



Fire Services Level of Service Policy

POLICY NUMBER: 246-OP-26

Approval Date: April 14, 2026

Revise Date:

Motion Number: CRM20260414.1020

Repeal Date:

Supersedes:

Review Date:

1.0 Policy Intent

The intent of this Policy is to establish a clear, transparent, and defensible Fire Services Level of Service for fire suppression within the City of Cold Lake, anchored in Council’s direction to define, measure, and apply the 10 minute total fire service response time standard. This Policy aligns municipal expectations with the operational realities of Cold Lake Fire Rescue’s paid on call (POC) model, the geographic and access constraints present within the community, and the fire protection related provisions of the National Building Code – 2023 Alberta Edition (NBC(AE)).

2.0 Purpose

To formally define the City of Cold Lake’s Level of Service (LOS) for fire suppression, including the 10 minute response time standard, service area distinctions, measurement methodology, reporting expectations, operational considerations, and legislative alignment.

- 2.1 Establish a tiered fire suppression response standard, including the 10 minute/90th percentile requirement where demonstrable.
- 2.2 Provide the methodology for measuring, analyzing, and reporting fire suppression response time performance.
- 2.3 Clarify how the LOS supports planning, development, and Safety Codes decisions, including NBC(AE) construction based mitigation where the 10 minute response cannot be demonstrated.
- 2.4 Ensure residents, developers, and Council understand the practical limitations and risks arising from factors such as turnout time variability, weather, distance, and multi incident demand within a POC system.
- 2.5 Provide a foundation for evidence based decision making, continuous improvement, and defensible application of provincial legislation and national fire service best practices.

3.0 Policy Statement

- 3.1 The City of Cold Lake establishes a tiered Fire Suppression LOS, preserving the 10 minute total fire service response at the 90th percentile in areas where it is operationally achievable and demonstrable.
- 3.2 Where the 10 minute standard cannot be met at the 90th percentile, the City will deem the 10 minute fire department response not available for the purposes of NBC(AE) application, requiring construction based mitigation measures such as limiting distances, cladding requirements, protected openings, and/or fire sprinklers as specified in the Code.
- 3.3 The City shall use validated CAD/AVL data, recognized percentile based performance methodology, and standardized time stamps to evaluate response performance consistent with widely recognized fire service best practices (NFPA 1710/1720).
- 3.4 This Policy does not guarantee response times; it defines targets for service delivery and regulatory application.

4.0 Managerial Guidelines

- 4.1 Definitions:
 - 4.1.1 “CAD/AVL” means Computer-Aided Dispatch/Automatic Vehicle Location;
 - 4.1.2 “CLFR” means Cold Lake Fire-Rescue;
 - 4.1.3 “Construction-Based Mitigation” refers to the additional building protection measures required by NBC(AE) when the 10 minute fire department response cannot be demonstrated;
 - 4.1.4 “Coverage Areas” means the geographically mapped fire response zones where validated dispatch, turnout, and travel times demonstrate the LOS targets. Coverage maps are planning tools and not guarantees;
 - 4.1.5 “GIS” means Geographic Information System;
 - 4.1.6 “HIRF” means High Intensity Residential Fire;
 - 4.1.7 “LOS” means Fire Services Level of Service;
 - 4.1.8 “MGA” refers to the *Municipal Government Act*, RSA 2000, c M-26;
 - 4.1.9 “NBC(AE)” means National Building Code – 2023 Alberta Edition, and establishes requirements for design and construction in Alberta, focusing on accessibility, energy efficiency, and safety standards;

- 4.1.10 “NFC(AE)” means National Fire Code – Alberta Edition, and establishes fire protection requirements for buildings and activities in Alberta, focusing on safety and compliance with national standards;
 - 4.1.11 “POC” refers to the Cold Lake Fire Rescue’s paid on call model;
 - 4.1.12 “Percentile Measurement” means a statistical method defining the maximum response time met or exceeded in a specified percentage of incidents (e.g., the 90th percentile). This is used in NBC(AE) interpretation and NFPA standards;
 - 4.1.13 “Response Time” means the total time from receipt of notification by the fire department to arrival of the first suppression capable apparatus able to initiate fire attack or exposure protection, inclusive of: call receipt → dispatch → turnout → travel → first arrival;
 - 4.1.14 “Urban” or “Rural” refers to the distinctions used for deployment planning, turnout/travel time expectations, and alignment with recognized best practice guidance for POC/volunteer systems.
- 4.2 Authority:
- 4.2.1 This Policy is enacted under the authority granted to municipalities by the MGA.
 - 4.2.2 Administration and enforcement of building and fire safety obligations are governed by the *Safety Codes Act*, the NBC(AE), and the NFC(AE).
- 4.3 Scope & Application:
- 4.3.1 Applies to CLFR fire suppression operations within City boundaries and to service provided through mutual aid or automatic aid agreements.
 - 4.3.2 Applies specifically to structure fire suppression response time performance and related implications for development and Safety Codes decisions.
- 4.4 Service Areas & LOS Targets:
- 4.4.1 Service Areas and travel times for the North and South Fire Stations can be identified on the attached Appendix “A”.
 - 4.4.2 Tier 1: Primary Coverage Areas (Urban Core/Station Proximate Zones):
 - 4.4.2.1 Target: ≤10:00 total response time at the 90th percentile.
 - 4.4.2.2 Supports classification of “10-minute fire department response available” for NBC(AE) purposes.

