



HEALTHIER STARTS

A SYCAMORE SCHOOL INITIATIVE

**Supporting the
whole child
through healthy
school start times**

Sycamore Advisory Council
Research Project
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**I asked students how many hours of sleep
they get on average each night**

We asked students:

How many hours of sleep do you usually get on school nights?

I get six hours of sleep at night.

I sleep six and a half hours at night.

Six hours.

I sleep for five hours a night.

Seven hours.

I get seven hours of sleep.

Six to seven hours of sleep.

Six and a half hours of sleep.

Six and a half hours.

I get eight hours of sleep.

Five and a half hours a night.

Probably about three hours.

Eight hours of sleep?

Five and a half hours of sleep.

Seven hours of sleep.

Six hours.

Like seven hours.

Four hours.

Five hours.

I got seven hours of sleep.

Six and a half hours.

Seven hours.

Seven and a half hours.

Six hours of sleep.

Six hours..

Six and a half hours.

Five and a half hours.

Seven.

**NINE
HOURS**

The average amount
of sleep a teenager
needs each night

81%

of Ohio teens report
getting less than
eight hours of sleep
(\approx 1,300 SHS students)

3X

Teens that sleep less than eight hours are three times more likely to commit suicide

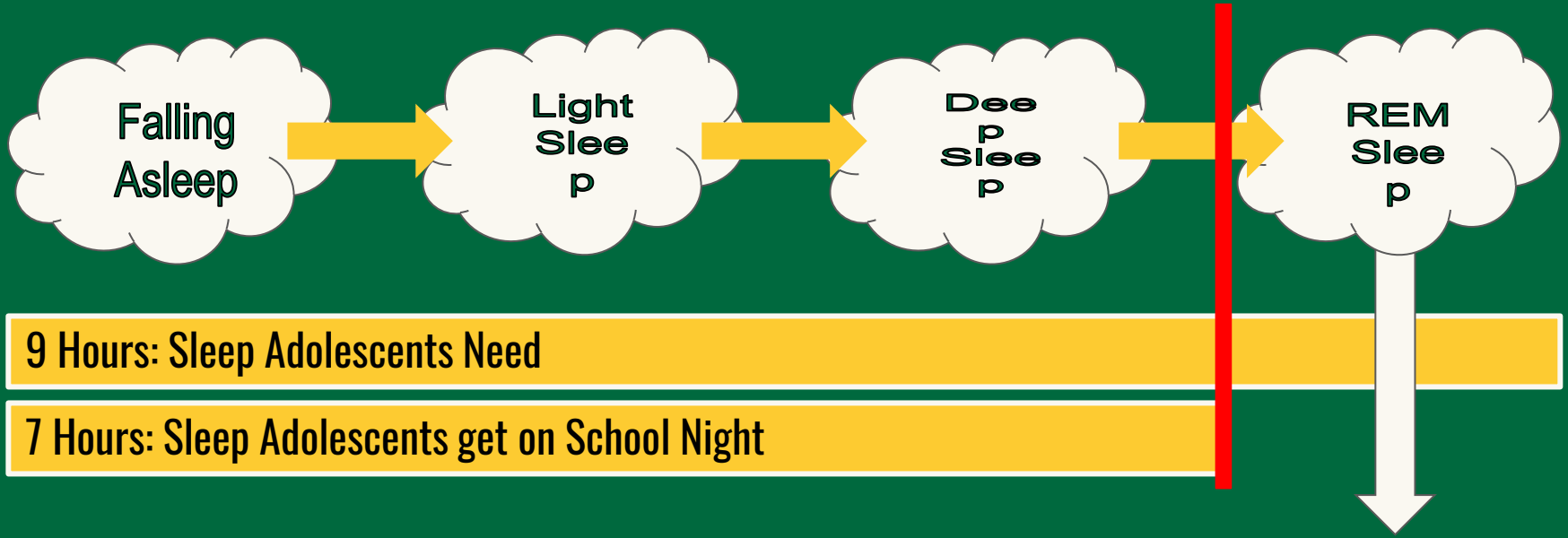
12

Average age of puberty
– when an adolescent's
biological clock shifts

8:30 a.m.

AAP suggested
middle and high
school start time

The Four Stages of Sleep



REM sleep is essential for brain maturation, memory consolidation, emotional regulation, and overall cognitive function.

4:00 a.m.

Melatonin Peaks
Deepest Sleep



6:01 a.m.

First SHS
Bus Pick Up
Risky Driving



8:00 a.m.

↓ Melatonin
↑ Body Temp
Alert



5:00 a.m.

↓ Body Temp
Difficulty
Waking up



7:20 a.m.

Teaching
Groggy
Students



Charge: To investigate, research, and develop an actionable recommendation for evidence-based school start time adjustments that align with adolescent sleep science, with the goal of improving student health, academic performance, and well-being.

