



Later School Start Times & Bus Tiers

BT Connect Meeting, December 4, 2023 7PM



Tonight's Agenda

- Why later school start times and bus tiering?
- What schedules are being considered?
- Student input: Project Citizen, Natalie Ramirez & Leena Mathai
- Experiences from the School District of the Chathams, Superintendent, Dr. Michael Lasusa
- Small group discussion
- Each group shares - pick a speaker
- Next steps

Why Later Start Times?

- More sleep especially for high school aged students
- Research indicates that more sleep improves mental, physical and academic outcomes
- Articles: [1](#), [2](#), [3](#), [4](#), [5](#)
- [Summary of data/presentations the district has shared since 2019](#)

Why Bus Tiers?

- If school start times are changed it makes sense to consider changing them in a way that not only provides more sleep for high school students but also saves money since transportation is a major cost center.
- Currently the district uses 53 buses for to-from transportation but half of those do only one route (AM and PM trip) so they are single tier.
- School schedules that facilitate using one bus to do two or three routes per day (double or triple tier) create opportunities for efficiency and cost savings.

How Much Money Could Tiering More Buses Save?

- Our current 53 buses cost approximately \$5 million for this school year.
- Start times that facilitate buses being used for two routes per day may save the district \$700,000+ by reducing the needed buses to about 41.
- Start times that facilitate buses being used for three routes per day may save the district \$1,000,000+ by reducing the needed buses to about 32.
- Why “may”?
 - Transportation route costs are subject to negotiating renewals or going out to bid, each have uncertainties
 - No configuration is ever perfect allowing ALL buses to do two routes or three routes, some inefficiency would still exist with some vehicles only being used to do one or two routes
 - Final routing needs change through the spring

STATUS QUO (our schedule right now is a single tier/double tier model)

School Level	School Starts:	School Dismissal:	Length of Day
High	7:35 AM	2:25 PM	6:50
Middle	7:45 AM	2:20 PM	6:35
Elementary	8:45 AM	3:15 PM	6:30

Alternative Single Tier/Double Tier Scenario(S/DT)

School Level	School Starts:	School Dismissal:	Length of Day
Middle	7:55 AM	2:30 PM	6:35
High	8:20 AM	3:10 PM	6:50
Elementary	9:00 AM	3:30 PM	6:30

Double Tier Schedule (DT)

Schools	School Starts:	School Dismissal:	Length of Day:
Annin	7:40 AM	2:15 PM	6:35
Ridge	8:30 AM	3:20 PM	6:50
MPS & CHS	8:00 AM	2:30 PM	6:30
OSS & LCS	9:00 AM	3:30 PM	6:30

Triple Tier Schedule (TT)

School Level:	School Starts:	School Dismissal:	Length of Day:
Annin* *Shortens day by 5 minutes	7:30 AM	2:00 PM	6:30
Ridge* *Shortens day by 5 minutes	8:20 AM	3:05 PM	6:45
Elementary	9:25 AM	3:55 PM	6:30





Natalie Ramirez - Student
Body President



Leena Mathai - Mental
Health Non-Profit
Founder

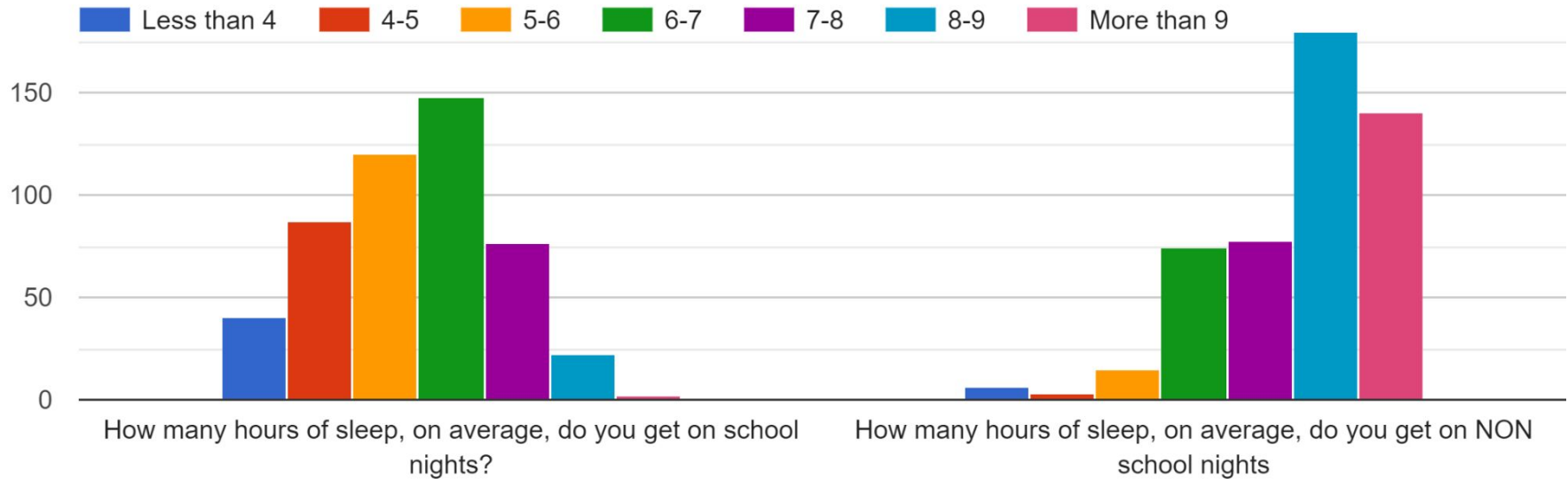
Recommended Amount of Sleep



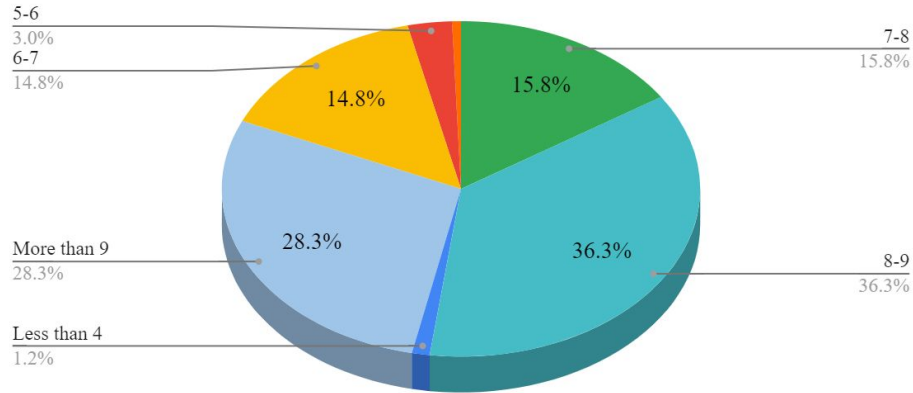
 How much sleep is enough? 	
Age	Recommended Amount of Sleep
Infants (4-12 Months)	12-16 Hours/Day (including naps)
Children (1-2 Years)	11-14 Hours/Day (including naps)
Children (3-5 Years)	10-13 Hours/Day (including naps)
Children (6-12 Years)	9-12 Hours/Day
Teens (13-18 Years)	8-10 Hours/Day
Adults (18+ Years)	7-8 Hours/Day

NIH National Heart, Lung, and Blood Institute
nhlbi.nih.gov

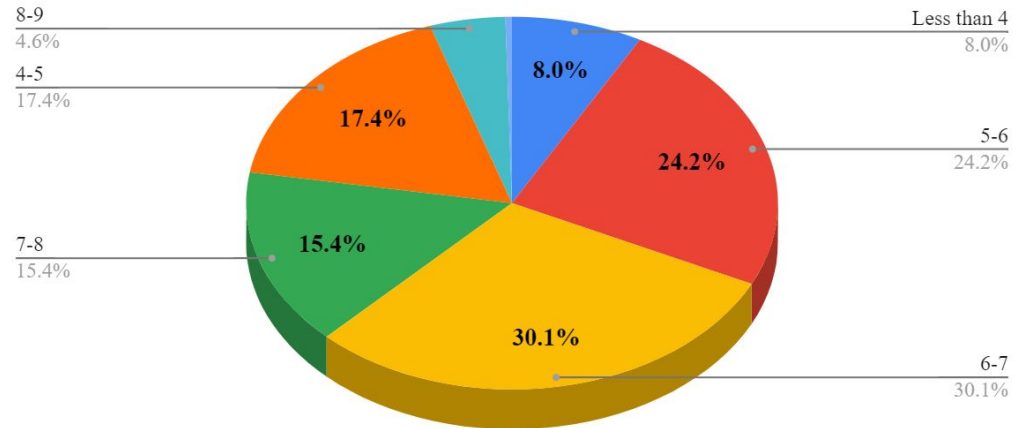
Student Results:



