

# Lucknow and District Fire Board Agenda

December 19, 2024

7:00 pm

Lucknow, ON

## **Board Members**

Bill Vanstone

Curtis Blake

Scott Gibson

Jim Hanna

Glen McNeil

Carl Sloetjes

## **Staff**

Jeff Bradley, Fire Chief

Jennifer White

Jodi MacArthur

Pages

### **1. Call to Order**

A Meeting of the Lucknow and District Fire Board will be called to Order at 7:00 p.m. on December 19, 2024 at the Lucknow Fire Hall.

### **2. Disclosure of Pecuniary Interest**

### **3. Adoption of Minutes**

That the minutes of the Lucknow and District Fire Board meeting of September 19, 2024 be adopted as presented.

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#### **4. Closed Session**

THAT the Lucknow and District Fire Board move into closed meeting at [TIME] for the purpose of considering:

1) personal matters about an identifiable individual, including municipal or local board employees (Fire Chief Wages);

2) personal matters about an identifiable individual, including municipal or local board employees (personnel)

pursuant to Section 239 (2) of the Municipal Act, 2001 as amended;

AND FURTHER THAT the Lucknow and District Fire Board return to regular open meeting upon completion.

#### **5. Matters Arising from Closed Session**

#### **6. Financial Reports**

##### **6.1 Financial Report Year to Date 2024, LDFB-2024-12-07**

4

THAT the Lucknow and District Fire Board receive for information Report LDFB-2024-12-07.

#### **7. Staff Reports**

##### **7.1 Lucknow and District Fire Board Periodic Activities Report - December, LDFB-2024-12-08**

8

That the Lucknow & District Fire Board hereby receives for information Report LDFB-2024-12-08 prepared by Jeff Bradley, Fire Chief.

##### **7.2 Budget Estimates 2025, LDFB-2024-12-09**

11

THAT the Lucknow & District Fire Board hereby approves Report LDFD-2024-12-09 prepared by Jeff Bradley, Fire Chief;

AND FURTHER approves the proposed Lucknow Fire Board budget, confirming that it fulfills the requirements of the Joint Fire Services Agreement Section 4(a);

AND FURTHER recommends approval of the proposed Budget by each respective Council.

#### **8. Information**

#### **9. New Business**

**10. Meeting Schedule**

The Board to discuss the 2025 meeting schedule. The Fire Board Rules of Procedure state:

The Lucknow and District Fire Board will meet quarterly or at the call of the Chair. The annual schedule of its regular meetings shall be on the fourth Thursday of the following months:

January, May, September, December.

For 2025, those dates would be January 23, 2025; May 22, 2025; September 26, 2025; and December 26, 2025.

**11. Adjournment**

THAT the meeting adjourn at TIME

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## Lucknow and District Fire Board Minutes

**Date:** September 19, 2024

**Time:** 7:00 pm

**Location:** Lucknow, ON

Members Present Carl Sloetjes  
Curtis Blake  
Scott Gibson  
Jim Hanna  
Glen McNeil  
Bill Vanstone, Chair

Staff Present Jeff Bradley, Fire Chief  
Jennifer White

### 1. Call to Order

The Chair called the meeting to order at 7:00 p.m.

### 2. Disclosure of Pecuniary Interest

None disclosed.

### 3. Adoption of Minutes

Motion No.: 09/19/24 LDFB - 01

**Moved By** Scott Gibson

**Seconded By** Bill Vanstone

THAT the minutes of the Lucknow and District Fire Board of June 4, 2024 be adopted as presented.

**Carried**

### 4. Financial Reports

#### 4.1 Financial Report – August 2024, LDFB-2024-09-06

Motion No.: 09/19/24 LDFB - 02

**Moved By** Glen McNeil  
**Seconded By** Curtis Blake

THAT the Lucknow and District Fire Board receive for information Report LDFB-2024-09-06 prepared by Jeff Bradley, Fire Chief.

**Carried**

**5. Staff Reports**

**5.1 Periodic Activities Report April to July 2024, LDFB-2024-09-05**

Motion No.: 09/19/24 LDFB - 03

**Moved By** Scott Gibson  
**Seconded By** Curtis Blake

That the Lucknow & District Fire Board hereby receives for information Report LDFB-2024-09-05 prepared by Jeff Bradley, Fire Chief

**Carried**

**6. Information**

**7. New Business**

Members discussed the potential for a lakeshore satellite station which had been introduced at the last meeting of the Board. Members reported that a review by staff presented to Ashfield-Colborne-Wawanosh Council, regarding response times for the Board Coverage Area were satisfactory to their Council and that the Township Council was not interested in pursuing this idea further at this time.

