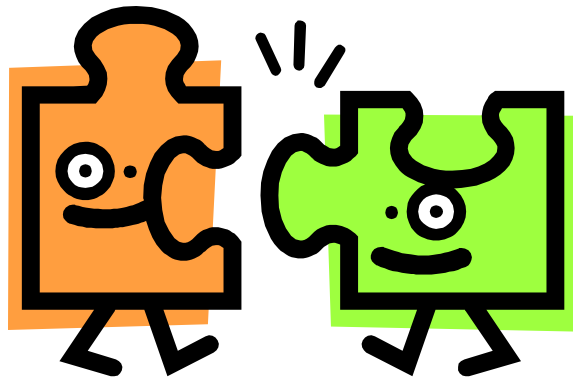


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# *Enrollment vs. Capacity*



George Nisotel  
Stow SBTF  
October 11, 2006

# Goal

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- Create an Analytical Framework that puts the subject of “Enrollment” into *a Context that enables a more informed discussion*
- How can one demonstrate an “*overcrowding*” problem without explicitly comparing Projected Enrollment (*Demand*) to Projected Classroom Capacity (*Supply*)?

# Develop a *Demand-Supply Model*

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- Integrate:
  - Projected Enrollment (*from NESDEC*)
  - Projected Classroom Capacity (*from SBTF proposals*)
- Show the “Student per Classroom” ratios:
  - by Grade
  - by Year
  - by School Site
  - *With and Without Modular Classrooms*
- Provide a tool for:
  - *Evaluating Multiple Scenarios*
  - *Performing Sensitivity Analysis*
  - *Comparing results to MSBA Guidelines*
  - *Demonstrating the degree of “overcrowding”*

# Overview of Data Inputs

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- **Enrollment**

- Will use NESDEC's Apr 2005 ("***With Additional Development***") Projection until we receive an update from NESDEC in Nov 2006

~ Scenario Used in  
M. Wood (8/28) SOI

Scenario Used  
by SBC in 2005

<b>NESDEC Scenario</b>	<b><i>Without</i> Additional Development</b>	<b><i>With</i> Additional Development</b>
<b><i>School Year</i></b>	<b><i>2018-19</i></b>	<b><i>2018-19</i></b>
Pre-K Students	35	35
K thru 5 Students	552	687
<b><i>Subtotal: Pre-K thru 5</i></b>	<b><i>587</i></b>	<b><i>722</i></b>

- Will need to interpolate "K thru 2", and "3 thru 5" groupings to obtain a projection by individual grade

# “Enrollment” Data Questions

- MWood 2006-08-28 SOI Enrollment figures for “K thru 5” match NESDEC 2005 “**Without** Additional Development” Scenario, *Except* for the 2011-2012 School Yr
  - MWood 2012 figure for “Grade 2” is 11 less than NESDEC ?

		Pre-K		K thru 2			3 thru 5			Total K thru 5			Total Pre-K thru 5	
		NESDEC Without A.D.	NESDEC With A.D.	NESDEC Without A.D.	MWood SOI (8/28/06)	NESDEC With A.D.	NESDEC Without A.D.	MWood SOI (8/28/06)	NESDEC With A.D.	NESDEC Without A.D.	MWood SOI (8/28/06)	NESDEC With A.D.	NESDEC Without A.D.	NESDEC With A.D.
2006-2007	Fcst	24	24	307	307	307	280	280	280	587	587	587	611	611
2007-2008	Fcst	26	26	294	294	301	297	297	305	591	591	606	617	632
2008-2009	Fcst	23	23	255	255	269	327	327	343	582	582	612	605	635
2009-2010	Fcst	26	26	272	272	293	316	316	340	588	588	633	614	659
2010-2011	Fcst	27	27	273	273	301	302	302	334	575	575	635	602	662
2011-2012	Fcst	28	28	284	273	319	262	262	302	546	535	621	574	649
2012-2013	Fcst	29	29	272	272	314	279	279	327	551	551	641	580	670
2013-2014	Fcst	30	30	273	273	322	279	279	335	552	552	657	582	687
2014-2015	Fcst	31	31	272	272	328	292	292	356	564	564	684	595	715
2015-2016	Fcst	32	32	273	273	336	279	279	351	552	552	687	584	719
2016-2017	Fcst	33	33	272		335	280		352	552		687	585	720
2017-2018	Fcst	34	34	273		336	279		351	552		687	586	721
2018-2019	Fcst	35	35	272		335	280		352	552		687	587	722

# “Enrollment” Data Questions

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Should we be using the NESDEC “***With*** Additional Development” Scenario (vis-à-vis *Without* Addnl. Devel.)?