- **Research & Best Practices:** Review scientific research on adolescent sleep, explore state and national trends, and learn from successful school districts.
- **Stakeholder Perspectives:** Engage students, families, teachers, staff, and the community, address concerns transparently, and include stakeholders throughout the planning process
- **Operational Feasibility:** Address transportation logistics, evaluate impact to sports, extracurriculars, childcare, families, and consider broader community needs
- **Practical Steps for Moving Forward:** Develop a recommended strategy, define clear success metrics, measure impact on attendance, performance, and well-being.

Methodology: To evaluate the merit and feasibility of adopting later school start times SAC conducted a comprehensive review of the following sources:

- **Medical Literature and Peer-Reviewed Research** (see resource list)
- **Case Studies:** AI-assisted deep research, media coverage, and conversations with districts who have explored and implemented changes
- **Multimedia content** including TED Talks, news articles, and podcasts on sleep loss in teens
- **Expert discussions with:**
 - Dean Bebee, PhD, ABPP – Pediatric Neuropsychologist, Cincinnati Children’s Hospital
 - Michael Miller – Director of Transportation, Sycamore Community Schools
 - Andrew Ovington – Athletic Director, Sycamore Community Schools
 - Stacey Simer, MSSA, LISW-S, National Communication Director, Start Schools Later
- **Book review:** *The Sleep Deprived Teen* by Lisa L. Lewis, MS



HEALTHIER STARTS

A SYCAMORE SCHOOL INITIATIVE

Reducing Risky Behavior with Later Start Times

- Fewer motor vehicle crashes among teen drivers
- More supervision during peak hours for juvenile crime
- Protection against negative peer pressure
- Lower risk of substance use and abuse
- Decrease in disciplinary referrals
- Improved attendance with fewer absences and tardies

Improving Physical Health with Later Start Times

- More sleep!
- Boosts immune function and reduces illness
- Reduced risk of obesity and chronic diseases
- Improved physical fitness
- Encourages healthy eating
- Faster, stronger, sharper athletes
- Foundation for lifelong optimal health

Cultivating Academic Excellence with Later School Start Times

- Higher grades, test scores
- Better attendance and reduced tardiness
- Enhanced focus and attention
- Increased graduation rates
- Better classroom behavior
- No impact on participation in sports / after school activities

Creating Equitable Learning Environments with Later Start Times

- Economically disadvantaged students often face barriers to adequate sleep – such as home stress, caregiving responsibilities, and lack of sleep-supportive environments.
- These students show the greatest gains in academic performance, health, and attendance with later start times.
- Delayed start times reduce discipline disparities and help narrow achievement gaps, making them a powerful tool for promoting educational equity.

Reconsidering start time is an effort rooted in Sycamore's Mission and Vision



Boost Academic Excellence



Support the Whole Child



Foster Innovation & Engagement



Prepare for Global Future

OUR VISION

“Empower all learners to reach their full potential in a globally competitive world.”

OUR MISSION

“Cultivate a culture of academic excellence and innovative learning opportunities for the whole child.”

CHANGE IS HAPPENING Nationwide Trends

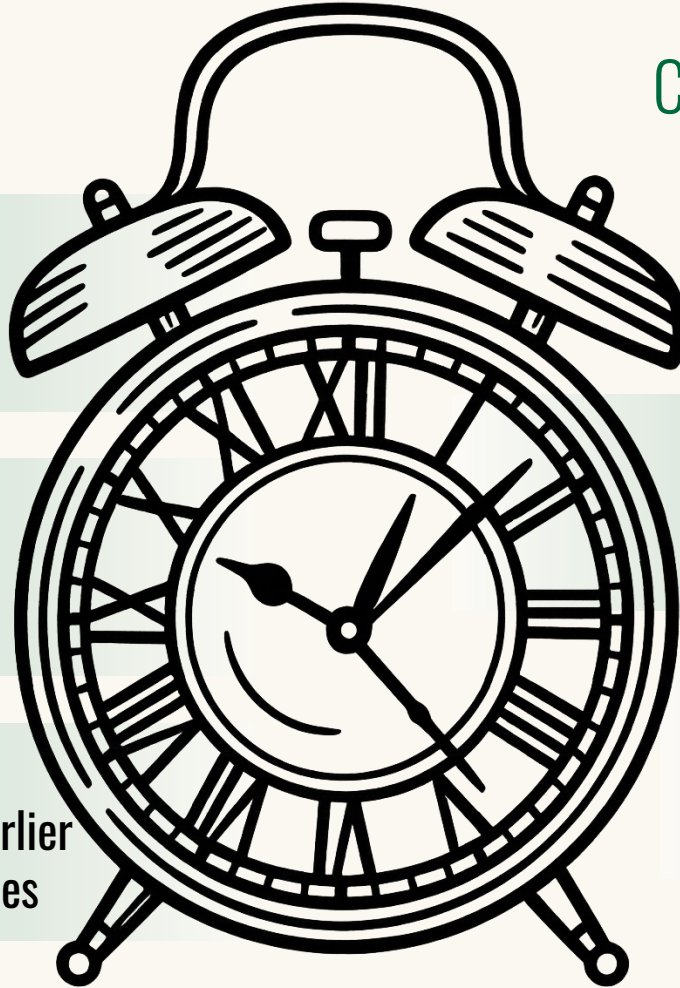
8:07 a.m.

