



What is the Service?

The goal of Fire Services is to protect the life and property of citizens and businesses from fire and other hazards. There are three primary fire safety activities provided in communities.

Specific objectives include:

- Public education and fire prevention
- Fire safety standards and enforcement
- Emergency response

Influencing Factors:

Geography: Topography, urban/rural mix, road congestion, fire station locations and travel distances from those stations.

Fire Prevention and Education: Enforcement of the Fire Code, and the presence of working smoke alarms.

Nature and Extent of Fire Risk: The type of building construction or occupancy, i.e. apartment dwellings vs. single family homes vs. institutions such as hospitals.

Response Agreements: Depending on response agreements between Fire Services, Emergency Medical Services (EMS), and hospital protocols, responses to medical calls can be a significant activity.

Service Levels: Set by municipal councils, based on local needs and circumstances (staffing, resources, response expectations, etc.), and in accordance with the Fire Protection & Prevention Act, Section 2(1)(b).

Service Standards: The service level standard included in the OMBI measures is each municipality's 90th percentile response time standard (minutes and number of personnel) in the urban component of the municipality. These standards affect the number/locations of stations, vehicles and firefighters required.

Staffing Models: Use of full time firefighters or composite models that include both full-time and part-time or volunteer firefighters.

Additional Information:

To improve the comparability of the information in this report, separate urban and rural results have been provided where appropriate:

- **Urban areas** have been defined as those served by full-time firefighters stationed with their vehicles on a continuous basis
- **Rural areas** are defined as those served by volunteer firefighters who are engaged in other professions, but are on call to respond to emergencies as they arise

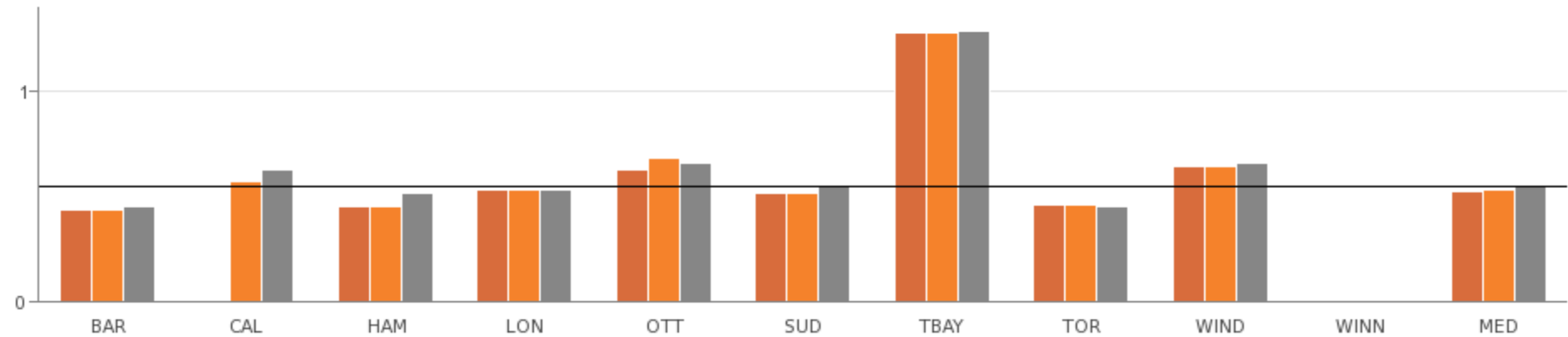
The one notable OMBI exception to this is the City of Thunder Bay, which uses full-time firefighters to serve both urban and rural areas. Where this report provides separate rural and urban data, Thunder Bay's results have been summarized entirely as "urban" to improve the comparability with other municipalities served by full-time firefighters.

The Ontario Fire Safety and Protection Model identifies three lines of defense in providing public fire protection: public education and prevention; fire safety standards and enforcement, and emergency response. Some of the more detailed OMBI measures address the rates of fire related injuries and fatalities as well as the incidence rate of residential, commercial and industrial fires, which can be significantly influenced by public education, fire prevention, fire safety standards and enforcement activities.

Fire Services

How many hours are staffed fire vehicles available to respond to emergencies in urban areas?

