

**COST/BENEFITS OF LAND USE OPTIONS
IN SCARBOROUGH**

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Prepared for:
Town of Scarborough Growth & Services Committee

Prepared by:
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As part of the Growth and Services project, Planning Decisions developed models that provide estimates of the fiscal costs/benefits of land use options. These include cost/benefit models for single-family subdivisions, condo & luxury apartments, multi-family units, parcels acquired for conservation of open space, retail commercial, large office commercial, and manufacturing. The cost/benefit balance sheets for each model are shown in Tables 1-7. Following the results of the models, the detailed model assumptions and data sources are presented.

The models present hypothetical land uses and development based on a sample of properties in Scarborough. Data for the sample profiles is from actual assessment data provided by the Town Assessing Office. **These models were designed for use by the Growth and Services Committee for developing policy options regarding future growth, development, services, and fiscal conditions in the community. The fiscal impacts of specific properties and land uses will vary from case to case based on numerous variables which include most notably, property valuation, households generated, enrollments generated, and impacts on the formula for State General Purpose Aid to Education. These models were not meant to be applied generically to specific properties or developments.**

The data presented in the tables provides an estimation of the annual current cost and benefits of land use types in Scarborough. The estimations are based on 1998 fiscal data (from the Audited Financial Statements of Scarborough) and current service, facility, staffing, and equipment levels and qualities in the community. In projecting future costs and benefits of development, potential significant changes in demands for these variables needs to be factored in, most notably, the impacts of development on future needs for school facilities.

Tables 1-3 present the results of the residential development models including single-family subdivisions, condo's, and multi-family units. Table 4 presents results of a model for preservation of open space and conservation land. This is modeled based on recent acquisitions of the Scarborough Land Trust. Tables 5-7 present the results of the commercial development models including corporate office, retail, and manufacturing.

The commercial models include two kinds of impacts: primary and secondary. The primary impacts represent direct costs and benefits that are driven by the property and its use (i.e. taxes paid, services received, impacts on formulas). The secondary impacts represent the impacts on residential development driven by employment added by business development. It should be noted that for each of the commercial development models, secondary impacts were estimated based on the estimated potential number of households that would locate in Scarborough and the net fiscal results of the single-family residential impact model. It should also be noted that secondary cost impacts may occur regardless of whether the development occurred within Scarborough or within nearby communities.

Findings

The following table summarizes the results of the fiscal cost/benefit models:

Summary of Annual Net Fiscal Impacts of Land Use Alternatives - Town of Scarborough

Land Use Alternative	Ann. Net Fiscal Impact (Benefits-Costs) in \$	Key factors driving results
Single-family Subdivision	-1,194 per unit	highest average valuation per unit of residential, but also highest number of pupils generated; net impact=added State school aid along with property tax revenues for education do not cover added school costs
Condo & Luxury Apartments	+597 per unit	slightly lower valuation per unit than single-family, but very few pupils generated; net impact=property tax revenues for education minus State School aid loss more than adequately cover added school cost; also no municipal costs associated with new roads and solid waste
Multi-family units	-1,282 per unit	low valuation per unit results in low property taxes received per unit, less pupils generated than single-family but more than condo; net impact=added State school aid along with property tax revenues for education do not cover added school costs
Open Space Conservation	+3 per acre	low direct fiscal benefits but extremely low direct costs; no school costs; net impact=slight net benefit, no major fiscal implications
Large Office	(per hypothetical business) primary +59,483 secondary -74,068 combined -14,584	high valuation generates significant property tax revenues but these are reduced by state & county formula impacts; large number of employees creates potential for significant residential demand which can lead to high negative secondary impacts; net fiscal impacts (primary)=fiscal benefit; (secondary)=fiscal loss, (combined)=potential fiscal loss unless secondary impacts can be minimized
Large Retail	(per hypothetical business) primary +11,405 secondary -10,802 combined +604	Lower valuation than office generates less property tax revenues but also less reduction in revenues through formula impacts; higher costs for public safety than other commercial alternatives; less secondary impacts than office as a result of fewer employees who would potentially be in the Scarborough housing market; net fiscal impacts (primary)=slight fiscal benefit; (secondary)=slight fiscal loss, (combined)=neutral to slight fiscal benefit
Manufac. (small to med size facility)	(per hypothetical business) primary +20,271 secondary -7,715 combined +12,556	lower valuation than office generates less property tax revenues but also has less reduction in revenues through formula impacts; lowest costs for public safety than other commercial alternatives; less secondary impacts than office and retail as a result of fewer employees who would potentially be in the Scarborough housing market; net fiscal

Issues & Implications of Cost/Benefits of Land Use Alternatives

Regarding Residential Development

Residential development that generates pupils results in net negative fiscal impacts. The potential negative fiscal impacts seem significant enough (as is the case of the single-family and multi-family models) to warrant consideration by the Growth & Services Committee of options for slowing the rate of residential growth and/or options for having more of the costs associated with residential development being born by households that drive costs. Options to consider include building permit limits, impact fees, reduction of land that is available for residential development, and increased user fees for services used by residences including rescue, recreation, extra-curricular school activities, and solid waste disposal. Residential development that does not produce significant number of pupils in relation to valuation can potentially be a net fiscal benefit for the community for example luxury condo or assisted living facilities.

Regarding Open Space

This land use option as modeled produced no significant fiscal implications (benefits or costs). However, if preservation of open space removes land that would otherwise be used for residential development, this option could lead to avoidance of negative fiscal impacts associated with single-family and multi-family development. This strategy needs to be evaluated in conjunction with concerns regarding personal property rights, land acquisition costs, and the potential of land for residential development.

Regarding Commercial Development

The primary fiscal benefits of commercial development are significantly reduced by impacts on formulas for State education aid, Revenue Sharing, and the County tax (on average Scarborough retains only 52% of property tax revenues generated by commercial development as a result of formula impacts). This finding warrants further consideration of utilizing mechanisms to reduce these formula impacts, most notably, Tax Increment Financing.

Costs to service commercial development will vary depending on the type of facility, business being conducted, number of employees, and location of the development. These factors warrant further evaluation when considering specific future development proposals.

Secondary negative impacts of commercial development (added employment leading to increased potential development) could become substantial and erode primary benefits depending on the types and wages of jobs added. Therefore, strategies to increase commercial development activity should be considered in conjunction with residential growth strategies. Based on the models presented, commercial development that has low secondary impacts and low potential service costs, offers the best fiscal opportunity for the community (see the manufacturing model).

Table 1: Cost Benefit Analysis - Town of Scarborough			
Development Profile		Single-Family Subdivision Built Since 1990	
1	Number of Residential Units	20	
2	Persons Per Residential Unit	3.2	
3	Total Persons Added from Development	64	
4	K-12 Enrollments Per Residential Unit	0.784	
5	K-12 Enrollments Added from Development	15.68	
6	Average Assessed Value per Housing Unit	\$180,000	
7	Total Assessed Value from Development	\$3,600,000	
8	Road Miles Added per Housing Unit	0.014	
9	Length of Road (Miles) Added from Development	0.28	
Net Annual Fiscal Impacts			
Annual Benefits			
10	Property Taxes @ 1998 Mill rate of 18.40	\$66,240	
11	Excise Taxes	\$7,074	
12	All Other Own-Source Revenues	\$7,781	
13	Total Own-Source Revenues		\$81,096
14	State GPA Education	\$26,334	
15	State Revenue Sharing	\$1,491	
16	All Other Intergovernmental	\$819	
17	Total Intergovernmental Revenues		\$28,644
18	Total Estimated Benefits		\$109,739
Annual Costs			
19	<i>General Government</i>	\$8,661	
20	<i>Public Services</i>	\$5,821	
21	<i>Public Safety</i>	\$8,162	
22	<i>Public Works</i>	\$7,404	
23	New Road Maintenance Costs	\$2,240	
24	Total Municipal Operating Costs	\$32,288	
25	Education Operating Costs	\$76,414	
26	Increase in County Tax	\$2,438	
27	Total Operating Costs		\$111,141
28	Municipal Debt Service	\$6,500	
29	School Debt Service	\$15,976	
30	Total Annual Debt Costs		\$22,476
31	Total Estimated Costs		\$133,616
32	Net Annual Impact (Benefits-Costs) for Development		(\$23,877)
33	Net Annual Impact Per Household		(\$1,194)

