High School Start Time Working Group Update

Newton Public Schools School Committee
March 14, 2016

Review of work so far:

ACTIVITIES	DATE
Initial Review of the Issue	2014-15
Working Group Scope Defined	Sept/October 2015
Communication/Website/Email List/Outreach	November 2015 -
Stakeholder interviews/Data Gathering	October 2015 -
Student Survey Development & Analysis	November 2015 -
Faculty/Staff Survey Development & Analysis	December 2015 -
Parent Survey Development & Analysis	January 2016 -

Today's Update

- Faculty/staff initial feedback
- Parent/guardian survey/feedback - Next
- Quantifying sleep opportunities
    - Evaluating the impact of a change
- Assessing impact on stakeholders
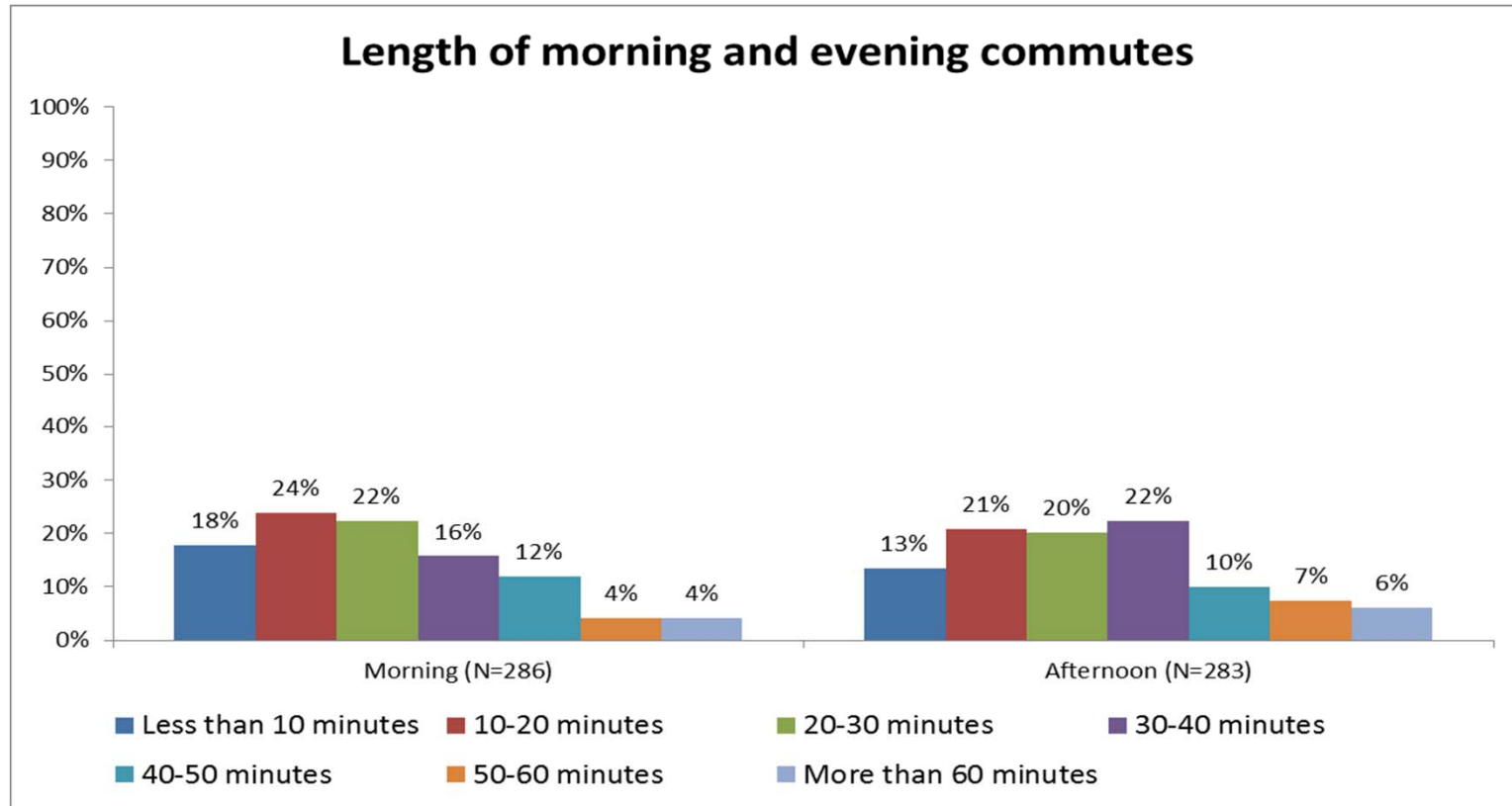- Initial transportation analysis
- Update on implementation plan

