

Pricing Police Case

New Billing Model Impact

The new billing model uses two cost drivers: base policing services and the calls for service. As shown in exhibit 1, the base policing services are calculated at a rate of \$195.96 per property within a given municipality, while the calls for service are calculated at \$83.97 per hour of weighted time spent on calls for service over the preceding four years. These numbers are generated for 2015, and will be updated annually using the most recent calculations for calls for service and property counts.

Using this model, the Alder, Balsam, and Cedar municipalities will all see a change in their billing rates, shown in exhibit 2. Alder and Cedar will both see an increase for 2015, with Cedar's fees increasing by almost 50% and Alder just shy of 20%. Balsam, on the other hand, will see a decrease of just over 25% in their billing rate. This is logical since Alder, Balsam, and Cedar were each using a billing rate from different years: 2011, 2013, and 2009 respectively, as shown in exhibit 3. Additionally, the former billing model used a single cost driver based on the number of properties in a given municipality for billing purposes. However, the number of properties do not correlate directly to the number of service call hours used. For example, in the preceding four years, the percentage of total weighed time for service calls that Alder used was nearly double the percentage of properties they have to the total service area, as shown in exhibits 3 and 4.

Single Cost Driver Impact

When considering proposed single cost driver options, we can use property counts, calls for service, population, household income, or property value as the cost drivers. The applicable rates for each cost driver is shown in exhibit 5. The cost drivers were determined by dividing the combined expense totals for base services and calls for service (exhibit 6) by the applicable municipality information provided (exhibit 3). The resulting calculations for the Adler, Balsam, and Cedar municipalities are available in exhibit 7, including the difference in cost for each between the new two driver model and the former model. It is important to note that the first option, calculating based on properties, is the same as the current model and so if no changes were made this would be the model used.

For each of the proposed single cost driver options, there will be an impact on each municipalities expenses. For Alder, calculating by either population or calls for service would increase their expenses when compared to either the current model or the proposed new model, while all other options would be a reduction in expenses. Balsam would see a reduction in expenses for any of the single cost drivers when compared to the current plan, but would see a less than 10% change (either positive or negative) when comparing to the proposed new plan. Lastly, Cedar would see an increase in expenses for any of the options when compared to the current model, by as much as 67%. The new model, though, has variable differences to single cost driver options.

Summary & Recommendation

The large variance in how different billing models impact different municipalities lays in the fact that each municipality is unique. It's important to account not just for a single cost driver, such as population, but to also note how much time and effort each municipality requires of OPP. There are not direct

correlations between a single factor and the needs of a municipality for OPP. As such, it is fairest to use the two-driver model where the base services are calculated using population while using historical calls for service to anticipate future call for service needs. While some municipalities may be up and coming and will require fewer calls for service or less time on each service call, using the preceding four years to calculate anticipated needs provides an ongoing method of updating the calculation on a year-by-year basis. If there is an extreme change in CFS needs one year, that will reflect in the following year's expenses. This is a flexible calculation that provides room for growth and changing municipality needs, which is not accounted for in a single cost driver model.

Exhibits

Exhibit 1 – Cost Drivers for the New Billing Model

Cost Driver	Activity Rate	Unit
Base Policing Services	\$ 195.96	property
Calls for Service	\$ 83.97	hour of weighted time

Exhibit 2 – Per-Municipality Service Costs for the New Billing Model

Service Costs	Alder	Balsam	Cedar
Base Policing Services	\$927,262.28	\$3,059,064.14	\$147,358.67
Calls for Service	\$1,189,202.80	\$1,810,373.07	\$ 113,573.42
Total	\$2,116,465.08	\$4,869,437.21	\$ 260,932.09
Former Contract Expense	\$1,724,246.16	\$6,121,541.43	\$ 130,712.64
Difference from former contract	\$392,218.92	\$(1,252,104.22)	\$ 130,219.45
<i>Percentage change</i>	<i>18.53%</i>	<i>-25.71%</i>	<i>49.91%</i>

