



Sleep Health Advisory Committee Task Group Reports

**School Committee Meeting
November 30, 2022**



Sleep Health Advisory Committee

Purpose

The Sleep Health Advisory Committee was convened to study the latest research on sleep health for children and adolescents and to consider potential options for adjusting school start times for the 2023-2024 school year.

It includes five Task Groups who have been studying different aspects of these issues and are presenting reports to the School Committee:

- 1) Research on sleep health of adolescents and children and the impact of school start times
- 2) Feedback from stakeholder groups
- 3) Practices in other school districts
- 4) Child care
- 5) Logistics



Sleep Health Advisory Committee Timeline

September – January: Advisory Committee meetings (5 so far)

November 9: Task Group for Research presented its report to the School Committee

November 10-17: ThoughtExchange survey conducted with stakeholder groups
(parents/caretakers, staff, students)

November 30: Task Groups for Stakeholder Feedback, Practices in Other Districts,
Child Care, and Logistics present reports to the School Committee



Sleep Health Advisory Committee Timeline (continued)

November 30: Task Groups for Stakeholder Feedback, Practices in Other Districts, Child Care, and Logistics present reports to the School Committee

December 12: Public webinar presented by Dr. Judith Owens, adolescent sleep expert from Boston Children's Hospital and Harvard Medical School

December 14: Sleep Health Advisory Committee presents recommended options for potential school start time changes for the 2023-2024 school year to the School Committee

December 15: Survey of stakeholder groups initiated to get feedback on options



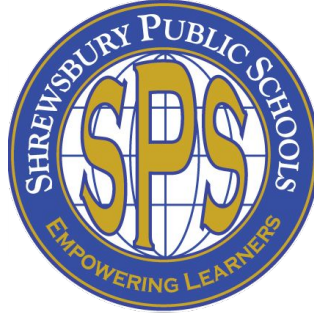
Sleep Health Advisory Committee Timeline (continued)

January 4: Public hearing at the School Committee meeting to listen to feedback from stakeholders

January 18: Discussion of options by the School Committee and potential vote

January 25: Potential additional School Committee meeting for discussion/vote (if necessary)

February 1: Last recommended School Committee meeting for discussion/vote to implement any change for the start of the 2023-2024 school year (if necessary)



Sleep Health Advisory Feedback Task Group

ThoughtExchange Survey Summary

Task Group Members:

Sarah Anane, SHS Class of 2024; Hallie Burak, Principal, Oak Middle School;
Dr. Jane Lizotte, Assistant Superintendent for Community Partnerships & Well-Being;
Adnan Malik, Parent

How does ThoughtExchange work?

- Participants can share as many thoughts as they wish in response to the open-ended question
- Participants can rate the importance of/agreement with others' thoughts (giving 1 to 5 stars)
- The ThoughtExchange software ensures all thoughts are rated only a certain number of times and by different people, so that the thoughts can be fairly ranked

How does ThoughtExchange work?

In this exchange:

- Students only saw and rated other students' thoughts.
- Parents and caretakers only saw and rated other parents' and caretakers' thoughts.
- Staff only saw and rated other staff members' thoughts.

All of the results, including all thoughts and ratings, are available in the reports provided separately and will be posted on the SPS website.

Open-Ended Question:

The Sleep Health Advisory Committee is investigating possibilities to change school start times next year so that older students get more sleep. To inform their work, please share what you see as potential benefits and challenges if school start and end times changed for the 2023-2024 school year.

Thank you to the students,
parents/caretakers, and staff who contributed
to this important discussion.



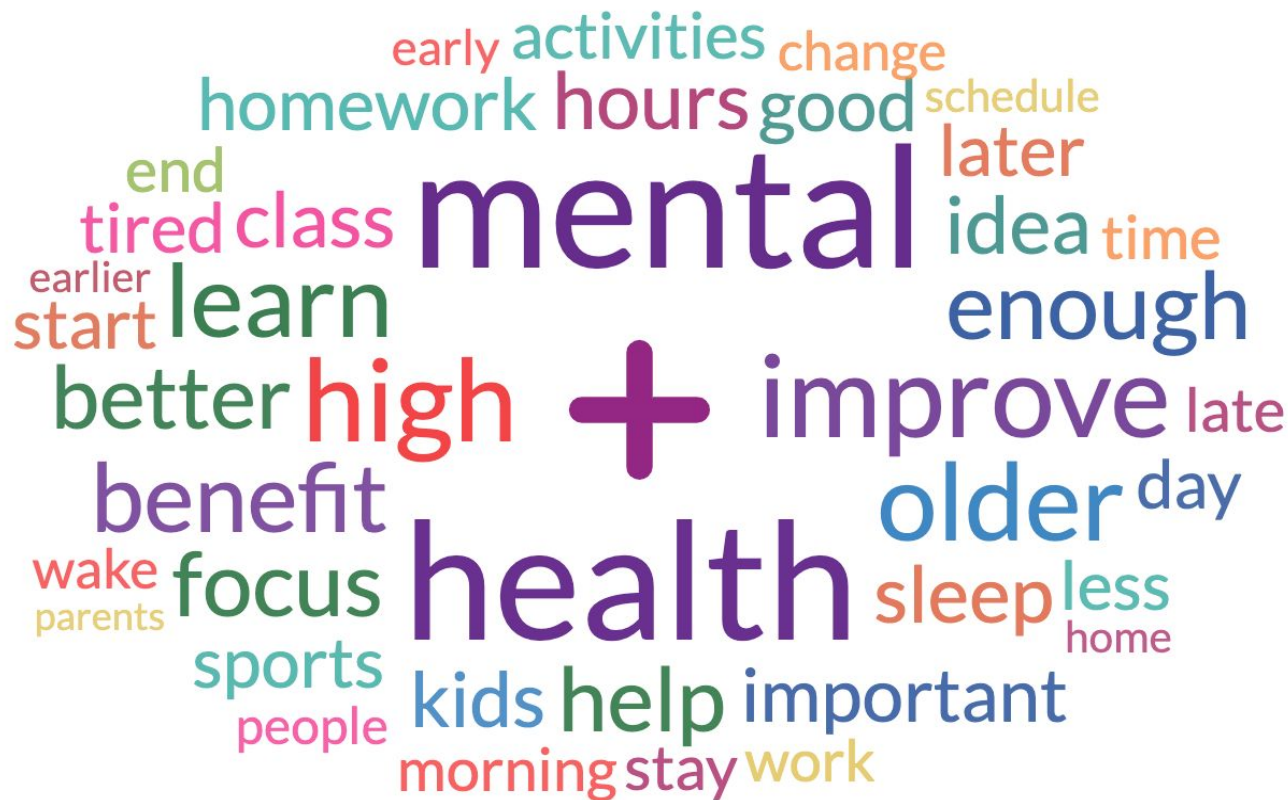
Respondents by School

	Total	%	Parents	Students	Staff
Shrewsbury High School	2,095	54%	472	1,466	157
Oak Middle School	1,334	34%	319	932	83
Sherwood Middle School	389	10%	288	48	53
Elementary Schools	558	14%	405	37	116
Preschool	50	1%	36	3	11
District Staff	51	1%	3	2	46
Total	3,835	100%	1,036	2,367	432



