



March 20, 2021

Lee Newman
Planning Director
500 Dedham Avenue
Needham, MA 02492

Reference: 2021 Fiscal Impact Analysis, Highway Commercial I Rezoning

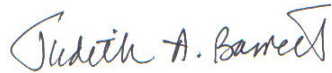
Dear Lee,

I am submitting a revised report on the fiscal impact of commercial and mixed-use development options for the proposed Highway I Commercial District. The purposes of this revision are to address comments you provided to us by email on Tuesday, March 16. As noted in the enclosed report, we find that development in the proposed district would lead to the following fiscal outcome for the Town:

1. At maximum buildout with a floor area ratio (FAR) of 1.0, development in the new district would provide \$6,733,100 in tax revenue per year and create demands on municipal services of approximately \$381,000 per year. For development at this level, the net revenue would be \$6,352,100, for a cost-revenue ratio of 0.060.
2. In addition, if development occurs at 1.35 FAR, development in the new district would provide \$8,844,400 in tax revenue per year and create demands on municipal services of approximately \$502,000 per year. The net revenue would be \$8,342,400, for a cost-revenue ratio would be 0.060.
3. As for the mixed-use development options, a project comprised of multiple nonresidential uses (retail, lab space, and offices) and 170 apartments, with a combined total FAR of 1.0, would generate \$5,807,600 in taxes per year and create demands on municipal and school services of approximately \$1,154,900. The net revenue would be \$4,652,700 for a cost-revenue ratio of 0.199.
4. A project comprised of multiple nonresidential uses and 226 apartments, with a combined total FAR of 1.35, would generate \$7,508,500 in taxes per year and create demands on municipal and school services of approximately \$1,479,600. The net revenue would be \$6,028,900 for a cost-revenue ratio of 0.197.
5. Finally, you asked us to evaluate a potential mix of warehouse/distribution space and television studio. We estimate that the Town would receive \$922,900 in tax revenue and spend approximately \$179,000 for municipal services to meet the demands of these two uses. The net revenue would be \$743,900, for a cost-revenue ratio of 0.241.

Under existing conditions, the parcels in the proposed district pay the Town about \$490,500 in taxes per year. As a result, the gain in tax revenue from the new nonresidential options or the mixed-use development options will be anywhere from 11 to 18 times what the Town receives today.

Sincerely,

A handwritten signature in cursive script that reads "Judi Barrett". The signature is written in black ink and is positioned above the printed name.

Judi Barrett
Barrett Planning Group LLC

FISCAL IMPACT ANALYSIS: HIGHWAY COMMERCIAL I

INTRODUCTION

In September 2019, the Needham Planning Department asked Barrett Planning Group to review a potential rezoning of four parcels (15 acres) at Highland Avenue and Gould Street west of the Route 128 highway layout. The Town subsequently decided to study the proposal further before presenting the proposed Highway Commercial I District to Town Meeting. We were asked to update our analysis in February 2021, and to expand it by including other uses not contemplated in the original concept for this district. For the new study, we reviewed and considered the following information:

1. Highway Commercial 1 Zoning District Planning Presentation, February 3, 2021;
2. Property Assessment and Tax Information, provided by the Needham Planning Department;
3. CoStar Office, Industrial, Retail, and Multifamily Market Data and Trends, Newton-Needham-Brookline-Dover Submarkets;
4. Town of Needham, FY 2021 Operating Budget;
5. Department of Revenue, Municipal Data Bank, Misc. Financial Data (Tax Rates, Assessed Values, Revenue Sources, Tax Levy); and
6. Buildout Analysis prepared by John Connery for Needham Planning Department (2015).

SUMMARY

The following chart compares the current assessed values and tax payments for the area included in our analysis to the estimated values and tax revenue of the same area, assuming the parcels are assembled and redeveloped under the proposed Highway Commercial I zoning.

