



Station Location Study

Council Presentation

December 13, 2022

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Introduction and Approach





ORH helps emergency services around the world to optimize resource use and respond in the most effective and efficient way.



Scope of Work

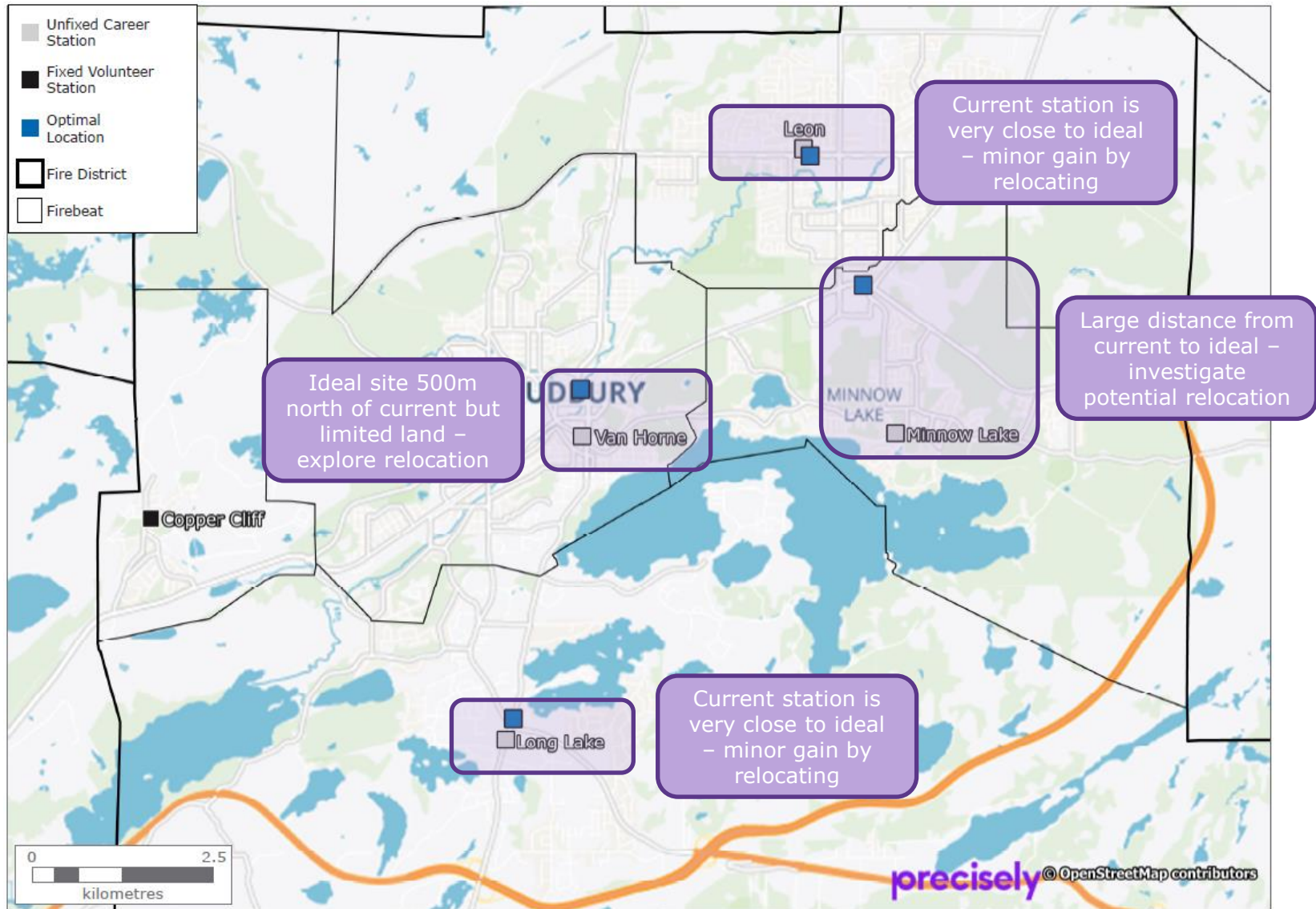
Objective: To determine the ideal number and distribution of emergency service stations for Greater Sudbury.

