

# Municipality of Clarington

## 2020 D.C. Background Study – Draft Calculations

### Technical Appendix

# Roads and Related Services

DRAFT

Infrastructure Costs Included in the Development Charges Calculation

Municipality of Clarington  
 Servict Roads and Related

Prj .No	Increased Service Needs Attributable to Anticipated Development			Type of Work	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
	2020-2031								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 83%	Non-Residential Share 17%
	Road	From	To										
<b>Bridge Structure Works</b>													
1	Lambs Rd. Grade Separation	at CNR Crossing		5.1	2030	15,006,547	-	15,006,547	-		15,006,547	12,455,434	2,551,113
2	Longworth Ave. Structure at Brookhill	Brookhill Tributary Crossing		5.4	2022	1,213,228	-	1,213,228	-		1,213,228	1,006,979	206,249
3	Grady Dr. Structure (and Road Link)	At Foster Creek		5.4	2024	2,987,454	-	2,987,454	-		2,987,454	2,479,587	507,867
4	Bennett Rd.	At Soper Creek Tributary		5.4	2031	1,108,501	-	1,108,501	-		1,108,501	920,056	188,445
5	Baseline Rd.	At Bennett Rd. Channel Crossing		5.4	2023	1,108,501	-	1,108,501	-		1,108,501	920,056	188,445
6	Lambs Rd.	At Bennett Rd. Channel Crossing		5.4	2023	1,108,501	-	1,108,501	-		1,108,501	920,056	188,445
<b>Culvert Works</b>													
7	Baseline Rd. Culvert (99065)	at Darlington Creek	West of Green Rd.	8.1	2027	285,049	-	285,049	-		285,049	236,591	48,458
8	Baseline Road Culvert (99063)	140m East of Holt Rd.		8.1	2028	285,049	-	285,049	-		285,049	236,591	48,458
9	Lambs Rd. Box Culvert (99069)	at Soper Creek Tributary		8.1	2023	285,049	-	285,049	-		285,049	236,591	48,458
10	Baseline Rd. Culvert (99055)	at Robinson Creek (w. of R.R. 34)		8.1	2028	285,049	-	285,049	-		285,049	236,591	48,458
11	Baseline Rd. Culvert (99057)	at Tooley Creek (e. of R.R. 34)		8.1	2029	285,049	-	285,049	-		285,049	236,591	48,458
12	Hancock Rd. Box Culvert (99077)	at Black Creek Tributary		8.2	2022	1,012,600	-	1,012,600	679,000		333,600	276,888	56,712
<b>Intersection Works</b>													
13	Baseline Rd./Holt Rd. (Signals)			4.3	2031	316,231	-	316,231	122,916		193,316	160,452	32,864
14	Bennett Rd. Railroad Crossing	at CNR Level Crossing		4.4	2022	381,670	-	381,670	-		381,670	316,786	64,884
15	Conc. St. E./Lambs Rd. Intersection			4.3	2027	316,231	-	316,231	122,916		193,316	160,452	32,864
16	Holt Rd./Bloor St. (Signals)			4.3	2031	316,231	-	316,231	122,916		193,316	160,452	32,864
17	King St./Scugog St. (Intersection)			4.2	2030	432,377	-	432,377	241,598		190,779	158,347	32,432
18	King St./Simpson Ave. (Intersection)			4.2	2028	432,377	-	432,377	241,598		190,779	158,347	32,432
19	Longworth Ave./Green Rd. (Intersection)			4.3	2022	316,231	-	316,231	122,916		193,316	160,452	32,864
20	Mearns Ave./Concession St. (Signals)			4.3	2026	316,231	-	316,231	122,916		193,316	160,452	32,864
21	Prestonvale Rd. Railroad Crossing	at CPR Level Crossing		4.4	2026	636,117	-	636,117	-		636,117	527,977	108,140
22	Arthur St. Railroad Crossing	at C.P.R Level Crossing		4.4	2024	636,117	-	636,117	-		636,117	527,977	108,140
23	King Ave./Baldwin St./North Street			4.3	2021	316,231	-	316,231	122,916		193,316	160,452	32,864
24	Toronto St./Mill St. Intersection			4.1	2030	207,746	-	207,746	152,996		54,750	45,443	9,308
25	Baseline Rd.	At Haines St.		4.6	2023	310,925	-	310,925	-		310,925	258,068	52,857
26	Baseline Rd.	At Caristrap St.		4.6	2023	310,925	-	310,925	-		310,925	258,068	52,857
27	Baseline Rd.	At Maple Grove Rd.		4.5	2027	621,850	-	621,850	-		621,850	516,136	105,715
28	Baseline Rd.	At Mearns Ave./Mearns Ct.		4.5	2023	621,850	-	621,850	-		621,850	516,136	105,715
29	George Reynolds Dr.	At Courtice Rd.		4.5	2020	610,925	-	610,925	-		610,925	507,068	103,857
30	Prestonvale Rd.	At Robert Adams Dr.		4.3	2024	316,231	-	316,231	122,916		193,316	160,452	32,864
31	Bennett Rd.	At Lake Road		4.2	2022	432,377	-	432,377	241,598		190,779	158,347	32,432
32	Trulls Rd.	At George Reynolds Dr.		4.2	2031	432,377	-	432,377	241,598		190,779	158,347	32,432
33	Trulls Rd.	At Sandringham Dr.		4.2	2022	432,377	-	432,377	241,598		190,779	158,347	32,432
34	Clarington Blvd.	At Prince William Blvd		4.2	2024	506,000	-	506,000	282,736		223,264	185,309	37,955
35	Baseline Rd.	At Simpson Ave.		4.2	2031	532,377	-	532,377	-		532,377	441,873	90,504
36	King St.	At Ontario St.		4.1	2021	207,746	-	207,746	152,996		54,750	45,443	9,308
37	Longworth Ave.	At Mearns Ave.		4.1	2031	207,746	-	207,746	152,996		54,750	45,443	9,308
38	Green Rd.	At Brookhill		4.1	2021	207,746	-	207,746	152,996		54,750	45,443	9,308
<b>Road Works</b>													
39	Baseline Rd.	Lambs Rd.	Bennett Rd.	1.6	2031	1,788,454	-	1,788,454	-		1,788,454	1,484,416	304,037
40	Baseline Rd.	Mearns Ct.	Haines St.	1.1	2023	1,356,387	-	1,356,387	600,171		756,216	627,659	128,557
41	Baseline Rd.	Haines St.	Lambs Rd.	1.2	2023	1,382,584	-	1,382,584	255,286		1,127,298	935,657	191,641
42	Baseline Rd.	170m East of Darlington Creek	Holt Rd.	1.2	2027	5,057,010	-	5,057,010	286,546		4,770,464	3,959,485	810,979
43	Bennett Rd.	South Service Rd.	South End (East Beach Rd.)	1.6	2022	1,756,744	-	1,756,744	243,804		1,512,940	1,255,740	257,200
44	Bennett Rd.	Highway 401	Reg. Highway 2	1.7	2030	1,858,462	-	1,858,462	545,628		1,312,834	1,089,652	223,182

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Municipality of Clarington  
 Servicing Roads and Related

Prj .No	Increased Service Needs Attributable to Anticipated Development			Type of Work	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
	2020-2031								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 83%	Non-Residential Share 17%
	Road	From	To										
45	Conc. Rd. 3	500m East of Middle Rd.	Liberty St.	1.2	2021	1,131,721	-	1,131,721	327,748		803,974	667,298	136,676
46	Conc. Rd. 3	200m East of Reg. Rd. 57	100m West of Middle Rd.	1.2	2022	1,783,319	-	1,783,319	661,886		1,121,432	930,789	190,643
47	Conc. Rd. 3	Liberty St.	90m W. of Jollow Dr.	1.2	2021	1,283,828	-	1,283,828	347,338		936,490	777,287	159,203
48	Concession St. E.	Soper Creek Dr.	Lambs Rd.	1.2	2024	1,930,435	-	1,930,435	599,758		1,330,677	1,104,462	226,215
49	Concession St. E.	Lambs Rd.	Providence Rd.	1.2	2030	2,846,451	-	2,846,451	498,815		2,347,636	1,948,538	399,098
50	Green Rd.	Ross Wright	Future Longworth Avenue	1.2	2021	514,419	-	514,419	12,481		501,938	416,608	85,329
51	Green Rd.	Baseline Rd.	South End	1.2	2030	2,366,327	-	2,366,327	567,446		1,798,881	1,493,071	305,810
52	Green Rd.	Future Longworth Ave.	670 m North of Longworth Ave.	1.2	2027	2,297,737	-	2,297,737	55,749		2,241,989	1,860,851	381,138
53	Green Rd. Widening	Baseline Rd.	Reg. Highway 2	1.3	2030	1,461,983	-	1,461,983	-		1,461,983	1,213,446	248,537
54	Haines St.	Baseline Rd.	Reg. Highway 2	1.2	2024	3,155,102	-	3,155,102	55,386		3,099,716	2,572,764	526,952
55	Holt Rd.	Baseline Rd.	300m South of Baseline Rd.	1.13	2031	900,628	-	900,628	55,514		845,114	701,444	143,669
56	Holt Rd.	Baseline Rd.	Bloor St.	1.13	2031	5,621,532	-	5,621,532	134,977		5,486,555	4,553,840	932,714
57	Holt Rd.	Bloor St.	Reg. Highway 2	1.13	2031	2,043,132	-	2,043,132	124,027		1,919,105	1,592,857	326,248
58	Holt Rd.	Reg. Highway 2	Future Longworth Ave.	1.13	2025	948,597	-	948,597	188,648		759,949	630,758	129,191
59	Lambs Rd.	Highway 2	Concession St. E	1.2	2022	4,629,770	-	4,629,770	163,844		4,465,926	3,706,718	759,207
60	Lambs Rd.	Concession St. E	CPR Tracks	1.2	2027	3,806,699	-	3,806,699	522,388		3,284,311	2,725,978	558,333
61	Lambs Rd.	300mm North of Baseline Rd.	Highway 2	1.2	2023	1,152,153	-	1,152,153	393,520		758,633	629,666	128,968
62	Lambs Rd.	Highway 401	Baseline Rd.	1.2	2026	1,646,140	-	1,646,140	39,940		1,606,200	1,333,146	273,054
63	Lambs Rd.	Port Darlington Rd.	Lake Rd.	1.6	2030	1,057,049	-	1,057,049	12,852		1,044,197	866,684	177,514
64	Longworth Ave.	Holt Rd.	Maple Grove Rd.	1.12	2025	3,062,447	-	3,062,447	-		3,062,447	2,541,831	520,616
65	Longworth Ave.	Maple Grove Rd.	West Bowmanville Boundary	1.12	2025	1,485,515	-	1,485,515	-		1,485,515	1,232,978	252,538
66	Longworth Ave. (Road Oversizing)	West Bowmanville Boundary	Green Rd.	1.9	2020	186,663	-	186,663	-		186,663	154,930	31,733
67	Longworth Ave. (Road Oversizing)	Bowmanville Creek	Green Rd.	1.9	2022	684,432	-	684,432	-		684,432	568,078	116,353
68	Nash Rd. (Future Clarington Blvd.)	South 90 degree Curve	North 90 degree Curve	1.2	2025	2,023,381	-	2,023,381	21,211		2,002,170	1,661,801	340,369
69	Queen St. Extension	St. George St.	Frank St.	1.8	2023	719,084	-	719,084	-		719,084	596,840	122,244
70	Simpson Ave. Extension	King St.	Future Church St.	1.8	2026	505,624	-	505,624	-		505,624	419,668	85,956
71	Lake Rd. (Through Existing GFL Site)	Bennett Rd.	250m West of Bennett Rd.	1.2	2020	1,512,666	-	1,512,666	-		1,512,666	1,255,513	257,153
72	Stevens Rd.	Reg. Rd. 57	East End	1.4	2027	766,489	-	766,489	44,985		721,504	598,848	122,656
73	Baseline Rd.	Reg. Rd. 34 (Courtice Rd.)	Hancock Road	1.2	2029	2,547,039	-	2,547,039	150,182		2,396,857	1,989,391	407,466
74	Baseline Rd.	Prestonvale Rd.	Trulls Rd.	1.2	2028	3,621,633	-	3,621,633	220,198		3,401,435	2,823,191	578,244
75	Crago Rd.	Osbourne Rd.	South Service Rd.	1.2	2029	5,315,661	-	5,315,661	401,190		4,914,471	4,079,011	835,460
76	Darlington Blvd.	Highway 2	Foxhunt Trail	1.1	2021	2,265,924	-	2,265,924	538,710		1,727,214	1,433,588	293,626
77	Energy Drive	410m East of Osborne Rd.	Crago Rd.	1.12	2027	2,078,587	-	2,078,587	-		2,078,587	1,725,227	353,360
78	George Reynolds Dr.	Courtice Rd.	Harry Gay Dr.	1.8	2020	3,343,694	-	3,343,694	-		3,343,694	2,775,266	568,428
79	Hancock Rd.	Nash Rd.	0.65km North	1.7	2022	1,308,832	-	1,308,832	38,730		1,270,102	1,054,185	215,917
80	Hancock Rd.	275m South of Nash. Rd.	Nash Rd.	1.7	2022	543,699	-	543,699	126,691		417,008	346,117	70,891
81	Nash Rd.	50m East of Harry Gay Dr.	Hancock Rd.	1.1	2022	1,011,422	-	1,011,422	187,935		823,487	683,495	139,993
82	Osbourne Rd.	Energy Dr.	Megawatt Dr.	1.2	2028	994,543	-	994,543	116,404		878,139	728,856	149,284
83	Prestonvale Rd.	CPR Level Crossing	262m S. Southfield Ave.	1.2	2026	3,559,778	-	3,559,778	345,023		3,214,756	2,668,247	546,508
84	Trulls Rd.	230m South of Yorkville Dr.	Reg. Rd. 22	1.1	2023	2,374,768	-	2,374,768	432,707		1,942,061	1,611,910	330,150
85	Trulls Rd.	Bloor St. (Reg. Rd. 22)	Baseline Rd.	1.2	2023	6,241,615	-	6,241,615	1,797,196		4,444,419	3,688,868	755,551
86	Arthur St.	CPR Level Crossing	1.13km N. of CPR	1.7	2024	2,236,086	-	2,236,086	1,135,694		1,100,392	913,325	187,067
87	Arthur St.	1.13 km North CPR Level Crossing	Conc. Rd. 3	1.7	2027	1,018,200	-	1,018,200	508,547		509,652	423,012	86,641
88	Conc. Rd. 3	Reg. Rd. 17	Arthur St.	1.7	2029	1,459,090	-	1,459,090	428,376		1,030,714	855,493	175,221
89	Rudell Rd.	Grady Dr.	CPR	1.8	2020	1,521,372	-	1,521,372	-		1,521,372	1,262,739	258,633
90	Toronto St.	Mill St.	CNR Level Crossing	1.2	2030	3,823,847	-	3,823,847	185,276		3,638,571	3,020,014	618,557
91	Baseline Rd.	Trulls Rd.	Reg. Rd. 34 (Courtice Rd.)	1.2	2020	2,463,898	-	2,463,898	945,020		1,518,878	1,260,669	258,209
92	Old Scugog Rd.	Conc. Rd. 4	Taunton Rd.	1.11	2025	952,647	-	952,647	701,584		251,063	208,383	42,681
93	Middle Rd.	890m N of Conc 3	Taunton Rd.	1.11	2021	1,498,951	-	1,498,951	1,103,914		395,038	327,881	67,156
94	Conc. Rd. 3	Mearns Ave.	Reg. Rd. 42	1.11	2023	1,498,951	-	1,498,951	1,103,914		395,038	327,881	67,156

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	2020-2031								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 83%	Non-Residential Share 17%
	Road	From	To										
95	Lambs Rd.	CPR Tracks	Conc. Rd. 3	1.11	2021	451,491	-	451,491	332,504		118,987	98,759	20,228
96	Mearns Ave.	Conc. Rd. 3	300m North Conc. Rd. 3	1.2	2030	1,028,838	-	1,028,838	57,162		971,676	806,491	165,185
97	Maple Grove Rd.	Baseline Rd.	Bloor St.	1.11	2023	880,408	-	880,408	648,383		232,025	192,581	39,444
98	Maple Grove Rd.	Hwy 2	Future Longworth Ave	1.11	2021	383,768	-	383,768	282,628		101,139	83,946	17,194
99	Pebblestone Rd.	Req. Rd. 55 (Townline Rd.)	Tooley Rd.	1.11	2025	555,334	-	555,334	408,980		146,354	121,474	24,880
100	Pebblestone Rd.	Trulls Rd.	Req. Rd. 34 (Courtice Rd.)	1.11	2025	370,223	-	370,223	272,653		97,570	80,983	16,587
101	Bennett Rd.	Hwy 2	Conc. St. East	1.8	2031	4,537,040	-	4,537,040	-		4,537,040	3,765,743	771,297
102	Port Darlington Rd.	Port Darlington East Beach Park	East Shore Drive	1.4	2022	1,505,603	-	1,505,603	-		1,505,603	1,249,650	255,952
103	East Shore Dr.	Port Darlington Rd.	Lake Rd.	1.2	2023	1,457,520	-	1,457,520	318,728		1,138,792	945,197	193,595
104	Prince William Blvd.	Pethick St.	Req. Rd. 57	1.12	2024	1,129,295	-	1,129,295	-		1,129,295	937,315	191,980
105	Trulls Rd.	Billett Gate	Pebblestone Rd.	1.2	2031	3,669,521	-	3,669,521	183,273		3,486,248	2,893,586	592,662
<b>Sidewalk &amp; Cycling Facility Works</b>													
106	Baseline Rd. (South Side Cycling Facility)	Spry Ave.	Liberty St.	2.5	2030	1,042,971	-	1,042,971	-		1,042,971	865,666	177,305
107	Frank St.	Future Queen St.	Prince St.	2.3	2023	28,154	-	28,154	-		28,154	23,368	4,786
108	Highway 2 Sidewalk	271m East of Clarington Blvd.	Reg. Rd. 57	2.1	2020	192,676	-	192,676	74,168		118,508	98,362	20,146
109	Highway 2 Sidewalk	Soper Creek	Bennett Rd.	2.3	2026	333,794	-	333,794	-		333,794	277,049	56,745
110	Liberty St. Sidewalk	Bons Ave.	Concession Rd. 3	2.1	2021	374,342	-	374,342	-		374,342	310,704	63,638
111	Liberty St. Sidewalk	Conc. Rd. 3	North Urban Boundary	2.3	2030	261,269	-	261,269	-		261,269	216,854	44,416
112	Nash Rd. (Cycling Lanes)	Maple Grove Rd.	Solina Rd.	2.8	2028	1,723,638	-	1,723,638	-		1,723,638	1,430,620	293,018
113	Reg. Rd. 57 (West Side MUP)	Stevens Rd.	Nash Rd.	2.6	2024	772,354	-	772,354	-		772,354	641,054	131,300
114	Reg. Rd. 57 Sidewalk East Side	140m N of Baseline Rd.	Pedestrian Under Crossing	2.3	2021	105,859	-	105,859	-		105,859	87,863	17,996
115	Reg. Rd. 57 (West Side MUP)	Aspen Springs Dr.	Hwy 2	2.6	2020	286,707	-	286,707	-		286,707	237,967	48,740
116	Scugog St. Sidewalk	King St.	Rehder Ave.	2.3	2025	75,453	-	75,453	-		75,453	62,626	12,827
117	West Scugog Lane Sidewalk	Mill Ln (south leg)	Bons Ave.	2.3	2024	87,841	-	87,841	-		87,841	72,908	14,933
118	Bloor St. (North Side Sidewalk)	Courtice Rd.	Hancock Rd.	2.3	2025	193,700	-	193,700	-		193,700	160,771	32,929
119	Bloor St. Sidewalk	Townline Rd. S	210m E of Townline Rd.	2.3	2020	47,299	-	47,299	-		47,299	39,258	8,041
120	Bloor St./Reg. Rd. 22 Sidewalk	Prestonvale Rd.	65m E of Prestonvale Rd.	2.5	2020	22,944	-	22,944	-		22,944	19,043	3,900
121	Courtice Rd. Sidewalk	South End of Plaza	South Urban Boundary	2.1	2030	176,161	-	176,161	-		176,161	146,214	29,947
122	Courtice Rd. Sidewalk	Stagemaster Cr.	Bloor St.	2.3	2024	254,513	-	254,513	-		254,513	211,245	43,267
123	Courtice Road (East Side Sidewalk)	Sandringham Dr.	Bloor St.	2.3	2030	315,325	-	315,325	-		315,325	261,720	53,605
124	Courtice Rd. (Regional Road 34)	Bloor St.	CPR/Future GO Station	2.4	2024	1,971,916	-	1,971,916	-		1,971,916	1,636,690	335,226
125	Highway 2 (North Side Cycling Facility)	Courtice Rd.	Future Transit Hub	2.5	2030	160,605	-	160,605	-		160,605	133,302	27,303
126	Highway 2 Sidewalk on South Side	East End of Plaza	Hancock Road (Realigned)	2.3	2029	120,049	-	120,049	-		120,049	99,641	20,408
127	Prestonvale Rd. Sidewalk	Bloor St.	230m N of Bloor St.	2.3	2020	51,803	-	51,803	-		51,803	42,997	8,807
128	Regional Rd. 34 Sidewalk	Nash Rd.	North Urban Boundary	2.1	2021	1,183,581	-	1,183,581	-		1,183,581	982,372	201,209
129	Trulls Rd. Sidewalk	Sandringham Dr.	Strathallan Dr.	2.3	2024	70,948	-	70,948	-		70,948	58,887	12,061
130	West Townline Rd. Sidewalk	Dudley Court	South Regional Urban Limit	2.1	2024	264,241	-	264,241	-		264,241	219,320	44,921
131	Highway 2 Sidewalk	35/115 GO Parking Lot	Rudell Rd.	2.3	2022	217,349	-	217,349	-		217,349	180,400	36,949
132	Highway 2 Sidewalk	Newcastle Fire Hall	Rudell Rd.	2.3	2022	117,121	-	117,121	-		117,121	97,210	19,911
133	Manvers Road (East Side Sidewalk)	George St.	CPR	2.3	2020	120,499	-	120,499	-		120,499	100,014	20,485
134	North St. Sidewalk	George St.	Remi Court	2.3	2020	39,416	-	39,416	-		39,416	32,715	6,701
135	Regional Rd. 17 Sidewalk East Side	Remi Ct.	375m N of CPR	2.3	2021	84,462	-	84,462	-		84,462	70,104	14,359
136	Regional Rd. 17 Sidewalk West Side	Remi Ct.	375m N of CPR	2.3	2021	131,761	-	131,761	-		131,761	109,362	22,399
137	Rudell Rd. Sidewalk	Sunset Blvd.	Hart Blvd.	2.2	2023	46,947	-	46,947	-		46,947	38,966	7,981
138	Lambs Rd.	Baseline Rd.	300m North of Baseline Rd.	2.3	2023	67,570	-	67,570	-		67,570	56,083	11,487
139	Reg. Rd. 57 (West Side MUP)	Highway 2	Stevens Rd.	2.6	2020	157,982	-	157,982	-		157,982	131,125	26,857
140	Bloor St. Sidewalk	210m E of Townline Rd.	415m Easterly	2.3	2025	46,173	-	46,173	-		46,173	38,323	7,849
141	Bloor St./Reg. Rd. 22 Sidewalk	65m E of Prestonvale Rd.	Courtice Rd.	2.6	2025	1,015,178	-	1,015,178	-		1,015,178	842,598	172,580
142	Hancock Rd.	Highway 2	275m South of Nash. Rd.	2.1	2022	363,332	-	363,332	-		363,332	301,565	61,766