The Board inquired about the potential to provide education to residents within the coverage area on factors which affect response times.

Staff noted that the data collection regarding factors affecting response times is complicated, has come from multiple sources and is difficult to gather. More than 80 hours have gone into collecting data from sources such as Bruce County EMS, Fire Chiefs and Office of the Fire Marshall. There are multiple areas where response times are not being met, but small changes could be made that are expected to impact these times, this includes reviewing how calls are being coordinated at dispatch.

The focus of data collection has been on the lakeshore area north of Amberly road. Staff noted that medical calls were being dispatched prior to the

established guidelines resulting in a large volume of calls being turned around, cancelled or not required. An issue has been identified that the Fire Department is being dispatched in advance of the agreed aid times.

Public Education, Inspections, Fire Safety Standards and Enforcement programs are expected to make a difference to response times in a more cost effective manner. As an example, Staff noted that many fire calls are to unoccupied beach fires, and no longer permitting these may also reduce calls. The Fire Chief noted that the current focus will be on education, early detection and fire prevention. "Have coffee with the Fire Chief" is a possible outreach program in the community to assist in this.

The Board requested the Fire Chief to investigate how to get Fire Blankets into the hands of residents more easily.

**8. Meeting Schedule**

The next regularly scheduled meeting of the Lucknow and District Fire Board is December 19, 2024 at 7:00 p.m.

**9. Adjournment**

Motion No.: 09/19/24 LDFB - 04

**Moved By** Jim Hanna

**Seconded By** Curtis Blake

THAT the meeting adjourn at 7: 20 p.m.

**Carried**

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Chair

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Secretary

## Committee Report

**Meeting: Lucknow and District Fire Board**

**Report Title: Financial Report Year to Date 2024**

**Prepared By: Jeff Bradley, Fire Chief**

**Date: Dec. 19, 2024**

**Report Number: LDFB-2024-12-07**

**File Number: C05 – LDFB 24**

**Attachments: Year to date financial revenue and expenditure report**

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**Recommendation:**

THAT the Lucknow and District Fire Board receive for information Report LDFB-2024-12-07.

**Background:**

As per the Joint Fire Service Agreement a financial report shall be submitted to the Lucknow District Fire Board.

Attached to this report a year to date financial and expenditures report for the Lucknow District Fire Department.

**Discussion:**

Additional purchase related updates are included in the Periodic Activities Report 2024-12-08.

**Financial Impacts:**

Operations remain within the projected budget.

**Respectfully Submitted By:**

Jeff Bradley, Fire Chief

**Report Approved By:**

Jodi MacArthur, Chief Administrative Officer

# General Ledger

## Annual Department Budget vs. Actual Comparison Report

Fiscal Year Ending: DEC 31,2024 - From Period 1 To Period 11 Ending NOV 30,2024

Account	Description	Previous Year Total Actual	Budget	Current Year To Date Actual	Total Budget
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**Fund: 01 GENERAL TOWNSHIP**

**Category: 2???**

**2020 \*\*\* LUCKNOW DISTRICT FIRE STATION \*\*\***

**Revenue**

01-2020-3014	Fire Inspection Fees	295.00	0.00	70.00	0.00
01-2020-3015	Donations	2,500.00	0.00	19,000.00	0.00
01-2020-3020	Cost Recovery	14,814.13	0.00	7,020.79	0.00
01-2020-3030	Fire Calls - Ashfield-Colborne-Wawa	13,100.00	0.00	6,000.00	0.00
01-2020-3035	Fire Calls - Huron-Kinloss	14,600.00	0.00	8,100.00	0.00
01-2020-3040	Contributions - Ashfield-Colborne-Wawa	175,023.49	168,950.00	99,085.72	188,450.00
01-2020-3045	Contributions - Huron-Kinloss	175,023.49	168,950.00	99,085.72	188,450.00
01-2020-3050	Fire Safety Grant	0.00	0.00	0.00	0.00
01-2020-3060	Ministry of Transportation - Fire Calls	0.00	0.00	0.00	0.00
01-2020-3400	County of Bruce - Modified Response	5,000.00	5,000.00	0.00	5,000.00
01-2020-6040	Contributions - Ashfield-Colborne-Wawa	373,092.12	325,000.00	0.00	45,000.00
01-2020-6045	Contributions - Huron-Kinloss	373,092.11	325,000.00	0.00	45,000.00
<b>Total Revenue</b>		<b>1,146,540.34</b>	<b>992,900.00</b>	<b>238,362.23</b>	<b>471,900.00</b>

