

GTA Project
 Economic Feasibility - 40 Year Horizon
 Parameters and Results

<u>Col. 1</u>	<u>Col. 2</u>
Line No.	Description
FEASIBILITY PARAMETERS	
1.	Discount Rate 5.88%
2.	CCA Rate 6.00%
3.	Tax Rate 26.50%
4.	Municipal Tax rate 0.30%
5.	Capital Tax Rate 0.00%
6.	Customer Revenue Horizon (Years) 40
7.	Annual Volumes (m ³) 706,621,245
8.	Annual Distribution Revenues (Dollars) 130,083,942
9.	Annual Average O&M (Dollars) 13,252,265
10.	Annual Average Transportation Services Charge (Dollars) 12,018,857
11.	Annual Average Transportation Savings (Dollars) 170,672,060
12.	Capital Investment (Dollars) 1,087,558,060
Working Capital	
13.	O&M (Lead days) (18.70)
14.	Commodity (Lag days) 3.70
FEASIBILITY RESULTS	
15.	Net Present Value (Dollars) 667,432,377
16.	Profitability Index 1.73

**GTA Project
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 DCF Analysis**

Line No.	Description	Col. 15 Year 11	Col. 16 Year 12	Col. 17 Year 13	Col. 18 Year 14	Col. 19 Year 15	Col. 20 Year 16	Col. 21 Year 17	Col. 22 Year 18	Col. 23 Year 19	Col. 24 Year 20	Col. 25 Year 21	Col. 26 Year 22
	Discount factors to project outset	0.510	0.461	0.455	0.429	0.406	0.383	0.362	0.342	0.323	0.305	0.288	0.272
	INCREMENTAL CAPITAL INVESTMENT												
1.	Investment in Mains	-	-	-	-	-	-	-	-	-	-	-	-
2.	Investment in Services	-	-	-	-	-	-	-	-	-	-	-	-
3.	Investment in Stations	-	-	-	-	-	-	-	-	-	-	-	-
4.	Investment in Land	-	-	-	-	-	-	-	-	-	-	-	-
5.	Investment in Land Rights	-	-	-	-	-	-	-	-	-	-	-	-
6.	Annual Capital Maintenance Costs	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(1,024,892)	(3,092)
7.	Contribution in Aid Of Construction	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(1,024,892)	(3,092)
8.	Net Investment Capital	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(1,024,892)	(3,092)
9.	Working Capital												
10.	Total Investment												
11.	PV Of Total Investment At Project Outset	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)
12.	ACCUMULATED PV OF TOTAL INVESTMENT												
	CCA TAX SHIELD												
13.	CCA Tax Shield	10,437,863	9,805,209	9,210,965	8,660,917	8,144,261	7,650,844	7,187,368	6,752,014	6,343,073	5,958,939	5,605,228	5,274,914
14.	PV Of CCA Tax Shield At Project Outset	5,319,693	4,719,611	4,187,605	3,716,923	3,302,918	2,930,344	2,600,169	2,307,055	2,046,986	1,816,264	1,613,689	1,434,205
15.	ACCUMULATED PV OF CCA TAX SHIELD	77,063,008	81,782,820	85,970,424	89,689,346	92,992,266	95,922,810	98,522,960	100,830,034	102,877,030	104,683,235	106,307,164	107,741,568
	INCREMENTAL OPERATING CASHFLOWS (BEFORE TAXES)												
16.	Gas Distribution Revenue	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942
17.	Transportation Services Charge	17,517,854	17,161,675	16,797,367	16,426,803	16,052,957	15,676,849	15,304,416	14,936,043	14,562,095	14,192,913	13,829,134	13,470,266
18.	Transportation Savings	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)
19.	Gas Costs	(12,979,785)	(12,979,785)	(12,979,785)	(12,979,785)	(12,979,785)	(12,979,785)	(12,979,785)	(12,979,785)	(12,979,785)	(12,979,785)	(12,979,785)	(12,979,785)
20.	CCM Expenses	249,909,263	78,538,254	78,173,966	77,809,678	77,446,390	77,083,102	76,720,814	76,358,526	76,000,238	75,641,950	75,283,662	74,925,374
21.	Net Operating Cash (Before Taxes)	127,367,116	37,804,979	38,500,432	32,862,946	31,413,840	29,922,653	27,740,331	26,064,544	24,487,053	23,002,644	21,241,414	20,303,013
22.	PV of Net Operating Cash (Before Taxes) At Project Outset	1,513,151,225	1,550,956,204	1,586,496,636	1,619,359,584	1,650,773,424	1,680,295,277	1,708,036,109	1,734,100,653	1,758,367,736	1,781,590,560	1,802,631,994	1,823,135,007
23.	ACCUMULATED PV OF NET OPERATING CASH (BEFORE TAXES)												
	TAXES												
24.	Income Tax (Before Interest Tax Shield)	(65,364,667)	(19,951,347)	(19,854,808)	(19,419,344)	(19,664,667)	(19,562,346)	(19,458,348)	(19,352,777)	(19,245,729)	(19,137,293)	(18,925,459)	(18,925,459)
25.	Municipal Tax	(3,250,144)	(3,250,153)	(3,250,162)	(3,250,171)	(3,250,180)	(3,250,189)	(3,250,198)	(3,250,207)	(3,250,216)	(3,250,225)	(3,250,234)	(3,250,243)
26.	Capital Tax												
27.	Total Taxes	(68,614,811)	(23,201,500)	(23,104,970)	(22,672,581)	(22,917,913)	(22,814,535)	(22,711,613)	(22,608,051)	(22,498,012)	(22,390,565)	(21,947,015)	(22,181,836)
28.	PV of Total Taxes At Project Outset	(34,969,775)	(11,168,216)	(10,504,272)	(9,735,412)	(9,294,397)	(8,739,183)	(8,216,365)	(7,724,124)	(7,260,738)	(6,824,574)	(6,317,962)	(6,031,054)
29.	ACCUMULATED PV OF TOTAL TAXES	(414,632,166)	(426,000,382)	(436,504,654)	(446,240,066)	(455,534,463)	(464,273,948)	(472,490,011)	(480,214,135)	(487,474,673)	(494,299,447)	(500,617,429)	(506,648,462)
	ACCUMULATED NPV AND PI												
30.	Net Present Value	264,612,109	296,168,683	325,392,447	352,238,907	377,661,269	401,374,483	423,499,119	444,146,594	463,419,935	481,414,470	497,951,791	513,657,955
31.	Profitability Index	1.291	1.325	1.357	1.387	1.415	1.441	1.465	1.486	1.509	1.529	1.547	1.564