- 4.4.3 Tier 2: Secondary Areas (Urban Peripheral/Suburban):
 - 4.4.3.1 Target: $\leq 14:00$ total response time at the 85th percentile.
 - 4.4.3.2 NBC(AE) mitigation applies if Tier 1 cannot be demonstrated.
- 4.4.4 Tier 3: Peripheral/Special Access/Rural Fringe:
 - 4.4.4.1 Target: $\leq 18:00$ total response time at the 80th percentile.
 - 4.4.4.2 NBC(AE) mitigation applies by default.
- 4.5 Wildland/Interface Considerations:
 - 4.5.1 The City maintains obligations under the *Forest and Prairie Protection Act* regarding wildfire suppression, recognizing that such demand may affect resource availability.
- 4.6 Measurement Methodology:
 - 4.6.1 All response times will be measured using standardized CAD/AVL timestamps (call receipt, dispatch, turnout, travel, arrival).
 - 4.6.2 Performance will be evaluated at the applicable percentile thresholds per Tier.
 - 4.6.3 Exclusions (e.g., canceled calls) must be documented and transparent.
 - 4.6.4 GIS response coverage analysis will be maintained and updated as required.
- 4.7 Urban & Rural Response Expectations:
 - 4.7.1 Urban core areas expect Tier 1 performance where feasible.
 - 4.7.2 Peripheral/complex access areas will generally fall under Tier 2 or Tier 3 due to travel time, geography, and POC turnout variables.
- 4.8 Performance Monitoring, Reporting & Review:
 - 4.8.1 Administration will prepare an Annual Fire Services LOS Report to Council showing performance by Tier, coverage mapping, and trends.
 - 4.8.2 Quarterly internal monitoring will be performed by the CLFR Fire Chief.
 - 4.8.3 A formal policy review will occur every three years, or sooner if major operational changes occur.

4.9 Operational Considerations:

4.9.1 Staffing Model:

4.9.1.1 CLFR operates as a paid on call service; turnout time and availability significantly impact response reliability. Targets represent objectives, not guarantees.

4.9.2 Deployment Strategy:

4.9.2.1 Apparatus placement and station coverage are optimized to preserve Tier 1 where feasible. Expanded Tier 1 coverage would require Council consideration of resource impacts (e.g., career staffing, new stations).

4.9.3 Dispatch Protocols:

4.9.3.1 Structure fire calls shall be dispatched immediately upon call receipt while interrogation continues, maximizing the available travel window.

4.9.4 Mutual & Automatic Aid:

4.9.4.1 The City will maintain agreements to strengthen effective response force (ERF), particularly during simultaneous incidents.

4.9.5 Training & Best Practices:

4.9.5.1 CLFR will maintain competency standards aligned with provincial legislation, Safety Codes requirements, and recognized best practices (NFPA).

4.10 Assumptions, Risks, & Limitations:

4.10.1 LOS targets do not guarantee response times to any specific incident.

4.10.2 CLFR performance is influenced by weather, traffic, distance, availability of POC members, and simultaneous calls.

4.10.3 NBC(AE) construction mitigation must be applied where 10 minute response availability cannot be demonstrated at the 90th percentile.

4.10.4 Data integrity requires continuous auditing of CAD/AVL systems.

4.11 Roles & Responsibilities:

4.11.1 City of Cold Lake Council:

- 4.11.1.1 Adopts the Policy;
- 4.11.1.2 Considers required resources;
- 4.11.1.3 Reviews annual LOS reporting.

4.11.2 City of Cold Lake Chief Administrative Officer:

- 4.11.2.1 Ensures policy implementation and inter-departmental alignment.

4.11.3 CLFR Fire Chief:

- 4.11.3.1 Oversees data collection, mapping, performance analysis, and annual/triennial reporting.

4.11.4 Planning & Development/Safety Codes

- 4.11.4.1 Applies NBC(AE) requirements and LOS benchmarks to development approvals.

4.12 Implementation & Transitional Provisions:

- 4.12.1 Administration will publish a public facing summary, update SOGs, and issue NBC(AE)/HIRF guidance to applicants.
- 4.12.2 This Policy does not create new staffing or capital requirements unless separately approved by Council.