Infrastructure Costs Included in the Development Charges Calculation

Municipality of Clarington  
Service Roads and Related

Prj .No	Increased Service Needs Attributable to Anticipated Development			Type of Work	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
	2020-2031								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 83%	Non-Residential Share 17%
	Road	From	To										
143	Prestonvale Rd. Sidewalk	230m N of Bloor St.	Meadowglade Rd.	2.3	2020	37,163	-	37,163	-	-	37,163	30,846	6,318
144	Tooley Rd. Sidewalk	265m N of Nash Rd.	Adelaide Ave.	2.3	2021	169,609	-	169,609	-	-	169,609	140,775	28,834
145	Trulls Rd. Sidewalk	Strathallan Dr.	Highway 2	2.3	2020	54,056	-	54,056	-	-	54,056	44,866	9,189
146	Nash Rd.	Green Rd.	Future Clarington Blvd.	2.8	2025	206,837	-	206,837	-	-	206,837	171,674	35,162
147	Trulls Rd.	Pebblestone Rd.	180m South of Taunton Rd.	2.8	2020	1,289,281	-	1,289,281	-	-	1,289,281	1,070,104	219,178
148	Baseline Rd.	Green Rd.	Spicer Sq.	2.6	2030	608,522	-	608,522	-	-	608,522	505,073	103,449
149	Baseline Rd.	Regional Rd. 57	Spry Ave.	2.6	2030	246,334	-	246,334	94,823	-	151,511	125,754	25,757
150	Baseline Rd.	Liberty St.	Haines St.	2.6	2031	1,475,545	-	1,475,545	-	-	1,475,545	1,224,702	250,843
151	Baseline Rd.	Haines St.	Lambs Rd.	2.6	2031	242,823	-	242,823	-	-	242,823	201,544	41,280
152	Reg. Rd. 57 Sidewalk East Side	Stevens Rd.	Nash Rd.	2.1	2024	1,453,327	-	1,453,327	-	-	1,453,327	1,206,262	247,066
153	Baseline Rd.	Spicer Sq.	Regional Rd. 57	2.6	2030	122,875	-	122,875	47,299	-	75,576	62,728	12,848
154	Reg. Rd. 57 (West Side MUP)	Baseline Rd.	Prestonway Dr.	2.6	2021	496,179	-	496,179	-	-	496,179	411,829	84,350
155	Reg. Rd. 57 (West Side MUP)	Prestonway Dr.	Aspen Springs Dr.	2.6	2021	275,005	-	275,005	104,502	-	170,503	141,518	28,986
156	Reg. Rd. 57 Sidewalk East Side	CPR	Hwy 2	2.3	2020	56,308	-	56,308	-	-	56,308	46,736	9,572
157	Reg. Rd. 57 Sidewalk East Side	Hartwell Ave.	CPR	2.3	2025	123,878	-	123,878	-	-	123,878	102,819	21,059
158	Reg. Rd. 57 Sidewalk East Side	Hwy 2	Stevens Rd.	2.3	2020	60,813	-	60,813	-	-	60,813	50,475	10,338
159	Regional Rd. 17 Sidewalk East Side	375m N of CPR	Conc. Rd. 3	2.3	2027	278,162	-	278,162	-	-	278,162	230,874	47,288
160	Regional Rd. 17 Sidewalk West Side	375m N of CPR	Conc. Rd. 3	2.3	2027	278,162	-	278,162	-	-	278,162	230,874	47,288
<b>Street Lighting Works</b>													
161	Highway 2	Boswell Dr.	Courtice Rd.	3.5	2022	486,459	-	486,459	-	-	486,459	403,761	82,698
162	Highway 2 Streetlighting	Soper Creek	Bennett Rd.	3.1	2023	360,063	-	360,063	-	-	360,063	298,853	61,211
163	Reg. Rd. 57 Streetlighting	Highway 2	Nash Rd.	3.1	2024	379,500	-	379,500	-	-	379,500	314,985	64,515
164	Bloor St. (Streetlighting)	Courtice Rd.	Hancock Rd.	3.1	2025	208,944	-	208,944	-	-	208,944	173,423	35,520
165	Bloor St./Reg. Rd. 22 Streetlighting	Prestonvale Rd.	Courtice Rd.	3.1	2025	437,324	-	437,324	-	-	437,324	362,979	74,345
166	Courtice Rd. Streetlighting	Stagemaster Cr.	Bloor St.	3.1	2024	274,542	-	274,542	-	-	274,542	227,870	46,672
167	Courtice Rd. (Regional Road 34)	Bloor St.	Highway 401 Interchange	3.1	2024	506,567	-	506,567	-	-	506,567	420,450	86,116
168	Regional Rd. 17 Streetlighting	Remi Ct.	375m N of CPR	3.1	2024	142,130	-	142,130	-	-	142,130	117,968	24,162
169	Reg. Rd. 57 Streetlighting	CPR	Baseline Rd.	3.1	2021	413,028	-	413,028	-	-	413,028	342,813	70,215
170	Courtice Road Streetlighting	Sandringham Dr.	Stagemaster Cr.	3.5	2024	29,318	-	29,318	-	-	29,318	24,334	4,984
171	Hancock Rd.	Highway 2	275m South of Nash. Rd.	3.5	2022	35,833	-	35,833	-	-	35,833	29,741	6,092
172	Highway 2 Streetlighting	East of Firehall	35/115 GO Parking Lot	3.1	2022	125,123	-	125,123	-	-	125,123	103,852	21,271
173	Regional Rd. 17 Streetlighting	375m N of CPR	Conc. Rd. 3	3.1	2027	300,053	-	300,053	-	-	300,053	249,044	51,009
<b>Streetscape Works</b>													
174	Frank St. (Streetscape)	King St.	Future Queen St.	6.2	2023	423,297	-	423,297	311,740	-	111,557	92,592	18,965
175	King St. Corridor Improv. (Streetscape)	Liberty St.	Simpson Ave.	6.2	2028	1,341,525	-	1,341,525	987,975	-	353,549	293,446	60,103
176	King Street Corridor Improv. (Streetscape)	Simpson Ave.	Mearns Ave.	6.2	2028	1,289,426	-	1,289,426	949,607	-	339,819	282,050	57,769
177	St. George St. Tree Planting (Streetscape)	King St.	Queen St.	6.4	2023	12,678	-	12,678	9,337	-	3,341	2,773	568
178	Highway 2 Streetscape	Townline Rd.	Darlington Blvd.	6.11	2029	368,323	-	368,323	271,254	-	97,069	80,567	16,502
179	Highway 2 Streetscape	Darlington Blvd.	Centrefield Dr.	6.12	2029	417,105	-	417,105	307,180	-	109,925	91,238	18,687
180	Highway 2 Streetscape	Centrefield Dr.	Prestonvale Rd.	6.13	2030	848,176	-	848,176	624,646	-	223,531	185,531	38,000
181	Highway 2 Streetscape	Prestonvale Rd.	Trulls Rd.	6.14	2030	989,158	-	989,158	728,472	-	260,685	216,369	44,317
182	Highway 2 Streetscape	Trulls Rd.	Maplefield Drive	6.15	2031	1,066,425	-	1,066,425	785,376	-	281,049	233,270	47,778
183	Highway 2 Streetscape	Richard Gay Ave.	Courtice Rd.	6.16	2031	811,461	-	811,461	597,607	-	213,855	177,500	36,355
184	Highway 2 Streetscape	Courtice Rd.	Hancock Rd. (Realigned)	6.17	2031	686,721	-	686,721	505,741	-	180,980	150,214	30,767
185	Newcastle Streetscape Phase 1	North St.	Mill St.	6.2	2021	781,043	-	781,043	575,205	-	205,838	170,846	34,992
186	Newcastle Streetscape Phase 2	Mill St.	Beaver St.	6.2	2023	260,553	-	260,553	191,886	-	68,667	56,994	11,673
187	Newcastle Streetscape Phase 3	Beaver St.	Arthur St.	6.2	2025	567,617	-	567,617	418,026	-	149,591	124,161	25,431
<b>Engineered Services Studies &amp; Non Site-Specific Improvements</b>													
188	Bowmanville Waterfront Redevelopment Transportation Network Needs and Feasibility Study				2018	60,000	-	60,000	-	-	60,000	49,800	10,200

## Infrastructure Costs Included in the Development Charges Calculation

Municipality of Clarington  
Service Roads and Related

Prj .No	Increased Service Needs Attributable to Anticipated Development			Type of Work	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
	2020-2031								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 83%	Non-Residential Share 17%
	Road	From	To										
189	Active Transportation and Trails MP				2020	60,000	-	60,000	-		60,000	49,800	10,200
190	ES Report to Establish an East/West Transportation Corridor North of Highway No.2				2023	120,000	-	120,000	-		120,000	99,600	20,400
191	ES Report to Establish an East/West Transportation Corridor South of Highway No.2				2023	120,000	-	120,000	-		120,000	99,600	20,400
192	Development Traffic Monitoring Studies for D.C. Project Implementation				2015-2031	120,000	-	120,000	-		120,000	99,600	20,400
193	Erosion Protection Works				2020-2031	2,675,046	-	2,675,046	891,754		1,783,293	1,480,133	303,160
	<b>Recovery of Debenture</b>												
194	NPV Principal Payments - Green Rd Debenture				2020-2029	3,988,753	-	3,988,753	-		3,988,753	3,310,665	678,088
195	NPV Interest Payments - Green Rd Debenture				2020-2029	779,211	-	779,211	-		779,211	646,745	132,466
	<b>Operations</b>												
196	Provision for additional fleet - Roads (24)				2020-2031	2,786,561	-	2,786,561	-		2,786,561	2,312,845	473,715
197	Provision for additional facility space - Roads (NPV of Future Debt Payments)				2020-2031	6,091,842	-	6,091,842	-		6,091,842	5,056,229	1,035,613
	<b>Other Studies</b>												
198	Operations Needs Assessment Study Update				2024	50,000	-	50,000	-		50,000	41,500	8,500
199	Hospital Transportation Review				2020-2031	40,000	-	40,000	10,000		30,000	24,900	5,100
200	Transportation Master Plan Update				2021	75,000	-	75,000	18,750		56,250	46,688	9,563
201	Transportation Master Plan Update				2026	150,000	-	150,000	37,500		112,500	93,375	19,125
202	Transportation Master Plan Update				2031	75,000	-	75,000	18,750		56,250	46,688	9,563
	Reserve Fund Adjustment							(22,004,369)			(22,004,369)	(18,263,626)	(3,740,743)
	<b>Total</b>					<b>218,472,685</b>	<b>-</b>	<b>196,468,316</b>	<b>31,935,266</b>	<b>-</b>	<b>164,533,050</b>	<b>136,562,431</b>	<b>27,970,618</b>

## Description of Road Project Types

Type of Work	Description
<b>Road Works</b>	
1.1	Semi Urban to Urban Collector
1.2	Rural to Urban Collector
1.3	Urban Collector Road Widening
1.4	Semi Urban Local Residential to Urban Local Residential
1.5	Urban Local Reconstruction
1.6	Widening and Fully Urbanize Rural Collector
1.7	Widening and Half Urbanize Rural Collector
1.8	New Two Lane Urban Collector
1.9	Road Oversizing
1.11	Rural Upgrade
1.12	New Four Lane Urban Collector
1.13	Rural Collector to Rural Arterial
1.14	New Two Lane Rural Collector
<b>Sidewalk &amp; Cycling Facility Works</b>	
2.1	Fill Ditch and Pour Curb to Construct Sidewalk
2.2	Pour Curb and Grade to Construct Sidewalk
2.3	Tie Sidewalk into Existing Cross Section
2.4	Fill Ditch and Pour Curb to Construct Multi Use Path
2.5	Multi-use Path in Urban Boulevard through Undeveloped Area
2.6	Multi-use Path in Urban Boulevard through Developed Area
2.7	One-way In-boulevard Cycling Facility Parallel to Sidewalk
2.8	Widen Rural Road for Cycling Lanes/Paved Shoulders
<b>Street Lighting Works</b>	
3.1	Lighting for Urban Arterial Road (both sides - 50 m spacing)
3.2	Decorative Street Lighting (double hung in median - 50 m spacing)
3.3	Decorative Street Lighting (both sides - 35 m spacing)
3.4	Lighting for Collector Road (single side - 50 m spacing)
3.5	Lighting for Rural Arterial Road (single side - 50 m spacing)
3.6	Lighting on Existing HP's for Arterial Road (one side - 70 m spacing)
3.7	Walkway Lighting (one side - 30m spacing)
<b>Intersection Works</b>	
4.1	Signalize Intersection - No Road Improvements
4.2	Upgrade Signalized Intersection - Road Widening, Sidewalks and Resurfacing
4.3	Signalize Intersection - With Road Widening
4.4	Railway Level Crossing Improvements
<b>Bridge Structure Works</b>	
5.1	Structure - Rail Underpass - Collector\Arterial (14 m ultimate road width)
5.2	Structure - Rail Overpass - Collector\Arterial (14 m ultimate road width)
5.3	Structure - Creek Crossing - Major (collector\arterial road, 3 span)
5.4	Structure - Creek Crossing - Minor (local or rural road, single span)
<b>Streetscape Works</b>	
6.11	Townline Rd. to Darlington Blvd., Courtice
6.12	Darlington Blvd. To Centrefield Dr., Courtice
6.13	Farewell Creek Bridge (Centrefield to Prestonvale Rd.), Courtice
6.14	Prestonvale Rd. to Trulls Road, Courtice
6.15	Trulls Road to Maplefield St. (MCA), Courtice
6.16	Maplefield Street to Courtice Road, Courtice
6.17	Courtice Road to Hancock Road, Courtice
6.2	Streetscaping Established Corridor
6.3	Streetscaping in Developing Corridor
6.4	Tree Planting Both Sides in Boulevard
<b>Culvert Works</b>	
8.1	Extend Concrete Box Culvert
8.2	Replace and Extend Concrete Box Culvert



**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Roads  
Unit Measure: km of roadways

Description	Lanes	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/km)
Rural Collector	2	167.39	167.39	167.39	166.96	167.40	167.40	167.40	165.62	165.62	166.30	\$1,720,100
Semi-Urban Collector	2	18.93	18.36	18.36	18.36	18.36	18.36	18.36	18.36	18.76	18.76	\$2,396,500
Urban Collector	2	59.40	62.62	62.62	63.13	64.74	65.23	68.04	70.10	73.04	73.04	\$3,716,100
Urban Collector	3	0.84	0.84	0.84	0.84	0.84	0.84	1.19	1.19	1.19	1.19	\$4,054,800
Urban Collector	4	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	\$4,529,900
Semi-Urban Arterial	2	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	\$2,771,900
Urban Arterial	3	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	\$4,298,000
Urban Arterial	4	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	2.43	\$4,926,400
Urban Arterial	5	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	\$5,399,500
<b>Total</b>		<b>255.03</b>	<b>257.68</b>	<b>257.68</b>	<b>257.76</b>	<b>259.80</b>	<b>260.29</b>	<b>263.46</b>	<b>263.74</b>	<b>267.07</b>	<b>268.35</b>	

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.0031	0.0030	0.0030	0.0029	0.0029	0.0029	0.0029	0.0028	0.0028	0.0027

10 Year Average	2010-2019
Quantity Standard	0.0029
Quality Standard	\$2,379,793
Service Standard	\$6,901

D.C. Amount (before deductions)	11 Year
Forecast Population	35,340
\$ per Capita	\$6,901
Eligible Amount	\$243,895,476

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Depots and Domes  
Unit Measure: ft<sup>2</sup> of building area

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Hampton Operations Centre	14,812	14,812	14,812	14,812	14,812	14,812	14,812	14,812	14,812	14,812	\$365	\$396
Hampton Storage Building (Sign Shed)	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	\$47	\$58
Hampton Quonset Hut - Old Scugog Road Hampton	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	2,450	\$23	\$32
Hampton Salt Shed	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	\$82	\$97
Hampton Sand Dome	11,035	11,035	11,035	11,035	11,035	11,035	11,035	11,035	11,035	11,035	\$35	\$45
Hampton Storage Trailers	704	1,344	1,344	1,344	1,344	1,344	1,344	1,344	1,344	1,344	\$23	\$54
Orono Operations Centre	5,122	5,122	5,122	5,122	5,122	5,122	5,122	5,122	5,122	5,122	\$365	\$396
Orono Storage Building	1,423	1,423	1,423	1,423	1,423	1,423	1,423	1,423	1,423	1,423	\$47	\$68
Orono Salt Shed	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	\$82	\$97
Orono Sand Dome	11,035	11,035	11,035	11,035	11,035	11,035	11,035	11,035	11,035	11,035	\$35	\$55
<b>Total</b>	<b>50,197</b>	<b>50,837</b>	<b>50,837</b>	<b>50,837</b>	<b>50,837</b>	<b>50,837</b>	<b>50,837</b>	<b>50,837</b>	<b>50,837</b>	<b>50,837</b>		