**Expense**

01-2020-0000	*** LUCKNOW DISTRICT FIRE STA	0.00	0.00	0.00	0.00
01-2020-7100	Salaries	207,681.97	200,000.00	45,353.31	200,000.00
01-2020-7200	Benefits	31,225.15	30,000.00	11,960.13	30,000.00
01-2020-7251	Administration Fee	2,500.00	2,500.00	2,500.00	2,500.00
01-2020-7254	Office Supplies	77.71	1,000.00	796.20	1,000.00
01-2020-7255	Public Education/Fire Safety	4,065.46	1,000.00	6,133.06	1,000.00
01-2020-7256	Computer Equipment - R&M - Servic	0.00	0.00	301.97	0.00
01-2020-7260	Telephone	2,217.88	2,000.00	2,049.88	2,000.00
01-2020-7261	Dispatch Services	9,625.33	22,000.00	34,672.94	22,000.00
01-2020-7262	Advertising	0.00	200.00	0.00	200.00
01-2020-7263	Gifts & Flowers	225.00	500.00	0.00	500.00
01-2020-7265	Association Memberships	412.38	1,000.00	1,447.38	1,000.00
01-2020-7266	Insurance	12,060.36	10,000.00	17,743.22	14,000.00
01-2020-7268	Audit	800.00	800.00	0.00	800.00
01-2020-7269	Radio Licences	647.94	800.00	676.44	800.00
01-2020-7270	Meetings - Registration	0.00	0.00	0.00	2,000.00
01-2020-7271	Meetings - Travel	737.65	500.00	414.67	0.00
01-2020-7272	Meetings - Meals	1,739.84	1,500.00	461.24	0.00
01-2020-7273	Professional Fees and Services	8,140.80	0.00	0.00	0.00
01-2020-7275	Medical Supplies	3,842.05	1,200.00	1,640.20	1,200.00
01-2020-7276	Small Tools	1,921.43	1,000.00	284.89	1,000.00
01-2020-7284	Hydrant Repairs & Maintenance	3,840.00	4,000.00	4,030.00	4,000.00
01-2020-7285	Depreciation Expense	115,723.17	0.00	0.00	0.00
01-2020-7292	Uniforms	432.72	0.00	415.13	500.00
01-2020-7300	Conferences - Registration	0.00	0.00	0.00	0.00
01-2020-7301	Conferences - Accomodations	0.00	0.00	0.00	0.00
01-2020-7302	Conferences - Travel, parking & Taxi	0.00	0.00	0.00	0.00
01-2020-7303	Conferences - Meals	0.00	0.00	0.00	0.00
01-2020-7305	Training - Registration	15,624.21	13,000.00	7,210.54	16,000.00
01-2020-7306	Training - Accomodations	618.06	0.00	430.00	0.00
01-2020-7307	Training - Supplies	1,528.43	0.00	232.73	0.00
01-2020-7308	Training - Meals	405.59	1,000.00	132.82	1,000.00
01-2020-7318	Utilities - Propane	7,207.80	6,000.00	4,934.84	6,000.00
01-2020-7320	Utilities - Hydro	3,263.25	3,000.00	2,657.05	3,000.00