- Analyzing the **current service profile**
- Producing **demand projections** for the next ten years
- Identifying the **ideal locations** using a 'blank canvas approach' and then refining to develop feasible options
- Identifying the **number and type** of paramedic services vehicles in order to achieve most effective **response times** through simulation modelling
- Developing a **phased plan** of recommendations for the next ten years

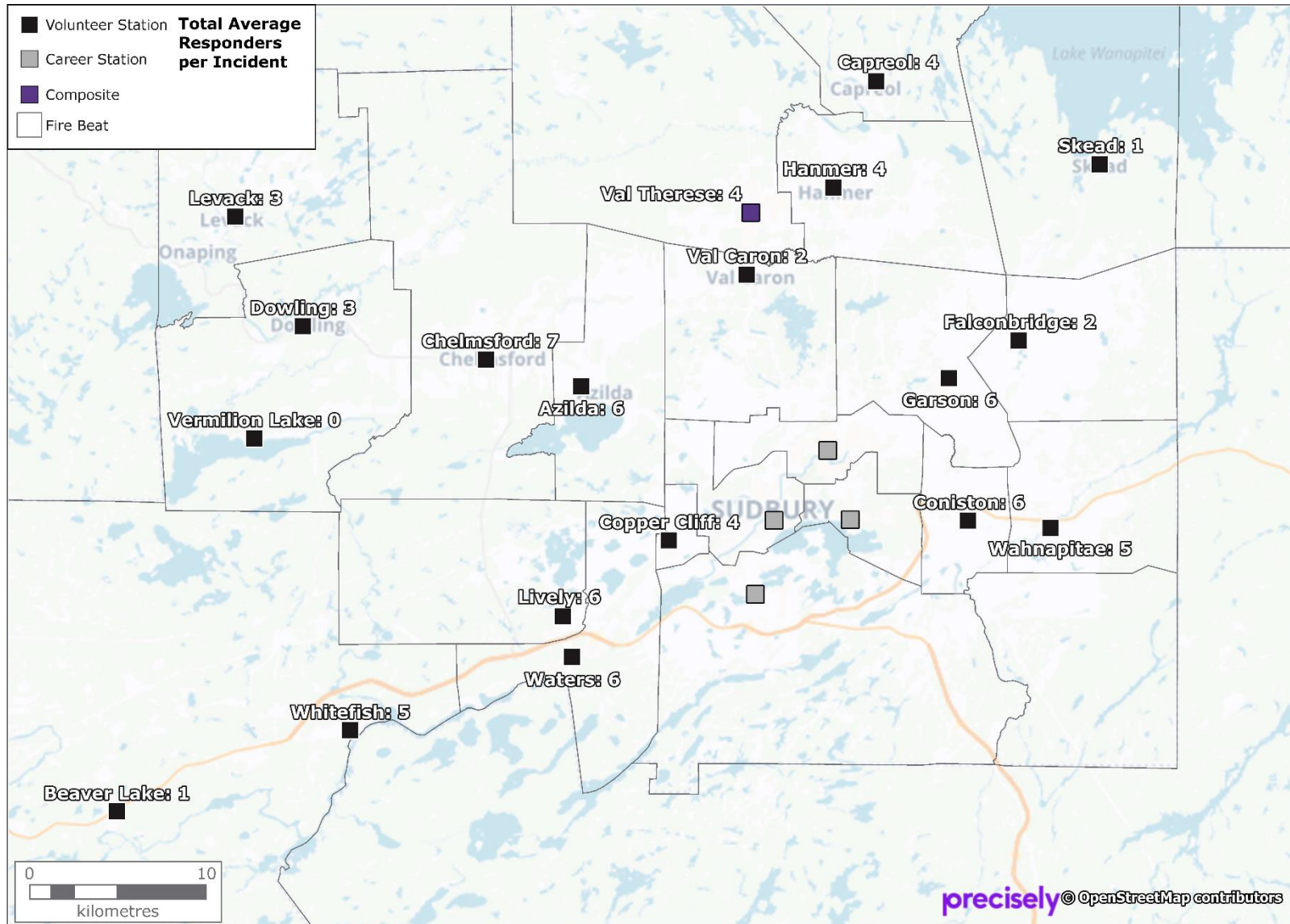


Fire Service Outcomes

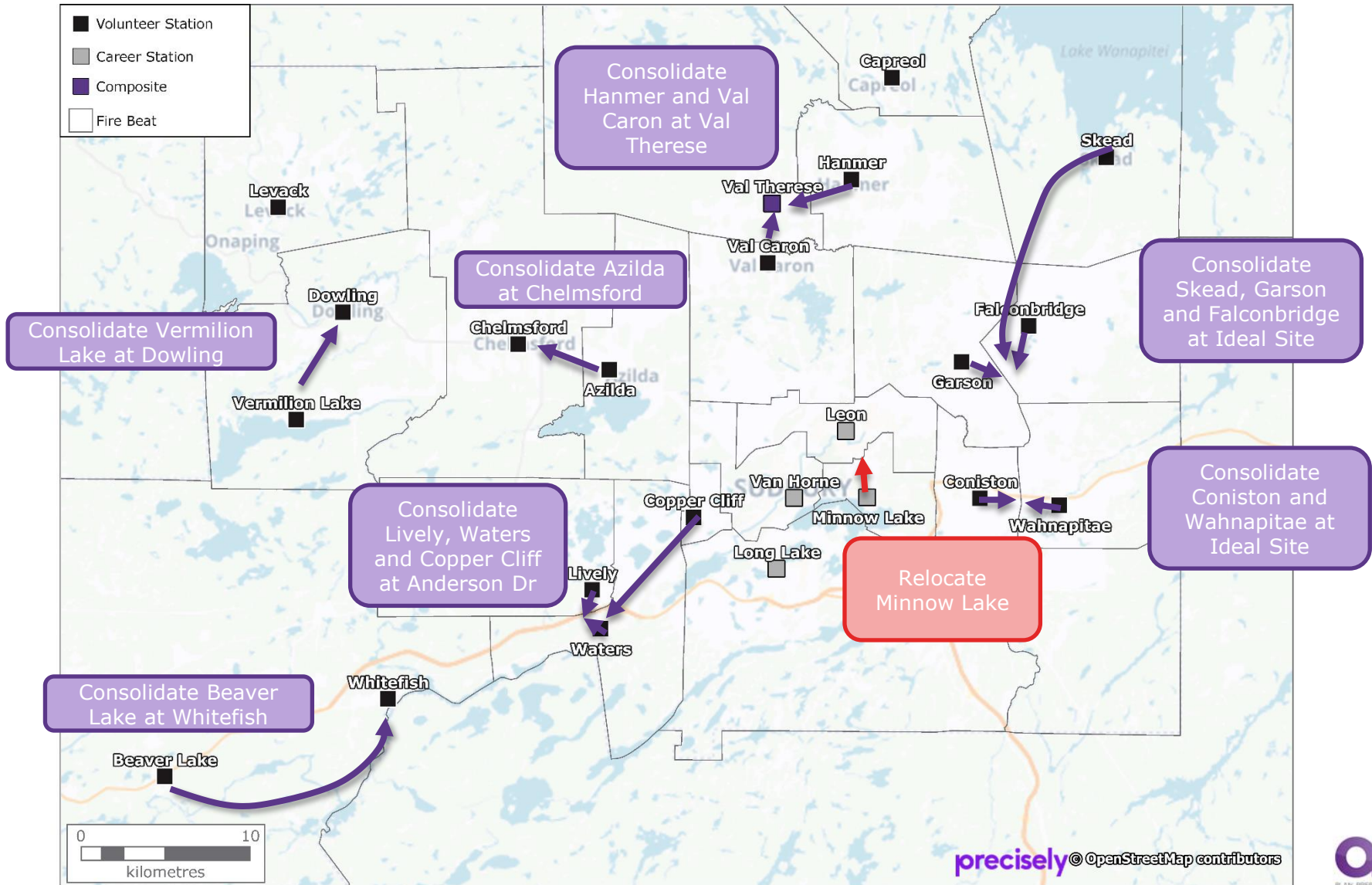
Ideal City Core Distribution of Stations



