

# Moving LSRHS to an evidenced-based school start time

Lincoln Sudbury Regional High School

May 29, 2019

# Why change the start time?

- During adolescence, internal circadian rhythms drive sleep changes
- These changes are normal, biologically based, and result in *later* sleep and wake times for most students.
- At the same time, middle and high schools start too early, out of synch with adolescent biology. Early start times harm students.
- The result is chronic adolescent sleep deprivation.
- Sleep is essential to physical and mental health, safety, preparedness to learn, academic performance, and wellbeing.

**In response, districts have moved start times. A growing body of evidence shows that delaying school start times positively impacts student achievement, health, and safety.**

# National and state agencies call for later start times

## **American Association of Pediatrics, 2014:**

- Announced position that middle and high schools should delay start times.

## **American Psychological Association, 2014:**

- Move start times, despite complications, to improve student performance and wellbeing.

## **Center for Disease Control, 2015:**

- US middle and high schools start the day too early, preventing students from getting the sleep needed for health, safety, and academic success.

## **Massachusetts Medical Society, 2015:**

- Resolution supporting starting middle and high school after 8:30 a.m.

## **American Medical Society, 2016:**

- Policy calls for school districts to set middle and high school start times no earlier than 8:30 a.m.

## **Massachusetts Interscholastic Athletic Association (MIAA) Sports Medicine Committee, 2016:**

- Full support of later school start times.

And many other organizations, see end slide  
or <https://www.startschoollater.net/>

## **American Academy of Sleep Medicine, 2017:**

- Calls for implementation of 8:30 a.m. or later start time for middle and high schools to ensure students arrive at school healthy, awake, alert, and ready to learn.

**“Sleep is vital to your well-being, as important as the air you breathe, the water you drink and the food you eat.”<sup>1</sup>**

- **Adequate sleep is critical for learning and memory consolidation, motor learning, restoration**
- **Adverse outcomes associated with chronic sleep deprivation**
  - **Impaired cognition: limits ability to learn, listen, concentrate and solve problems**
  - **Physical health: cardiovascular disease, obesity, impaired immune function, sports injuries, reduced life expectancy**
  - **Emotional health: mood disorders, irritability, depression, hopelessness,**
  - **Risky and impulsive behaviors: substance abuse, drowsy driving, aggressive behavior**
- **Improvements with a later start time**
  - **School performance**
    - improved grades, test scores, learning attitude, attendance
    - decreased tardiness, absenteeism, disciplinary actions
  - **Increased sleep - bedtimes stay about the same**
  - **65-70% reduction in car crashes**

Research available at all national agencies reference and  
<https://www.startschoollater.net/>

# Chronology of considering a later start time at LSRHS

- **Tri-District Meeting in October 21, 2015**

- Eric Deede, MD, presented sleep study research and recommendations from the American Pediatric Society for high schools to move to later start times that are biologically aligned with teens and adolescents. [Letter to Sudbury Crier](#).

- **Tri-District Meeting May 17, 2016**

- Margie Decter, Newton School Committee presented on the multi-step process that Newton underwent to study the logistical issues that must be considered if school start times are changed significantly (including scheduling, transportation, athletics and clubs, teacher, staff, and community communication)

- LSRHS launched a **School Start Time Taskforce (2017)** and SPS launched a **School Start Time Committee** (Nov 2016)

- Judith Owens MD MPH, Director of Sleep Medicine, Boston Children's Hospital presented to community on 1/12/2017 [The ABC's of ZZZ's, The Impact of Sleep on Student Health](#), [Video](#)

# Chronology continued

LSRHS School Start Time Taskforce (including SC members, teachers, administrators, and parents) collaborated on the “Teen Sleep and School Start Time Report” May 31, 2017

- The committee conducted surveys of parents, staff, and students  
*“Overall, our survey found more support than not for a later start time from all groups we surveyed. Parents and guardians are overwhelmingly supportive of this change, with more than 70% of them in favor, and less than 15% opposed. Students are more divided, with half in favor, a quarter opposed, and the remaining quarter neutral or unsure. A third of the faculty are supportive of starting school later, while almost half the faculty are neutral.”*

# Chronology continued

April 2018: LS School Committee and the LS Teacher's Association negotiated flexibility to change the start time in the 2018-2021 agreement

- **ARTICLE VII -- FACULTY MEMBERS' ASSIGNMENTS**

- 7.2 (c) School Day

- The schedule for the school day will be constructed so that it will be no longer than six hours and 50 minutes in length, with no instructional time scheduled to begin prior to 7:50 a.m. or to end later than 3:15 p.m.