# General Ledger

## Annual Department Budget vs. Actual Comparison Report

Fiscal Year Ending: DEC 31,2024 - From Period 1 To Period 11 Ending NOV 30,2024

Account	Description	Previous Year Total		Current Year To Date	Total Budget
		Actual	Budget	Actual	
01-2020-7321	Utilities - Water	720.00	700.00	735.00	700.00
01-2020-7322	Utilities - Sewage	525.00	500.00	550.00	500.00
01-2020-7323	Building - R&M - Services	7,399.75	3,000.00	11,836.13	3,000.00
01-2020-7324	Building - R&M - Supplies	6,378.03	3,000.00	439.97	3,000.00
01-2020-7325	Building - Cleaning	1,200.00	1,200.00	1,099.21	1,200.00
01-2020-7326	Building - Snow Removal	3,285.01	5,000.00	3,107.79	5,000.00
01-2020-7351	Equipment - Certification	2,962.71	4,000.00	818.15	4,000.00
01-2020-7353	Vehicle - R&M - Supplies	13,043.09	1,500.00	607.72	1,500.00
01-2020-7354	Vehicle - R&M - Services	18,612.03	6,000.00	16,967.74	6,000.00
01-2020-7355	Vehicle - Diesel	7,338.38	5,000.00	3,984.16	5,000.00
01-2020-7356	Vehicle - Gas	152.67	1,500.00	447.12	1,500.00
01-2020-7357	Equipment - R&M - Services	8,829.73	3,500.00	16,281.70	35,000.00
01-2020-7358	Equipment - R&M - Supplies	9,068.71	5,000.00	15,567.45	5,000.00
01-2020-8010	Equipment	3,544.98	50,000.00	59,901.75	90,000.00
01-2020-8020	Apparatus Replacement	0.00	600,000.00	0.00	0.00
01-2020-8025	Computer Equipment	0.00	0.00	1,874.22	0.00
<b>Total Expense</b>		519,624.27	992,900.00	280,696.75	471,900.00
<b>Dept Excess Revenue Over (Under) Expenditures</b>		626,916.07	0.00	(42,334.52)	0.00
<b>Category Excess Revenue Over (Under) Expenditures</b>		626,916.07	0.00	(42,334.52)	0.00

# General Ledger

## Annual Department Budget vs. Actual Comparison Report

Fiscal Year Ending: DEC 31,2024 - From Period 1 To Period 11 Ending NOV 30,2024

Account	Description	Previous Year Total Actual	Budget	Current Year To Date Actual	Total Budget
<b>REPORT SUMMARY</b>					
01-2020	*** LUCKNOW DISTRICT FIRE STATION ***	1,146,540.34	992,900.00	238,362.23	471,900.00
Fund 01 Total Revenue		1,146,540.34	992,900.00	238,362.23	471,900.00
01-2020	*** LUCKNOW DISTRICT FIRE STATION ***	519,624.27	992,900.00	280,696.75	471,900.00
Fund 01 Total Expenditure		519,624.27	992,900.00	280,696.75	471,900.00
Fund 01 Excess Revenue Over (Under) Expenditures		626,916.07	0.00	(42,334.52)	0.00
Report Total Revenue		1,146,540.34	992,900.00	238,362.23	471,900.00
Report Total Expenditure		519,624.27	992,900.00	280,696.75	471,900.00
Report Excess Revenue Over (Under) Expenditures		626,916.07	0.00	(42,334.52)	0.00

# Committee Report

**Meeting: Lucknow and District Fire Board**

**Report Title: Lucknow and District Fire Board Periodic Activities Report - December**

**Prepared By: Jeff Bradley, Fire Chief**

**Date: Dec. 19, 2024**

**Report Number: LDFB-2024-12-08**

**File Number: C05 LDFB 24**

**Attachments: None**

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## **Recommendation:**

That the Lucknow & District Fire Board hereby receives for information Report LDFB-2024-12-08 prepared by Jeff Bradley, Fire Chief.

## **Background:**

All necessary Fire and Emergency Services administrative tasks have been initiated, are on-going and/or have been completed for the reporting period.

1. All general administrative tasks with the day-to-day operations of the Fire Department for the reporting period have been completed.
2. The activities since the last report was submitted for the Lucknow & District Fire Department are detailed below.
3. At present Staff are reviewing certifications to ensure that all remaining members of the Lucknow District Station have completed their NFPA Firefighter 1 and 2 certification examinations and assessments.
4. Projects/Activities completed since last report was submitted for the Lucknow & District Fire Department are detailed below.

## **Discussion:**

### **1. Emergency Response Incidents:**

#### **ASHFIELD-COLBORNE-WAWANOSH**

<b>Call #</b>	<b>Date</b>	<b>Response Type</b>
16-24-0110	2024-09-21	Medical
16-24-0108	2024-09-19	Alarm
16-24-0104	2024-09-06	Vehicle Collision
16-24-0095	2024-08-20	Medical
16-24-0094	2024-08-17	Call cancelled on route
16-24-0091	2024-08-09	Medical
16-24-0089	2024-08-04	Authorized controlled burning - complaint
16-24-0088	2024-07-31	Fire
16-24-0086	2024-07-21	Vehicle Collision
16-24-0085	2024-07-18	Medical

16-24-0083	2024-07-13	Fire
16-24-0082	2024-07-13	Medical
16-24-0081	2024-07-12	Medical
16-24-0078	2024-07-06	Medical

