

SCHEDULE "A"

TAX RATIOS FOR MUNICIPALITIES IN BMA STUDY WITH POPULATIONS OVER 110,000

Municipality with > 110,000 Population in 2019 BMA Study	Multi-Residential Tax Ratio	Commercial Tax Ratio (Residual)	Industrial Tax Ratio (Residual)	Industrial Tax Ratio (Large)	Large and Residual Industrial Tax Ratios
Barrie	1.0000	1.4331	1.5163	1.5163	1.5163
Brampton	1.7050	1.2971	1.4700	1.4700	1.4700
Durham	1.8665	1.4500	2.1040	2.1040	2.1040
Greater Sudbury	1.9650	1.9420	3.7263	4.3254	4.0259
Guelph	1.8254	1.8400	2.2048	2.2048	2.2048
Halton	2.0000	1.4565	2.3599	2.3599	2.3599
Hamilton	2.5671	1.9800	3.3696	3.9513	3.6605
Kingston	1.8000	1.9800	2.6300	2.6300	2.6300
London	1.7491	1.9200	1.9200	1.9200	1.9200
Mississauga	1.3461	1.5007	1.6266	1.6266	1.6266
Niagara	1.9700	1.7349	2.6300	2.6300	2.6300
Ottawa	1.4005	1.8249	2.5521	2.1916	2.3719
Thunder Bay	2.2850	2.1152	2.4151	3.1700	2.7926
Toronto	2.3444	2.7800	2.7632	2.7632	2.7632
Waterloo	1.9500	1.9500	1.9500	1.9500	1.9500
Windsor	2.0000	2.0187	2.3200	2.9381	2.6291
York	1.0000	1.2794	1.5704	1.5704	1.5704

Average	1.8102	1.7943			2.3662
Median	1.8665	1.8400			2.3599
Minimum	1.0000	1.2794			1.4700
Maximum	2.5671	2.7800			4.0259
Provincial Threshold	2.0000	1.9800	2.6300	2.6300	2.6300

London Compared to Median	-6.3%	4.3%			-18.6%
London Compared to Average	-3.4%	7.0%			-18.9%

change in group averages since 2006	-19.64%	-5.37%			-7.84%
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decreases in ratios