Volunteer Availability (2020)



Final Fire Modelling Options



Fire Modelling: Step Changes

90th Percentile Impacts (Individual Changes)

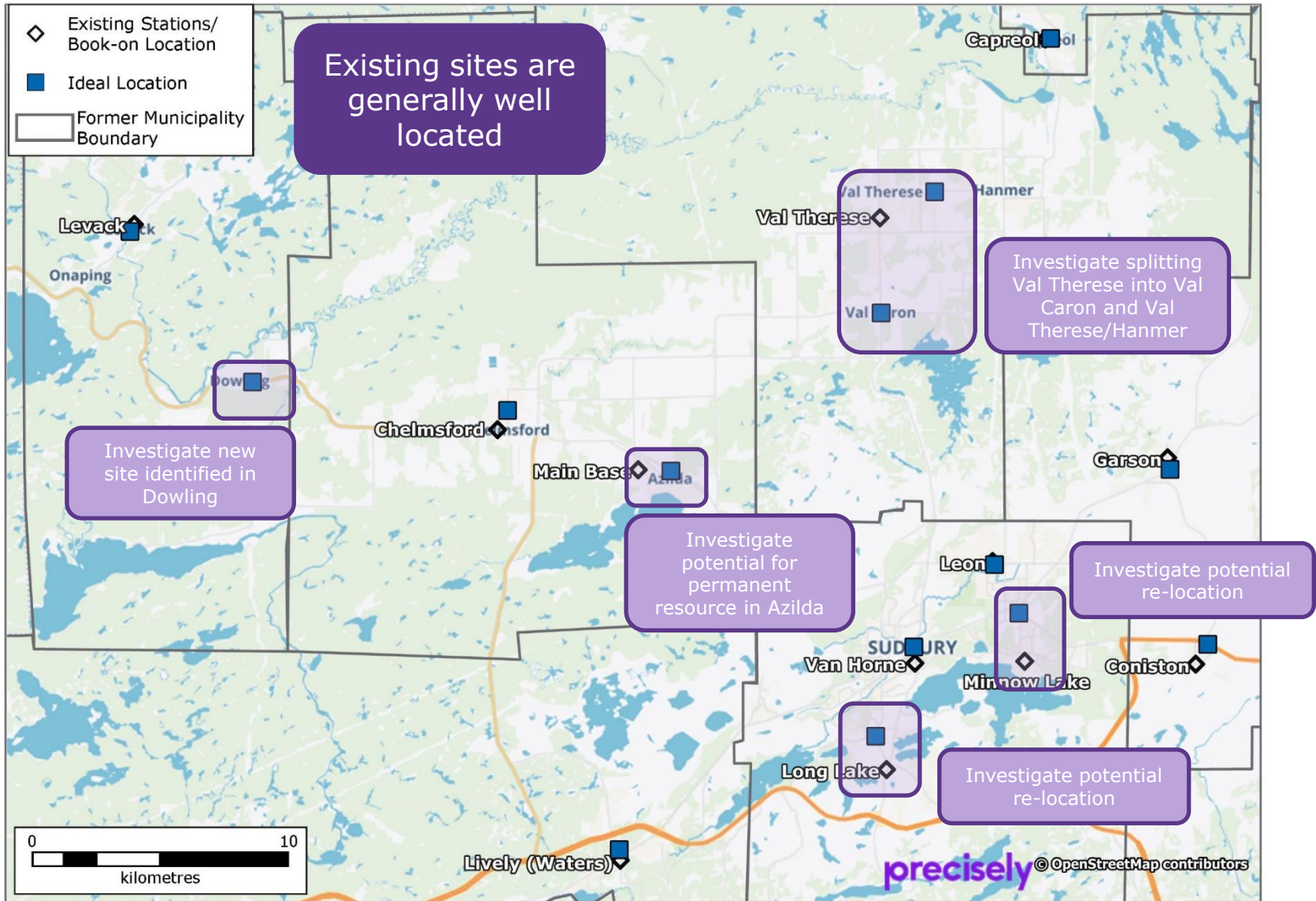
Step	Description	Impact of Step Change	
		Across Volunteer Areas	Across Career Areas
1	Relocate Minnow Lake to the ideal location	-00:04	-00:13
2	Consolidate Skead and Falconbridge into ideal site for Garson	-00:06	00:00
3	Consolidate Val Caron and Hanmer at current site for Val Therese	-00:02	-00:01
4	Consolidate Vermillion Lake into Dowling	00:00	00:00
5	Consolidate Beaver Lake into Whitefish	00:00	00:00
6	Consolidate Wahnapiatae and Coniston at ideal site	00:04	00:00
7	Consolidate Waters, Lively and Copper Cliff at Anderson Drive	00:06	00:00
8	Consolidate Azilda at Chelmsford	00:11	00:00