## HURON-KINLOSS

Call #	Date	Response type
16-24-0109	2024-09-20	Medical
16-24-0107	2024-09-14	Medical
16-24-0106	2024-09-12	Call cancelled on route
16-24-0105	2024-09-11	CO false alarm (no CO present)
16-24-0103	2024-09-03	Other pre fire conditions (no fire)
16-24-0102	2024-09-01	Medical
16-24-0101	2024-08-26	Medical
16-24-0100	2024-08-25	CO incident, CO present (exc false alarms)
16-24-0099	2024-08-24	Medical
16-24-0098	2024-08-22	Medical
16-24-0096	2024-08-20	Medical
16-24-0093	2024-08-14	Medical
16-24-0092	2024-08-11	Medical
16-24-0090	2024-08-05	Medical
16-24-0087	2024-07-29	Call cancelled on route
16-24-0084	2024-07-18	Medical
16-24-0080	2024-07-09	Fire
16-24-0079	2024-07-09	Medical

## 2.Fire Department Training Sessions:

Session Type:	Totals:
General/Officer Meetings	3
Fire Practice	5
Emergency Training Course (NFPA)	2
Recruit Firefighter Training	1
General Apparatus/Equipment Inspections	5

## 3.Non-Emergency Activities:

Activity Type:	Totals:
Fire Inspections (Incl. Burn Complaints)	8
Fire Investigations	1
Open Air Burn By-law Investigation	1
Fire Permits Issued	6
Fire Prevention Activity/Plan Review	10
Pre-Incident Planning Activity	1
Public Education Delivery	1
Smoke/CO Program Activity	5
Community Event Participation	0
JHSC – Monthly Facility Inspection	4

**Additional information:**

- Lucknow station will be doing a recruitment auxiliary firefighter hire in mid January to return our staffing levels to 26 suppression firefighters serving the community.
- Lucknow firefighters responded to a medical emergency where they performed live saving skills with a great outcome. This was contributed to the ongoing training and dedication our firefighters give back to our community.
- Firefighters' association received a donation from the McArthur family to purchase a Sparky the Fire Dog costume for fire prevention and public education.
- Firefighters' association looking to fundraise and purchase an emergency response drone that can assist in firefighting activities, search and rescue.

**Financial Impacts:**

None

**Respectfully Submitted By:**

Jeff Bradley, Fire Chief

**Report Approved By:**

Jodi MacArthur, Chief Administrative Officer

# Committee Report

**Meeting: Lucknow and District Fire Board**

**Report Title: Budget Estimates 2025**

**Prepared By: Jeff Bradley, Fire Chief**

**Date: Dec. 19, 2024**

**Report Number: LDFB-2024-12-09**

**File Number: C05 LDFB 24**

**Attachments: Fire Fighter Exposure to Carcinogens Information Sheet, 2025 Operational and Capital budgets**

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## **Recommendation:**

THAT the Lucknow & District Fire Board hereby approves Report LDFD-2024-12-09 prepared by Jeff Bradley, Fire Chief;

AND FURTHER approves the proposed Lucknow Fire Board budget, confirming that it fulfills the requirements of the Joint Fire Services Agreement Section 4(a);

AND FURTHER recommends approval of the proposed Budget by each respective Council.

## **Background:**

As per the Joint Fire Services Agreement Section 4(a) the Fire Chief shall prepare annually and present through the Lucknow and District Fire Board and estimate of operating revenues and expenditures and capital contributions and purchases for the Lucknow and District Fire Board.

Attached to this report are the 2025 Operational Budget Estimates and the 2025 Lucknow & District Fire Department Capital Expenditure Business Plan for review by the Lucknow & District Fire Board.

Per Section 4(b) of the agreement all parties (being the Township of Ashfield-Colborne-Wawanosh and Township of Huron-Kinloss) to the agreement must approve the Fire Chief's estimates as submitted or amended.

## **Discussion:**

### Operational Budget Expenditures:

The 2025 Operational budgets proposed reflect the estimated actual operating and capital costs of the Lucknow & District Fire Department which are consistent with the 2024 expenditures as attached to this report.

Increases this year are mainly in salary and benefit costs. This is consistent with the previous year's call volumes and wage expenditures.