- Notes:
- (1) September 12 2013 is project outset as time 0.
 - (2) Oct 1 2010 to Sep 12 2013 - Project planning and engineering.
 - (3) Sep 12 2013 to Dec 31 2013, mid-term discounting. Discount period equals 3.6/12*0.5 = 0.15
 - (4) Jan 1 to Dec 31 2014, mid-term discounting. Discount period equals 12/12*0.5+3.6/12 = 0.9
 - (5) Year 1 - capital spending Jan 1 to Dec 31 2015, mid-term discounting. Discount period equals 12/12*0.5+1+3.6/12 = 1.80
 - (6) 50% effectivity considered for the first year of customer additions revenue.
 - (7) First year of customer additions revenues Jan 1 to Dec 31 2015. Discount period equals 12/12*0.5+1+3.6/12 = 1.80
 - (8) Transportation savings and Transportation Services Charge start Oct 15, 2015, mid-term discounting. Discount period equals 2.5/12*0.5+9.5/12+1+3.6/12 = 2.196

**GTA Project
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 DCF Analysis**

Line No.	Description	Col. 27 Year 23	Col. 28 Year 24	Col. 29 Year 25	Col. 30 Year 26	Col. 31 Year 27	Col. 32 Year 28	Col. 33 Year 29	Col. 34 Year 30	Col. 35 Year 31	Col. 36 Year 32	Col. 37 Year 33	Col. 38 Year 34
	Discount factors to project outset	0.257	0.243	0.229	0.216	0.204	0.193	0.182	0.172	0.163	0.154	0.145	0.137
	INCREMENTAL CAPITAL INVESTMENT												
1.	Investment in Mains	-	-	-	-	-	-	-	-	-	-	-	-
2.	Investment in Services	-	-	-	-	-	-	-	-	-	-	-	-
3.	Investment in Stations	-	-	-	-	-	-	-	-	-	-	-	-
4.	Investment in Land	-	-	-	-	-	-	-	-	-	-	-	-
5.	Investment in Land Rights	-	-	-	-	-	-	-	-	-	-	-	-
6.	Annual Capital Maintenance Costs	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(1,024,892)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)
7.	Contribution in Aid Of Construction	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(1,024,892)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)
8.	Net Investment Capital	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(1,024,892)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)
9.	Working Capital												
10.	Total Investment	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)
11.	PV Of Total Investment At Project Outset												
12.	ACCUMULATED PV OF TOTAL INVESTMENT												
13.	CCA Tax Shield	4,955,574	4,655,586	4,373,806	4,109,099	3,860,436	3,634,969	3,423,170	3,216,087	3,021,552	2,838,801	2,667,121	2,505,840
14.	PV Of CCA Tax Shield At Project Outset	6,272,572	1,129,163	1,001,921	889,024	788,853	701,541	623,964	553,689	491,316	435,972	386,665	343,291
15.	ACCUMULATED PV OF CCA TAX SHIELD	108,013,961	110,143,124	111,145,045	112,034,069	112,822,922	113,524,463	114,146,447	114,702,136	115,193,452	115,629,424	116,016,289	116,359,560
16.	INCREMENTAL OPERATING CASHFLOWS (BEFORE TAXES)												
17.	Gas Distribution Revenue	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942