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Table 2: Cost Benefit Analysis - Town of Scarborough			
Development Profile		Condo & Luxury Apartment built since 1980	
1	Number of Residential Units	20	
2	Persons Per Residential Unit	2.0	
3	Total Persons Added from Development	40	
4	K-12 Enrollments Per Residential Unit	0.046	
5	K-12 Enrollments Added from Development	0.92	
6	Average Assessed Value per Housing Unit	\$150,000	
7	Total Assessed Value from Development	\$3,000,000	
8	Road Miles Added per Housing Unit	0	
9	Length of Road (Miles) Added from Development	0	
Net Annual Fiscal Impacts			
Annual Benefits			
10	Property Taxes @ 1998 Mill rate of 18.40	\$55,200	
11	Excise Taxes	\$7,074	
12	All Other Own-Source Revenues	\$6,687	
13	Total Own-Source Revenues		\$68,962
14	State GPA Education	(\$18,226)	
15	State Revenue Sharing	\$192	
16	All Other Intergovernmental	\$819	
17	Total Intergovernmental Revenues		(\$17,215)
18	Total Estimated Benefits		\$51,746
Annual Costs			
19	<i>General Government</i>	\$8,661	
20	<i>Public Services</i>	\$4,477	
21	<i>Public Safety</i>	\$8,162	
22	<i>Public Works</i>	\$4,551	
23	New Road Maintenance Costs	\$0	
24	Total Municipal Operating Costs	\$25,852	
25	Education Operating Costs	\$4,483	
26	Increase in County Tax	\$2,032	
27	Total Operating Costs		\$32,367
28	Municipal Debt Service	\$6,500	
29	School Debt Service	\$937	
30	Total Annual Debt Costs		\$7,437
31	Total Estimated Costs		\$39,804
32	Net Annual Impact (Benefits-Costs) for Development		\$11,942
33	Net Annual Impact Per Household		\$597

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Table 3: Cost Benefit Analysis - Town of Scarborough			
Development Profile		Multi-Family Complex built since 1970	
1	Number of Residential Units	20	
2	Persons Per Residential Unit	2.2	
3	Total Persons Added from Development	44	
4	K-12 Enrollments Per Residential Unit	0.346	
5	K-12 Enrollments Added from Development	6.92	
6	Average Assessed Value per Housing Unit	\$33,000	
7	Total Assessed Value from Development	\$660,000	
8	Road Miles Added per Housing Unit	0	
9	Length of Road (Miles) Added from Development	0	
Net Annual Fiscal Impacts			
Annual Benefits			
10	Property Taxes @ 1998 Mill rate of 18.40	\$12,144	
11	Excise Taxes	\$7,074	
12	All Other Own-Source Revenues	\$6,828	
13	Total Own-Source Revenues		\$26,047
14	State GPA Education	\$18,462	
15	State Revenue Sharing	\$2,823	
16	All Other Intergovernmental	\$819	
17	Total Intergovernmental Revenues		\$22,104
18	Total Estimated Benefits		\$48,150
Annual Costs			
19	<i>General Government</i>	\$8,661	
20	<i>Public Services</i>	\$4,701	
21	<i>Public Safety</i>	\$8,162	
22	<i>Public Works</i>	\$4,551	
23	New Road Maintenance Costs	\$0	
24	Total Municipal Operating Costs	\$26,076	
25	Education Operating Costs	\$33,724	
26	Increase in County Tax	\$447	
27	Total Operating Costs		\$60,246
28	Municipal Debt Service	\$6,500	
29	School Debt Service	\$7,051	
30	Total Annual Debt Costs		\$13,550
31	Total Estimated Costs		\$73,797
32	Net Annual Impact (Benefits-Costs) for Development		(\$25,646)
33	Net Annual Impact Per Household		(\$1,282)

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Table 4: Cost Benefit Analysis - Town of Scarborough			
Development Profile		Acquisition of Land for Conservation	
1	Acres Acquired	30	
2	Households Added from Open Space Parcel	0	
3	Persons Added from Open Space Parcel	0	
4	Enrollments Added from Open Space Parcel	0	
5	Average Assessed Value per Acre	\$267	
6	Assessed Value from Open Space Parcel	\$8,000	
7	Road Miles Added per Acre of Open Space	0	
8	Length of Road (Miles) Added from Open Space	0	
Net Annual Fiscal Impacts			
Annual Benefits			
9	Property Taxes @ 1998 Mill rate of 18.40	\$147	
10	Excise Taxes	\$0	
11	All Other Own-Source Revenues	\$3	
12	Total Own-Source Revenues		\$150
13	State GPA Education	(\$13)	
14	State Revenue Sharing	(\$8)	
15	All Other Intergovernmental	\$0	
16	Total Intergovernmental Revenues		(\$21)
17	Total Estimated Benefits		\$130
Annual Costs			
18	General Government	\$8	
19	Public Services	\$18	
20	Public Safety	\$8	
21	Public Works	\$1	
22	New Road Maintenance Costs	\$0	
23	Total Municipal Operating Costs	\$35	
24	Education Operating Costs	\$0	
25	Increase in County Tax	\$5	
26	Total Operating Costs		\$40
27	Municipal Debt Service	\$6	
28	School Debt Service	\$0	
29	Total Annual Debt Costs		\$6
30	Total Estimated Costs		\$46
31	Net Annual Impact (Benefits-Costs) for Open Space Parcel		\$84
32	Net Annual Impact Per Acre		\$3

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Table 5: Cost Benefit Analysis - Town of Scarborough

Development Profile		Hypothetical New Corporate Office	
1	Acres for Development	11	
2	Total Building Square Feet	100,000	
3	Employees Total	800	
4	Scarborough Resident Employees	120	
5	Total Assessed Value of Development	\$20,000,000	
6	Potential Households Added from Development	62	
7	Potential Persons Added from Development	199	
8	Potential Enrollments Added from Development	49	
9	Road Miles Added from Development (Primary)	0	
Net Annual Fiscal Impacts (Primary excl. residential impacts)			
Annual Primary Benefits			
10	Property Taxes @ 1998 Mill rate of 18.40	\$368,000	
11	Excise Taxes	\$44,507	
12	All Other Own-Source Revenues	\$28,905	
13	Total Own-Source Revenues	\$441,412	
14	State GPA Education	(\$140,628)	
15	State Revenue Sharing	(\$19,453)	
16	All Other Intergovernmental	\$6,532	
17	Total Intergovernmental Revenues	(\$153,549)	
18	Total Estimated Primary Benefits		\$287,863
Annual Primary Costs			
19	General Government	\$55,054	
20	Public Services	\$10,606	
21	Public Safety	\$52,259	
22	Public Works	\$55,312	
23	New Road Maintenance Costs	\$0	
24	Total Municipal Operating Costs	\$173,231	
25	Education Operating Costs	\$0	
26	Increase in County Tax	\$13,533	
27	Total Operating Costs	\$186,764	
28	Municipal Debt Service	\$41,616	
29	School Debt Service	\$0	
30	Total Annual Debt Costs	\$41,616	
31	Total Estimated Primary Costs		\$228,380
32	Net Annual Primary Impact (Benefits-Costs) for Development		\$59,483
33	Net Annual Secondary Impact from Residential Development		(\$74,068)
34	Net Annual Primary & Secondary Impact from Development		(\$14,584)