## Capital Budget Expenditures:

The equipment being sought and the rationale for each is detailed as follows:

### 1. Equipment Decontamination:

To meet Regulations, fire departments are implementing cancer prevention programs. We are implementing 3 separate phases in this project:

- 1) **On scene decontamination:** We are currenting managing this phase by washing with water and decontamination solution, to remove the majority of the physical contaminates that are on the gear and equipment.
- 2) **Cleaning contaminated gear:** Includes: Purchasing fire Gear extractors that remove a considerable amount of carcinogens vs regular residential washers. These are NFPA approved for extracting carcinogens from the fire gear safely. Also includes Gear dyers to reduce the drying time and eliminate trapped moisture in the gear.
- 3) **Constructing a decontamination room:** This supports the decontamination program by containing and controlling the space where contaminated gear and equipment will be staged and await cleaning. As contaminated gear will continue to off gas in the room, venting to the outside is required. It will include Installing a large sink that will support washing SCBA, bottles, masks, and any equipment exposed to contaminated situations and ensure that all equipment is thoroughly cleaned before reuse.

1) **\$1,000** 2) **\$17,000** 3) **\$62,000.**

**Total \$80,000**

[National Framework on Cancers linked to Firefighting - Canada.ca](#)

### 2. Safety Equipment – 'New; pumper (16-1):

Hard top cover for new pumper (16-1) hose bed.

This is a safety feature that allows personnel to not fall off sides of truck when loading/unloading hose (top folds up on either side). Protects hose from elements when on scene increasing life span of hose. **\$10,000.00**

### 3. SCBA Harness Assembly Cycle Replacement Program:

5 sets of SCBA (Self Contained Breathing Apparatus) (4500 psi).

We are continuing to replace our SCBA in 2025 with following our 4-year plan to outfit the department with todays standards of PPE. This has been ongoing proposed schedule with the intent to take advantage of discounted savings because of purchasing demo units as they become available from the supplier at the end of each year until all SCBA have been completed in 2026.

**\$56,000.00**

### 4. Firefighting Equipment – Turnout Gear:

Replacement of 10 yr. expired Firefighter Personal Protective Equipment  
(Turnout Gear sets, boots, gloves, helmets etc.) **\$20,000.00**

5. Equipment – SCBA Air Bottle Fill Station Replacement

As we continue replace our SCBA to the modern style SCBA. The new SCBA air bottles are not compatible with the current fill station installed in 2010. We will need to align with the current NFPA regulations, which have changed for the installation requirements.

Current situation: we are traveling with the empty bottles to Ripley station when filling is required. **\$85,000.00.**

Capital Planning:

The Fire Chief will continue to identify future capital needs for the Lucknow & District Fire Department. Annual capital business plans will be prepared according to those needs assessments.

All other capital assets that may be identified for upgrade or replacement will be captured in the annual capital budget proposals each year.

**Financial Impacts:**

2025 budget estimates as outlined in the report.