Faculty/Staff Survey Response Rates

▸ Includes faculty/staff at North, South, and alternative education programs

▸ Overall response rate of 41.2%

▸ Teacher response rate of 46%

▸ Over 89% of participants are 1.0 FTEs

▸

Feedback on: Current Commutes

Length of morning and evening commutes

Chart showing percentages for Morning (N=286): 18%, 24%, 22%, 16%, 12%, 4%, 4%; and Afternoon (N=283): 13%, 21%, 20%, 22%, 10%, 7%, 6%. Categories: Less than 10 minutes, 10-20 minutes, 20-30 minutes, 30-40 minutes, 40-50 minutes, 50-60 minutes, More than 60 minutes.
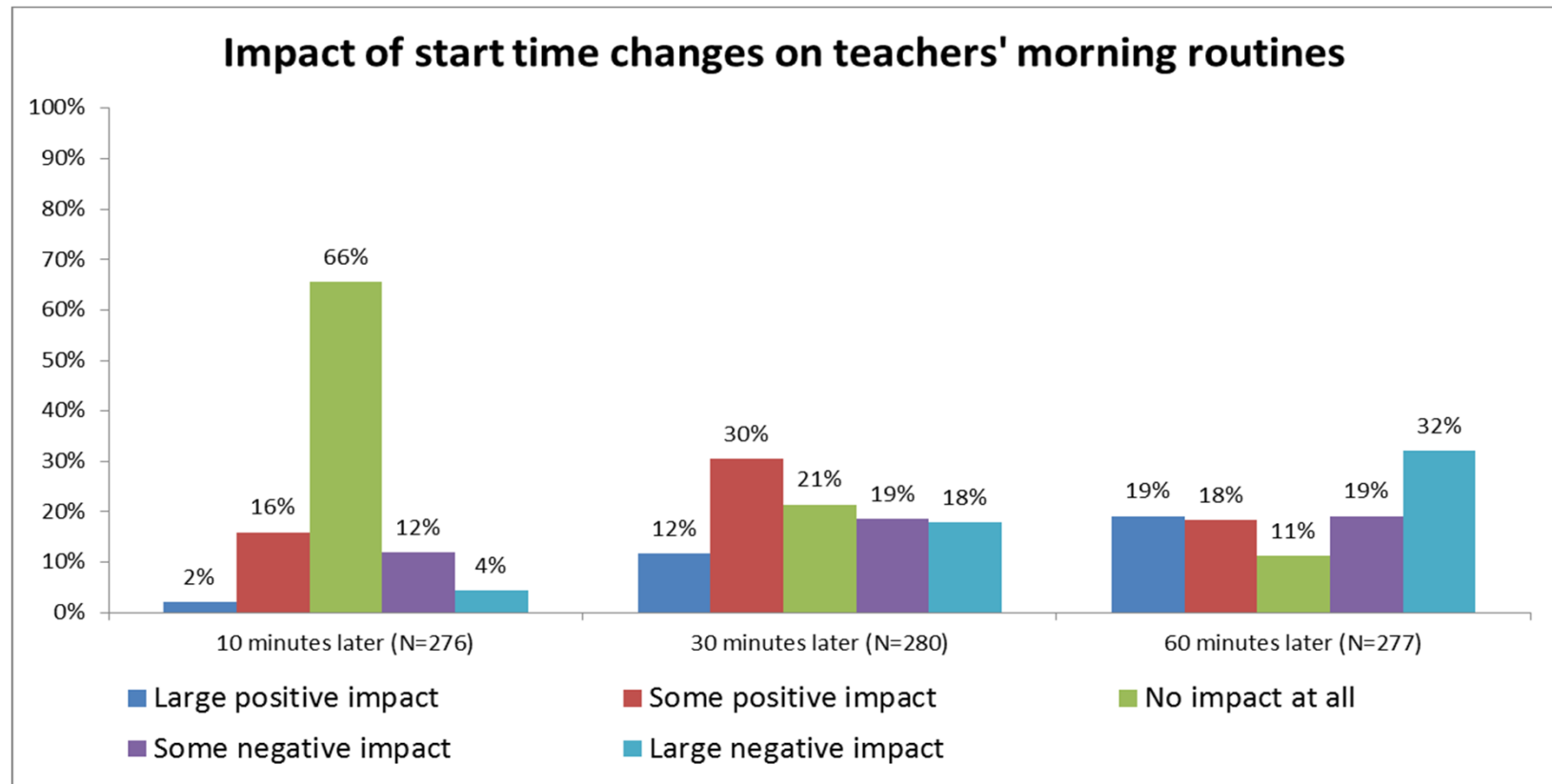
▸ More than half of the participants (59%) leave their homes between 6:30 – 7:15 am