Average Start Time of
Public High Schools

8.9%

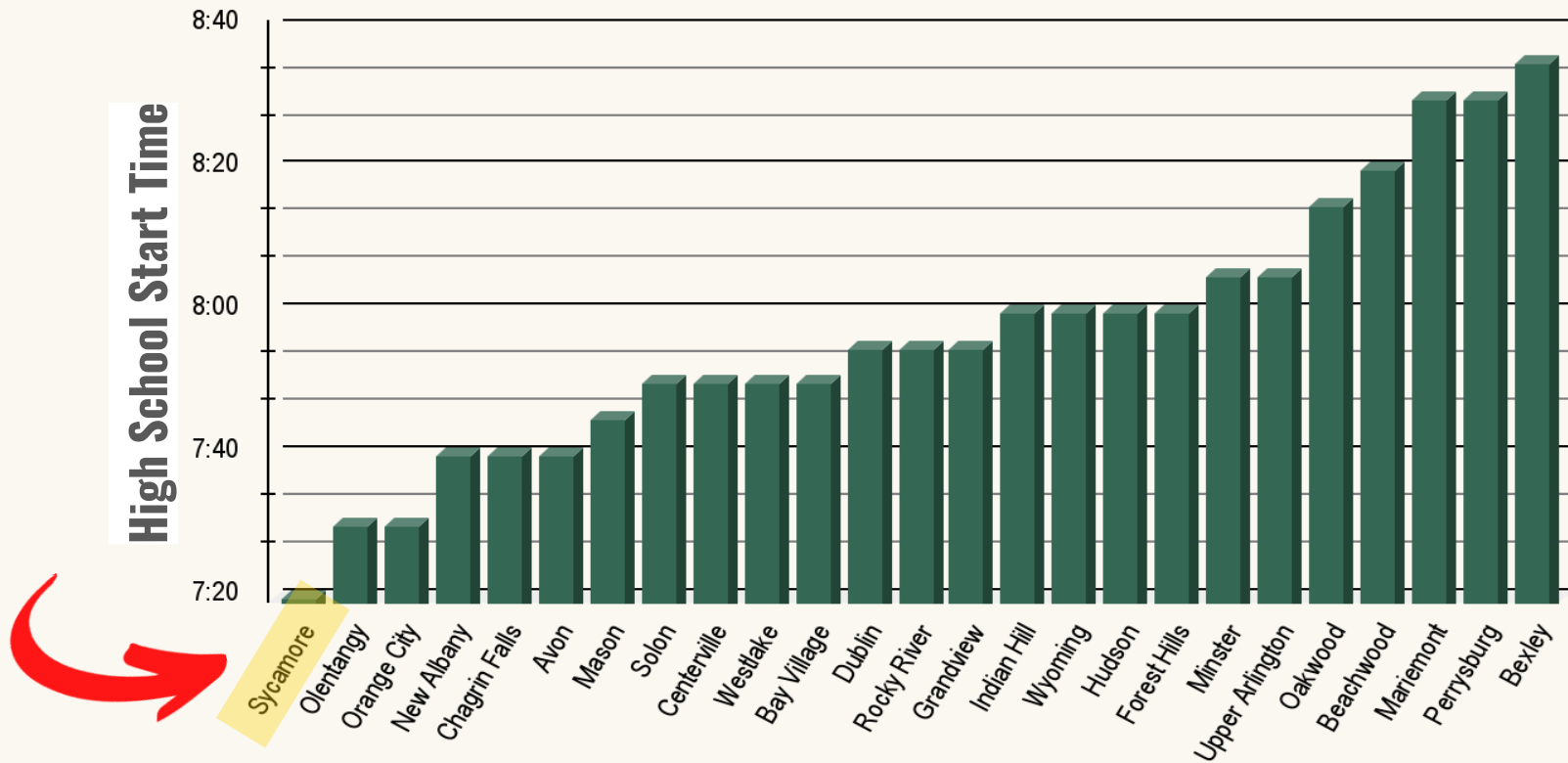
Percent of schools with
pre-7:30 a.m. start

Average middle school
start times are slightly earlier
than high school start times



1000+ school districts
have successfully
delayed start times

Two
states have mandated later
school start times;



Sycamore's 7:20 AM high school start time is the earliest of Ohio's Top 25 Public School Districts.
Does this put our students at a disadvantage?