WORDCLOUD

Top Rated



Update



Hide

TOP THOUGHTS- STUDENTS FEEDBACK

I think school should start later than it dos right now. Because sleep is way more important than a lot of people think it is, without proper rest kids will not be able to focus. It's very important. *I am a Shrewsbury Public Schools student*

4.3  (24 )
Ranked #1 of 2060



Some benefits to later school start times are that students can focus more in class. This is also beneficial for students who do sports. This is important because students will be less likely to fall asleep during class. This also helps since students are less likely to get injured. *I am a Shrewsbury Public Schools student*

4.3  (23 )
Ranked #2 of 2060



Teens will be more energized and ready to learn. It will open them up to get the most out of their education, motivate them to pursue a better future, and seize critical opportunities. *I am a Shrewsbury Public Schools student*

4.3  (23 )
Ranked #3 of 2060



LOWEST RATED THOUGHTS-STUDENT FEEDBACK

I dont see any benefits to starting school later

 Comment  Action

2.4  (24 )

Ranked #2045 of 2060



School should start at 7:05am Especially during the winter, having school get out earlier would allow me to participate in more outdoor activities.

 Comment  Action

2.4  (23 )

Ranked #2046 of 2060



If anything start school at 8 not 8:30. Honestly, there shouldn't be a change. 8:30 seems too late to start school. Along with that, having a time change in general just causes so many issues for people.

 Comment  Action

2.4  (22 )

Ranked #2047 of 2060



TOP THOUGHTS- PARENT/CARETAKER FEEDBACK

I would like to see my high schooler start a little later than present time. For 6:40 bus they have to be up around 5:45 and as they get older there work keeps them up late at night and I worry about barely 6 hours of sleep day *I am a parent/caretaker of a Shrewsbury Public Schools student*

4.5  (35 )
Ranked #1 of 720



High school kids needs more sleep time. I think school timings should change *I am a parent/caretaker of a Shrewsbury Public Schools student*

4.5  (34 )
Ranked #2 of 720



This feels overdue to me. We should be looking more at how sleep impacts mental and physical health. We have a crisis of mental health in our youth. We have to be willing to make changes. *I am a parent/caretaker of a Shrewsbury Public Schools student*

4.4  (36 )
Ranked #3 of 720



LOWEST RATED THOUGHTS- PARENT/CARETAKER FEEDBACK

this is ridiculous. This generation needs to toughen up and be more disciplined. NO. This is not preparing them for college early classes nor WORK which - first shift starts at 7am or 8am. Give me a break. *I am a parent/caretaker of a Shrewsbury Public Schools student*

2.2 ★★☆☆☆ (22 👤)

Ranked #713 of 720



I think students will just go to later The will be no gain in sleep *I am a parent/caretaker of a Shrewsbury Public Schools student*

2.0 ★★☆☆☆ (35 👤)

Ranked #716 of 720



Changing times is not necessary It's the way society works.. you get up, even when you don't want to and go to work and school *I am a parent/caretaker of a Shrewsbury Public Schools student*

1.9 ★★☆☆☆ (35 👤)

Ranked #718 of 720



TOP THOUGHTS- STAFF FEEDBACK

This will greatly impact staff and their ability to care for their own families Our own children will follow a totally different schedule *I am a Shrewsbury Public Schools staff member*



How will this impact families whose older children help out after school for care for younger siblings Child care is expensive *I am a Shrewsbury Public Schools staff member*



Later start time means later end time which could effect staff's schedules. Some staff members are not fortunate enough to have one job to support themselves and have two jobs. A change in times means it effects other jobs. *I am a Shrewsbury Public Schools staff member*



LOWEST RATED THOUGHTS - STAFF FEEDBACK

Better attendance for staff if they have extra time to sleep in the morning *I am a Shrewsbury Public Schools staff member*

2.7 ★★☆☆☆ (33 👤)

Ranked #339 of 346



Yes, let's move to a later start time We've known all of the information presented for years. It's about time that we put students in classrooms at times when they are most alert *I am a Shrewsbury Public Schools staff member*

2.7 ★★☆☆☆ (20 👤)

Ranked #340 of 346



Change school start time by 15 to 20 minutes Older students are more involved in extra curricular activities along with school work *I am a Shrewsbury Public Schools staff member*

2.7 ★★☆☆☆ (6 👤)

Ranked #341 of 346

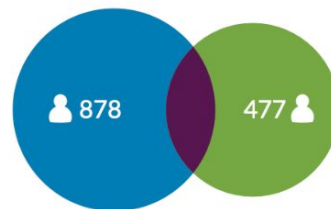




DIFFERENCES

Later Start | Time Change [878 | 477]

I am a Shrewsbury Public Schools student



Side A

Postpone start time 1h to 8:30 This will give students an extra hour of sleep bringing it from 7h of sleep to 8h, the recommendation.

★ 4.8 ★ 1.8

The high school times and middle school/elementary school timings should be switched I've seen that the younger the people around me are, the more energy they have during the day. That extra sleep for older kids could be very helpful.

★ 4.6 ★ 1.0

Side A/B Common (high)

I think maybe limiting homework for each day would be a better solution to student's sleep deprivation. Most of the time, students stay up for late hours due to schoolwork. Therefore less homework means more sleep.

★ 4.6 ★ 4.7

Students don't get a break Students get 2 hours worth of homework and 6 hours of school. on the weekends instead of having a break teachers pile on the pressure with more work.

★ 4.6 ★ 3.8

Side B

I don't want them to change it I think this because we will still all be tired and we will have less time after school

★ 1.9 ★ 5.0

WON'T FIX ANYTHING Kids just need to learn how to manage their sleep better

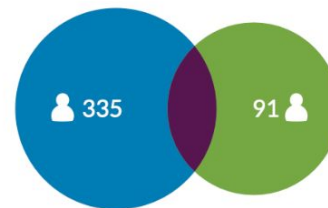
★ 1.1 ★ 4.4



DIFFERENCES

Sleep Later | Sleep Later [335 | 91]

I am a parent/caretaker of a Shrewsbury Public Schools student



Side A

I would strongly prefer my high school student start school at a later time. He sometimes doesn't get enough sleep with the current schedule.

★ 5.0 ★ 1.2

I think it's a good idea for older students as they can get some more sleep and be more active during the day. Its important as we see the kids are under a lot of stress and its important to change the start time so they come well rested and alert to school

★ 5.0 ★ 1.3

Side A/B Common (high)

It's scientifically proven that getting enough sleep is a critical component to overall good health. Children develop lifelong habits now, so they should be provided every opportunity to form healthy ones like prioritizing sleep.