Relocating Minnow Lake provides greater benefit to the local fire beat, hence is ranked as the first step



Paramedic Services Outcomes

Blank Canvas Approach



Current Resources

- Current resources are **already deployed at the most ideal locations** – no improvement in overall performance when moving resources.
- Small improvements moving to ideal Minnow Lake/Long Lake
- Some area improvements observed (eg, Onaping Falls and Rayside-Balfour) but net degradation due to fall in cover in Core.

Scenario	P4 Performance		
	6-Minute	8-Minute	10-Minute
Base Position - Overall Performance	50.8%	75.2%	87.1%

Difference from Base Position:

Move to Ideal Minnow Lake and Long Lake	0.6%	0.1%	0.0%
Move Core Resource to Val Caron + Move Val Therese to VT/Hanmer	0.0%	-1.0%	-0.4%
Move Core Resource to Levack + Move Levack PRU to Dowling	-2.7%	-2.6%	-1.7%
Keep Core Resource at Azilda	-3.3%	-2.8%	-1.7%
Move Capreol to Fire Station	-0.2%	-0.1%	-0.1%

An aerial night view of a city with light trails from traffic and glowing blue network lines connecting various points across the scene. The background shows a cityscape with illuminated buildings and roads.

Combined Recommendations

Key Messages (1)

- Existing paramedic stations are generally well located, particularly for current resources.
- However, fire station locations are currently not appropriately balanced in the community, and many lack the desired number of available staff.
- Minnow Lake (career fire + paramedic site) could be relocated to improve performance. Although the modelling for career stations has shown that there are potential response time improvements by relocating Van Horne station, there are no identifiable properties at the ideal sites to build a new Main Station. This option has therefore been excluded from the final position.
- Some volunteer fire stations could be consolidated to avoid known capital renewal needs without compromising response times: Vermilion Lake, Beaver Lake, Skead, Falconbridge, Val Caron, Hanmer and Copper Cliff.

Key Messages (2)

- Future changes to fire incident numbers and population growth in the community do not support these stations being sufficiently staffed moving forward. Consolidating stations would provide a more reliable and robust staffing model for GSFS in the future.
- Further consolidations could take place subject to changes to the fire station configuration: Waters, Lively and Copper Cliff at a new site on Anderson Drive; Wahnapiatae and Coniston at the ideal site; and Azilda at Chelmsford (paramedic services would remain at Azilda).
- Where new or renovated stations are recommended (due to relocations) there is opportunity to modernize and improve the functionality of these sites, including for paramedic services.
- No other significant response time improvements can be achieved simply by relocating existing resources, for either fire or paramedic services, without also making some other investment/enhancement in the service.

Development Plan

Implementation Phase Order	Description
1	Relocate the paramedic unit in Capreol to the current fire station
	Consolidate Vermilion Lake into Dowling
	Consolidate Beaver Lake into Whitefish
2	Relocate Minnow Lake to the ideal location (both fire and paramedic services)
	Consolidate Skead and Falconbridge into ideal site for Garson
3	Consolidate Val Caron and Hanmer at current site for Val Therese
	Consolidate Waters, Lively and Copper Cliff at Anderson Drive (both fire and paramedic services)
4	Consolidate Wahnapiatae and Coniston at ideal site (both fire and paramedic services)
	Consolidate Azilda at Chelmsford (keep paramedic services book on at current site)

The implementation phase order for the development plan takes account of feasibility and investment costs, in addition to the modelled impacts on response times

Questions?

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