Case Study | Barrington School District | Chicago Suburb

Impetus	Extensive research on adolescent sleep patterns, recommendations from AAP, physicians in community recognized issue of sleep deprivation among their high school students were the primary drivers.
Process	Multi-year process, dedicated advisory committee of community members. They explored various start scenarios and gathered significant community feedback. The school board played an active role in refining proposals.
Community Engagement	Both strong support for the change based on health and academic grounds, and opposition due to concerns about later dismissal times impacting extracurriculars, jobs and family schedules. Their initial recommendations faced significant backlash, leading to revisions and further community input.
Transportation	The district anticipated an increased annual cost for transportation due to shift. They factored this into their budget. They utilize a three-tiered system like Sycamore before and after the change. (\$830K investment)
Impact	Disappearance of a significant disparity in first-period grades compared to later periods. Anecdotal evidence from student and teachers suggest improved alertness and engagement.
Lessoned Learned	A long-term, phased approach with substantial community involvement is essential. Be prepared for strong opinions and the need for compromise. Clearly articulate the research and rationale. Plan for ripple effects, such as changes in after school care needs.

Case Study | Perrysburg Local Schools | Toledo Suburb

Impetus	Parent concerns regarding early start times and desire to implement a bus tracking system coincided. Research on adolescent sleep was not as prominently stated.
Process	Superintendent initiated discussion with BOE, emphasized simultaneous rollout of new start times and the “My Stop” bus tracking app. Presented changes as a way to improve student well-being and provide better communication about transportation.
Community Engagement	District conducted surveys of parents and students to gather feedback, presentations outlined rational and proposed new schedule. General support, but parents of young students expressed concerns about impacts to their start time.
Transportation	Strategic reallocation of busses was key. By adjusting routes and fleet utilization they were able to shift the high school start time without significant cost. “MyStop” app addressed anxiety relative to new bus schedule.
Impact	Successful implementation and continued operation.
Lessoned Learned	Clear communication about the rational and transportation is crucial. Addressing all parent groups (elementary and secondary is important). Leveraging existing resources creativity can mitigate cost barriers.

Case Study | Upper Arlington Schools | Columbus Suburb

Impetus	Research on adolescent sleep and potential benefits for student well-being and academic performance.
Process	Long history of studying start times through various committees and task forces over years. The district has made incremental adjustment to start times over time.
Community Engagement	Key factor in UA experience. There was support among some, but significant and consistent resistance from a vocal segment of the community, primarily citing concerns about athletics, extracurriculars, and family schedules. These concern have prevented more significant shifts.
Transportation	UA does not bus to high school except for those with IEP; Families opt in to request transportation each year.
Impact	While smaller adjustments have been made, the lack of a significant shift means less impact. Ongoing debate suggests a recognition of potential for additional benefits and community preferences.
Lessoned Learned	In high achieving districts with strong traditions around extracurricular activities, significant changes to school schedules can be very challenging. Thoroughly understand and address community concerns. Incremental changes might be more palatable than radical shifts.

Case Study | Williamsville Central School District | Buffalo Suburb

Impetus	The district's proposal of later high school start times (8:50 a.m.) was driven by research supporting the benefits for adolescent health, well-being, and academic performance.
Process	The district developed a specific plan for the 2025-26 school year that involved later starts for secondary and earlier starts for elementary schools. This plan was presented to the community and BOE.
Community Engagement	This was a critical point. The proposal faced strong and vocal opposition from students, parents, and community members. A survey of high school students showed very low support for the change, which contradicts support from students at Barrington and other districts.
Transportation	District linked change to transportation efficiency, aiming to optimize bus routes with new start times. This aspect was not a primary concern for families.
Impact	The proposal was rejected by the BOE at their February board meeting due to significant community opposition and the need for more research and input.
Lessoned Learned	Even with research supporting the benefits, strong opposition from key stakeholder groups (especially parents and students) can derail plans. Understanding and addressing the specific concerns of these groups is crucial. Prioritize building a coalition of support to engage community and build buy-in.

Peer District Comparison: Insights from Similar Start Time Initiatives

School	Date	HS Start	Outcome
Hudson Cleveland, OH	2020-21	8:30 AM	Condensed from three tiers to with no cost implication.
Williamsville Buffalo, NY	FEB '25 Vote	N/A	No change after well run school start time change initiative
Barrington Chicago, IL	2017-18	8:30 AM	Three tier flip (ELM-HS-JHS) +\$830K upfront investment
Upper Arlington Columbus, OH	2023-24	8:05 AM	Shifted starts, moving the needle some was better than nothing.
Perrysville Toledo, OH	2021-22	8:35 AM	Flipped elementary school and high school start items.

