School Enrollment Assumptions and Costs

Presentation to Planning Board Public Hearing September 5, 2024

WHAT'S CHANGED IN 48 HOURS (number of units)

RKG issued its final report on 4/30/24, and in the past 48 hours, a new report has been issued (dropped Wednesday morning 9/4/24).

Key metrics of the plan have changed:

- a) 100 West (the Carter building) flipped from "not likely" to "likely" to be developed
- b) Now there are **more units** in both proposals

Base plan, full build-out 1,868 units to 1,924 units

Neighborhood plan, full build-out 3,294 units to 3,350 units

c) Now there's a higher likelihood to build (a higher "propensity to change")

Base plan 11.9% to 24.2%

Neighborhood plan 33.4% to 40.0%

WHAT'S CHANGED IN 48 HOURS (school enrollment)

Because there are more units...

4) there are now more students projected

Base plan, full build-out 151 students to 243 students

Neighborhood plan, full build-out 264 students to 422 students

- 5) the **student-to-household ratio** has increased in both proposals from 8/100 to 13/100 (correction on SAC in 2 bedroom apartments) and since schools are the largest element in the town budget (39%)
- 6) the projected "net fiscal impact" of the two proposals has changed as well.

A FOCUS ON COSTS NOT CONCEPTS

The concept of more housing in Needham is fine, but every **concept** has a **price**. We need to understand what the MBTA rezoning proposals will **cost** us before we vote.

Lots of potential costs, but I focused on student enrollment, because

- 1) it's the most **immediate** consequence of occupancy
- 2) it drives spending "by the head" (incremental costs for every new student) and so has an immediate impact on the town budget and taxes
- 3) it can exacerbate existing problems (aging facilities, overcrowding, etc.), and
- 4) it impacts a key element of **Needham's "brand"** -- the quality of our schools draws young families to the town.

I asked four basic questions.

QUESTION 1: How many kids in an apartment?

Analysis of School Enrollment Assumptions

ARE THESE REALISTIC NUMBERS?

			O	RIGINAL RKG REPORT	NEW RKG REPORT
				4/30/24	9/4/24
				SAC RATIO/UNIT	SAC RATIO/UNIT
Approx	People	Approx		Generates 8/100	Generates 13/100
Sq Feet	per unit	cost/mo			
			MARKET RATE (87% of un	its)	
500	1 to 2	\$2,000	Studio	0.0	0.0
750	1 to 2	\$3,000	1 bedroom	0.0	0.0
1,050	2 to 4	\$,4000	2 bedroom	0.06	0.16
1,250	3 to 5	\$5,000	3 bedroom	0.50	0.50
			AFFORDABLE (13% of uni	ts)	
500	1 to 2		Studio	0.0	0.0
750	1 to 2		1 bedroom	0.0	0.0
1,050	2 to 4		2 bedroom	0.06	0.38
1,250	3 to 5		3 bedroom	1.20	1.20

A page 41, original RKG report in HONE packet 4/30/24

B page 49, new RKG report 9/4/24

QUESTION 2: What's a realistic student projection?

Analysis of School Enrollment Assumptions

WHAT'S A REALISTIC PROJECTION OF STUDENTS?

COMPARABLE STUDENT-TO-HOUSEHOLD RATIOS		SAC/HH
Towns with top-rated schools (Wellesley, Medfield, Sharon, etc)	54/100	
Current Needham SAC/HH ratio	49/100	
ESI Residential Demographic Multiplier, <u>all</u> multifamily units		29/100

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ESI Residential Demographic Multiplier, all multifamily units		29/100
ESI Residential Demographic Multiplier, 5+ unit multifamily ur	nits	18/100
"Needham Report 2025"		17/100
City of Boston (65% multifamily housing)		17/100

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ESI Residential Demographic Multiplier, 5+ unit multifan	nily units	18/100
"Needham Report 2025"		17/100
City of Boston (65% multifamily housing)		17/100
NEW RKG student projection		13/100
ORIGINAL RKG student projection		8/100

QUESTION 3: When do we have to start paying for growth?

