD could explore opportunities to either leverage its own technology capability and systems to provide additional services directly to local governments. This could include offering GIS as a service to give local government access to the CRD's technical expertise. Alternatively, the CRD could look at options to share physical infrastructure, such as a jointly managed on-premises data and application hosting centre. While the shift towards cloud-based hosting had reduced the overall reliance on physical infrastructure, most organizations still require some level of on-premises presence for critical applications and to enhance resilience. A shared data centre could meet these needs more efficiently, reducing duplication and lowering costs through shared maintenance and operations. This option would be a longer-term aspiration which would take at a minimum 24 months to implement.

## IMPLICATIONS

### *Service Delivery Implications*

Advancing shared information technology and cooperative service delivery with regional partners will require dedicated organizational capacity, inter-municipal coordination, and formal governance structures. The CRD would need to establish a formal framework for assessing partner needs, negotiating service-level expectations, and designing a scalable, interoperable technology service catalogue and roadmap.

To begin this effort, the CRD could lead stakeholder engagement sessions with interested BC municipalities and First Nations partners to define areas of common need. The operationalization of shared service offerings (such as GIS-as-a-service or a shared data hosting model) would also require the formalization of technical support models, client onboarding processes, incident and change management frameworks, and escalation protocols.

In addition, the CRD may need to expand or adapt its client and service support model and capabilities, develop regional service agreements or memorandums of understanding, and establish shared governance or advisory structures to ensure equitable oversight and accountability. The delivery of shared services would further require that existing systems and platforms be reviewed for scalability, redundancy, and security compliance, including alignment with provincial privacy legislation and public-sector procurement requirements.

### *Financial Implications*

It is important to note that this work is not currently included in any approved service plans and would require additional resources to be undertaken.

As such, the recommended next step would be to conduct a feasibility study to assess the overall impact of the options identified and quantify the resource requirements needed to proceed. The estimated one-time cost for this study is \$100,000–\$150,000, depending on the extent of external vendor involvement. Staff time will be absorbed within existing core budgets. Once the study is complete, the findings will be presented to the Board to inform decision-making and establish a clear roadmap for next steps.

The estimated financial impacts of each option, excluding staff time, are outlined below. These estimates will be refined through the feasibility study.

#### *Option 1 – Cooperative Purchasing Partnership*

- Shared Procurement Pilot: one-time costs of \$50,000–\$75,000 to engage legal and procurement advisors in designing collective purchasing frameworks and contract administration. This includes onboarding external vendors into a regional pricing model and implementing contract vehicles suitable for multiple jurisdictions.
- Dedicated Program Lead Administrator for Intergovernmental Service Coordinator: estimated cost of approximately \$130,000–\$150,000 annually. This position would be responsible for overseeing partner engagement, operational planning, vendor liaison, and ongoing

coordination across jurisdictions. It would also manage the development of cost-sharing models, service agreements, and performance reporting.

*Option 2 – Artificial Intelligence/Local Large Language Model in Partnership with the Province*

- Proof-of-Concept: staff would recommend advancing a one-time initiative to explore the feasibility of such a program. The estimated one-time prototype development and vendor support cost is approximately \$100,000–\$150,000.

*Option 3 – Leveraging Technology Capabilities*

- GIS-as-a-Service: estimated cost of approximately \$100,000–\$150,000 in first year of implementation to support scaling the CRD's GIS infrastructure (software, licensing, server capacity), professional services for multitenancy readiness, and shared training resources.
- Shared Hosting Facility Feasibility study: estimated cost of approximately \$75,000–\$100,000 to engage a third-party consultant for scoping, site assessment, operational cost modelling, and risk assessment. Implementation of a physical shared hosting facility is expected to cost approximately \$500,000–\$1M over 3+ years (depending on scale and scope), with ongoing shared operational expenses.
- Governance framework development: estimated cost of approximately \$40,000 for legal counsel, procurement expertise, and technical consultants to support the development of data-sharing agreements, cybersecurity protocols, and joint service governance models compliant with FOIPPA and other policies and regulations.

Funding for these initiatives may be partially offset by reallocating internal capacity, leveraging grants (e.g., UBCM, FCM, or provincial innovation funds), and establishing cost recovery or subscription-based models with partner organizations

## **RECOMMENDATION**

Direction from the Board will be required to advance some or all options. Staff recommend initiating the planning for a feasibility study to assess the opportunities, risks, and resource requirements associated with the options proposed. Staff will report back to the Board when additional planning work has been completed.

Any new resources identified through the study will be proposed through the usual service planning and financial planning process, ensuring that future commitments are both sustainable and aligned with organizational priorities.