

**From:** James Bubar [mailto:james@bubar.org]  
**Sent:** Tuesday, September 15, 2020 4:43 PM  
**To:** Michael Behrendt  
**Cc:** Todd Selig; England, Richard; 'James Sr. Morse'  
**Subject:** ORCSD Cost Allocation Model

Michael,

Please forward, including attachment, to the Planning Board and post online along with the other two notes that I sent on this subject.

## ORCSD Cost Allocation Model

The attached spreadsheet models changes to ORCSD Gross Expenditures (net of tuition fees and other incidental funds) resulting from new ADMs, additional costs for ORCSD to support each ADM, and property values created to support those new ADMs by member community. This model fully supports adding ADMs and taking full advantage of what excess costs you believe exist.

There is an option to add new property values for each member community that is unrelated to new ADMs.

There is an option to add additional Tuition ADMs, Tuition per Tuition ADM, and any additional costs that ORCSD may incur accommodating those new Tuition ADMs.

The spreadsheet has been protected and the unshaded boxes are for entering the variables that you want. You may add negative ADMs, which will result in a decline in total ADMs, as well as a reduction in Gross Expenditures to the extent you entered any Additional ORCSD Costs per New ADM.

Tuition ADMs works similarly. If you enter a negative number for new ADMs, that community's property valuation will not be decreased. This is like more students graduating in the spring than entering in the fall.

The effect on each community's gross allocation (ORCSD Gross Expenditures, net) from any changes entered are reflected in Change from Actual to Adjusted Expenditures section.

The model will assume that all new ADMs and Tuition ADMs are absorbed by excess costs if you leave Additional ORCSD Cost per New ADM or Tuition ADM blank.

This model is based on the allocation of FY2020 ORCSD Net Gross Expenditures before State Aid and MS-24 Town specific offsets. In the prior note I sent on ORCSD Marginal Costs, I misstated that these expenditures were net of those offsets. For FY2020, the total offsets for the member communities' amount to \$9,157,832; these amounts vary by community and are provided by the State. This model does not attempt to calculate these amounts.

### Issues

- I believe it is unlikely that more than a handful of new ADMs can be added without incurring some additional ORCSD costs for busing, food service, textbooks, etc.
- The model is not designed to accommodate recurring increases and/or decreases in new ADMs or other variables over a multi-year period.
- The model assumes that the new ADMs will be distributed throughout K-12 as the existing ADMs are and therefore absorb some of the excess costs. However, given the emphasis on workforce housing, missing middle housing, etc. it appears the target market is 1<sup>st</sup> time home buyers who are generally younger, starting families, and looking for more modestly priced housing. This implies the new ADMs will more likely be distributed across K-6 and could cause a bubble in the student population distribution forcing additional resources regardless of the excess cost levels. This could then create longer term effects as this bubble works through the grades depending on whether teachers can migrate with them from K-6 to 7-12.
- The model assumes that any Additional ORCSD Cost per New ADM is the same for all ADMs and does not reflect cost differentials between the lower grades to the higher grades where laboratory or workshops are required.

- The model presumes that the only cost drivers are ADMs and Property Valuation, but those are how the costs are allocated, not necessarily how the costs are created or driven.
- The model is a high-level attempt to suggest implications from adding new ADMs. It is not a proforma budget prepared by personnel who know the numbers, related cost drivers, and are able to provide more accurate guidance. As such it is only a high-level tool.

## Recommendations

High level analysis can be elucidating, insightful, and thought provoking, but are just that: high level. The core assumption that ADMS and Property Valuations drive costs is too superficial. Property valuations have nothing to do with driving educational costs. These two variables are how the costs are being allocated. That allocation model drives cost to those paying taxes and is therefore an important public policy decision.

I would urge the appropriate Board/Committee Chair or Town Official to request that Dr. Morse and Ms. Susan Caswell, time permitting, prepare a proforma multi-year budget that provides insight into what might occur for ORCSD and member communities if ADMs radically changed or other non-ADM factors driving costs change. Those requesting the study should provide estimates for the projected property valuations at each level and for each period. In my direct experience dealing with Dr. Morse and Ms. Caswell, they have been professional, courteous, forthcoming, and honest. I would be extremely comfortable working with any model they presented and believe that short of a thorough consulting

cost analysis, they would provide the most reliable pro forma tool to use. I would then willingly relegate this model to the dust bin.

James A Bubar

High Level Model based on FY2020 ORCSD Data

	New ADMs	ADM's per New Household	New Household Property Valuation	Additional ORCSD Cost per New ADM	Additional Property Valuation Added Unrelated to New ADMs
Durham	0	0	\$0	\$0	\$0
Lee	0	0	\$0	\$0	\$0
Madbury	0	0	\$0	\$0	\$0
Tuition ADMs	0	Tuition per Tuition ADM		Additional ORCSD Cost per New Tuition ADM	
		0		\$0	
	FY2018 Actual ADMs	ADM % Distribution	Adjusted ADMs	Adjusted ADM % Distribution	
Durham	963.33	47.43%	963.33	47.43%	
Lee	705.58	34.74%	705.58	34.74%	
Madbury	362.07	17.83%	362.07	17.83%	
	<u>2030.98</u>	<u>100.00%</u>	<u>2030.98</u>	<u>100.00%</u>	
	2017 Equalized Valuation	2017 Equalized Valuation % Distribution	Additional Equalized Valuation	Adjusted Equalized Valuation	Adjusted Equalized Valuation % Distribution
Durham	\$1,144,424,005	59.31%	\$0	\$1,144,424,005	59.31%
Lee	\$530,857,155	27.51%	\$0	\$530,857,155	27.51%
Madbury	\$254,256,479	13.18%	\$0	\$254,256,479	13.18%
	<u>\$1,929,537,639</u>	<u>100.00%</u>	<u>\$0</u>	<u>\$1,929,537,639</u>	<u>100.00%</u>
	ORCSD FY2020 Gross Expenditures	Additional Expenditures for New ADMs	Adjusted ORCSD FY2020 Gross Expenditures	Change from Actual to Adjusted Expenditures	% Change

Note: If entering new ADMs you must also enter ADMs per Household and New Household Property Valuation

Total	\$41,523,400	\$0	\$41,523,400	\$0	0.0%
Durham	\$22,161,572	N/A	\$22,161,572	\$0	0.0%
Lee	\$12,924,783	N/A	\$12,924,783	\$0	0.0%
Madbury	\$6,437,045	N/A	\$6,437,045	\$0	0.0%
	Actual Average Gross Expenditures per ADM		Adjusted Average Gross Expenditures per Adjusted ADM	Change from Actual to Adjusted	% Change
Durham	\$23,005.17		\$23,005.17	\$0.00	0.0%
Lee	\$18,317.95		\$18,317.95	\$0.00	0.0%
Madbury	\$17,778.45		\$17,778.45	\$0.00	0.0%
	<b>\$20,445.01</b>		<b>\$20,445.01</b>	<b>\$0.00</b>	0.0%
	<u>31 March 2020 Tax Rates</u>		New Taxes Collected on Additional Equalized Valuation in Durham		
	Durham Local School Tax	\$15.32	\$0		
	Durham State School Tax	\$2.01	\$0		
			<u>\$0</u>		