School Start Time Advisory Committee Recommendation

Presented to Franklin School Committee March 26, 2019

School Start Time Advisory Committee Members

School Committee Representatives

Monica Linden*, Mary Jane Scofield*, Virginia Zub

Parent and Community Representatives

Kit Brady*, Rebecca Cameron, Jen DeBaggis, Oona Harrington, Jessica Pisano*, Diana Taylor

School Department Representatives

Sara Ahern*, Superintendent	Emily Ambrose, Teacher	
Tom Angelo, Athletic Director	Kathleen Gerber (2018-2019), Elementary Principal	
Miriam Goodman*, School Business Administrator	Ellen Gould, School Nurse	
Donna Grady*, FEA President	Bill Klements, Franklin High School Deputy Principal	
Erica Monteiro, Central Office Staff Member	Maria Weber, Franklin High School Assistant Principal	
Beth Woelflein, Teacher		

Student Representatives (Non-voting)

Billy Gardner, Conlin Hickey, Grace Newton, Will Olbrys

*Steering Committee Members

Outline

- Framework, Purpose and Process
- Sleep Needs and Sleep Deprivation
- Recommendation
- Considerations and Concerns
- Implementation Recommendations

Information in this presentation is from the complete Summary Paper and Survey Summary Reports. Both are available on the SSTAC web page through the FPS.

Framework: 2018-2019 District Improvement Plan

Strategic Objective:

Social-Emotional Well-being of Students and Staff: To help students develop connections to school, support positive behaviors, and increase academic achievement, the Franklin Public Schools will enhance programs and practices, while promoting the well-being of staff, to enable each student to acquire the knowledge, attitudes, and skills associated with the core competencies for social-emotional learning.

Strategic Initiative:

Complete School Start Times Advisory Committee study

Purpose of the School Start Times Advisory Committee

The purpose of the School Start Times Advisory Committee will be to study the feasibility of adjusting school start times in Franklin based on current research related to children and sleep. The Advisory Committee will also consider any proposed changes within the local context. Representatives from the Advisory Committee will present their findings and possible recommendations for the School Committee to consider. Changes to school start times, if any, are to be decided by the Franklin School Committee.

Process

- A committee was formed comprised of 3 SC members; 11 teachers, staff and administrators; 6 parents/community members; and 4 non-voting students
- A Steering Committee was formed and the full committee was divided into subcommittees with each subcommittee having at least one representative of each voting demographic (parent, teacher/administrator, School Committee)
- All subcommittees, the steering committee, and the full committee each met regularly starting in March, 2018 (<u>agendas</u>)
- All full committee meetings included the presentation of all information, question, and concerns raised by the subcommittees.
- The process was collaborative, thoughtful and one in which everyone went into every discussion with an open mind while keeping the needs of the students at the forefront.

Subcommittees and Specific goals

- Research on sleep and adolescents
 - Gather and share research on two topics:
 - What is the current research-based understanding of the sleep needs of teens and the impacts of sleep deprivation on teens?
 - What does the research show on younger children and start time shifts?
- Impacts on before school programs and childcare
- Impacts on after school programs and childcare
 - Identify the stakeholders, explore the current time parameters and share concerns and obstacles as they arise to the full committee for further exploration

Subcommittees and Specific goals

- Implications for transportation and traffic
 - Discuss with busing company options available for different scenarios being mindful of staying cost neutral
 - Explore traffic concerns with town administrators and Franklin Police Department
- School start times in other districts
 - Contact and discuss with other districts their process and decisions about shifting start times
- Implications for employees
 - To identify concerns specific to the different demographics in each building type recognizing the distinct roles and time-constraints (eg: nurses, coaches, classroom teachers, custodial and cafeteria staff)

Subcommittee findings

- Research on sleep and adolescents
 - Gather and share research on two topics:
 - What is the current research-based understanding of the sleep needs of teens and the impacts of sleep deprivation on teens?
 - What does the research show on younger children and start time shifts?