★ 5.0 ★ 4.0

Elementary start time is late enough. Going in any later than nine is not ideal, and to extend the dismissal time would be even worse. The bus does not get some children home until past 4.

★ 3.5 ★ 4.8

Side B

no Because if school starts late, they will sleep late.

★ 1.1 ★ 4.7

I doubt it will promote more sleep. Students will come home from school or practices later, start evening routines later and then go to sleep later

★ 1.3 ★ 5.0

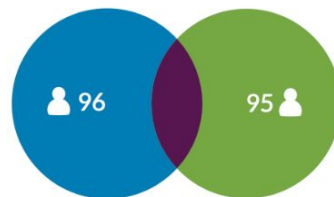




DIFFERENCES

Sleep Better | Later Start [96 | 95]

I am a Shrewsbury Public Schools staff member



Side A

Make the change this coming year. SPS has put this important health-enhancing choice off for far too long. Announce this winter so families can plan. We need this change, and we need it soon so families can plan. Pushing it off another year just delays the changes we all need to make.

★ 4.6 ★ 1.3

It is important for teens to get enough sleep, and a late start time would help them do so.

★ 4.3 ★ 1.5

Side A/B Common (high)

Later start time means later end time which could effect staff's schedules. Some staff members are not fortunate enough to have one job to support themselves and have two jobs. A change in times means it effects other jobs.

★ 3.7 ★ 5.0

How will this impact families whose older children help out after school for care for younger siblings Child care is expensive

★ 3.6 ★ 4.8

Side B

Given the demands of student schedules balancing with school work, sport or club activities, and personal jobs students may still **continue to struggle** Students will still have the same amount of tasks to accomplish in the day. Starting later would mean getting home later to begin all their tasks.

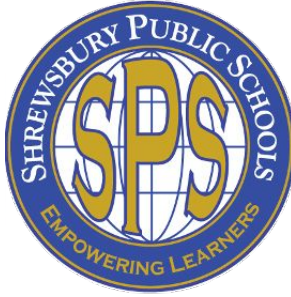
★ 2.0 ★ 4.9

Times should remain the same. Many students have after school activities that would be negatively affected and vital jobs to support the household.

★ 2.1 ★ 4.8

Overarching Themes

- Many respondents indicated agreement that sleep is essential to mental and physical well-being, and that they perceive that students are better able to focus and are more equipped to learn when they have adequate sleep.
- Many respondents believe that high school students are currently not getting enough sleep due to a multitude of responsibilities including homework, athletics, clubs and activities, care of family members, and employment.
- The ranking of thoughts indicated that both students and parents/caretakers support later school start times for adolescents, while thoughts ranked as most important by staff focused on concerns about schedule changes and childcare.
- The feedback from this exchange was highly informative and both potential benefits and potential challenges are being carefully considered by the Sleep Health Advisory Committee as it works on recommendations for potential changes to school start times.



Sleep Health Advisory Committee

Practices in Other Districts

Erin Boucher, School Committee; Angie Flynn, Director of School Counseling; Noelle Freeman, Director of School Nursing; Scott Mulcahy, Principal, Walter J Paton School; Shane Quintard, Parent

Charge of Practices in Other Districts Task Group

- Research practices in other districts regarding sleep health and start times
- Identified districts that made changes to start times and what those changes were
- Identified districts that considered making a change but did not do so
- Identified district that made change and reverted back to original times
- Created [survey](#) that was sent out to administrators, educators, school committee members, and parents in these districts asking for feedback on their process, changes made/considered, and challenges faced

Surveyed Districts

Districts That Changed Start Times:

- Westborough
- Northborough and Southborough
- Marlborough
- Newton
- Ashland
- Barrington, R.I.

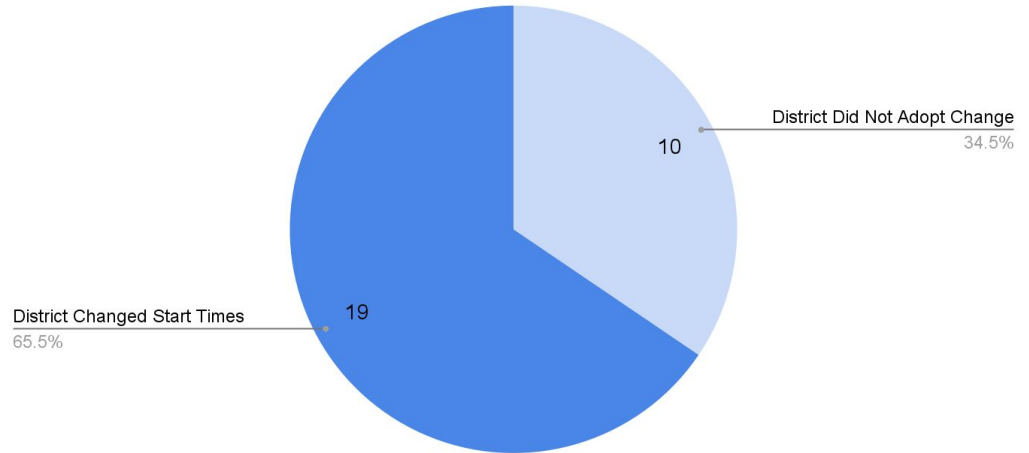
Districts That Did Not Adopt Change:

- Grafton
- Franklin
- Hamden, CT

Districts That Changed and Reverted Back:

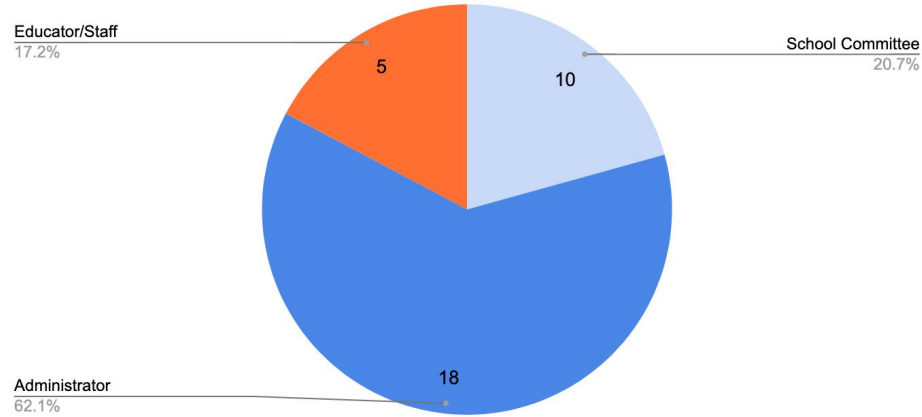
- Newport, R.I.
- Norwalk, CT

Representation of Surveyed Districts (N = 29)

