

Should the Lower Merion School District Change School Start & End Times?

Overview of Decision-Making Process



Presentation to the Curriculum Committee of the Board

March 5, 2019



Current LMSD Student Schedules

HIGH	7:30-2:40	(7 hours, 10 mins.)
MIDDLE	8:15-3:05	(6 hours, 50 mins.)
ELEMENTARY	9:00-3:35	(6 hours, 35 mins.)

Major health organizations recommend that middle and high school students begin school no earlier than 8:30 am.

WHY?

The average American teenager is sleep deprived for a variety of reasons. Sleep research has demonstrated that biological shifts occur with the onset of puberty, which pushes the natural sleep & wake cycle about two hours later into the day than either school-aged children or adults. Early school start times conflict with these biological sleep patterns, so delaying school start time is one strategy recommended for broadly addressing adolescent sleep health via public policy.

History and Process in Considering this Issue



The District has been formally engaged in the topic of student sleep health and school start times since 2015, when the LMSD Interschool Council produced a report of findings from their study of sleep and later start times for high schoolers. Through the implementation of *All Forward*, the District's strategic plan, the topic was designated for in-depth exploration to collect information about the issues surrounding and feasibility of changing school start times to support better sleep health among students. Superintendent Copeland has charged the *All Forward* team with forming a committee of representative stakeholders to develop recommendations for action. The committee's decision-making process will be facilitated by a third-party, TregoEd, and is expected to deliver recommendations to the Board of School Directors in Fall 2019. The Board of Directors' response is expected in Winter 2019/2020.

- **May 2015** ISC issues findings from study
- **Jan. 2017** All Forward R & D Committee begins work of gathering research & feasibility data
- **March 2019** R & D Committee delivers findings to All Forward Leadership, Superintendent and Board of Directors
- **Spring/Summer 2019** Community Advisory Committee develops recommendations & action plan
- **Fall 2019** Community input on plan gathered
- **Winter 2019/2020** Board takes action

Deliverables

-
- May 2015 ISC issues findings from study
 - Jan. 2017 All Forward R & D Committee begins work of gathering research & feasibility data
 - **March 2019 R & D Committee delivers findings to All Forward Leadership, Superintendent and Board of Directors**
 - Spring/Summer 2019 Community Advisory Committee Develops recommendations & action plan
 - Fall 2019 Community input on plan gathered
 - Winter 2019/2020 Board takes action

Deliverables

Now Available from R & D

1) Infographic with overview of key issues

2) Executive Report (this slidedeck) with more context on key issues and the District's process

3) Online Archive with source materials, reports, data, and all reference materials that will be needed to inform the work of the Advisory Committee

To access these materials, visit the All Forward website or enter "sleep" in the search bar at www.lmsd.org.

Should the Lower Merion School District Change School Start & End Times?

New school schedules may be recommended. Here's what you need to know.

Background

The District has been engaged in the topic of student sleep health and school start times since 2020, when the UMCO Intersectoral Council produced a report of findings from their study of sleep and later start times for high schoolers. Through the implementation of All Forward, the District's vision for the future of UMCO, the topic was designated for in-depth exploration to collect information about the merit and feasibility of changing school start times to support better sleep health among students. Superintendent Cookland is now charging a committee of representative stakeholders to develop recommendations for actions the District should take. The committee will be facilitated by a third-party and is expected to deliver recommendations to the Board of School Directors in Fall 2023.

Current School Schedules

Level	Start Time	End Time
HIGH	7:00-0:00	1:40-0:00
MIDDLE	8:00-0:00	1:40-0:00
ELEM.	8:00-0:00	1:40-0:00

Why is LMSD considering this?

Drawing from scientific evidence on the sleep patterns and needs that change with the onset of puberty and continue through adolescence, many health organizations have issued recommendations for delayed start times for middle and high school students with consensus on starting school for middle and high school at 8:00 AM or later.

Delayed start times for middle and high schools have been recommended by:

- American Academy on Sleep Medicine
- American Medical Association
- American Psychological Association
- National Association of School Administrators
- National Education Policy Center
- National Sleep Foundation
- National Transportation Safety Board
- National Transportation Safety Board
- National Transportation Safety Board
- American Academy on Sleep Medicine

What are the options?

Option	Description
The Flip	Flip the start order for high school and elementary school, so the youngest students start school the earliest (elementary-middle-high).
Re-Order	Re-arrange the start order so that adolescents start later and disruption to extracurriculars are minimized (elementary-high-middle).
The Push	Maintain current start order and delay all schedules.
Two Tiers	Increase the size of the bus fleet, providing enough transportation for all schools to operate on two different schedules instead of three.
Shorter Days, Extend Year	Start school later but continue with the same dismissal time, thereby maintaining the status quo for after-school activities. Add days to the calendar to make up for lost instructional time.

What are the key logistical issues?

- UMCO transports students to nearly 100 public and non-public schools each day using a three-tiered schedule and a transfer system for non-public riders. Changed schedules require changes to the transportation system. Key transportation considerations include:
 - the time span between tiers needed to maximize each vehicle's use for all school levels
 - site-based limitations to the space available to stage buses for efficient drop-off and pick-up
 - transportation of non-public riders on arrival and departure schedules set by other institutions
 - ensuring arrival times that allow students to access breakfast programs
 - the safety of riders getting on or off the bus in darkness
 - commute times that fluctuate depending on the volume of traffic at different points in the day
- When schools start later, they also dismiss later. Later dismissal times affect the timing of after-school activities. Key considerations for school-sponsored activities and out-of-school experiences include:
 - ensuring outdoor lighting for activities pushed further into the evening, particularly near or after daylight saving ends
 - out-of-district competitors that require early dismissals and lost instructional time for athletes and coaches who teach
 - consideration of policies around the length of time that out-of-school meetings or practices should take place and limits on how long into the evening they should go
 - critical reflection on, and communication of, homework expectations
- Families, staff members, and community members have organized their lives around the current school schedules. School schedule changes may require adjustments to:
 - childcare arrangements for UMCO families who use out-of-school services or who count on siblings, extended family, neighbors, or friends to care for young students
 - childcare arrangements for staff commuting on new schedules
 - commute times for staff, commute times and patterns for those driving through the District
 - student and staff members' out-of-school work schedules

