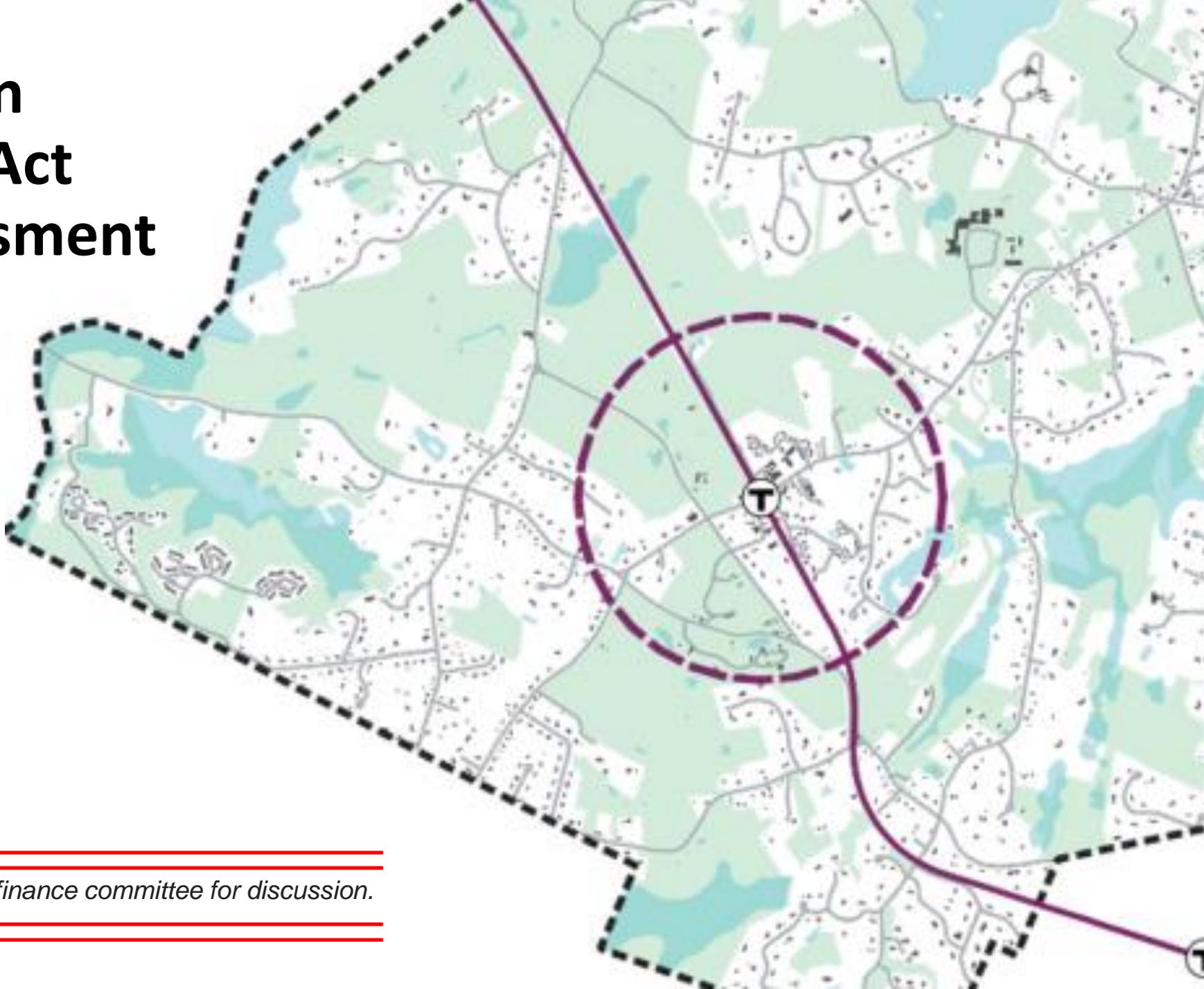


Town of Lincoln Housing Choice Act Fiscal Impact Assessment

IN PROGRESS

February 12, 2023



Prepared by Fuat Koro and presented to the finance committee for discussion.

Introduction

Scope & Framing Question

There will be a Housing Choice Act vote at the Annual Town meeting on March 23, 2024. As part of its mission to consider municipal questions for the purpose of making recommendations to the Town, Finance Committee is conducting a **fiscal impact study**.

This studies examines the potential impact of new housing production for the Town of Lincoln if the Option C zoning – chosen at Special Town meeting on 12/2/23 – moves forward.