18.	Transportation Services Charge	12,873,242	12,445,763	12,014,439	11,579,504	11,141,160	10,704,990	10,269,282	9,834,542	9,399,379	8,964,315	8,528,942	8,093,797
19.	Transportation Savings	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)
20.	Gas Costs	(12,979,765)	(12,979,765)	(12,979,765)	(12,979,765)	(12,979,765)	(12,979,765)	(12,979,765)	(12,979,765)	(12,979,765)	(12,979,765)	(12,979,765)	(12,979,765)
21.	Net Operating Cash (Before Taxes)	74,249,821	73,822,342	73,391,016	72,956,063	72,517,759	72,079,969	71,641,861	71,204,158	70,766,958	70,329,758	69,892,558	69,455,358
22.	PV of Net Operating Cash (Before Taxes) At Project Outset	19,067,068	17,904,765	16,811,906	15,784,411	14,816,493	13,865,786	13,064,535	12,311,248	11,611,248	10,966,370	10,371,216	9,826,157
23.	ACCUMULATED PV OF NET OPERATING CASH (BEFORE TAXES)	1,842,020,075	1,860,106,860	1,876,916,767	1,892,703,178	1,907,521,671	1,921,167,457	1,934,251,091	1,946,163,240	1,956,440,610	1,966,149,342	1,975,320,558	1,983,963,715
24.	TAXES												
25.	Income Tax (Before Interest Tax Shield)	(18,813,260)	(18,699,976)	(18,585,673)	(18,470,412)	(18,354,254)	(17,990,345)	(18,129,274)	(17,470,560)	(15,885,540)	(15,888,921)	(15,891,681)	(15,893,858)
26.	Municipal Tax	(3,256,366)	(3,256,366)	(3,256,404)	(3,256,414)	(3,256,423)	(3,259,497)	(3,259,507)	(3,259,516)	(3,259,525)	(3,259,535)	(3,259,544)	(3,259,553)
27.	Capital Tax												
28.	Total Taxes	(22,069,646)	(21,956,371)	(21,842,077)	(21,728,826)	(21,610,677)	(21,159,842)	(21,388,761)	(20,730,076)	(19,145,065)	(19,148,456)	(19,151,225)	(19,153,411)
29.	ACCUMULATED PV OF TOTAL TAXES	(512,315,862)	(517,641,155)	(522,644,567)	(527,345,294)	(531,761,263)	(535,845,087)	(539,743,890)	(543,372,028)	(546,425,689)	(549,366,634)	(552,144,511)	(554,768,460)
30.	ACCUMULATED NPV AND P												
31.	Net Present Value	528,330,195	542,038,870	554,849,267	566,821,985	578,013,352	588,296,874	598,086,590	606,982,890	614,638,214	621,842,173	628,622,377	635,004,877
	Profitability Index	1.560	1.595	1.609	1.622	1.635	1.646	1.657	1.667	1.675	1.683	1.690	1.697

- Notes:
- (1) September 12 2013 is project outset as time 0.
 - (2) Oct 1 2010 to Sep 12 2013 - Project planning and engineering.
 - (3) Sep 12 2013 to Dec 31 2013, mid-term discounting. Discount period equals 3.6/12*0.5 = 0.15
 - (4) Jan 1 to Dec 31 2014, mid-term discounting. Discount period equals 12/12*0.5+3.6/12 = 0.8
 - (5) Year 1 - capital spending Jan 1 to Dec 31 2015, mid-term discounting. Discount period equals 12/12*0.5+1+3.6/12 = 1.80
 - (6) 50% effectiveness considered for the first year of customer additions revenue.
 - (7) First year of customer additions revenues Jan 1 to Dec 31 2015. Discount period equals 12/12*0.5+1+3.6/12 = 1.80
 - (8) Transportation savings and Transportation Services Charge start Oct 15, 2015, mid-term discounting. Discount period equals 2.5/12*0.5+9.5/12+1+3.6/12 = 2.196