Fig 7.1 Number of Staffed Fire In-Service Vehicle Hours per Capita (Urban Area)

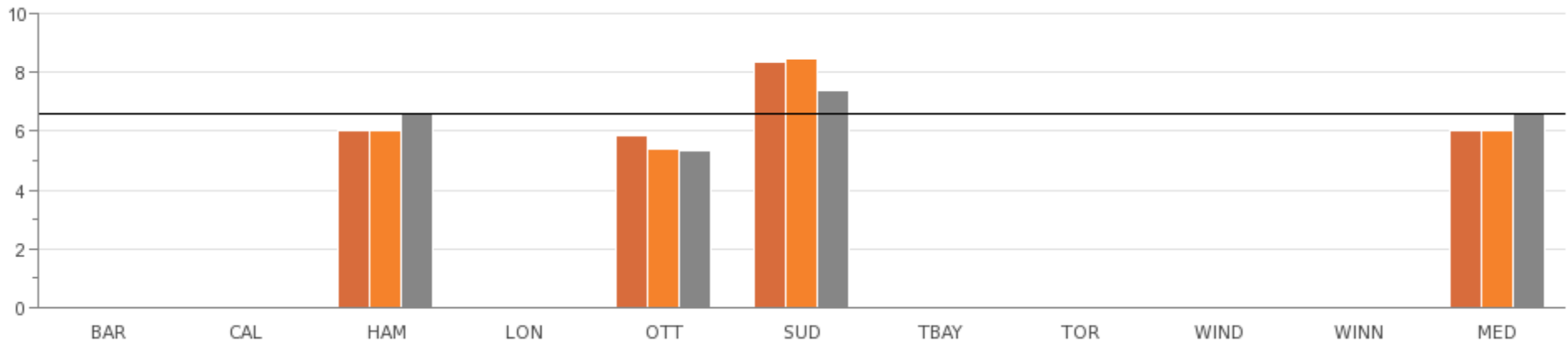


2009	0.44	N/A	0.45	0.53	0.63	0.52	1.28	0.46	0.64	N/A	0.53
2010	0.44	0.57	0.45	0.53	0.68	0.52	1.28	0.46	0.64	N/A	0.53
2011	0.45	0.63	0.52	0.53	0.66	0.55	1.29	0.45	0.66	N/A	0.55

Source: FIRE230 (Service Level)

How many hours are fire vehicles available to respond to emergencies in rural areas?

Fig 7.2 Number of Fire In-service Vehicle Hours per Capita (Rural Area)



2009	N/A	N/A	6.04	N/A	5.87	8.34	N/A	N/A	N/A	N/A	6.04
2010	N/A	N/A	6.01	N/A	5.40	8.50	N/A	N/A	N/A	N/A	6.01
2011	N/A	N/A	6.60	N/A	5.32	7.39	N/A	N/A	N/A	N/A	6.60

Source: FIRE232 (Service Level)

Comment: Rural areas tend to have higher vehicle hours because a proportionately greater number of vehicles are necessary to adequately cover broader geographic service areas with an acceptable response time. Rural areas typically do not have fire hydrants, necessitating the use of water tanker vehicles that are not required in urban areas.

How many injuries and fatalities resulted from residential fires?

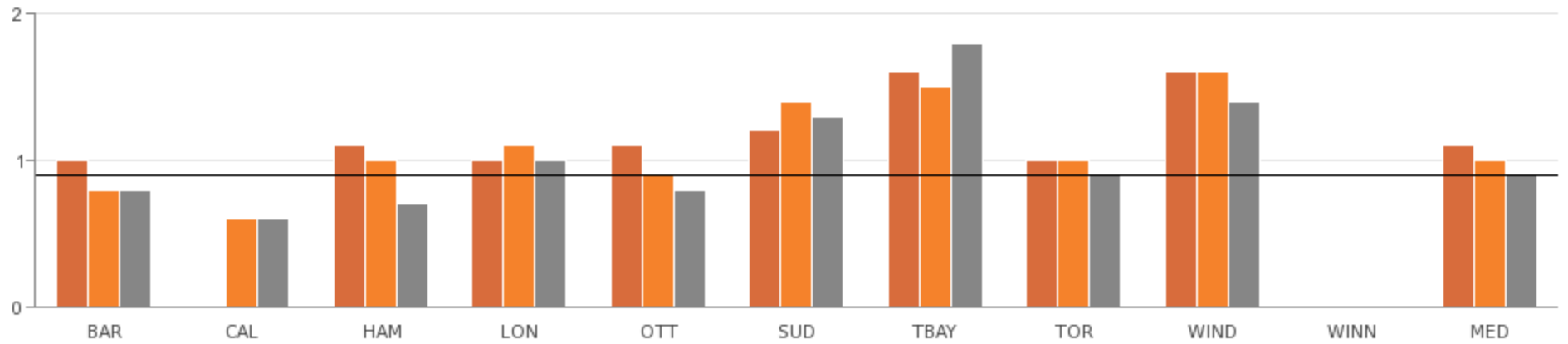
Fig 7.3 Number of Injuries and Fatalities as a Result of Residential Fires – Urban and Rural Areas