Sleep needs

Healthy sleep patterns are influenced by factors such as light, stimulation and a recognition of natural, *biologically-driven* circadian patterns of sleep and wakefulness.

One factor regulated by circadian biology is when an individual is *eligible for sleep*. The time of sleep eligibility shifts during teen years such that on average teens can not fall asleep until *11:00 pm*. The time for sleep eligibility shifts back toward 9:00 pm in the early 20's.

Logistics of meeting sleep needs

<u>Teens</u>

Need 8 hours minimum

On average become sleep eligible at 11pm

If waking at 6am for current start time, have to fall asleep by 10pm

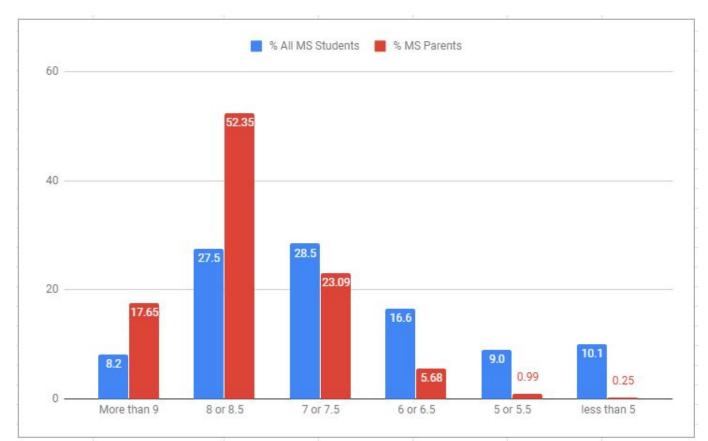
K through pre-teen

Need 9 hours minimum

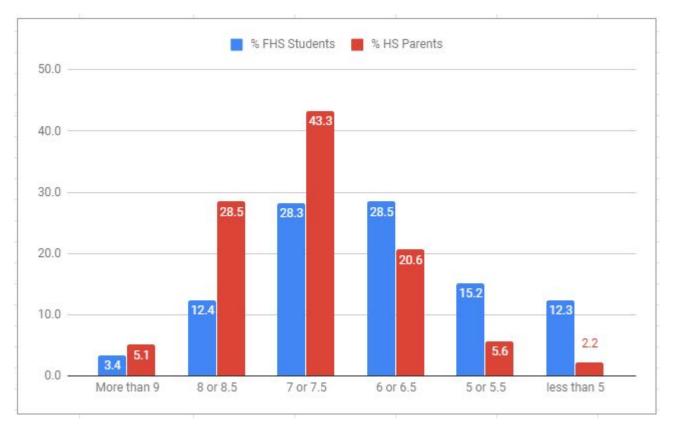
On average become sleep eligible at 9pm

To meet this need can wake at roughly 6am

Franklin teen sleep - Middle School



Franklin teen sleep - High School



Take home

Students in the Franklin middle and high school are not getting enough sleep and are therefore suffering from sleep deprivation.

Impacts of sleep deprivation

Adolescents who do not get enough sleep are more likely to





be not get overweight enough physical activity

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suffer from depressive symptoms



engage in unhealthy risk behaviors such as drinking alcohol, smoking tobacco, and using illicit drugs



perform poorly in school

For more information: www.cdc.gov

National Center for Chronic Disease Prevention and Health Promotion



Division of Population Health





DEDICATED TO THE HEALTH OF ALL CHILDREN*

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

POLICY STATEMENT School Start Times for Adolescents

"The American Academy of Pediatrics strongly supports the efforts of school districts to optimize sleep in students and urges high schools and middle schools to aim for start times that allow students the opportunity to achieve optimal levels of sleep (8.5–9.5 hours) and to improve physical (e.g., reduced obesity risk) and mental (eg, lower rates of depression) health, safety (e.g., drowsy driving crashes), academic performance, and quality of life". Pediatrics 2014:134:642-649

What happens when districts shift start time?

Two Seattle high schools collected data (including electronic sleep trackers) from a similar cohort of roughly 90 students (first period biology class) before (start 7:50) and after (8:45) start time shift.