▸ Current commutes tend to get longer in the afternoon

▸

Feedback on: Traffic concerns for current commutes

Traffic concerns for morning and evening commutes
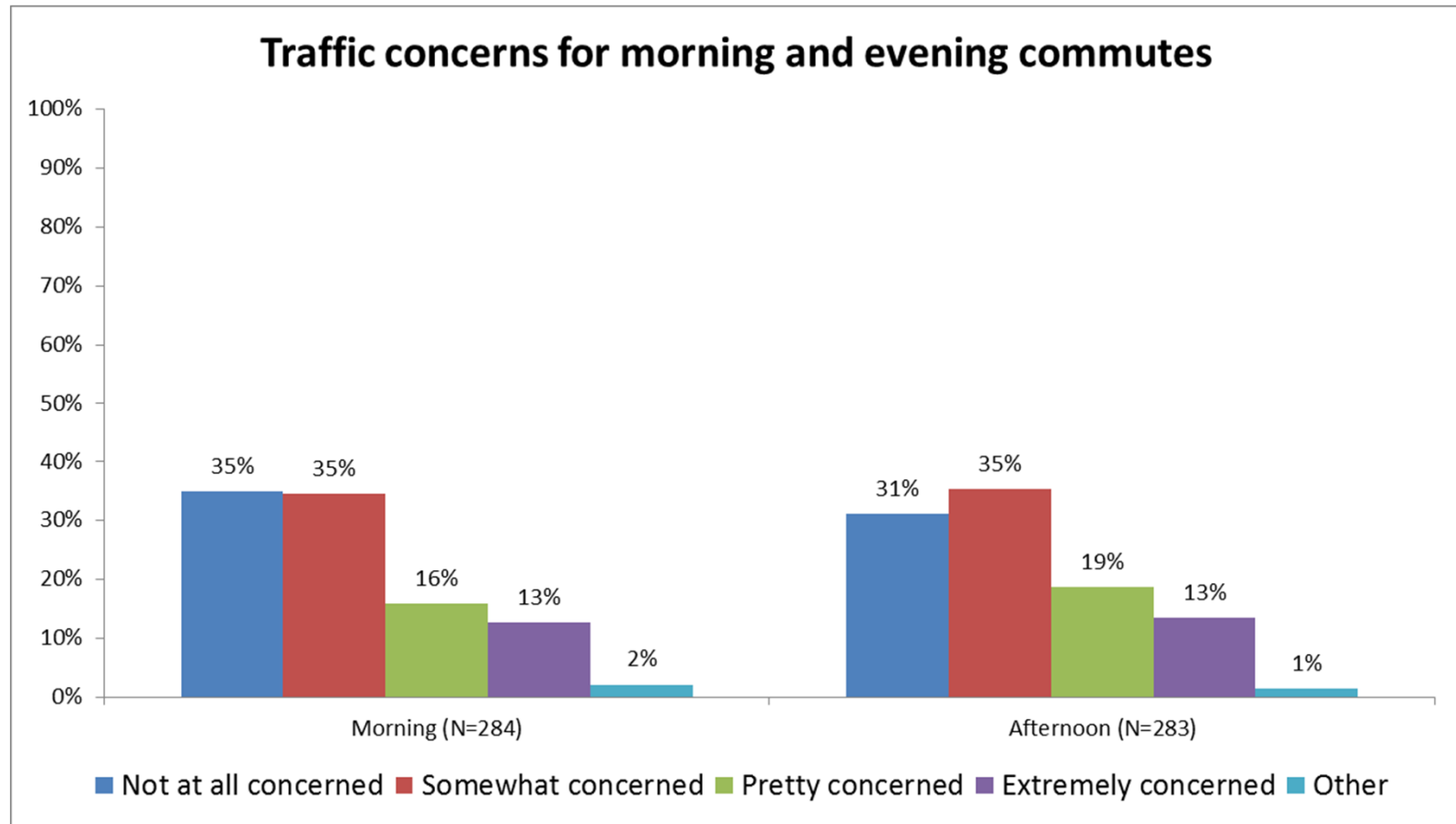
▶ Current traffic concerns are relatively consistent in the morning and afternoon

▶

Feedback on: Impact of potential changes on morning routines

Impact of start time changes on teachers' morning routines

	10 minutes later (N=276)	30 minutes later (N=280)	60 minutes later (N=277)
Large positive impact	2%	12%	19%
Some positive impact	16%	30%	18%
No impact at all	66%	21%	11%
Some negative impact	12%	19%	19%
Large negative impact	4%	18%	32%