Municipality	Residential Fire Related Injuries per 100,000 Population (Urban and Rural)			Residential Fire Related Fatalities per 100,000 Population (Urban and Rural)		
	2009	2010	2011	2009	2010	2011
Barrie	5.00	4.26	4.26	0.00	0.71	0.71
Hamilton	10.08	7.76	6.97	0.38	0.76	0.19
Calgary	N / A	2.61	1.74	N / A	0.19	0.18
London	6.07	6.57	10.10	0.00	0.82	0.00
Ottawa	4.62	2.83	2.80	0.66	0.11	0.43
Greater Sudbury	4.36	5.66	4.37	1.24	0.63	0.62
Thunder Bay	11.92	9.17	11.99	0.92	0.00	1.85
Toronto	2.43	1.98	2.90	0.73	0.58	0.61
Windsor	11.09	9.70	16.12	0.00	0.46	1.90
Median	5.54	5.66	4.37	0.52	0.58	0.61

Source: FIRE105 and FIRE110 (Community Impact)

How many fires resulted in property loss in urban areas?

Fig 7.4 Number of Residential Structural Fires with Losses per 1,000 Households (Urban Area)

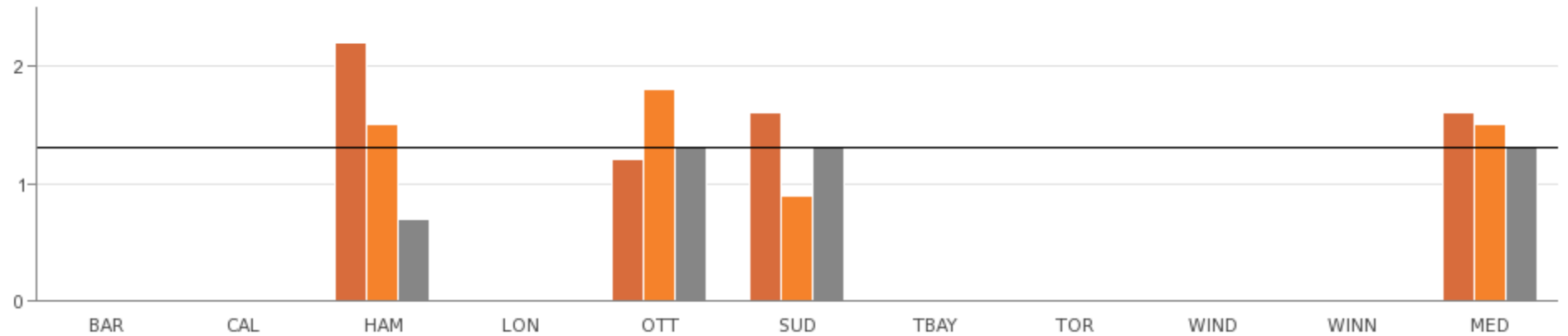


2009	1.0	N/A	1.1	1.0	1.1	1.2	1.6	1.0	1.6	N/A	1.1
2010	0.8	0.6	1.0	1.1	0.9	1.4	1.5	1.0	1.6	N/A	1.0
2011	0.8	0.6	0.7	1.0	0.8	1.3	1.8	0.9	1.4	N/A	0.9

Source: FIRE116 (Community Impact)

How many fires resulted in property loss in rural areas?