Out of Scope

This study will not consider the potential non-fiscal impact of HCA relative to:

- Aesthetics
- Environment
- Traffic
- Affordable housing

Methodology

The study will use:

- Scenario Planning (Probabilistic) vs. Point answer (Deterministic)
- Marginal analysis (i.e. net new housing units, students, taxes, expenses, etc.)
- 2024 dollars and tax rates

Cognitive biases to be aware of...

Actor-observer bias | Ambiguity effect | Anchoring | Attentional bias | Availability cascade | Availability heuristic | Bandwagon effect | Base rate fallacy | Beneffectance | Bias blind spot | Capability bias | Choice-supportive bias | Clustering illusion | Confirmation bias | Congruence bias | Conjunction fallacy | Consistency bias | Contrast effect | Correspondence Bias | Cryptomnesia | Déformation professionnelle | Distinction bias | Dunning-Kruger effect | Egocentric bias | Endowment effect | Extreme aversion | False consensus effect | False memory | Focusing effect | Forer effect | Frame blindness | Framing | Fundamental attribution error | Gambler's fallacy | Halo effect | Hawthorne effect | Herd instinct | Hindsight bias | Hyperbolic discounting | Illusion of asymmetric insight | Illusion of control | Illusion of transparency | Illusory correlation | Impact bias | Information bias | Ingroup bias | Irrational escalation | Just-world phenomenon | Lake Wobegon effect | Loss aversion | Ludic fallacy | Mere exposure effect | Moral credential effect | Need for closure | Neglect of prior base rates effect | Neglect of probability | Notational bias | Observer-expectancy effect | Omission bias | Optimism bias | Outcome bias | Outgroup homogeneity bias | Overconfidence effect | Planning fallacy | Positive outcome bias | Post-purchase rationalization | Primacy effect | Projection bias | Pseudocertainty effect | Reactance | Recall Bias | Recency effect | Regression toward the mean disregarded | Reminiscence bump | Rosy retrospection | Selection bias | Selective perception | Self-fulfilling prophecy | Self-serving bias | Status quo bias | Stereotyping | Subadditivity effect | Subjective validation | Suggestibility | System justification | Telescoping effect | Texas sharpshooter fallacy | Trait ascription bias | Ultimate attribution error | Worst-case bias

This study considers fiscal impact across three components

1
Revenue

Property Tax
(including Residential,
Commercial, CPA) + **Motor
Vehicle Excise Tax**

2
Operating
Expense

School + **Fire, Police, EMS**

3
Capital
Expense

Any infrastructure the property owner does
not pay for

We can create long-term (10-yr+) housing production projections for HCA zoning

HCA Zoning

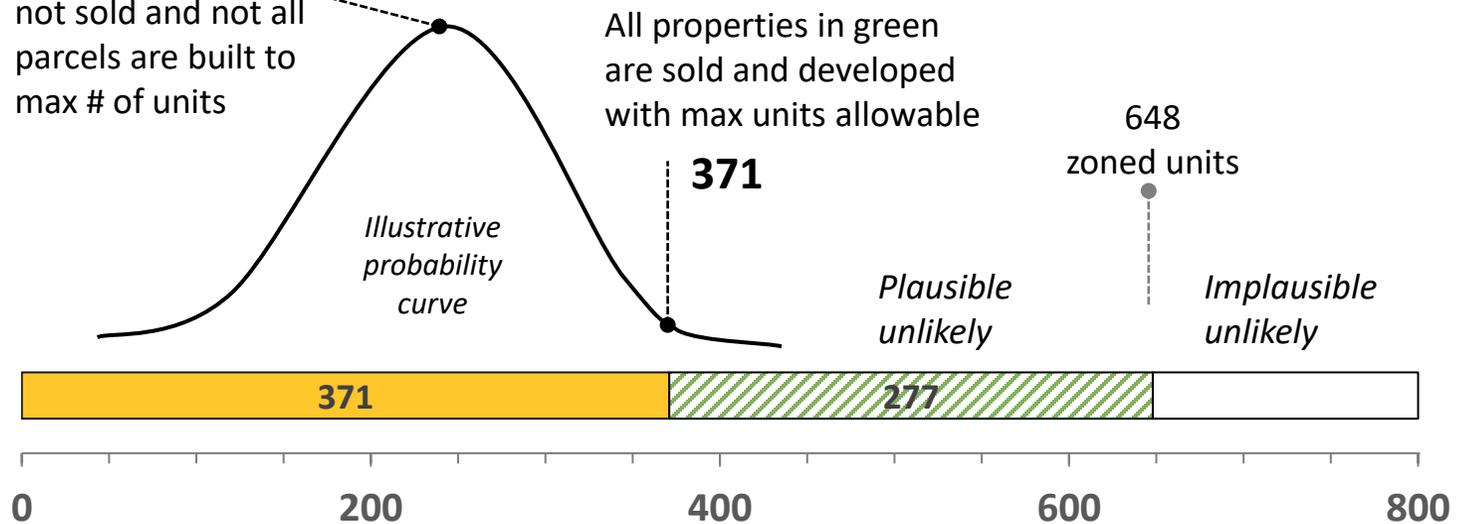
Option C zoning was chosen at Town meeting on 12/2/23.