- Large positive impact
- Some positive impact
- No impact at all
- Some negative impact
- Large negative impact

▸ 10 minutes later has a negative impact on only 16% of participants

▸ 30 minutes and 60 minutes later have both negative and positive impact on morning routines

▸

Feedback on: Impact of potential changes on afternoon/evening routines

Impact of end time changes on teachers' afternoon/evening routines
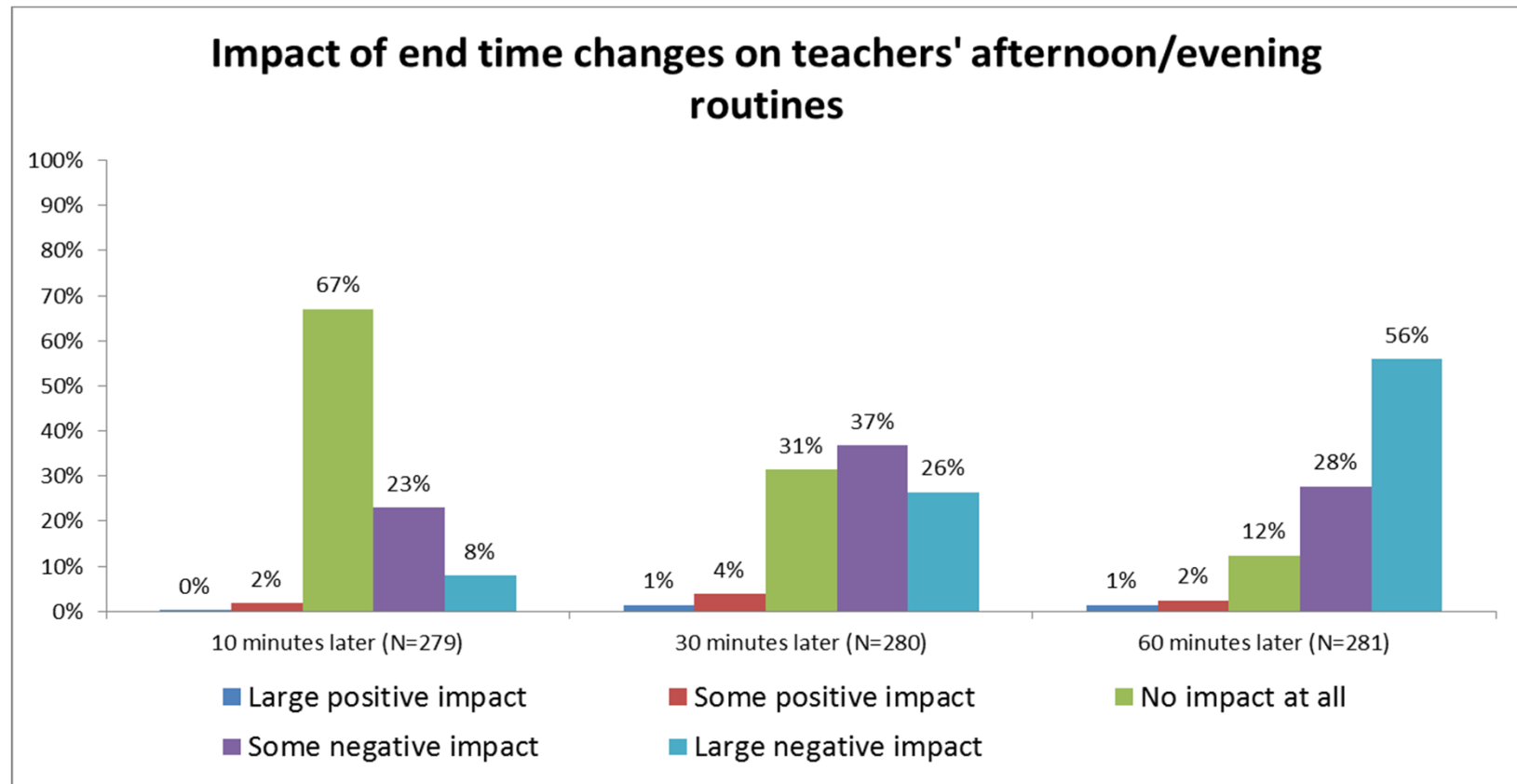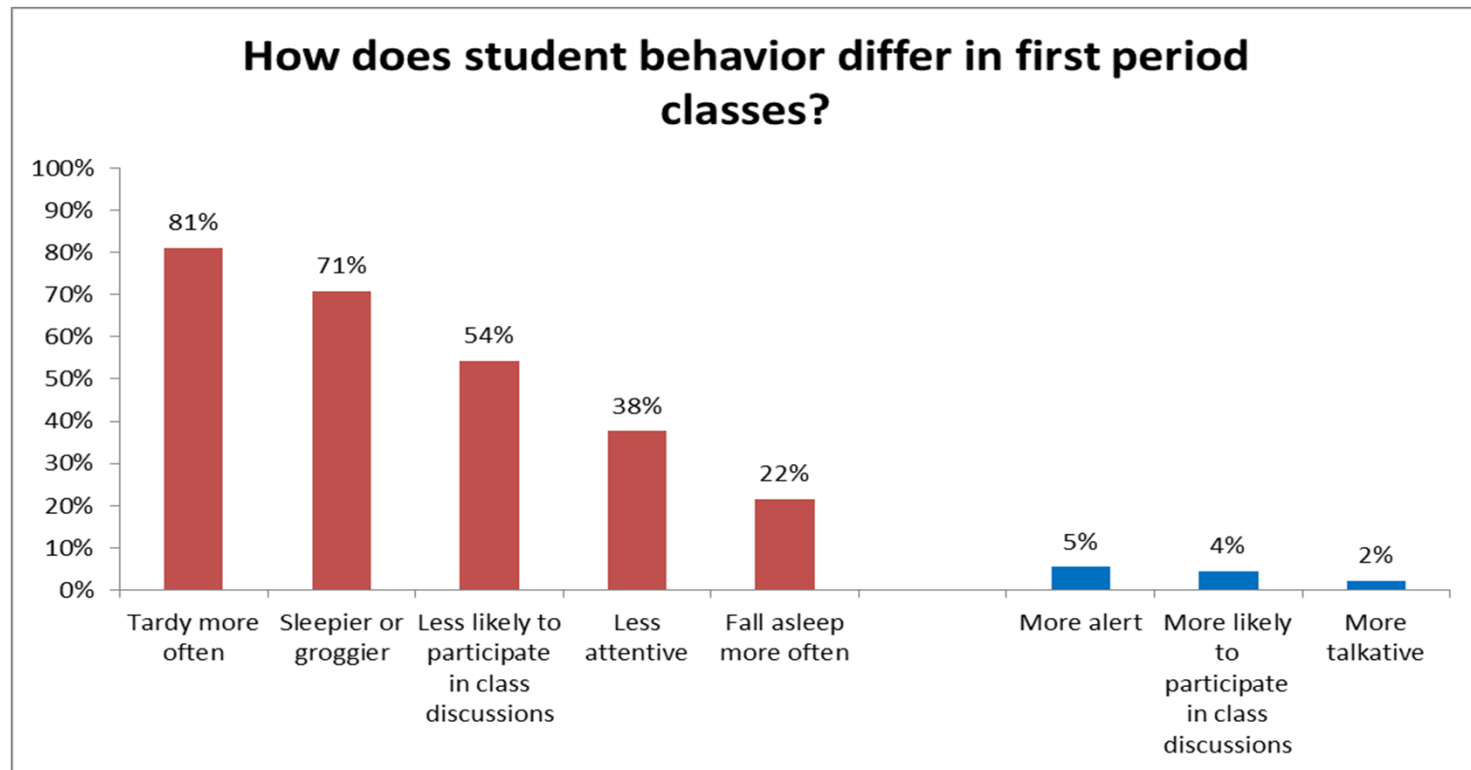
▸ Ending 60 minutes later has negative impacts for most participants

