

# **ACTON-BOXBOROUGH REGIONAL SCHOOL DISTRICT**



## **SCHOOL START TIME COMMITTEE REPORT**

**JUNE 2017**

## **CONTENTS**

<b>I. INTRODUCTION &amp; OVERVIEW</b>	<b>3</b>
A. Start Time Working Group	3
B. ABRSD Start Time Committee	4
<b>II. DATA COLLECTION INSTRUMENT: DESCRIPTION &amp; OVERVIEW</b>	<b>5</b>
<b>III. SUMMARY OF SURVEY QUESTIONS &amp; RESPONSES</b>	<b>5</b>
<b>IV. SURVEY HIGHLIGHTS BY SECTION</b>	<b>6</b>
A. Three-Tier Options	6
B. Two-Tier Options	8
C. Budgetary Considerations of the Two-Tier Models	9
D. Ranking the Four Start Time Options & the 2017-18 Schedule	10
E. Factors Influencing Ranking Decision	10
<b>V. OPEN RESPONSE SUMMARY: THEMES &amp; HIGHLIGHTS</b>	<b>12</b>
A. Question 11: What are the most important factors that influence your decision?	13
B. Question 12: Additional comments	14
<b>VI. RECOMMENDATION</b>	<b>15</b>
<b>VII. CONCLUSION</b>	<b>15</b>
<b>VIII. APPENDICES</b>	<b>16</b>
A. Research & Resources	16
B. Additional Information	16

## **I. INTRODUCTION & OVERVIEW**

During the 2015-16 school year, Dr. Brand, Superintendent of Schools, requested that the *Superintendent's Wellness Committee* engage in a study to examine the issue of school start times and its intersection with student health and well-being.

This year-long effort resulted in an extensive report presented to the ABRSD School Committee in June of 2016, which specifically recommended that the school district examine changing school start times at the secondary level. Upon receipt of the report, the School Committee requested that Dr. Brand develop a plan to respond to the *Superintendent's Wellness Committee's* recommendations.

This plan, which was put in place as a part of Dr. Brand's goals for the 2016-17 school year, included the formation of a School Start Time Committee. The committee was tasked with delivering a report to the School Committee outlining the various options, financial costs, and implications regarding future school start and end times.

This report represents the culmination of the work that has taken place over the course of the last school year. The specific strategies included:

- Form an internal working group to examine options and financial costs as well as identify implications and/or necessary changes if a shift in start time is pursued
- Establish a wider stakeholder group

### ***A. Start Time Working Group***

From October until December of 2016, a small working group began examining the various options and financial costs associated with transformations to our current school start times across the district. Given the need to provide transportation service to the entire school district, identifying options required the consideration of impacts across all schools.

The *Start Time Working Group* included the following members:

Glenn Brand - Superintendent of Schools  
Marie Altieri - Deputy Superintendent  
Larry Dorey - Associate Principal, ABRHS  
Matt McDowell - Assistant Principal, McCarthy-Towne  
Steve Martin - Director of Athletics  
JD Head - Director of Facilities & Transportation  
Erin Bettez - Director of Community Education  
Ed Wiener - Transportation Manager

Meeting dates included October 7, November 16 and December 15. The work completed by this group included the development of possible options that were vetted and then ultimately advanced to the larger *ABRSD Start Time Committee*.

***B. ABRSD Start Time Committee***

On December 15, 2016 a call for volunteers to serve on the *ABRSD Start Time Committee* went out to staff and the AB community. This Committee was formed to:

- Explore various start time options
- Gather community feedback
- Make recommendations to the School Committee for further consideration

The list below represents those individuals who served on the Committee. Additionally, the Committee was further broken down into four subcommittees to better facilitate the work.

The full *ABRSD Start Time Committee* met on the following dates: January 10, February 7, May 1 and May 23. Subcommittees scheduled additional meetings as necessary.

**Start Time Subcommittee Members  
2016-17**

<b>Outreach</b>	<b>Scenario &amp; Options</b>	<b>Research &amp; Education</b>	<b>Communications</b>
*Larry Dorey	*Marie Altieri	*Kate Contini	*Allison Warren
Steve Martin	Damian Sugrue	Jessica Lubets	Chris Fenniman
Laura Martin	Tessa McKinley	Michelle Hanlon	Erin Bettez
David Green	Bill Noeth		Andrea Keenan
Eileen Zhang	Heather Harer		Deanne O’Sullivan
Diane Baum	Deanne O’Sullivan		
Diane Ross	JD Head		
Elizabeth McGovern	Kerrie French		
	Ed Weiner		
	Matt McDowell		

\* Subcommittee leaders

## II. DATA COLLECTION INSTRUMENT: DESCRIPTION & OVERVIEW

In May 2017, the *ABRSD Start Time Committee* conducted a community survey to gather feedback from stakeholders on start time options. The brief on-line survey, created through SurveyMonkey, was sent to all ABRSD parents/guardians and all ABRSD staff members via a link in an email message from the superintendent on May 4. An email reminder about the survey was sent on May 10 and the survey closed on May 15.

<b>Survey Respondents</b>	<b>#</b>	<b>%</b>
<b>Parents/guardians</b>	2,109	78%
<b>Staff</b>	395	15%
<b>Both parent/guardian and staff</b>	162	6%
<b>Community member (with no children currently in the district)</b>	27	1%
<b>Total</b>	<b>2,693</b>	<b>100%</b>

The survey received a total of 2,693 responses from the following demographic groups:

The goal of the survey was to gauge support for several start time options as well as understand the factors influencing stakeholders' preferences. The survey consisted of the following:

- Three either/or questions where respondents chose between pairs of start time options
- One question where respondents were asked to rank five start time options
- One multiple choice question on the factors influencing the ranking decisions
- One multiple choice question on budgetary considerations
- One open response question asking respondents to “provide any additional comments”

The following pages provide a summary of the results as well as some highlights by section. For more detailed results, please see the Survey Results Report in Appendix B.