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Table 6: Cost Benefit Analysis - Town of Scarborough			
Development Profile		Hypothetical Large Retail Development	
1	Acres for Development	12	
2	Total Building Square Feet	75,000	
3	Employees Total	175	
4	Scarborough Resident Employees	18	
5	Total Assessed Value of Development	\$6,000,000	
6	Potential Households Added from Development	9	
7	Potential Persons Added from Development	29	
8	Potential Enrollments Added from Development	7	
9	Road Miles Added from Development (Primary)	0	
Net Annual Fiscal Impacts (Primary excl. residential impacts)			
Annual Primary Benefits			
10	Property Taxes @ 1998 Mill rate of 18.40	\$110,400	
11	Excise Taxes	\$13,352	
12	All Other Own-Source Revenues	\$8,671	
13	Total Own-Source Revenues		\$132,424
14	State GPA Education	(\$42,284)	
15	State Revenue Sharing	(\$5,906)	
16	All Other Intergovernmental	\$1,960	
17	Total Intergovernmental Revenues		(\$46,230)
18	Total Estimated Primary Benefits		\$86,193
Annual Primary Costs			
19	<i>General Government</i>	\$16,516	
20	<i>Public Services</i>	\$3,182	
21	<i>Public Safety</i>	\$21,949	
22	<i>Public Works</i>	\$16,594	
23	New Road Maintenance Costs	\$0	
24	Total Municipal Operating Costs	\$58,240	
25	Education Operating Costs	\$0	
26	Increase in County Tax	\$4,063	
27	Total Operating Costs		\$62,303
28	Municipal Debt Service	\$12,485	
29	School Debt Service	\$0	
30	Total Annual Debt Costs		\$12,485
31	Total Estimated Primary Costs		\$74,788
32	Net Annual Primary Impact (Benefits-Costs) for Development		\$11,405
33	Net Annual Secondary Impact from Residential Development		(\$10,802)
34	Net Annual Primary & Secondary Impact from Development		\$604

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Table 7: Cost Benefit Analysis - Town of Scarborough			
Development Profile		Hypothetical Manufacturing Development	
1	Acres for Development	7	
2	Total Building Square Feet	55,000	
3	Employees Total	125	
4	Scarborough Resident Employees	13	
5	Total Assessed Value of Development	\$5,000,000	
6	Potential Households Added from Development	6	
7	Potential Persons Added from Development	21	
8	Potential Enrollments Added from Development	5	
9	Road Miles Added from Development (Primary)	0	
Net Annual Fiscal Impacts (Primary excl. residential impacts)			
Annual Primary Benefits			
10	Property Taxes @ 1998 Mill rate of 18.40	\$92,000	
11	Excise Taxes	\$11,127	
12	All Other Own-Source Revenues	\$7,226	
13	Total Own-Source Revenues		\$110,353
14	State GPA Education	(\$34,917)	
15	State Revenue Sharing	(\$4,926)	
16	All Other Intergovernmental	\$1,633	
17	Total Intergovernmental Revenues		(\$38,210)
18	Total Estimated Primary Benefits		\$72,143
Annual Primary Costs			
19	<i>General Government</i>	\$13,763	
20	<i>Public Services</i>	\$2,652	
21	<i>Public Safety</i>	\$7,839	
22	<i>Public Works</i>	\$13,828	
23	New Road Maintenance Costs	\$0	
24	Total Municipal Operating Costs	\$38,082	
25	Education Operating Costs	\$0	
26	Increase in County Tax	\$3,386	
27	Total Operating Costs		\$41,468
28	Municipal Debt Service	\$10,404	
29	School Debt Service	\$0	
30	Total Annual Debt Costs		\$10,404
31	Total Estimated Primary Costs		\$51,872
32	Net Annual Primary Impact (Benefits-Costs) for Development		\$20,271
33	Net Annual Secondary Impact from Residential Development		(\$7,715)
34	Net Annual Primary & Secondary Impact from Development		\$12,556

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Detailed Municipal & School Revenues & Expenditures - 1998 by Land Use Category - Town of Scarborough

Fiscal Variable	1998	Residential %	Residential \$	Res Per Household	Commercial %	Commercial \$	Comm Per \$ of Val	% Open Space	\$ Open Open	Open \$ per Acre
REVENUES										
Own Source Revenues										
Taxes										
Property taxes	32,302,598	79.987%	25,837,945	4,439	19.974%	6,452,001	0.0233452	0.039%	12,652	1.9724908
Changes in deferred property tax revenue	27,229,558	77.499%	21,102,528	3,625	22.457%	6,114,993	0.0221258	0.044%	12,037	1.8767149
Excise taxes	25,014,790	76.686%	19,182,749	3,295	23.268%	5,820,424	0.0210599	0.046%	11,617	1.8112215
Interest & cost on taxes	21,890,693	76.648%	16,778,778	2,882	23.300%	5,100,531	0.0184552	0.052%	11,383	1.7747366
Licenses & Permits										
Plumbing fees	296,194	76.648%	227,027	39	23.300%	69,013	0.0002497	0.052%	154	0.0240132
Town Clerk fees	2,674,069	77.000%	2,059,033	354	23.000%	615,036	0.0022254	0.000%	0	0.0000000
Building permits	153,834	76.648%	117,911	20	23.300%	35,843	0.0001297	0.052%	80	0.0124717
Electrical permits	385,785	78.046%	301,091	52	21.954%	84,694	0.0003064	0.000%	0	0.0000000
Zoning Board of Appeals	16,461	77.000%	12,675	2	23.000%	3,786	0.0000137	0.000%	0	0.0000000
License plate fees	55,070	77.000%	42,404	7	23.000%	12,666	0.0000458	0.000%	0	0.0000000
Subdivision fees	212,463	77.000%	163,597	28	23.000%	48,866	0.0001768	0.000%	0	0.0000000
Education state subsidies	18,508	77.000%	14,251	2	23.000%	4,257	0.0000154	0.000%	0	0.0000000
State Revenue Sharing	6,283	77.000%	4,838	1	23.000%	1,445	0.0000052	0.000%	0	0.0000000
State property tax relief block grant	59,450	77.000%	45,777	8	23.000%	13,674	0.0000495	0.000%	0	0.0000000
D.O.T. block grant	17,550	100.000%	17,550	3	0.000%	0	0.0000000	0.000%	0	0.0000000
General assistance reimbursement	5,073,040	93.345%	4,735,417	814	6.643%	337,008	0.0012194	0.012%	614	0.0957758
Emergency Management Agency revenues	3,685,481	100.000%	3,685,481	633	0.000%	0	0.0000000	0.000%	0	0.0000000
COPS Fast Grant	1,059,009	76.648%	811,709	139	23.300%	246,749	0.0008928	0.052%	551	0.0858567
Community Development Block Grant	154,380	60.000%	92,628	16	40.000%	61,752	0.0002234	0.000%	0	0.0000000
Other Federal, State & County revenues	37,246	100.000%	37,246	6	0.000%	0	0.0000000	0.000%	0	0.0000000
Federal emergency management agency revenue	14,575	100.000%	14,575	3	0.000%	0	0.0000000	0.000%	0	0.0000000
State comprehensive planning grant	17,921	76.648%	13,736	0	23.300%	0	0.0000000	0.052%	0	0.0000000
Interest Earned										
Unclassified										
Clam flat revitalization	79,400	76.648%	60,859	10	23.300%	18,500	0.0000669	0.052%	41	0.0064372
School Department	25,028	76.648%	19,183	3	23.300%	5,832	0.0000211	0.052%	13	0.0020291
Adult education	265,505	76.648%	203,504	35	23.300%	61,863	0.0002238	0.052%	0	0.0000000
Community services	1,563,478	90.515%	1,415,184	243	9.467%	148,012	0.0005355	0.018%	282	0.0439682
Police court time	115,163	76.648%	88,000	0	23.300%	0	0.0000000	0.052%	0	0.0000000
Beaches	10,482	100.000%	10,482	2	0.000%	0	0.0000000	0.000%	0	0.0000000
Insurance reimbursements	658,684	100.000%	658,684	113	0.000%	0	0.0000000	0.000%	0	0.0000000
Cemeteries	7,639	76.648%	5,855	1	23.300%	1,780	0.0000064	0.052%	4	0.0006193
Parking violations	64,886	76.648%	49,734	9	23.300%	15,118	0.0000547	0.052%	34	0.0052605
Special police	37,803	80.000%	30,242	5	20.000%	7,561	0.0000274	0.000%	0	0.0000000
	455	100.000%	455	0	0.000%	0	0.0000000	0.000%	0	0.0000000
	9,500	77.000%	7,315	1	23.000%	2,185	0.0000079	0.000%	0	0.0000000
	91,254	76.648%	69,944	12	23.300%	21,262	0.0000769	0.052%	47	0.0073982