Feedback on: Impact on morning and afternoon/evening commitments

- Participants were also asked about impact on morning and afternoon/evening commitments
  - Stipend and non-stipend work for NPS
  - Paid employment outside NPS
  - Child care
  - Elder care
  - Coursework
  - Exercise/gym

- Similar patterns for impact as seen in the previous slides

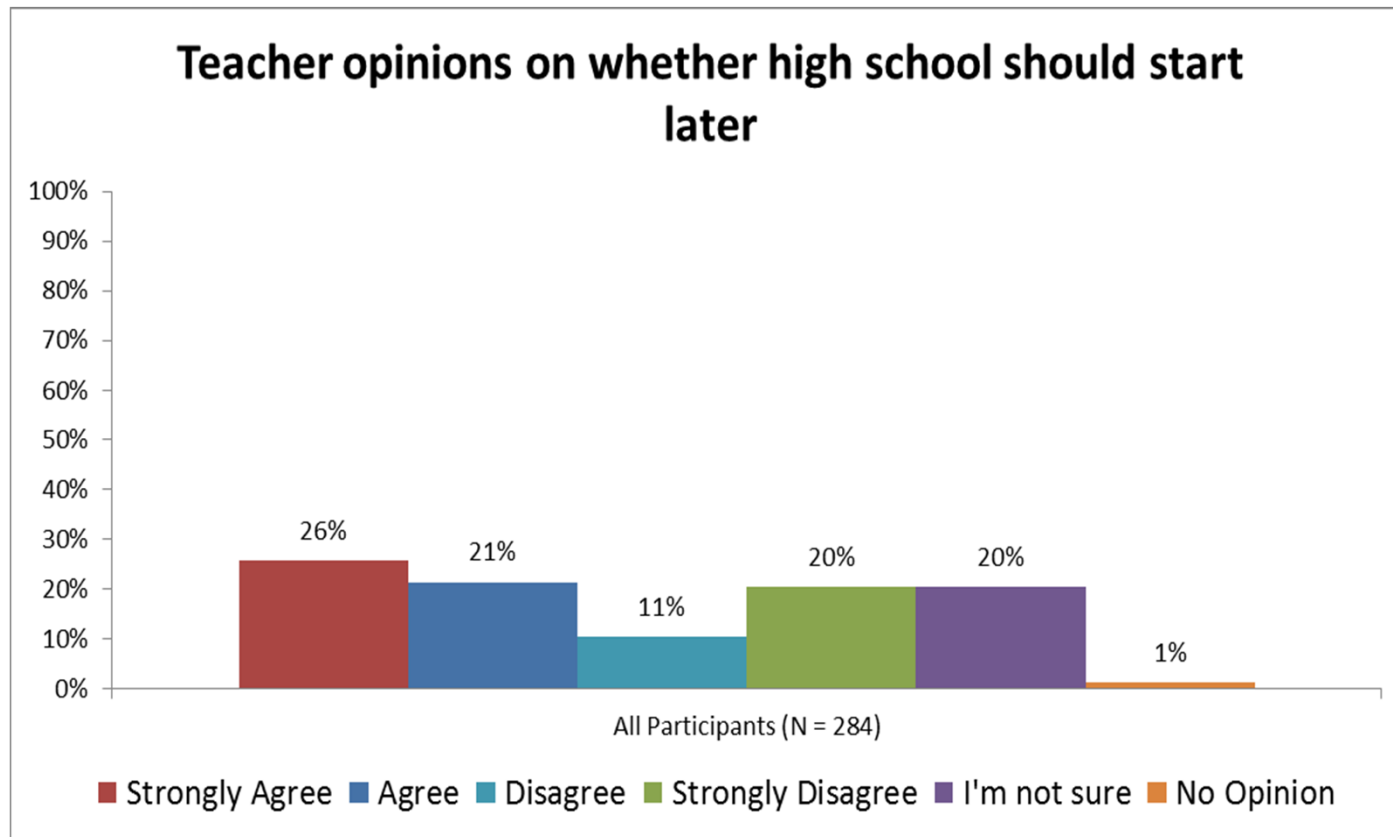# Feedback on: Student behavior

How does student behavior differ in first period classes?

- 81% — Tardy more often
- 71% — Sleepier or groggier
- 54% — Less likely to participate in class discussions
- 38% — Less attentive
- 22% — Fall asleep more often
- 5% — More alert
- 4% — More likely to participate in class discussions
- 2% — More talkative

▸ 80% of participants said student behavior differed in first period

▸ The most frequently selected behaviors that differed in first period are more "negative" behaviors

Feedback on: Opinions

Teacher opinions on whether high school should start later

100%
90%
80%
70%
60%
50%
40%
30%   26%
20%   21%   20%   20%
            11%
10%   1%
0%

All Participants (N = 284)

■ Strongly Agree ■ Agree ■ Disagree ■ Strongly Disagree ■ I'm not sure ■ No Opinion

▸ Teachers are more split on this question than students

Surveys – Overall Status

▸ Continued use of student data

▸ Additional analysis of faculty/staff survey results

▸ Parent/guardian survey in development

  ▸ Level of concern about impact of any start time change

    ▸ Later or potentially earlier (for younger students)

    ▸ Work schedules or commute

    ▸ Child care

  ▸ Choices about student transportation

  ▸ Opinions about children's sleep patterns

▸

Quantifying Sleep Opportunities

▸ American Academy of Pediatrics (AAP) recommends that adolescents have the opportunity to sleep for 8.5 – 9.5 hours, starting at 11PM