**Respectfully Submitted By:**

Jeff Bradley, Fire Chief

**Report Approved By:**

Jodi MacArthur, Chief Administrative Officer



# Lucknow Fire Station 2025 DRAFT Budget

	Description	2024 Budget	2025 Proposed
<b>2020</b>	<b>*** LUCKNOW DISTRICT FIRE STATION ***</b>		
<b>Revenue</b>			
01-2020-3014	Fire Inspection Fees	0.00	0.00
01-2020-3015	Donations	0.00	0.00
01-2020-3020	Cost Recovery	0.00	0.00
01-2020-3030	Fire Calls - Ashfield-Colborne-Wawa	0.00	0.00
01-2020-3035	Fire Calls - Huron-Kinloss	0.00	0.00
01-2020-3040	Contributions - Ashfield-Colborne-W	188,450.00	199,700.00
01-2020-3045	Contributions - Huron-Kinloss	188,450.00	199,700.00
01-2020-3060	Ministry of Transportation - Fire Calls	0.00	0.00
01-2020-3400	County of Bruce - Modified Respons	5,000.00	5,000.00
01-2020-6040	Contributions - Ashfield-Colborne-W	45,000.00	125,500.00
01-2020-6045	Contributions - Huron-Kinloss	45,000.00	<u>125,500.00</u>
	<b>Total Revenue</b>	<b>471,900.00</b>	<b><u>655,400.00</u></b>
<b>Expense</b>			
01-2020-7100	Salaries	200,000.00	210,000.00
01-2020-7200	Benefits	30,000.00	32,000.00
01-2020-7251	Administration Fee	2,500.00	2,500.00
01-2020-7254	Office Supplies	1,000.00	2,000.00
01-2020-7255	Public Education/Fire Safety	1,000.00	4,000.00
01-2020-7256	Computer Equipment - R&M - Services	0.00	1,000.00
01-2020-7260	Telephone	2,000.00	2,000.00
01-2020-7261	Dispatch Services	22,000.00	22,000.00
01-2020-7262	Advertising	200.00	200.00
01-2020-7263	Gifts & Flowers	500.00	500.00
01-2020-7265	Association Memberships	1,000.00	2,000.00
01-2020-7266	Insurance	14,000.00	18,000.00
01-2020-7268	Audit	800.00	800.00
01-2020-7269	Radio Licences	800.00	800.00
01-2020-7270	Meetings - Registration	0.00	500.00
01-2020-7271	Meetings - Travel	1,500.00	500.00
01-2020-7272	Meetings - Meals	500.00	2,000.00
01-2020-7275	Medical Supplies	1,200.00	1,500.00
01-2020-7276	Small Tools	1,000.00	4,000.00
01-2020-7284	Hydrant Repairs & Maintenance	4,000.00	4,000.00
01-2020-7292	Uniforms	500.00	1,000.00
01-2020-7305	Training - Registration	15,000.00	16,000.00
01-2020-7306	Training - Accomodations		1,500.00
01-2020-7307	Training - Supplies	1,000.00	1,000.00
01-2020-7308	Training - Meals	1,000.00	1,000.00
01-2020-7318	Utilities - Propane	6,000.00	6,000.00
01-2020-7320	Utilities - Hydro	3,000.00	3,000.00
01-2020-7321	Utilities - Water	700.00	700.00
01-2020-7322	Utilities - Sewage	500.00	500.00
01-2020-7323	Building - R&M - Services	3,000.00	6,000.00
01-2020-7324	Building - R&M - Supplies	3,000.00	3,000.00
01-2020-7325	Building - Cleaning	1,200.00	2,400.00
01-2020-7326	Building - Snow Removal	5,000.00	5,000.00
01-2020-7351	Equipment - Certification	4,000.00	4,000.00
01-2020-7353	Vehicle - R&M - Supplies	1,500.00	1,500.00
01-2020-7354	Vehicle - R&M - Services	6,000.00	10,000.00
01-2020-7355	Vehicle - Diesel	5,000.00	5,000.00
01-2020-7356	Vehicle - Gas	1,500.00	1,500.00
01-2020-7357	Equipment - R&M - Services	35,000.00	15,000.00
01-2020-7358	Equipment - R&M - Supplies	5,000.00	10,000.00
01-2020-8010	Equipment	90,000.00	251,000.00
01-2020-8020	Apparatus Replacement	0.00	<u>0.00</u>
	<b>Total Expense</b>	<b>471,900.00</b>	<b><u>655,400.00</u></b>
	<b>Dept Excess Revenue Over (Under) Expenditures</b>	<b>0.00</b>	<b><u>0.00</u></b>



# Fire Fighter Cancer Awareness and Prevention



## Exposures to Carcinogens

### INTRODUCTION

Fire fighters are occupationally exposed to combustion products of modern residential, commercial, vehicle, wildland and other fires that contain many hazardous substances. These include carcinogens (i.e., cancer-causing chemicals) present during fire responses and at the fire station.

Years of research have clearly documented fire fighters' exposure to carcinogens in all phases of fire response, including overhaul. Recent studies have also addressed combustion of all the new synthetic products present in homes, cars and factories. A carcinogen exposure to products of combustion does not require visible smoke.

Chronic exposure to heat, smoke and toxicants puts fire fighters at higher risk for developing cancer when compared to non-fire fighters. Inhalation, ingestion and absorption of toxic substances causes cell damage that may lead to cancer.

### EXPOSURES ON THE FIRE GROUND

When responding to a fire, there are many opportunities for exposure to carcinogens. A wide range of chemicals have been detected in smoke and soot during fire suppression and overhaul. These contaminants cover personal protective equipment (PPE) and the equipment used for fire activities and they remain there until washed off. These lingering contaminants can lead to additional exposures if fire fighters remove their self-containing breathing apparatus (SCBA) at any time while on the fire ground and – if they do not perform preliminary exposure reduction (on-scene and post fire gross decontamination) – these contaminants can spread to the apparatus' cab and/or back to the fire station.