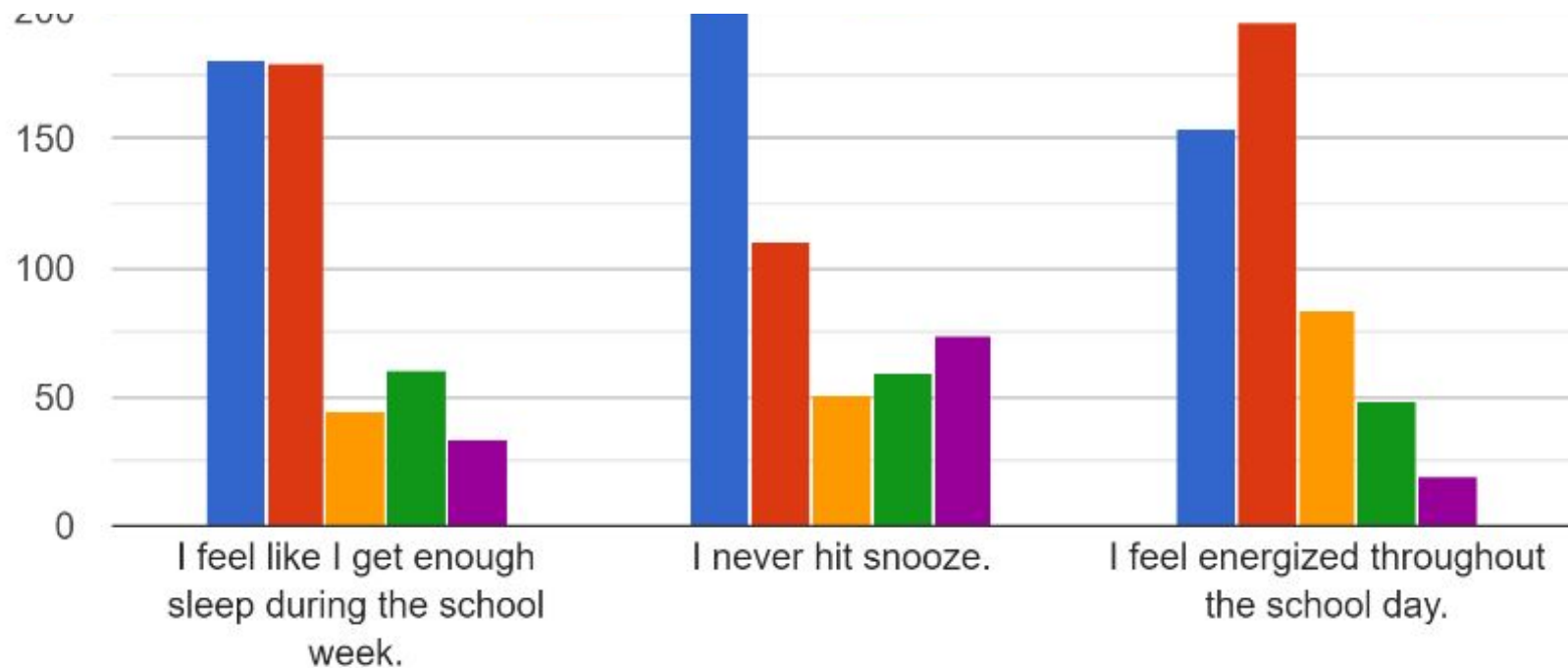
Average Hours of Sleep on Non-school Nights