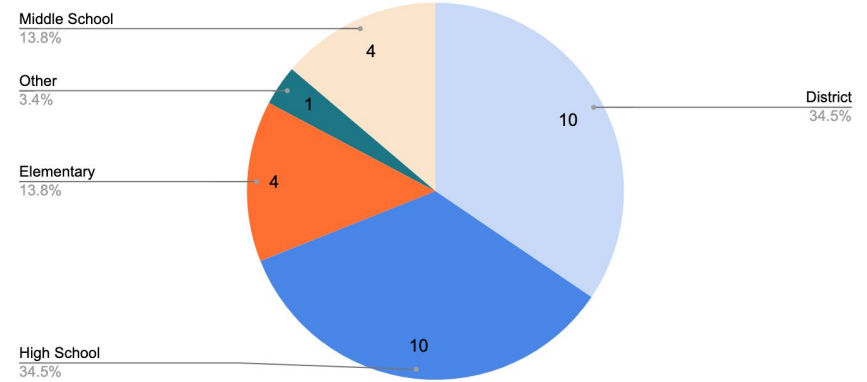


Surveyed Districts

Role Within School District (N = 29)



Level Within School District (N = 29)



Start Time Changes

District	Elementary start time before changes	Middle School start time before changes	High School start time before changes		Elementary start time after changes	Middle School start time after changes	High School start time after changes
Ashland, MA	8:45	7:40	7:40		Gr K-2 9:00 Gr 3-5 7:40	8:20	8:20
Lexington, MA	8:30	8:00	7:45		9:00	8:00	8:30
Marlborough, MA	8:50	8:00	7:20		9:00	8:00	8:00
Newton, MA	8:20	8:00-8:30	7:40		8:10	7:50-8:20	9:00
Northborough/ Southborough, MA	8:00-8:50	7:50	7:20		8:30-9:10	7:45	8:00
Westborough, MA	8:50	7:30	7:30		8:50	8:02 & 8:10	8:10
Barrington, RI	8:40	7:50	7:40		7:45	8:40	8:30

Themes from Districts That Changed Start Times

Positive outcomes due to a change in start time included:

- Student outcomes related to mental health and well being
- Students were reported to better rested, more engaged, and alert

Negative outcomes due to a change in start time included:

- Conflicts with logistics affecting after school activities
- Challenges related to transportation

Themes from Districts That Changed Start Times

Additional Insight from 7 Respondents about Families and Student Reactions:

- Generally positive responses
- Need for open and transparent communication
- Concerns related to before and after school care, after school activities, and financial impact on families

Communication Methods

- Stakeholders communication at the district level via the superintendent, school committee, and focus groups
- Stakeholder communication at the individual building level through building administrators
- Stakeholder feedback and input through surveys and public forums
- Sharing of information through presentations and district social media

Themes from Districts That Did Not Adopt Change

Three common themes for not adopting the change were the following:

- Busing costs and logistics
- Financial impact on families
- Impact on athletics and extracurricular activities

Case Study Takeaways from Norwalk, CT

Similarities:

- Community stakeholder involvement through surveys, focus groups and other efforts to elicit as much feedback as possible prior to a final decision
- Logistical reviews to address concerns with transportation, athletics and other co-curricular activities

Differences:

- Committee directly advising the Norwalk Superintendent was comprised solely of district administrators and faculty, whereas Shrewsbury's includes students, parents, and community members
- Length of time between the start of the analysis and the implementation of Norwalk's plan

Parallels:

- Focus on the mental health and well-being of high school students was a major factor in the decision making of the Superintendents committee
- Concerns included transportation and logistics, impacts to staff and scheduling of extra-curricular activities

Case Study Takeaways from Norwalk, CT

Identified factors which led to the start time reversal:

- Faculty unhappiness with the new schedule
- Impacts to instructional time due to transportation issues
- Faculty/staff increase in daily commute time, affecting family time and personal obligations
- Students reported waking at the same time as they had before the change was implemented due to traffic issues and getting to school on time

Critical components to a successful start time change:

- Stakeholder buy in
- Transportation and logistics reviews to ensure no unforeseen unintended or negative outcomes
- Communication with the entire Shrewsbury district, across multiple mediums and platforms

Conclusions

- School districts that made a change to school start times reported that the change was a positive one, especially in terms of student mental health and well being
- Although there was an adjustment period, once community became accustomed to new start times, change was viewed favorably
- Busing costs and impacts to childcare were main factors that prevented districts from making change.
- Districts that made a change also reported that stakeholder involvement in various forums concerning the study of the start time issue and effective communication of the change to the start time was key to the successful implementation of start time adjustments.



Sleep Health Advisory Committee

Report from the Child Care Task Group

**Todd Bazydlo, Principal, Shrewsbury High School; Kristen Combs, Parent;
Erin Kennedy, Special Education Team Chair, Sherwood Middle School;
Guinevere Molina, Teacher, Beal School; Sara Russell, Parent**

Purpose of the Child Care Task Group

Gather information regarding how child care needs of families and school staff may be impacted by any potential changes in school start times for different grade spans.

Information Gathering:

Sources of Information

1. Karen Isaacson, Director of Extended Learning for SPS
2. Licensed child care providers located via search tool on the Department of Early Education and Care (EEC) page of the Mass.gov website: https://eeclead.force.com/EEC_child_careSearch
3. Child care provider websites
4. Child care providers business Facebook pages

Information Gathered:

1. ESC and other child care provider enrollment status
2. Hours of operation
3. Lead-time for notice of schedule changes

TYPES OF CHILD CARE SURVEYED	NUMBER OF RESPONSES
Full-day center-based daycare (infant-age 5)	18
Full-day family daycare (infant-school age)	15
Preschool and Kindergarten programs (including those with Extended Day options)	17
Before/After School Programs	8
Total	58

Towns Surveyed:

Shrewsbury, Grafton, Westborough, Northborough, Boylston, West Boylston, Worcester, Holden, Rutland, Sterling, Framingham, and Natick

Enrollment: SPS Extended School Care Program:

<u>School</u>	<u>Capacity</u>	<u>Current AM enrollment</u>	<u>Current PM Enrollment</u>
Beal	130*	40	130
Coolidge	75	30	60
Paton	75	30	65
Spring	75	25	60
Floral	120	25	65
Sherwood	120	-	85

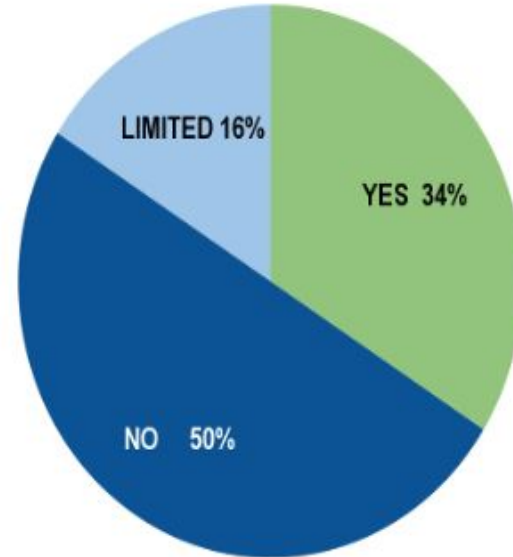
ESC Hours of Operation: Opens at 7:00am for AM care, Closes at 6:00pm for PM care

Enrollment: Surveyed Child Care Providers

Current Enrollment:

- More openings for preschool-age children than infants and toddlers.
- Full-day programs for infants and toddlers consistently have a waitlist.