▸ Student data allows us to understand the impact of **any** start time change on sleep opportunities
  ▸ Same assumptions used for all grades
  ▸ Based on student survey responses
  ▸ Used estimates from non-respondents
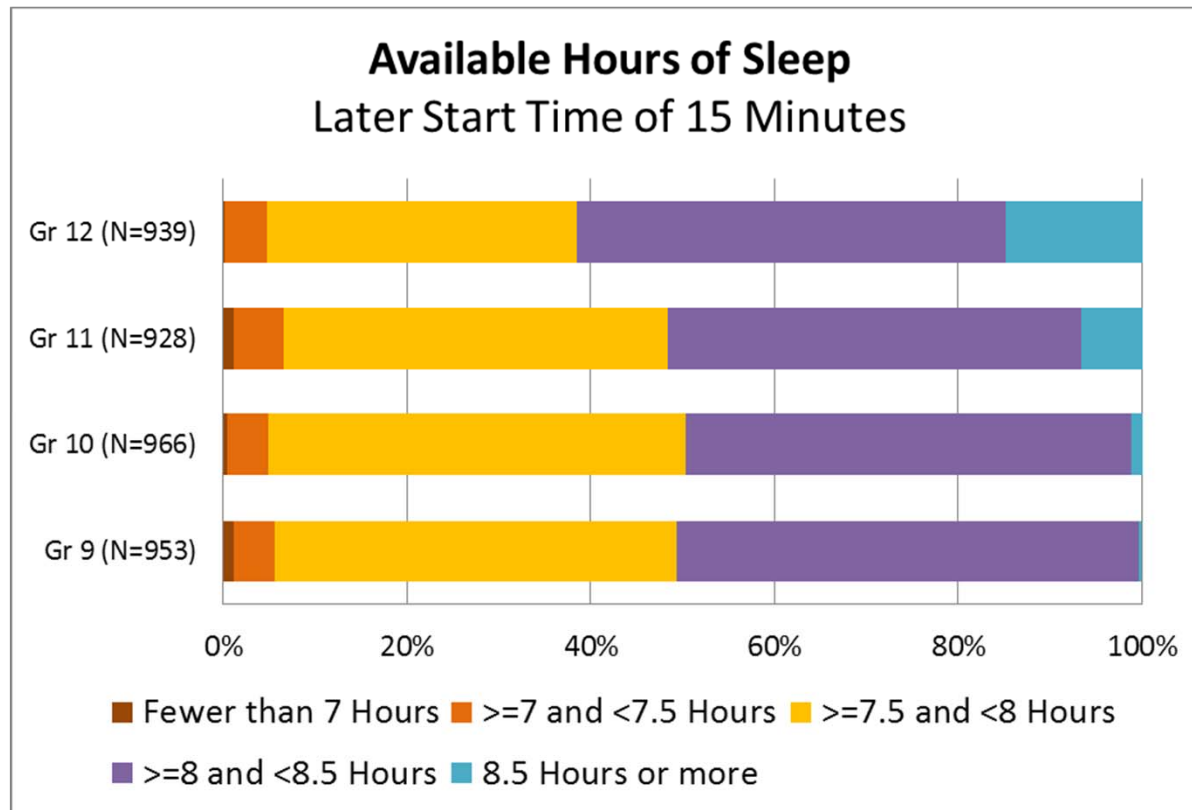 ▸ Adjusted for AM schedule variations
▸