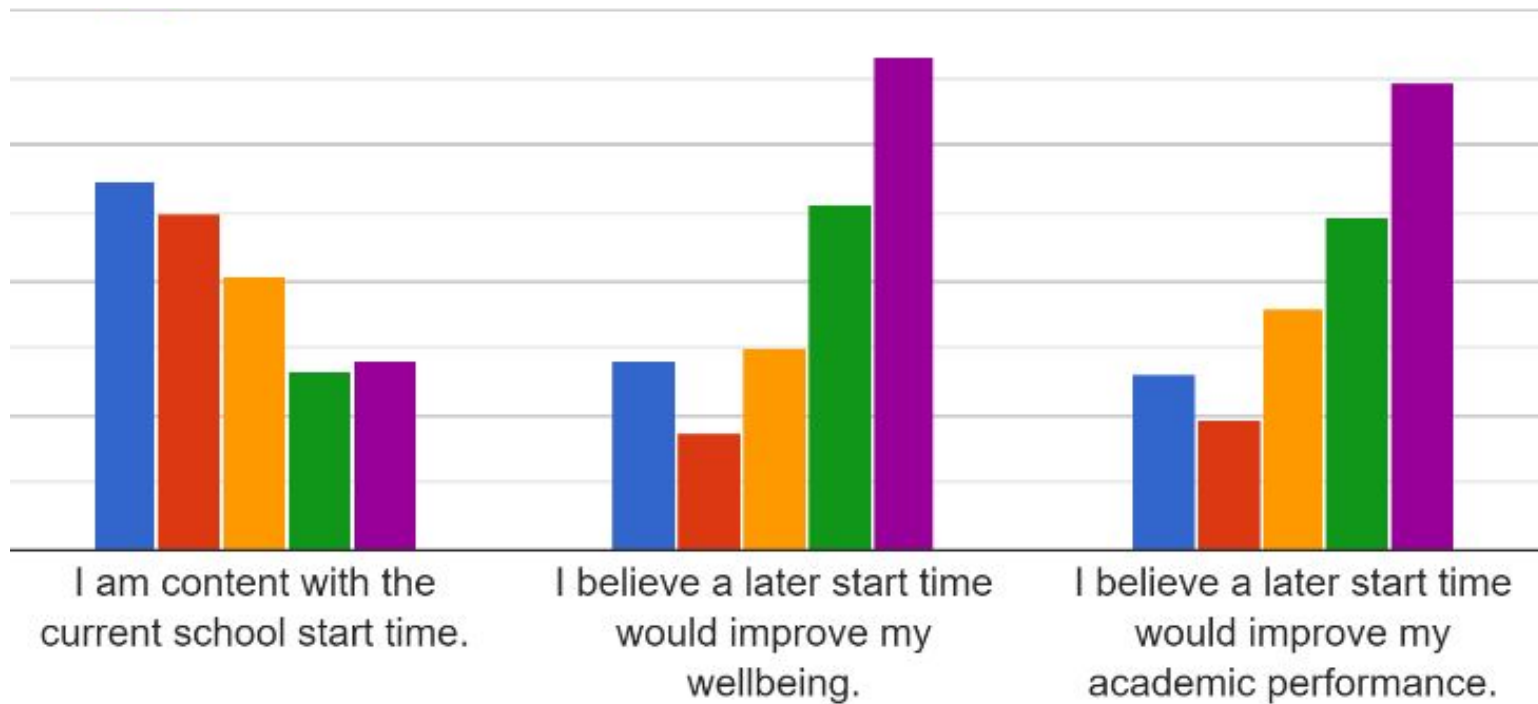
Average Hours of Sleep on school Nights



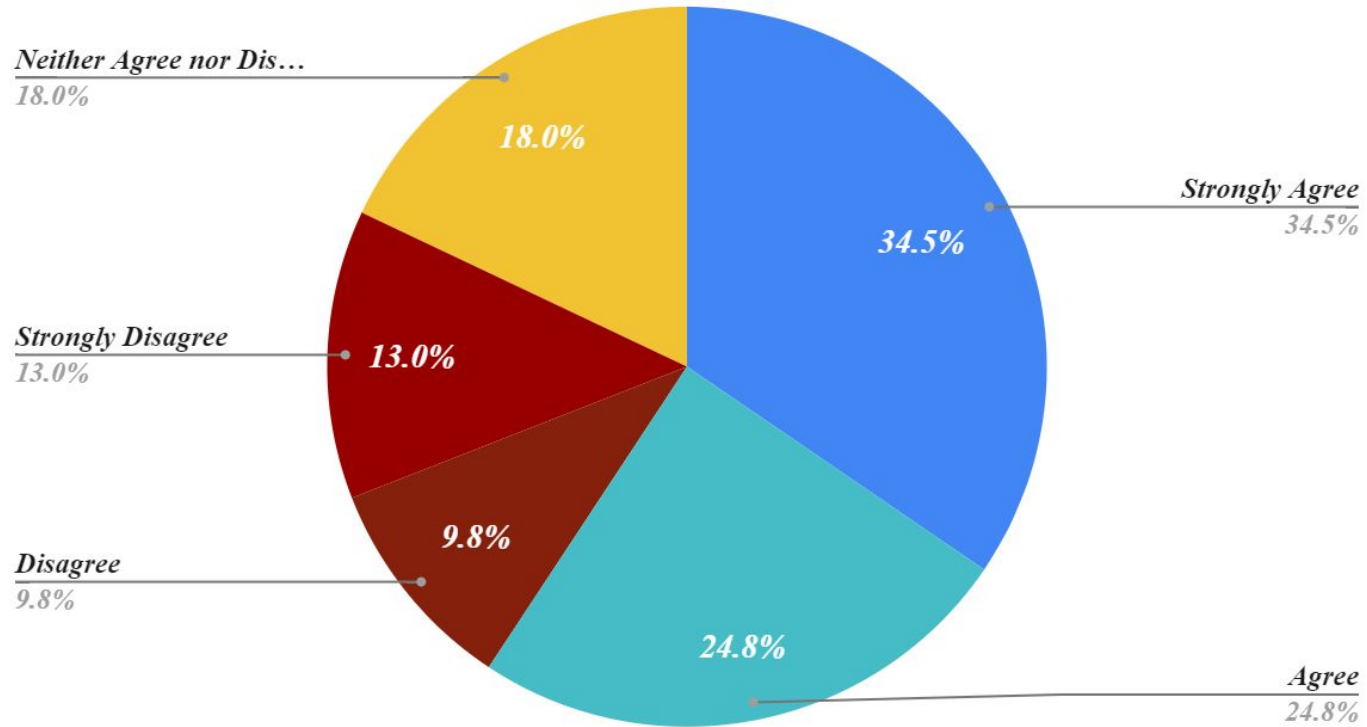
Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree



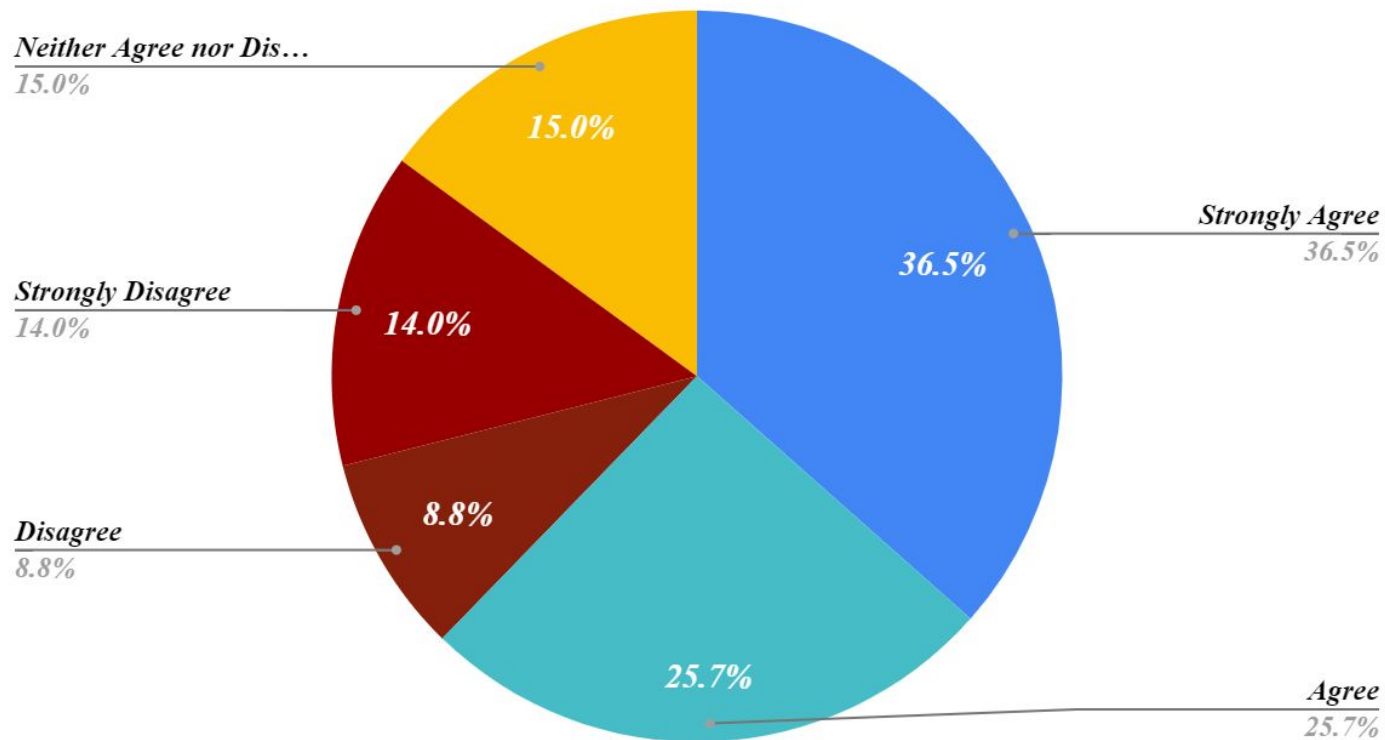
Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree



Will Later Start Time Improve Academics



Will Later Start Time Improve Overall Well-being



Common trends about anonymous student responses

"I would be far more well-rested and able to do things like exercise and eat breakfast plus more likely to be on time to school"

"I am **concerned that sports and extracurriculars** would have to be pushed back when many students already get home late in the afternoon. Also, it might be inconvenient for elementary and middle school students to go to school earlier or later, and for parents to pick them up at the new times."

"A later start time complicates a lot of sport practices and competitions, possibly forcing them to miss more school or practice in the dark and cold (winter times). Additionally, the later start time wouldn't help sleep schedules because students will just be sleeping even later. Even though they can wake up later, they would still be getting roughly the same amount of sleep."

"A later start time doesn't seem like a good idea for sports. It...gets dark before 5:00, and pushing school back would mean ...only 90 minutes ...get practice in before sunset. ...other extracurriculars that already run late will be sending their students home later, resulting in extra long work nights anyway."

"...the health of students is infinitely more important and that this is a worthy cause for our district to pursue. I am a senior now and I truly hope the district realizes the importance of sleep on the overall wellbeing of its students."