- Zoned Units: **648**
- Existing Units: **185**
- Max. “net new” unit potential: **463**
- Not included: Town-owned properties (blue) that require separate town vote with 2/3 majority

Housing Production

Some properties are not sold and not all parcels are built to max # of units



Overtime

Depends on:

- property owners (# of parcels sold)
 - development economics (# of units built as a fraction of max allowed)
- 371 assumes max for both 1 and 2.

Unlikely

Depends on:

- Lincoln Woods (125 units) rezoned can accommodate only ~35 additional units. Waster water unknown.
- Ryan Estate requires collective action from all owners to sell

Wetlands & Septic

Application of real-world constraints

Not included: Organic” housing production outside of HCA which is insignificant

Student/unit is the critical assumption for enrollment scenarios

We can triangulate a student/unit value based on multiple data sources.

Examine different scales.

Community	PS Students	Housing Units	Student Unit
Oriole Landing ¹	2	60	0.03
Lincoln Woods ¹	30	125	0.24
Average 9 MA 100+ unit condo complexes ²	421	2,212	0.19
Lincoln ¹	596	2,100	0.28
Massachusetts ⁴	896,103	3,036,334	0.30

Examine correlation with unit size/ # of bedrooms.

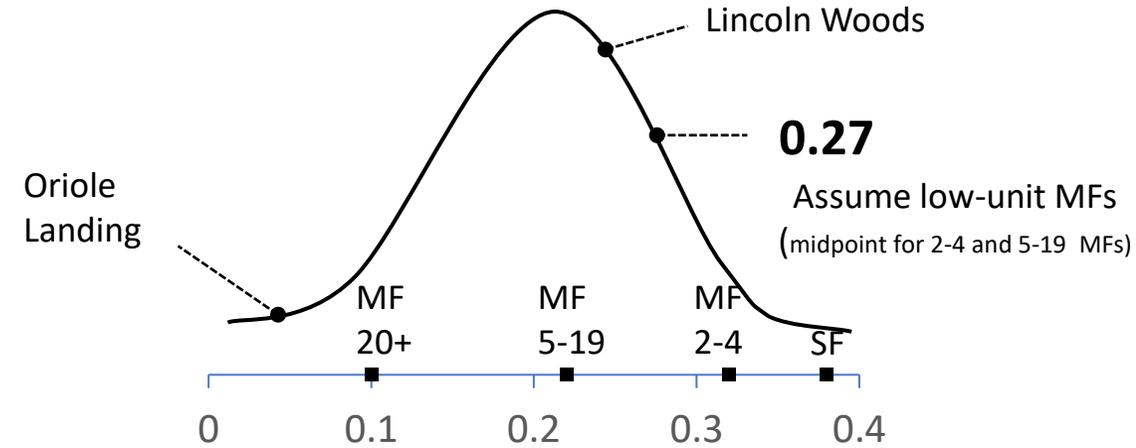
MA Housing Unit Structure Type ⁵	Student unit	Multifamily examples	1 2 3 bedroom % split/sq ft
Single Family Detached	0.38	Lincoln Woods 125 units	32% 58% 12%
Multi family 2-4 units	0.32	Oriole 60 unit	50% 50%
Multifamily 5-19 units	0.22	Proposed Mall Complex ~40 units	618–1,023 ft ² 1008–1,423 ft ²
Multifamily 20+ units	0.1		50% 50%
			650 850 ft ²

Avoid sample bias.