## III. SUMMARY OF SURVEY QUESTIONS & RESPONSES

Survey results in the aggregate show broad support for changing the start time, with a majority of respondents listing “Student well-being” as an important factor in considering start time preferences. All four of the proposed new start time scenarios were ranked higher than the 2017-18 start time.

Three of the four new proposed start time options were essentially tied as respondents' first choice: Option I (25%), Option II (24%), and Option IV (24%). Option III was selected as first choice by 18% of survey-takers. The 2017-18 start time was selected as first choice by 9% of respondents.

Of the 2,194 survey-takers who are Acton or Boxborough residents, 78% indicated a willingness to support the costs of a changing to a two-tier busing option either through a reallocation of funds in the current budget (32%), an increase in the assessment (5%), or a “reallocation of funds and/or an increase in the assessment” (41%). 22% indicated they would not be willing to support a two-tier model by either of these means.

The factors which most often influenced respondents’ decisions when ranking the options were “Student health and well-being” (84%) and “Impact on student sleep” (77%). The next four most commonly selected factors were “Budgetary considerations of the two-tier models” (26%), “Athletics in the PM” (20%), “After school care” (18%), and “Morning care” (16%).

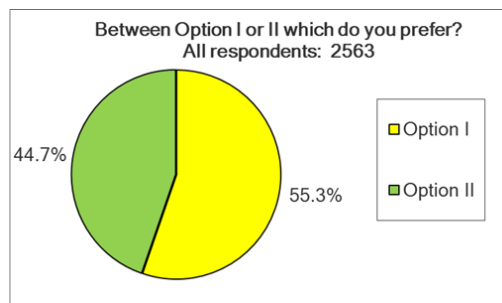
#### IV. SURVEY HIGHLIGHTS BY SECTION

##### A. Three-Tier Options

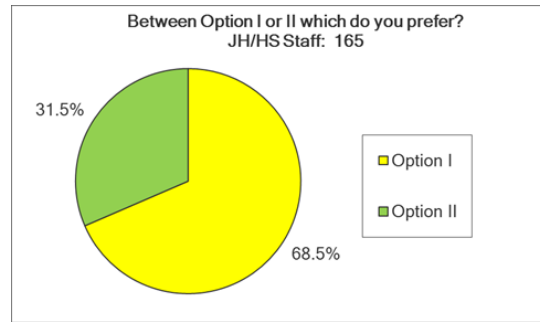
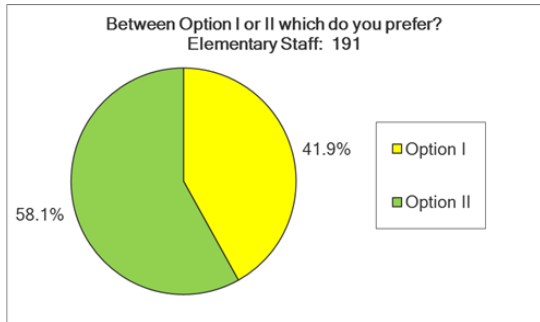
Respondents were asked to choose between two start time scenarios referred to as Option I and Option II.

<b>Option I:</b>		<b>Option II:</b>	
JHS/HS	7:50 - 2:26/2:30	Elem: Early	7:30-2:00
Elem: Early	8:40 - 3:10	Elem: Late	8:10-2:40
Elem: Late	9:20 - 3:50	JHS/HS	8:50-3:26/3:30

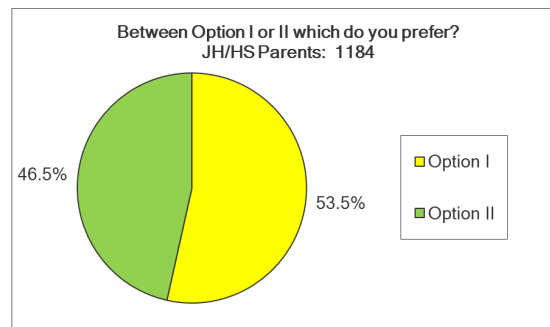
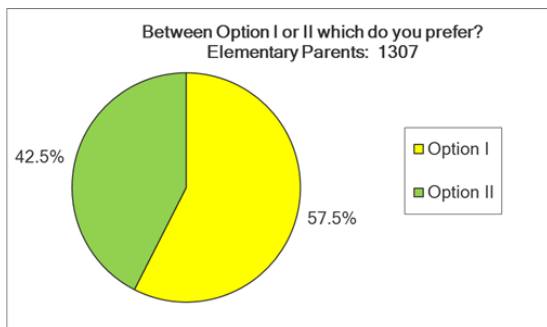
Responses from parents and staff matched the aggregate response, with 55% in favor of Option I and 45% in favor of Option II.



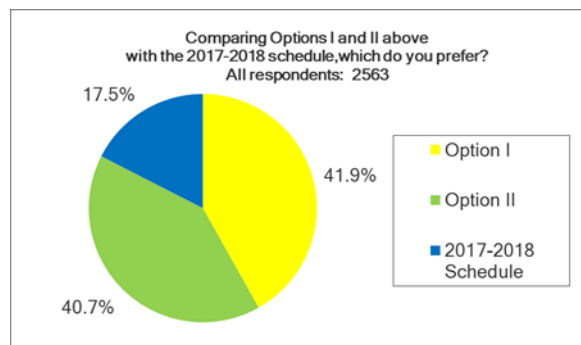
When breaking down the staff subgroup into elementary staff and junior high/high school staff, however, the balance shifted to only 42% of elementary staff in favor of Option I while 69% of junior high/high school staff were in favor of Option I over Option II.