increases in ratios



SCHEDULE "B"
2020 TAX POLICY ALTERNATIVE TAX RATIO OPTIONS FOR CONSIDERATION

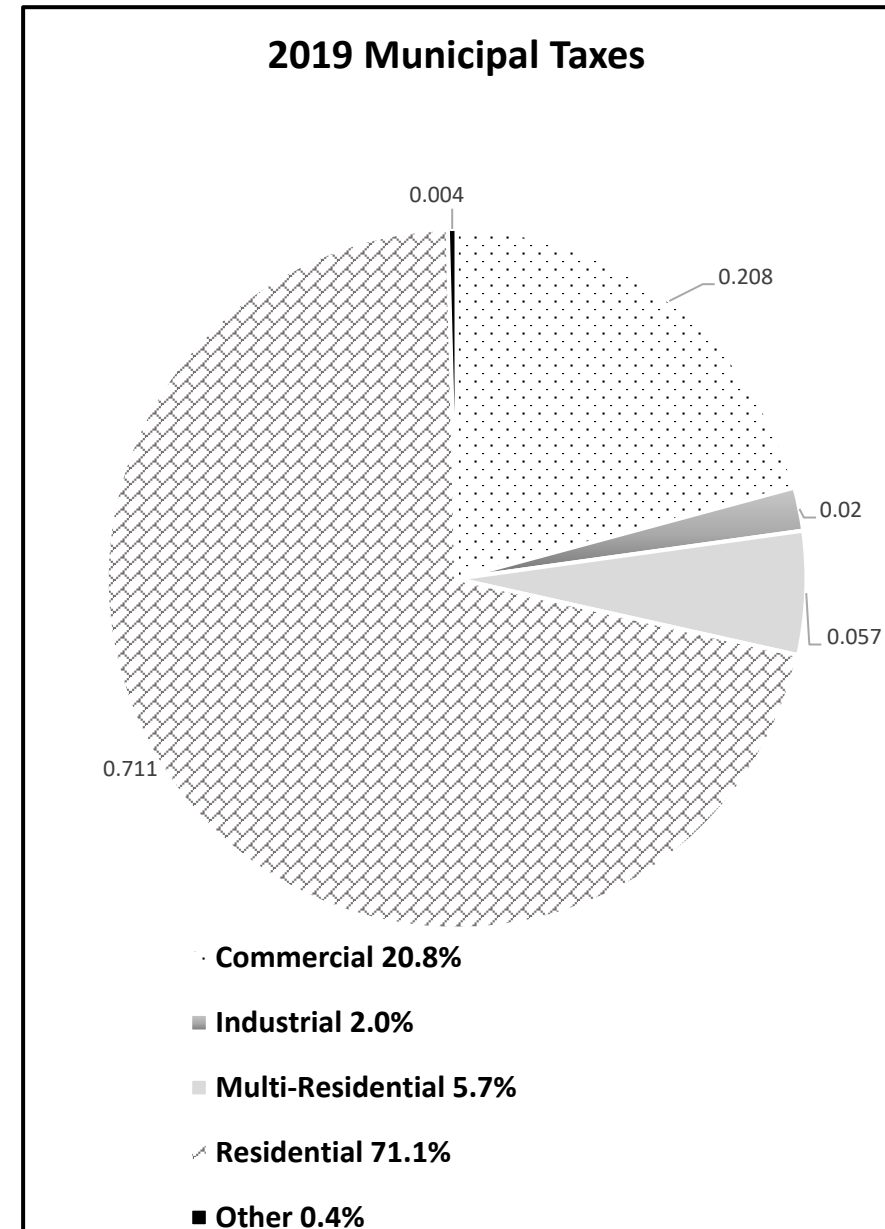
	No change to tax ratios alternative - keep tax ratios in 2020 same as 2019	Option A - equalize average municipal tax increase in residential multi-residential and commercial property classes	Option AB1 - equalize average municipal tax increase in residential, multi-residential and commercial/industrial tax ratios at 1.899500	Option AB2 - equalize average municipal tax increase in residential, and multi-residential classes and commercial/industrial tax ratios at 1.910000	Option B - equalize average municipal tax increase in residential, and multi-residential classes - no change in other tax ratios	Option C - reduce commercial and industrial property class tax ratios and keep average increase in residential class at 4.3% including education (and keep multi-res ratio below commercial and industrial)	Option D - reduce only the multi-residential tax ratio to 1.5 and equalize municipal increase in residential and classes
future tax policy direction	Direction #1	Direction #2	Direction #2	Direction #2	Direction #2	Direction #2 and #3	Direction #3
average tax increases in property classes including education	residential = 2.3% farm = 14.0% multi-residential = 4.8% commercial = 5.4% industrial = 2.0% new multires = 4.5%	residential = 3.2% farm = 14.9% multi-residential = 3.7% commercial = 3.5% industrial = 0.2% new multi-res = 5.4%	residential = 2.6% farm = 14.3% multi-residential = 3.1% commercial = 4.9% industrial = 1.6% new multi-res = 4.8%	residential = 2.5% farm = 14.2% multi-residential = 3.0% commercial = 5.2% industrial = 1.9% new multi-res = 4.7%	residential = 2.4% farm = 14.1% multi-residential = 2.9% commercial = 5.5% industrial = 2.1% new multi-res = 4.6%	residential = 4.3% farm = 15.9% multi-residential = 4.9% commercial = 0.9% industrial = -2.3% new multi-res = 6.5%	residential = 3.0% farm = 14.7% multi-residential = -8.4% commercial = 6.0% industrial = 2.6% new multi-res = 5.3%
average tax increases in property classes excluding education	residential = 3.0% farm = 15.7% multi-residential = 5.3% commercial = 7.0% industrial = 3.6% new multi-res = 5.3%	residential = 4.1% farm = 16.9% multi-residential = 4.1% commercial = 4.1% industrial = 0.8% new multi res = 6.3%	residential = 3.4% farm = 16.1% multi-residential = 3.4% commercial = 6.3% industrial = 2.9% new multi-res = 5.7%	residential = 3.3% farm = 16.0% multi-residential = 3.3% commercial = 6.7% industrial = 3.3% new multi-res = 5.5%	residential = 3.2% farm = 15.9% multi-residential = 3.2% commercial = 7.2% F10 industrial = 3.7% new multi-res = 5.4%	residential = 5.3% farm = 18.3% multi-residential = 5.3% commercial = 0.0% industrial = -3.2% new multi-res = 7.6%	residential = 3.9% farm = 16.7% multi-residential = -9.0% commercial = 7.9% industrial = 4.5% new multi-res = 6.1%
tax ratios used	residential = 1.000000 farm = 0.102820 multi-residential = 1.749100 commercial = 1.920000 industrial = 1.920000 pipelines = 1.713000 managed forests =0.250000	residential = 1.000000 farm = 0.102820 multi-residential = 1.711880 commercial = 1.848350 industrial = 1.848350 pipelines = 1.713000 managed forests =0.250000	residential = 1.000000 farm = 0.102820 multi-residential = 1.711880 commercial = 1.899500 industrial = 1.899500 pipelines = 1.713000 managed forests =0.250000	residential = 1.000000 farm = 0.102820 multi-residential = 1.711880 commercial = 1.910000 industrial = 1.910000 pipelines = 1.713000 managed forests = 0.250000	residential = 1.000000 farm = 0.102820 multi-residential =1.711880 commercial = 1.920000 industrial = 1.920000 pipelines = 1.713000 managed forests =0.250000	residential = 1.000000 farm = 0.102820 multi-residential = 1.7491000 commercial = 1.755000 industrial = 1.755000 pipelines = 1.713000 managed forests = 0.250000	residential = 1.000000 farm = 0.102820 multi-residential = 1.500000 commercial = 1.920000 industrial = 1.920000 pipelines = 1.713000 managed forests =0.250000