Not included	Student unit
Hanscom AFB	>1
Ryan Estate	0

LPS and Town of Lincoln
 US Census Bureau, 2022
 One Public School Child for Every Three Homes Special Studies 5 | 1 | 20 By Na Zhao, Ph.D NAHB Economics & Housing Policy Group
 Fiscal Impact Analysis Oriole Landing 01 | 22 | 18 By Fougere Planning & Development

We can set a “likely” students/unit ratio based on a probability range



371 units x 0.27 students/unit

~ 100 students

The incremental students cluster into LPS and LSRH

70 students



LPS K-8

30 students



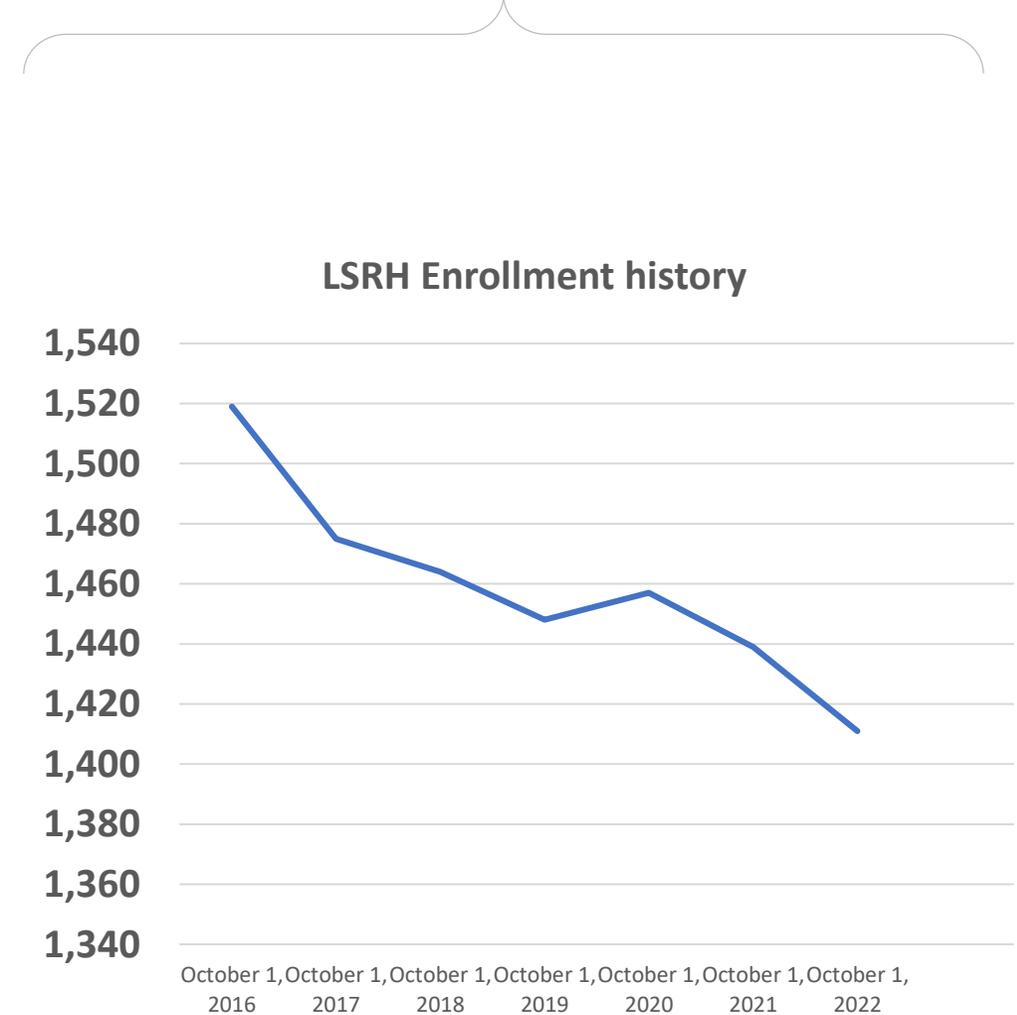
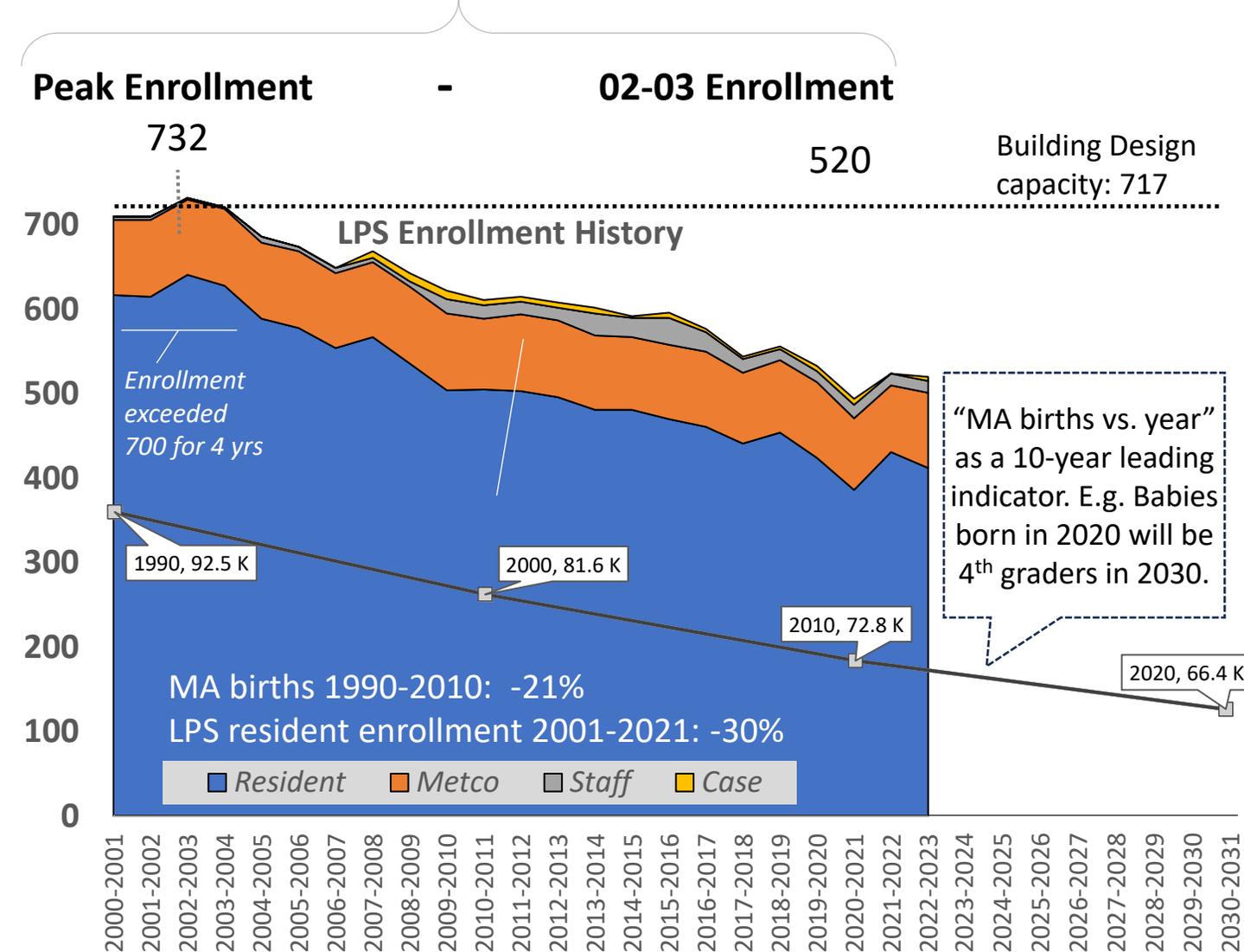
LSRH 9-12