- **722** vs. 587, in School Year 2018-19
- SBC Proposal referred to “**722**” scenario
- NESDEC Forecast needs to be updated based on Actuals
  - 2005-2006 Forecast for “K thru 5” appears to be less than Actual
  - 2005-2006 Forecast for “Pre-K” appears to be higher than Actual
- What “Scenarios” will NESDEC provide in their update?
  - ***With*** and ***Without*** Additional Development?
  - By Grade: **Pre-K** thru **8**?
  - By Year: Actuals for past few years, and Forecast thru 2018-2019

# Overview of Data Inputs

- **Classroom Capacity** (*Permanent and Modular*)  
for Stow (Pre-K thru 5) Students

			<i>This Year</i>		<i>Next Year</i>	
<i>Grades</i>	<i>School</i>	<i>Town</i>	<i>Perm</i>	<i>Mod</i>	<i>Perm</i>	<i>Mod</i>
Pre-K	Emerson	Bolton	2	0		
Pre-K	???	Stow				
K thru 2	Pompo	Stow	11	2	11	2
3 thru 5	Center	Stow	12	0	12	0
<b>Total</b> <b>Pre-K thru 5</b>			<b>25</b>	<b>2</b>	<b>23</b>	<b>2</b>

*Declines !*

# “Capacity” Data Questions

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- Modular Classrooms
  - What is current plan for adding Modulares?
  - Should they be considered as a part of “Capacity”?
  - MSBA’s position on Modulares as a long-term solution?
  - Should use of Modulares be added to Evaluative Criteria?
- What are the MSBA guidelines for “Students per Classroom”, by Grade?

# “Students per Classroom” Projection

(NESDEC Enrollment with “Addnl. Dev.” / “Next Yr” Capacity)

	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010		2012-2013		2015-2016		2018-2019
	<i>Fcst</i>	<i>Fcst</i>	<i>Fcst</i>	<i>Fcst</i>	<i>Fcst</i>		<i>Fcst</i>		<i>Fcst</i>		<i>Fcst</i>
<b>K thru 2</b>											
<b>Incl Mod</b>	21.2	23.6	23.2	20.7	22.5		24.2		25.8		25.8
<b>Excl Mod</b>	24.5	27.9	27.4	24.5	26.6		28.5		30.5		30.5
<i>MSBA Guideline</i>											
<b>Pre-K thru 2</b>											
<b>Incl Mod</b>	23.1	25.5	25.2	22.5	24.5		26.4		28.3		28.5
<b>Excl Mod</b>	26.6	30.1	29.7	26.5	29.0		31.2		33.5		33.6
<i>MSBA Guideline</i>											
<b>3 thru 5</b>											
<b>Incl Mod</b>	22.3	23.3	25.4	28.6	28.3		27.3		29.3		29.3
<b>Excl Mod</b>	22.3	23.3	25.4	28.6	28.3		27.3		29.3		29.3
<i>MSBA Guideline</i>											
<b>K thru 5</b>											
<b>Incl Mod</b>	21.7	23.5	24.2	24.5	25.3		25.6		27.5		27.5
<b>Excl Mod</b>	23.4	25.5	26.3	26.6	27.5		27.9		29.9		29.9
<i>MSBA Guideline</i>											
<b>Pre-K thru 5</b>											
<b>Incl Mod</b>	22.7	24.4	25.3	25.4	26.4		26.8		28.8		28.9
<b>Excl Mod</b>	24.6	26.6	27.5	27.6	28.7		29.1		31.3		31.4
<i>MSBA Guideline</i>											

# Other Issues to Consider

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- Inclusion of Enrollment Projections for Hale
- A centralized “campus” approach provides more flexibility to deal with enrollment “bubbles” by shifting grades between “adjacent” buildings
- Inadequate space may have indirect negative impacts on the curriculum and support facilities (i.e. more than just “Students per Classroom”)

# Next Steps

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- NESDEC Enrollment update  
(due to SBTF in Nov 2006?)
- Updates to Near-Term Capacity figures?
- Address identified “Enrollment” and “Capacity”  
Data Questions
- Expand Framework to include Non-Classroom  
Space considerations?

# Next Steps

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- Finalize Enrollment Forecast
  - *Based on a NESDEC Scenario*
- Determine Additional Future Capacity
  - ***Based on SBTF Building Proposal Scenarios!***