### EXPOSURES IN FIRE STATIONS

Many of the contaminants that fire fighters encounter during fire responses can be tracked back to the fire stations where they live throughout their shifts when not responding to a call. In a study of dust samples in 26 fire stations in five states, Shen and colleagues<sup>1</sup> documented phosphorous-containing and polybrominated diphenyl ether flame retardant levels that were higher than those previously reported in homes and other occupational settings around the world. The study was replicated in Canada where it demonstrated the same findings.

Daily exposure to diesel exhaust in the firehouse can also contribute to the development of cancer. Analysis of the kitchen and bunkroom walls and furniture in firehouses reveals a tremendous amount of diesel exhaust particles. These dangerous particles are inhaled and absorbed every shift and cause

significant harm to fire fighters. Diesel exhaust was classified as a group 1 carcinogen by the World Health Organization (WHO) and the International Agency for Research on Cancer (IARC).

## **ROUTES OF EXPOSURE**

### **1. Inhalation Exposures**

The most common route of exposure to carcinogens for fire fighters is through inhalation. When responding to a call, the chemicals released in the smoke and soot do not disappear when the fire is extinguished. These chemicals remain airborne through all phases of fire activities. Research has confirmed carcinogen exposures during the overhaul phase, a period when fire fighters have traditionally not worn SCBA. Inhalation can also occur from various sources including off-gassing from contaminated equipment and PPE and diesel exhaust commonly at the station. It is important to wear your SCBA through all fire suppression activities and perform on-scene gross decontamination to minimize the risk of inhaling carcinogens.

### **2. Dermal Exposures**

Exposure can also occur through dermal absorption when contaminated particulates are absorbed through the skin. Commonly, dermal absorption to carcinogens found in soot can occur even while wearing turnout gear when soot is transferred to the fire fighter's skin either during firefighting activities or while removing contaminated PPE. Elevated temperatures, as routinely experienced by fire fighters, have been associated with increased dermal absorption. Steps can be taken to reduce dermal exposure and include on-scene gross decontamination, wiping of skin, and showering and laundering station work uniform upon arrival back at the station.

### **3. Ingestion Exposures**

For fire fighters, ingestion is a less common route of exposure, but it does occur. Soot is the typical exposure source as it transfers to fire fighters' hands and if not washed can then be ingested through eating, drinking and putting hands in your mouth. In a 2020 research study that evaluated chemicals in the air and on fire fighter ensembles, researchers identified that gloves are some of the most contaminated.<sup>2</sup> Some gloves had high contaminant levels and were generally more contaminated than turnout coats. The study identified that routine gross decontamination appeared to reduce many of the contaminants. **This highlights the importance of on-scene gross decontamination of PPE and equipment, hand washing and showering within the hour of returning to the station.**

**To protect yourself from exposures, the following actions are recommended:**

- Use SCBA from initial attack through overhaul. (Not wearing SCBA in both active and postfire environments is the most dangerous voluntary activity in the fire service today).
- Perform on-scene gross decontamination on PPE to remove as much soot and particulates as possible. Wet decon is the most effective.
- Use wet wipes to remove as much soot as possible from head, neck, jaw, throat, underarms, hands and all exposed areas of skin immediately and while on the scene.
- Bag contaminated gear on scene and store them in an outside compartment. Never in the cab.
- Change your clothes and wash them immediately after a fire. If possible, have a change of clothing in a personal bag.
- Shower thoroughly after a fire.

- Clean PPE, gloves, hood and helmet (including helmet liner) immediately after a fire. Follow NFPA 1851 recommendations.
  - Decontaminate the interior of apparatus after fires regularly.
  - Keep bunker gear out of living and sleeping quarters.
  - Use a diesel exhaust capture system.
  - **The importance of annual medical examinations cannot be overstated – early detection and early treatment are essential to increasing survival and improving outcomes.**
  - Track your exposures using the NFORS Exposure Tracker app to log exposure and incident details in a private, encrypted and secure online environment.
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### **Resources:**

1. Shen B, Whitehead TP, Gill R, et al. Organophosphate flame retardants in dust collected from United States fire stations. *Environment International* 112 (2018) 41–48.
2. Kenneth W. Fent, Mark LaGuardia, Drew Luellen, Seth McCormick, Alexander Mayer, I-Chen Chen, Steve Kerber, Denise Smith, Gavin P. Horn. Flame retardants, dioxins, and furans in air and on firefighters' protective ensembles during controlled residential firefighting. *Environment International*, Volume 140, 2020.