Childcare Providers with Current Openings

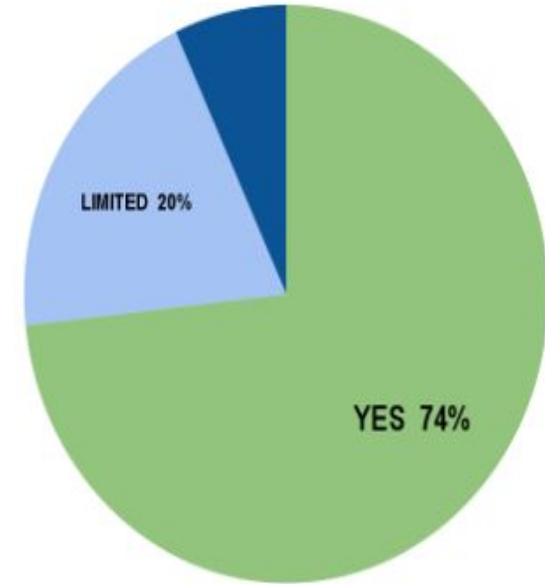


Enrollment: Surveyed Child Care Providers

Future Enrollment:

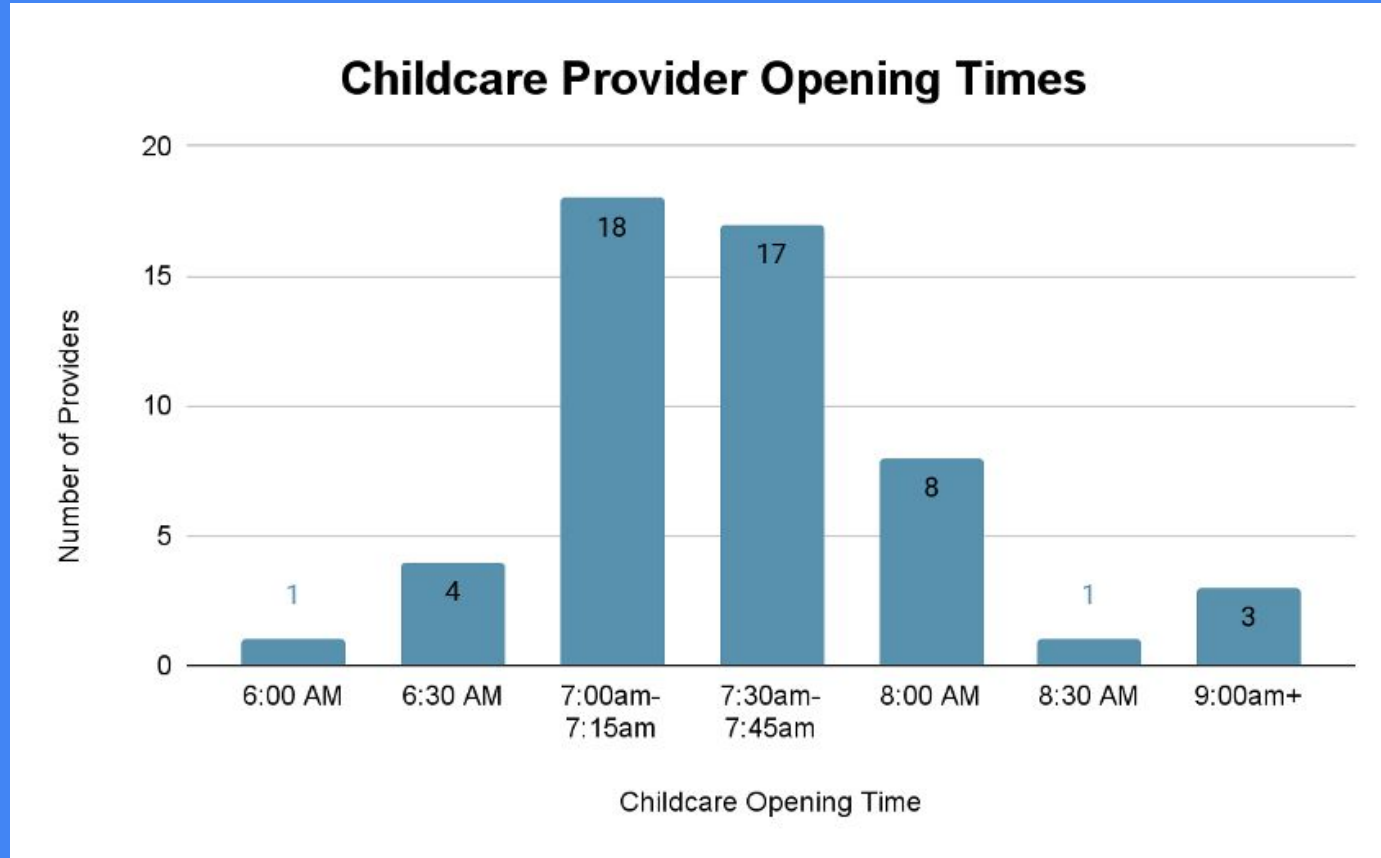
- Enrollment for 2023-2024 school year has begun or will soon begin at many private preschools.
- About 74% of sampled child care providers currently have openings for Fall 2023. Once the school year starts, waitlists at many, are expected.