TABLE 1. ASSESSED VALUE AND REVENUE CHANGE, 2021 PROPOSED HIGHWAY COMMERCIAL I

	Existing Conditions	If Redeveloped at 1.0 FAR for Nonresidential Uses	Gain/Loss at 1.0 FAR Outcome	If Redeveloped at 1.35 FAR for Nonresidential Uses	Gain/Loss at 1.35 FAR Outcome
Assessed Value	\$19,087,100	\$261,582,100	\$242,495,000	\$343,604,200	\$324,517,100
Tax Revenue	\$490,500	\$6,733,100	\$6,242,600	\$8,844,400	\$8,353,900
	Existing Conditions	If Redeveloped at 1.0 FAR as Mixed-Use Option	Gain/Loss at 1.0 FAR Outcome	If Redeveloped at 1.35 FAR as Mixed-Use Option	Gain/Loss at 1.35 FAR Outcome
Assessed Value	\$19,087,100	\$262,226,000	\$243,138,900	\$340,356,200	\$321,269,100
Tax Revenue	\$490,500	\$5,807,600	\$5,317,100	\$7,508,500	\$7,018,000
	Existing Conditions	If Redeveloped at as Warehouse/TV Studio	Gain/Loss		
Assessed Value	\$19,087,100	\$35,854,000	\$16,766,900		
Tax Revenue	\$490,500	\$922,900	\$432,400		

Source: Barrett Planning Group, with data from Town of Needham, Municipal Data Bank, and CoStar.

APPROACH AND METHODOLOGY

Proportional Valuation

Nonresidential development places different demands on municipal services depending on the class of use. For example, retail uses usually demand more from public safety personnel than any other municipal department, but industrial uses tend to require higher expenditures for public works. Food service establishments also require periodic inspections by the health department, and uses ranging from nursing homes and day care centers to performing arts centers require semiannual or more frequent inspections by health, fire, and building authorities. In some towns, nonresidential development of all types places demands on services traditionally thought of as “residential,” e.g., public libraries. When a community invests in waterworks and sewer system upgrades, the benefits are often shared by residential and nonresidential ratepayers.

Recognizing that each class of use has both unique needs and needs common to all uses, fiscal impact analysts have developed models to identify, estimate, and assign service costs to various types of development. The most widely used model for estimating the cost to serve nonresidential land uses is known as *proportional valuation*. This two-part model embraces a long-standing fiscal impact principle: the average cost of nonresidential municipal services can be inferred from the relationship between nonresidential real property values and the total value of real property in a community, adjusted for type of community and size of tax base.

TABLE 2. PROPORTIONAL VALUATION ANALYSIS: EXISTING CONDITIONS, NEEDHAM

A	2021 General Fund Operating Budget	\$190,247,800	Town of Needham
B	Less Education	\$81,835,000	Town of Needham
C	Less Education Debt	\$10,766,800	Town of Needham
D	Less Education Fixed Costs	\$26,592,400	Consultant Estimate
E	Total Municipal	\$71,053,600	Town of Needham
F	Non-Residential Real Property Value	\$1,153,202,700	Dept. of Revenue
G	Total Real Property Assessed Value	\$10,742,368,800	Dept. of Revenue
H	Ratio	0.107	F/G
I	Non-Residential Parcels	441	Dept. of Revenue
J	Total Parcels	10,211	Dept. of Revenue
K	Average Value: Non-Residential Parcel	\$2,615,000	FI
L	Average Value: All Parcels	\$1,052,000	G/J
M	Ratio	2.49	K/L
N	Refinement Coefficient	0.686	Consultant (Burchell)
O	Non-Residential Expenditures	\$5,232,600	Consultant
P	Residential Expenditures	\$185,015,200	Consultant

Average Cost Per Capita/Student, Adjusted

After establishing the approximate share of nonresidential expenditures under existing conditions, analysts can use a similar process to estimate the cost of services that will be used by new growth. For our 2019 study of Highway Commercial I, we applied the principles of proportional valuation to estimate the revenue and cost of services impact of new development under that plan. People familiar with that study may remember that a critical step in proportional valuation involves using a *refinement coefficient* to modify the average cost of nonresidential services in order to adjust for significant differences in scale between the proposed project and existing conditions in the tax base as a whole. We repeated the process for this report. However, since the new plan for the district includes options for mixed-use development with housing, the updated study is more complicated.

The development scenarios that could occur under the proposed zoning include multifamily units in mixed-use projects. This means the fiscal impact analysis must also consider the net new cost of residential demands on municipal services and schools. To estimate these costs, we used the following procedures.

The average cost of non-school services used by Needham residents is \$2,130. This represents the total cost of residential non-school services, \$65,821,000, divided by the Town’s estimated 2019 population, 30,970.¹ When we prepare a fiscal impact analysis, our goal is to simulate as much as possible what the Town’s *net new cost of services* will be – that is, the *incremental cost* of services associated with growth. Toward that end, we adjusted the average cost of municipal services per capita, just as we modified the average cost for the nonresidential portion of this study. For the residential analysis, we eliminated costs that would not necessarily change just because the Town attracts a modest number of new residents. For example, the Town would not hire more personnel in the Town Manager’s office or the management/administrative tiers of other general government offices or the public safety and public works departments just because the Town gained 330-400 new residents. Still, population growth will impose some additional burdens on day-to-day service delivery, and those burdens come with some costs.

