High School Start Time Working Group Year End Report Overview

Newton Public Schools Newton, Massachusetts

June 20, 2016

The Report

- Comprehensive resource
 - Links to previously released material
 - Links to full survey results (all answer frequencies)
 - Newly released parent survey results
- Tool for making future decisions
- Guide for mapping out potential future actions
- Does not make recommendation

Central Finding

- Starting later in the morning has less negative impact than finishing later in the afternoon
 - Preferred <u>types</u> of scenarios would maximize change in the morning and minimize change in the afternoon

Newton's Context

- Large geography (18.2 square miles)
- ▶ 43% of high school students live > 2 miles
- ▶ 23% of high school students ride buses
- ▶ 19 buses serve the high schools
- Grade levels have similar start/end times to facilitate professional development
- ▶ 990 instructional hours in a minimum of 180 days

Key Values

- Ensure equity
- Improve overall health and wellness
- Allow more students to get more sleep, at developmentally appropriate times
- Find solutions that are balanced

Overview of Scenarios A, B, C, D, E

- ▶ 5 Scenarios with different impacts, benefits and costs for a range of start times between
 8:00 9:00 a.m.
- Plus additional versions that combine with schedule changes to achieve earlier end times

Schedule Changes

- Complement start time changes
- For any given start time, afternoon release times can be earlier
- Do not improve sleep opportunities by themselves

Schedule Changes: Even End Time

A1 7:50-8:45 B1 7:50-8:45 A2 7:50-9:05 A3 7:50-8:45 A4 7:50- HR 8:50-9:00 B3 9:05-10:20 B4 8:50- D1 9:50-10:45 D2 10:25-11:20 D3 10:25-11:20 C3 10:25-11:20 E4 10:50- L1 10:50-12:20 C2 11:25-11:55 L2 11:25-11:55 L2 12:05-12:30 L3 11:50-12:25 L3 12:25-12:30 L3 12:45-11:55 L3 12:25-12:35 L3 12:25-13-35 L3	- 9:45 - 10:45 - 12:20
RR 9:10 - 9:20 B4 8:50 B3 9:05 - 10:20 B4 8:50	- 10:45 - 12:20
HR 9:10 - 9:20 B2 9:25- 10:20 C4 9:50 - D2 10:25- 11:20 D3 10:25- 11:20 C3 10:25- 11:20 E4 10:50- 11:0:50- 11:20 L1 10:50- 11:20 L2 11:25- 11:50 L3 11:50- 12:20 F1 12:25- 1:20 L1 11:25- 11:55 L2 12:05- 12:30 L1 11:25- 11:55 L2 12:05- 12:30 G4 12:25	- 10:45 - 12:20
B2 9:25- 10:20	12:20
D2 10:25-11:20	12:20
G2 11:25- 1:15 E2 11:25- 12:55 D4 11:25- 1:15 L1 10:50-11:20 L1 10:50- 11:20 L2 11:25- 11:50 L3 11:50- 12:20 1 12:25- 1:20 L1 11:25- 11:55 L2 12:05- 12:30 L2 12:25- 12:30 G4 12:25	
G2 11:25-1:15	
L1 10:50- 11:20 L2 11:25- 11:50 L3 11:50- 12:20 T1 12:25- 11:20 L1 11:25- 11:55 L2 12:05- 12:30 L1 11:25- 11:55 L2 12:05- 12:30 L1 11:25- 11:55 L2 12:05- 12:30 L1 11:25- 11:55	
L2 11:25-11:50 L3 11:50-12:20 F1 12:25-1:20 L1 11:25-11:55 L2 12:05-12:30 L1 11:25-11:55 L2 12:05-12:30 L1 11:25-11:55 L2 12:05-12:30 L2 12:05-12:30 L3 11:25-11:55 L2 12:05-12:30	
C1 12:25-1:20 L1 11:25-11:55 L1 11:25-11:55 L2 12:05-12:30 L2 12:00-12:25 L2 12:05-12:30 G4 12:25	- 11:50
F2 1:20- 2:35 F3 1:00- 1:55 E3 1:20- 2:35	
E1 1:25- 2:20 F4 1:25 -	- 2:20
G3 2:00-2:55	
X1 2:25-3:20	
2:40- 4:00 FACULTY	

Results in Earlier End Time —

Schedule Changes: Longer Year

- Start school year earlier (before Labor Day)
- End school year later
- Modify vacation schedules
- Limit closure days to federal holidays
 - > Results in slightly shorter school days

Scenario A:

Shift All Schools 20 Minutes

Scenario A	
North Start and End Times	8:10 AM to 2:40 - 3:40 PM
South Start and End Times	8:00 AM to 2:15 - 3:40 PM
Students with opportunity for >=8 hours of sleep	67%
Potential Cost	\$0
Scenario A.1: Even end times	
Scenario A.1: Even end times	
North Start and End Times	8:10 AM to 3:25 PM
South Start and End Times	8:00 AM to 3:15 PM

- ▶ Elementary Schools start at 8:50 AM
- Middle Schools start between 8:20 AM and 8:50 AM

Scenario B:

HS at 8:30 a.m., Brown at 8:00 a.m.