- % calculations above do not include business education tax rates on new construction in commercial and industrial property classes.
- Recommended ratio for Landfill property class under all options is 2.818527.
- Recommended ratio for New Multi-residential property class under all options is 1.000000.
- % calculations for commercial and industrial property classes do not include vacant and excess land.

SCHEDULE "C"
MUNICIPAL TAX IMPACT BY PROPERTY CLASS FOR 2020
LEVY CHANGE AND NO CHANGE IN TAX RATIOS

	2019 Tax Rates on 2019 Year End Assessments	2020 Taxes (2020 Approved Budget)	Tax Change From Assessment Phase- in and Budget	Tax Ratios Used
Summary by Class				
Commercial	\$84,130,815	\$90,817,102	7.95%	1.920000
Office Building	\$8,424,456	\$8,830,652	4.82%	1.920000
Farmland	\$515,897	\$596,977	15.72%	0.102820
Industrial	\$7,988,944	\$8,757,725	9.62%	1.920000
Large Industrial	\$4,523,183	\$4,738,448	4.76%	1.920000
Multi-residential	\$34,584,371	\$36,411,009	5.28%	1.749100
New Multi-residential	\$147,043	\$154,780	5.26%	1.000000
Pipeline	\$2,156,539	\$2,226,756	3.26%	1.713000
Residential	\$438,144,679	\$451,478,082	3.04%	1.000000
Shopping Centre	\$35,786,059	\$38,886,490	8.66%	1.920000
Managed Forest	\$2,838	\$3,157	11.23%	0.250000
	\$616,404,824	\$642,901,178	4.30%	

Summary by Class				
Commercial Including Optional Classes	\$128,341,330	\$138,534,245	7.94%	1.920000
Farmland	\$515,897	\$596,977	15.72%	0.102820
Industrial Including Optional Classes	\$12,512,127	\$13,496,173	7.86%	1.920000
Multi-residential	\$34,584,371	\$36,411,009	5.28%	1.749100
New Multi-residential	\$147,043	\$154,780	5.26%	1.000000
Pipeline	\$2,156,539	\$2,226,756	3.26%	1.713000
Residential	\$438,144,679	\$451,478,082	3.04%	1.000000
Managed Forest	\$2,838	\$3,157	11.23%	0.250000
	\$616,404,824	\$642,901,178	4.30%	



SCHEDULE "D"
SHIFT IN TAX BURDEN - UNWEIGHTED TO WEIGHTED RESIDENTIAL ASSESSMENT
FOR MUNICIPALITIES IN BMA STUDY WITH POPULATIONS OVER 110,000