Lessons Learned

Expect Resistance
Extensive Community Outreach
Communication is Paramount
Transportation is Key
Focus on Student Well Being
Flexibility is Important
Focus on the Greater Good
Every Minute Matters
Tailor the Approach

Administration

Change is risky, competing priorities, want thriving students

Sports and Extracurriculars

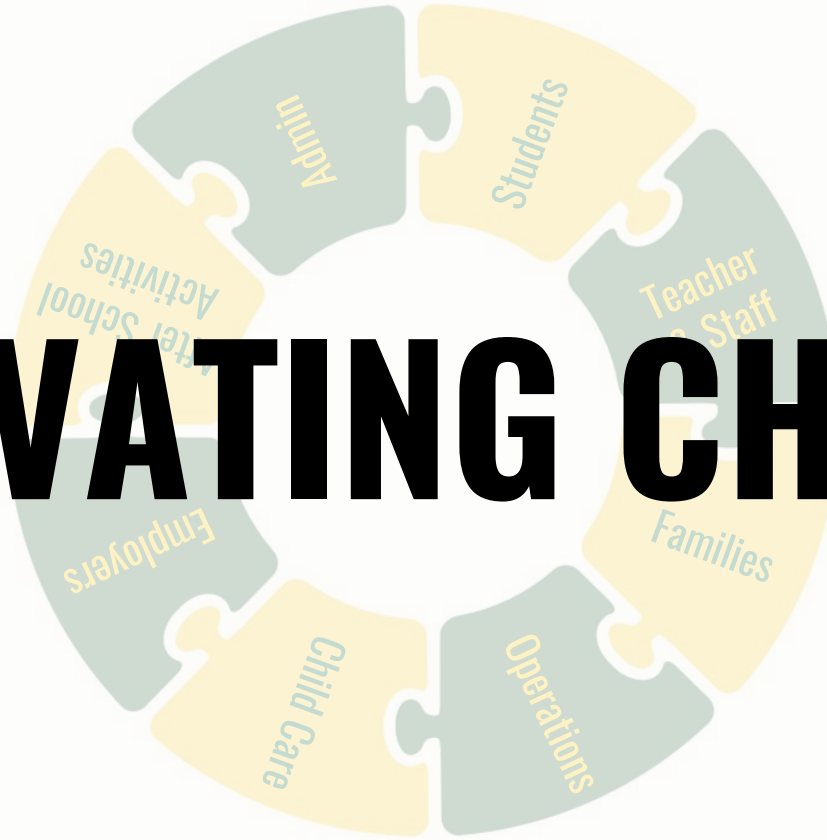
League coordination, later practices, less time for clubs

Employers

Shift in afternoon hours teens are available for work part-time

Child Care

Shift in demand, can't rely on high school student to help after school



Students: need more sleep to thrive, better learning outcomes, mental health, safety

Teachers & Staff: conflict with CBA contract, work life balance, more planning, less time

Families: need for changes to child care, accustomed to building schedule around schools

Operations: budget constraints, transportation, and building needs

ACTIVATING CHANGE

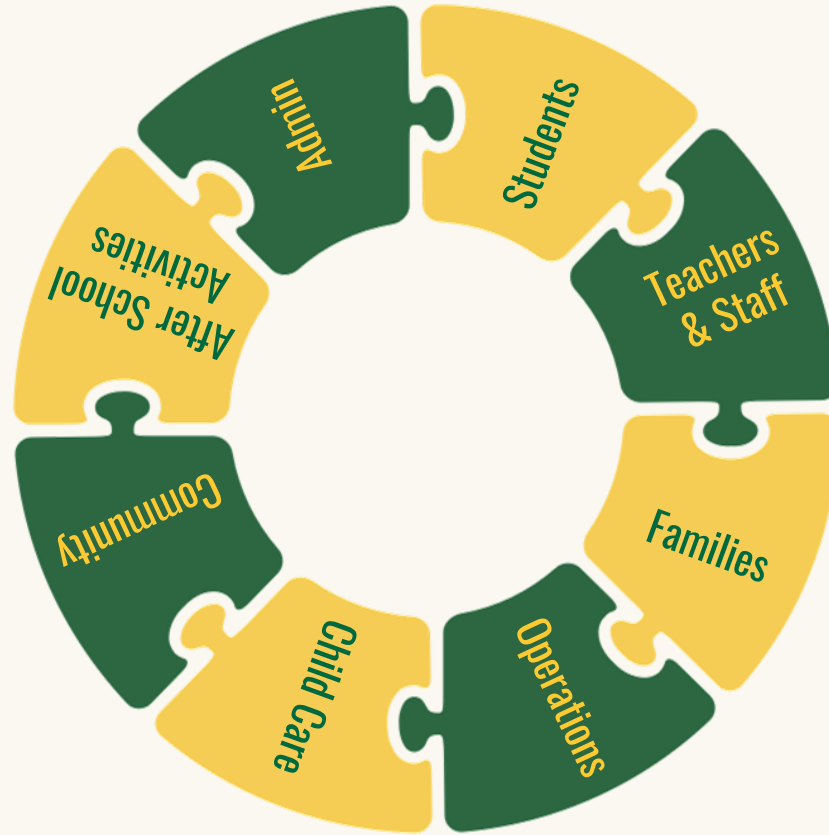
Stakeholder Perspective

Admin / BOE: Change is risky, competing priorities, operational pressure, fiscal responsibility