Project Citizen Website:

Topic: Student Lack of Sleep at Ridge High School

Contributing Members: Leena Mathai, Natalie Ramirez, Samantha Babcock, Ria Abraham, Miguel Subervi, Eva Sela

<https://leenamathai.wixsite.com/student-lack-of-slee>

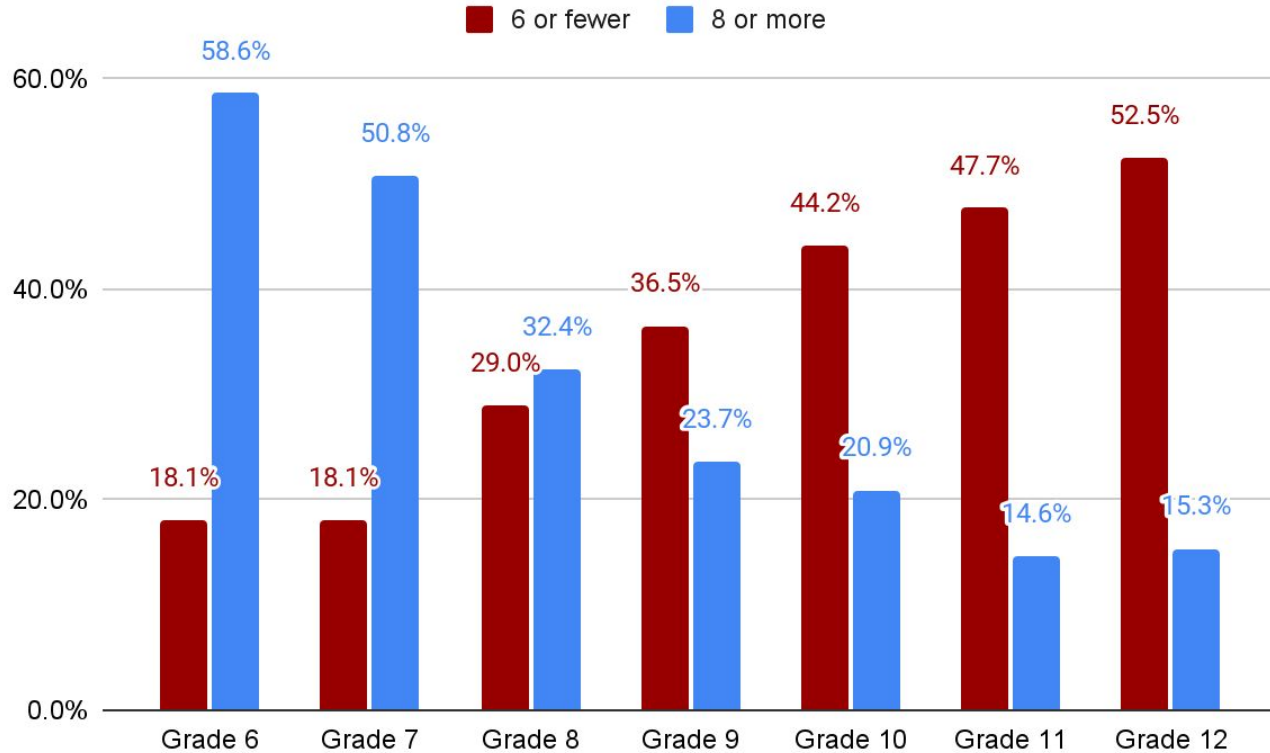
Chatham's Story (so far)

- Quick history
- Tipping point
- Implementation fall 2022
- Initial impacts and outcomes
- Sticking points

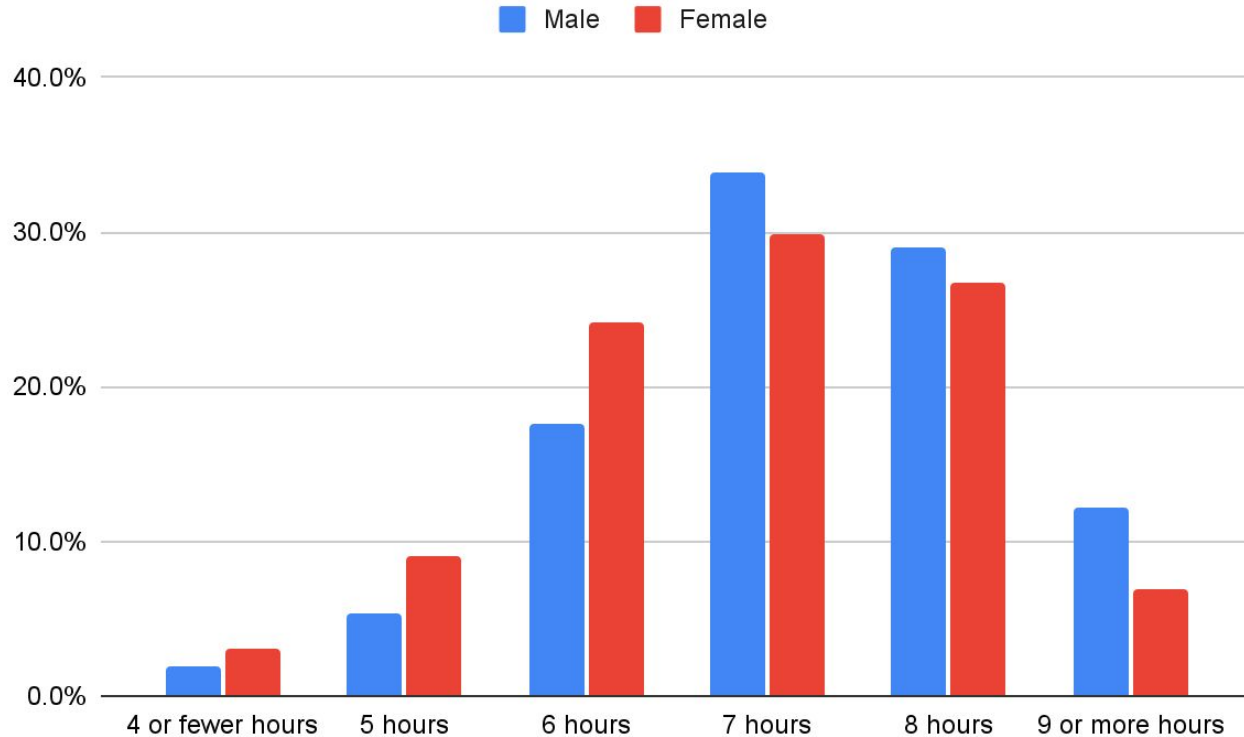
Quick History

- Discussion, mostly unserious, for 15 years
- Ongoing survey of students in Grades 6 - 12

2021 Data on Hours Slept by Grade

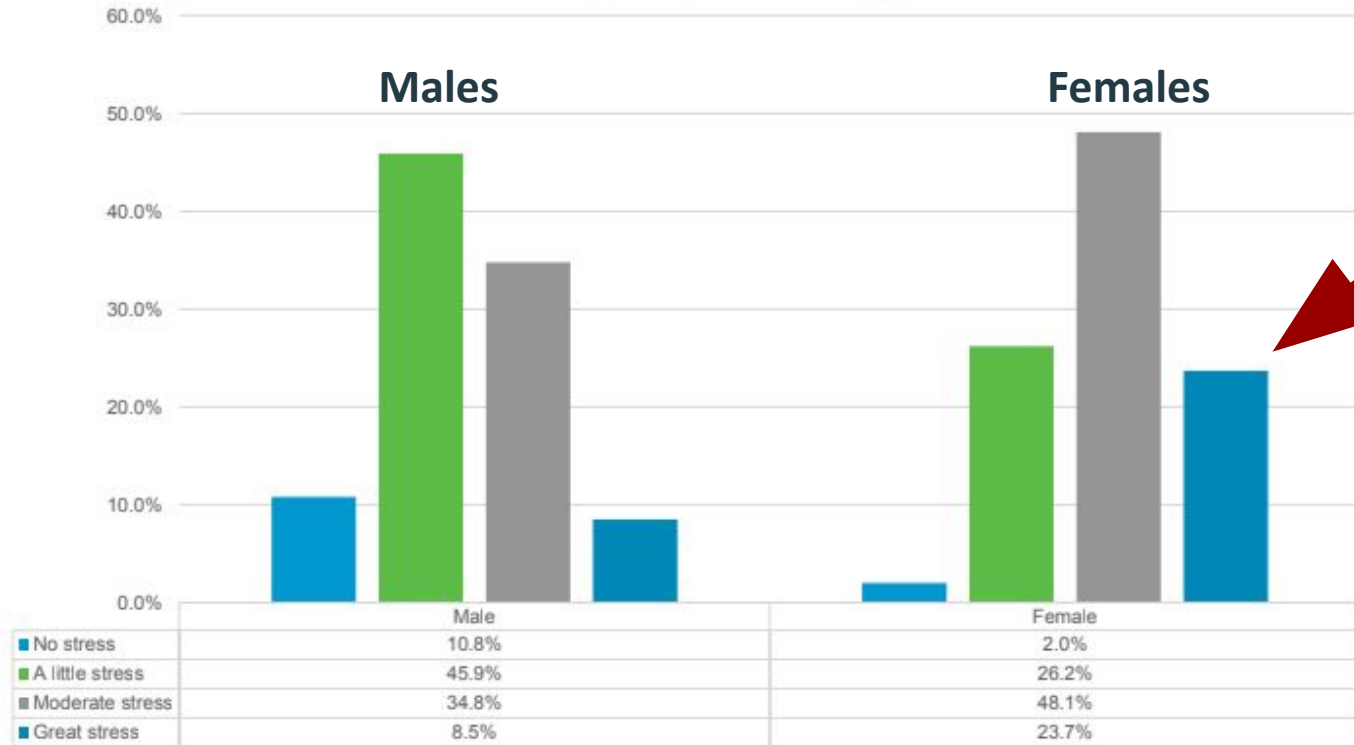


2019 Data on Hours Slept by Gender



2019 Data on Stress by Gender

How much stress do you experience in a typical week?