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.6030	0.6013	0.5941	0.5796	0.5743	0.5645	0.5525	0.5383	0.5252	0.5134

10 Year Average	2010-2019
Quantity Standard	0.5646
Quality Standard	\$188
Service Standard	\$106

D.C. Amount (before deductions)	11 Year
Forecast Population	35,340
\$ per Capita	\$106
Eligible Amount	\$3,752,401

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Operations Fleet  
Unit Measure: No. of vehicles and equipment

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/Vehicle)
<b>Roads &amp; Public Works</b>											
Cars and Vans	1	1	2	2	2	2	2	2	2	2	\$35,000
Heavy Duty Trucks - Tandems	13	13	13	13	13	13	14	16	16	17	\$260,000
Heavy Duty Trucks - Sweepers	1	1	1	2	2	2	2	2	2	2	\$300,000
Heavy Duty Trucks - Flushers	1	1	1	1	1	1	1	1	1	1	\$200,000
Heavy Duty Trucks - Single Axle	13	13	13	13	13	13	13	13	13	13	\$240,000
Medium Duty Trucks	7	8	9	10	12	12	12	12	12	12	\$75,000
Light Duty Trucks	18	19	22	24	24	25	26	27	27	27	\$45,000
Loaders/Graders/Chippers - Loaders	2	2	2	2	2	2	2	2	2	2	\$270,000
Loaders/Graders/Chippers - Backhoes	2	2	2	2	2	2	2	2	2	2	\$145,000
Loaders/Graders/Chippers - Graders	2	2	2	2	2	2	2	2	2	2	\$400,000
Loaders/Graders/Chippers - Excavator	2	2	2	2	2	2	2	2	2	2	\$450,000
Loaders/Graders/Chippers - Chippers	2	2	2	2	2	2	2	2	2	2	\$55,000
Compact Excavator	-	-	1	1	1	1	1	1	1	1	\$75,000
Bobcat	1	1	1	1	1	1	1	1	1	1	\$80,000
Gator	1	1	2	2	2	2	2	2	2	2	\$25,000
Steamer	-	-	-	-	-	1	1	1	1	1	\$25,000
Billy Goat	1	1	-	-	-	-	-	-	-	-	\$2,800
Trailers	6	6	7	6	6	5	5	5	5	5	\$15,000
Loaders/Graders/Chippers - Brushcutter	1	1	1	1	1	1	1	1	1	1	\$46,000
Tractors	3	3	4	4	4	4	4	4	4	4	\$180,000
<b>Total</b>	<b>74</b>	<b>76</b>	<b>83</b>	<b>86</b>	<b>88</b>	<b>89</b>	<b>91</b>	<b>94</b>	<b>94</b>	<b>99</b>	

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.0009	0.0009	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010

10 Year Average	2010-2019
Quantity Standard	0.0010
Quality Standard	\$137,430
Service Standard	\$137

D.C. Amount (before deductions)	11 Year
Forecast Population	35,340
\$ per Capita	\$137
Eligible Amount	\$4,856,776

# Fire Protection Services

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### Infrastructure Costs Included in the Development Charges Calculation

Municipality of Clarington  
Servic Fire Services

Prj. No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 82%	Non-Residential Share 18%
	2020-2029									
	<b>Headquarters #1</b>									
1	Expansion of Headquarters #1 (4,500 square feet and F&E)	2024	1,732,500	-	1,732,500	-		1,732,500	1,420,650	311,850
2	Apparel and Protective Clothing for Fire Fighters	2024	143,000	-	143,000	-		143,000	117,260	25,740
3	Provision for Training Equipment	2024	250,000	-	250,000	191,700		58,300	47,806	10,494
4	Command/Rescue Vehicle	2024	1,000,000	-	1,000,000			1,000,000	820,000	180,000
	<b>Station #6</b>									
5	New Station #6 in Bowmanville (12,000 sf, 1ha land, and F&E)	2028	6,018,000	-	6,018,000	-		6,018,000	4,934,760	1,083,240
6	Apparel and Protective Clothing for Fire Fighters	2028	143,000	-	143,000	-		143,000	117,260	25,740
7	Provision for Training Equipment	2028	250,000	-	250,000	191,700		58,300	47,806	10,494
8	2 Pumpers (Station 6)	2028	1,500,000	-	1,500,000	-		1,500,000	1,230,000	270,000
9	Support Vehicles (2)	2028	120,000	-	120,000	-		120,000	98,400	21,600
	<b>Vehicles</b>									
10	Fire Prevention Vehicle	2020	40,000	-	40,000	-		40,000	32,800	7,200
	<b>Studies</b>									
11	Facilities Review and Space Needs Study	2020-2029	52,600	-	52,600	13,200		39,400	32,308	7,092
12	Fire Master Plan	2020	116,800	-	116,800	29,200		87,600	71,832	15,768
13	Fire Master Plan	2025	116,800	-	116,800	29,200		87,600	71,832	15,768
	Reserve Fund Adjustment				(5,433,091)			(5,433,091)	(4,455,134)	(977,956)
	<b>Total</b>		<b>11,482,700</b>	<b>-</b>	<b>6,049,609</b>	<b>455,000</b>	<b>-</b>	<b>5,594,609</b>	<b>4,587,580</b>	<b>1,007,030</b>

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Fire Facilities  
Unit Measure: sq.ft. of building area

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Bowmanville Station	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	\$385	\$506
Courtice Station	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	\$385	\$492
Old Newcastle Station	6,847	6,847	6,847	6,847	-	-	-	-	-	-	\$385	\$469
Orono Station	6,762	6,762	6,762	6,762	6,762	6,762	6,762	6,762	6,762	6,762	\$385	\$449
Enniskillen Station	4,211	4,211	4,211	4,211	4,211	4,211	4,211	4,211	4,211	4,211	\$385	\$556
Municipal Operations Centre (Hampton)	703	703	703	703	-	-	-	-	-	-	\$385	\$552
Municipal Emergency Operations Centre (Newcastle)	-	-	-	-	1,200	1,200	1,200	1,200	1,200	1,200	\$385	\$490
Newcastle Station 3333 HWY #2	-	-	-	-	10,152	10,152	10,152	10,152	10,152	10,152	\$385	\$490
<b>Total</b>	<b>39,523</b>	<b>39,523</b>	<b>39,523</b>	<b>39,523</b>	<b>43,325</b>	<b>43,325</b>	<b>43,325</b>	<b>43,325</b>	<b>43,325</b>	<b>43,325</b>		

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.4748	0.4675	0.4619	0.4506	0.4894	0.4811	0.4709	0.4588	0.4476	0.4375

10 Year Average	2010-2019
Quantity Standard	0.464
Quality Standard	\$494
Service Standard	\$229

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$229
Eligible Amount	\$6,907,158

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Fire Vehicles  
Unit Measure: No. of vehicles

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/Vehicle)
Cars and Vans	9	9	9	10	10	8	8	8	8	8	\$33,368
Tankers	5	5	5	5	5	5	5	5	5	5	\$263,064
Pumpers (Heavy Duty Custom)	7	7	7	8	8	8	8	8	8	8	\$757,811
Aerial Station #1 and #2	2	2	2	2	2	2	2	2	2	2	\$1,075,030
Rescue	2	2	2	2	2	1	1	1	1	1	\$350,400
Grass Fire Truck	2	2	2	2	2	2	2	2	2	2	\$116,800
Mobile Fire Safety House	1	1	1	1	1	1	1	1	1	1	\$81,700
Prevention Suburban	1	1	1	-	-	-	-	-	-	-	\$93,400
Trailers	3	3	3	4	4	5	5	5	5	5	\$52,247
Heavy Duty Trucks	1	1	1	1	1	1	1	1	1	1	\$171,846
Medium Duty Trucks	1	2	2	2	2	2	2	2	2	2	\$61,130
Polaris ATV	-	-	-	1	1	1	1	1	1	1	\$31,553
Hurst Tools	2	2	2	2	2	2	2	2	2	2	\$41,141
<b>Total</b>	<b>36</b>	<b>37</b>	<b>37</b>	<b>40</b>	<b>40</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.0004	0.0004	0.0004	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004

10 Year Average	2010-2019
Quantity Standard	0.0004
Quality Standard	\$307,650
Service Standard	\$123

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$123
Eligible Amount	\$3,708,044

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Fire Small Equipment and Gear  
Unit Measure: No. of equipment and gear

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/item)
Personal Equipment (for Full Time Firefighters)	55	57	60	61	63	63	63	63	63	63	\$6,500
Personal Equipment (for Part Time Firefighters)	125	125	125	125	125	125	125	125	125	125	\$4,100
<b>Total</b>	<b>180</b>	<b>182</b>	<b>185</b>	<b>186</b>	<b>188</b>	<b>188</b>	<b>188</b>	<b>188</b>	<b>188</b>	<b>188</b>	

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.0022	0.0022	0.0022	0.0021	0.0021	0.0021	0.0020	0.0020	0.0019	0.0019

10 Year Average	2010-2019
Quantity Standard	0.0021
Quality Standard	\$4,814
Service Standard	\$10

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$10
Eligible Amount	\$304,635



## Parking Services

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### Infrastructure Costs Included in the Development Charges Calculation

Municipality of Clarington  
Service Parking Spaces

Prj. No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less:	Potential D.C. Recoverable Cost		
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share	Non-Residential Share
	2020-2029										82%	18%
1	Provision for Additional Parking	2020-2029	843,395	-	843,395	-		843,395	84,339	759,055	622,425	136,630
	Reserve Fund Adjustment				(462,929)	-		(462,929)		(462,929)	(379,602)	(83,327)
	<b>Total</b>		<b>843,395</b>	<b>-</b>	<b>380,466</b>	<b>-</b>	<b>-</b>	<b>380,466</b>	<b>84,339</b>	<b>296,126</b>	<b>242,824</b>	<b>53,303</b>

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parking Spaces  
Unit Measure: No. of spaces

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/space)
Division Street, Bowmanville	86	86	86	86	86	86	86	86	86	86	\$8,200
King Street, Bowmanville	40	40	40	40	40	40	40	40	40	40	\$8,200
Silver Street South, Bowmanville	31	31	31	31	31	31	31	31	31	31	\$8,200
Silver Street North, Bowmanville	36	36	36	36	36	36	36	36	36	36	\$8,200
Church Street (West Side), Bowmanville	34	34	34	34	34	34	34	34	34	34	\$8,200
Church Street (East Side), Bowmanville	35	35	35	35	35	39	39	39	39	39	\$8,200
Newcastle Village, Mill Street Lot (East side)	25	25	25	25	25	25	25	25	25	25	\$8,200
Newcastle Town Hall Lot	18	18	18	18	18	18	18	18	18	18	\$8,200
<b>Total</b>	<b>305</b>	<b>305</b>	<b>305</b>	<b>305</b>	<b>305</b>	<b>309</b>	<b>309</b>	<b>309</b>	<b>309</b>	<b>309</b>	

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.0037	0.0036	0.0036	0.0035	0.0034	0.0034	0.0034	0.0033	0.0032	0.0031

10 Year Average	2010-2019
Quantity Standard	0.0034
Quality Standard	\$8,232
Service Standard	\$28

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$28
Eligible Amount	\$843,395

# Parks and Recreation Services

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### Infrastructure Costs Included in the Development Charges Calculation

Municipality of Clarington  
Service Parks and Recreation

Prj. No	Increased Service Needs Attributable to Anticipated Development  2020-2029	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less:	Potential D.C. Recoverable Cost		
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share 100%	Non-Residential Share 0%
<b>Parks</b>												
1	Conceptual Park Related Design	2020-2029	150,000	-	150,000	-		150,000	15,000	135,000	135,000	-
2	Brookhill Neighbourhood Park (South Side of Longworth)	2023	738,600	-	738,600	-		738,600	73,860	664,740	664,740	-
3	Bowmanville Valley Trail	2020	408,700	-	408,700	-		408,700	40,870	367,830	367,830	-
4	Newcastle Community Park - Design Phase One	2020	87,600	-	87,600	-		87,600	8,760	78,840	78,840	-
5	Clarington Fields - Soccer Design	2023	160,900	-	160,900	-		160,900	16,090	144,810	144,810	-
6	Farewell Creek Trail (Townline to Phase 1 Trail)	2020	459,000	-	459,000	-		459,000	45,900	413,100	413,100	-
7	Brookhill Parkette (Tonno/ Dunbury)	2023	357,400	-	357,400	-		357,400	35,740	321,660	321,660	-
8	Newtonville Estates Parkette	2021	297,800	-	297,800	-		297,800	29,780	268,020	268,020	-
9	Foster Creek Parkette (Given Road and Hwy 2)	2022	178,700	-	178,700	-		178,700	17,870	160,830	160,830	-
10	Newcastle Community Park - Phase 1	2020	1,224,000	-	1,224,000	-		1,224,000	122,400	1,101,600	1,101,600	-
11	1505 Bowmanville Ave to Rhonda Park Trail	2020	40,800	-	40,800	-		40,800	4,080	36,720	36,720	-
12	Farewell Creek Trail Phase 2 (Townline Rd to Phase 1 Trail)	2020	459,000	-	459,000	-		459,000	45,900	413,100	413,100	-
13	Newtonville Estates Parkette	2021	297,800	-	297,800	-		297,800	29,780	268,020	268,020	-
14	Northglen East Neighbourhood Park (Middle Rd)	2021	663,000	-	663,000	-		663,000	66,300	596,700	596,700	-
15	Northglen Phase 8 Parkette	2021	255,000	-	255,000	-		255,000	25,500	229,500	229,500	-
16	Foster Creek Trail (Hwy 2 to north of Grady Drive)	2021	459,000	-	459,000	-		459,000	45,900	413,100	413,100	-
17	Wilmot Trail-Hwy 2 through NCP to Rudell	2022	408,000	-	408,000	-		408,000	40,800	367,200	367,200	-
18	North Newcastle -Water Play	2022	178,700	-	178,700	-		178,700	17,870	160,830	160,830	-
19	Foster Creek Parkette (Given Rd and Highway 2)	2022	178,700	-	178,700	-		178,700	17,870	160,830	160,830	-
20	Soper Creek Trail Phase 3	2022	566,100	-	566,100	-		566,100	56,610	509,490	509,490	-
21	Foster Creek Neighbourhood Park West (Newcastle Heritage Park)	2022	408,000	-	408,000	-		408,000	40,800	367,200	367,200	-
22	Brookhill Trail (Stevens Road to Green Road)	2022	408,000	-	408,000	-		408,000	40,800	367,200	367,200	-
23	Wilmot Trail-west side of NCP to Cobble Dick	2023	459,000	-	459,000	-		459,000	45,900	413,100	413,100	-
24	Brookhill Neighbourhood Park 1 (south side of Longworth)	2023	738,600	-	738,600	-		738,600	73,860	664,740	664,740	-
25	Brookhill Parkette (Tonno/Dunbury)	2023	357,400	-	357,400	-		357,400	35,740	321,660	321,660	-
26	Brookhill Parkette (west of Bowmanville Ck, south of Longworth Ave)	2023	255,000	-	255,000	-		255,000	25,500	229,500	229,500	-
27	Clarington Fields - Soccer Design	2023	160,900	-	160,900	-		160,900	16,090	144,810	144,810	-
28	Waterfront Trail (Darlington Park Rd to Waterfront)	2023	357,000	-	357,000	-		357,000	35,700	321,300	321,300	-
29	Wilmot Trail-Newcastle Heritage Park to GO commuter parking	2024	306,000	-	306,000	-		306,000	30,600	275,400	275,400	-
30	Clarington Fields Soccer	2024	2,754,000	-	2,754,000	-		2,754,000	275,400	2,478,600	2,478,600	-
31	Bowmanville West Parkette (Goodyear)	2024	306,000	-	306,000	-		306,000	30,600	275,400	275,400	-
32	Southwest Courtice Neighbourhood Park	2024	663,000	-	663,000	-		663,000	66,300	596,700	596,700	-
33	Courtice Waterfront Park Phase 1	2024	1,530,000	-	1,530,000	-		1,530,000	153,000	1,377,000	1,377,000	-
34	Waterfront Trail extension and CN level crossing at Cargo lands	2024	408,000	-	408,000	-		408,000	40,800	367,200	367,200	-
35	Port Darlington Neighbourhood Park	2025	663,000	-	663,000	-		663,000	66,300	596,700	596,700	-

### Infrastructure Costs Included in the Development Charges Calculation

Municipality of Clarington  
Service Parks and Recreation

Prj. No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less:		Potential D.C. Recoverable Cost		
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share	Non-Residential Share	
2020-2029											100%	0%	
36	Port Darlington East Beach Phase 2	2025	510,000	-	510,000	-	-	510,000	51,000	459,000	459,000	-	
37	Brookhill Neighbourhood Park 2 (north of Longworth west of Green)	2025	663,000	-	663,000	-	-	663,000	66,300	596,700	596,700	-	
38	Newcastle Waterfront Park Phase 2	2025	612,000	-	612,000	-	-	612,000	61,200	550,800	550,800	-	
39	North Newcastle Neighbourhood Park 2	2025	663,000	-	663,000	-	-	663,000	66,300	596,700	596,700	-	
40	Southwest Courtice Parkette	2025	306,000	-	306,000	-	-	306,000	30,600	275,400	275,400	-	
41	Soper Hills Neighbourhood Park	2026	663,000	-	663,000	-	-	663,000	66,300	596,700	596,700	-	
42	Bowmanville Valley Trail (King to Nash)	2026	2,040,000	335,868	1,704,132	-	-	1,704,132	170,413	1,533,719	1,533,719	-	
43	Ridge Pine Park (Bennett Road)	2026	1,530,000	1,530,000	-	-	-	-	-	-	-	-	
44	Brookhill Neighbourhood Park 3	2026	663,000	663,000	-	-	-	-	-	-	-	-	
45	Soper Springs Neighbourhood Park	2026	663,000	663,000	-	-	-	-	-	-	-	-	
46	Courtice Waterfront Park Phase 2	2027	1,020,000	1,020,000	-	-	-	-	-	-	-	-	
47	South Courtice Soccer Field Phase 3	2027	1,020,000	1,020,000	-	-	-	-	-	-	-	-	
48	Port Darlington Waterfront Park West Beach Phase 2	2027	510,000	-	510,000	-	-	-	-	-	-	-	
49	Black Creek Trail (Centerfield to Trulls)	2028	1,101,600	1,101,600	-	-	-	-	-	-	-	-	
50	Robinson Creek Trail (Southfield to Trulls)	2028	1,101,600	1,101,600	-	-	-	-	-	-	-	-	
51	Brookhill Neighbourhood Park 4	2029	663,000	663,000	-	-	-	-	-	-	-	-	
52	Soper Hills Community Park - Concession and Lambs	2029	2,040,000	2,040,000	-	-	-	-	-	-	-	-	
<b>Operations</b>													
53	Provision for additional fleet - Parks (10)	2020-2020	658,347	93,851	564,496	-	-	564,496	56,450	508,046	508,046	-	
54	Provision for additional facility space - Parks (NPV of Future Principal Payments)	2029-2029	3,546,886	505,628	3,041,258	-	-	3,041,258	304,126	2,737,132	2,737,132	-	
55	Provision for additional facility space - Parks (NPV of Future Interest Payments)	2029-2029	1,160,835	165,483	995,352	-	-	995,352	99,535	895,817	895,817	-	
<b>Indoor Recreation</b>													
56	NPV Principal - Bowmanville Indoor Soccer Debenture	2020-2024	769,744	-	769,744	-	-	769,744	76,974	692,769	692,769	-	
57	NPV Interest - Bowmanville Indoor Soccer Debenture	2020-2024	58,465	-	58,465	-	-	58,465	5,847	52,619	52,619	-	
58	NPV Principal - Diane Hamre Recreation Complex Debenture	2020-2022	3,576,717	-	3,576,717	-	-	3,576,717	357,672	3,219,045	3,219,045	-	
59	NPV Interest - Diane Hamre Recreation Complex Debenture	2020-2022	163,247	-	163,247	-	-	163,247	16,325	146,922	146,922	-	
60	South Bowmanville Facility (Phase 1) (NPV of Future Principal Payments)	2021-2022	34,011,351	6,607,915	27,403,436	8,233,512	-	19,169,925	1,916,992	17,252,932	17,252,932	-	
61	South Bowmanville Facility (Phase 1) (NPV of Future Interest Payments)	2021-2022	11,131,333	2,162,658	8,968,676	2,694,687	-	6,273,988	627,399	5,646,590	5,646,590	-	
62	Diane Hamre Recreation Complex - Ph 1 Exp.	2022	9,629,100	379,266	9,249,834	6,535,992	-	2,713,843	271,384	2,442,458	2,442,458	-	
63	Courtice Community Complex - Aquatic Expansion	2024	8,293,400	326,656	7,966,744	5,629,352	-	2,337,392	233,739	2,103,653	2,103,653	-	
64	Diane Hamre Recreation Complex - Ph 2 Exp.	2026	33,222,900	8,514,562	24,708,338	19,754,049	-	4,954,289	495,429	4,458,860	4,458,860	-	
65	South Courtice Arena - Expansion	2027	6,599,500	429,766	6,169,734	3,119,145	-	3,050,589	305,059	2,745,530	2,745,530	-	
66	South Bowmanville Facility (Phase 2)	2029	18,453,050	10,195,944	8,257,106	-	-	8,257,106	825,711	7,431,395	7,431,395	-	

