

Role of a GIS Data Aggregator FAQ [v1.0]

Purpose of this document: This document is provided as additional information to the *Geographical Information Systems (GIS) and Common Addressing FAQ [v4]*. It answers questions for local government authorities and GIS stakeholders specifically regarding the role and function of different types of GIS Data Aggregators, and it will be updated as required based on new information.

1) What is NG9-1-1 and why is it important to my organization?

- Please have a look at [Next Generation 9-1-1 in Canada: Frequently Asked Questions \(esri.ca\)](https://www.esri.ca). This is a good place to learn more about NG9-1-1 and the associated GIS requirements.

2) What is a GIS Data Aggregator?

- A GIS Data Aggregator is an organization that merges GIS data from multiple Authoritative GIS Data Providers (e.g., Local Government Authorities or 9-1-1 Authorities) for the planned future use in the NG9-1-1 system (2025 & beyond).
- GIS Data Aggregators are established as follows:
 - i) through provincial legislation (e.g., NB, NL, NS, PE, and QC), or delegated through an agreement with Authoritative GIS Data Providers.
 - ii) for provinces or territories that do not have legislation or have not delegated the responsibility, the CRTC has directed that Bell, SaskTel, or TELUS, depending on the area of responsibility, be the GIS Data Aggregators).

3) Why is a GIS Data Aggregator needed?

- Authoritative GIS Data Providers are responsible for a specific geographic area (e.g., a municipality) or for specific data layers such as PSAP or Service Boundaries such as Fire or Police or EMS. This GIS data must be combined (aggregated) to produce a seamless coverage for a larger geographic area such as a region or a province.

4) Are there different types of GIS Data Aggregators?

- Yes, the following are the types of GIS Data Aggregators:

i) Top-Level GIS Data Aggregators

The Top-Level GIS Data Aggregators are the designated 9-1-1 Service Providers in Canada. They are responsible for forwarding all calls from local telephone service providers to a designated PSAP.

The CRTC has directed TELUS, SaskTel, and Bell Canada as the Top-Level GIS Data Aggregators in Canada. Their geographical areas of responsibility are as follows:

- (i) TELUS – BC & AB
- (ii) SaskTel – SK
- (iii) Bell Canada – MB, ON, QC, NB, NS, PE, NL; plus, NT and YK (with NorthwesTel).

ii) Provincial GIS Data Aggregators

Provincial GIS Data Aggregators are designated in legislation by their respective provincial/territorial governments as the body responsible for aggregating the GIS data which will be required by NG9-1-1 in the future. Currently, Provincial GIS Data Aggregators have been identified in: NB, NS, NL, PE, and QC.

These Provincial GIS Data Aggregators provide this data to the respective Top-Level GIS Data Aggregator.

iii) Regional GIS Data Aggregators

Regional GIS Data Aggregators perform a delegated collaboration role to aggregate GIS data between the respective Authoritative GIS Data Providers it serves to produce coverage for a larger geographic area.

These Regional GIS Data Aggregators, in turn, provide the aggregated data to the Provincial GIS Data Aggregators, or to the Top-Level GIS Data Aggregators where no Provincial Aggregator exists.

5) Who or what is a Local Authoritative GIS Data Provider?

- A Local Authoritative GIS Data Provider is the local jurisdiction (*could also be regional or provincial/territorial*) that has the mandated authority to create or modify GIS data layers that are identified in the [NENA NG9-1-1 GIS Data Model](#). These local jurisdictions currently have a service level or data sharing agreement with their respective 9-1-1 Service Provider to provide addressing information.
- A Local Authoritative GIS Data Provider may contract with a regional or provincial / territorial GIS Data Aggregator to collect and disseminate their GIS and Addressing data to Top-Level GIS Data Aggregators.

6) What is the NENA NG9-1-1 GIS Data Model?

- The NENA Standard for NG9-1-1 GIS Data Model provides guidance on the GIS datasets (mapping layers) that are required, strongly recommended, and recommended for NG9-1-1. The current version of this model is NENA STA-006.2-2022 and can be found at <https://www.nena.org/page/ng911gisdatamodel>.

7) Does a GIS Data Aggregator have to provide the service to an entire province, or can it focus on a smaller area?

- A GIS Data Aggregator can focus on a smaller area. These are called Regional GIS Data Aggregators, and aggregate data for a specified area within a province or territory.

8) Can a GIS Data Aggregator specialize in specific mapping layer(s) of the GIS data?

- Yes, a GIS Data Aggregator can specialize in aggregating only specific layers identified by the NENA Standard for NG9-1-1 GIS Data Model. For example, the Saskatchewan Public Safety Agency aggregates the PSAP boundaries for the Province of Saskatchewan.

9) My organization provides GIS services by completing change notices for one or more Authorized GIS Data Providers. Am I considered a GIS Data Aggregator?

- Not necessarily - GIS Data Aggregators have two-way relationships. The first is with the Authorized GIS Data Provider, and the second is with the designated Provincial GIS Data Aggregator or designated Top-Level GIS Data Aggregator.

10) What are the core responsibilities of a GIS Data Aggregator?

- Ensuring that the data provided by the Local Authorized GIS Data Provider meets the NENA Standard for NG9-1-1 GIS Data Model. It is important to note that the GIS Data Aggregator does not have the authority to change or create data. Data discrepancies must be flagged and reported to the applicable Local Authorized GIS Data Provider for resolution.
- To assemble the GIS data into a seamless coverage map for the applicable geographic area.
- Providing this data to the contracted next level GIS Data Aggregator as required by the Top-Level GIS Data Aggregator (*NOTE: that the gold standard is within 72-hours, which is more frequent than the current update cycle e.g., months, twice a year, or longer*).

11) What are the requirements for me to become a GIS Data Aggregator?

- Regional GIS Data Aggregators are contracted by the Local Authorized GIS Data Providers.
- Provincial GIS Data Aggregators are designated by the province or territory through legislation (e.g., the Province of Quebec has designated MRNF [Ministère des Ressources naturelles et des Forêts]).
- In the absence of a legislated Provincial/Territorial GIS Data Aggregator, the Top-Level GIS Data Aggregators have been mandated by the CRTC as Bell, SaskTel, and TELUS to also act as the Provincial/Territorial GIS Data Aggregators.

12) How do the roles and responsibilities differ between GIS Data Aggregators and Local Government Authorities in the new NG9-1-1 agreements?

- Aggregating GIS data is not a responsibility of local authorities; however, local government authorities may elect to contract a resource to assist with provisioning GIS data which they are responsible for providing to the designated (provincial or top-level) GIS Data Aggregator as per the new NG9-1-1 service agreement (with either Bell, SaskTel, or TELUS). [*NOTE: Currently TELUS does not require the GIS Provider Schedule to be completed at this time due to the evolving Standards work.*]