Analysis of School Enrollment Assumptions

FISCAL IMPACT OF <u>ORIGINAL</u> RKG ESTIMATE – 8/100

		BASE PLAN	NEIGHBORHOOD PLAN
		FULL BUILD-OUT	FULL BUILD-OUT
		1868 units/151 students ^d	3294 units/264 students ^d
Total Property Taxes ^a		\$6,174,263	\$11,036,330
Municipal Costs ^b	(\$1,136 per unit)	-2,122,048	-3,741,984
Education Costs ^c	(\$12,128 per student)	<u>-1,831,328</u>	3,201,792
Net Fiscal Impact		\$2,220,887	\$4,092,554
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ORIGINAL RKG ESTIMATE GOES NEGATIVE AT 18/100

		BASE PLAN	NEIGHBORHOOD PLAN
		FULL BUILD-OUT	FULL BUILD-OUT
		1868 units/151+183 students ^g	3294 units/264+337 students ^g
Total Property Taxes ^a		\$6,174,263	\$11,036,330
Municipal Costs ^b	(\$1,136 per unit)	-2,122,048	-3,741,984
Education Costs ^c	(\$12,128 per student)	<u>-4,062,880</u>	<u>-7,301,056</u>
Net Fiscal Impact		- \$10,665	- \$6,710

FISCAL IMPACT OF <u>NEW RKG ESTIMATE - 13/100</u>

		BASE PLAN	NEIGHBORHOOD PLAN
		FULL BUILD-OUT	FULL BUILD-OUT
		1924 units/243 students ^e	3350 units/422 students ^e
Total Property Taxes ^a		\$6,620,864	\$11,530,661
Municipal Costs ^b	(\$1,136 per unit)	-2,185,664	-3,805,600
Education Costs ^c	(\$12,128 per student)	<u>-2,947,104</u>	<u>-5,118,016</u>
Net Fiscal Impact ^f		\$1,488,096	\$2,607,045

NEW RKG ESTIMATE GOES NEGATIVE AT 19/100

		BASE PLAN	NEIGHBORHOOD PLAN
		FULL BUILD-OUT	FULL BUILD-OUT
		1924 units/243+123 students ^g	3350 units/422+215 students ^g
Total Property Taxes ^a		\$6,620,864	\$11,530,661
Municipal Costs ^b	(\$1,136 per unit)	-2,185,664	-3,805,600
Education Costs ^c	(\$12,128 per student)	<u>-4,438,848</u>	<u>-7,725,536</u>
Net Fiscal Impact		- \$3,648	- \$475

WHEN DO WE START PAYING FOR STUDENT GROWTH?

COMPARABLE STUDENT-TO-HOUSEHOLD RATIOS	SAC/HH
• • • • • • • • • • • • • • • • • • • •	1/100
Current Needham SAC/HH ratio 49	9/100
ESI Residential Demographic Multiplier, all multifamily units	29/100
NEW RKG student projection – Fiscal Impact goes NEGATIVE	19/100
ORIGINAL RKG student projection – Fiscal Impact goes NEGATIVE	18/100
ESI Residential Demographic Multiplier, 5+ unit multifamily units	18/100
"Needham Report 2025"	17/100
City of Boston (65% multifamily housing)	17/100
NEW RKG student projection	13/100
ORIGINAL RKG student projection	8/100

QUESTION 4: What's a more realistic range for planning?

Analysis of School Enrollment Assumptions

WHAT'S A REALISTIC RANGE FOR SCHOOL PROJECTION?

COMPARABLE STUDENT-TO-HOUSEHOLD RATIOS		SAC/HH
Towns with top-rated schools (Wellesley, Medfield, Sharon, e	tc) 54/100	
Current Needham SAC/HH ratio	49/100	
ESI Residential Demographic Multiplier, all multifamily un	its	29/100
NEW RKG student projection – Fiscal Impact goes NEGATIV	/E	19/100
ORIGINAL RKG student projection – Fiscal Impact goes NEC	SATIVE	18/100
ESI Residential Demographic Multiplier, 5+ unit multifamil	y units	18/100
"Needham Report 2025"		17/100
City of Boston (65% multifamily housing)		17/100
NEW RKG student projection		13/100
ORIGINAL RKG student projection		8/100
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A FOCUS ON COSTS NOT CONCEPTS

The concept of more housing in Needham is fine, but every **concept** has a **price**. We need to understand what the MBTA rezoning will **cost** us before we vote.

There's still have work to do on costing out the school enrollment bump that would be expected from the MBTA Communities Act rezoning. We need to understand

- 1) the **variable costs** (per student)
- 2) the fixed costs (at what point do we need more teachers and staff), and
- 3) the capital costs (impact on the School Master Plan).

In my opinion, the RKG estimates are far too low and need to be reexamined so we don't have surprises in taxation or overrides.