Results:

- Time to sleep stayed consistent as students added 34 minutes to sleep duration
- Median first period biology grades rose by 4.5%
- Absentees and tardyism dropped significantly

This is similar to what prior research has shown.

A single, small study showed a small test score impact on elementary children while noting that school characteristics (very small, free/reduced lunch in Appalachia) may be important.

Subcommittee findings - Transportation and Traffic

Current Model

- Transporting HMMS and HS together on the first tier at the same time as ASMS and RMS
- Next tiers transport Elementary and then Charter
- Use of 31 buses annual cost = \$1,496,160.

Proposed Model

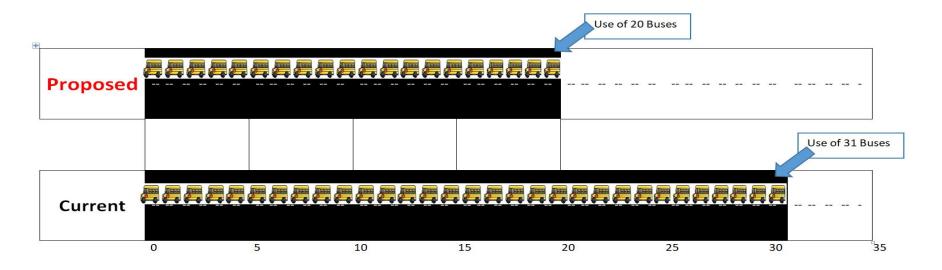
- Transports each level separately on a tier
- Charter students would be transported at the same time as HS
- Proposed use of 20 buses
- Estimated cost savings of \$350,000
- Requires 30 min. between each level's start time

Minimal traffic impact as buses are already in Franklin's "rush hour" times

Bus logistics

Fewer buses would be a potential savings of approximately \$350,000

Routes would be developed, with route times and additional details during the implementation phase, **if** a change is approved.



Considered scenarios

School level	Current time	Recommended time A
Elementary Schools	8:30 AM - 2:40 PM	7:45 AM - 1:55 PM
Middle Schools	7:20 AM - 1:50 PM	8:15 AM - 2:45 PM
High School	7:35 AM - 2:05 PM	8:45 AM - 3:15 PM

School level	Current time	Recommended time B
Elementary Schools	8:30 AM - 2:40 PM	7:55 AM - 2:05 PM
Middle Schools	7:20 AM - 1:50 PM	8:55 AM - 3:25 PM
High School	7:35 AM - 2:05 PM	8:25 AM - 2:55 PM

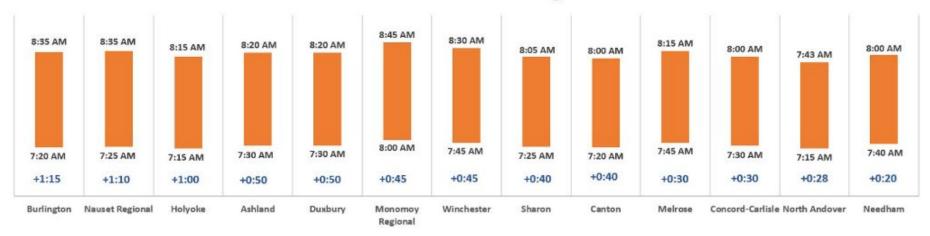
Considered scenarios: support and concern

School level	Recommended time A	Recommended time B
Elementary Schools*	7:45 AM - 1:55 PM	7:55 AM - 2:05 PM
Middle Schools	8:15 AM - 2:45 PM	8:55 AM - 3:25 PM
High School	8:45 AM - 3:15 PM	8:25 AM - 2:55 PM
Concerns	HS dismissal very late Elem dismissal early	Big shift for middle school Poorer alignment with sleep research
Support	Better alignment with sleep research More logical progression from elementary to middle to high school	Allows for after school activities Smaller change for Elementary
Consideration	*Goal was to start Elementary within 30 minutes of latest sunrise; Sunrise on 12/22 7:11 AM	