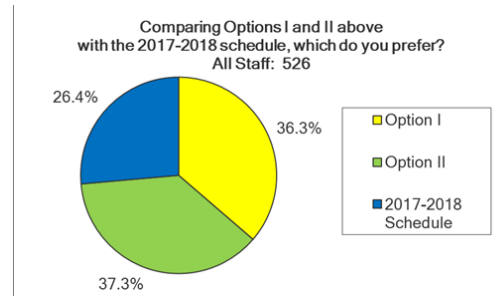
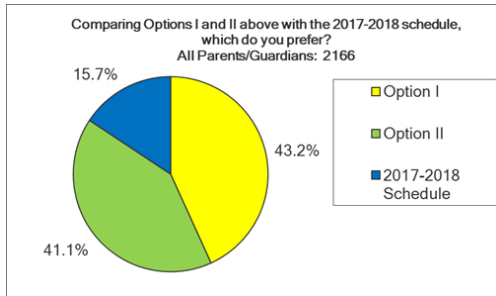
Comparing parents/guardians of elementary and junior high/high school students, the options remained fairly balanced with 58% of elementary parents/guardians preferring Option I and 54% of junior high/high school parents preferring Option I over Option II.



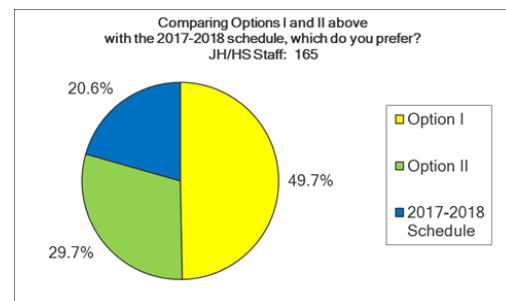
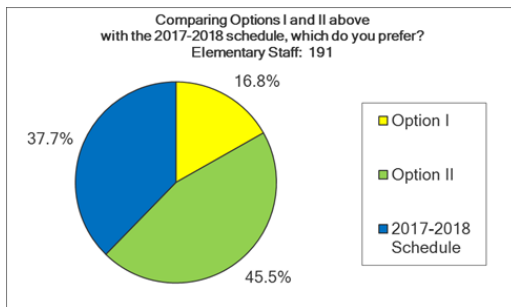
When the 2017-18 schedule was added to Option I and Option II as a third option, 18% of respondents switched over to preferring the 2017-18 start time, with most coming from the group that had selected Option II as their preference previously.



26% of staff indicated a greater preference for the 2017-18 schedule over Options I and II and 16% of parents did as well. Both groups still favored Option I or II over the 2017-18 schedule.



Again, as shown in the charts below, the largest difference occurred between staff at the elementary schools and staff at the high school/junior high. The elementary staff were more in favor of the 2017-18 schedule and Option II and the junior high/high school staff more in favor of Option I.

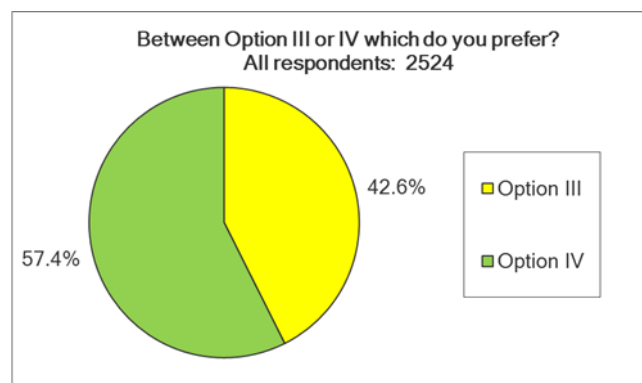


### B. Two-Tier Options

When considering the two-tier options which were referred to in the survey as Option III and Option IV, the subgroups of parents/guardians and staff matched closely with the aggregate, with 57% preferring Option IV and 43% preferring Option III.

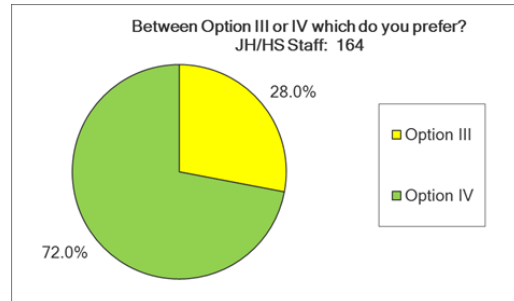
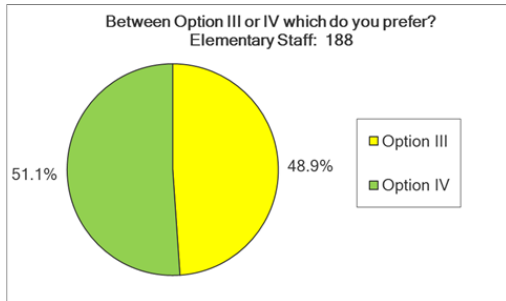
Option III:	
Elem: ALL	7:50 - 2:20
JHS/HS	8:30 - 3:06/3:10

Option IV:	
JHS/HS	8:00 - 2:36/2:40
Elem: ALL	8:40 - 3:10

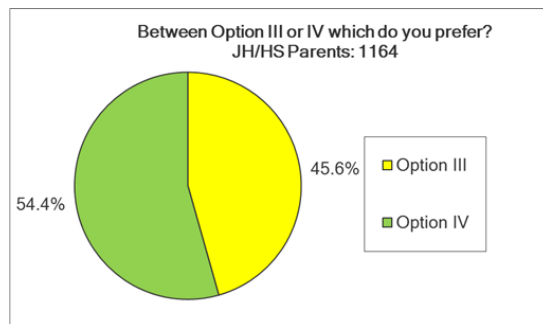
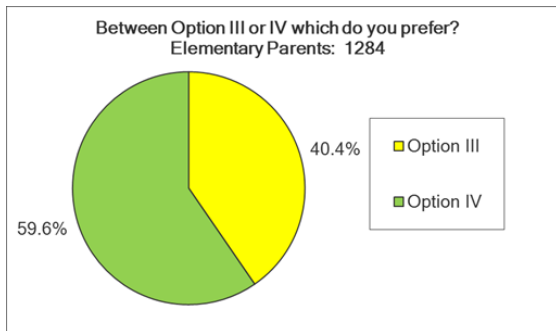




However, in further breaking these groups down some imbalance in preferences emerged. Elementary school staff were equally divided between Option III (49%) and Option IV (51%) while junior high/high school staff favored Option IV (72%) significantly over Option III (28%).