Sports and Extracurriculars: League coordination, later practices = less time with families

Community: traffic patterns, student workers, financial gain, supports mental health initiatives

Child Care: Shift in demand, can't rely on high school student to help after school



Students: need more sleep to thrive, better learning outcomes, mental health, impact activities

Teachers & Staff: contract concerns, work life balance, more sleep, engaged learners

Families: additional cost, changes to child care, cuts into family time, accustomed to schedule change

Operations: budget constraints, transportation logistics, building needs, support services

Stakeholder Perspectives

CHALLENGING THE STATUS QUO

Resistance → Progress

Acknowledge the Discomfort

It's Uncertainty, Not Rejection

Lead with Sycamore's Values

Academic Excellence and Innovation

Expect Intense Emotion

Ground Rationale in Research

Make it Human

Elevating Perspectives of Stakeholders

Involve Stakeholders Early

Ask, Listen, Give Time, Build Trust

Return to the Why

Rested Students, Healthier Community

Perceived Conflict

Opportunity

Scheduling

Optimize Schedule & Be Flexible

Bussing

Streamline Tiers & Creative Solutions

Employment Contract/Requirements

Unite and Build a Success Story

Family Childcare

Community Partnerships for Child Care

Athletic Contest & Practice Timing

Address One-Offs; ↑ Performance

Historical Conditioning

Educate and Focus on Progress



The Yellow Bus

FACTS

- **Universal Bussing:** Sycamore transports all students (Head Start, PreK–12), including ~200 charter/parochial students.
- **Legal Obligation:** Because HS bussing is offered, the district must provide transport or stipends to non-Sycamore students.
- **Cost Impact:** ~\$500K annually spent on out-of-district transport (190 bused / 293 stipends) with no funding support.

OPPORTUNITIES

- Merge PreK with K-4 Routes: Build on PM success at Blue Ash
- Improve Efficiency: Evaluate loading/unloading processes
- Review Priorities: Some districts (e.g., Loveland) don't bus HS
- Streamline HS Transport: May cut costs & enable start time changes
- Measure Smartly: Consider both cost and student ride time



FACTS

- **Enhanced Performance:** Sleep is essential for peak athletic performance – reaction time, speed, and endurance all improve with adequate rest.
- **Injury Reduction:** Athletes who get 8+ hours of sleep have a 68% lower injury risk.
- **Solid Academic & Athletic Results:** No evidence of long-term negative athletic impact in districts that have made the change – many report student-athletes thriving in athletics & academics.
- Peer districts in GMC have already made the shift.

OPPORTUNITIES

- This could boost athletic outcomes for Sycamore and give Sycamore additional reasons to shine.
- Athletic leadership is critical to shaping a positive culture around later start times and discourage early-morning practices ensuring benefits of later start times are realized for athletes.
- Increase parent engagement and attendance - later schedules are believed to provide more flexibility in parent work schedules and improve family support at athletic events.



HEALTHIER STARTS

A SYCAMORE SCHOOL INITIATIVE

**Begin thoughtful
planning now for
a 2-3 year
implementation
timeline**

Initiation

Project Charter
Planning Committee
Preliminary Approval

**Q4
2025**

Logistics and Planning

Implementation Models
Impact Studies
Communication Plan

**Q2
2026**

Take Off

Healthy Start Times
Evaluation
Sustainability



Stakeholder Analysis

Awareness Campaign
Impact Assessment
Local Context

**Q3
2025**

**Q1
2026**

Recommendation

Implementation Plan
Budget Request
Operational Impact

**2027
School Year**

Deliverable: Create Project Charter and Secure Initial Approval

Target Date: June 2025

Deliverable: Create Project Charter

- Review SAC reports and existing research
- Clearly define what *Healthier Start* means for Sycamore
- Explain rationale in alignment with the District's mission
- Clarify scope and objectives of *Healthier Start*
- Establish measurable objectives
- Set timeline for planning and potential implementation
- Deliver a data-informed proposal and request for approval from the Board of Education to move forward with exploration planning



