THOMPSON-NICOLA REGIONAL DISTRICT Municipal GIS Services Proposal

January 2024

Overview

This proposal has been prepared by the Thompson-Nicola Regional District's GIS Services department for our member municipalities. The proposal presents an opportunity for member municipalities to opt into the Municipal GIS Service.

The proposal is intended to be used by member municipalities to inform staff and council of the benefits and funding implications related to joining the Municipal GIS Service. This proposal is a follow-up to the all-CAO meeting held on November 2, 2023, in the TNRD Boardroom.

Background

The TNRD web application, myRegionView, has served TNRD residents, property owners, community groups, businesses, and member municipalities with mapping and property information needs for over ten years. The software infrastructure is entering mature support, which means there will be no maintenance releases to resolve software bugs and security vulnerabilities. The TNRD GIS Services department is upgrading the software infrastructure, which is projected to be completed in the spring of 2024.

Including member municipality GIS data in myRegionView over the past ten years was done at no additional costs to municipalities. However, in preparation for the creation of a replacement web application, it became evident the TNRD GIS department does not have the capacity to continue to provide this support. In June 2022, a notice of change of service was sent out to the TNRD's municipal CAOs, notifying them of the TNRD 's intention to discontinue providing this service to municipalities based on the following reasons:

- 1. Increased demand on the TNRD GIS and mapping services department. The workload on the small team and demand for our service continue to increase to meet the growing needs of our business units, support our Emergency Operation Centre (EOC) during emergency events, and meet existing and new regulations/legislations (e.g. asset management, Next Generation 9-1-1).
- 2. The current model relies on consistent and timely data submissions from member municipalities to keep municipal data current, complete, and accurate in myRegionView. Unfortunately, receiving updates from our member municipalities through the years has been intermittent, resulting in inaccurate municipal content being displayed on myRegionView and Property Information Reports.

A formal municipal GIS service will mitigate these issues by creating additional resources and providing a formal workflow to ensure data integrity.

Proposal

The proposal is for the TNRD to create an additional FTE GIS technician funded through a service agreement with the 10 TNRD member municipalities (all except Kamloops). The following summarizes the services the TNRD would provide to municipalities.

- 1. Access to a Geographic Information System (GIS) Service resource. This resource will:
 - create a transparent workflow for the local government for GIS requests,
 - provide GIS support, data management, and warehousing.
 - maintain hardware and online software licensing,
 - support GIS-related initiatives, and
 - provide access to GIS resources for special projects.
- 2. Access to the new web map Online GIS Services. This web-based service will provide:
 - public access to local government data for public reference
 - secure access to web-based tools for GIS data maintenance.
 - a view of local government and regional data to print and export
 - approved local government datasets via myTNRD Open Data Portal for public download and
 - property information reports.
- 3. Access to a data warehouse and data management tools to:
 - provide technical support for data acquisition and storage,
 - maintain, update, and aggregate GIS data,
 - submit errors and omissions and liaise with the province/municipalities to help resolve errors in GIS data and
 - backup, archive, and recover GIS data.

Funding through this agreement will ensure the local government data services and access to web mapping will continue.

Cost

The proposed service agreement is for a five (5) year term. The total cost of providing the service is \$120,000 per year, inclusive of wages, benefits, workspace, equipment, and software. The costs below assume all listed member municipalities will contribute.

| Municipality | Est % of 1 FTE | Cost For FTE | | |
|--------------|----------------|--------------|--|--|
| Merritt | 22.5% | \$ 27,000.00 | | |
| Chase | 12.5% | \$ 15,000.00 | | |
| Logan Lake | 12.5% | \$ 15,000.00 | | |
| Clearwater | 12.5% | \$ 15,000.00 | | |
| Sun Peaks | 10% | \$ 12,000.00 | | |
| Barriere | 10% | \$ 12,000.00 | | |
| Ashcroft | 10% | \$ 12,000.00 | | |
| Cache Creek | 5% | \$ 6,000.00 | | |
| Clinton | 2.50% | \$ 3,000.00 | | |
| Lytton | 2.50% | \$ 3,000.00 | | |

Summary

During the CAO meeting on November 2, 2023, it was clear that all member municipalities (except Kamloops) rely on the myRegionView application; there was consensus that the municipalities would like to receive a cost proposal for the TNRD continuing to provide this service. In addition, it was noted there were many other GIS-related services that municipalities could not deliver on their own—for example, the transition to next-generation 911(NG9-1-1). NG9-1-1 relies on GIS data and technology and will require significant work to ensure all GIS data is accurate in a usable format for the transition in 2025.