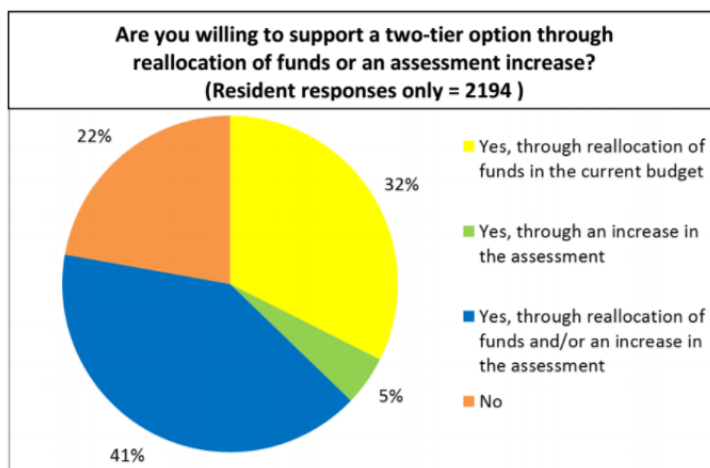


Among parents of elementary school children and parents of junior high/high school students, the preference of both was for Option IV at 60% and 54% respectively.



### C. Budgetary Considerations of the Two-Tier Models

After choosing between Options III and IV, respondents were asked if they would be willing to support funding one of the two-tier models. 78% of the Acton and Boxborough town residents taking the survey indicated they would support funding a two-tier model by some means.



A further look at the demographic breakdown of responses indicates a greater willingness on the part of parents/guardians to fund a two-tier model than other town residents.

	All	Parents/ Guardians	Staff	Community Members
<b>Number of responses*</b>	<b>2524</b>	<b>2131</b>	<b>520</b>	<b>25</b>
<b>Yes, through reallocation of funds in the current budget</b>	28%	32%	10%	20%
<b>Yes, through an increase in the assessment</b>	4%	5%	4%	4%
<b>Yes, through reallocation of funds and/or an increase in the assessment</b>	35%	40%	18%	32%
<b>No</b>	19%	21%	11%	24%
<b>N/A - not a resident of either town</b>	13%	2%	57%	20%

\*Staff members who also have a child in the district are counted in both the Staff column and the Parent/Guardian column. Therefore, the combined number of Parents/Guardians, Staff, and Community Members exceeds the total number of respondents.

#### ***D. Ranking the Four Start Time Options & the 2017-18 Schedule***

Survey-takers were next asked to rank five start time scenarios. Three of the options proved to be fairly equally rated with 591 (25%) of respondents selecting Option I as their First Choice, 571 (24%) selecting Option IV, and 570 (24%) selecting Option II. The 2017-18 schedule was the least often selected with 9% choosing it as their First Choice. Option IV was most often in respondents' top three choices.

<b>% of Respondents who chose this option as their...</b>	<b>First Choice</b>	<b>First or Second Choice</b>	<b>First, Second, or Third Choice</b>
Option I	25	24	21
Option II	24	18	16
Option III	18	22	20
Option IV	24	23	25
2017-18 Schedule	9	11	14

#### ***E. Factors Influencing Ranking Decision***

After ranking start time options, survey-takers were asked to select the “most important factors” that influenced their decision. Respondents could choose as many options as applied and were also afforded the opportunity to type in a factor that was not listed. Respondents

overwhelmingly selected “Student health and well-being” and “Impact on student sleep” as important factors influencing their preferences of start times. The next four most commonly selected factors were “Budgetary considerations of the two-tier models” (26%), “Athletics in the PM” (20%), “After school care” (18%), and “Morning care” (16%). With few exceptions, parent/guardian and staff responses matched fairly closely with the overall responses.

	All	Parents/ Guardians	Staff
<b>A. Student health and well-being</b>	84%	86%	80%
<b>B. Impact on student sleep</b>	77%	80%	65%
<b>C. Athletics in the AM</b>	2%	1%	2%
<b>D. Athletics in the PM</b>	20%	21%	20%
<b>E. After school care</b>	18%	17%	20%
<b>F. Morning care</b>	16%	16%	19%
<b>G. Late drop off for elementary students</b>	11%	11%	12%
<b>H. Early pick up</b>	5%	5%	5%
<b>I. Gap in supervision between dismissal and after school activities</b>	9%	9%	7%
<b>J. After school jobs</b>	9%	8%	16%
<b>K. Budgetary considerations of the two-tier models</b>	26%	28%	19%
<b>L. Other*</b>	12%	10%	16%
<b>Number of Respondents</b>	<b>2,402</b>	<b>2,034</b>	<b>493</b>

\*most often listed factors under "Other" were the desire to end the alternating year schedules for elementary schools and concern regarding time for afterschool activities/rest/play/homework.