Childcare Providers Expecting Openings Fall 2023



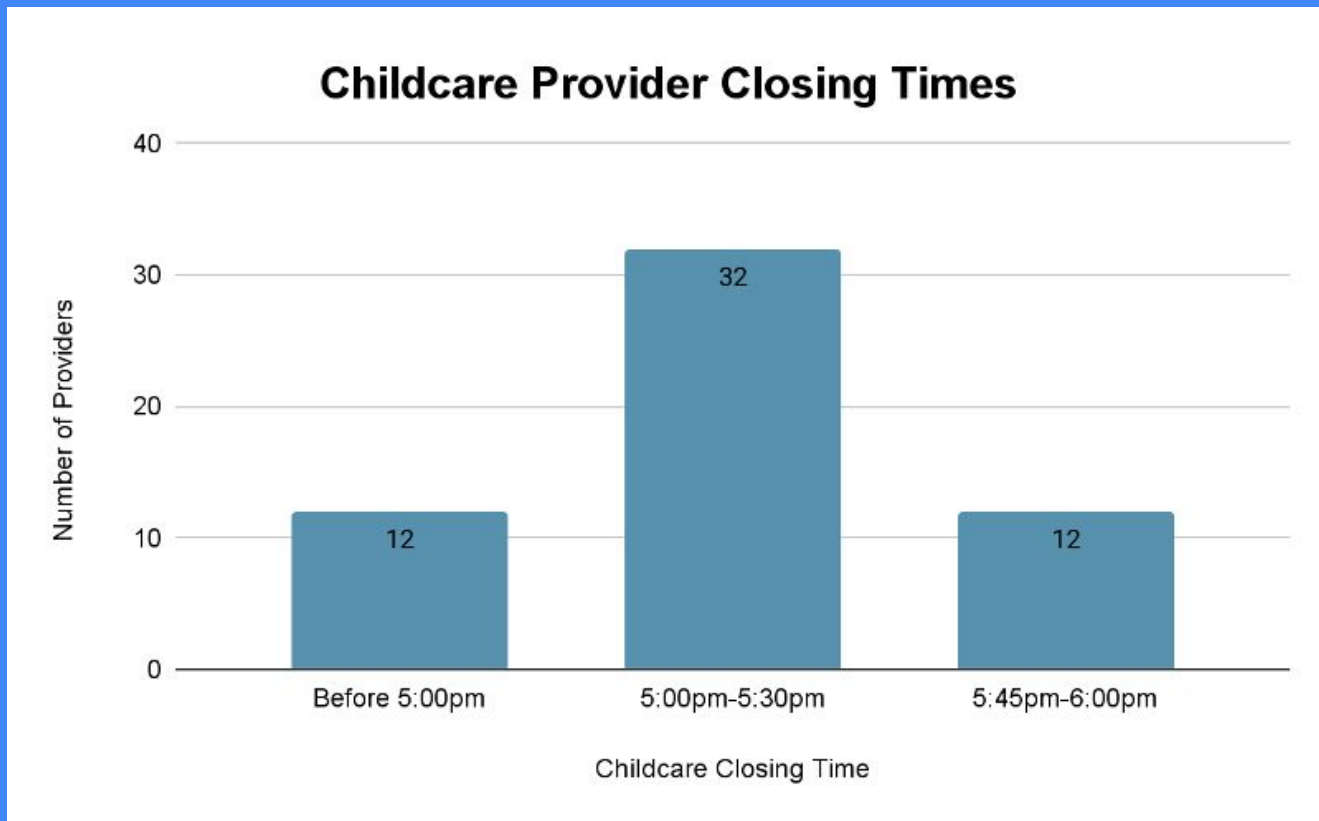
The earlier that families enroll their children or place them on waitlists, the greater the likelihood they will be able to secure a spot for next school year.

Most (76%) of sampled child care programs start before 8:00am



10% of total start times were earlier than 7:00am, and 24% start 8:00am or later.

Most (77%) child care providers close at 5:00pm or later



55% close between 5:00-5:30pm, and 22% close between 5:45-6:00pm
23% of sampled providers close before 5:00pm

Lead-Time Needed for Changes:

- Once enrolled, lead-time for pick-up/drop-off changes is generally 0-48 hours.
- Most Extended Day programs appear flexible with changes once a child is enrolled in the program.
- Providers often require more time (14-30 days) to add/subtract days to a child's weekly schedule or to withdraw from the program.
- In general, preschool/kindergarten programs are less flexible with schedule changes due to specific program start/end times.

Possible effects on need for child care, compared with current school start timetable:

	DISTRICT FAMILIES			SPS STAFF		
Potential Scenarios	Elementary School	Middle School	High School	Elementary School	Middle School	High School
1 Maintain current order and shift times later (HS --> MS --> ES)	May increase need for AM care and decrease need for PM care	May increase need for AM care and decrease need for PM care	Child specific	May decrease need for AM care and increase need for PM care	May decrease need for AM care and increase need for PM care	May decrease need for AM care and increase need for PM care
2 Shift times later and change order to MS --> HS --> ES	May increase need for AM care and decrease need for PM care	Unlikely to result in changes to child care needs	Child specific	May decrease need for AM care and increase need for PM care	Unlikely to result in changes to child care needs	May decrease need for AM care and increase need for PM care
3 Shift times later and change order ES --> MS --> HS	May decrease need for AM care and increase need for PM care	May increase need for AM care and decrease need for PM care	Child specific	May increase need for AM care and decrease need for PM care	May decrease need for AM care and increase need for PM care	May decrease need for AM care and increase need for PM care
4 Shift times later and change order to ES --> HS --> MS	May decrease need for AM care and increase need for PM care	May increase need for AM care and decrease need for PM care	Child specific	May increase need for AM care and decrease need for PM care	May decrease need for AM care and increase need for PM care	May decrease need for AM care and increase need for PM care

HS = High School, MS = Middle School, ES = Elementary School

Other Factors to Consider:

- 1) Availability of older siblings to care for younger siblings after school, or conversely, families' reliance on older siblings to provide care or transportation to younger siblings before school.
- 2) Impact to ESC programming and ESC employee hours (e.g.: need to add or subtract morning programs or lengthen/shorten afternoon programs).
- 3) Length of time at school for children attending school and Extended School Care programs.
- 4) Impact to financial cost of child care.
- 5) Possible effect of dismissal times on presence of middle schoolers in the center of town in the after-school time period.

Summary

- Child care can be a complex issue.
- Should school start/end times change, it is presumed that child care needs for some SPS staff and student families will change.
- The potential child care impact to families and SPS staff will be different for each age span, as it is currently.
- Impact might also be affected by each family's own unique considerations, priorities, attitudes, and preferences.
- There are many options that families and SPS staff may consider when deciding how to best care for their children.
- This task group is still considering the efficacy of administering further surveys of stakeholders' perspectives in order to gain more detailed insights on how changes in school schedules might affect sibling child care in homes, staff child care needs, and staff availability outside of the regularly scheduled school day.

Scenario 1

Maintain current order and globally shift start times later:

High School → Middle School → Elementary School

- Dismisses older students before younger students, maintaining older students' ability to care for younger siblings after school.
- May need to add a morning ESC program at Sherwood Middle School.
- May reduce afternoon hours by 2.5 hours per week for a few ESC employees.
- May provide some relief to the issue of large numbers of middle school students populating the streets and businesses near the center of town after school.

Scenario 2

**Shift times later and change order of start times:
Middle School → High School → Elementary School**

- Preserves older students' ability to care for younger siblings after school.
- District families with middle school students and SPS middle school staff with children are likely to have child care needs that are similar to the current schedule.
- No significant changes to current ESC programming anticipated.