**GTA Project
 Economic Feasibility - 40 year Horizon
 DCF Analysis**

Line No.	Description	Col. 39 Year 35	Col. 40 Year 36	Col. 41 Year 37	Col. 42 Year 38	Col. 43 Year 39	Col. 44 Year 40
	Discount factors to project outset	0.129	0.122	0.115	0.109	0.103	0.097
	INCREMENTAL CAPITAL INVESTMENT						
1.	Investment in Mains	-	-	-	-	-	-
2.	Investment in Services	-	-	-	-	-	-
3.	Investment in Stations	-	-	-	-	-	-
4.	Investment in Land	-	-	-	-	-	-
5.	Investment in Land Rights	-	-	-	-	-	-
6.	Annual Capital Maintenance Costs	(1,024,892)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)
7.	Contribution In Aid Of Construction	(1,024,892)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)
8.	Net Investment Capital	(1,024,892)	(3,092)	(3,092)	(3,092)	(3,092)	(3,092)
9.	Working Capital						
10.	Total Investment	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)	(910,569,958)
11.	PV Of Total Investment At Project Outset						
12.	ACCUMULATED PV OF TOTAL INVESTMENT						
	CCA TAX SHIELD						
13.	CCA Tax Shield	2,382,451	2,227,749	2,093,085	1,956,575	1,847,723	15,420,454
14.	PV Of CCA Tax Shield At Project Outset	385,676	272,246	241,588	214,383	190,244	1,499,558
15.	ACCUMULATED PV OF CCA TAX SHIELD	116,665,239	116,937,504	117,179,082	117,393,475	117,593,719	119,063,276
	INCREMENTAL OPERATING CASHFLOWS (BEFORE TAXES)						
16.	Gas Distribution Revenue	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942	130,083,942
17.	Transportation Services Charge	2,641,268	1,899,956	1,895,476	1,896,626	1,896,159	1,894,155
18.	Transportation Savings						
19.	Gas Costs	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)	(55,727,578)
20.	CCM Expenses	(15,023,365)	(12,979,785)	(12,979,785)	(12,979,785)	(12,979,785)	(12,979,785)
21.	Net Operating Cash (Before Taxes)	61,974,247	63,276,533	63,272,054	63,273,205	63,272,738	63,270,734
22.	PV of Net Operating Cash (Before Taxes) At Project Outset	8,016,872	7,732,813	7,392,970	6,897,633	6,514,631	6,152,744
23.	ACCUMULATED PV OF NET OPERATING CASH (BEFORE TAXES)	1,992,002,587	1,999,735,400	2,007,036,371	2,013,936,006	2,020,460,637	2,026,605,381
	TAXES						
24.	Income Tax (Before Interest Tax Shield)	(15,558,579)	(15,903,683)	(15,902,493)	(15,902,796)	(15,902,669)	(15,902,136)
25.	Municipal Tax	(3,262,628)	(3,262,637)	(3,262,646)	(3,262,656)	(3,262,665)	(3,262,674)
26.	Capital Tax						
27.	Total Taxes	(18,821,207)	(19,166,320)	(19,165,139)	(19,165,451)	(19,165,334)	(19,164,810)
28.	PV of Total Taxes At Project Outset	(2,342,283)	(2,342,282)	(2,342,283)	(2,342,283)	(2,342,283)	(2,342,283)
29.	ACCUMULATED PV OF TOTAL TAXES	(57,203,743)	(57,946,995)	(58,179,069)	(58,347,362)	(58,520,646)	(58,694,323)
	ACCUMULATED NPV AND P						
30.	Net Present Value	640,894,144	646,556,951	651,889,435	656,912,161	661,643,751	667,432,377
31.	Profitability Index	1.704	1.710	1.716	1.721	1.727	1.730

Notes:

- (1) September 12 2013 is project outset as time 0.
- (2) Oct 1 2010 to Sep 12 2013 - Project planning and engineering.
- (3) Sep 12 2013 to Dec 31 2013, mid-term discounting. Discount period equals 3.6/12*0.5 = 0.15
- (4) Jan 1 to Dec 31 2014, mid-term discounting. Discount period equals 12/12*0.5+3.6/12 = 0.9
- (5) Year 1 - capital spending Jan 1 to Dec 31 2015, mid-term discounting. Discount period equals 12/12*0.5+1+3.6/12 = 1.80
- (6) 50% effectivity considered for the first year of customer additions revenue.
- (7) First year of customer additions revenues Jan 1 to Dec 31 2015. Discount period equals 12/12*0.5+1+3.6/12 = 1.80
- (8) Transportation savings and Transportation Services Charge start Oct 15, 2015, mid-term discounting. Discount period equals 2.5/12*0.5+9.5/12+1+3.6/12 = 2.196