Municipality with > 110,000 Population in 2019 BMA Study	Residential Unweighted Assessment	Residential Weighted Assessment	% Change	Implied Adjustment to Residential Taxes
Toronto	74.1%	52.2%	-21.9%	42.0%
Thunder Bay	79.4%	64.0%	-15.4%	24.1%
Greater Sudbury	79.5%	64.2%	-15.3%	23.8%
Windsor	74.7%	60.6%	-14.1%	23.3%
Cambridge	75.1%	61.8%	-13.3%	21.5%
Kingston	74.0%	61.3%	-12.7%	20.7%
Waterloo	74.0%	62.2%	-11.8%	19.0%
Guelph	78.5%	66.3%	-12.2%	18.4%
Hamilton	82.0%	69.5%	-12.5%	18.0%
Kitchener	79.0%	67.0%	-12.0%	17.9%
Ottawa	75.1%	64.2%	-10.9%	17.0%
St. Catharines	79.0%	68.2%	-10.8%	15.8%
London	80.7%	70.2%	-10.5%	15.0%
Burlington	78.9%	69.8%	-9.1%	13.0%
Mississauga	72.8%	64.6%	-8.2%	12.7%
Oshawa	79.8%	71.3%	-8.5%	11.9%
Oakville	84.9%	78.1%	-6.8%	8.7%
Milton	81.7%	75.7%	-6.0%	7.9%
Barrie	76.5%	71.1%	-5.4%	7.6%
Whitby	86.4%	80.6%	-5.8%	7.2%
Vaughan	79.3%	74.6%	-4.7%	6.3%
Brampton	81.5%	76.8%	-4.7%	6.1%
Markham	85.5%	82.6%	-2.9%	3.5%
Richmond Hill	89.7%	87.6%	-2.1%	2.4%

If all non-residential classes were at 1, residential taxes would increase by 15.0%

Average	15.2%
Median	15.4%
Maximum	42.0%
Minimum	2.4%

London Compared to Median	-2.9%
London Compared to Average	-1.3%

Residential unweighted assessment does not reflect any weighting of various classes with tax ratios.

Residential weighted assessment reflects the weighting of non-residential assessment with tax ratios

SCHEDULE "E"
CLAW BACK PERCENTAGES BY YEAR

Year	Multi Residential	Commercial	Industrial
1998*	42.96%	60.88%	40.73%
1999	29.54%	42.07%	16.47%
2000	20.16%	25.38%	7.99%
2001*	65.56%	66.18%	21.18%
2002	40.89%	58.29%	21.95%
2003*	48.34%	73.90%	78.54%
2004*	42.73%	75.18%	63.44%
2005	24.84%	53.87%	53.23%
2006*	38.69%	36.71%	33.37%
2007	36.97%	59.00%	67.51%
2008	88.84%	42.72%	46.38%
2009**	11.11%	21.46%	20.19%
2010	10.93%	21.96%	17.36%
2011	10.78%	6.34%	4.44%
2012	6.49%	7.46%	5.45%
2013**	25.35%	11.42%	6.69%
2014	8.53%	18.26%	1.16%
2015	14.40%	9.52%	0.98%
2016	5.38%	8.32%	0.00%
2017**	0.00%	8.49%	0.00%
2018	0.00%	0.00%	0.00%
2019	0.00%	0.00%	0.00%
2020	0.00%	0.00%	0.00%