Scenarios 3 & 4

Shift times later and change order of start times:

Elementary School → Middle or High School → High or Middle School

- May drive an increased need for those families who use older siblings as the afternoon child care provider to find alternative care for the afternoon.
- In some families, elementary school students may be accompanied to the morning bus or driven to school by an older high school student, which may eliminate the benefit of the later start time for that high school student.
- Before school ESC program would no longer operate, resulting in a loss of morning hours for approximately 20 staff. Would mostly be offset by an earlier start to the afternoon ESC program.
- Afternoon program length would increase, which may result in higher tuition rates for families due to increased cost to operate a longer afternoon ESC program.

Scenarios 3 & 4 (Continued)

Shift times later and change order of start times:

Elementary School → Middle or High School → High or Middle School

- Some young children may be at school and in ESC program for longer day due to early arrival time.
- May require the addition of a before-school ESC program at Sherwood Middle School.
- May provide some relief to the issue of middle schoolers congregating in the center of town after school.



Logistics Task Group Report

Members:

Patrick Collins, Assistant Superintendent for Finance & Operations;
Irene Drabkin, Parent; Lynsey Heffernan, School Committee & Parent;
Sanjula Jakati, SHS Class of 2025; Jon Kelly, Principal, Sherwood Middle School;
Jennifer Parshall, Parent

Topics

Bus System Basics

Cost Factors

Current Challenges

Key Success Factors if Start Times Change

Considerations for After School Co-curricular Programs [athletics, clubs, theatre, activities etc..]

Principles in Forming Potential Options

Bus System Basics

- The district outsources this service and current vendor is AA Transportation
- In district fleet data = 48 buses total
 - Regular education & private school buses = 38
 - Special education buses = 8
 - Assabet Valley Regional Technical High School buses = 2
- We operate a “three tier system” to maximize use and minimize cost
 - Generally, each bus has three morning commitments and three afternoon commitments

Bus System Basics

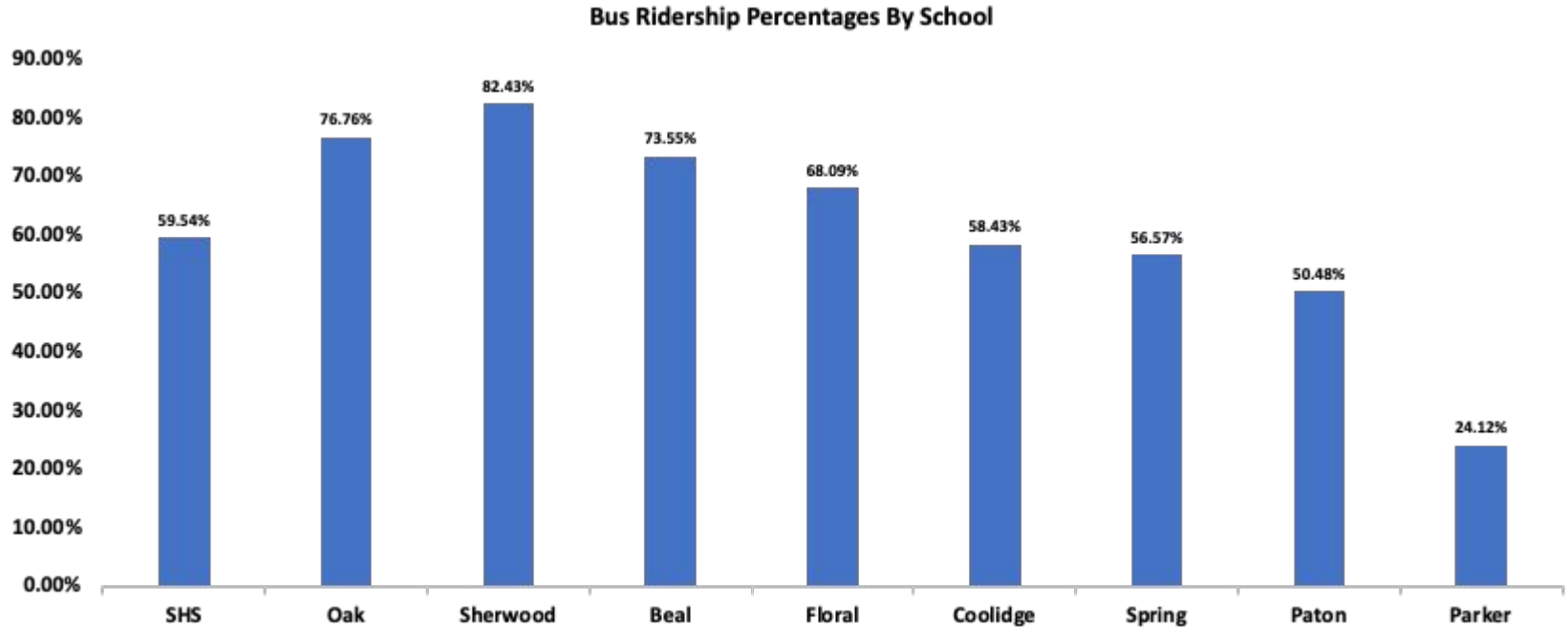
Examples of the Three Tier System and Assabet Busing

District operates 247 bus routes for morning, mid-day, and afternoon runs.