To account for these new demands, we assumed the *average variable cost* in municipal departments is approximately 18 percent, so we used 82 percent of the average municipal cost of services to estimate the cost of new growth:

Average cost of new municipal services =	Existing cost of municipal services	X 82%	/ Existing Population
\$1,740 =	\$65,821,000	\$53,973,200	30,970

**Numbers may not total due to rounding.*

The cost of new services was multiplied by the new household population assumptions for each mixed-use scenario to arrive at the estimated cost of new demands on town services.

¹ U.S. Census Bureau, 2015-2019 American Community Survey (ACS) Five-Year Estimates).

The potential cost of new school services was estimated in a similar way. We consulted the detailed version of Needham's most recent Per Pupil Cost report from the Massachusetts Department of Elementary and Secondary Education (DESE) and identified what we assumed would be costs most directly affected by enrollment growth: teachers, instructional support personnel, instructional materials, and pupil services, including transportation. On a per-student basis, the sum of these expenditures is \$7,530. Since the most recent report reflects FY 2019 conditions, we adjusted for inflation and non-inflation spending growth with a multiplier of 1.12. This explains how we arrived at the average cost per student for our study, \$8,400.

We used the following procedures and data sources to estimate the new household population:

- The Town supplied us with the school enrollment counts for three existing Chapter 40B mixed-income developments: Charles River Landing, Modera Needham, and The Kendrick. The total number of units in these developments is 943 and total number of school students, 105 (October 1, 2020). Since 70 percent of the apartments at Charles River Landing are one-bedroom units, the number of school-age children is very low (18). We eliminated Charles River Landing from our analysis and focused on the other projects. The average number of students living at Modera Needham (136 units) and The Kendrick (390 units) is 87, or an average of 0.165 per unit. We used that number to estimate the school enrollment impact of the mixed-use options for the subject property: 28 students in 170 units or 38 students in 226 units.
- The household population estimate is based on the average household size of two-bedroom apartments per the U.S. Census Bureau, *American Housing Survey*: 1.945 persons per unit. For 170 units, the result is 331 new residents and for 226 units, 440.

The proportional valuation models for each of the development options the Town asked us to evaluate are presented on the following pages. They are:

- 1. A nonresidential project with a maximum floor area ratio (FAR) of 1.0., comprised of:**
 - Office: 280,305 sq. ft.
 - Research Center/Lab: 280,305 sq. ft.
 - Retail: 98,925 sq. ft.
 - Total: 659,535 sq. ft.
- 2. A nonresidential project with a maximum floor area ratio (FAR) of 1.35., comprised of:**
 - Office: 368,200 sq. ft.
 - Research Center/Lab: 368,200 sq. ft.
 - Retail: 129,940 sq. ft.
 - Total: 866,340 sq. ft.
- 3. A mixed-use project with a maximum floor area ratio (FAR) of 1.0, comprised of:**
 - Office: 197,860 sq. ft.
 - Research Center/Lab: 197,860 sq. ft.
 - Retail: 69,250 sq. ft.

- Apartments: 170
 - Total: 659,535 sq. ft.
- 4. A mixed-use project with a maximum floor area ratio (FAR) of 1.35., comprised of:**
- Office: 259,130 sq. ft.
 - Research Center/Lab: 259,130 sq. ft.
 - Retail: 91,460 sq. ft.
 - Apartments: 226
 - Total: 866,340 sq. ft.
- 5. A warehouse/distribution facility and television studio mix as of right:**
- Warehouse: 158,900 sq. ft.
 - TV studio: 90,002
 - Total: 248,902 sq. ft.