Fig 7.5 Number of Residential Structural Fires with Losses per 1,000 Households (Rural Area)



2009	N/A	N/A	2.2	N/A	1.2	1.6	N/A	N/A	N/A	N/A	1.6
2010	N/A	N/A	1.5	N/A	1.8	0.9	N/A	N/A	N/A	N/A	1.5
2011	N/A	N/A	0.7	N/A	1.3	1.3	N/A	N/A	N/A	N/A	1.3

Source: FIRE117 (Community Impact)

How long does it take to respond to an emergency call from the time the fire station is notified to arrival at the emergency scene?

Fig 7.6 Station Notification Response Time (Urban Area)

Fig 7.7 Station Notification Response Time (Rural Area)

Fig 7.6	Station Notification Response Time 90th Percentile (min:sec) Urban Area			
	Municipality	2009	2010	2011
	Barrie	08:53	08:54	08:54
	Calgary		07:36	07:15
	Hamilton	07:12	06:25	06:56
	London	06:05	06:13	06:13
	Ottawa	06:45	06:52	07:00
	Sudbury (Greater)	09:22	09:29	09:11
	Thunder Bay	07:02	06:24	06:32
	Toronto	06:40	06:42	06:47
	Windsor	05:58	06:36	06:29
	Median	06:54	06:42	06:56

Source: FIRE405 (Customer Service)

Fig 7.7	Station Notification Response Time 90th Percentile (min:sec) Rural Area			
	Municipality	2009	2010	2011
	Hamilton		12:36	12:57
	Ottawa		13:18	14:39
	Sudbury (Greater)	15:45	17:55	17:23
	Median	15:45	13:18	14:39

Source: FIRE406 (Customer Service)

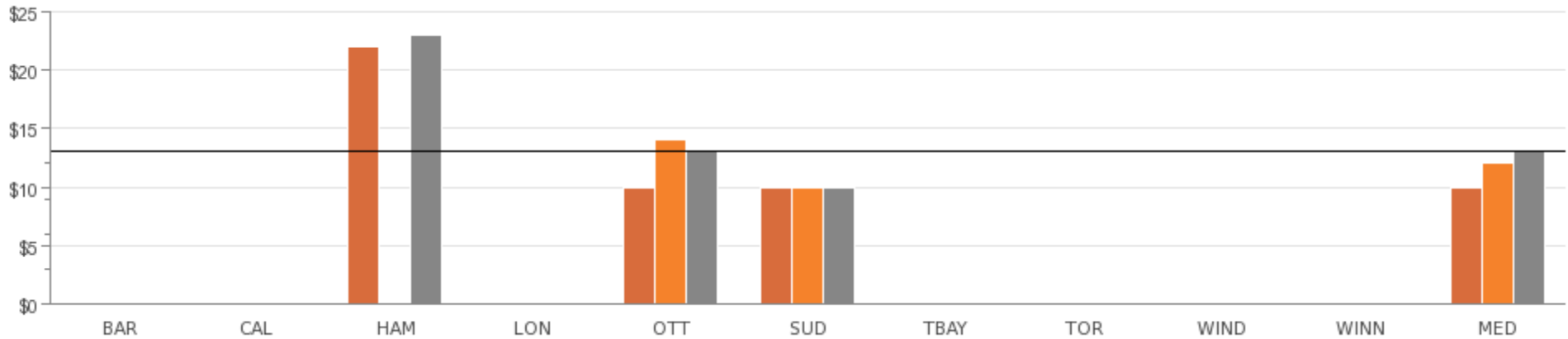
Note: Station Notification Response Time is from the point that fire station staff have been notified of an emergency call to the point when they arrive at the emergency scene. It does not include dispatch time.

Note: 90th percentile means that 90% of all emergency calls have a station notification response time within the time period reflected in the graph.

Comment: Rural area response times are impacted by larger geographic distances and the fact that volunteer firefighters must first travel to fire station.

How much does it cost per hour to have a front-line fire vehicle available in the rural areas?