Tipping Point

- Pandemic and 2020/2021
 - Hybrid schedule for students
 - Many parents working from home
 - Consistency in online resources (Google Classroom, Schoology, etc.)
- 2021/2022 Proposal
 - Reduce the length of the high school day

Tipping Point

- 2021/2022 Proposal
 - Reduce the length of the high school day
 - The length of the high school day had been 6 hours and 55 minutes, longer than the other schools in the district.
 - That made sense prior to the internet.
 - I had never used Google Meet or Zoom before the pandemic.

Chatham High School Schedule

Former Schedule		
Block	Start	End
1	7:40	8:37
2	8:41	9:39
3	9:43	10:40
Lunch	AM Lab 10:40	11:07
	10:40	11:36
	PM Lab 11:09	11:36
4	11:36	12:33
5	12:37	1:34
6	1:38	2:35

NOTES

Periods move from **57 to 55** minutes.

Lunch moves from **56 to 54** minutes.

Science labs are **unchanged** at 27 minutes added on to the period.

New Schedule		
Block	Start	End
1	8:20	9:15
2	9:19	10:14
3	10:18	11:13
Lunch	AM Lab 11:13	11:39
	11:13	12:03
	PM Lab 11:41	12:07
4	12:07	1:02
5	1:06	2:01
6	2:05	3:00

Implementation–Fall 2022

- CHS = 7:40 am - 2:35 pm
- CMS = 8:00 am - 2:40 pm
- pK-3 = 8:35 am - 3:05 pm
- LAF = 8:40 am - 3:10 pm

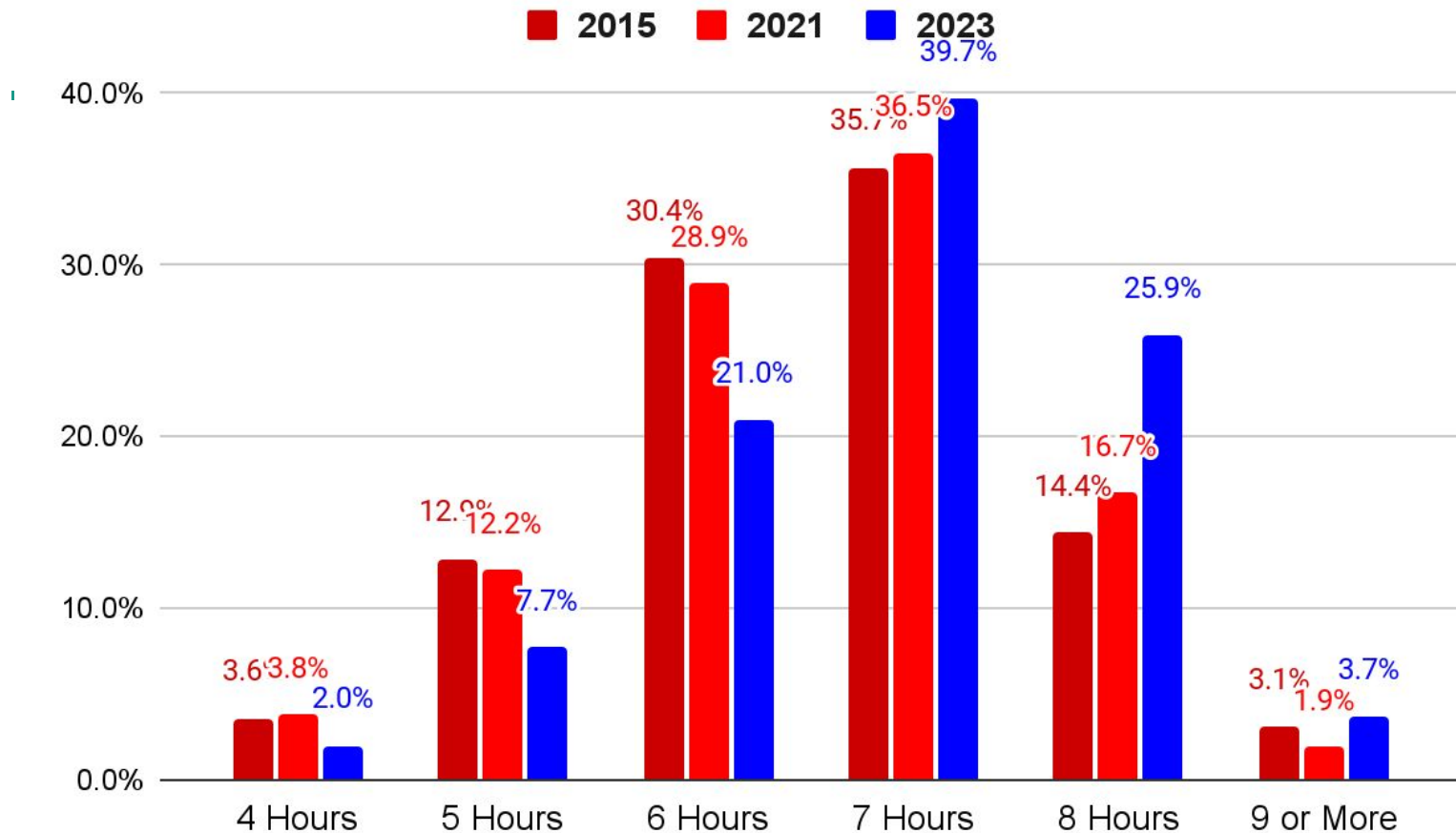
- CHS = 8:20 am - 3:00 pm
- CMS = 7:55 am - 2:30 pm
- pK-3 = 8:55 am - 3:25 pm
- LAF = 9:00 am - 3:30 pm

Implementation–Fall 2022

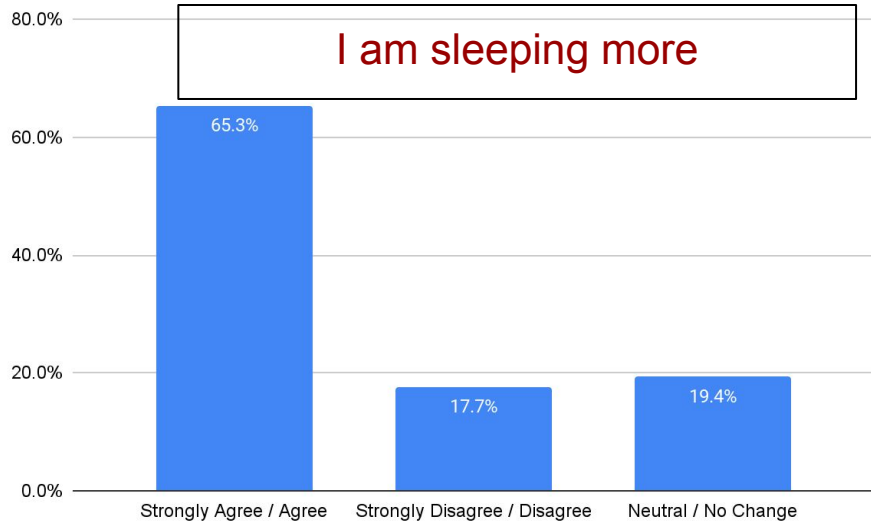
- Primary concerns
 - Restructured bus tiers
 - Before-Care for K-5 students
 - Athletics schedules