### Infrastructure Costs Included in the Development Charges Calculation

Municipality of Clarington  
Service Parks and Recreation

Prj. No	Increased Service Needs Attributable to Anticipated Development  2020-2029	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less:	Potential D.C. Recoverable Cost		
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share 100%	Non-Residential Share 0%
	<b>Studies</b>											
67	Community Services Strategic Plan	2021	280,300	-	280,300	70,075		210,225	21,023	189,203	189,203	-
68	Community Service Strategic Plan Review	2025	87,600	-	87,600	21,900		65,700	6,570	59,130	59,130	-
69	Park Needs Study	2020-2029	70,100	-	70,100	17,525		52,575	5,258	47,318	47,318	-
	Reserve Fund Adjustment				(1,099,316)			(1,099,316)		(1,099,316)	(1,099,316)	-
	<b>Total</b>		<b>164,824,776</b>	<b>40,029,796</b>	<b>123,695,664</b>	<b>46,076,237</b>	<b>-</b>	<b>77,619,427</b>	<b>7,871,874</b>	<b>69,747,552</b>	<b>69,747,552</b>	<b>-</b>

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parkland Development  
Unit Measure: Hectares of Parkland

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/Hectare)
Parkettes	11.43	11.67	11.80	11.80	11.80	12.10	13.30	14.30	14.30	14.30	\$133,000
Neighbourhood Parks	52.80	52.80	52.80	56.00	56.40	58.50	63.14	63.14	64.14	64.14	\$74,100
Community Parks	47.09	47.09	47.09	47.12	47.11	50.95	50.95	51.45	52.20	52.20	\$90,000
District Parks	29.98	29.98	31.51	31.55	31.55	33.55	33.95	33.95	33.95	33.95	\$122,000
<b>Total</b>	<b>141.30</b>	<b>141.54</b>	<b>143.20</b>	<b>146.47</b>	<b>146.86</b>	<b>155.10</b>	<b>161.34</b>	<b>162.84</b>	<b>164.59</b>	<b>164.59</b>	

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0018	0.0017	0.0017	0.0017

10 Year Average	2010-2019
Quantity Standard	0.0017
Quality Standard	\$93,929
Service Standard	\$160

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$160
Eligible Amount	\$4,811,478



**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parkland Amenities  
Unit Measure: No. of parkland amenities

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/item)
<b>Pools</b>											
Orono Park	1	1	1	1	1	1	1	1	1	1	\$224,900
<b>Lacrosse Bowls</b>											
Bowmanville Outdoor Lacrosse Bowl	1	1	1	1	1	1	1	1	1	1	\$380,100
<b>Baseball Diamonds</b>											
<i>Championship Lit Baseball Diamonds</i>											
Clarington Fields	2	2	2	2	2	2	2	2	2	2	\$1,072,100
<i>Lit Baseball Diamonds</i>											
Harvey Jackson Park	2	2	2	2	2	2	2	2	2	2	\$401,700
Orono Park	1	1	1	1	1	1	1	1	1	1	\$401,700
Soper Creek Park	1	1	1	1	1	1	1	1	1	1	\$401,700
<i>Unlit Baseball Diamonds</i>											
Longworth Park	1	1	1	1	1	1	1	1	1	1	\$195,000
Penfound Park	1	1	1	1	1	1	1	1	1	1	\$195,000
<b>Softball Diamonds</b>											
<i>Championship Lit Softball Diamonds</i>											
Clarington Fields	2	2	2	2	2	2	2	2	2	2	\$595,600
<i>Lit Softball Diamonds</i>											
Bowmanville Memorial Park	1	1	1	1	1	1	1	1	1	1	\$118,500
Rickard Community Complex	2	2	2	2	2	2	2	2	2	2	\$270,900
<i>Unlit Softball Diamonds</i>											
Argent Park	1	1	1	1	1	1	1	1	1	1	\$134,300
Bowmanville Memorial Park	1	1	1	1	1	1	1	1	1	1	\$111,100
Brownsdale Community Centre	1	1	1	1	1	1	1	1	1	1	\$121,500
Burketon Park	1	1	1	1	1	1	1	1	1	1	\$121,500
Courtice West Park	1	1	1	1	1	1	1	1	1	1	\$121,500
Courtice Memorial Park Softball Field	1	1	1	1	1	1	1	1	1	1	\$121,500
Edward Park	1	1	1	1	1	1	1	1	1	1	\$121,500
Elephant Hill Park	2	2	2	2	2	2	2	2	2	2	\$121,500
Highland Park	1	1	1	1	1	1	1	1	1	1	\$121,500
Kendal Park	1	1	1	1	1	1	1	1	1	1	\$121,500
Lord Elgin Park	2	2	2	2	2	2	2	2	2	2	\$121,500
Optimist Park	1	1	1	1	1	1	1	1	1	1	\$121,500

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parkland Amenities  
Unit Measure: No. of parkland amenities

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/item)
Rhonda Park	1	1	1	1	1	1	1	1	1	1	\$121,500
Rosswell Park	1	1	1	1	1	1	1	1	1	1	\$110,900
Solina Park	2	2	2	2	2	2	2	2	2	2	\$121,500
Stuart Park	1	1	1	1	1	1	1	1	1	1	\$121,500
Tyrone Park	2	2	2	2	2	2	2	2	2	2	\$121,500
<b>Soccer Pitches</b>											
<i>Lit Soccer Pitches</i>											
Darlington Hydro Fields	2	2	2	2	2	2	2	2	2	2	\$428,600
South Courtice Community Park	1	1	1	1	1	1	1	1	1	1	\$428,600
<i>Lit Artificial Turf Soccer Pitches</i>											
South Courtice Community Park	-	-	-	-	-	1	1	1	1	1	\$1,488,500
<i>Unlit Soccer Pitches</i>											
Baxter Park	1	1	1	1	1	1	1	1	1	1	\$108,600
Burketon Park	1	1	1	1	1	1	1	1	1	1	\$108,600
Green Park (Clarington Corners Park)	1	1	1	1	1	1	1	1	1	1	\$108,600
Clarington Fields	3	3	3	3	3	3	3	3	3	3	\$108,600
Courtice Memorial Park	1	1	1	1	1	1	1	1	1	1	\$108,600
Darlington Sports Centre	1	1	1	1	1	1	1	1	1	1	\$108,600
Elliot Park	1	1	1	1	1	1	1	1	1	1	\$108,600
Highland Park	1	1	1	1	1	1	1	1	1	1	\$108,600
Northglen Park	-	-	-	-	-	-	1	1	1	1	\$108,600
Optimist Park	1	1	1	1	1	1	1	1	1	1	\$108,600
Pearce Farm Park	1	1	1	1	1	1	1	1	1	1	\$108,600
Rickard Neighbourhood Park	-	-	-	-	-	-	-	-	1	1	\$108,600
Scugog Street Neighbourhood Park	-	-	-	-	-	1	1	1	1	1	\$108,600
Solina Park	2	2	2	2	2	2	2	2	2	2	\$108,600
South Courtice Community Park	-	-	-	-	-	-	-	1	1	1	\$108,600
Tyrone Park	2	2	2	2	2	2	2	2	2	2	\$108,600
Walbridge Park	1	1	1	1	1	1	1	1	1	1	\$108,600
West Side Park	1	1	1	1	1	1	1	1	1	1	\$108,600
Zion Park	1	1	1	1	1	1	1	1	1	1	\$108,600
Scugog Street Park	-	-	-	-	-	1	1	1	1	1	\$108,600
<i>Mini Soccer Pitches</i>											

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parkland Amenities  
Unit Measure: No. of parkland amenities

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/item)
Baseline Park	1	1	1	1	1	1	1	1	1	1	\$56,100
Burketon Park	2	2	2	2	2	2	2	2	2	1	\$56,100
Clarington Fields	4	4	4	4	4	4	4	4	4	4	\$56,100
Courtice Complex	1	1	1	1	1	1	1	1	1	1	\$56,100
Darlington Hydro Fields	4	4	4	4	4	4	4	4	4	4	\$56,100
Enniskillen Park	-	-	-	-	-	-	-	-	-	1	\$56,100
Guildwood Park	1	1	1	1	1	1	1	1	1	1	\$56,100
Harry Gay Park	-	-	-	1	1	1	1	1	1	1	\$56,100
Longworth Park	-	-	-	-	-	2	2	2	2	2	\$56,100
Meams Park	1	1	1	1	1	1	1	1	1	1	\$56,100
Newcastle Memorial	1	1	1	1	1	1	1	1	1	1	\$56,100
Optimist Park	2	2	2	2	2	2	2	2	2	2	\$56,100
Orono Fairgrounds Park	2	2	2	2	2	1	1	1	1	1	\$56,100
Pearce Farm Park	2	2	2	2	2	2	2	2	2	2	\$56,100
Penfound Park	1	1	1	1	1	1	1	1	1	1	\$56,100
Rosswell Park	1	1	1	1	1	1	1	1	1	1	\$56,100
Solina Park	1	1	1	1	1	1	1	1	1	1	\$56,100
Tyrone Park	1	1	1	1	1	1	1	1	1	1	\$56,100
Zion Park	1	1	1	1	1	1	1	1	1	1	\$56,100
<b>Football Fields</b>											
<i>Lit Football Fields</i>											
Clarington Fields	1	1	1	1	1	1	1	1	1	1	\$686,700
<b>Tennis Courts</b>											
<i>Lit Tennis Courts</i>											
Lions Parkette (Beech Centre)	2	2	2	2	2	2	2	2	2	2	\$65,000
Orono Park	2	2	2	2	2	2	2	2	2	2	\$64,600
Solina Park	-	-	-	-	-	-	-	1	1	1	\$48,700
<i>Unlit Tennis Courts</i>											
Avondale Park	2	2	2	2	2	2	2	2	2	2	\$59,600
Clarington Corners Park (Green Park)	2	2	2	2	2	2	2	2	2	2	\$88,600
Guildwood Park	2	2	2	2	2	2	2	2	2	2	\$74,500
Lord Elgin Park	2	2	2	2	2	-	-	-	-	-	\$52,600
Orono Park	-	-	-	2	2	2	2	2	2	2	\$52,600

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parkland Amenities  
Unit Measure: No. of parkland amenities

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/item)
Solina Park	2	2	2	2	2	2	2	2	2	2	\$52,600
Stuart Park	2	2	2	2	2	2	2	2	2	2	\$33,900
<b>Skateboard Park</b>											
Courtice Community Complex - Rob Piontek Skatepark	1	1	1	1	1	1	1	1	1	1	\$586,000
Garnet B. Rickard Rec Complex Park (Bowmanville) - Carson Elliot Memorial Skatepark	1	1	1	1	1	1	1	1	1	1	\$333,000
Darlington Sports Complex (Hampton)	1	1	1	1	1	1	1	1	1	1	\$60,000
Orono Park	1	1	1	1	1	1	1	1	1	1	\$105,000
<b>Water Play Facilities</b>											
Avondale Park	1	1	1	1	1	1	1	1	1	1	\$95,900
Baxter Park	1	1	1	1	1	1	1	1	1	1	\$147,600
Bons Park	1	1	1	1	1	1	1	1	1	1	\$159,700
Bowmanville Memorial Park	1	1	1	1	1	1	1	1	1	1	\$108,000
Glenabbey Park	1	1	1	1	1	-	-	-	-	-	\$80,600
Guildwood Park	1	1	1	1	1	1	1	1	1	1	\$119,900
Harry Gay Park	-	-	-	1	1	1	1	1	1	1	\$147,400
Harvey Jones Park	-	-	-	1	1	1	1	1	1	1	\$134,300
Northglen Park							1	1	1	1	\$171,000
Orono Park	1	1	1	1	1	1	1	1	1	1	\$73,400
Longworth Park						1	1	1	1	1	\$144,500
Pearce Farm Park	1	1	1	1	1	1	1	1	1	1	\$228,800
Port Darlington Waterfront Park (East Beach)						1	1	1	1	1	\$258,400
Rickard Neighbourhood Park							1	1	1	1	\$139,300
Rosswell Park	1	1	1	1	1	1	1	1	1	1	\$120,400
Walbridge Park	1	1	1	1	1	1	1	1	1	1	\$108,400
West Side Drive Park	1	1	1	1	1	1	1	1	1	1	\$95,200
<b>Playgrounds</b>											
Andrew Street Playground	-	-	-	-	-	-	-	1	1	1	\$36,900
Argent Park	1	1	1	1	1	1	1	1	1	1	\$87,200
Avondale Park	1	1	1	1	1	1	1	1	1	1	\$38,200
Barlow Court Park Playground	1	1	1	1	1	1	1	1	1	1	\$71,000

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parkland Amenities  
Unit Measure: No. of parkland amenities

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/item)
Baseline Park	1	1	1	1	1	1	1	1	1	1	\$39,900
Baxter Park	1	1	1	1	1	1	1	1	1	1	\$61,400
Bons Park	1	1	1	1	1	1	1	1	1	1	\$101,000
Bowmanville Memorial Park	1	1	1	1	1	1	1	1	1	1	\$31,700
Brookhouse Park Playground	1	1	1	1	1	1	1	1	1	1	\$71,500
Burketon Park	1	1	1	1	1	1	1	1	1	1	\$58,400
Buttonshaw Parkette Playground	1	1	1	1	1	1	1	1	1	1	\$136,200
Courtice West Park Playground	1	1	1	1	1	1	1	1	1	1	\$32,700
Clarington Corners Park (Green Park)	1	1	1	1	1	1	1	1	1	1	\$44,600
Darlington Hydro Park	1	1	1	1	1	1	1	1	1	1	\$32,700
Edward Park	1	1	1	1	1	1	1	1	1	1	\$17,500
Elephant Hill Park	1	1	1	1	1	1	1	1	1	1	\$34,900
Elliot Memorial Park	1	1	1	1	1	1	1	1	1	1	\$27,800
Enniskillen Park	-	-	-	-	-	-	-	-	1	1	\$132,000
Firwood Park Playground	1	1	1	1	1	1	1	1	1	1	\$10,900
Foster Creek Parkette Playground	-	-	-	-	-	1	1	1	1	1	\$39,800
Garnet B. Rickard Rec Complex Park	1	1	1	1	1	1	1	1	1	1	\$40,000
Greenwood Park	-	-	-	-	-	1	1	1	1	1	\$44,600
Guildwood Park	1	1	1	1	1	1	1	1	1	1	\$83,000
Harry Gay Park	-	-	-	1	1	1	1	1	1	1	\$115,000
Harvey Jones Park	-	-	-	1	1	1	1	1	1	1	\$17,500
Highland Park	1	1	1	1	1	1	1	1	1	1	\$37,100
Harvey Jackson (Kendal Park)	1	1	1	1	1	1	1	1	1	1	\$17,500
Lions Parkette	1	1	1	1	1	1	1	1	1	1	\$16,700
Longworth Park	1	1	1	1	1	1	1	1	1	1	\$35,400
Lord Elgin Park	1	1	1	1	1	1	1	1	1	1	\$29,700
Mearns Park	1	1	1	1	1	1	1	1	1	1	\$38,000
Nelson Street Parkette	-	-	1	1	1	1	1	1	1	1	\$91,200
Newcastle Memorial Park	1	1	1	1	1	1	1	1	1	1	\$44,400
Northglen Park							1	1	1	1	\$225,000
Orono Park	1	1	1	1	1	1	1	1	1	1	\$32,700
Pearce Farm Park	1	1	1	1	1	1	1	1	1	1	\$73,400
Penfound Park	1	1	1	1	1	1	1	1	1	1	\$47,400

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parkland Amenities  
Unit Measure: No. of parkland amenities

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/item)
Pickard Gate Parkette						1	1	1	1	1	\$42,300
Port Darlington Waterfront Park (East Beach)						1	1	1	1	1	\$119,700
Rhonda Park	1	1	1	1	1	1	1	1	1	1	\$42,500
Rick Gay Memorial Park Playground	1	1	1	1	1	1	1	1	1	1	\$36,400
Rickard Neighbourhood Park	-	-	-	-	-	-	-	-	1	1	\$142,200
Rosswell Park	1	1	1	1	1	1	1	1	1	1	\$32,700
Scugog Street Neighbourhood Park						1	1	1	1	1	\$135,000
Solina Park	1	1	1	1	1	1	1	1	1	1	\$32,700
Soper Creek Park	1	1	1	1	1	1	1	1	1	1	\$33,200
Stuart Park	1	1	1	1	1	1	1	1	1	1	\$58,500
Squire Fletcher Parkette	1	1	1	1	1	1	1	1	1	1	\$75,400
Tyrone Park	1	1	1	1	1	1	1	1	1	1	\$45,200
Walbridge Park	1	1	1	1	1	1	1	1	1	1	\$72,400
Westside Park	1	1	1	1	1	1	1	1	1	1	\$92,400
Whitecliffe Parkette	-	-	1	1	1	1	1	1	1	1	\$41,600
<b>Basketball Courts - 1/2 Courts</b>											
Andrew St. Parkette	1	1	1	1	1	1	1	1	1	1	\$10,700
Barlow Court Park	1	1	1	1	1	1	1	1	1	1	\$14,200
Bons Park	1	1	1	1	1	1	1	1	1	1	\$7,100
Brookhouse Park	1	1	1	1	1	1	1	1	1	1	\$8,800
Foxhunt Parkette	1	1	1	1	1	1	1	1	1	1	\$18,700
Gate House Parkette	1	1	1	1	1	1	1	1	1	1	\$11,100
Glenabbey Parkette	1	1	1	1	1	1	1	1	1	1	\$10,000
Harvey Jones Park	-	-	-	1	1	1	1	1	1	1	\$14,000
Highland Park	1	1	1	1	1	1	1	1	1	1	\$10,300
Moyse Parkette	1	1	1	1	1	1	1	1	1	1	\$10,700
Northglen Park							1	1	1	1	\$28,100
Orono Park	1	1	1	1	1	1	1	1	1	1	\$11,100
Stuart Park	1	1	1	1	1	1	1	1	1	1	\$12,700
<b>Basketball Courts - Full Courts</b>											
Clarington Corners Park (Green Park)	1	1	1	1	1	1	1	1	1	1	\$11,700
Elliot Memorial Park	1	1	1	1	1	1	1	1	1	1	\$49,000
Guildwood Park	1	1	1	1	1	1	1	1	1	1	\$37,400