Part II. Est. Impact of Five Development Scenarios
II.A. Office/Research/Retail Mix @ 1.0 FAR

	NEW PROJECT VALUE (Z)	\$261,582,100	NOTES
A	New Value / Total Nonresidential Value	0.23	
B	Refinement Coefficient	0.321	
C	New Nonresidential Service Costs	\$381,000	(A*B*NonResTot)
D	Est. Nonresidential Tax Revenue	\$6,733,100	Value/1000/*\$25.74
E	New Residential Service Costs		
F	Est. Residential Tax Revenue		
G	Net Revenue	\$6,352,100	D-C
H	Cost/Revenue Ratio	0.060	C/D
	Project Use(s)		
I	Total Sq. Ft.	659,535	From Town
J	Office	280,305	From Town
K	Research Center	280,305	From Town
L	Retail	98,925	From Town
M	Warehouse	0	From Town
N	Residential (Units)	0	From Town
	Rent		
O	Office sq. ft.	\$42.00	CoStar
P	Research Center sq. ft.	\$60.00	CoStar
Q	Retail sq. ft.	\$36.80	CoStar
R	Warehouse sq. ft.	\$19.61	Loopnet
S	Residential (per unit)	\$2,637	CoStar
	Income & Value		
T	Gross Nonresidential Income	\$32,231,550	Sq. ft.*rents
U	Nonresidential Exp. Ratio 39.2%	\$13,920,800	CoStar
V	Nonresidential NOI	\$18,310,750	T-U
W	Residential Income	\$0	
X	Residential Exp. Ratio 38%	\$0	
Y	Residential NOI	\$0	
Z	Submarket NonRes. Cap Rate 7%	\$261,582,100	Town; consultant modified
AA	Submarket Res. Cap Rate 4.50%	\$0	
AB	Total Value	\$261,582,100	(Z+AA)

Part II. Est. Impact of Five Development Scenarios
II.B. Office/Research/Retail Mix @ 1.35 FAR

	NEW PROJECT VALUE (Z)	\$343,604,200	NOTES
A	New Value / Total Nonresidential Value	0.30	
B	Refinement Coefficient	0.322	
C	New Nonresidential Service Costs	\$502,000	(A*B*NonResTot)
D	Est. Nonresidential Tax Revenue	\$8,844,400	Value/1000/*\$25.74
E	New Residential Service Costs		
F	Est. Residential Tax Revenue		
G	Net Revenue	\$8,342,400	D-C
H	Cost/Revenue Ratio	0.060	C/D
	Project Use(s)		
I	Total Sq. Ft.	866,340	From Town
J	Office	368,200	From Town
K	Research Center	368,200	From Town
L	Retail	129,940	From Town
M	Warehouse	0	From Town
N	Residential (Units)	0	From Town
	Rent		
O	Office	\$42.00	CoStar
P	Research Center	\$60.00	CoStar
Q	Retail	\$36.80	CoStar
R	Warehouse	\$19.61	Loopnet
S	Residential (Units)	\$2,637	CoStar
	Income & Value		
T	Gross Nonresidential Income	\$42,338,192	Sq. ft.*rents
U	Nonresidential Exp. Ratio 39.2%	\$18,285,900	CoStar
V	Nonresidential NOI	\$24,052,292	T-U
W	Residential Income	\$0	
X	Residential Exp. Ratio 38%	\$0	
Y	Residential NOI	\$0	
Z	Submarket NonRes. Cap Rate 7%	\$343,604,200	Town; consultant modified
AA	Submarket Res. Cap Rate 4.50%	\$0	
AB	Total Value	\$343,604,200	

Part II. Est. Impact of Five Development Scenarios
II.C. Office/Research/Retail/Residential Mix @ 1.0 FAR

	NEW PROJECT VALUE (Z)	\$262,226,000	NOTES
A	New Value / Total Nonresidential Value	0.23	
B	Refinement Coefficient	0.289	
C	New Nonresidential Service Costs	\$343,900	(A*B*NonResTot)
D	Est. Nonresidential Tax Revenue	\$4,841,900	Value/1000/*\$25.74
E	New Residential Service Costs ²	\$810,951	See Assumptions
F	Est. Residential Tax Revenue	\$965,700	Value/1000/*\$13.03
G	Net Revenue	\$4,652,749	(D+F)-(C+E)
H	Cost/Revenue Ratio	0.199	(C+E)/(D+F)
	Project Use(s)		
I	Total Sq. Ft.*	659,535	From Town
J	Office	197,860	From Town
K	Research Center	197,860	From Town
L	Retail	69,250	From Town
M	Warehouse	0	From Town
N	Residential (Units)	170	From Town
	Rent		
O	Office	\$42.00	CoStar
P	Research Center	\$60.00	CoStar
Q	Retail	\$36.80	CoStar
R	Warehouse	\$19.61	Loopnet
S	Residential (Units)	\$2,637	CoStar
	Income & Value		
T	Gross Nonresidential Income	\$23,178,410	Sq. ft.*rents
U	Nonresidential Exp. Ratio 39.2%	\$10,010,800	CoStar for exp. ratio
V	Nonresidential NOI	\$13,167,610	T-U
W	Residential Income	\$5,379,480	Units * rents
X	Residential Exp. Ratio 38%	\$2,044,200	CoStar for exp. ratio
Y	Residential NOI	\$3,335,280	W-X
Z	Submarket NonRes. Cap Rate 5.90%	\$188,108,700	CoStar for cap rate
AA	Submarket Res. Cap Rate 4.50%	\$74,117,300	CoStar for cap rate
AB	Total Value	\$262,226,000	Z+AA