Initial Impacts and Outcomes

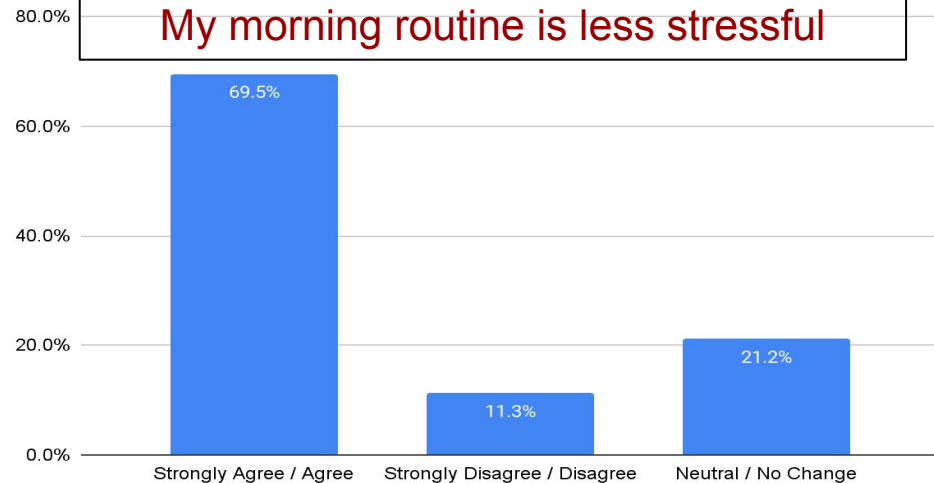
CHS Students: Amount of Sleep Reported



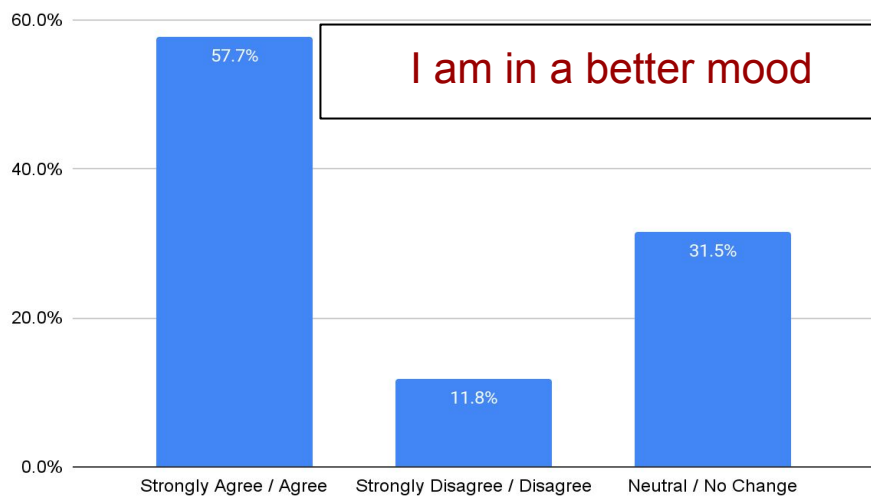
I am sleeping more



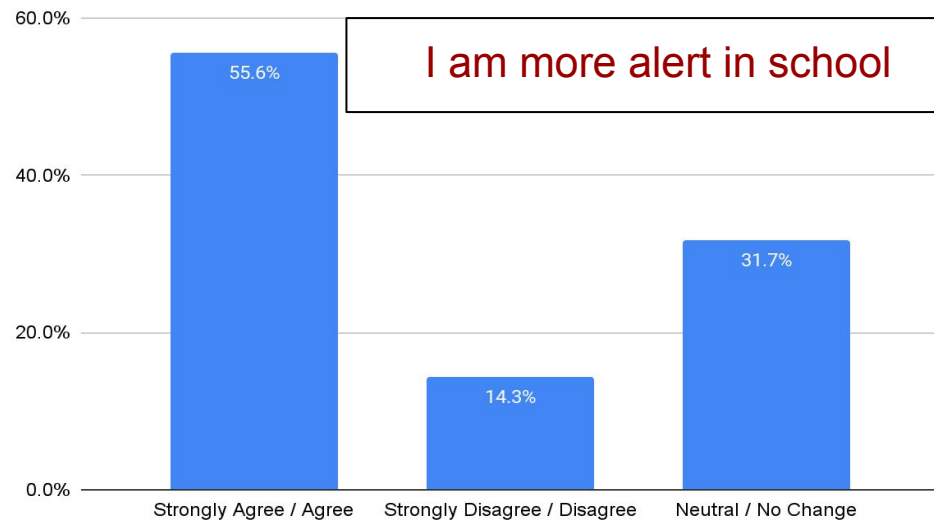
My morning routine is less stressful



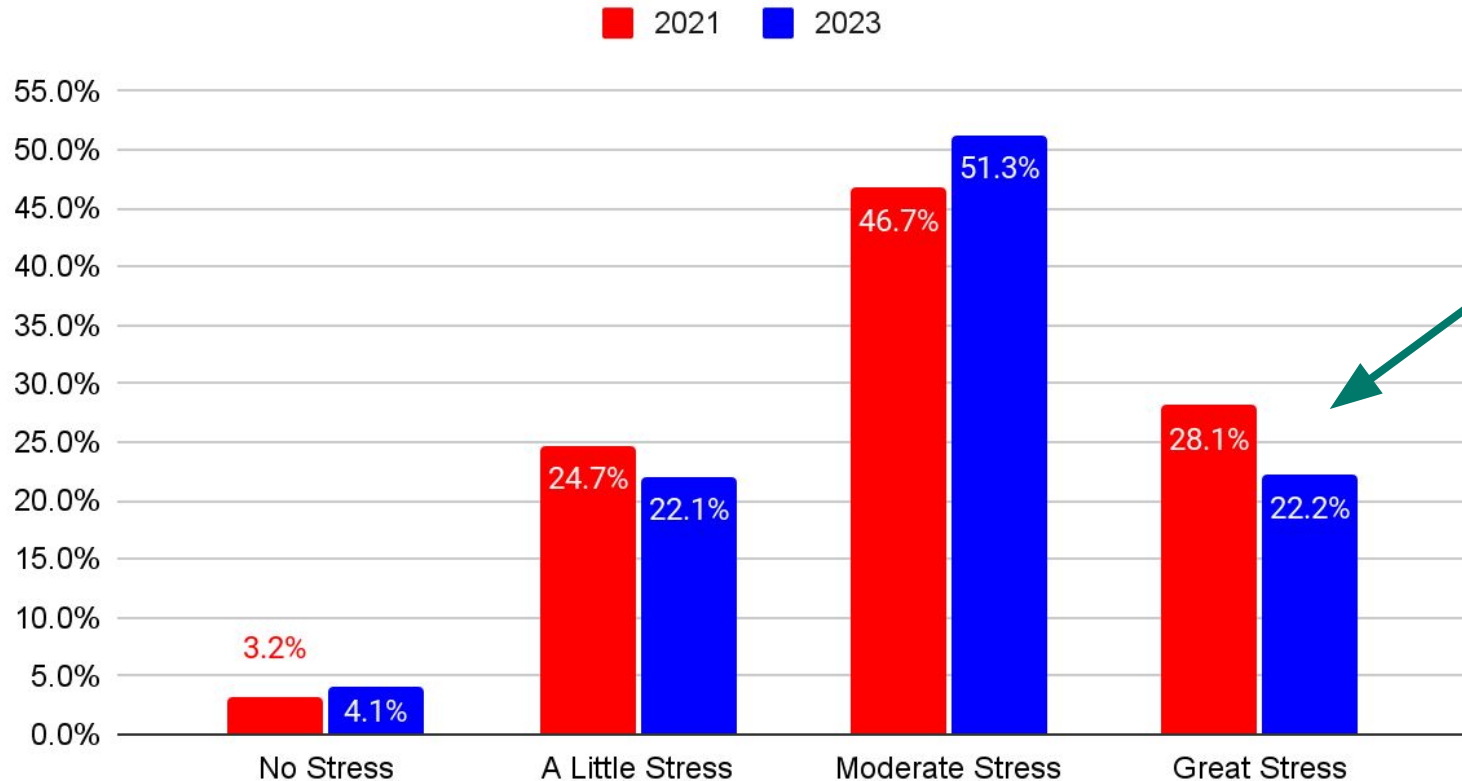
I am in a better mood



I am more alert in school

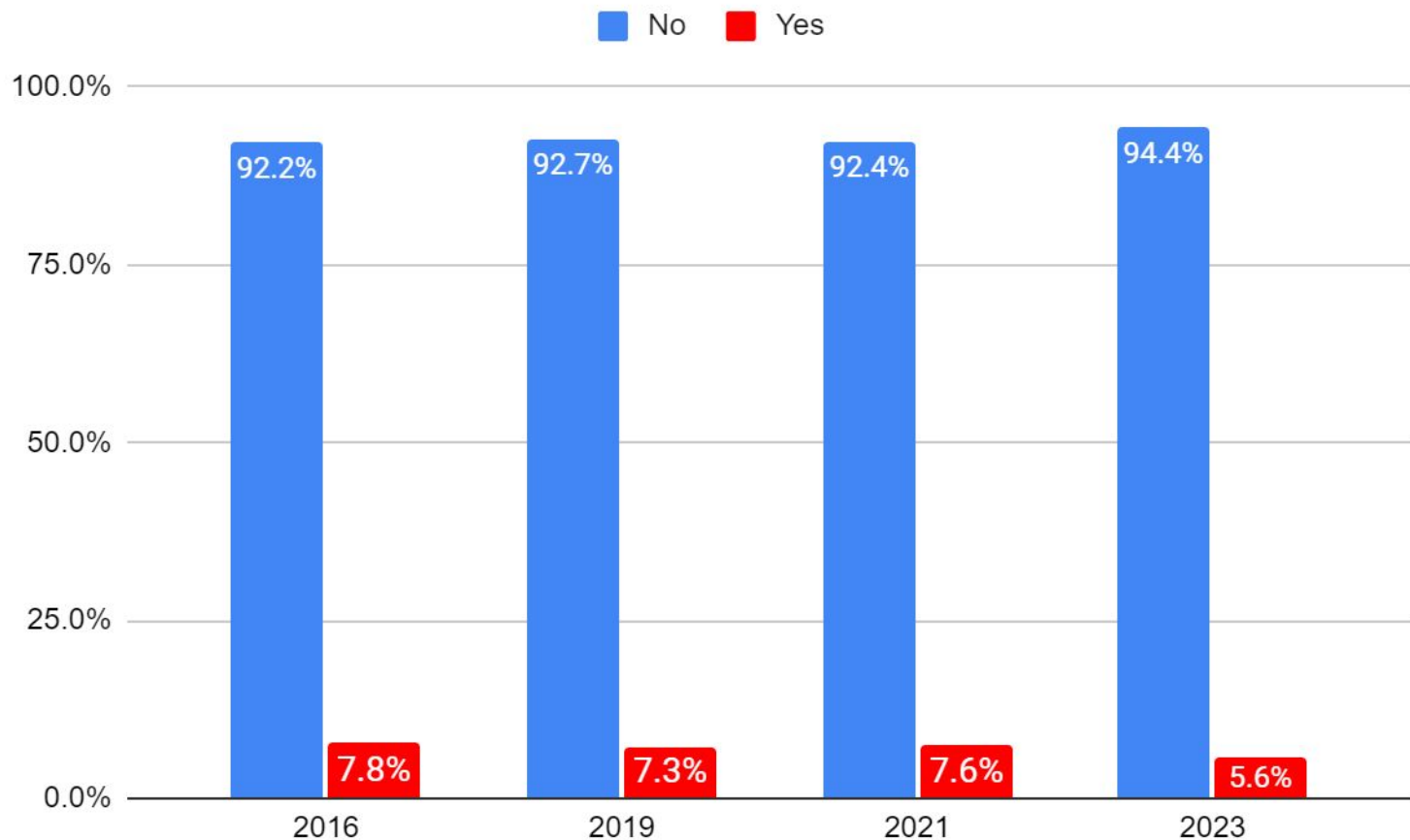


CHS Students: Feelings of Stress, All Students

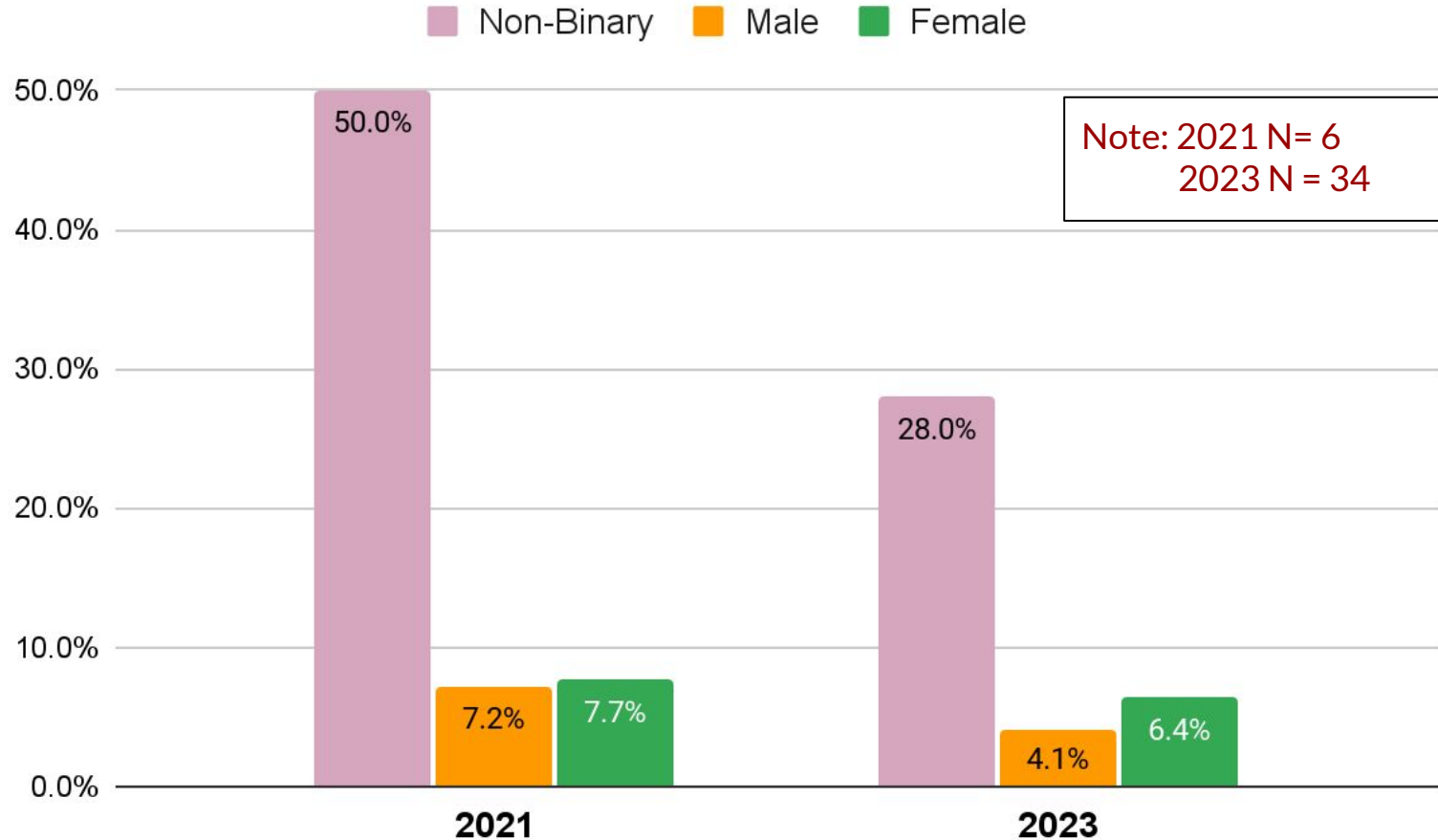


All

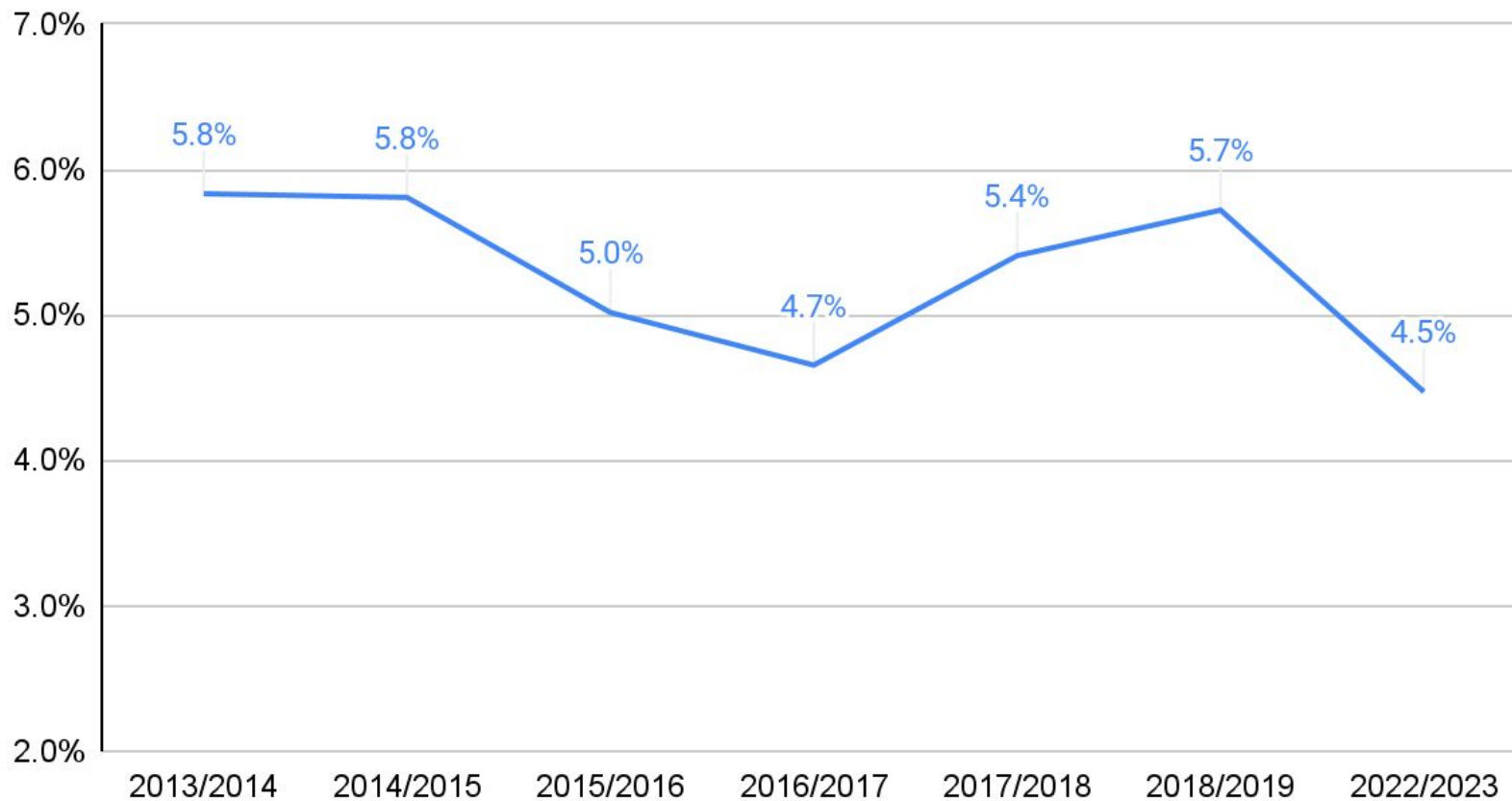