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parkland Amenities  
Unit Measure: No. of parkland amenities

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/item)
Lord Elgin Park	1	1	1	1	1	1	1	1	1	1	\$26,100
Optimist Park	1	1	1	1	1	1	1	1	1	1	\$25,400
Pearce Farm Park	1	1	1	1	1	1	1	1	1	1	\$36,000
Rosswell Park	1	1	1	1	1	1	1	1	1	1	\$30,200
Soper Creek Park	1	1	1	1	1	1	1	1	1	1	\$17,400
South Courtice Community Park	1	1	1	1	1	1	1	1	1	1	\$28,900
Tyrone Park	1	1	1	1	1	1	1	1	1	1	\$16,600
Walbridge Park	1	1	1	1	1	1	1	1	1	1	\$24,400
<b>Tot Lots</b>											
Andrew St. Parkette	1	1	1	1	1	1	1	1	1	1	\$96,900
Barlow Court Park	1	1	1	1	1	1	1	1	1	1	\$110,900
Bathgate Commons						1	1	1	1	1	\$61,900
Brookhouse Park	1	1	1	1	1	1	1	1	1	1	\$105,100
Buttons Shaw Parkette							1	1	1	1	\$81,800
Cecil Found Memorial Park	1	1	1	1	1	1	1	1	1	1	\$49,000
Rick Gay Memorial Park	1	1	1	1	1	1	1	1	1	1	\$96,900
Foster Creek Parkette	1	1	1	1	1	1	1	1	1	1	\$96,900
Foxhunt Parkette	1	1	1	1	1	1	1	1	1	1	\$30,000
Gate House Parkette	1	1	1	1	1	1	1	1	1	1	\$13,900
George Reynolds Park	1	1	1	1	1	1	1	1	1	1	\$96,900
Glanville Parkette	1	1	1	1	1	1	1	1	1	1	\$9,900
Glenabbey Parkette	1	1	1	1	1	1	1	1	1	1	\$50,400
Haydon Hall Parkette	1	1	1	1	1	1	1	1	1	1	\$96,900
Ina Brown Parkette	1	1	1	1	1	1	1	1	1	1	\$17,500
Landerville Parkette	1	1	1	1	1	1	1	1	1	1	\$29,800
Moyse Parkette	1	1	1	1	1	1	1	1	1	1	\$24,900
Peters Pike Parkette	1	1	1	1	1	1	1	1	1	1	\$32,600
Pickard Gate Parkette (Robinson Ridge)	1	1	1	1	1	1	1	1	1	1	\$96,900
Tourist Information Centre Park	1	1	1	-	-						\$96,900
Whitecliff Parkette	1	1	1	1	1	1	1	1	1	1	\$17,500
<b>Shelters &amp; Features</b>											
Andrew Parkette	1	1	1	1	1	1	1	1	1	1	\$49,000
Argent Park	1	1	1	1	1	1	1	1	1	1	\$49,000

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parkland Amenities  
Unit Measure: No. of parkland amenities

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/item)
Avondale Park	1	1	1	1	1	1	1	1	1	1	\$49,000
Bathgate Commons						1	1	1	1	1	\$46,800
Barlow Court Park	1	1	1	1	1	1	1	1	1	1	\$91,100
Bond Head Boat Launch	1	1	1	1	1	1					\$49,000
Bond Head Park							1	1	1	1	\$78,100
Bowmanville Memorial Park	1	1	1	1	1	1	1	1	1	1	\$49,000
Bowmanville Valley Fish Channel	-	-	-	-	1	1	1	1	1	1	\$415,700
Brookhouse Park	1	1	1	1	1	1	1	1	1	1	\$50,200
Burketon Park	1	1	1	1	1	1	1	1	1	1	\$27,200
Buttons Shaw Parkette							1	1	1	1	\$54,000
Clarington Corners Park (Green Park)	1	1	1	1	1	1	1	1	1	1	\$49,000
Clarington Fields	1	1	1	1	1	1	1	1	1	1	\$151,800
Courtice Entry Feature	1	1	1	1	1	1	1	1	1	1	\$129,600
Enniskillen Park									1	1	\$47,700
Foster Creek Parkette	1	1	1	1	1	1	1	1	1	1	\$49,000
Foxhunt Parkette	1	1	1	1	1	1	1	1	1	1	\$26,900
Glenabbey Parkette	1	1	1	1	1	1	1	1	1	1	\$49,000
Harvey Jones Park	-	-	-	1	1	1	1	1	1	1	\$68,900
Harry Gay Park	-	-	-	1	1	1	1	1	1	1	\$15,700
Highland Park	1	1	1	1	1	1	1	1	1	1	\$25,400
Ina Brown	-	-	-	1	1	1	1	1	1	1	\$21,000
Landerville Parkette	1	1	1	1	1	1	1	1	1	1	\$28,300
Longworth Park (original shelter in phase 1)	1	1	1	1	1	1	1	1	1	1	\$49,000
Longworth Park (2015 shelter)						1	1	1	1	1	\$63,400
Mearns Park	1	1	1	1	1	1	1	1	1	1	\$27,300
Moyse Park	1	1	1	1	1	1	1	1	1	1	\$49,000
Nelson Street Parkette	-	-	1	1	1	1	1	1	1	1	\$26,500
Newcastle Cenotaph (Newcastle Village Comm)	1	1	1	1	1	1	1	1	1	1	\$49,000
Northglan Park							1	1	1	1	\$125,600
Orono Park	1	1	1	1	1	1	1	1	1	1	\$49,000
Orono Streetscape	1	1	1	1	1	1	1	1	1	1	\$92,300
Pearce Farm Park	1	1	1	1	1	1	1	1	1	1	\$120,300
Penfound Park	1	1	1	1	1	1	1	1	1	1	\$24,600



**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parkland Amenities  
Unit Measure: No. of parkland amenities

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/item)
Port Darlington Waterfront Park (East Beach)						1	1	1	1	1	\$130,200
Prince William Parkette								1	1	1	\$5,600
Rhonda Park	1	1	1	1	1	1	1	1	1	1	\$49,000
Rickard Neighbourhood Park							1	1	1	1	\$61,200
Rickard Neighbourhood Park (Fitness Equipment)							1	1	1	1	\$24,200
Rosswell Park	1	1	1	1	1	1	1	1	1	1	\$53,700
Rotary Park (Gazebo)	1	1	1	1	1	1	1	1	1	1	\$49,000
Samuel Wilmot Nature Area	1	1	1	1	1	1	1	1	1	1	\$29,600
Scugog Street Neighbourhood Park						1	1	1	1	1	\$59,100
Solina Park	1	1	1	1	1	1	1	1	1	1	\$49,000
Springfield Parkette							1	1	1	1	\$2,800
Squire Fletcher Parkette	1	1	1	1	1	1	1	1	1	1	\$20,100
Tooley's Mill Park	-	-	-	-	1	1	1	1	1	1	\$129,800
Trulls & Hwy 2 Parkette	-	-	1	1	1	1	1	1	1	1	\$29,200
Walbridge Park	1	1	1	1	1	1	1	1	1	1	\$49,000
West Side Drive Park	1	1	1	1	1	1	1	1	1	1	\$24,900
Westview Parkette	1	1	1	1	1	1	1	1	1	1	\$49,000
<b>Boat Launches</b>											
Bond Head	1	1	1	1	1	1	1	1	1	1	\$8,400
Bownmanville	1	1	1	1	1	1	1	1	1	1	\$19,400
<b>Park Bridges - Long Span</b>											
Bowmanville Boat Lunch Waterfront Trail	1	1	1	1	1	1	1	1	1	1	\$177,400
Bowmanville Valley	1	1	2	2	2	2	2	2	2	2	\$162,400
Farewell Creek Trail									1	1	\$132,000
Glenabbey Parkette	1	1	1	1	1	1	1	1	1	1	\$78,700
Ridge Pine Park Bridge	1	1	1	1	1	1	1	1	1	1	\$82,400
Samuel Wilmot Nature Area	1	1	1	1	1	1	1	2	2	2	\$33,000
Baseline Park	1	1	1	1	1	1	1	1	1	1	\$143,600
Courtice Millennium Trail	1	1	1	1	1	1	1	1	1	1	\$75,800
West Side Park Ped. Bridge	-	-	-	-	-	-	-	-	1	1	\$110,200
Gailbraith Court Bridge	-	-	-	-	-	-	-	-	1	1	\$97,000
<b>Park Bridge - Short Span</b>											
Bowmanville Valley Fish By-pass/ Platform	-	-	-	-	1	1	1	1	1	1	\$38,600

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parkland Amenities  
Unit Measure: No. of parkland amenities

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/item)
Foxhunt Parkette	1	1	1	1	1	1	1	1	1	1	\$31,200
Graham Creek Pedestrian Bridge	-	-	-	-	-	-	-	1	1	1	\$179,700
Lions Trail	1	1	1	1	1	1	1	1	1	1	\$29,300
Nelson Parkette	-	-	1	1	1	1	1	1	1	1	\$180,900
Old Kingston Road Ped. Bridge - Courtice	1	1	1	1	1	1	1	1	1	1	\$31,000
Orono Park	2	2	2	2	2	2	2	2	2	2	\$31,600
Soper Creek Trail	2	2	2	2	2	2	2	2	2	2	\$15,900
Sydney Rutherford Trail	1	1	1	1	1	1	1	1	1	1	\$24,100
Squire Fletcher Parkette	1	1	1	1	1	1	1	1	1	1	\$21,800
<b>Total</b>	<b>247</b>	<b>247</b>	<b>253</b>	<b>263</b>	<b>266</b>	<b>279</b>	<b>290</b>	<b>296</b>	<b>303</b>	<b>303</b>	

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.0030	0.0029	0.0030	0.0030	0.0030	0.0031	0.0032	0.0031	0.0031	0.0031

10 Year Average	2010-2019
Quantity Standard	0.0031
Quality Standard	\$98,423
Service Standard	\$305

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$305
Eligible Amount	\$9,193,575

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Parkland Trails  
Unit Measure: Linear Metres of Paths and Trails

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/ Linear Metre)
Asphalt Trail	7,217	7,217	7,517	7,517	7,517	8,734	9,553	9,763	10,443	12,143	\$300
Granular Trail	7,448	7,448	7,448	7,448	7,448	7,631	7,631	7,921	8,046	8,046	\$96
Concrete Walkways	-	-	-	-	-	-	28	28	28	28	\$250
<b>Total</b>	<b>14,665</b>	<b>14,665</b>	<b>14,965</b>	<b>14,965</b>	<b>14,965</b>	<b>16,365</b>	<b>17,212</b>	<b>17,712</b>	<b>18,517</b>	<b>20,217</b>	

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.1762	0.1735	0.1749	0.1706	0.1690	0.1817	0.1871	0.1876	0.1913	0.2042

10 Year Average	2010-2019
Quantity Standard	0.1816
Quality Standard	\$205
Service Standard	\$37

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$37
Eligible Amount	\$1,119,102

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Recreation Vehicles and Equipment  
Unit Measure: No. of vehicles and equipment

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/Vehicle)
Ice Resurfacers	2	2	2	3	4	4	4	4	5	6	\$110,000
Cars and Vans	1	1	1	1	1	1	1	1	1	1	\$35,000
Medium Duty Trucks	1	1	1	1	1	1	1	1	1	1	\$75,000
Heavy Duty Trucks - Forestry Truck	1	1	1	1	1	1	1	1	1	1	\$300,000
Light Duty Trucks	2	2	2	2	2	2	3	3	3	3	\$45,000
Tractors/Mowers/ATV's - ATVs	1	1	1	1	1	1	1	1	1	2	\$15,000
Tractors/Mowers/ATV's - Tractors	3	3	3	3	3	3	3	3	3	3	\$47,000
Tractors/Mowers/ATV's - Loaders	1	1	1	1	1	1	1	1	1	1	\$270,000
Tractors/Mowers/ATV's - Mowers	7	7	7	7	7	7	7	7	7	7	\$15,000
Beach Groomer	-	-	-	-	-	-	-	-	-	1	\$40,000
Top Dresser	1	1	1	1	1	1	1	1	1	1	\$28,000
Trailers	12	13	15	14	14	10	10	10	10	11	\$15,000
Mobile Stage	-	-	-	-	-	1	1	1	1	1	\$175,000
Ballpark Groomer	-	-	-	-	-	1	1	1	1	1	\$48,000
Heavy Duty Trucks - Compactors	1	1	2	2	2	2	2	2	2	2	\$175,000
Backhoe	1	1	1	1	1	1	1	1	1	1	\$145,000
<b>Total</b>	<b>34</b>	<b>35</b>	<b>38</b>	<b>38</b>	<b>39</b>	<b>37</b>	<b>38</b>	<b>38</b>	<b>39</b>	<b>43</b>	

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004

10 Year Average	2010-2019
Quantity Standard	0.0004
Quality Standard	\$61,525
Service Standard	\$25

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$25
Eligible Amount	\$741,549

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Operations Facilities  
Unit Measure: No. of vehicles

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Clarington Fields Storage Building	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	\$51	\$63
Parks Operations Depot (Depot 42)	5,208	5,208	5,208	5,208	5,208	5,208	5,208	5,208	5,208	5,208	\$365	\$390
Parks Operations Depot Sand Dome	8,210	8,210	8,210	8,210	8,210	8,210	8,210	8,210	8,210	8,210	\$35	\$45
Rotary Park Washroom Building	560	560	560	560	560	560	560	560	560	560	\$58	\$70
Orono Park Washroom Building	900	900	900	900	900	900	900	900	900	900	\$58	\$70
East Beach Park Washroom Building	-	-	-	720	720	720	720	720	720	720	\$365	\$409
Clarington Fields Washroom Trailer (# of)	-	-	-	-	-	-	-	1	1	1	\$527,163	\$527,163
<b>Total</b>	<b>16,228</b>	<b>16,228</b>	<b>16,228</b>	<b>16,948</b>	<b>16,948</b>	<b>16,948</b>	<b>16,948</b>	<b>16,949</b>	<b>16,949</b>	<b>16,949</b>		

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.1949	0.1919	0.1897	0.1932	0.1914	0.1882	0.1842	0.1795	0.1751	0.1712

10 Year Average	2010-2019
Quantity Standard	0.1859
Quality Standard	\$176
Service Standard	\$33

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$33
Eligible Amount	\$983,810

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Indoor Recreation Facilities  
Unit Measure: ft<sup>2</sup> of building area

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Alan Strike Aquatic and Squash Centre	13,647	13,647	13,647	13,647	13,647	13,647	13,647	13,647	13,647	13,647	\$385	\$439
Base line Community Centre	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	\$257	\$337
Bowmanville Indoor Soccer Facility	28,482	28,482	28,482	28,482	28,482	28,482	28,482	28,482	28,482	28,482	\$163	\$208
Less: Committed Excess Capacity	(17,143)	(15,918)	(14,694)	(13,469)	(12,245)	(11,020)	(9,796)	(8,571)	(7,347)	(6,122)	\$163	\$208
Brownsdale Community Centre	3,248	3,248	3,248	3,248	3,248	3,248	3,248	3,248	3,248	3,248	\$257	\$309
Clarington Beech Centre	17,648	17,648	17,648	17,648	17,648	17,648	17,648	17,648	17,648	17,648	\$292	\$347
Courtice Community Complex	47,000	47,000	47,000	47,000	47,000	47,000	47,000	47,000	47,000	47,000	\$385	\$478
Darlington Sports Centre	32,900	32,900	32,900	32,900	32,900	32,900	32,900	32,900	32,900	32,900	\$385	\$447
Diane Hamre Recreation Complex	61,900	61,900	61,900	61,900	61,900	61,900	61,900	61,900	61,900	61,900	\$385	\$454
Less: Committed Excess Capacity	(49,357)	(45,244)	(41,131)	(37,018)	(32,905)	(28,792)	(24,679)	(20,566)	(16,452)	(12,339)	\$385	\$454
Garnet B. Rickard Community Complex	88,586	88,586	88,586	88,586	88,586	88,586	88,586	88,586	88,723	88,723	\$385	\$461
Hampton Community Centre	3,059	3,059	3,059	3,059	3,059	3,059	3,059	3,059	3,059	3,059	\$257	\$309
Haydon Community Centre	1,344	1,344	1,344	1,344	1,344	1,344	1,344	1,344	1,344	1,344	\$257	\$332
Kendal Community Centre	8,185	8,185	8,185	8,185	8,185	8,185	8,185	8,185	8,185	8,185	\$257	\$320
Memorial Park Community Centre	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	\$257	\$344
Newcastle Community Centre	21,002	21,002	21,002	21,002	21,002	21,002	21,002	21,002	21,002	21,002	\$292	\$334
Newcastle Memorial Arena	27,007	27,007	27,007	27,007	27,007	27,007	27,007	27,007	27,007	27,007	\$315	\$362
Newtonville Community Centre	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	\$257	\$289
Orono Arena & Community Hall	35,989	35,989	35,989	35,989	35,989	35,989	35,989	35,989	35,989	35,989	\$315	\$363
Orono Town Hall	3,530	3,530	3,530	3,530	3,530	3,530	3,530	3,530	3,530	3,530	\$257	\$307
Solina Community Centre	2,766	2,766	2,766	2,766	2,766	2,766	2,766	2,766	2,766	2,766	\$257	\$329
South Courtice Arena	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	\$385	\$464
Less: Committed Excess Capacity	(35,933)	(30,800)	(25,667)	(20,533)	(15,400)	(10,267)	(5,133)	-	-	-	\$385	\$464
Tyronne Community Centre	5,887	5,887	5,887	5,887	5,887	5,887	5,887	5,887	5,887	5,887	\$257	\$315
Youth Centre - Resource Area	2,000	2,000	2,000	2,000	2,000	-	-	-	-	-	\$257	\$420
<b>Total</b>	<b>387,963</b>	<b>398,434</b>	<b>408,905</b>	<b>419,376</b>	<b>429,847</b>	<b>438,318</b>	<b>448,789</b>	<b>459,260</b>	<b>464,735</b>	<b>470,072</b>		

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	4.6606	4.7125	4.7788	4.7814	4.8555	4.8674	4.8774	4.8632	4.8016	4.7470

10 Year Average	2010-2019
Quantity Standard	4.7945
Quality Standard	\$400
Service Standard	\$1,917

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$1,917
Eligible Amount	\$57,761,839