Detailed Municipal & School Revenues & Expenditures - 1998 by Land Use Category - Town of Scarborough

Fiscal Variable	1998	Residential %	Residential \$	Res Per Household	Commercial %	Commercial \$	Comm Per \$ of Val	% Open Space	\$ Open	Open \$ per Acre
Inspection/review fees	51,754	77.00%	39,851	7	23.00%	11,903	0.000431	0.00%	0	0.000000
Rescue donations	198,300	76.64%	151,993	26	23.30%	46,204	0.0001672	0.052%	103	0.0160767
Regional Waste PILOT	71,450	100.00%	71,450	12	0.00%	0	0.0000000	0.00%	0	0.0000000
Sale of land and buildings		76.64%	0	0	23.30%	0	0.0000000	0.052%	0	0.0000000
Library revenue		100.00%	0	0	0.00%	0	0.0000000	0.00%	0	0.0000000
Rental income	64,006	76.64%	49,059	8	23.30%	14,913	0.000540	0.052%	33	0.0051891
Sale of town owned property	20,000	76.64%	15,330	3	23.30%	4,660	0.000169	0.052%	10	0.0016215
Rental of portable classrooms	65,856	100.00%	65,856	11	0.00%	0	0.0000000	0.00%	0	0.0000000
Miscellaneous	96,246	76.64%	73,771	13	23.30%	22,425	0.000811	0.052%	50	0.0078029
EXPENDITURES TOTAL	30,812,583	89.654%	27,624,821	4,746	10.316%	3,178,532	0.0115008	0.030%	9,231	1.4391647
EXPEND - Excl Capital & Debt	25,526,285	89.770%	22,914,881	3,937	10.199%	2,603,456	0.0094200	0.031%	7,947	1.2390664
General Government	3,190,996	76.781%	2,450,073	421	23.167%	739,273	0.0026749	0.052%	1,650	0.2572309
Town Council	11,112	76.64%	8,517	1	23.30%	2,589	0.0000094	0.052%	6	0.0009009
Administration	647,052	76.64%	495,952	85	23.30%	150,763	0.0005455	0.052%	336	0.0524582
Code enforcement/planner	288,082	76.64%	220,809	38	23.30%	67,123	0.0002429	0.052%	150	0.0233556
Assessing department	113,807	76.64%	87,231	15	23.30%	26,517	0.0000959	0.052%	59	0.0092266
Voter registration	18,152	100.00%	18,152	3	0.00%	0	0.0000000	0.00%	0	0.0000000
Personnel benefits	1,055,354	76.64%	808,908	139	23.30%	245,897	0.0008897	0.052%	549	0.0855603
Computer systems management	194,006	76.64%	148,702	26	23.30%	45,203	0.0001636	0.052%	101	0.0157286
Utilities	184,215	76.64%	141,197	24	23.30%	42,922	0.0001553	0.052%	96	0.0149348
General government	89,693	76.64%	68,748	12	23.30%	20,898	0.0000756	0.052%	47	0.0072716
Town Hall	107,034	76.64%	82,039	14	23.30%	24,939	0.0000902	0.052%	56	0.0086775
Boards and committees	24,274	76.64%	18,606	3	23.30%	5,656	0.0000205	0.052%	13	0.0019680
Legal	142,137	76.64%	108,945	19	23.30%	33,118	0.0001198	0.052%	74	0.0115234
Insurance	248,411	76.64%	190,402	33	23.30%	57,880	0.0002094	0.052%	129	0.0201393
Outside requests	67,667	76.64%	51,865	9	23.30%	15,766	0.0000570	0.052%	35	0.0054859
Public Services	1,844,690	91.841%	1,694,175	291	7.945%	146,566	0.0005303	0.214%	3,949	0.6157315
Library	382,552	100.00%	382,552	66	0.00%	0	0.0000000	0.00%	0	0.0000000
Community health, welfare and human resources	119,760	100.00%	119,760	21	0.00%	0	0.0000000	0.00%	0	0.0000000
Cemetery care	19,524	100.00%	19,524	3	0.00%	0	0.0000000	0.00%	0	0.0000000
Memorials	3,735	100.00%	3,735	1	0.00%	0	0.0000000	0.00%	0	0.0000000
Ferry Beach, Pine Pt. Beach, Hurd Park	20,550	76.64%	15,751	3	23.30%	4,788	0.0000173	0.052%	11	0.0016660
Conservation Commission	605	80.00%	484	0	0.00%	0	0.0000000	20.00%	121	0.0188650
Community Development working capital loan	79,400	76.64%	60,859	10	23.30%	18,500	0.0000669	0.052%	41	0.0064372
Economic Development Corporation	113,094	0.00%	0	0	100.0%	113,094	0.0004092	0.0%	0	0.0000000
Open space	18,768	80.00%	15,014	3	0.00%	0	0.0000000	20.00%	3,754	0.5852198
Shellfish conservation	43,707	76.64%	33,501	6	23.30%	10,184	0.0000368	0.052%	23	0.0035434
Community services	1,042,995	100.00%	1,042,995	179	0.00%	0	0.0000000	0.00%	0	0.0000000
Public Safety	3,099,380	76.648%	2,375,613	408	23.300%	722,156	0.0026130	0.052%	1,612	0.2512750
Fire Department	675,729	76.648%	517,933	89	23.30%	157,445	0.0005697	0.052%	351	0.0547831

Detailed Municipal & School Revenues & Expenditures - 1998 by Land Use Category - Town of Scarborough