* Reassessment Year

** Reassessment Year with Phase-in

SCHEDULE "F"
CAP ADJUSTMENTS BY YEAR

Year	Multi Residential	Commercial	Industrial	Total
1998*	\$861,955	\$8,161,158	\$1,347,038	\$10,370,151
1999	\$456,005	\$6,268,157	\$757,655	\$7,481,817
2000	\$320,089	\$5,410,929	\$454,271	\$6,185,289
2001*	\$951,130	\$8,745,043	\$959,260	\$10,655,433
2002	\$390,568	\$5,818,822	\$461,648	\$6,671,038
2003*	\$725,782	\$5,935,519	\$1,019,716	\$7,681,017
2004*	\$833,525	\$6,200,165	\$1,121,642	\$8,155,332
2005	\$213,377	\$3,302,585	\$662,151	\$4,178,113
2006*	\$414,312	\$4,514,056	\$506,016	\$5,434,384
2007	\$175,561	\$2,625,310	\$351,547	\$3,152,418
2008	\$147,361	\$1,530,497	\$263,380	\$1,941,238
2009**	\$49,289	\$1,063,691	\$186,855	\$1,299,835
2010	\$34,468	\$876,641	\$187,789	\$1,098,898
2011	\$22,117	\$583,670	\$94,371	\$700,158
2012	\$12,141	\$412,698	\$74,571	\$499,410
2013**	\$11,235	\$298,044	\$47,394	\$356,673
2014	\$7,075	\$209,216	\$18,019	\$234,310
2015	\$5,023	\$138,795	\$10,170	\$153,988
2016	\$4,249	\$90,398	\$0	\$94,647
2017**	\$0	\$59,141	\$0	\$59,141
2018	\$0	\$16,131	\$0	\$16,131
2019	\$0	\$1,790	\$0	\$1,790

SCHEDULE "G"
ASSESSMENT RELATED TAX CHANGES IN THE RESIDENTIAL PROPERTY CLASS

	2020 Phase-in	2019 Phase-in	2018 Phase-in	2017 Reassessment	2016 Phase-in	2015 Phase-in	2014 Phase-in	2013 Reassessment	2012 Phase-in	2011 Phase-in	2010 Phase-in	2009 Reassessment	2006 Reassessment	2004 Reassessment	2003 Reassessment	2001 Reassessment	1998 Reassessment
# of Assessment Related Tax Decreases	137,370	136,385	133,416	118,456	97,618	97,796	95,998	69,923	76,549	69,240	61,079	54,704	63,520	61,220	57,887	52,265	39,905
Average Assessment Related Tax Decrease 	\$51.00	\$56.00	\$58.00	\$72.00	\$28.00	\$31.00	\$34.00	\$43.00	\$26.00	\$29.00	\$31.00	\$41.00	\$108.00	\$79.00	\$72.00	\$92.00	\$230.00
# of Assessment Related Tax Increases	15,610	14,298	14,997	27,942	42,552	40,462	39,673	64,536	56,027	61,940	65,042	70,186	54,125	49,262	49,864	49,769	57,307
Average Assessment Related Tax Increase 	\$63.00	\$69.00	\$75.00	\$68.00	\$47.00	\$49.00	\$51.00	\$53.00	\$24.00	\$28.00	\$29.00	\$32.00	\$128.00	\$98.00	\$84.00	\$97.00	\$160.00

SCHEDULE "H"
Rating/Evaluation of Economic Development Strategies - Municipalities

Economic Development Issue	Development Charge Grant	Water Pricing Rate Structure	Community Improvement Plans	Property Tax Ratios
Broad focus - all industry types in London -old and new, large and small	Low	Low	Low	High
Long term time frame in business planning	Low	High or Low depending water consumption of industry type	Low	High for all industry types
Significance in business planning and workforce expansion	High or Low dependent on new building construction	High or Low depending water consumption of industry type	High or Low depending on location	High for all industry types
Effect on on ongoing competitiveness	Low	High or Low depending water consumption of industry type	Low	High for all industry types
Effect on Municipal Capital Financing	Negative	Negative (consumption effect)	negative	Neutral
Impact on Industry retention	Low	High or Low depending water consumption of industry type	Low	High
Promotion of diversification in economic development	Medium to Low	Low	Medium to Low	High (ends bias against industrial development vs. commercial)
Potential for reduction in existing business vacancies in buildings	Low to None	Low to Medium	Medium to Low	High

Strategies described in this table are not alternative strategies.

Each strategy and/or policy stands on its own and should be designed and implemented on logical, equitable principles that are consistent with Council's objectives.

Principles relevant to tax ratio policy are that City should have a competitive property tax system and the system should be equitable and logical.

Only the tax ratio strategy/policy has a broad and long term focus that would apply to all industrial properties in the City and all key sector clusters in the industrial class.

Additional Information				
Basis of charge	Square metre of gross floor area	Per cubic metre of water usage	Location	Current dollar value of land and building
2019 charge per unit	\$278.74/sq.m. commercial - industrial exemption	\$2.2506 to \$0.9391/cu. m in declining blocks for water charge - \$2.0003 to \$0.8344/cu. m in declining blocks for wastewater charge	Various	2.264112%