Fig 7.8 Fire Operating Cost per Staffed In-service Vehicle Hour (Rural Area)



2009	N/A	N/A	\$22	N/A	\$10	\$10	N/A	N/A	N/A	N/A	\$10
2010	N/A	N/A	N/A	N/A	\$14	\$10	N/A	N/A	N/A	N/A	\$12
2011	N/A	N/A	\$23	N/A	\$13	\$10	N/A	N/A	N/A	N/A	\$13

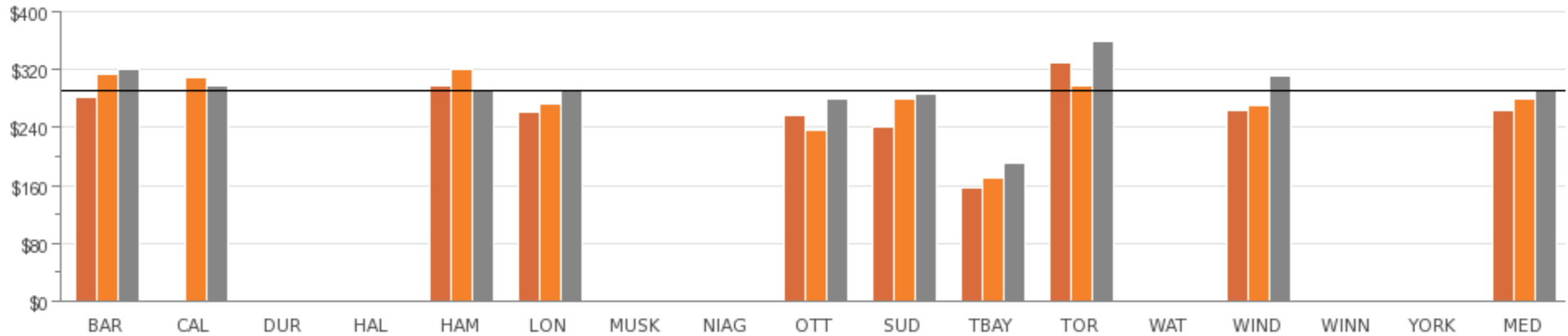
Source: FIRE304 (Efficiency)

Note: Front-line fire vehicles are pumpers, aerials, water tankers and rescue units.

Comment: In order to respond to emergencies, each municipality has a different mix of vehicle types and staffing modes, reflecting its fire and community risks. The cost per vehicle hour for rural areas served by volunteer firefighters tend to be much lower than urban areas served by full-time firefighters because volunteer firefighters are paid only for the hours in which they are actively responding to emergencies.

How much does it cost per hour to have a front-line fire vehicle available in the urban areas?

Fig 7.9 Fire Operating Cost per Staffed In-service Vehicle Hour (Urban Area)



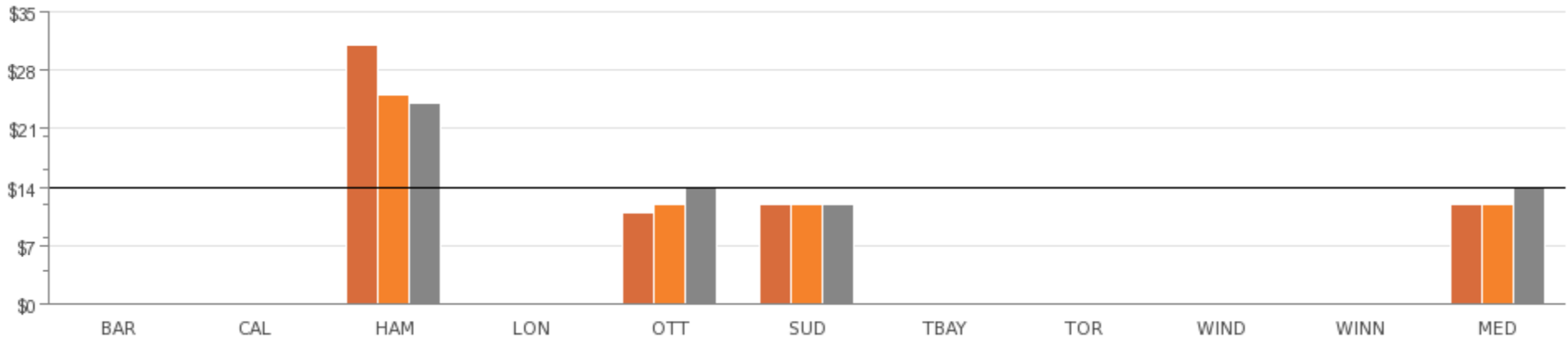
2009	\$283	N/A	N/A	N/A	\$299	\$262	N/A	N/A	\$256	\$242	\$156	\$329	N/A	\$264	N/A	N/A	\$263
2010	\$313	\$310	N/A	N/A	\$320	\$272	N/A	N/A	\$237	\$280	\$171	\$297	N/A	\$271	N/A	N/A	\$280
2011	\$321	\$297	N/A	N/A	\$292	\$292	N/A	N/A	\$280	\$286	\$191	\$360	N/A	\$311	N/A	N/A	\$292