The service agreement ensures municipalities are prepared for upcoming legislative requirements like NG9-1-1 and have access to all GIS Services noted in this proposal.

Schedule of Services:

| Types of Services | Base Service | Additional | Part of an existing contract | Comment/Note |
|--|-----------------|------------|------------------------------|--|
| GIS and mapping support in EOC | ✓ | | | GIS and mapping support provided to TNRD EOC |
| Municipal evacuation status available via online mapping | √ | | | Online application that displays evacuation status. Users can enter an address to find out the current evacuation status. |
| Search and rescue | ✓ | | | General web mapping and access to open data |
| Maintain fire protection boundaries and provide on the web application. | ✓ | | | web mapping only |
| Road data - submit errors/omissions and liaise with province/municipalities | ✓ | | | Help improve the accuracy of data for emergency response, 9-1-1. |
| Address data - report errors/omissions and liaise with municipalities; help to resolve errors | √ | | | Help improve the accuracy of data for emergency response, 9-1-1. |
| Help update the Master Street Address Guide (MSAG) | √ | | | Help improve the accuracy of data for emergency response, 9-1-1. |
| NG911 - Service - aggregation of data (data must exist) | ✓ | | | As per whatever we sign in the NG911 agreement, the data must be provided in the required format. |
| NG911 - service - data custodian - addressing PSAP boundaries and roads in NENA Standard | √ | | | as per the signed NG911 agreement |
| Maintain a regional house numbering grid. Assist municipalities in assigning civic addresses. | √ | | | |
| Maintain/update survey parcel data. | ✓ | | | |
| Maintain/update/Aggregate other GIS data(excluding utilities) | √ | | | |
| Update and maintain BC Assessment records in Tempest (weekly) | √ | | | |
| Mosquito control | ✓ | | | Map and aggregate treatment areas |
| Solid waste management | ✓ | | | Location maps |
| Property information report | ✓ | | | Available via web mapping |
| Data acquisition and warehousing | √ | | | Acquire, store, and distribute data as requested. |
| Zoning data updates | √ | | | As requested by municipalities and to support planning contracts with municipalities and to keep data current in the web map |

| Types of Services | Base Service | Additional | Part of an existing contract | Comment/Note |
|--|-----------------|------------|------------------------------|--|
| OCP data updates | ✓ | | | As requested by municipalities and to support planning contracts with municipalities and to keep data current in the web map |
| Municipal content available via online mapping | ✓ | | | Web mapping |
| Meet obligations as a member of the Integrated Cadastral Information Society (ICI Society) | ✓ | | | We provide updated cadastral to ICI Society weekly on behalf of municipalities in order for them to receive ICI Society membership benefits. |
| Training | √ | | | new staff on myRegionView application (quarterly) Access to help documentation and videos |
| GIS support for project work | ✓ | | | When requested, it requires coordination and resource availability. |
| Provide data to Kamloops Fire Rescue (KFR) for computer-aided dispatching (CAD) | | | √ | 4. Obligations and responsibilities of the TNRD: 4.1 The TNRD shall provide the City with all necessary digital information required for the effective dispatching of fire departments within TNRD jurisdictions; mapping formats shall be determined by the City. |
| Planning services agreement mapping for application as per agreement | | | √ | Schedule A - Mapping recovery already at \$40 Maintain a land and permitting system and databases to track municipal planning applications. 6.1 In connection with the provision of the Services, the TNRD shall establish and maintain a system of records in a form satisfactory to the Municipality |
| Building inspection | | | √ | Maintain a land and permitting system and databases to track municipal building and plumbing permits; the system is used to record and report on housing start statistics for the Regional Growth Strategy. |
| Municipal building permits are available via online mapping | | | √ | Online application that displays active and recently completed building and plumbing permits |
| Customized maps | | ✓ | | |
| Asset Management Registers | | √ | | (Utilities (water, sewer, storm), Land (community centers, cemeteries, parks) |
| Emergency preparedness program | | √ | | GIS and mapping support for emergency preparedness and evac plans: Including fire protection mapping (pdf/paper) |