Subcommittee findings

- School start times in other districts
 - When sufficient time is given for all stakeholders to adjust, changes are generally positively received
 - There is a growing trend in the region to explore and implement start time shifts
 - Each community had specific, local context to consider (busing, schedule, contract)
- Suggestions from other districts focused on
 - Communication
 - Delaying implementation by at least one year

Alignment with the region



MA Schools - Start Time Changes

Subcommittee findings

- Impacts on before school programs and childcare
- Impacts on after school programs and childcare
- Implications for employees

Information gathered by these groups was built into the <u>surveys</u> sent to parents and teachers/staff. Responses were grouped by current position (eg: parent/guardian to elementary only vs parent/guardian to elementary and high school, elementary teacher and high school coach vs nurse at a complex)

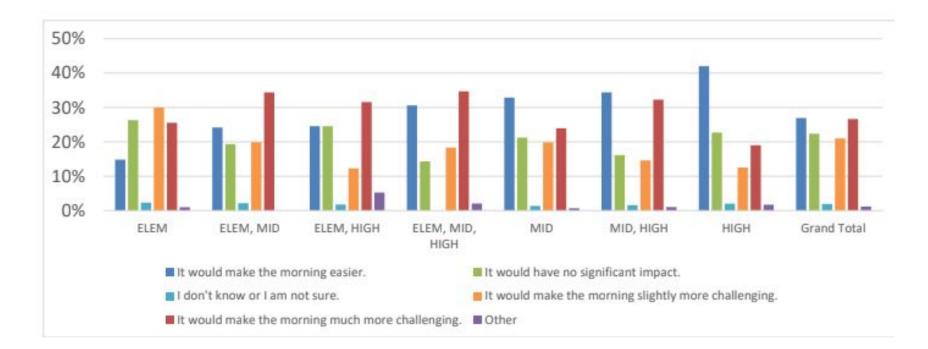
Parent/guardian feedback on this recommendation

If the school day began for your child(ren) as listed in Scenario B, what would be the impact on your family in the _____?

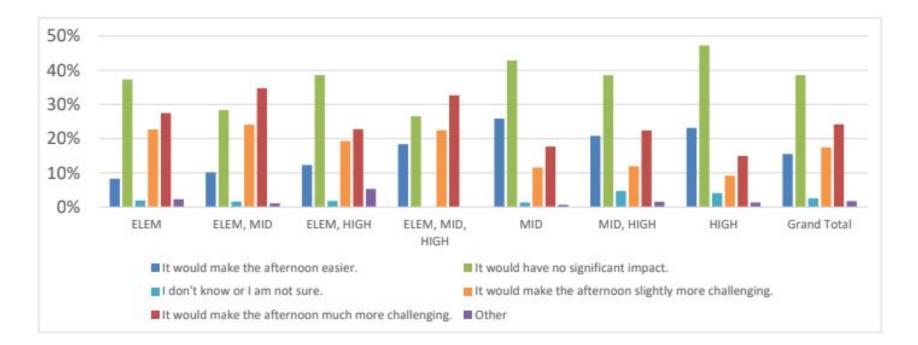
Morning: Just over one-quarter of parents/guardians felt it would make the morning easier, with high school parents at 42%. Whereas, overall one-fourth also felt it would make the morning much more challenging, affecting mostly elementary and middle school families.

Afternoon: Overall nearly 39% indicated it would have no significant impact. However, nearly one-quarter indicated it would make the afternoon more challenging, affecting mostly elementary families.