Fiscal Variable	1998	Residential %	Residential \$	Res Per Household	Commercial %	Commercial \$	Comm Per \$ of Val	% Open Space	\$ Open	Open Acres
Police Department	1,986,137	76.648%	1,522,334	262	23.300%	462,770	0.0016744	0.052%	1,033	0.1610214
Civil Emergency Preparedness	21,530	76.648%	16,502	3	23.300%	5,016	0.000182	0.052%	11	0.0017455
Harbor Master	13,512	76.648%	10,357	2	23.300%	3,148	0.000114	0.052%	7	0.0010955
Rescue protection	402,472	76.648%	308,487	53	23.300%	93,776	0.0003393	0.052%	209	0.0326295
Public Works	2,919,588	73.813%	2,155,030	370	26.180%	764,337	0.0027656	0.008%	221	0.0344089
Public works department	1,662,019	60.000%	997,211	171	40.0%	664,808	0.0024055	0.0%	0	0.0000000
Care of beaches	30,000	76.648%	22,994	4	23.300%	6,990	0.000253	0.052%	16	0.0024322
Pine Point town landing	581	76.648%	445	0	23.300%	135	0.000005	0.052%	0	0.0000471
Water charges	153,438	76.648%	117,607	20	23.300%	35,751	0.0001294	0.052%	80	0.0124396
Street lighting	127,172	76.648%	97,475	17	23.300%	29,631	0.0001072	0.052%	66	0.0103102
Traffic signals	97,955	76.648%	75,081	13	23.300%	22,824	0.0000826	0.052%	51	0.0079415
Shade trees	2,780	77.000%	2,141	0	23.300%	639	0.0000023	0.000%	0	0.0000000
Special projects	499	76.648%	382	0	23.300%	116	0.0000004	0.052%	0	0.0000405
Engineering services	14,776	76.648%	11,326	2	23.300%	3,443	0.0000125	0.052%	8	0.0011979
Solid waste disposal & collection	830,368	100.000%	830,368	143	0.000%	0	0.0000000	0.000%	0	0.0000000
Education	16,297,842	100.000%	16,297,842	2,800	0.000%	0	0.0000000	0.000%	0	0.0000000
Education - excluding debt service	13,479,679	100.000%	13,479,679	2,316	0.000%	0	0.0000000	0.000%	0	0.0000000
Regular high school (9-12)	2,428,711	100.000%	2,428,711	417	0.000%	0	0.0000000	0.000%	0	0.0000000
Regular middle school (6-8)	2,077,121	100.000%	2,077,121	357	0.000%	0	0.0000000	0.000%	0	0.0000000
Regular elementary school (3-5)	1,836,878	100.000%	1,836,878	316	0.000%	0	0.0000000	0.000%	0	0.0000000
Regular elementary school (K-2)	1,854,498	100.000%	1,854,498	319	0.000%	0	0.0000000	0.000%	0	0.0000000
Special services	1,994,020	100.000%	1,994,020	343	0.000%	0	0.0000000	0.000%	0	0.0000000
Transportation	633,085	100.000%	633,085	109	0.000%	0	0.0000000	0.000%	0	0.0000000
Maintenance	1,028,370	100.000%	1,028,370	177	0.000%	0	0.0000000	0.000%	0	0.0000000
Central office	500,899	100.000%	500,899	86	0.000%	0	0.0000000	0.000%	0	0.0000000
Debt service	2,818,163	100.000%	2,818,163	484	0.000%	0	0.0000000	0.000%	0	0.0000000
System wide	865,259	100.000%	865,259	149	0.000%	0	0.0000000	0.000%	0	0.0000000
Computer systems management	174,258	100.000%	174,258	30	0.000%	0	0.0000000	0.000%	0	0.0000000
Adult education	86,580	100.000%	86,580	15	0.000%	0	0.0000000	0.000%	0	0.0000000
County Tax	899,690	76.648%	689,594	118	23.300%	209,628	0.0007585	0.052%	468	0.0729403
Tax Abatements	92,262	76.648%	70,717	12	23.300%	21,497	0.0000778	0.052%	48	0.0074799
Debt Service (excluding education)	2,468,135	76.648%	1,891,776	325	23.300%	575,075	0.0020808	0.052%	1,283	0.2000983
Principal	1,551,244	76.648%	1,188,998	204	23.300%	361,440	0.0013078	0.052%	807	0.1257635
Interest	916,891	76.648%	702,779	121	23.300%	213,636	0.0007730	0.052%	477	0.0743348
NET IMPACT(REV-EXPEND)			(1,786,875)	(307)		3,273,469	0.0118443		3,421	0.5333261

Source: Annual Financial Reports, Town of Scarborough

Cost & Revenue Allocation factors

Residential % of Valuation		76.648%
Commercial & Industrial % of Valuation		23.300%
Open Space % of Valuation		0.052%
Residential % factor w/ open space excl.		77%
Comm & Ind % factor w/ open space excl.		23%
# of estimated Households -1998	5,821	
Total Valuation Commercial -1998	276,374,185	
Total Acreage Open Space - 1999 est	6,414	

note: cost and revenue allocation factors have been selected by Planning Decisions based on several sources including % of valuation by land use category from Town Assessing Office & 1997 Jeremy Wintersteen study, "Economics of Land Conservation, A Study of Scarborough Maine"; or a factor derived from interviews with Department heads.

note: commercial includes all property that is used for commercial, industrial, or any other business uses.

note: these figures represent the average net impact of the land use category based on 1998 financial data; the net impacts of individual properties will vary and the average impact over time changes as a result of changes in marginal costs and benefits from a given change in land use

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
1 Scarborough Total Population	14,843	1998	Estimated by Planning Decisions
2 Scarborough Total Households	5,821	1998	Estimated by Planning Decisions
3 Scarborough Total K-12 Enrollments	2,766	1998-99	October 1st District Enrollment Report from Scarborough School Department
4 Scarborough Total K-8 Enrollments	2,058	1998-99	October 1st District Enrollment Report from Scarborough School Department
5 Scarborough Total 9-12 Enrollments	708	1998-99	October 1st District Enrollment Report from Scarborough School Department
6 Persons Per Household (Single-Family)	3.2	1990	Based on National Association of Home Buyers Profile of the New Home Buyer, 1990 household size for U.S. single-family homes selling for \$150,000+
7 Persons Per Household (Condo & Luxury Apartment)	2.0	recent	Estimated by Planning Decisions based on 1990 NAHB Profile of New Home Buyers for single-family attached homes & students per household from Scarborough Facility Study
8 ratio Person Per HH condo: single-family	0.625	recent	calculated by Planning Decisions
9 Persons Per Household (Multi-family Apartment)	2.2	1997	American Housing Survey, U.S. Census, Household Size for Renter Occupied Homes
10 ratio Person Per HH multi: single-family	0.688	recent	calculated by Planning Decisions
11 K-12 Enrollments Per Household (Single-Family)	0.784	1998	Based on enrollments per housing unit for selected single-family subdivisions in Scarborough built since 1985; & 1998-99 enrollment data, study conducted by Planning Decisions for Scarborough Facilities Study, Winter 1999
12 K-12 Enrollments Per Household (Condo & Luxury Apartment)	0.046	1998	Based on enrollments per housing unit for selected condo & apartment units in Scarborough built since 1985; & 1998-99 enrollment data, study conducted by Planning Decisions for Scarborough Facilities Study, Winter 1999
13 K-12 Enrollments Per Household (Multi-family)	0.346	1998	Based on enrollments per housing unit for selected apartment units in Scarborough built since 1970; & 1998-99 enrollment data, study conducted by Planning Decisions for Scarborough Facilities Study, Winter 1999
14 Total Employment within Scarborough (regardless of place of residence)	6,658	1990	U.S. Census Commuting Data

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
15 Scarborough Resident Employment that Works in Scarborough	1,718	1990	U.S Census Commuting Data
16 % of Employment Within Scarborough that Lives in Scarborough	25.8%	1990	U.S Census Commuting Data
17 Winter Road Miles - Scarborough	133	1994	Town of Scarborough Comprehensive Plan, 1994
18 Summer Road Miles - Scarborough	107	1994	Town of Scarborough Comprehensive Plan, 1994
19 Average Road Miles - Scarborough	120	1994	Town of Scarborough Comprehensive Plan, 1994
20 New Public Road Miles Per New Housing Unit (subdivision development)	0.014	current	Based on 150 feet of frontage shared between 2 homes; from Town Planner
21 New Public Road Miles Per New Housing Unit (condo development)	0	current	based on assumption that all new roads will be private
22 New Public Road Miles Per New Housing Unit (Apartment)	0	current	based on assumption that all new roads will be private
23 New Public Road Miles Added Per Acre of Open Space	0	current	based on assumption that new new public roads would be added to service open space
24 New Public Road Miles Added Per new commercial development	0	current	based on assumption that new new public roads would be added to service new commercial development
25 Total Open Space Acreage - Scarborough excluding active recreation	6,414	1994	Jeremy Wintersteen Study, Economics of Land Conservation-A Study of Scarborough Maine plus recent Libby River Farm Acquisition minus active recreation areas (playgrounds)
26 Total Assessed Value (Local) - Scarborough	\$1,186,155,300	1998	Town of Scarborough Annual Financial Reports
27 Residential Value \$ - Scarborough	\$909,164,314	1998	Estimated by Planning Decisions based on current percentage of valuation that is residential vs commercial from Town Assessing Office & open space estimate from 1997 study by Jeremy Wintersteen
28 Commercial & Industrial Value \$ - Scarborough	\$276,374,185	1998	Estimated by Planning Decisions based on current percentage of valuation that is residential vs commercial from Town Assessing Office & open space estimate from 1997 study by Jeremy Wintersteen