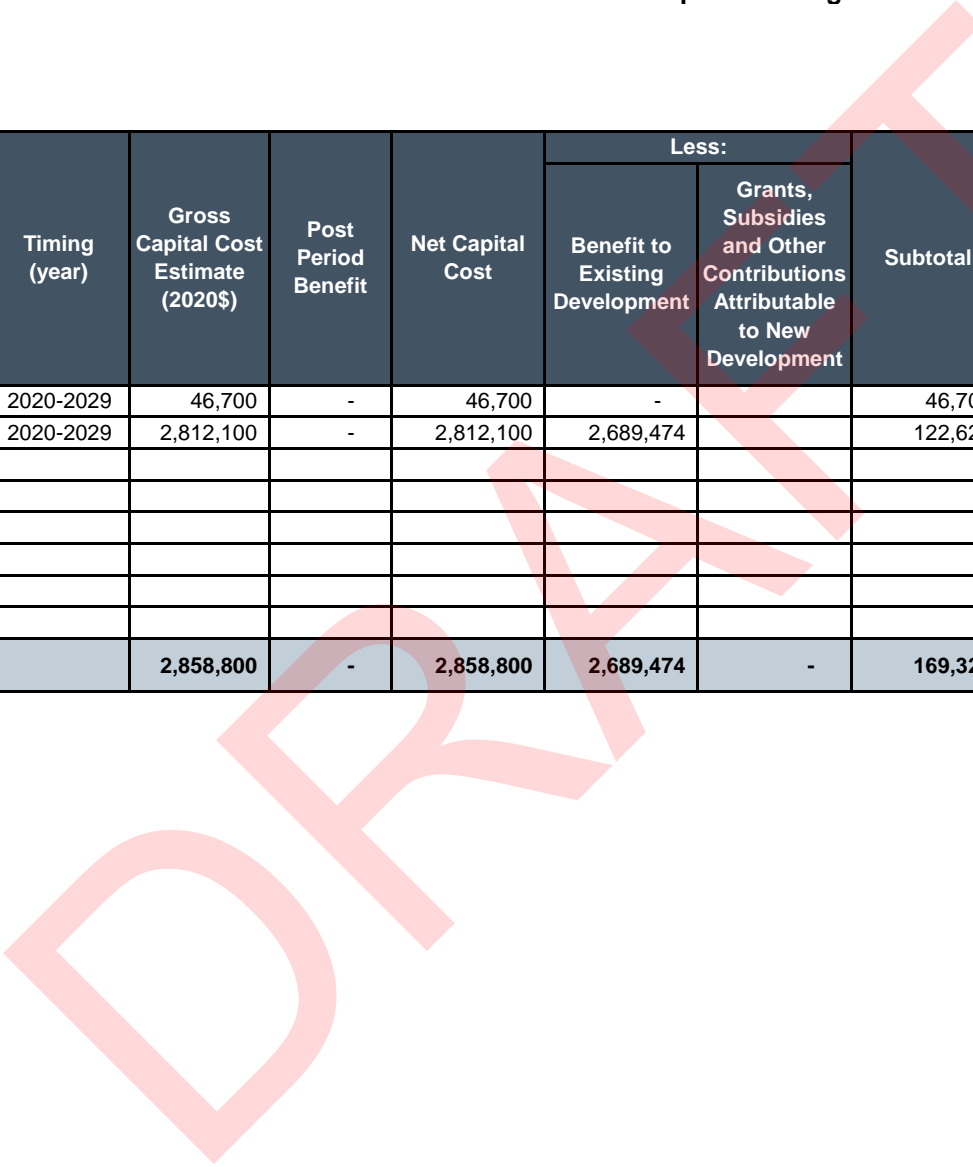
# Animal Services

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**Infrastructure Costs Included in the Development Charges Calculation**

Municipality of Clarington  
 Service: Animal Services

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less: Other (e.g. 10% Statutory Deduction)	Potential D.C. Recoverable Cost		
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development			Total	Residential Share	Non-Residential Share
2020-2029										100%	0%	
1	Cages	2020-2029	46,700	-	46,700	-		46,700	4,670	42,030	42,030	-
2	Provision for Additional Space	2020-2029	2,812,100	-	2,812,100	2,689,474		122,626	12,263	110,363	110,363	-
	<b>Total</b>		<b>2,858,800</b>	<b>-</b>	<b>2,858,800</b>	<b>2,689,474</b>	<b>-</b>	<b>169,326</b>	<b>16,933</b>	<b>152,393</b>	<b>152,393</b>	<b>-</b>





**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Animal Services Facilities  
Unit Measure: ft<sup>2</sup> of building area

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Animal Services Facility	5,834	5,834	5,834	5,834	5,834	5,834	5,834	5,834	5,834	5,834	\$365	\$461
<b>Total</b>	<b>5,834</b>	<b>5,834</b>	<b>5,834</b>	<b>5,834</b>	<b>5,834</b>	<b>5,834</b>	<b>5,834</b>	<b>5,834</b>	<b>5,834</b>	<b>5,834</b>		

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.0701	0.0690	0.0682	0.0665	0.0659	0.0648	0.0634	0.0618	0.0603	0.0589

10 Year Average	2010-2019
Quantity Standard	0.0649
Quality Standard	\$461
Service Standard	\$30

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$30
Eligible Amount	\$901,248

# Library Services

DRAFT

### Infrastructure Costs Included in the Development Charges Calculation

Municipality of Clarington  
Service Library Services

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Subtotal	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share	Non-Residential Share	
2020-2029												100%	0%	
1	South Bowmanville Library	2023	5,692,550	-		5,692,550	-		5,692,550	569,255	5,123,295	5,123,295	-	
2	Acquisition of New Collection Materials	2020-2029	2,430,748	-		2,430,748	-		2,430,748	243,075	2,187,674	2,187,674	-	
3	NPV Principal - Courtice Branch Debenture	2020-2029	688,080	-		688,080	-		688,080	68,808	619,272	619,272	-	
4	NPV Interest - Courtice Branch Debenture	2020-2029	113,584	-		113,584	-		113,584	11,358	102,225	102,225	-	
5	Provision for Courtice Street Library Space	2020-2029	1,974,748	-		1,974,748	-		1,974,748	197,475	1,777,273	1,777,273	-	
<b>Studies</b>														
6	Information Technology Study	2020-2029	35,000	-		35,000	8,750		26,250	2,625	23,625	23,625	-	
7	Library Service Strategic Plan	2020	87,600	-		87,600	21,900		65,700	6,570	59,130	59,130	-	
8	Library & Museum Strategic Plan	2024	50,000	-	25,000	25,000	6,250		18,750	1,875	16,875	16,875	-	
	Reserve Fund Adjustment					(830,462)			(830,462)		(830,462)	(830,462)	-	
	<b>Total</b>		<b>11,072,310</b>	<b>-</b>	<b>25,000</b>	<b>10,216,848</b>	<b>36,900</b>	<b>-</b>	<b>10,179,948</b>	<b>1,101,041</b>	<b>9,078,907</b>	<b>9,078,907</b>	<b>-</b>	

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Library Facilities  
Unit Measure: ft<sup>2</sup> of building area

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Bowmanville Branch	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	\$467	\$567
Less: Excess Capacity	(809)	(674)	(539)	(405)	(270)	(135)	-	-	-	-	\$467	\$567
Courtice Branch	6,000	6,000	6,000	6,000	6,000	6,000	12,000	12,000	12,000	12,000	\$467	\$595
Less: Excess Capacity		-	-	-	-	-	-	(5,183)	(4,813)	(4,443)	\$467	\$595
New Newcastle Village	9,100	9,100	9,100	9,100	9,100	9,100	9,100	9,100	9,100	9,100	\$467	\$624
Less: Excess Capacity	(2,532)	(2,216)	(1,899)	(1,583)	(1,266)	(950)	(633)	(317)	-	-	\$467	\$624
Orono Branch	3,604	3,604	3,604	3,604	3,604	3,604	3,604	3,604	3,604	3,604	\$467	\$623
<b>Total</b>	<b>39,363</b>	<b>39,814</b>	<b>40,265</b>	<b>40,717</b>	<b>41,168</b>	<b>41,620</b>	<b>48,071</b>	<b>43,204</b>	<b>43,891</b>	<b>44,261</b>		

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	0.4729	0.4709	0.4706	0.4642	0.4650	0.4622	0.5224	0.4575	0.4535	0.4470

10 Year Average	2010-2019
Quantity Standard	0.4686
Quality Standard	\$587
Service Standard	\$275

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$275
Eligible Amount	\$8,289,916

**Municipality of Clarington  
Service Standard Calculation Sheet**

Service: Library Collection Materials  
Unit Measure: No. of library collection items

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Value (\$/item)
Books	143,512	142,322	126,577	127,316	128,319	111,388	111,896	108,376	110,017	110,017	\$32
Periodicals (Number of Prints)	2,632	3,183	4,037	4,307	3,143	2,458	2,177	2,235	1,835	2,100	\$12
Electronic Resources (Number of Database Subscriptions)	59	27	27	27	29	14	19	9	8	11	\$1,121
Audiobooks	3,418	3,569	3,529	3,603	3,798	4,664	4,126	4,229	4,252	4,500	\$63
Microfilm	230	230	230	230	275	275	275	275	275	275	\$140
CDs	2,620	2,621	2,333	2,386	2,378	1,975	1,334	1,015	1,134	1,100	\$21
DVDs	9,268	3,456	11,696	12,957	14,047	13,806	14,020	14,113	15,208	11,000	\$36
Video games	1,066	1,106	619	702	867	581	593	627	867	1,350	\$56
Titles of E-Resources	63,912	40,662	82,732	98,765	105,376	101,600	118,650	140,229	162,728	181,150	\$23
<b>Total</b>	<b>226,717</b>	<b>197,176</b>	<b>231,780</b>	<b>250,293</b>	<b>258,232</b>	<b>236,761</b>	<b>253,090</b>	<b>271,108</b>	<b>296,324</b>	<b>311,503</b>	

Population	83,244	84,548	85,567	87,709	88,527	90,052	92,014	94,435	96,788	99,025
Per Capita Standard	2.7235	2.3321	2.7088	2.8537	2.9170	2.6292	2.7506	2.8708	3.0616	3.1457

10 Year Average	2010-2019
Quantity Standard	2.7993
Quality Standard	\$29
Service Standard	\$81

D.C. Amount (before deductions)	10 Year
Forecast Population	30,132
\$ per Capita	\$81
Eligible Amount	\$2,430,748

# Administration – Studies

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### Infrastructure Costs Included in the Development Charges Calculation

Municipality of Clarington  
 Servicing Administration Studies

Prj. No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2020\$)	Post Period Benefit	Net Capital Cost	Less:		Subtotal	Less:	Potential D.C. Recoverable Cost		
						Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		Other (e.g. 10% Statutory Deduction)	Total	Residential Share	Non-Residential Share
2020-2029										82%	18%	
<b>Planning and Development</b>												
1	Zoning By-Law - Part 1	2021	146,000	-	146,000	73,000		73,000	7,300	65,700	53,874	11,826
2	Zoning By-Law - Part 2	2021	146,000	-	146,000	73,000		73,000	7,300	65,700	53,874	11,826
3	Municipal Secondary Plan 1	2021	408,700	-	408,700	-		408,700	40,870	367,830	301,621	66,209
4	Intensification Guidelines	2022	116,800	-	116,800	-		116,800	11,680	105,120	86,198	18,922
5	Subwatershed Study 1	2021	408,700	-	408,700	204,350		204,350	20,435	183,915	150,810	33,105
6	Architectural Design Guidelines Update	2021	70,100	-	70,100	-		70,100	7,010	63,090	51,734	11,356
7	Other Official Plan Implementation Studies/ Master Plans	2021-2022	116,800	-	116,800	58,400		58,400	5,840	52,560	43,099	9,461
8	Municipal Secondary Plan 2	2021	350,400	-	350,400	-		350,400	35,040	315,360	258,595	56,765
9	Subwatershed Study 2	2021	408,700	-	408,700	204,350		204,350	20,435	183,915	150,810	33,105
10	Official Plan Review	2024	800,000	-	800,000	400,000		400,000	40,000	360,000	295,200	64,800
11	Municipal Secondary Plan Review 3	2021	350,400	-	350,400	-		350,400	35,040	315,360	258,595	56,765
12	Municipal Secondary Plan 4	2022	408,700	-	408,700	-		408,700	40,870	367,830	301,621	66,209
13	Municipal Secondary Plan 5	2023	408,700	-	408,700	-		408,700	40,870	367,830	301,621	66,209
14	Courtice Waterfront implementation Design	2022	250,000	-	250,000	191,676		58,324	5,832	52,492	43,043	9,449
15	Courtice GO Station	2020	50,000	-	50,000	25,000		25,000	2,500	22,500	18,450	4,050
16	Bowmanville GO Station	2020	30,000	-	30,000	15,000		15,000	1,500	13,500	11,070	2,430
17	Population/Employment Demographic Update	2020	30,000	-	30,000	-		30,000	3,000	27,000	22,140	4,860
18	Landscape and amenities design guidelines	2023	75,000	-	75,000	18,750		56,250	5,625	50,625	41,513	9,113
19	Commercial Policy Review	2023-2024	125,000	-	125,000	31,250		93,750	9,375	84,375	69,188	15,188
20	Industrial Employment Lands Policy review	2023-2024	150,000	-	150,000	37,500		112,500	11,250	101,250	83,025	18,225
	Lands Needs assessment	Committed										
21	Municipal Secondary Plan Updates (MCR)	2024	350,000	-	350,000	-		350,000	35,000	315,000	258,300	56,700
22	Municipal Secondary Plan Implementation - Block plans (MCR)	2024	300,000	-	300,000	-		300,000	30,000	270,000	221,400	48,600
23	Heritage Study	2023	150,000	-	150,000	115,005		34,995	3,499	31,495	25,826	5,669
<b>Additional Studies</b>												
24	Service Review Study	2023	50,000	-	50,000	12,500		37,500	3,750	33,750	27,675	6,075
<b>Development Charges</b>												
25	Development Charges Background Study	2019	93,400	-	93,400	-		93,400	9,340	84,060	68,929	15,131
26	Development Charges Background Study	2024	93,400	-	93,400	-		93,400	9,340	84,060	68,929	15,131
27	On-going DC Consulting and Legal Advice	2020-2029	116,800	-	116,800	-		116,800	11,680	105,120	86,198	18,922
	Reserve Fund Balance				(382,761)			(382,761)		(382,761)	(313,864)	(68,897)
<b>Total</b>			<b>6,003,600</b>	<b>-</b>	<b>5,620,839</b>	<b>1,459,781</b>	<b>-</b>	<b>4,161,058</b>	<b>454,382</b>	<b>3,706,676</b>	<b>3,039,475</b>	<b>667,202</b>

# Growth Forecast

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**Schedule 1  
Municipality of Clarington  
Residential Growth Forecast Summary**

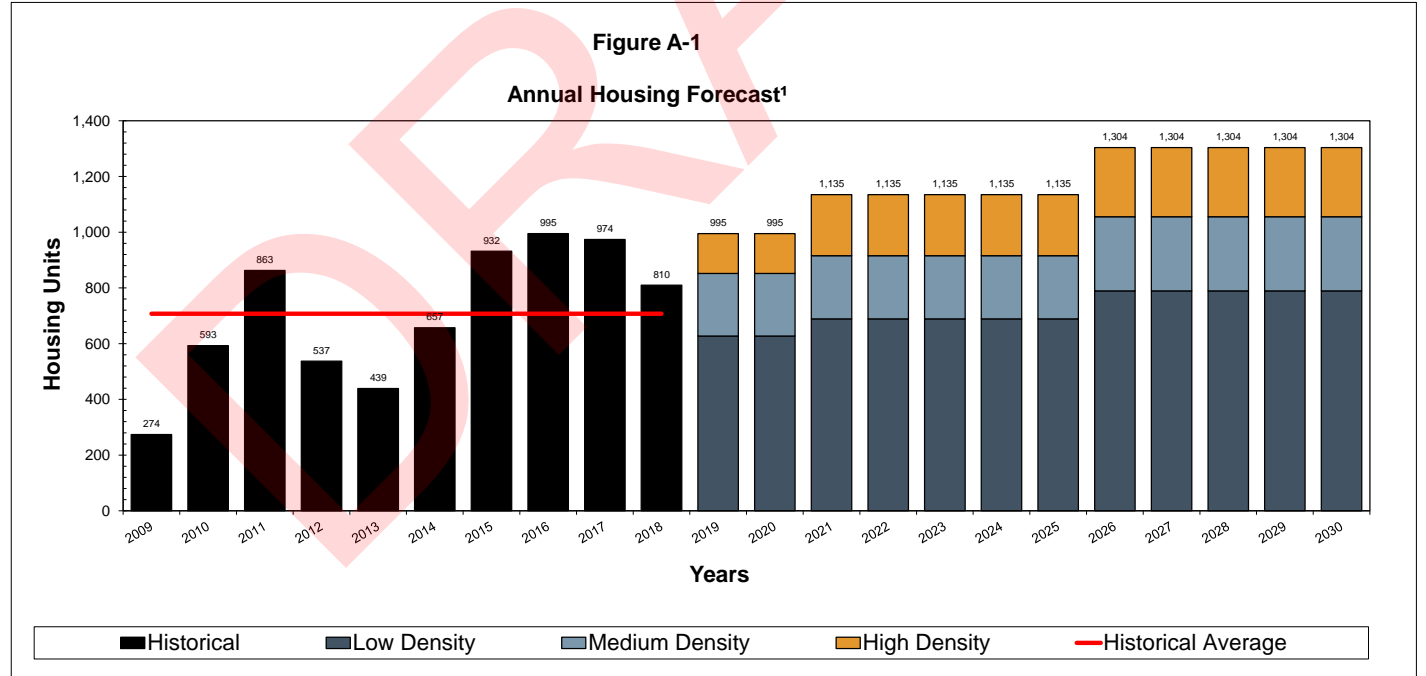
	Year	Population (Including Census Undercount) <sup>1</sup>	Excluding Census Undercount			Housing Units					Person Per Unit (P.P.U.): Total Population/ Total Households
			Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi-Detached	Multiple Dwellings <sup>2</sup>	Apartments <sup>3</sup>	Other	Total Households	
Historical	Mid 2006	80,930	77,820	710	77,110	22,410	2,680	1,685	85	26,860	2.897
	Mid 2011	87,930	84,548	823	83,725	24,629	3,090	2,048	113	29,880	2.830
	Mid 2016	95,690	92,013	823	91,190	26,985	3,640	2,100	110	32,835	2.802
Forecast	Early 2020	103,260	99,289	895	98,394	29,020	4,398	2,583	110	36,112	2.750
	Early 2025	118,020	113,484	1,029	112,455	32,373	5,529	3,565	110	41,577	2.730
	Early 2030	134,870	129,687	1,161	128,526	36,169	6,801	4,763	110	47,843	2.711
	Mid 2031	140,340	134,941	1,207	133,734	37,353	7,200	5,136	110	49,799	2.710
Incremental	Mid 2006 - Mid 2011	7,000	6,728	113	6,615	2,219	410	363	28	3,020	
	Mid 2011 - Mid 2016	7,760	7,465	0	7,465	2,356	550	52	-3	2,955	
	Mid 2016 - Early 2020	7,570	7,276	72	7,204	2,035	758	483	0	3,276	
	Early 2020 - Early 2025	14,760	14,195	134	14,061	3,353	1,131	981	0	5,465	
	Early 2020 - Early 2030	31,610	30,398	266	30,132	7,149	2,403	2,180	0	11,732	
	Early 2020 - Mid 2031	37,080	35,652	312	35,340	8,333	2,802	2,552	0	13,688	

Derived from Municipality of Clarington Official Plan (2018) and data from municipal staff regarding servicing and land supply, by Watson & Associates Economists Ltd., 2020

<sup>1</sup> Census undercount estimated at approximately 4.0%. Note: Population including the undercount has been rounded.

<sup>2</sup> Includes townhouses and apartments in duplexes.

<sup>3</sup> Includes bachelor, 1-bedroom and 2-bedroom+ apartments.



Source: Total historical housing activity derived from the Municipality of Clarington building permit data. Building permit by density-type from Statistics Canada for the Municipality of Clarington, 2009-2018.

<sup>1</sup> Growth forecast represents calendar year.

**Schedule 2**  
**Municipality of Clarington**  
**Estimate of the Anticipated Amount, Type and Location of**  
**Residential Development for Which Development Charges can be Imposed**

Development Location	Timing	Single & Semi-Detached	Multiples <sup>1</sup>	Apartments <sup>2</sup>	Total Residential Units	Gross Population In New Units	Existing Unit Population Change	Net Population Increase, Excluding Institutional	Institutional Population	Net Population Including Institutional
Bowmanville	2020 - 2025	1,485	795	599	2,880	7,549	(329)	7,220	72	7,292
	2020 - 2030	3,167	1,690	1,330	6,187	16,158	(680)	15,478	143	15,621
	2020 - 2031	3,692	1,971	1,558	7,220	18,846	(705)	18,141	168	18,309
Courtice	2020 - 2025	832	188	159	1,178	3,314	(203)	3,111	32	3,142
	2020 - 2030	1,773	399	353	2,525	7,083	(420)	6,663	63	6,725
	2020 - 2031	2,067	465	414	2,946	8,259	(436)	7,823	74	7,897
Newcastle	2020 - 2025	788	148	223	1,159	3,166	(90)	3,076	30	3,106
	2020 - 2030	1,680	314	496	2,490	6,776	(187)	6,590	60	6,650
	2020 - 2031	1,958	366	581	2,905	7,903	(194)	7,709	70	7,780
Rural	2020 - 2025	248	0	0	248	777	(123)	654		654
	2020 - 2030	529	0	0	529	1,657	(255)	1,403		1,403
	2020 - 2031	617	0	0	617	1,932	(264)	1,668		1,668
Municipality of Clarington	2020 - 2025	3,353	1,131	981	5,465	14,807	(745)	14,061	134	14,195
	2020 - 2030	7,149	2,403	2,180	11,732	31,674	(1,541)	30,133	266	30,399
	2020 - 2031	8,333	2,802	2,552	13,688	36,940	(1,599)	35,341	312	35,653

Derived from Municipality of Clarington Official Plan (2018) and data from municipal staff regarding servicing and land supply, by Watson & Associates Economists Ltd., 2020

<sup>1</sup> Includes townhouses and apartments in duplexes.