School Enrollment Assumptions and Costs

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Appendices

STUDENT-TO-HOUSEHOLD RATIOS – COMPARABLE TOWNS

	Town Base			School Output		
			Owner/	High School	K-12	Student/HH
	Population	<u>Households</u>	Occupied	Rank in MA	<u>Students</u>	<u>Ratio</u>
Weston	11,645	3,741	87%	10	2,022	0.54
Medfield	13,088	4,463	87%	16	2,531	0.57
Westwood	16,244	5,377	86%	20	2,914	0.54
Sharon	18,442	6,386	89%	22	3,591	0.56
Hopkinton	19,540	6,674	88%	13	4,196	0.63
Wellesley	30,733	8,956	84%	15	4,218	0.47
Needham	32,157	11,312	86%	19	5,547	0.49
Boston	653,833	276,053	35%	n/a	45,742	0.17



Mover Sample Multipliers: Massachusetts

	Scho	School-Age Children			Total Persons		
Housing Configurations	Per 90 Percent Confidence Household Interval		Per 90 Percent Confid Household Interval				
	Estimates	Lower Upper		Estimates	Lower	Upper	
All Housing Types							
Own or Rent							
All Sizes	0.383	0.376	0.390	2.384	2.372	2.397	
1 Bedroom or Studio	0.035	0.030	0.039	1.369	1.355	1.382	
2 Bedroom	0.270	0.260	0.280	2.202	2.184	2.219	
3 Bedroom	0.619	0.600	0.638	3.017	2.987	3.048	
4 Bedroom	0.904	0.872	0.936	3.646	3.599	3.693	
Own Only							
1 Bedroom or Studio	0.032	0.019	0.045	1.437	1.393	1.482	
2 Bedroom	0.121	0.109	0.134	1.950	1.925	1.976	
3 Bedroom	0.435	0.415	0.455	2.768	2.733	2.803	
Rent Only							
1 Bedroom or Studio	0.035	0.030	0.039	1.364	1.350	1.377	
2 Bedroom	0.314	0.302	0.326	2.276	2.257	2.296	
3 Bedroom	0.795	0.765	0.826	3.256	3.215	3.298	
Single-Family Units							
All Single-Family, Own or Rent	1						
All Sizes	0.560	0.546	0.574	2.876	2.855	2.898	
3 Bedroom	0.522	0.500	0.544	2.856	2.820	2.891	
4 Bedroom	0.858	0.830	0.886	3.538	3.495	3.581	
Detached, Own or Rent	5.222						
All Sizes	0.588	0.572	0.605	2.952	2.928	2.977	
Attached, Own or Rent	0.000	0.07 2	0.000	2.702	2.720	2.///	
All Sizes	0. 9	0.399	0.460	2.529	2.483	2.576	
Multi-Family Units		0.077	0.400	2.027	2.400	2.070	
All Multi-Family, Own or Rent							
All Sizes	0.289	0.282	0.297	2.126	2.110	2.141	
2 Bedroom	0.280	0.268	0.277	2.120	2.110	2.243	
2-4 Unit Structure, Own or Rent	0.200	0.200	0.271	2.221	2.1//	2.240	
All Sizes	0.421	0.408	0.434	2.478	2.452	2.503	
5+ Unit Structure, Own or Rent	0.421	0.400	0.434	2.4/0	2.432	2.000	
	0.175	0.1/7	0.184	1 800	1 905	1 005	
All Sizes	0.175	0.167	0.184	1.820	1.805	1.835	

If the value of the lower limit is neaative, zero is ported.

Multiplier estimates pertain to a mover sample, runits that householders moved into the unit between 2008 and 2015.

FOOTNOTES

SOURCE: RKG report contained in 4/30/24 HONE packet, revised 9/4/24	
a	Total Property Taxes pages 126 and 127
b	Municipal Costs page 121
С	Education Costs page 122 (note: these are only 58% of total education costs per student of \$19,829)
d	RKG student Projection page 44
e	NEW unit and student projections pages 48-49 in REVISED 9/4/24 packet
f	NEW net fiscal impact projections page 50 in REVISED 9/4/24 packet
g	NEW RKG estimates, and spend net positive money on additional students (base 243+123, neighborhood 422+215)
	ORIGINAL RKG estimates, and spend net positive money on additional students (base 151+183, neigborhood 264+337)
h	Divide net fiscal impact by incremental cost per student to find breakeven point