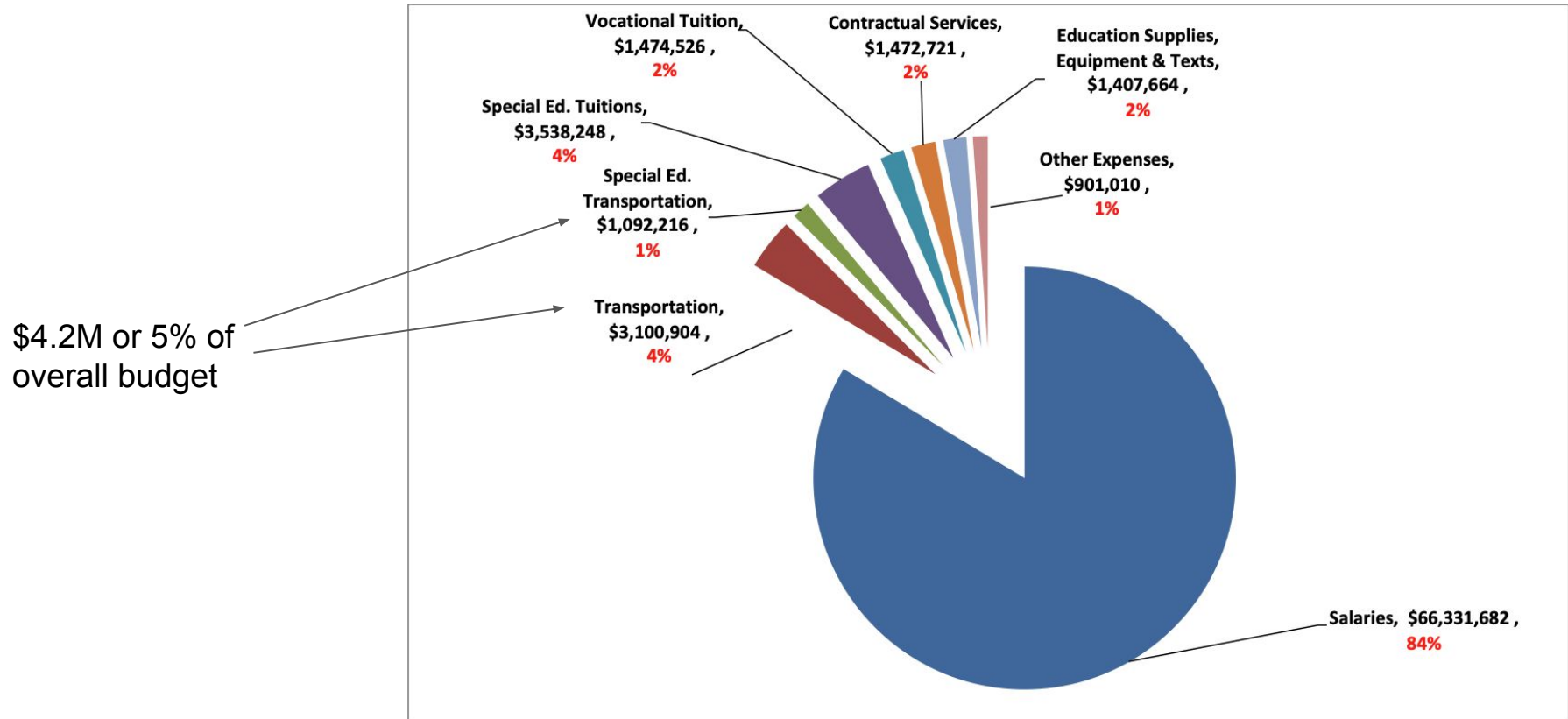
	Morning Commitments				Afternoon Commitments		
	<i>Tier 1</i>	<i>Tier 2</i>	<i>Tier 3</i>		<i>Tier 1</i>	<i>Tier 2</i>	<i>Tier 3</i>
Bus #1	High School	Sherwood/Oak Middle Schools	Floral		High School	Sherwood/Oak Middle Schools	Floral
Bus #8		Sherwood/Oak Middle Schools	Beal			Sherwood/Oak Middle Schools	Beal
Assabet #1	Assabet				Assabet		

Ridership

4,128 riders for Shrewsbury Public Schools plus 200 riders for private schools located in Shrewsbury totals 4,328 total registered riders.



Busing is 5% of Overall Budget Appropriation



Transportation Costs

The district pays an ***all inclusive annual rate*** to our vendor for each bus of \$80,752 which covers the asset, fuel, maintenance, insurance, and all driver associated costs.



Transportation Costs

- Moving from three to two Tiers would require significantly more buses and operators and would be prohibitively expensive.
- Adding a few buses to the system could reduce the time needed between the tiers. We estimate that each additional bus added to the system would cost approximately **\$87,000** annually [in FY24 dollars]. Therefore, as an example, adding 5 additional buses to the system would cost **\$435,000** in each year or **\$4.35M+** over 10 years.

Current School Start Times

Tier	School[s]	Notes	School Day	Time Between (Morning/ Afternoon)
Tier 1	High School	7:35am-2:00pm	6hr 25 min	n/a
Tier 2	Sherwood & Oak	8:00am-2:35pm	6hr 35 min	(25 min/ 35 min)
Tier 3	Elementary	9:00am-3:15pm	6hr 15 min	(60 min/ 40 min)

Challenges with Current Situation

- Buses are routed in three Tiers: High School; Sherwood & Oak; Elementary
- Each Tier has a slightly different length of student school day, ranging between 6 hr. 15 min. and 6 hr. 35 mins.
- There is insufficient time between the Tiers to allow the buses to make the routes between the different Tier start times, particularly between HS and Middle Schools, resulting in the need to pick up high school students and dropping them off earlier than needed to allow time for the operators to make the middle school run.
 - Therefore, some high school students are currently picked up nearly an hour before the High School start time.

Notes:

Private Schools: S.P.S. is responsible for in-district private school transportation for Shrewsbury residents. Currently six buses conduct these trips and also have a S.P.S. route commitment. In any future scenario, S.P.S. needs to continue to meet private school busing commitments.

Considerations for After School Athletics, Clubs, Theatre, & Other Activities

- Our athletic director surveyed athletic departments in nearby districts with later high school times (both in our league and outside our league) to gain their insights. Other district athletic directors contacted include: Westboro, Concord-Carlisle, Algonquin, Lincoln-Sudbury, Newton South, Wayland, Weston
- A correlation exists between shifting high school times later and the possibility and likelihood of encountering more conflicts and obstacles to success. The later you go, the more conflicts occur.

Considerations for After School Athletics, Clubs, Theatre, & Other Activities

- Potential need to provide some early dismissals from academic classes for athletes to make away competitions.
- Increased away travel time due to more traffic later in the afternoon.
- Scheduling conflicts/less times available with off site venues for swimming, ice hockey, gymnastics due to youth or adult group usage normally occurring at late afternoon/evening times.

Considerations for After School Athletics, Clubs, Theatre, & Other Activities (continued)

- More practices and games held on weekends.
- Some coaches who are also teachers decided not to coach as the later practice/game times pushed the coaching commitment too late into the evening for them.
- Prevented some athletes from also participating in after school clubs.

Key Success Factors in Forming Potential Options

- Equalize time between all Tiers to provide at least 40 minutes between tiers
 - Times currently vary between 25-60 minutes
- Equalize time of student school day to simplify operations and ensure 40 minute between tier gaps.

Current length of day:

-SHS= 6 hrs, 25 min, Middle= 6 hrs, 35 min, Elem= 6 hrs, 15 min

- Minimize/eliminate any new dollars directed into busing
 - Prefer dollars go “into the classroom”

Notes:

Changing the length of the school day would not reduce the amount of instructional time any student receives.

Principles for Forming Options

To achieve maximum efficiency:

- Assume general pattern of three Tiers without additional buses to avoid major cost increases
- Standardize the length of school day across all schools; the work day for high school and middle school teachers would continue to be 7 hours and 10 minutes
- May require a change in length of elementary teacher work day from 7 hours to 7 hours and 10 minutes
- Provide 40 minutes between each Tier to maximize schedule adherence

As possible:

- Avoid having the high school get out too late due to after school activities
- Avoid having elementary students waiting for the bus or getting dropped off in the dark. Sunrise in late December and early January is 7:15am and some sunsets at 4:15pm.

Specific Options

- Specific options will be recommended by the Sleep Health Committee at your December 14th meeting.
- Thus far we have developed/considered 11 different alternatives, some with only minor differences.