Assumption: Ignore current students in the rezoned areas (<4)

Enrollment trends suggest LPS & LSRH will not face facility-related capacity issues

22-23 Enrollment is ~212 students fewer compared to peak enrollment in the 02-03 academic year

22-23 Enrollment is ~108 students fewer compared to 16-17 enrollment



Incremental school expenses are derived from the three expense drivers

Cost/Student added to current sections:

LPS has >100 capacity with the current level of sections before reaching max students/section limits. But new student arrivals do not always align with sections where headroom exists. (below)

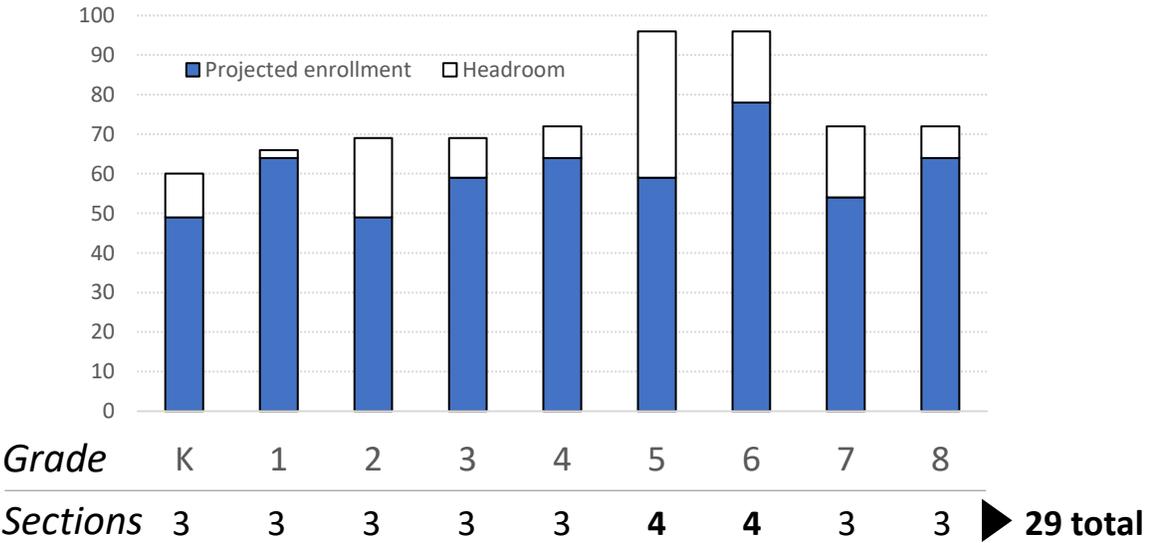
New Sections added:

A new section requires a teacher, a paraprofessional, associated benefits, as well as materials & furniture.

Lincoln-Sudbury enrollment split

Lincoln's share of LSRH budget is based on a formula that uses the three-year rolling enrollment split. (There are also minimum contribution requirements.)

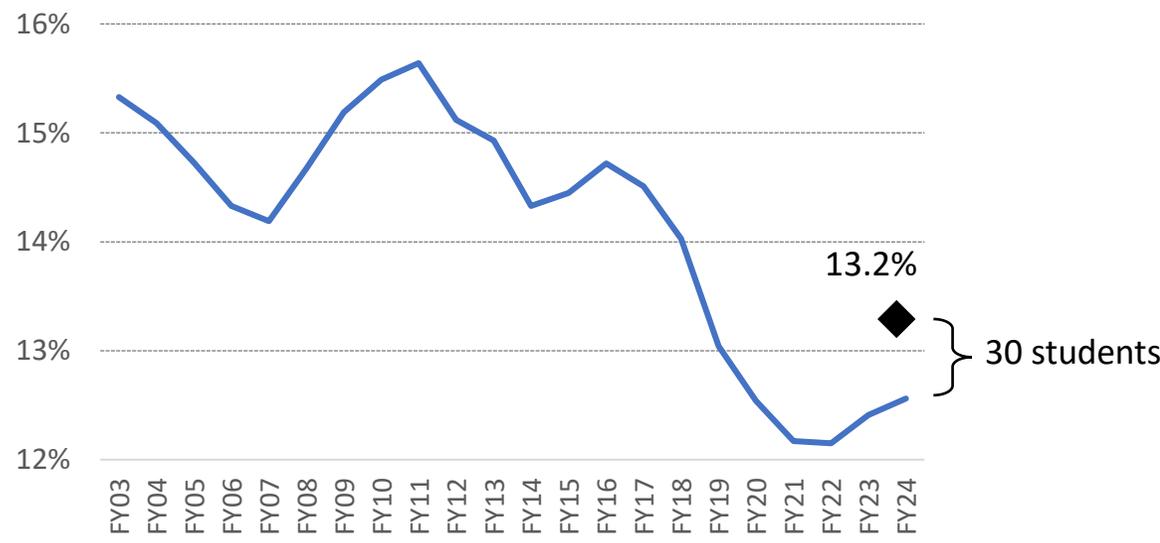
LPS Projected 2025 Enrollment



	# of Students	Expense
Students that can be absorbed into current sections	58	\$ 75,400
One new 21-student section	21	\$ 327,750
Total	79	\$ 403,150

[79 students ~\$0.4M]

Lincoln % of LSRH Enrollment History



30 Students increases enrollment split by 0.6% and translates to \$154K of incremental contribution

Assumption: 2024 LSRH budget. Lincoln enrollment is the only input changed. (i.e. Ceteris paribus analysis)

[30 Students ~\$0.15M]

Police, Fire, EMS expenses are based on additional calls

	Cost call	Est New Units	Est Calls-New Units	Annual Cost of Add'l Calls
Police	\$ 490	345	166	81,178
Fire	\$ 1,140	345	28	31,853
EMS	\$ 138	345	52	7,167

\$0.12M

Assumption: Incremental cost drivers are based on the Oriole Landing Study benchmarks.