Parent/guardian responses to scenario B: morning



Parent/guardian responses to scenario B: afternoon



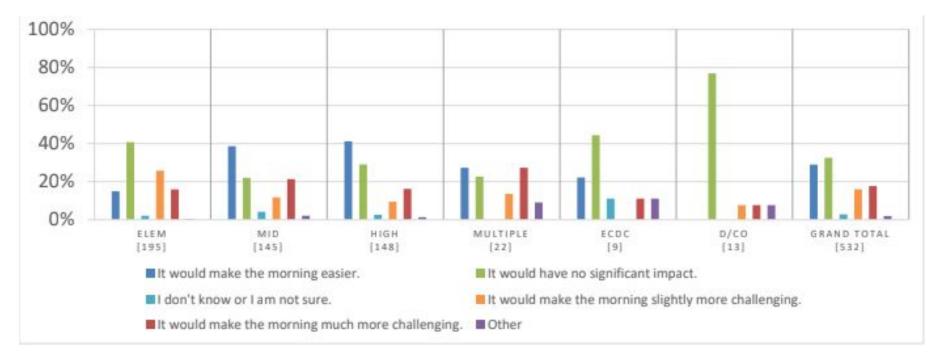
Faculty and Staff feedback on this recommendation

If the school day began for you as listed in Scenario B, how would this affect you in the _____?

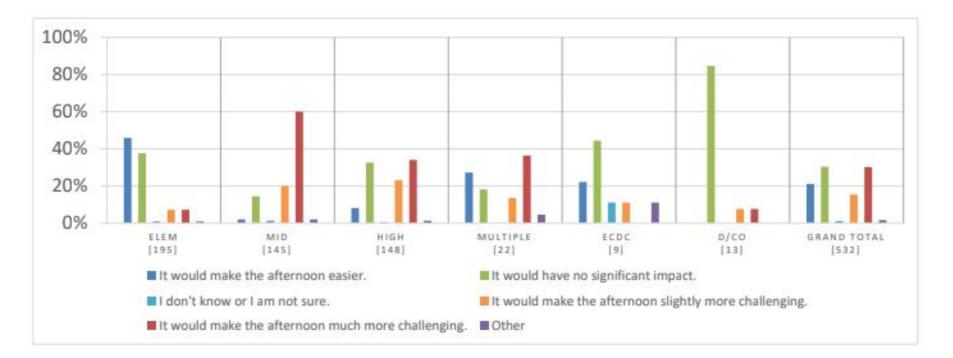
Morning: Over 61% of faculty and staff indicated it would either make the morning easier or have no significant impact. Whereas, nearly 34% indicated it would make the morning slightly more challenging or much more challenging.

Afternoon: Nearly 84% of only elementary staff felt it would make the afternoon easier or have no significant impact. Whereas 60% of only middle school staff and 34% of only high school staff felt it would make the afternoon much more challenging.

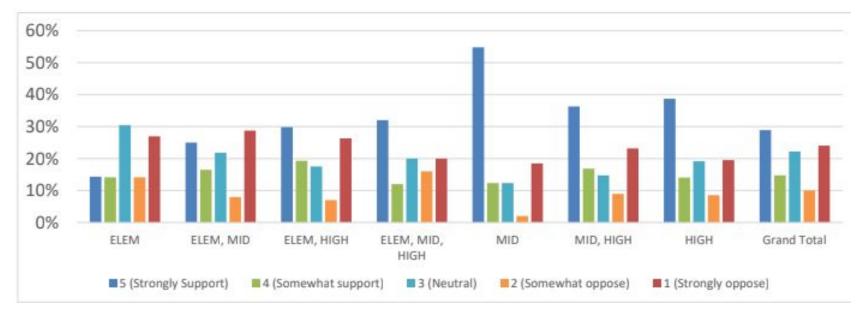
Faculty/staff responses to scenario B: morning



Faculty/staff responses to scenario B: afternoon

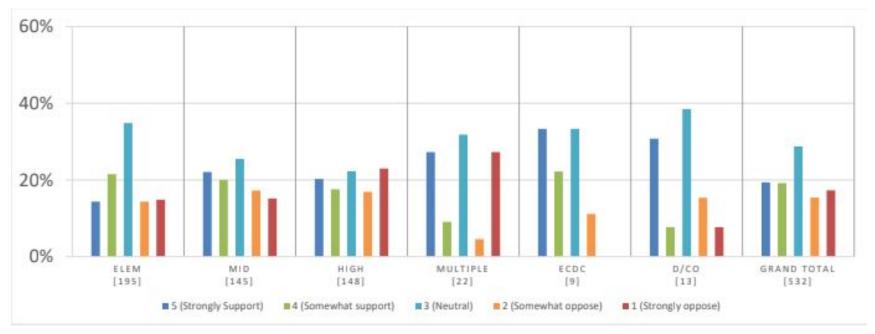


Overall parents/guardian:



Nearly 30% strongly support the proposed change in adjusting start times. However, families with students in the elementary level (27%) strongly oppose this change

Overall Teachers/staff:



Nearly 29% were neutral regarding their feelings with respect to adjusting start times. Nearly 39% were leaning towards supporting this proposal and nearly 33% are more opposed to this proposal.

Considerations and concerns

Most common concerns that emerged from parent/guardian survey

- Busing, Athletics and Solutions-based child care
- Homework
- Adjustments to family schedules

Most common concerns from teacher and staff survey:

- Teacher work-life balance
- Middle and High School afternoon commitments
- Technology

After school activities

- HS Athletics would adjust to later start times, with Scenario B being favored, with minimal disruption for most sports; may need Hockomock league exemption of 3:45 PM game time start rule for some sports/events.
- The athletic director does not anticipate an increase in transportation costs as a result.
- Scenario A would involve the need for more frequent early release from classes for student-athletes.
- A few other Hockomock schools have also adjusted start times (dismissal: Canton @ 2:24 PM, Sharon @ 2:40 PM).
- Swimming and gymnastics emerged as specific concerns.
 - Gymnastics may need to shift to morning practices negating the benefit of a later start for the students involved.
 - Pool time may be too limited with a later dismissal time to support a swim team. May explore other pools, but have concerns about availability and cost.

Lifelong Learning and care for younger children

- An earlier elementary start time may negate the need/feasibility of a morning Solutions program
- Solutions afternoon cost likely to increase depending upon the length in the afternoon as well as the impact of anticipated lost revenue of the elementary morning program
- However, a later middle school start time may provide an opportunity for an expanded morning Solutions program at the middle level
- LLL Director would like to survey Solutions families to gather more information during the preparation for implementation phase, should the School Committee vote to shift start times

Recommendation of the School Start Times Advisory Committee

After giving all due consideration to the research on adolescents and sleep, survey feedback from parents/guardians and faculty/staff, and potential implications on after school and before school activities, as well as transportation and traffic, the School Start Times Advisory Committee voted on 3/14/2019:

13-2 In favor of recommending to the School Committee that School Start Times be adjusted.

3 Committee members were absent.

The group was polled as to which scenario they could/could not support. Scenario A only received 1 vote Scenario B only received 2 votes Preference for A better than B received 2 votes Preference for B better than A received 8 votes

Implementation Recommendations

The Start Time Advisory Committee recognizes that a School Committee vote to approve is the beginning of the next phase of work. We respectfully recommend:

- Empower a Superintendent Implementation Team
 - Comprised primarily of teachers and staff tasked with navigating the process
- Stay as close to the recommended times as possible as they were chosen after careful consideration and much deliberation
- Commit to implementation in the **2020-2021** school year
- Continue robust two-way communication with all stakeholders
 - Teachers, staff and coaches
 - Parents of current and incoming students
 - Non-FPS/community-based organizations that interact with students

Implementation Considerations

Budgetary and Programming Impacts

- Busing -- potential \$350,000 savings
- Lifelong Learning -- remain cost neutral as an overall program; tuition may change for families
- Athletics -- remain as cost neutral as possible; some individual sports may see increase/decrease

Transportation Details

- BFCCPS -- Charter School busing
- ECDC

Employees

• Impact Bargaining

Measures of Success/Monitoring

Summary

What we've done: looked at sleep research, how start time changes have been implemented in other towns, and if a start time shift could work in Franklin

Why we did it: for the social, emotional, education and physical wellbeing of the students

What we've learned: there is a biological basis for the conversation and that there are no Franklin-specific obstacles that are insurmountable

What we recognize: change is hard and time should be afforded to allow for the district and families to plan and prepare

Questions and Comments