Predictably, variations in the factors influencing respondents’ preferences emerged when looking at some of the subgroups:

	Elementary Parents	JH/HS Parents	Elementary Staff	JH/HS Staff
<b>A. Student health and well-being</b>	85%	88%	80%	78%
<b>B. Impact on student sleep</b>	80%	83%	65%	58%
<b>C. Athletics in the AM</b>	2%	2%	1%	3%
<b>D. Athletics in the PM</b>	18%	24%	6%	27%
<b>E. After school care</b>	24%	9%	20%	24%
<b>F. Morning care</b>	21%	8%	21%	20%
<b>G. Late drop off for elementary students</b>	15%	6%	20%	3%
<b>H. Early pick up</b>	7%	2%	6%	1%
<b>I. Gap in supervision between dismissal and after school activities</b>	12%	6%	4%	6%
<b>J. After school jobs</b>	4%	11%	10%	24%
<b>K. Budgetary considerations of the two-tier models</b>	27%	30%	13%	14%
<b>L. Other*</b>	12%	9%	15%	20%
<b>Number of Respondents</b>	<b>1,222</b>	<b>1,120</b>	<b>177</b>	<b>157</b>

\*most often listed factors under "Other" were the desire to end the alternating year schedules for elementary schools and concern regarding time for afterschool activities/rest/play/homework.

Finally, the following chart offers a comparative look at responses given by those who chose the two most popular and the least popular of the start time options as their First Choice and the

factors influencing respondents' preferences.

Respondents who chose as their First Choice:		Option I	Option IV	2017-18 Schedule
<b>Total number of respondents:</b>		<b>591</b>	<b>571</b>	<b>216</b>
<b>Demographics</b>	I am a Parent/Guardian	83%	76%	69%
	I am a Staff Member	11%	17%	21%
	I am both a Parent and Staff Member	5%	7%	8%
	I am a Community Member	1%	1%	1%
<b>Factors Influencing Ranking</b>	Student health/well-being	84%	85%	50%
	Impact on student sleep	77%	78%	36%
	Athletics in AM	2%	1%	4%
	Athletics in PM	28%	21%	40%
	Afterschool care	19%	25%	26%
	Morning care	13%	20%	26%
	Late drop off -elem	7%	16%	13%
	Early pick up	4%	8%	6%
	Gap in afternoon supervision	10%	12%	11%
	Afterschool jobs	14%	9%	24%
	Budgetary	40%	11%	45%
	Other	9%	12%	22%
<b>Would you be willing to support a two-tier option through reallocation of funds in the current budget and/or an increase in the assessment?</b>	Yes- reallocation of funds	33%	28%	22%
	Yes- assessment increase	4%	5%	2%
	Yes - either reallocation or assessment	22%	47%	13%
	No	32%	5%	46%
	N/A - not a resident	9%	16%	17%

## V. OPEN RESPONSE SUMMARY: THEMES & HIGHLIGHTS

The open-response option allowed participants to leave comments related to the reasoning for their selections in the survey. These comments give further insight into the concerns and rationale of the Acton-Boxborough school community related to the school start time change proposal. The responses are varied and highlight the differing concerns of working parents, parents with children across the grade spectrum, staff members, and both community members

with deep understanding behind the science of adolescent sleep and those just getting familiar with it.

Responses indicate factors that range from deep concerns about our students health, to logistics regarding childcare and afterschool activities, to a reluctance to change the current schedule. These concerns indicate that the School Committee and School Start Committee will need to make a strong commitment to education and community outreach for wide-spread understanding and support.

The feedback in the open-responses can be grouped into categories or themes for each of the open response questions:

***A. Question 11: What are the most important factors that influence your decision? Please select all that apply.***

11.5% of responders said their most important factors were something other than the 12 options provided by the survey. There were 276 comments. Key themes include:

- Impact on parent work schedule/commute/traffic (19% / 52)
- Impact on after school activities/non-athletics - e.g. homework, family time, play time, student jobs (15% / 43)
- Do not want elementary schedules to flip flop/want single tier elementary (14% / 40)
- Do not want elementary schools to start too early (6% / 17)
- Keep times as they are/no change (5% / 15)
- Additional repeated comments include:
  - Eliminate school choice
  - Schools not responsible for what happens at home, parents/society need to change
  - Difficulty of having multiple children on different schedules and large gap in school hours
  - Ability for staff to schedule after work appointments
  - Staff and parents' health and well-being
  - Concern about high schoolers missing bus after parents have gone to work/don't want students getting on or off bus in dark

It's worth noting that concerns of elementary school parents differ somewhat from secondary school parents, but this survey focused on proposed changes related to recommendations of the medical community on sleep requirements of adolescents. Two-tier and three-tier busing is a separate issue but relates to the potential outcome of adjusted start time scheduling and is a concern of many families. It's an multi-level issue that is revealed in these comments and should be addressed in community outreach initiatives. Many concerns related to parent work schedules,

after school activities, and childcare can be addressed when confronting the multi-tiered bus schedules with the goal of a more consistent schedule.

***B. Question 12: Please provide any additional comments that you would like the Start Time Committee to be aware of as it relates to these options.***

22.4% of total survey participants responded in the final, open-ended question for additional feedback. There were 604 comments. Key themes include:

- 23% (144) Our children's mental and emotional health needs to be the top priority. We need to make this happen.
  - Can we do for this fall of 2017? (14)
  - We need to make a real shift - not 15/20 min. (14)
- 15% (90) THANK YOU to district for doing this/not easy
- 8% (48) Desire for single-tier elementary (or at least no flip flopping of late/early)
- 7% (40) Costs need to be controlled. Spend money on education not more transportation. No new taxes for this. If district can build fields it can pay for this important change. We have a new school building project coming too.
- 5% (32) Later start time good for secondary, but please consider impact on elementary students (too early start/too late end)
- 5% (30) Skepticism that change will do anything to teens' sleep habits. Parents need to manage children's social media/over-scheduling.
- 4% (25) Consider eliminating school choice (stress/empty buses/divisive/costly)
- 2% (14) Keep things the same.
- Additional repeated comments include:
  - Would be good to understand exact costs of each option. (10)
  - District must figure out a plan that is fairest to all interested parties as this pits elementary vs secondary (5)
  - Every family/staff member has unique work/child care/activity needs, which makes this so difficult..
  - No kids should go to school or home in the dark. (6)
  - Concerns about Thursday half days/cost to families (5)
  - This decision should not be driven by its impact on athletics (6)
  - Concerns about families whose older children care for younger siblings (5)
  - If HS starts later, there should be no school extra curricular activities before school -- it would defeat the purpose.
  - Do not like any of the options.
  - What about the impact on staff families/child care/etc?
  - What's the impact of a later start on students' after school jobs?
  - Concern about elementary children's play/free activities.