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
29 Open Space Value \$ - Scarborough	\$616,801	1998	Estimated by Planning Decisions based on current percentage of valuation that is residential vs commercial from Town Assessing Office & open space estimate from 1997 study by Jeremy Winterstein
30 Residential Value % - Scarborough	76.648%	1998	Estimated by Planning Decisions based on current percentage of valuation that is residential vs commercial from Town Assessing Office & open space estimate from 1997 study by Jeremy Winterstein
31 Commercial & Industrial Value % - Scarborough	23.300%	1998	Estimated by Planning Decisions based on current percentage of valuation that is residential vs commercial from Town Assessing Office & open space estimate from 1997 study by Jeremy Winterstein
32 Open Space Value % - Scarborough	0.052%	1998	Estimated by Planning Decisions based on current percentage of valuation that is residential vs commercial from Town Assessing Office & open space estimate from 1997 study by Jeremy Winterstein
33 Residential Value % factor when open space excluded - Scarborough	77%	1998	Estimated by Town Assessor's Office
34 Commercial & Industrial Value % factor open space excl - Scarborough	23%	1998	Estimated by Town Assessor's Office
35 Average Assessed Value of a Single-Family Unit (built since 1990)	\$180,000	1998	From Assessor's database, 1998 data, based on single-family homes built since 1985
36 Average Assessed Value of a Condo Unit	\$150,000	1998	From Assessor's database, 1998 data, based on condo's built since 1979
37 Average Assessed Value of an Apartment Unit	\$33,000	1998	From Assessor's database, 1998 data, based on apartments built since 1970
38 Tax Rate Local	0.0184	1998	Town of Scarborough Annual Financial Reports
39 Excise Tax Revenues	\$2,674,069	1998	Town of Scarborough Annual Financial Reports
40 Residential Excise Tax Revenues per household	\$354	1998	estimated by Planning Decisions based on 1998 total excise taxes, % tax that is residential, and 1998 estimated households
41 Excise Tax Revenues per Acre of Open Space	\$0	1998	estimated by Planning Decisions based on 1998 total excise taxes, % tax that is open space related households
42 Excise Tax Revenues per \$ of commercial valuation	\$0.0022254	1998	estimated by Planning Decisions based on 1998 total excise taxes, % tax that is commercial and total commercial valuation in Scarborough

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
43 All Other Own-Source Revenues (excl prop, excise, and intergov.)	\$2,664,796	1998	estimated by Planning Decisions based on 1998 total own source revenues excluded property and excise and % residential factor
44 All Other Own-Source Revenues Resid PHH (excl prop, excise, and intergov)	\$389	1998	estimated by Planning Decisions based on 1998 total own source revenues excluded property and excise.% residential factor. and 1998 households
45 All Other Own-Source Rev Cond PHH (excl prop, exc. inter. RWS PILOT & adj.comm serv revs)	\$334	1998	estimated by Planning Decisions based on 1998 total own source revenues excluded property, excise, & Regional Waste Pilot; % residential factor, and 1998 households, & community service condo adjustment
46 All Other Own-Source Rev Apart PHH (excl prop, exc. inter. RWS PILOT & adj.comm serv revs)	\$341	1998	estimated by Planning Decisions based on 1998 total own source revenues excluded property, excise, & Regional Waste Pilot; % residential factor, and 1998 households & community service apartment adjustment
47 All Other Own-Source Open Space Per Acre	\$0.1019784	1998	estimated by Planning Decisions based on 1998 total own source revenues excluded property and excise.% open space factor. and 1998 estimated open space acreage
48 All Other Own-Source Commercial Per \$ of Valuation	\$0.0014452	1998	estimated by Planning Decisions based on 1998 total own source revenues excluded property and excise.% commercial factor. and 1998 total commercial valuation
49 State Revenue Sharing Revenues Base	\$1,059,009	1998	Town of Scarborough Annual Financial Reports
50 Residential State Revenue Sharing Revenues PHH (Base)	\$139	1998	estimated by Planning Decisions based on 1998 total rev shar, % residential factor, and 1998 households
51 Change in State Revenue Sharing Revenues (Single-Family)	\$1,491	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new sf units with average value of \$180,000
52 Change in State Revenue Sharing Revenues PHH Residential (Single-Family)	\$75	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new sf units with average value of \$180,000 expressed per unit
53 Change in State Revenue Sharing Revenues (Condo)	\$192	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new condo units with average value of \$150,000 and 2 persons per HH
54 Change in State Revenue Sharing Revenues PHH Residential (Condo)	\$10	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new condo units with average value of \$150,000 expressed per unit and 2 person per HH
55 Change in State Revenue Sharing Revenues (Apartment)	\$2,823	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new apartment units with average value of \$33,000 and 2.2 persons per unit
56 Change in State Revenue Sharing Revenues PHH Residential (Apartment)	\$141	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new apartment units with average value of \$33,000 expressed per unit

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
57 Open Space Revenue Sharing Revenues Per acre (base)	\$0.0858567	1998	estimated by Planning Decisions based on 1998 total rev shar, % open space factor and open space acreage
58 Change in State Revenue Sharing Revenues (Open Space)	(\$8)	1998	estimated by Planning Decisions from in-house formula worksheet based on 30 acres added open space and \$267 of value per acre
59 Change in State Revenue Sharing Revenues per Acre (Open Space)	(\$0.2666667)	1998	estimated by Planning Decisions from in-house formula worksheet based on 30 acres added open space and \$267 of value per acre expressed per acre
60 Commercial Revenue Sharing Revenues Per \$ of Valuation (base)	\$0.0008928	1998	estimated by Planning Decisions based on 1998 total rev shar, % commercial factor and commercial valuation
61 Change in State Revenue Sharing Revenues (office)	(\$19,453)	1998	estimated by Planning Decisions from in-house formula worksheet based on \$20,000,000 valuation added
62 Change in State Revenue Sharing Revenues per \$ of Valuation (office)	(\$0.0009727)	1998	estimated by Planning Decisions from in-house formula worksheet based on \$20,000,000 valuation added expressed per \$ of valuation
63 Change in State Revenue Sharing Revenues (Retail)	(\$5,906)	1998	estimated by Planning Decisions from in-house formula worksheet based on \$6,000,000 valuation added
64 Change in State Revenue Sharing Revenues per \$ of Valuation (Retail)	(\$0.0009843)	1998	estimated by Planning Decisions from in-house formula worksheet based on \$6,000,000 valuation added expressed per \$ of valuation
65 Change in State Revenue Sharing Revenues (manufacturing)	(\$4,926)	1998	estimated by Planning Decisions from in-house formula worksheet based on \$5,000,000 valuation added
66 Change in State Revenue Sharing Revenues per \$ of Valuation (manufacturing)	(\$0.0009852)	1998	estimated by Planning Decisions from in-house formula worksheet based on \$5,000,000 valuation added expressed per \$ of valuation
67 State GPA Base	\$3,685,481	1998	Town of Scarborough Annual Financial Reports
68 Residential GPA PHH (Base)	\$633	1998	estimated by Planning Decisions based on 1998 total GPA, % that is residential, and 1998 estimated households
69 Residential GPA Per Pupil (Base)	\$1,332	1998	estimated by Planning Decisions based on 1998 total GPA, % that is residential, and 1998 k-12 enrollments
70 Change in GPA (Single-Family)	\$26,334	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new sf units with average value of \$180,000 and .784 students per HDD