<sup>2</sup> Includes accessory apartments, bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.

**Schedule 3**  
**Municipality of Clarington**  
**Current Year Growth Forecast**  
**Early 2016 to Early 2020**

		Population
Mid 2016 Population		92,013
Occupants of New Housing Units, Mid 2016 to Early 2020	<i>Units (2)</i>	3,276
	<i>multiplied by P.P.U. (3)</i>	2,768
	<i>gross population increase</i>	9,071
Occupants of New Equivalent Institutional Units, Mid 2016 to Early 2020	<i>Units</i>	66
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	72
Decline in Housing Unit Occupancy, Mid 2016 to Early 2020	<i>Units (4)</i>	32,835
	<i>multiplied by P.P.U. decline rate (5)</i>	-0,057
	<i>total decline in population</i>	-1,867
Population Estimate to Early 2020		99,289
<i>Net Population Increase, Mid 2016 to Early 2020</i>		7,276

(1) 2016 population based on Statistics Canada Census unadjusted for Census undercount.

(2) Estimated residential units constructed, Mid-2016 to the beginning of the growth period assuming a six-month lag between construction and occupancy.

(3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit <sup>1</sup> (P.P.U.)	% Distribution of Estimated Units <sup>2</sup>	Weighted Persons Per Unit Average
<i>Singles &amp; Semi Detached</i>	3.189	62%	1.981
<i>Multiples (6)</i>	2.412	23%	0.558
<i>Apartments (7)</i>	1.556	15%	0.230
<b>Total</b>		100%	2.768

<sup>1</sup> Based on 2016 Census custom database

<sup>2</sup> Based on Building permit/completion activity

(4) 2016 households taken from Statistics Canada Census.

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.

**Schedule 4a  
Municipality of Clarington  
Five Year Growth Forecast  
Early 2020 to Early 2025**

		Population
Early 2020 Population		99,289
Occupants of New Housing Units, Early 2020 to Early 2025	<i>Units (2)</i>	5,465
	<i>multiplied by P.P.U. (3)</i>	2,709
	<i>gross population increase</i>	14,807
Occupants of New Equivalent Institutional Units, Early 2020 to Early 2025	<i>Units</i>	121
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	133
Decline in Housing Unit Occupancy, Early 2020 to Early 2025	<i>Units (4)</i>	36,112
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.021
	<i>total decline in population</i>	-745
Population Estimate to Early 2025		113,484
<i>Net Population Increase, Early 2020 to Early 2025</i>		<i>14,195</i>

(1) Early 2020 Population based on:

2016 Population (92,013) + Mid 2016 to Early 2020 estimated housing units to beginning of forecast period (3,276 x 2.768 = 9,071) + (66 x 1.1 = 72) + (32,835 x -0.057 = -1,867) = 99,289

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

(3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit <sup>1</sup> (P.P.U.)	% Distribution of Estimated Units <sup>2</sup>	Weighted Persons Per Unit Average
<i>Singles &amp; Semi Detached</i>	3.133	61%	1.922
<i>Multiples (6)</i>	2.568	21%	0.531
<i>Apartments (7)</i>	1.426	18%	0.256
<i>one bedroom or less</i>	1.024		
<i>two bedrooms or more</i>	1.668		
Total		100%	2.709

<sup>1</sup> Persons per unit based on adjusted Statistics Canada Custom 2016 Census database.

<sup>2</sup> Forecast unit mix based upon historical trends and housing units in the development process.

(4) Early 2020 households based upon 2016 Census (32,835 units) + Mid 2016 to Early 2020 unit estimate (3,276 units) = 36,112 units.

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.

**Schedule 4b  
Municipality of Clarington  
Ten Year Growth Forecast  
Early 2020 to Early 2030**

		Population	
Early 2020 Population		99,289	
Occupants of New Housing Units, Early 2020 to Early 2030	<i>Units (2)</i>	11,732	
	<i>multiplied by P.P.U. (3)</i>	2,700	
	<i>gross population increase</i>	31,674	31,674
Occupants of New Equivalent Institutional Units, Early 2020 to Early 2030	<i>Units</i>	241	
	<i>multiplied by P.P.U. (3)</i>	1,100	
	<i>gross population increase</i>	265	265
Decline in Housing Unit Occupancy, Early 2020 to Early 2030	<i>Units (4)</i>	36,112	
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.043	
	<i>total decline in population</i>	-1,541	-1,541
Population Estimate to Early 2030		129,687	
<i>Net Population Increase, Early 2020 to Early 2030</i>		30,398	

(1) Early 2020 Population based on:

2016 Population (92,013) + Mid 2016 to Early 2020 estimated housing units to beginning of forecast period (3,276 x 2.768 = 9,071) + (66 x 1.1 = 72) + (32,835 x -0.057 = -1,867) = 99,289

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

(3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit <sup>1</sup> (P.P.U.)	% Distribution of Estimated Units <sup>2</sup>	Weighted Persons Per Unit Average
<i>Singles &amp; Semi Detached</i>	3.133	61%	1.909
<i>Multiples (6)</i>	2.568	20%	0.526
<i>Apartments (7)</i>	1.426	19%	0.265
<i>one bedroom or less</i>	1.024		
<i>two bedrooms or more</i>	1.668		
Total		100%	2.700

<sup>1</sup> Persons per unit based on adjusted Statistics Canada Custom 2016 Census database.

<sup>2</sup> Forecast unit mix based upon historical trends and housing units in the development process.

(4) Early 2020 households based upon 2016 Census (32,835 units) + Mid 2016 to Early 2020 unit estimate (3,276 units) = 36,112 units.

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.

**Schedule 5  
Municipality of Clarington  
Longer Term Growth Forecast  
Early 2020 to Mid 2031**

		Population
Early 2020 Population		99,289
Occupants of New Housing Units, Early 2020 to Mid 2031	<i>Units (2)</i>	13,688
	<i>multiplied by P.P.U. (3)</i>	2,699
	<i>gross population increase</i>	36,940
Occupants of New Equivalent Institutional Units, Early 2020 to Mid 2031	<i>Units</i>	283
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	311
Decline in Housing Unit Occupancy, Early 2020 to Mid 2031	<i>Units (4)</i>	36,112
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.044
	<i>total decline in population</i>	-1,599
Population Estimate to Mid 2031		134,941
<i>Net Population Increase, Early 2020 to Mid 2031</i>		35,652

(1) Early 2020 Population based on:

2016 Population (92,013) + Mid 2016 to Early 2020 estimated housing units to beginning of forecast period (3,276 x 2.768 = 9,071) + (66 x 1.1 = 72) + (32,835 x -0.057 = -1,867) = 99,289

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

(3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit <sup>1</sup> (P.P.U.)	% Distribution of Estimated Units <sup>2</sup>	Weighted Persons Per Unit Average
<i>Singles &amp; Semi Detached</i>	3.133	61%	1.907
<i>Multiples (6)</i>	2.568	20%	0.526
<i>Apartments (7)</i>	1.426	19%	0.266
<i>one bedroom or less</i>	1.024		
<i>two bedrooms or more</i>	1.668		
<b>Total</b>		100%	2.699

<sup>1</sup> Persons per unit based on Statistics Canada Custom 2016 Census database.

<sup>2</sup> Forecast unit mix based upon historical trends and housing units in the development process.

(4) Early 2020 households based upon 2016 Census (32,835 units) + Mid 2016 to Early 2020 unit estimate (3,276 units) = 36,112 units.

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.

**Schedule 6**  
**Municipality of Clarington**  
**Summary of Housing Supply Potential as of 2018**  
**Municipality of Clarington - Bowmanville**

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples <sup>1</sup>	Apartments <sup>2</sup>	Total
<b>Greenfield Development</b>				
Registered Not Built	210	147	0	<b>357</b>
<i>% Breakdown</i>	59%	41%	0%	100%
Draft Plans Approved	559	414	229	<b>1,202</b>
<i>% Breakdown</i>	47%	34%	19%	100%
Application Under Review	141	382	0	<b>523</b>
<i>% Breakdown</i>	27%	73%	0%	100%
<b>Intensification</b>				
Registered Not Built	53	258	123	<b>434</b>
<i>% Breakdown</i>	12%	59%	28%	100%
Draft Plans Approved	334	737	426	<b>1,497</b>
<i>% Breakdown</i>	22%	49%	28%	100%
Application Under Review	33	103	804	<b>940</b>
<i>% Breakdown</i>	4%	11%	86%	100%
<b>Vacant lands designated for Residential</b>				
Designated Vacant Residential Lands	2,874	875	1,068	<b>4,817</b>
<i>% Breakdown</i>	60%	18%	22%	100%
<b>Total</b>	<b>4,204</b>	<b>2,916</b>	<b>2,650</b>	<b>9,770</b>
<i>% Breakdown</i>	<b>85%</b>	<b>59%</b>	<b>54%</b>	<b>100%</b>

Source: Municipality of Clarington Planning Department, as of December 2018.

<sup>1</sup> Includes townhomes and apartments in duplexes.

<sup>2</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

**Schedule 6**  
**Municipality of Clarington**  
**Summary of Housing Supply Potential as of 2018**  
**Municipality of Clarington - Courtice**

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples <sup>1</sup>	Apartments <sup>2</sup>	Total
<b>Greenfield Development</b>				
Registered Not Built	4	0	0	4
<i>% Breakdown</i>	100%	0%	0%	100%
Draft Plans Approved	112	60	80	252
<i>% Breakdown</i>	44%	24%	32%	100%
Application Under Review	129	159	0	288
<i>% Breakdown</i>	45%	55%	0%	100%
<b>Intensification</b>				
Registered Not Built	15	0	50	65
<i>% Breakdown</i>	23%	0%	77%	100%
Draft Plans Approved	35	91	60	186
<i>% Breakdown</i>	19%	49%	32%	100%
Application Under Review	135	172	230	537
<i>% Breakdown</i>	25%	32%	43%	100%
<b>Vacant lands designated for Residential</b>				
Designated Vacant Residential Lands	1,553	1,399	2,819	5,771
<i>% Breakdown</i>	27%	24%	49%	100%
<b>Total</b>	<b>1,983</b>	<b>1,881</b>	<b>3,239</b>	<b>7,103</b>
<i>% Breakdown</i>	<b>149%</b>	<b>141%</b>	<b>243%</b>	<b>100%</b>

Source: Municipality of Clarington Planning Department, as of December 2018.

<sup>1</sup> Includes townhomes and apartments in duplexes.

<sup>2</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



**Schedule 6**  
**Municipality of Clarington**  
**Summary of Housing Supply Potential as of 2018**  
**Municipality of Clarington - Newcastle**

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples <sup>1</sup>	Apartments <sup>2</sup>	Total
<b>Greenfield Development</b>				
Registered Not Built	5	21	0	<b>26</b>
<i>% Breakdown</i>	19%	81%	0%	100%
Draft Plans Approved	940	274	223	<b>1,437</b>
<i>% Breakdown</i>	65%	19%	16%	100%
Application Under Review	324	55	105	<b>484</b>
<i>% Breakdown</i>	67%	11%	22%	100%
<b>Intensification</b>				
Registered Not Built	0	0	12	<b>12</b>
<i>% Breakdown</i>	0%	0%	100%	100%
Draft Plans Approved	0	0	250	<b>250</b>
<i>% Breakdown</i>	0%	0%	100%	100%
Application Under Review	0	29	0	<b>29</b>
<i>% Breakdown</i>	0%	100%	0%	100%
<b>Vacant lands designated for Residential</b>				
Designated Vacant Residential Lands	669	272	383	<b>1,324</b>
<i>% Breakdown</i>	51%	21%	29%	100%
<b>Total</b>	<b>1,938</b>	<b>651</b>	<b>973</b>	<b>3,562</b>
<i>% Breakdown</i>	<b>87%</b>	<b>29%</b>	<b>43%</b>	<b>100%</b>

Source: Municipality of Clarington Planning Department, as of December 2018.

<sup>1</sup> Includes townhomes and apartments in duplexes.

<sup>2</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

**Schedule 6**  
**Municipality of Clarington**  
**Summary of Housing Supply Potential as of 2018**  
**Municipality of Clarington - Rural**

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples <sup>1</sup>	Apartments <sup>2</sup>	Total
Greenfield Development				
Registered Not Built	43	0	0	<b>43</b>
<i>% Breakdown</i>	<i>100%</i>	<i>0%</i>	<i>0%</i>	<i>100%</i>
Draft Plans Approved	50	0	0	<b>50</b>
<i>% Breakdown</i>	<i>100%</i>	<i>0%</i>	<i>0%</i>	<i>100%</i>
Application Under Review	0	0	0	<b>0</b>
<i>% Breakdown</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	
Vacant lands designated for Residential				
Designated Vacant Residential Lands	694	0	0	<b>694</b>
<i>% Breakdown</i>	<i>100%</i>	<i>0%</i>	<i>0%</i>	<i>100%</i>
<b>Total</b>	<b>787</b>	<b>0</b>	<b>0</b>	<b>787</b>
<i>% Breakdown</i>	<i>100%</i>	<i>0%</i>	<i>0%</i>	<i>100%</i>

Source: Municipality of Clarington Planning Department, as of December 2018.

<sup>1</sup> Includes townhomes and apartments in duplexes.

<sup>2</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

**Schedule 6**  
**Municipality of Clarington**  
**Summary of Housing Supply Potential as of 2018**  
**Municipality of Clarington Total**

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples <sup>1</sup>	Apartments <sup>2</sup>	Total
<b>Greenfield Development</b>				
Registered Not Built	262	168	0	<b>430</b>
<i>% Breakdown</i>	61%	39%	0%	100%
Draft Plans Approved	1,661	748	532	<b>2,941</b>
<i>% Breakdown</i>	56%	25%	18%	100%
Application Under Review	594	596	105	<b>1,295</b>
<i>% Breakdown</i>	46%	46%	8%	100%
<b>Intensification</b>				
Registered Not Built	68	258	185	<b>511</b>
<i>% Breakdown</i>	13%	50%	36%	100%
Draft Plans Approved	369	828	736	<b>1,933</b>
<i>% Breakdown</i>	19%	43%	38%	100%
Application Under Review	168	304	1,034	<b>1,506</b>
<i>% Breakdown</i>	11%	20%	69%	100%
<b>Vacant lands designated for Residential</b>				
Vacant lands designated for Residential	5,790	2,546	4,270	<b>12,606</b>
<i>% Breakdown</i>	46%	20%	34%	100%
<b>Total</b>	<b>8,912</b>	<b>5,448</b>	<b>6,862</b>	<b>21,222</b>
<i>% Breakdown</i>	42%	26%	32%	100%

Source: Municipality of Clarington Planning Department, as of December 2018.

<sup>1</sup> Includes townhomes and apartments in duplexes.

<sup>2</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

**Schedule 7**  
**Municipality of Clarington**  
**Historical Residential Building Permits**  
**Years 2009 to 2017**

Year	Residential Building Permits			
	Singles & Semi Detached	Multiples <sup>1</sup>	Apartments <sup>2</sup>	Total
2009	264	7	3	274
2010	462	111	20	593
2011	636	137	90	863
2012	425	112	0	537
2013	308	131	0	439
Sub-total	2,095	498	113	2,706
<b>Average (2009 - 2013)</b>	<b>419</b>	<b>100</b>	<b>23</b>	<b>541</b>
% Breakdown	77.4%	18.4%	4.2%	100.0%
2014	558	91	8	657
2015	555	105	272	932
2016	561	214	220	995
2017	506	276	192	974
2018	654	156	0	810
Sub-total	2,834	842	692	4,368
<b>Average (2014 - 2018)</b>	<b>567</b>	<b>168</b>	<b>138</b>	<b>874</b>
% Breakdown	64.9%	19.3%	15.8%	100.0%
2009 - 2018				
Total	4,929	1,340	805	7,074
<b>Average</b>	<b>493</b>	<b>134</b>	<b>81</b>	<b>707</b>
% Breakdown	69.7%	18.9%	11.4%	100.0%

Source: Total historical housing activity derived from the Municipality of Clarington building permit data. Building permit by density-type from Statistics Canada for the Municipality of Clarington, 2009-2018.

<sup>1</sup> Includes townhouses and apartments in duplexes.

<sup>2</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

**Schedule 8 - 20 Year Average  
Municipality of Clarington  
Persons Per Unit By Age and Type of Dwelling  
(2016 Census)**

Age of Dwelling	Singles and Semi-Detached						20 Year Average
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	-	1.920	3.166	4.885	<b>3.189</b>	
6-10	-	-	1.895	3.194	4.486	<b>3.144</b>	
11-15	-	-	1.800	3.194	4.125	<b>3.109</b>	
16-20	-	-	1.789	3.188	4.028	<b>3.089</b>	3.133
20-25	-	-	1.837	3.014	4.688	<b>3.014</b>	
25-35	-	1.545	1.620	2.941	3.987	<b>2.874</b>	
35+	-	1.355	1.912	2.687	3.543	<b>2.616</b>	
<b>Total</b>	-	<b>1.491</b>	<b>1.830</b>	<b>2.980</b>	<b>4.039</b>	<b>2.915</b>	

Age of Dwelling	Multiples <sup>1</sup>						20 Year Average
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	-	-	2.392	-	<b>2.412</b>	
6-10	-	-	-	2.983	-	<b>2.720</b>	
11-15	-	-	-	2.476	-	<b>2.582</b>	
16-20	-	-	2.273	2.596	-	<b>2.556</b>	2.568
20-25	-	-	2.000	2.663	-	<b>2.519</b>	
25-35	-	-	1.857	2.703	-	<b>2.480</b>	
35+	-	1.346	1.926	2.641	-	<b>2.267</b>	
<b>Total</b>	-	<b>1.320</b>	<b>1.946</b>	<b>2.630</b>	<b>4.000</b>	<b>2.489</b>	

Age of Dwelling	Apartments <sup>2</sup>						20 Year Average
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	-	1.625	-	-	<b>1.556</b>	
6-10	-	1.033	1.520	-	-	<b>1.444</b>	
11-15	-	1.083	1.438	-	-	<b>1.304</b>	
16-20	-	-	1.364	-	-	<b>1.400</b>	1.426
20-25	-	-	-	-	-	<b>1.625</b>	
25-35	-	1.179	1.629	-	-	<b>1.608</b>	
35+	-	1.179	1.805	2.813	-	<b>1.693</b>	
<b>Total</b>	-	<b>1.135</b>	<b>1.627</b>	<b>2.444</b>	-	<b>1.567</b>	

Age of Dwelling	All Density Types					
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	-	-	1.809	3.070	4.815	<b>3.043</b>
6-10	-	1.156	1.730	3.137	4.293	<b>2.892</b>
11-15	-	1.286	1.667	3.120	4.297	<b>2.942</b>
16-20	-	-	1.835	3.054	4.000	<b>2.956</b>
20-25	-	1.313	1.829	2.952	4.618	<b>2.877</b>
25-35	-	1.275	1.647	2.916	3.906	<b>2.753</b>
35+	-	1.244	1.890	2.690	3.532	<b>2.506</b>
<b>Total</b>	-	<b>1.249</b>	<b>1.792</b>	<b>2.937</b>	<b>4.000</b>	<b>2.776</b>

<sup>1</sup> Includes townhouses and apartments in duplexes.