## VI. RECOMMENDATION

After reviewing and discussing the research and the survey results, the *Start Time Committee* makes the following recommendation:

**Move forward exploring the logistical and financial possibility of implementing a change in start times as outlined in Option IV for September 2018.**

The schedules for this option are:

High School	8:00 am to 2:40 pm
Jr. High	8:00 am to 2:36 pm
Elementary (All)	8:40 am to 3:10 pm

## VII. CONCLUSION

As indicated in the survey results summary, there is broad support for making a change to start times with 84% of respondents indicating “Student health and well-being” and 77% indicating “Impact on student sleep” as the primary reasons. The research done by both the *ABRSD Start Time Committee’s* research subcommittee as well as the 2015-16 *Superintendent’s Wellness Committee* strongly supports a change to later start times for high school and junior high school students. There was also strong support for moving to single-tier elementary busing in the qualitative and quantitative feedback, and 78% of respondents said that they would support a two-tier model by some means.

The *Start Time Committee* recommends the Option IV schedule based on the following:

- This option results in improved school start and end times for all students K-12
- This option allows for significant shifts in start times for both the high school (47 minutes later) and the jr high school (30 minutes later) while avoiding a negative impact on the elementary start/end times
- These times are consistent with other Massachusetts school districts that have moved to a later start time; no district has “flipped” elementary start times to be earlier than the high school start time
- The ending time for the high school (2:40 pm) will not dramatically impact athletics or extracurricular activities
- The options that maintain three-tier busing result in the elementary schools either starting too early (7:30 am) or ending too late (3:50 pm)
- Moving from three tiers of busing to two has many additional benefits for the elementary schools.
  - Many written comments reported the difficulties of the elementary school schedules switching each year and ending too late on the late schedule

- Teachers will be available at the same time for meetings and professional learning if all elementary schools are on the same schedule

If two-tier busing is not financially feasible, the *Start Time Committee* believes that only a slight change to the high school start time could be made. If the new high school schedule includes a day which is fifteen minutes shorter, the high school could start fifteen minutes later (7:38 am). The committee believes this slight shift would be preferable to Options I and II, which have the elementary school students starting earlier or ending later than desired.

In conclusion, shifting the high school and the jr. high to a later start time of 8:00 am and aligning the elementary schools on a single, consistent schedule starting at 8:40 am would provide benefits to the health and wellness of all students K-12. Before this shift is made, there should be additional community outreach and a more detailed review of impacts on extra-curricular activities and families. The *Start Time Committee* encourages the School Committee to further explore this option with the community and through the budget process.

## **VIII. APPENDICES**

### ***A. Research & Resources***

[In the News](#)

[In the Research](#)

[In Other Communities](#)

[In Our District](#)

### ***B. Additional Information***

[Start Time Survey Results Summary](#)

[2016 ABRSD Wellness Advisory Committee Report](#)

[Two-Tier Bus Routing System Assessment](#)



## ACKNOWLEDGEMENTS

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Sincerely,

Glenn Brand, Ed.D.  
Superintendent of Schools

## School Start Times

### IN THE NEWS

AAP Press Release (2014); *Let them sleep- AAP Recommends Delaying Start Times of Middle and High Schools to Combat Teen Sleep Deprivation*

<https://www.aap.org/en-us/about-the-aap/aap-press-room/Pages/Let-Them-Sleep-AAP-Recommends-Delaying-Start-Times-of-Middle-and-High-Schools-to-Combat-Teen-Sleep-Deprivation.aspx>

- American Academy of Pediatrics policy statement on school start time recommendation
- Effects of lack of sleep are serious including depression, obesity, impaired driving.
- Advocates for school start times no earlier than 8:30am.

AASM position: *Delaying middle school, high school start times is beneficial to students*

<http://www.aasmnet.org/articles.aspx?id=6847>

- A new position statement from the American Academy of Sleep Medicine (AASM) asserts that the school day should begin at 8:30 a.m. or later for middle school and high school students.
- The position statement is published in the April 15, 2017 issue of the *Journal of Clinical Sleep Medicine*.
- The position statement states that "Data show that later start times provide adolescents the opportunity to get sufficient sleep on school nights, which optimizes daytime alertness, reduces tardiness and improves school attendance. A later school start time supports peak academic performance, more opportunities for learning, better mental health, and enhanced driving safety."

Straus, Wendy, Washington Post (8/25/16); *US Doctors urge later school start times for teens*

[https://www.washingtonpost.com/news/answer-sheet/wp/2014/08/25/u-s-doctors-urge-later-school-start-times-for-teens/?utm\\_term=.6b963ef243e8](https://www.washingtonpost.com/news/answer-sheet/wp/2014/08/25/u-s-doctors-urge-later-school-start-times-for-teens/?utm_term=.6b963ef243e8)

- Cites studies and data on the side of later start times.
- Nationally, schools are grappling with this health issue and working to find solutions to logistical barriers such as bus scheduling and athletics.