**The contracts permits LS to start at 8:25 a.m. and end at 3:14 p.m.**

# 2018 – 2019 School Year: SPS

- November 2018, SPS School Start Time Subcommittee launched
- March 2019, SPS Start Time Subcommittee Report and Video
  - Conducted surveys about Curtis Middle School student sleep habits
  - Reviewed research and studies regarding adolescent sleep
  - Looked at other districts' experience
  - Report recommended:
    - SSTSC focus on implementation plan for start times change Sep 2020
    - Working group with LS to evaluate transportation options and costs
    - Focus on scenarios that enable LSRHS start time of 8:15-8:26
    - Recommend specific SPS start times in coordination with LSRHS decision

# LSRHS School Start Time subcommittee established January 2019

- Reviewed new literature on later start times
- Looked at experience from other districts that have changed start times
- Reviewed the 2017 Report on School Start times (including surveys of parents, teachers, and students)
- Committee members attended the SPS subcommittee meetings to ensure coordination and collaboration with SPS
- Also collaborated with members of administration and staff, SED, parents, and LSPO
- Considered impacts of a later start (and end) time to high school students (and families) including:
  - Academic load
  - Sports and other afternoon activities
  - Jobs
  - Siblings and care responsibilities
  - Transportation

# LSRHS School Start Time subcommittee reestablished in January 2019

- Cosponsored presentation with SPS SSTSC “Sleep and the adolescent brain” by Dr. Chun Lim, January 31, 2019
  - Strong advocacy for later start times
- Committee members attended the MASC training on implementing later start times
- Ongoing community communication through submissions to the newspaper, meetings and minutes, updates during school committee meetings, LSPO communications, and superintendent email blasts

# School Start Time subcommittee continued

- Collaborated with SPS to contract with Transfinder
  - Transportation study to assess the feasibility of selected start time scenarios for LSRHS and Sudbury's elementary and middle schools.
- The study also determined the number of buses needed for each scenario to determine costs.
  - In all scenarios, it is feasible to change the LSRHS start time to 8:25 a.m. with the end time at 3:14 p.m.
  - Several scenarios to consider for LSRHS and SPS, including scenarios that:
    - Increase the number of buses modestly
    - Retain the same number of buses
    - Reduce buses depending on the bell times
  - “We are the traffic.”
  - LS and SPS committees reviewed the report, asked Transfinder staff questions, and requested a final report
  - Awaiting the final report. Do not anticipate any significant changes

# Scenarios

	Cost savings (TBD)		Cost neutral		LS moves, SPS does not, increased cost	
	Start	End	Start	End	Start	End
LSRHS	8:25	3:14	8:25	3:14	8:25	3:14
Curtis	9:00	3:40	8:30	3:10	7:45	2:25
Elementary	7:45	2:15	7:55	2:25	8:55	3:25

# LS Subcommittee recommendation to full LSSC

- Implement evidence-based recommendation to move the LSRHS start time to 8:25 a.m. for Fall 2020.
- Prioritize vote for June 11, 2019 SC meeting in order to maximize time that administration has to operationalize this change.
- Based on the experience of districts across Massachusetts and the country, we expect our students will benefit from this change. Across both districts, we expect middle and high school students will have improved cognition, physical and emotional health, and academic performance, as well as fewer injuries, risky and impulsive behaviors, and absenteeism and tardiness.
- Urge SPS SC to move middle school start time in line with research.

# Next steps

- SPS subcommittee meeting (May 31, 8 am Curtis Middle School Rm, 154)
- LSRHS subcommittee meeting (likely June 7, 8 am LS)
- **Joint LS/SPS Community Forum: June 10 at 7 pm to answer questions and elicit community feedback**
- **Possibly a joint meeting to vote, June 11**

# Other nearby schools that have changed the start time:

Districts that moved to later start times for high school students include:

- Acton-Boxborough, Ashland, Burlington, Concord-Carlisle, Duxbury, Eastham, Hingham, Holyoke, Marblehead, Marlborough, Melrose, Monomy, Needham, Nauset, Sharon, Stoneham, Watertown, Weston, Winchester

Additional districts planning to change start times in the next year:

- Dover Sherborn, Lexington, Scituate and Wayland

Professional medical and public health organizations have reviewed all of the available sleep research on adolescent health. They have recommended a start time for all middle/high schools.



**Recommend middle/high school start at  
8:30am or later**

American Academy of Child & Adolescent Psychiatry  
American Academy of Pediatrics  
American Academy of Sleep Medicine  
American Medical Association  
American Psychological Association  
American Sleep Association  
American Thoracic Society  
Centers for Disease Control  
Massachusetts Medical Society  
National Association of School Nurses  
National Institutes of Health  
National Parent Teacher Association  
National Sleep Foundation  
Sleep Research Society  
Society of Behavioral Medicine  
Society of Pediatric Nurses

**Recommend middle/high school start  
before 8:30am**

No organization has found that starting middle or high schools before 8:30am is safe or healthy for our children.



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health, safety and equity in education