Source: FIRE305 (Efficiency)

Comment: In order to respond to emergencies, each municipality has a different mix of vehicle types and staffing modes, reflecting its fire and community risks. The cost per vehicle hour for rural areas served by volunteer firefighters tend to be much lower than urban areas served by full-time firefighters because volunteer firefighters are paid only for the hours in which they are actively responding to emergencies.

What is the total cost per hour to have a front-line fire vehicle available in the rural areas?

Fig 7.10 OMBI Total Fire Cost per In-Service Vehicle Hour (Rural Area) (includes amortization)



2009	N/A	N/A	\$31	N/A	\$11	\$12	N/A	N/A	N/A	N/A	\$12
2010	N/A	N/A	\$25	N/A	\$12	\$12	N/A	N/A	N/A	N/A	\$12
2011	N/A	N/A	\$24	N/A	\$14	\$12	N/A	N/A	N/A	N/A	\$14

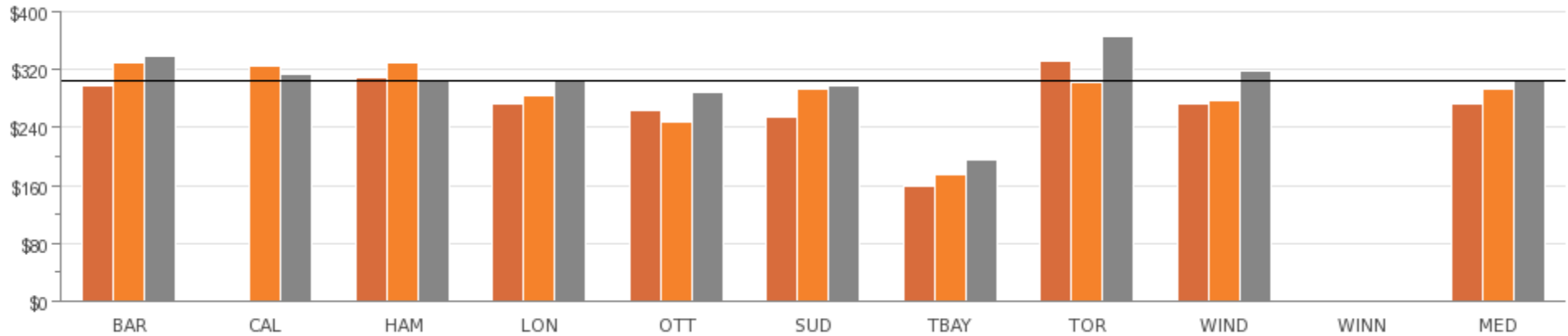
Source: FIRE304T (Efficiency)

Note: Calculation includes amortization.

Comment: In order to respond to emergencies, each municipality has a different mix of vehicle types and staffing modes, reflecting its fire and community risks. The cost per vehicle hour for rural areas served by volunteer firefighters tend to be much lower than urban areas served by full-time firefighters because volunteer firefighters are paid only for the hours in which they are actively responding to emergencies.

What is the total cost per hour to have a front-line fire vehicle available in the urban areas?

Fig 7.11 OMBI Total Fire Cost per In-Service Vehicle Hour (Urban Area) (includes amortization)



2009	\$297	N/A	\$309	\$273	\$264	\$254	\$160	\$333	\$274	N/A	\$274
2010	\$331	\$326	\$330	\$285	\$248	\$293	\$175	\$302	\$278	N/A	\$293
2011	\$339	\$313	\$304	\$305	\$289	\$299	\$195	\$366	\$318	N/A	\$305

Source: FIRE305T (Efficiency)

Note: Calculation includes amortization.

Comment: In order to respond to emergencies, each municipality has a different mix of vehicle types and staffing modes, reflecting its fire and community risks. The cost per vehicle hour for rural areas served by volunteer firefighters tend to be much lower than urban areas served by full-time firefighters because volunteer firefighters are paid only for the hours in which they are actively responding to emergencies.