Troxel, Wendy TED Talk (12/1/16): *Sleepy Teens - A public health epidemic*

[https://www.youtube.com/watch?v=G0Zj\\_InJ4BQ](https://www.youtube.com/watch?v=G0Zj_InJ4BQ)

- Dr. Wendy Troxel, sleep scientist and founding director of the American Academy of Sleep Medicine, speaks at a TED talk in Manhattan Beach.
- Outlines the mental and physical effects of lack of sleep in teens.
- Negative impacts on academic, social, emotional, and physical development

Vaznis, James, Boston Globe (3/10/17); *Students find more awareness with later starts*  
<https://www.bostonglobe.com/metro/2016/03/09/students-see-benefits-from-later-school-start-times/OOb4vtHm4XZTBLm5X78V9L/story.html>

- Cites study showing Massachusetts with earlier start times than the national average
- Nauset Regional HS with positive results from a shift to 8:35am start time
- Other MA districts exploring later start time options, with bussing logistics proving to be the biggest obstacle, while athletics and after-school activity logistics being easier to overcome.

Weller, Chris Business Insider (10/16/16); *Schools around the US are finally pushing back their start times — and it's working*  
<http://www.businessinsider.com/school-start-times-2016-10>

- Spotlight on Dobbs Ferry, NY district with positive results from changing start time.
- Highlights some of the downsides in the change including less time in the afternoons for after-school activities.

## School Start Times

### IN THE RESEARCH

#### **Sleep Research**

##### ***Adolescent Sleep Patterns and Nighttime Technology Use***

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0111700>

- Late night technology use is negatively impacting adolescent sleep patterns.

##### ***AMA Supports Delayed School Start Times to Improve Adolescent Wellness-***

##### **American Medical Association**

<https://www.ama-assn.org/ama-supports-delayed-school-start-times-improve-adolescent-wellness>

- American Medical Association statement released last June (2016) supporting later start times (no earlier than 8:30) and calls on schools nationwide to address as well as pediatricians to educate parents on the science.

##### ***Later Start Times Improve Sleep and Daytime Functioning - Science Daily***

<https://www.sciencedaily.com/releases/2014/01/140115122215.htm>

- Later start times improves sleep
- Improving sleep improves mood and learning

##### ***Prioritizing Sleep Health - Perspectives on Psychological Science***

<http://journals.sagepub.com/doi/pdf/10.1177/1745691615598509>

- Crisis = not enough sleep
- Start school later

##### ***School Start Time for Adolescents - American Academy of Pediatrics***

<http://pediatrics.aappublications.org/content/pediatrics/early/2014/08/19/peds.2014-1697.full.pdf>

- Factors influencing insufficient sleep for adolescents
- Impact of a lack of sleep on adolescents
- Recommendations

##### ***Sleep in Adolescence: The Perfect Storm- Pediatric Clinics of North America***

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3130594/pdf/nihms-291181.pdf>

- Changes in adolescent sleep patterns
- Psychosocial impact on sleep
- Recommendations for change

##### ***Social Ties and Adolescent Sleep Disruption - Journal of Health and Social Behavior***

<http://www.asanet.org/sites/default/files/savvy/journals/JHSB/DEC13JHSBFeature.pdf>

- A study of adolescents that discusses school, family, and peer impacts on sleep in addition to the medical factors that impact sleep.

### **Brain Research**

**Armstrong, T. (2016). *The power of the adolescent brain: Strategies for teaching middle***

***and high school students*. Alexandria, VA: ASCD.**

- Explains changes and needs of the adolescent brain.
- Focuses on learning needs.
- Suggestions for teachers and parents.

**Feinstein, S. G. (2009). *Secrets of the teenage brain: Research-based strategies for reaching and teaching today's adolescents*. New York, NY: Skyhorse Publishing.**

- Plasticity and changes in the adolescent brain.
- Chapters on learning, stress, socializing, and self-concept.
- Final chapters provides recommendations for families and schools on how to help teens through this transitional time.

**Jensen, F. E. & Nutt, A. E. (2015). *The teenage brain: A neuroscientist's survival guide to***

***raising adolescents and young adults*. New York, NY: Harper Collins.**

- Chapter on the research around sleep
- Chapter on the impact of the changing brain on learning

**Luciana, M., & Collins, P. F. (2012). Incentive motivation, cognitive control, and the adolescent brain: Is it time for paradigm shift? *Child Development Perspectives*, 6**

**(4), 392-399. doi:10.1111/j.1750-8606.2012.00252.x**

**retrieved from:**

**<http://onlinelibrary.wiley.com.ezproxyles.flo.org/doi/10.1111/j.1750->**

**8606.2012.00252.x/pdf;jsessionid=795EC6BE51A5B5BD0389E81043D75F80.**

**f01t04**

- Discusses the impact of stress & fatigue on the brain
- Lack of sleep leads to fatigue which leads to lack of learning

**Siegel, D. J. (2013). *Brainstorm: The power and purpose of the teenage brain*. New York,**

**NY: Penguin Group.**

- Overview of the changes in the adolescent brain
- Impact on learning, relationships and other aspects of life

- Sections related to sleep and stress impact

## School Start Times

### IN OTHER COMMUNITIES

A recent Boston Globe article states "Massachusetts has one of the earliest start times for secondary school students in the nation, according to a report last year by the Centers for Disease Control and Prevention. On average, the morning bell for middle and high schools in Massachusetts rings at 7:53 a.m. — 10 minutes earlier than the national average — while less than 12 percent of all middle and high schools statewide start at 8:30 a.m. or later, according to the report" (Vaznisk, 3/10/16). Further, according to the ABRSD Wellness Advisory Committee Report, ABRHS and RJ Grey have some of the earliest start times in the local area. The report states that AB had the second earliest start time in the 27 districts surrounding Acton and those in the Dual County League (DCL) (page 13).