Scenario B						
North Start and End Times	8:30 AM to 3:15 - 4:00 PM					
South Start and End Times	8:30 AM to 2:45 - 4:10 PM					
Students with opportunity for >=8 hours of sleep	86%					
Potential Cost	\$649,440 - \$844,272 plus \$42,845 - \$85,690 (B.1, B.2)					
Scenario B.1: Even end times						
North Start and End Times	8:30 AM to 3:45 PM					
South Start and End Times	8:30 AM to 3:45 PM					
Scenario B.2: Add 5 days						
North Start and End Times	8:30 AM to 3:35 PM					
South Start and End Times	8:30 AM to 3:35 PM					

No other schools change

Scenario C:

Switch High School and Elementary start times

Scenario C										
North Start and End Times	8:30 AM to 3:00 - 4:00 PM									
South Start and End Times	8:30 AM to 2:45 - 4:10 PM									
Students with opportunity for >=8 hours of sleep	86% - 96%									
Potential Cost	\$324,720 - \$422,136 plus \$42,845 - \$85,690 (C.1+ A+)									
Scenario C.1: even end times										
North Start and End Times	8:30 AM to 3:45 PM									
South Start and End Times	8:30 AM to 3:45 PM									

Elementary School starts at 7:45 AM

Scenario C:

(CONTINUED)

Switch High School and Elementary start timesthen shift all schools 20 minutes

Scenario C.1 + A									
North Start and End Times	8:50 AM to 4:05 PM								
South Start and End Times	8:50 AM to 4:05 PM								
Scenario C.1 + A + add 5 days									
North Start and End Times	8:50 AM to 3:55 PM								
South Start and End Times	8:50 AM to 3:55 PM								
Scenario C.1 + A + add 10 days									
North Start and End Times	8:50 AM to 3:45 PM								
South Start and End Times	8:50 AM to 3:45 PM								

▶ Elementary School starts at 8:05 AM

Scenario D:

Start High School at 9:00 a.m.

Scenario D										
Students with opportunity for >=8 hours of sleep	98%									
Potential Cost	\$0 plus \$42,845 - \$85,690 (D.1)									
Scenario D.1 (even end times) + 5 days										
North Start and End Times	9:00 AM to 4:05 PM									
South Start and End Times	9:00 AM to 4:05 PM									
Scenario D.1 (even end times) + 10 days										
North Start and End Times	9:00 AM to 3:55 PM									
South Start and End Times 9:00 AM to 3:55 PM										

No changes to other schools

Scenario E:

Start High School at 8:00 a.m.

Scenario E	
Students with opportunity for >=8 hours of sleep	57%
Potential Cost	\$568,260 - \$738,738
North Start and End Times	8:00 AM to 2:30 - 3:30 PM
South Start and End Times	8:00 AM to 2:15 - 3:40 PM

Similar to start times in Scenario A but there are no changes to times at other schools

What is next?

HIGH SCHOOL START TIME WORKING GROUP TIMELINE

	1																														
				2016-17 2017-18																2	3-1	19									
	Jul	Aug	Sep	Oc	t Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se	рОс	t N	lov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Эес
Feedback & Community																															
Engagement														0																	
Discussion of Preferred																															
Options																															
Operational Planning /										If	ne	ede	ed	foi	r																
Budget Impacts										im	nplo	em	en	tat	tio	n															
School Committee Update						*		*																							
FY18 Budget Process										*												*									
Implementation planning																															
Potential change															7																

Questions / Discussion

Scenario	enario Student with sleep opportunity for >=8 hours							
A A.1	67%	Start All Schools 20 minutes	#5					
B B.1 B.2	86%	HS starts at 8:30, Brown starts at 8:00	# 1					
C C.1	86%	Switch HS and ES start times	# 2					
C.1 + A C.1 + A +	96%	Then shift all schools by 20 minutes	#3					
D D.1	98%	High School starts at 9:00	#4					
Е	57%	High School starts at 8:00	#2					