Current Sleep Opportunities

Available Hours of Sleep
High School Student Current Conditions
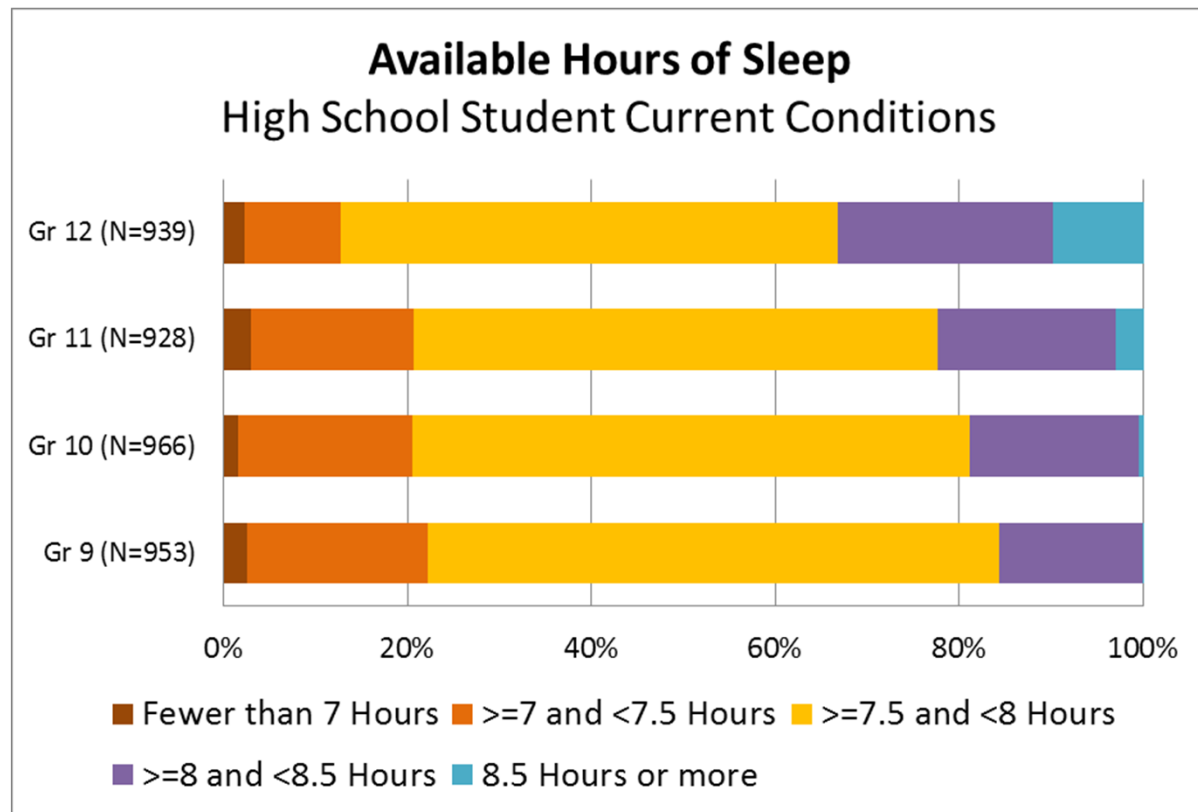
- About 60% of students have the opportunity for 7.5 – 8.0 hrs
- About 20% of students have the opportunity for more or less

Improved Sleep Opportunities (Example)

Available Hours of Sleep
Later Start Time of 15 Minutes

- Gr 12 (N=939)
- Gr 11 (N=928)
- Gr 10 (N=966)
- Gr 9 (N=953)

0%   20%   40%   60%   80%   100%

- ■ Fewer than 7 Hours ■ >=7 and <7.5 Hours ■ >=7.5 and <8 Hours
- ■ >=8 and <8.5 Hours ■ 8.5 Hours or more

▸ Allows more than 50% of students the opportunity to get 8.0–8.5 hours
▸ Fewer than 10% of students have the opportunity for sleep amounts in the lowest category
▸ Slightly more students with the opportunity to achieve AAP levels of sleep

Assessing Impacts of Change (Example)

▸ The goal is to understand the benefits, impacts and costs in a holistic way

Students with sleep opportunity >8 hours is increased by 31%
Other Impacts on Students (in order of % magnitude)
Students with extra curriculars outside of school on 3 or more days/week (49%)
Students involved in school-based extra curricular on 3 or more days/week (42%)
Students who are athletes (35%)
Students with afterschool jobs (19%)
Teacher Impact
A negative impact for teachers on morning routines (16%)
A negative impact for teachers on child care (est. 16%)
Other Activities (est. 16%)
Family Impact
Community Impact
Financial Impact

▸

Initial Transportation Analysis

- An early look taken at options/opportunities
- Parameters include:
  - 2-3 routes per bus each AM and PM
  - 8 late buses, 10 runs for secondary schools
  - Contractual limits on driver hours/day
- Fleet is currently 29 buses (+6 for projects)
  - New contract in FY18
- 20% of high school students ride buses

Update on Implementation Plans

▸ No schedule changes before 2017-18

▸ Effective processes in other communities have taken a minimum of 2 years

   ▸ Newton's size makes this more complex
   ▸ 9th largest district statewide

▸ Significant lead time is needed to manage change due to impact on stakeholders and potential costs

▸

Broad Promotion of Student Well Being

▸ Later start time exploration
▸ Initiatives on social and emotional learning
▸ Active and increased supports for students in schools
▸ Managing homework levels
▸ Home-school connections

"...delaying school start times alone is less likely to have a significant effect without concomitant attention to other contributing and potentially remediable factors, such as excessive demands on students' time because of homework, extracurricular activities, after-school employment, social networking, and electronic media use.

http://pediatrics.aappublications.org/content/early/2014/08/19/peds.2014-1697

▸

Next Steps

ACTIVITIES	DATE
Parent Survey Development & Analysis	January 2016 -
Continued Analysis of Feedback	Ongoing
Continued Assessment of Stakeholder Impact	Ongoing
Scenario Development	April - May 2016
Public Event	TBD
Assessment of Impact of Scenarios	May – June 2016
Final Report	June 2016