Initiation

PROJECT CHARTER

Deliverable: Establish a Planning Committee
Target Date: July 2025



Initiation

PLANNING COMMITTEE

- Identify and recruit key stakeholders across the district
- Engage a diverse and influential group to ensure broad representation and support
- Define membership and roles/responsibilities to promote accountability and collaboration
- Commit to timeline
- Develop a shared vision and guiding principles to anchor decision making (e.g. student well-being is paramount, data driven decisions, transparent communication, focus on the greater good)

Establish a Planning Committee (Continued)

Target Date: July 2025



Initiation

GUIDING COALITION

Core Planning Committee members:

- District Leadership: Assistant Superintendents
- Director of Transportation
- Building Principals: Elementary; Greene, SJHS, SHS
- School Counselor
- Teachers: One from each level w/ desire to pursue leadership
- Union Rep
- SAC Representatives (Parents / Community)
- Finance, Communication, HR

Advisors: Athletic Director, BOE Members, All Admin, Before/After School Child Care, Coaches and Extracurricular Leaders, City Governments, Medical Experts, Aves/Star Council, PTO



Initiation

COMMITTEE RESPONSIBILITIES

Planning Committee Responsibilities

- Establish and communicate clear direction
- Champion *Healthier Starts*
- Challenge assumptions and serve as change leader
- Maintain momentum ensuring timely progress
- Provide transparent updates
- Operate as an extension of Superintendent
- Stay informed through ongoing research
- Shield Leadership from unnecessary risk
- Demonstrate ownership mentality



Stakeholder Engagement

AWARENESS CAMPAIGN

- Educate community through existing channels
- Offer expert-led sleep health session with CCHMC
- Offer workshop for teachers and staff
- Equip coaches and athletes with understanding of sleep science and sports performance
- Distribute fact sheets to educate and combat misinformation

Deliverable: Impact Assessment Report
Target Date: November 2025



Stakeholder Engagement

IMPACT ASSESSMENT

- Analyze the impact of healthy start times
- Meet individually with all advisors
- Collaborate with unions on contracts as necessary
- Survey parents, students, teachers, staff, community
- Provide regular updates to ensure transparency and engagement
- Summarize findings in impact report

Deliverable: Communication and Transparency Plan
Target Date: November 2025



Stakeholder Engagement COMMUNICATION PLAN

- **Create an online comment form for ongoing community feedback**
- **Dedicate a “Healthy School Start” email address**
- **Opt-in option for update, forum groups, and volunteers opportunities**
- **“Ask Us Anything” session**
- **Feature student voices to highlight real-life impact**
- **Respond to concerns with active listening and clear researched based answers**
- **Publish regular updates and FAQ addressing common concerns**



Stakeholder Analysis

LOCAL CONTEXT ASSESSMENT

- **Analyze student and family context data:** attendance, First-Period vs. Later-Period Performance, Activity Participation, Family Childcare Needs
- **Review schedules for small efficiencies:** Identify opportunities to reduce lost learning and improve daily flow (e.g. Aves Bell, Passing Time, Departure Routines)
- **Set clear logistical parameters:** Earliest pickup time, max ride duration, earliest start
- **Transportation readiness:** fleet, routes, schedules
- **Consider external consultants for transportation or project management**



Logistics & Planning

IMPLEMENTATION MODELS
Target Date: February 2026

- Explore school start times scenarios informed by the Impact Assessment Report
- Evaluate pros and cons of each scenario
- Develop 3-4 implementation models
- Conduct Transportation Impact Study
- Ensure alignment with teacher contracts and unions
- Identify staffing, training, system resources needed
- Explore funding sources and budget implications
- **Publish Implementation Options Report Featuring:** scenario comparison chart, feasibility and cost-benefit analysis, funding opportunities and budget considerations, communication strategy

Deliverable: Comprehensive Communication Plan
Targeted Date: February 2026



Stakeholder Engagement AWARENESS CAMPAIGN

- Replicate initial awareness campaign
- Create deadline for online feedback
- Present 3-4 clear start time scenarios with concise summaries of pros, cons and impacts
- Reinforce message through trusted district voices
- Hold focus groups with students, teachers, staff, and parents to gather input and surface concerns
- Individual discussions with key decision makers
- Document and analyze all feedback and refine approach based on input
- Proactively address concerns

Deliverable: Recommend Final Implementation Model for BOE Approval

Target Date: April 2026



Logistics & Planning

RECOMMENDATION

Target Date: February 2026

- Finalize preferred implementation model
- Develop detailed timeline with clear milestones
- Conduct cost analysis and clear budget request
- Align with other district priorities
- Identify measurable outcomes
- **Build broad-based support by engaging:** community organizations, local businesses, city governments, law enforcement, health professionals, advocacy groups
- **Present formal recommendation to BOE for implementation approval.**

Measurable Academic Outcomes:

- Track data on attendance, tardiness, standardized test scores, first classes
- Measure changes in sleep duration, well-being, student satisfaction
- Annual student and teacher survey
- Measureable driving data
- Disciplinary referrals
- Athletic Performance
- Transportation Efficiency

What Students Say About Later Start Times

"It would allow me more time and energy in the morning when I get more sleep and feel more well rested during the day."