Exhibit 3 – Municipality Details & Former Contract

Category	Alder	Balsam	Cedar	All Areas
Region	East	Central	North West	n/a
Population	14,220	27,221	2,370	2,146,789
Area (km ²)	17.24	22.37	12.90	1,035.57
Pop. Density (km ²)	824.83	1,216.85	183.72	2.07
Households	4,430	15,082	671	1,069,951
Commercial Prop.	302	529	81	58,847
Total Properties	4,732	15,611	752	1,128,798
Avg. Household Income	\$ 49,769	\$ 82,179	\$ 62,465	\$ 78,160
Avg. Household Size	3.21	1.80	3.53	2.01
Total Property Assessment	\$891,836,576	\$3,695,312,326	\$280,010,747	\$276,024,606,014
Average Property Assessment	\$ 188,469	\$ 236,712	\$ 372,355	\$ 244,530
Year of Prev. Contract	2011	2013	2009	n/a
Cost per Property per Previous Contract	\$ 364.38	\$ 392.13	\$ 173.82	n/a

Exhibit 4 – 2015 Calls for Service Totals

Calls for service totals	Avg. Calls	Total Weighted Time	% of weighted time
Alder	3,215	14,162	0.86%
Balsam	5,348	21,559	1.31%
Cedar	340	1,353	0.08%
ALL SERVICE AREAS	399,243	1,644,880.28	

Exhibit 5 – Single Cost Driver Model

Cost Driver	Activity Rate	Unit
Properties	\$ 318.32	property
CFS	\$ 900.00	call
Population	\$ 167.37	resident
Household Income	\$ 0.004297	dollar of household income
Property Value	\$ 0.001302	dollar of property assessment

Exhibit 6 – Summary Base Service and Calls for Service

Category	FTE's	Base Service	Calls for Service	Total (all areas)
Total uniform salaries & benefits	2,237.47	\$173,098,725	\$107,444,219	\$280,542,944
Total detachment civilian salaries & benefits	192.32	\$8,932,506	\$5,928,200	\$14,860,706
Total support staff salaries & benefits costs		\$16,279,664	\$10,285,817	\$26,565,481
Total salaries & benefits		\$198,310,895	\$123,658,236	\$321,969,131
Total other direct operating expenses		\$22,883,486	\$14,464,157	\$37,347,643
Total municipal base & calls for service cost		\$221,194,381	\$138,122,393	\$359,316,774
Total OPP-policed municipal properties		1,128,798		
Base service cost per property		\$195.96		

Exhibit 7 – Single Cost Driver Model

Cost Driver	Dollar Amounts			Percentage Change		
	<i>Alder</i>	<i>Balsam</i>	<i>Cedar</i>	<i>Alder</i>	<i>Balsam</i>	<i>Cedar</i>
Properties	\$1,506,280.99	\$4,969,263.02	\$239,375.17			
Difference from new billing model	\$(610,184.09)	\$99,825.81	\$(21,556.92)	-40.51%	2.01%	-9.01%
Difference from former contract	\$(217,965.17)	\$(1,152,278.41)	\$108,662.53	-14.47%	-23.19%	45.39%
Calls for Service	\$2,893,484.49	\$4,813,174.20	\$305,998.36			
Difference from new billing model	\$777,019.41	\$(56,263.01)	\$45,066.27	26.85%	-1.17%	14.73%
Difference from former contract	\$1,169,238.33	\$(1,308,367.23)	\$175,285.72	40.41%	-27.18%	57.28%
Population	\$2,380,059.02	\$4,556,089.07	\$396,676.50			
Difference from new billing model	\$263,593.94	\$(313,348.14)	\$135,744.41	11.08%	-6.88%	34.22%
Difference from former contract	\$655,812.86	\$(1,565,452.36)	\$265,963.86	27.55%	-34.36%	67.05%
Household Income	\$ 947,309.06	\$ 5,325,358.39	\$ 180,089.47			
Difference from new billing model	\$(1,169,156.02)	\$455,921.18	\$(80,842.62)	-123.42%	8.56%	44.89%
Difference from former contract	\$(776,937.10)	\$(796,183.04)	\$49,376.83	-82.02%	-14.95%	27.42%
Property Value	\$1,160,953.89	\$4,810,396.16	\$364,505.76			
Difference from new billing model	\$(955,511.19)	\$(59,041.06)	\$103,573.67	-82.30%	-1.23%	28.41%
Difference from former contract	\$(563,292.27)	\$(1,311,145.27)	\$233,793.12	-48.52%	-27.26%	64.14%