Of those districts on the list in the Wellness Report, many are considering or have changed their start times to be later in the day. We met with (in person or on the phone) administrators or representatives from School Committees or School Start Time Committees from several districts.

Sharon School District moved their high school start time from 7:25 to 8:05 AM for the 2010-2011 academic year. In discussions with the principal of the high school, he relayed that in his opinion there "are no cons" to this decision. His overriding statement was that when considering what's best for the kids and their health, the later start time is the right decision. He presented data from the state that showed a marked decline in absentee rates in his school district following the change. He said that there would not be one kid in the school that would now say to move the start time back to 7:30 am. He said certainly there are logistical issues but all of these can be overcome if academics and student well-being are prioritized.

Other discussions were held with Ashland, Wayland, Concord-Carlisle, and Natick School Districts.

Ashland's school start time for 2017-2018 will be 8:20 am for the high school and 8:15 am for the middle school. Currently their school start times are 7:30 am and 7:50 am.

Concord-Carlisle will move the school start time for 2017-2018 to 8:00 am for the high school and 8:12 am for the middle school. (If the CC annual budget is approved, they did not anticipate any issues with the budget passing.)

Each of these people stated the same big issues in terms of challenges when changing start times: 1) bus schedules/transportation, 2) extracurricular activities, and 3) child care

issues. But each of the districts found ways to address these issues. Each emphasized the importance of consistently focusing on the well-being of the students and the prioritizing of academics. Each also emphasized that communication is key during the process.

Many other nearby districts including Lincoln-Sudbury, Waltham, and Wayland are considering changing their start times to be 8:00 am or later. Other districts considering the change are in the ABRHS Wellness report and for information on the movement nationwide, the web page [www.startschoollater.net](http://www.startschoollater.net) provides a listing by state.

The Natick and Newton districts considered the change but did not end up changing start times for the upcoming school year. Logistical issues (scheduling and costs) could not be overcome at the current time to accomplish moving the start times. It is our understanding that both districts are to some extent continuing to work on the issue for possible re-consideration in the future.

For more information. . .

Ashland

<http://ashlandhs.libguides.com/StartTimes>

Natick:

[http://www.natickps.org/about/policies/school\\_start\\_time\\_resources](http://www.natickps.org/about/policies/school_start_time_resources)

Sharon:

[http://www.sharon.k12.ma.us/pages/Sharon\\_Public\\_Schools/Main\\_Menu/General\\_Information/Special\\_Projects/Previous\\_Special\\_Projects/School\\_Start\\_Time](http://www.sharon.k12.ma.us/pages/Sharon_Public_Schools/Main_Menu/General_Information/Special_Projects/Previous_Special_Projects/School_Start_Time)

Concord

<http://www.concordps.org/events/event/cchs-later-start-time-initiative-public-forum/>



## School Start Times

### IN OUR DISTRICT

#### **ABRSD WELLNESS ADVISORY COMMITTEE REPORT, School Start Times, June 2016**

Research report presented to ABRSD School Committee on the science, impact, and recommendation on adolescent sleep.

Link to Report, Video, and Slides

<http://www.abschools.org/district/school-start-times>

Presentation

[https://d9adebcf-a-bdde4ed0-s-sites.googlegroups.com/a/abschools.org/district-design/district/school-start-times/Wellness%20Presentation%206-9-16%20ALL.pdf?attachauth=ANoY7cpD4eD89Em1ldtvA1fjvfph8vQYohT68Cb6KoR-pe-L0CfLD-tF15-0kMQnr-0kz6j2xdLa\\_2aDNmRy3DzGRQOe-Q-WnBxEImnA8d6RReFAZF3JZaQslgpNSqATmEUclONzQy3sTxpLOjdZTXmq7R6oBqzBX3X5qjt-ZTQEEq09Kllmb3b2fuJ7dp2etArYcXqG2EHPXuEPksx1maXPPpovrNJz73FcrFkmhpnTo3L7Cxfx2gOSGdt1ChD2MuvHher7qET4BzucqUzGQ2k6kNM9Ta7wHIK7dm0qalXNU7TzVvMIY%3D&attredirects=0](https://d9adebcf-a-bdde4ed0-s-sites.googlegroups.com/a/abschools.org/district-design/district/school-start-times/Wellness%20Presentation%206-9-16%20ALL.pdf?attachauth=ANoY7cpD4eD89Em1ldtvA1fjvfph8vQYohT68Cb6KoR-pe-L0CfLD-tF15-0kMQnr-0kz6j2xdLa_2aDNmRy3DzGRQOe-Q-WnBxEImnA8d6RReFAZF3JZaQslgpNSqATmEUclONzQy3sTxpLOjdZTXmq7R6oBqzBX3X5qjt-ZTQEEq09Kllmb3b2fuJ7dp2etArYcXqG2EHPXuEPksx1maXPPpovrNJz73FcrFkmhpnTo3L7Cxfx2gOSGdt1ChD2MuvHher7qET4BzucqUzGQ2k6kNM9Ta7wHIK7dm0qalXNU7TzVvMIY%3D&attredirects=0)

- Adolescents need 8.5-9.5 hours of sleep in a day
- Reduced sleep can have significant impact on Physical, Emotional, and Mental development and behavior and consequently impact academic performance
- ABRSD Sleep survey determined that over 70% of 9-12 graders are getting less than 7 hours of sleep nightly
- ABRSD survey and national studies corroborate sleep onset for average high-school age student to be around 11:15 pm - typical for the natural biological patterns in this age group.
- Nationally, high school start times average start at 8:03am; Massachusetts start times average at 7:53am. ABRSD start times is among the earliest within the Middlesex districts at 7:20am
- Wellness Committee proposed surveying neighboring districts also undergoing or evaluating a school start time change. They also looked at start times for schools within AB's athletic conference, the Dual County League.