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
71 Change in GPA PHH Residential (Single-Family)	\$1,317	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new sf units with average value of \$180,000 and .784 students per HHD expressed per household
72 Change in GPA Per Pupil Residential (Single-Family)	\$1,679	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new sf units with average value of \$180,000 and .784 students per HHD expressed per pupil
73 Change in GPA (Condo)	(\$18,226)	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new condo units with average value of \$150,000 and .046 students per HHD
74 Change in GPA PHH Residential (Condo)	(\$911)	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new condo units with average value of \$150,000 and .046 students per HHD expressed per household
75 Change in GPA Per Pupil Residential (Condo)	(\$19,811)	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new condo units with average value of \$150,000 and .046 students per HHD expressed per pupil
76 Change in GPA (Apartment)	\$18,462	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new apartment units with average value of \$33,000 and .346 students per HHD
77 Change in GPA PHH Residential (Apartment)	\$923	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new apartment units with average value of \$33,000 and .346 students per HHD expressed per HH
78 Change in GPA Per Pupil Residential (Apartment)	\$2,668	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new apartment units with average value of \$33,000 and .346 students per HHD expressed per pupil
79 Change in GPA (Open Space)	(\$12.88)	1998	estimated by Planning Decisions from in-house formula worksheet based on 30 acres of acquired open space with average value of \$267 per acre and no pupil impacts
80 Change in GPA Open Space Per Acre	(\$0.4293333)	1998	estimated by Planning Decisions from in-house formula worksheet based on 30 acres of acquired open space with average value of \$267 per acre and no pupil impacts expressed per acre
81 Change in GPA (Office)	(\$140,628)	1998	estimated by Planning Decisions from in-house formula worksheet based on \$20,000,000 of valuation added and no pupil impacts
82 Change in GPA per \$ of Valuation (Office)	(\$0.0070314)	1998	estimated by Planning Decisions from in-house formula worksheet based on \$20,000,000 of valuation added and no pupil impacts expressed per \$ of valuation
83 Change in GPA (Retail)	(\$42,284)	1998	estimated by Planning Decisions from in-house formula worksheet based on \$6,000,000 of valuation added and no pupil impacts
84 Change in GPA per \$ of Valuation (Retail)	(\$0.0070473)	1998	estimated by Planning Decisions from in-house formula worksheet based on \$6,000,000 of valuation added and no pupil impacts expressed per \$ of valuation

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
85 Change in GPA (Manufacturing)	(\$34,917)	1998	estimated by Planning Decisions from in-house formula worksheet based on \$5,000,000 of valuation added and no pupil impacts
86 Change in GPA per \$ of Valuation (Manufacturing)	(\$0.0069834)	1998	estimated by Planning Decisions from in-house formula worksheet based on \$5,000,000 of valuation added and no pupil impacts expressed per \$ of valuation
87 All Other Intergov (excl GPA and rev shar)	\$328,550	1998	estimated by Planning Decisions based on 1998 total intergov revenues excluded GPA and rev shar and % residential factor
88 All Other Intergov Residential PHH (excl GPA and rev shar)	\$41	1998	estimated by Planning Decisions based on 1998 total intergov revenues excluded GPA and rev shar, % residential factor, and 1998 households
89 All Other Intergov Open Space per acre (excl GPA and rev shar)	\$0.0099192	1998	estimated by Planning Decisions based on 1998 total intergov revenues excluded GPA and rev shar, % open space factor and estimated total open space acreage
90 All Other Intergov Commercial per \$ of valuation (excl GPA and rev shar)	\$0.0003266	1998	estimated by Planning Decisions based on 1998 total intergov revenues excluded GPA and rev shar, % commercial factor and total commercial valuation
91 Municipal Operating Costs - Total incl. Tax Abate-ments (excludes County, Educ, Debt Service)	\$11,146,916	1998	Town of Scarborough Annual Financial Reports
92 General Government Expenditures & Tax Abate-ments	\$3,283,258	1998	Town of Scarborough Annual Financial Reports
93 Public Service Expenditures	\$1,844,690	1998	Town of Scarborough Annual Financial Reports
94 Public Safety Expenditures	\$3,099,380	1998	Town of Scarborough Annual Financial Reports
95 Public Works Expenditures	\$2,919,588	1998	Town of Scarborough Annual Financial Reports
96 Public Works Expenditures (excluding solid waste)	\$2,089,220	1998	Town of Scarborough Annual Financial Reports
97 General Government Expenditures & Tax Abate Residential - Per Household	\$433	1998	estimated by Planning Decisions based on 1998 expenditures, % residential factor, and 1998 households
98 General Government Expenditures & Tax Abate Open Space - Per Acre	\$0.2647108	1998	estimated by Planning Decisions based on 1998 expenditures, % open space factor, and 1998 estimated open space acreage

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
99 General Government Expenditures & Tax Abate commercial - Per \$ of value	\$0.0027527	1998	estimated by Planning Decisions based on 1998 expenditures, % commercial factor, and 1998 commercial valuation
100 Public Service Expenditures Residential - Per Household (single-family)	\$291	1998	estimated by Planning Decisions based on 1998 expenditures, % residential factor, and 1998 households
101 Public Service Expenditures Residential - Per Household (condo)	\$224	1998	estimated by Planning Decisions based on 1998 expenditures, % residential factor, and 1998 households & condo community service adjustment
102 Public Service Expenditures Residential - Per Household (apart)	\$235	1998	estimated by Planning Decisions based on 1998 expenditures, % residential factor, and 1998 households & apartment community service adjustment
103 Public Service Expenditures Open Space - per acre	\$0.6157315	1998	estimated by Planning Decisions based on 1998 expenditures, % open space factor, and 1998 estimated open space acreage
104 Public Service Expenditures commercial - per \$ of valuation	\$0.0005303	1998	estimated by Planning Decisions based on 1998 expenditures, % commercial factor, and 1998 commercial valuation
105 Public Safety Expenditures Residential - Per Household	\$408	1998	estimated by Planning Decisions based on 1998 expenditures, % residential factor, and 1998 households
106 Public Safety Expenditures Open Space - per acre	\$0.2512750	1998	estimated by Planning Decisions based on 1998 expenditures, % open space factor, and 1998 estimated open space acreage
107 Public Safety Expenditures commercial - per \$ of valuation	\$0.0026130	1998	estimated by Planning Decisions based on 1998 expenditures, % commercial factor, and 1998 commercial valuation
108 Public Safety Expenditures office - per \$ of valuation	\$0.0026130	1998	estimated by Planning Decisions based on 1998 expenditures, % commercial factor, 1998 commercial valuation, and commercial type cost adjustment factor
109 Public Safety Expenditures retail - per \$ of valuation	\$0.0036581	1998	estimated by Planning Decisions based on 1998 expenditures, % commercial factor, 1998 commercial valuation, and commercial type cost adjustment factor
110 Public Safety Expenditures manufacturing - per \$ of valuation	\$0.0015678	1998	estimated by Planning Decisions based on 1998 expenditures, % commercial factor, 1998 commercial valuation, and commercial type cost adjustment factor
111 Public Works Residential - Per Household (Single-Family)	\$370	1998	estimated by Planning Decisions based on 1998 expenditures, % residential factor, and 1998 households
112 Public Works Residential - Per Household (condo & apart) excl. solid waste	\$228	1998	estimated by Planning Decisions based on 1998 expenditures, % residential factor, and 1998 households, excludes solid waste based on assumption that roads which service development are private

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
113 Public Works Open Space - Per Acre	\$0.0344089	1998	estimated by Planning Decisions based on 1998 expenditures, % open space factor, and 1998 estimated open space acreage
114 Public Works commercial - Per \$ of valuation	\$0.0027656	1998	estimated by Planning Decisions based on 1998 expenditures, % commercial factor, and 1998 commercial valuation
115 New Road Maintenance Cost Per Mile (summer + winter)	\$8,000	1999	From Public Works Director based on 150 miles of total roads
116 Municipal Debt Service Costs	\$2,468,135	1998	Town of Scarborough Annual Financial Reports
117 Municipal Debt Service Costs Residential Per Household	\$325	1998	estimated by Planning Decisions based on 1998 expenditures, % residential factor, and 1998 households
118 Municipal Debt Service Costs open space Per Acre	\$0.2000983	1998	estimated by Planning Decisions based on 1998 expenditures, % open space factor, and 1998 estimated open space acreage
119 Municipal Debt Service Costs commercial Per \$ of valuation	\$0.0020808	1998	estimated by Planning Decisions based on 1998 expenditures, % commercial factor, and 1998 commercial valuation
120 Education Operating Costs	\$13,479,679	1998	Town of Scarborough Annual Financial Reports; excludes debt service
121 Education Operating Costs Per Pupil	\$4,873	1998	calculated by Planning Decisions based on education operating expenditures & pupils for 1998; excludes debt service & capital expenditures
122 School Debt Service Costs	\$2,818,163	1998	Town of Scarborough Annual Financial Reports
123 School Debt Service Costs Per Pupil	\$1,019	1998	estimated by Planning Decisions based on 1998 expenditures, % residential factor, and 1998 pupils
124 Increase in County Tax (single-family)	\$2,438	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new sf units with average value of \$180,000
125 Increase in County Tax (condo)	\$2,032	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new condo units with average value of \$150,000
126 Increase in County Tax (apartment)	\$447	1998	estimated by Planning Decisions from in-house formula worksheet based on 20 new apartment units with average value of \$33,000