5.0 References

- 5.1 *Municipal Government Act*, RSA 2000, c M-26
- 5.2 *Safety Codes Act*, RSA 2000, c S-1
- 5.3 *Forest and Prairie Protection Act*, RSA 2000, c F-19
- 5.4 National Building Code – 2023 Alberta Edition
- 5.5 National Fire Code – Alberta Edition
- 5.6 Recognized Best Practices (NFPA 1710/1720)
- 5.7 City of Cold Lake – Fire Services LOS Policy Staff Report (February 17, 2026)

6.0 Persons Affected

- 6.1 City Council
- 6.2 Chief Administrative Officer
- 6.3 Planning & Development Department
- 6.4 Regional Dispatch Partners
- 6.5 Mutual Aid Partners
- 6.6 Development Community
- 6.7 Building Owners
- 6.8 City of Cold Lake Residents

7.0 Revision/Review History

April 20, 2026
Date

Apr 21/2026
Date



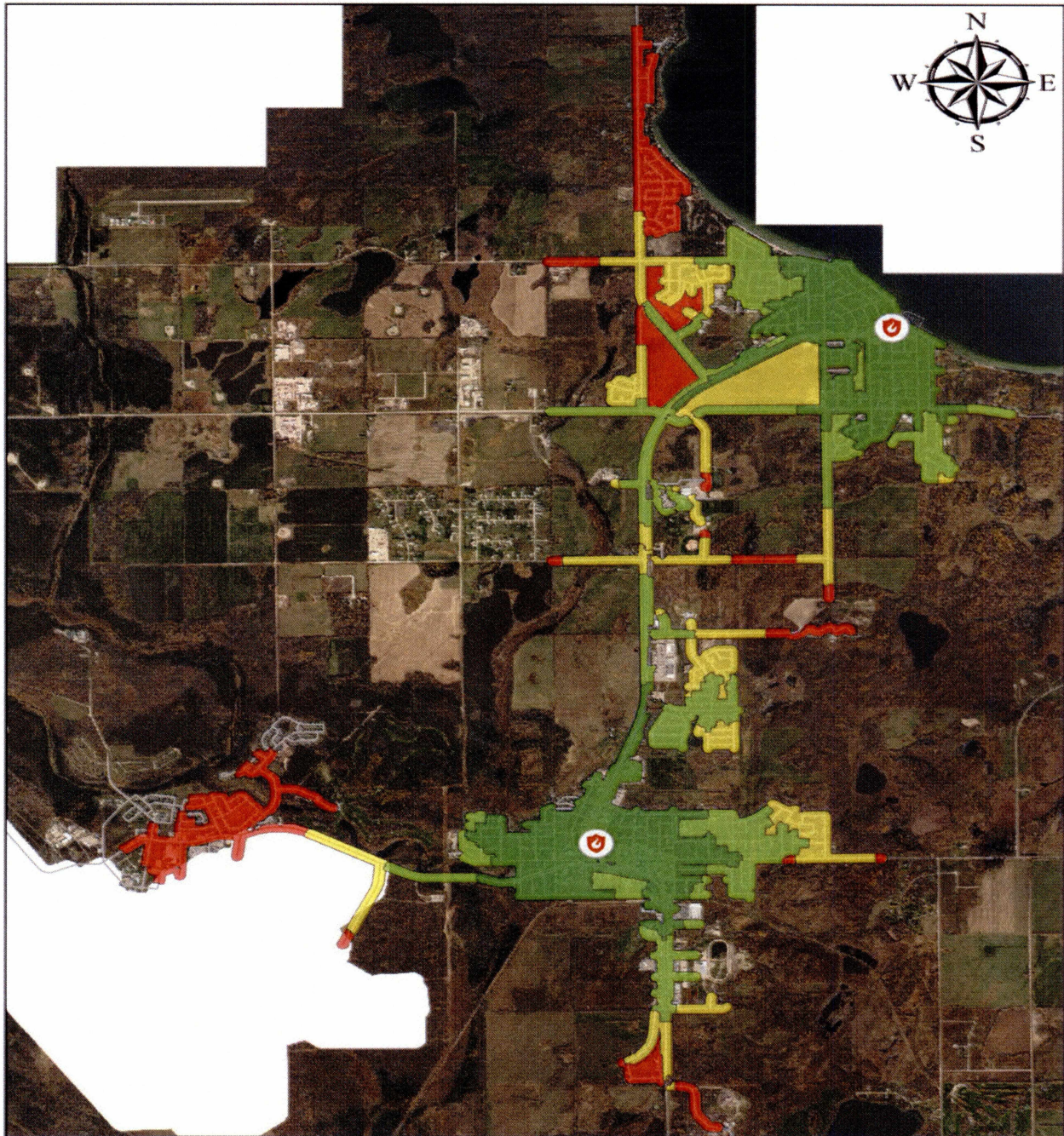
Chief Administrative Officer



Mayor



APPENDIX "A"
NORTH AND SOUTH FIRE STATION
SERVICE AREA – TRAVEL TIME (Minutes)



Both Fire Stations
Service Area - Travel Time (minutes)*

*This does not include assembly and call handling time

-  North Fire Station
 -  South Fire Station
- | | |
|---|-----------|
|  | 6 minutes |
|  | 4 minutes |
|  | 3 minutes |
|  | 2 minutes |