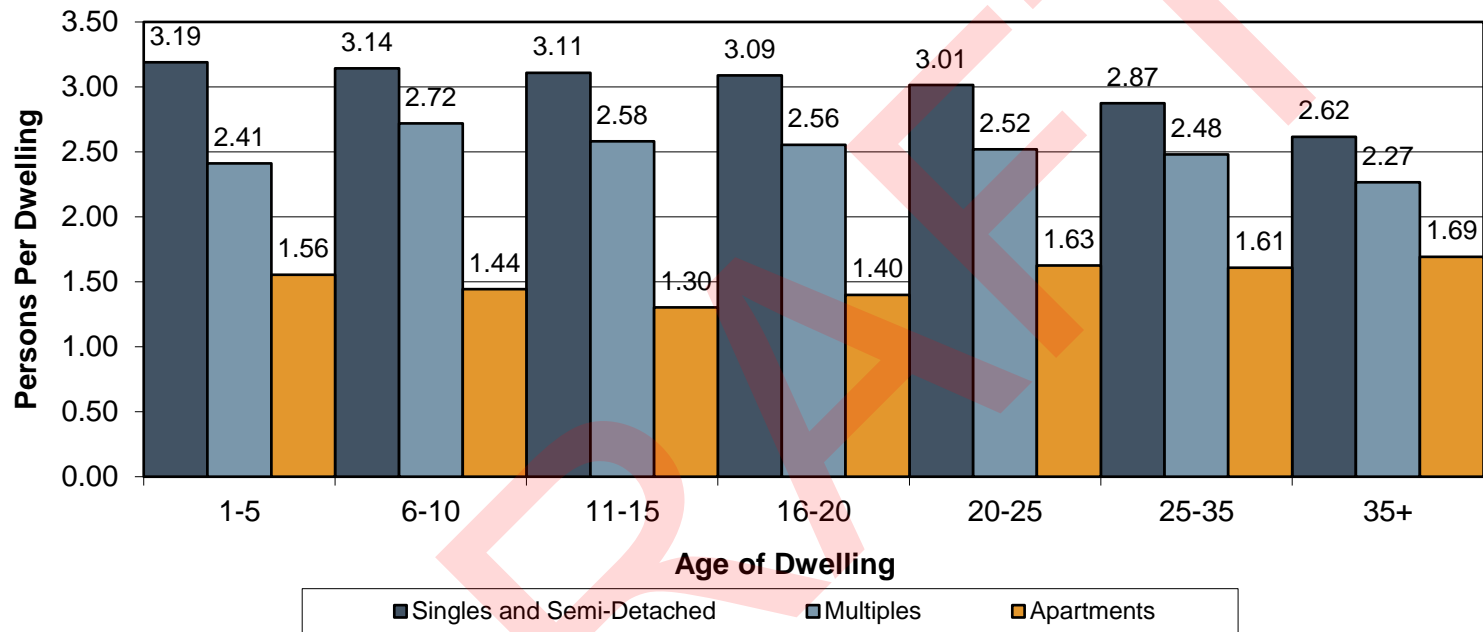
<sup>2</sup> Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

<sup>3</sup> Adjusted based on 2001-2016 historical trends.

*Note: Does not include Statistics Canada data classified as 'Other'*

*P.P.U. Not calculated for samples less than or equal to 50 dwelling units, and does not include institutional population.*

**Schedule 9  
Municipality of Clarington  
Persons Per Unit By Structural Type and Age of Dwelling  
(2016 Census)**



Multiple and Apartment P.P.U.s are based on Municipality of Clarington.

**Schedule 10a  
Municipality of Clarington  
2020 Employment Forecast**

Period	Population	Activity Rate								Employment								Total Employment (Including N.F.P.O.W.)	Total (Excluding Work at Home and N.F.P.O.W.)
		Primary	Work at Home	Industrial	Commercial/Population Related	Institutional	Total	N.F.P.O.W. <sup>1</sup>	Total Including N.F.P.O.W.	Primary	Work at Home	Industrial	Commercial/Population Related	Institutional	Total	N.F.P.O.W. <sup>1</sup>	Total Employment (Including N.F.P.O.W.)		
Mid 2006	77,820	0.004	0.032	0.080	0.076	0.045	0.237	0.042	0.279	285	2,465	6,258	5,943	3,475	18,425	3,267	21,692	15,960	
Mid 2011	84,548	0.004	0.031	0.071	0.076	0.048	0.231	0.046	0.277	380	2,620	6,033	6,428	4,085	19,545	3,856	23,401	16,925	
Mid 2016	92,013	0.007	0.032	0.077	0.086	0.051	0.253	0.059	0.312	660	2,950	7,110	7,880	4,655	23,255	5,435	28,690	20,305	
Early 2020	99,289	0.007	0.032	0.076	0.090	0.047	0.252	0.058	0.310	660	3,161	7,571	8,920	4,710	25,022	5,743	30,765	21,861	
Early 2025	113,484	0.006	0.033	0.075	0.102	0.047	0.262	0.056	0.319	660	3,745	8,468	11,575	5,340	29,788	6,390	36,178	26,043	
Early 2030	129,687	0.005	0.031	0.073	0.095	0.045	0.250	0.055	0.304	660	4,058	9,486	12,320	5,848	32,372	7,103	39,475	28,314	
Mid 2031	134,941	0.005	0.031	0.073	0.092	0.045	0.246	0.054	0.300	660	4,211	9,810	12,443	6,005	33,129	7,329	40,458	28,918	
<b>Incremental Change</b>																			
Mid 2006 - Mid 2011	6,728	0.001	-0.001	-0.009	0.000	0.004	-0.006	0.004	-0.002	95	155	-225	485	610	1,120	589	1,709	965	
Mid 2011 - Mid 2016	7,465	0.0027	0.0011	0.0059	0.0096	0.0023	0.0216	0.0135	0.0350	280	330	1,078	1,453	570	3,710	1,579	5,289	3,380	
Mid 2016 - Early 2020	7,276	-0.0005	-0.0002	-0.0010	0.0042	-0.0032	-0.0007	-0.0012	-0.0019	0	211	461	1,040	55	1,767	308	2,075	1,556	
Early 2020 - Early 2025	14,195	-0.0008	0.0012	-0.0016	0.0122	-0.0004	0.0105	-0.0015	0.0089	0	584	897	2,655	630	4,766	647	5,413	4,182	
Early 2020 - Early 2030	30,398	-0.0016	-0.0006	-0.0031	0.0052	-0.0023	-0.0024	-0.0031	-0.0055	0	897	1,915	3,400	1,138	7,350	1,360	8,710	6,453	
Early 2020 - Mid 2031	35,652	-0.0018	-0.0006	-0.0036	0.0024	-0.0029	-0.0065	-0.0035	-0.0100	0	1,050	2,239	3,523	1,295	8,107	1,586	9,693	7,057	
<b>Annual Average</b>																			
Mid 2006 - Mid 2011	1,346	0.00017	-0.00014	-0.00181	-0.00007	0.00073	-0.00112	0.00072	-0.00039	19	31	-45	97	122	224	118	342	193	
Mid 2011 - Mid 2016	1,493	0.0005	0.0002	0.0012	0.0019	0.0005	0.0043	0.0027	0.0070	56	66	216	291	114	742	316	1,058	676	
Mid 2016 - Early 2020	2,079	-0.0002	-0.0001	-0.0003	0.0012	-0.0009	-0.0002	-0.0004	-0.0006	0	60	132	297	16	505	88	593	445	
Early 2020 - Early 2025	2,839	-0.00017	0.00023	-0.00033	0.00243	-0.00008	0.00209	-0.00031	0.00179	0	117	179	531	126	953	129	1,083	836	
Early 2020 - Early 2030	3,040	-0.00016	-0.00006	-0.00031	0.00052	-0.00023	-0.00024	-0.00031	-0.00055	0	90	192	340	114	735	136	871	645	
Early 2020 - Mid 2031	3,100	-0.00015	-0.00006	-0.00031	0.00021	-0.00026	-0.00057	-0.00031	-0.00087	0	91	195	306	113	705	138	843	614	

Derived from Municipality of Clarington Official Plan (2018) and data from municipal staff regarding servicing and land supply, by Watson & Associates Economists Ltd., 2020

<sup>1</sup> Statistics Canada defines no fixed place of work (N.F.P.O.W.) employees as "persons who do not go from home to the same work place location at the beginning of each shift". Such persons include building and landscape contractors, travelling salespersons, independent truck drivers, etc.

**Schedule 10b**  
**Municipality of Clarington**  
**Employment & Gross Floor Area (G.F.A) Forecast, 2020 to Buildout**

Period	Population	Employment					Gross Floor Area in Square Feet (Estimated) <sup>1</sup>			
		Primary	Industrial	Commercial/ Population Related	Institutional	Total	Industrial	Commercial/ Population Related	Institutional	Total
Mid 2006	77,820	285	6,258	5,943	3,475	15,960				
Mid 2011	84,548	380	6,033	6,428	4,085	16,925				
Mid 2016	92,013	660	7,110	7,880	4,655	20,305				
Early 2020	99,289	660	7,571	8,920	4,710	21,861				
Early 2025	113,484	660	8,468	11,575	5,340	26,043				
Early 2030	129,687	660	9,486	12,320	5,848	28,314				
Mid 2031	134,941	660	9,810	12,443	6,005	28,918				
<b>Incremental Change</b>										
Mid 2006 - Mid 2011	6,728	95	-225	485	610	965				
Mid 2011 - Mid 2016	7,465	280	1,078	1,453	570	3,380				
Mid 2016 - Early 2020	7,276	0	461	1,040	55	1,556	599,300	338,000	38,500	975,800
Early 2020 - Early 2025	14,195	0	897	2,655	630	4,182	1,166,100	862,900	441,000	2,470,000
Early 2020 - Early 2030	30,398	0	1,915	3,400	1,138	6,453	2,489,500	1,105,000	796,600	4,391,100
Early 2020 - Mid 2031	35,652	0	2,239	3,523	1,295	7,057	2,910,700	1,145,000	906,500	4,962,200
<b>Annual Average</b>										
Mid 2006 - Mid 2011	1,346	19	-45	97	122	193				
Mid 2011 - Mid 2016	1,493	56	216	291	114	676				
Mid 2016 - Early 2020	2,079	0	132	297	16	445	171,229	96,571	11,000	278,800
Early 2020 - Early 2025	2,839	0	179	531	126	836	233,220	172,580	88,200	494,000
Early 2020 - Early 2030	3,040	0	192	340	114	645	248,950	110,500	79,660	439,110
Early 2020 - Mid 2031	3,100	0	195	306	113	614	253,104	99,565	78,826	431,496

Derived from Municipality of Clarington Official Plan (2018) and data from municipal staff regarding servicing and land supply, by Watson & Associates Economists Ltd., 2020

<sup>1</sup> Square Foot Per Employee Assumptions

Industrial	1,300
Commercial/ Population Related	325
Institutional	700



**Schedule 10c**  
**Estimate of the Anticipated Amount, Type and Location of**  
**Non-Residential Development for Which Development Charges can be Imposed**

Development Location	Timing	Industrial G.F.A. S.F. <sup>1</sup>	Commercial G.F.A. S.F. <sup>1</sup>	Institutional G.F.A. S.F. <sup>1</sup>	Total Non-Residential G.F.A. S.F.	Employment Increase <sup>2</sup>
Bowmanville	2020 - 2025	832,500	90,000	237,400	1,159,900	1,256
	2020 - 2030	1,777,300	218,300	428,900	2,424,500	2,652
	2020 - 2031	2,078,000	226,300	488,000	2,792,300	2,992
Courtice	2020 - 2025	256,500	650,000	104,000	1,010,500	2,346
	2020 - 2030	547,500	729,300	187,900	1,464,700	2,934
	2020 - 2031	640,300	755,700	213,900	1,609,900	3,123
Newcastle	2020 - 2025	50,300	77,700	99,600	227,600	420
	2020 - 2030	107,400	99,500	179,800	386,700	645
	2020 - 2031	125,500	103,000	204,600	433,100	706
Rural	2020 - 2025	26,800	45,200	-	72,000	160
	2020 - 2030	57,300	57,900	-	115,200	222
	2020 - 2031	66,900	60,000	-	126,900	236
Municipality of Clarington	2020 - 2025	1,166,100	862,900	441,000	2,470,000	4,182
	2020 - 2030	2,489,500	1,105,000	796,600	4,391,100	6,453
	2020 - 2031	2,910,700	1,145,000	906,500	4,962,200	7,057

Derived from Municipality of Clarington Official Plan (2018) and data from municipal staff regarding servicing and land supply, by Watson & Associates Economists Ltd., 2020

<sup>1</sup> Square feet per employee assumptions:

Industrial	1,300
Commercial	325
Institutional	700

<sup>2</sup> Employment Increase does not include No Fixed Place of Work.

\*Reflects Early 2020 to Mid 2031 forecast period.

**Schedule 11**  
**Municipality of Clarington**  
**Non-Residential Construction Value**  
**Years 2007 to 2016**  
**(000's 2018 \$)**

YEAR	Industrial				Commercial				Institutional				Total			
	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total
2007	5,505	437	336	6,277	27,753	2,922	1,517	32,192	4,531	194	896	5,622	37,789	3,553	2,749	44,091
2008	11,126	650	0	11,776	8,688	1,796	5,043	15,527	4,660	496	2,298	7,454	24,475	2,941	7,342	34,757
2009	4,087	536	3,190	7,813	25,662	3,149	407	29,218	90	480	15,500	16,071	29,840	4,165	19,097	53,102
2010	3,174	148	0	3,323	28,351	4,340	2,743	35,434	10,364	3,792	0	14,156	41,889	8,280	2,743	52,912
2012	84,109	437	536	85,082	16,568	7,181	2,382	26,131	17,252	1,681	4,244	23,177	117,929	9,300	7,162	134,390
2013	8,017	2,788	4,092	14,897	4,367	15,722	0	20,089	24,133	776	3,159	28,068	36,517	19,286	7,251	63,055
2014	6,612	186	0	6,798	46,715	6,505	971	54,190	241	9,681	4,334	14,257	53,568	16,372	5,306	75,245
2015	36,803	2,469	0	39,272	10,430	5,782	0	16,213	0	1,898	0	1,898	47,233	10,149	0	57,382
2016	2,978	700	640	4,317	8,518	3,617	0	12,135	20,796	1,415	0	22,211	32,292	5,732	640	38,664
Subtotal	165,611	11,268	8,794	185,674	250,255	62,190	13,357	325,801	82,267	22,662	33,578	138,506	498,133	96,119	55,729	649,981
Percent of Total	89%	6%	5%	100%	77%	19%	4%	100%	59%	16%	24%	100%	77%	15%	9%	100%
<b>Average</b>	<b>16,561</b>	<b>1,127</b>	<b>1,759</b>	<b>18,567</b>	<b>25,025</b>	<b>6,219</b>	<b>1,908</b>	<b>32,580</b>	<b>9,141</b>	<b>2,266</b>	<b>4,797</b>	<b>13,851</b>	<b>49,813</b>	<b>9,612</b>	<b>6,192</b>	<b>64,998</b>
2007 - 2011 Period Total				35,307				197,043				48,895				281,245
<b>2007 - 2011 Average</b>				<b>7,061</b>				<b>39,409</b>				<b>9,779</b>				<b>56,249</b>
% Breakdown				12.6%				70.1%				17.4%				100.0%
2012 - 2016 Period Total				150,367				128,758				89,611				368,736
<b>2012 - 2016 Average</b>				<b>30,073</b>				<b>25,752</b>				<b>17,922</b>				<b>73,747</b>
% Breakdown				40.8%				34.9%				24.3%				100.0%
2007 - 2016 Period Total				185,674				325,801				138,506				649,981
<b>2007 - 2016 Average</b>				<b>18,567</b>				<b>32,580</b>				<b>13,851</b>				<b>64,998</b>
% Breakdown				28.6%				50.1%				21.3%				100.0%

Source: Statistics Canada Publication, 64-001-XIB

Note: Inflated to year-end 2017 (January, 2018) dollars using Reed Construction Cost Index

**Schedule 12**  
**Municipality of Clarington**  
**Employment to Population Ratio by Major Employment Sector, 2006 to 2016**

NAICS		Year			Change		Comments
		2006	2011	2016	06-11	11-16	
<b>Employment by industry</b>							
	<b>Primary Industry Employment</b>						
11	<i>Agriculture, forestry, fishing and hunting</i>	655	560	810	-95	250	Categories which relate to local land-based resources
21	<i>Mining and oil and gas extraction</i>	35	15	115	-20	100	
<b>Sub-total</b>		<b>690</b>	<b>575</b>	<b>925</b>	<b>-115</b>	<b>350</b>	
	<b>Industrial and Other Employment</b>						
22	<i>Utilities</i>	2,855	3,055	3,425	200	370	Categories which relate primarily to industrial land supply and demand
23	<i>Construction</i>	1,000	1,000	1,750	0	750	
31-33	<i>Manufacturing</i>	1,590	1,260	1,270	-330	10	
41	<i>Wholesale trade</i>	465	680	400	215	-280	
48-49	<i>Transportation and warehousing</i>	535	430	550	-105	120	
56	<i>Administrative and support</i>	325	273	330	-53	58	
<b>Sub-total</b>		<b>6,770</b>	<b>6,698</b>	<b>7,725</b>	<b>-73</b>	<b>1,028</b>	
	<b>Population Related Employment</b>						
44-45	<i>Retail trade</i>	2,060	2,470	2,980	410	510	Categories which relate primarily to population growth within the municipality
51	<i>Information and cultural industries</i>	250	300	275	50	-25	
52	<i>Finance and insurance</i>	380	590	605	210	15	
53	<i>Real estate and rental and leasing</i>	295	410	410	115	0	
54	<i>Professional, scientific and technical services</i>	805	1,030	1,300	225	270	
55	<i>Management of companies and enterprises</i>	0	0	10	0	10	
56	<i>Administrative and support</i>	325	273	330	-53	58	
71	<i>Arts, entertainment and recreation</i>	330	435	365	105	-70	
72	<i>Accommodation and food services</i>	1,640	1,555	2,120	-85	565	
81	<i>Other services (except public administration)</i>	980	755	1,150	-225	395	
<b>Sub-total</b>		<b>7,065</b>	<b>7,818</b>	<b>9,545</b>	<b>753</b>	<b>1,728</b>	
	<b>Institutional</b>						
61	<i>Educational services</i>	1,610	1,530	1,825	-80	295	
62	<i>Health care and social assistance</i>	1,780	2,130	2,430	350	300	
91	<i>Public administration</i>	510	795	805	285	10	
<b>Sub-total</b>		<b>3,900</b>	<b>4,455</b>	<b>5,060</b>	<b>555</b>	<b>605</b>	
<b>Total Employment</b>		<b>18,425</b>	<b>19,545</b>	<b>23,255</b>	<b>1,120</b>	<b>3,710</b>	
<b>Population</b>		<b>77,820</b>	<b>84,548</b>	<b>92,013</b>	<b>6,728</b>	<b>7,465</b>	
<b>Employment to Population Ratio</b>							
<b>Industrial and Other Employment</b>		<b>0.09</b>	<b>0.08</b>	<b>0.08</b>	<b>-0.01</b>	<b>0.00</b>	
<b>Population Related Employment</b>		<b>0.09</b>	<b>0.09</b>	<b>0.10</b>	<b>0.00</b>	<b>0.01</b>	
<b>Institutional Employment</b>		<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.00</b>	<b>0.00</b>	
<b>Primary Industry Employment</b>		<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	
<b>Total</b>		<b>0.24</b>	<b>0.23</b>	<b>0.25</b>	<b>-0.01</b>	<b>0.02</b>	

Source: Statistics Canada Employment by Place of Work

Note: 2006-2016 employment figures are classified by North American Industry Classification System (NAICS) Code