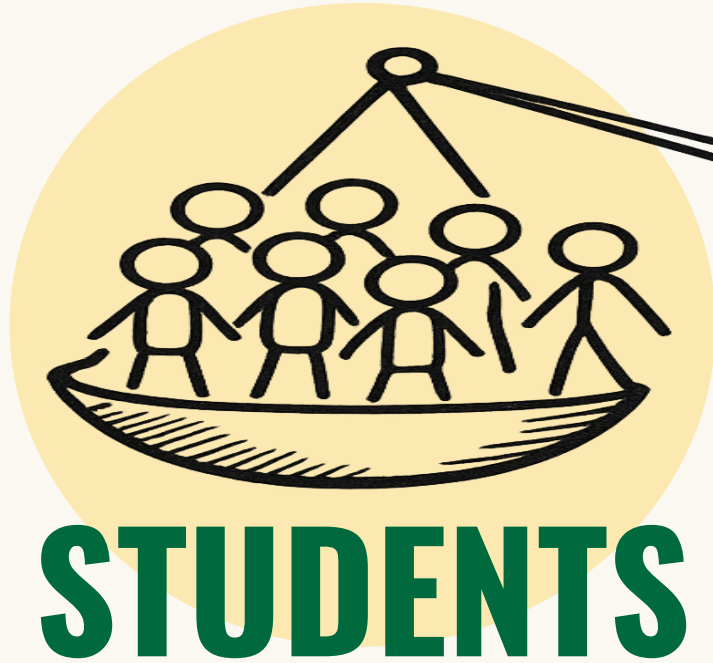
"It would help my productivity and I would actually be able to stay focused and have a lot more energy."

"I would be able to get more sleep at night. Also, it would allow me to be able to study before school in the morning."

"Sports go late into the evening, especially if you have a game, so you end up getting home late and going to bed late. School starting later would give me extra time to sleep in the morning."

"Less students would be tardy since school would start later in the morning, and it would improve academic performance."

Who is Sycamore making this decision for?



Status Quo
Childcare Parents
Administration
Teachers & Staff
Transportation
Logistics ← Fear of Change
Work Schedules Clubs & Activities
Athletics

Key Resources

[AAP | Sleep Recommendations from the American Academy of Sleep Medicine](#)

[CDC | 2023 Youth Risk Behavior Survey | Sleep in Ohio](#)

[IBE | UNESCO Science of Learning](#)

[AAP | School Start Times for Adolescents](#)

[IBE | Sleep, learning and school start times in adolescence](#)

[APA | Strengthen your brain by resting it](#)

[IBE | UNESCO Science of Learning](#)

[NIH | Associations between sleep duration and suicidality in adolescence](#)

[CDC | Association Between Insufficient Sleep, Depressive Symptoms and Suicidality](#)

[YRBS | HS Students Who Felt Sad or Hopeless](#)

[YRBS | HS Who Seriously Considered Suicide](#)

[JGSM | School Start Times Change and Motor Vehicle Crashes in Adolescent Drivers](#)

[OJJDP | Violent Crime by Youth](#)

[Journal of Adolescence | School start time delays and high school educational outcomes: Evidence from the START/LEARN study](#)

[Youth & Society | Adolescent Sleep Problems and Susceptibility to Peer Influence](#)

[NIH | Impact of Sleep and Circadian Rhythms on Addiction Vulnerability in Adolescents](#)

[AAP | School Start Times, Sleep, and Youth Outcomes](#)

[NIH | Delaying School Start Times by One Hour: Effects on Attention Levels in Adolescents](#)

[NIH | Sleep Duration and Weight-Related Behaviors among Adolescents](#)

[NIH | Sleep and health-related physical fitness in children and adolescents: a systematic review](#)

[NIH | Childhood sleep duration and lifelong mortality risk](#)

[APA | Schools shift as evidence mounts that later start times improve teens' learning and well-being](#)

[Journal of Clinical Sleep Medicine | Delayed high school start time and graduation and attendance rates over 4 years: the impact of race and socioeconomics](#)

[Journal of Adolescent Health | Association of Delaying School Start Time with Sleep-Wake Behaviors Among Adolescents](#)

[JGSM | Delaying Middle School and High School Start Times Promotes Student Health and Performance](#)

[Journal of School Health | Effect of Delaying High School Start Time on Teen Physical Activity, Screen Use, and Sports and Extracurricular Activity Participation from START](#)

[JGSM | School Start Times Change and Motor Vehicle Crashes in Adolescent Drivers](#)

[AAA | The Average School Start Time in Every State](#)

[Start Schools Later | 2023 Annual Report](#)

[Niche | Top School Districts in Ohio](#)