Students in Grades 6-12: Having seriously considered suicide the past year



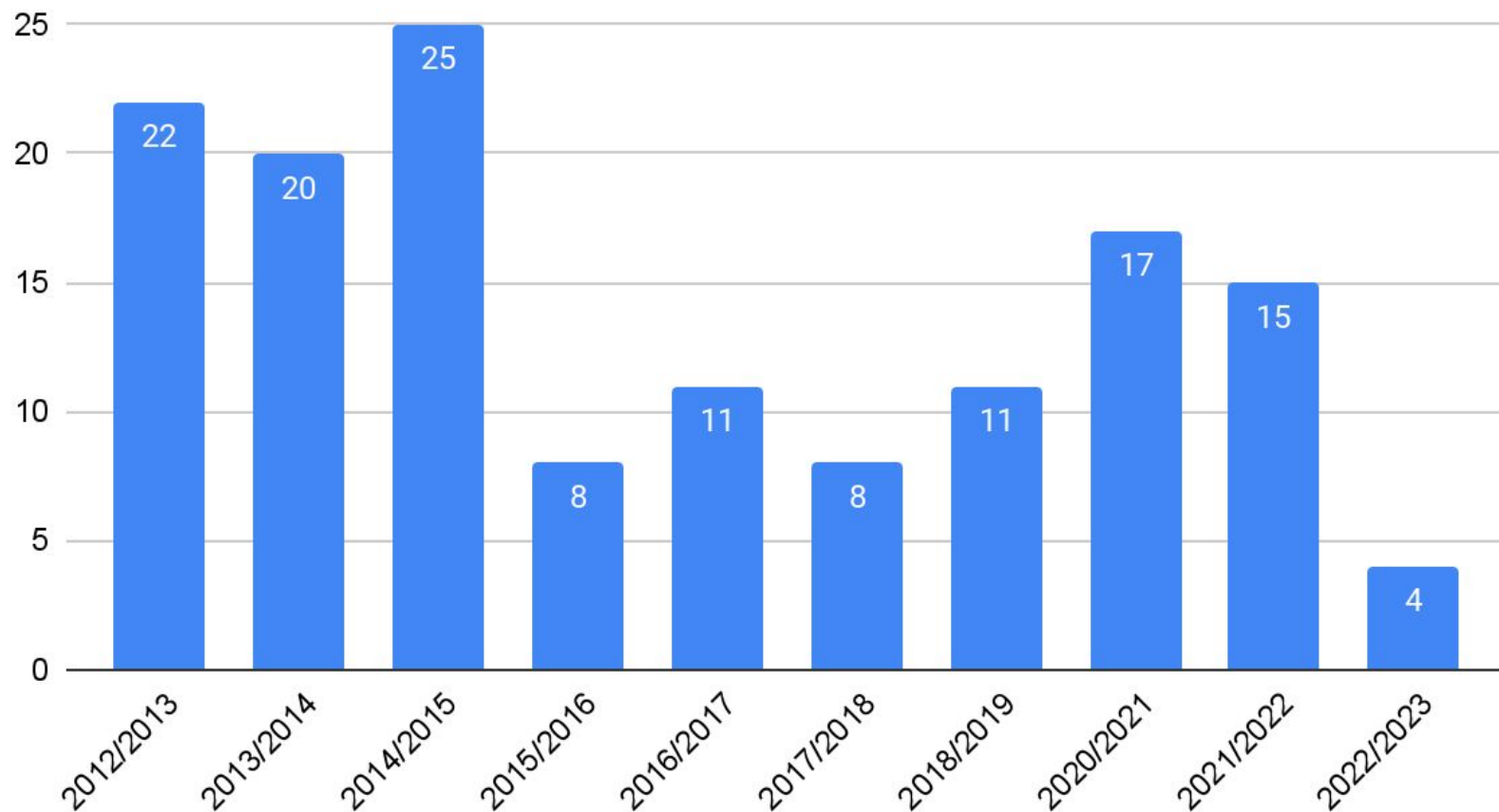
CHS Students: Suicide Consideration by Gender



% of Students Late 18 or More Times over Full Year



Number of CHS students receiving an F in a course



Sticking Points and Sleepers

- Elementary start-time
- Teachers who coach
- Elementary teachers who coach
- Multiple athletic contests on the same day

Table Talk....

Please take some time at your tables to talk about what questions, considerations or pros/cons that you think are important for this issue. It may help to use these abbreviations when talking about the school start time schedules reviewed tonight: S/DT, DT, TT. Please make notes on the poster paper or click [here](#) and record notes.

Next Steps

- Survey Staff, Families and High School Students between now and December 15
- Share survey results at the December 18 Board of Education meeting
- Make final recommendations to the Board of Education in January

Thank you!