² 331 residents, 28 students

Part II. Est. Impact of Five Development Scenarios
II.D. Office/Research/Retail/Residential Mix @ 1.35 FAR

	NEW PROJECT VALUE (AB)	\$340,356,200	NOTES
A	New Value / Total Nonresidential Value	0.30	
B	Refinement Coefficient	0.26	
C	New Nonresidential Service Costs	\$401,500	(A*B*NonResTot)
D	Est. Nonresidential Tax Revenue	\$6,224,600	Value/1000/*\$25.74
E	New Residential Service Costs ³	\$1,078,100	See Assumptions
F	Est. Residential Tax Revenue	\$1,283,900	Value/1000/*\$13.03
G	Net Revenue	\$6,028,900	(D+F)-(C+E)
H	Cost/Revenue Ratio	0.197	(C+E)/(D+F)
	Project Use(s)		
I	Total Sq. Ft.*	863,010	From Town
J	Office	259,130	From Town
K	Research Center	259,130	From Town
L	Retail	91,460	From Town
M	Warehouse	0	From Town
N	Residential (Units)	226	From Town
	Rent		
O	Office	\$42.00	CoStar
P	Research Center	\$60.00	CoStar
Q	Retail	\$36.80	CoStar
R	Warehouse	\$19.61	Loopnet
S	Residential (Units)	\$2,637	CoStar
	Income & Value		
T	Gross Nonresidential Income	\$29,796,988	Sq. ft.*rents
U	Nonresidential Exp. Ratio 39.2%	\$12,869,300	CoStar for exp. ratio
V	Nonresidential NOI	\$16,927,688	T-U
W	Residential Income	\$7,151,544	Units * rents
X	Residential Exp. Ratio 38%	\$2,717,600	CoStar for exp. ratio
Y	Residential NOI	\$4,433,944	W-X
Z	NonRes Value: NonRes. Cap Rate 7%	\$241,824,100	Town; consultant modified
AA	ResValue: Submarket Res. Cap Rate 4.50%	\$98,532,100	CoStar for cap rate
AB	Total Value	\$340,356,200	Z+AA

³ 440 residents, 38 students.

Part II. Est. Impact of Five Development Scenarios
II.E. Warehouse/Distribution

	NEW PROJECT VALUE (AB)	\$35,854,000	NOTES
A	New Value / Total Nonresidential Value	0.03	
B	Refinement Coefficient	0.55	
C	New Nonresidential Service Costs	\$179,000	(A*B*NonResTot)
D	Est. Nonresidential Tax Revenue	\$922,900	Value/1000/*\$25.74
E	New Residential Service Costs	N/A	
F	Est. Residential Tax Revenue	N/A	
G	Net Revenue	\$743,900	D-C
H	Cost/Revenue Ratio	0.241	C/D
	Project Use(s)		
I	Total Sq. Ft.	0	From Town
J	Office	0	From Town
K	Research Center	0	From Town
L	Retail	0	From Town
M	Warehouse	158,900	From Town
M.1	TV Studio (No Change)	90,002	From Town
N	Residential (Units)	0	From Town
	Rent		
O	Office	\$42.00	CoStar
P	Research Center	\$60.00	CoStar
Q	Retail	\$36.80	CoStar
R	Warehouse	\$19.61	Loopnet
S	Residential (Units)	\$2,637	CoStar
	Income & Value		
T	Gross Nonresidential Income	\$3,116,000	Warehouse only
U	Nonresidential Exp. Ratio 35%	\$1,345,800	CoStar for exp. ratio
V	Nonresidential NOI	\$1,770,200	T-U
W	Residential Income	\$0	Units * rents
X	Residential Exp. Ratio 38%	\$0	CoStar for exp. ratio
Y	Residential NOI	\$0	W-X
Z	Submarket NonRes. Cap Rate 5.50%	\$35,854,000	Warehouse + TV Studio
AA	Submarket Res. Cap Rate 4.50%		CoStar for cap rate
AB	Total Value	\$35,854,000	Z+AA