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
127 Increase in County Tax (open space)	\$5	1998	estimated by Planning Decisions from in-house formula worksheet based on 30 acres of added open space with average value of \$267 per acre
128 Increase in County Tax (office)	\$13,533	1998	estimated by Planning Decisions from in-house formula worksheet based on \$20,000,000 of valuation added
129 Increase in County Tax (retail)	\$4,063	1998	estimated by Planning Decisions from in-house formula worksheet based on \$6,000,000 of valuation added
130 Increase in County Tax (manufacturing)	\$3,386	1998	estimated by Planning Decisions from in-house formula worksheet based on \$5,000,000 of valuation added
131 SF Units Modeled	20	n/a	Variable chosen for cost benefit model based on typical new subdivision built since 1990
132 SF Pupils Modeled	15.68	n/a	based on 20 units at .784 students per unit based on facility study
133 SF Persons Modeled	64	n/a	based on 3.2 person per HH from NAHB 1990
134 SF Valuation Modeled	\$3,600,000	n/a	based on 20 units at average of \$180,000 per unit from assessor 1998 data
135 Condo Units Modeled	20	n/a	Variable chosen for cost benefit model based on typical condominium complex built since 1980
136 Condo Pupils Modeled	0.92	n/a	based on 20 units at .046 students per unit based on facility study
137 Condo Persons Modeled	40	n/a	based on 2.0 person per HH estimated by Planning Decisions from NAHB 1990 single-family attached & students from Scarborough Facility Study
138 Condo Valuation Modeled	\$3,000,000	n/a	based on 20 units at average of \$150,000 per unit from assessor 1998 data
139 Apartment Units Modeled	20	n/a	Variable chosen for cost benefit model based on typical apartment complex built since 1970 but reduced to 20 units to reflect condo and single-family model
140 Apartment Pupils Modeled	6.92	n/a	based on 20 units at .346 students per unit based on facility study

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
141 Apartment Persons Modeled	44	n/a	based on 2.2 person per HH estimated by Planning Decisions from 1997 American Housing Survey, household size for renter occupied households
142 Apartment Valuation Modeled	\$660,000	n/a	based on 20 units at average of \$33,000 per unit from assessor 1998 data
143 Open Space Acreage Modeled	30	n/a	variable chosen for model based on sample of Scarborough Land Trust Properties including Libby River Farm, Kirkwood Road, & Pleasant Hill Road
144 Open Space Value Modeled	\$8,000	n/a	variable chosen for model based on sample of Scarborough Land Trust Properties including Libby River Farm, Kirkwood Road, & Pleasant Hill Road
145 Open Space Average Valuation per Acre	\$267	1998	based on Town Assessing data for Scarborough Land Trust Properties
146 Open Space Persons Modeled	0	n/a	based on land no being developed so no impact on persons
147 Open Space Pupils Modeled	0	n/a	based on land no being developed so no impact on pupils
148 Open Space Households Modeled	0	n/a	based on land no being developed so no impact on households
149 Commercial retail public safety cost factor	1.40	current	estimated by Planning Decisions based on interviews with public safety department heads
150 Commercial office public safety cost factor	1.00	current	estimated by Planning Decisions based on interviews with public safety department heads
151 Commercial manufacturing public safety cost factor	0.60	current	estimated by Planning Decisions based on interviews with public safety department heads
152 Office Commercial Valuation Modeled	\$20,000,000	n/a	variable chosen for model based on Hanaford Bros Corporate headquarters
153 Office Commercial Lot Size Modeled	11	n/a	variable chosen for model based on Hanaford Bros Corporate headquarters
154 Office Commercial Building Square Feet Modeled	100,000	n/a	variable chosen for model based on Hanaford Bros Corporate headquarters

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
155 Office Commercial # of Employees Modeled	800	n/a	variable chosen for model based on Hanaford Bros Corporate headquarters
156 Office Commercial # of Scarborough Resident Employees Modeled	120	n/a	variable chosen for model based on Hanaford Bros Corporate headquarters
157 Office Commercial % of Employees that are Scarborough Residents Modeled	15.00%	n/a	variable chosen for model based on Hanaford Bros Corporate headquarters
158 Office Direct number of households, persons, and enrollments added modeled	0	n/a	based on fact that impact on these variables will be indirect through new residential development
159 Workers per family household	1.9342	1990	U.S. Census
160 Office Commercial # of households added modeled	62	n/a	based on 120 employees each living in households with 1.9 workers
161 Office Commercial Number of K-12 pupils modeled	49	n/a	based on single-family model of .784 enrollments per household
162 Office Commercial Number of persons modeled	199	n/a	based on single family model of 3.2 persons per household
163 Retail Commercial Valuation Modeled	\$6,000,000	n/a	variable chosen for model based on sample large retail
164 Retail Commercial Lot Size Modeled	12	n/a	variable chosen for model based on sample big box retail
165 Retail Commercial Building Square Feet Modeled	75,000	n/a	variable chosen for model based on sample big box retail
166 Retail Commercial # of Employees Modeled	175	n/a	variable chosen for model based on sample big box retail
167 Retail Commercial # of Scarborough Resident Employees Modeled	17.5	n/a	variable chosen for model based on sample big box retail
168 Retail Commercial % of Employees that are Scarborough Residents Modeled	10.00%	n/a	variable chosen for model based Planning Decisions estimate

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
169 Retail Direct number of households, persons, and enrollments added modeled	0	n/a	based on fact that impact on these variables will be indirect through new residential development
170 Retail Commercial # of households added modeled	9	n/a	based on 17.5 employees each living in households with 1.9 workers
171 Retail Commercial Number of K-12 pupils modeled	7	n/a	based on single-family model of .784 enrollments per household
172 Retail Commercial Number of persons modeled	29	n/a	based on single family model of 3.2 persons per household
173 Manufacturing Commercial Valuation Modeled	\$5,000,000	n/a	variable chosen for model based on sample manufacturing
174 Manufacturing Commercial Lot Size Modeled	7	n/a	variable chosen for model based on sample manufacturing
175 Manufacturing Commercial Building Square Feet Modeled	55,000	n/a	variable chosen for model based on sample manufacturing
176 Manufacturing Commercial # of Employees Modeled	125	n/a	variable chosen for model based on sample manufacturing
177 Manufacturing Commercial # of Scarborough Resident Employees Modeled	13	n/a	variable chosen for model based on sample manufacturing
178 Manufacturing Commercial % of Employees that are Scarborough Residents Modeled	10.00%	n/a	variable chosen for model based Planning Decisions estimate
179 Manufacturing Direct number of households, persons, and enrollments added modeled	0	n/a	based on fact that impact on these variables will be indirect through new residential development
180 Manufacturing Commercial # of households added modeled	6	n/a	based on 13 employees each living in a household with 1.9 workers
181 Manufacturing Commercial Number of K-12 pupils modeled	5	n/a	based on single-family model of .784 enrollments per household
182 Manufacturing Commercial Number of persons modeled	21	n/a	based on single family model of 3.2 persons per household

Municipal & School Variables For Cost/Benefit Analysis - Scarborough Growth & Services

Variable	Data	Year	Notes
183 Secondary Per Household Annual Net Fiscal Impact from Development (Commercial)	(\$1,194)	n/a	estimated by Planning Decisions based on Single-family fiscal impact model