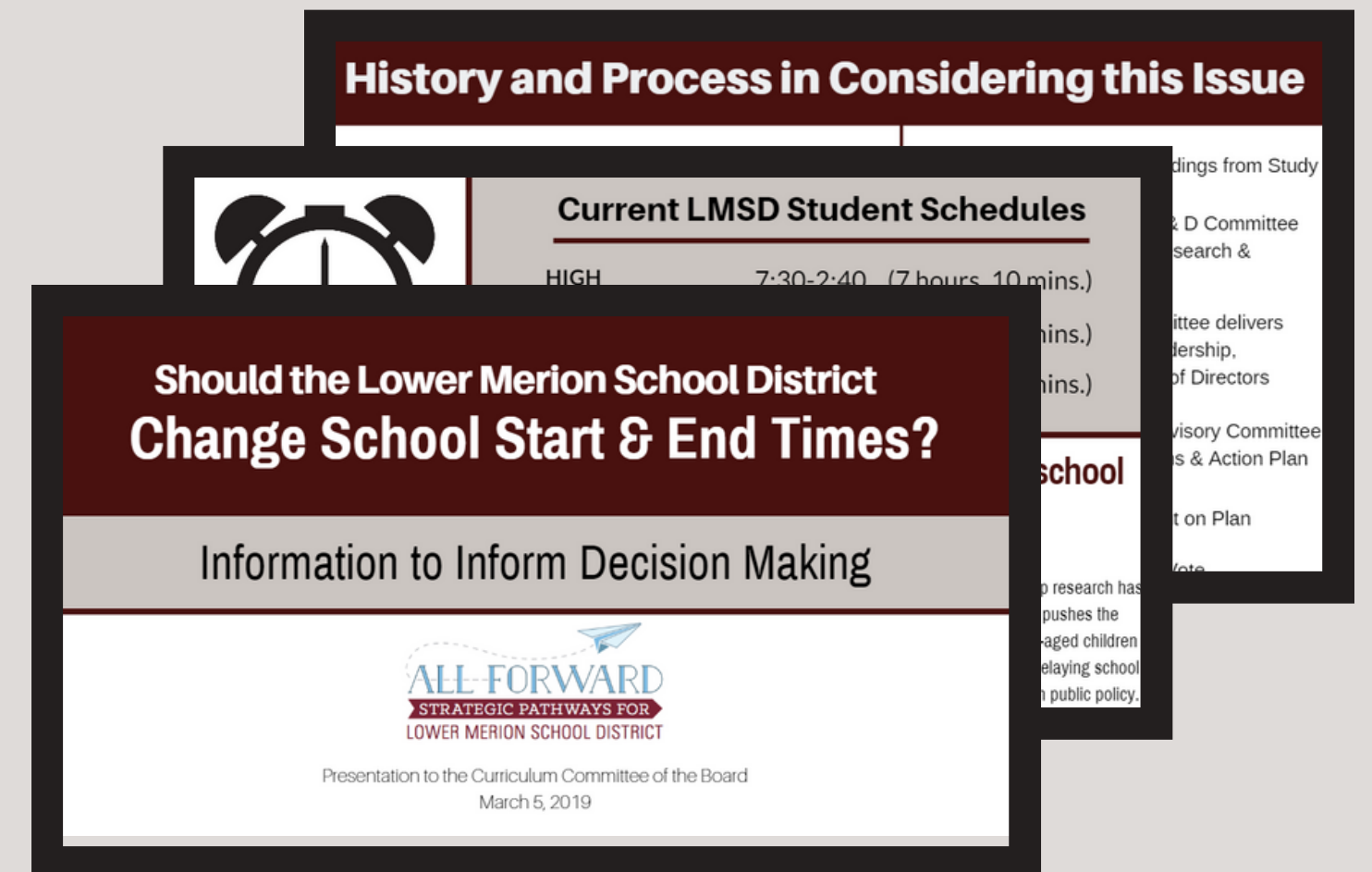
Learn | **Connect** | **Engage**

Deliverables

Now Available from R & D

- 1) **Infographic** with overview of key issues
- 2) **Executive Report** (this slidedeck) with more context on key issues and the District's process
- 3) **Online Archive** with source materials, reports, data, and all reference materials that will be needed to inform the work of the Advisory Committee

To access these materials, visit the All Forward website or enter "sleep" in the search bar at www.lmsd.org.



Deliverables

Now Available from R & D

- 1) **Infographic** with overview of key issues
- 2) **Executive Report** (this slidedeck) with more context on key issues and the District's process
- 3) **Online Archive** with source materials, reports, data, and all reference materials that will be needed to inform the work of the Advisory Committee

To access these materials, visit the All Forward website or enter "sleep" in the search bar at www.lmsd.org.

- **Research studies**
- **Case studies from other districts**
- **Educational materials for learning about the science of sleep & starting school later**
- **Reports from third-party studies conducted on behalf of LMSD:**
 - Community Stakeholder Interviews (Hanover, Feb. 2019)
 - Staff Survey (Hanover, June 2018)
 - District Benchmarking Study (Hanover, May 2018)
 - Field Lighting Study (Snyder Hoffman Associates, March 2018)
 - Traffic Study (F. Tavani and Associates, Feb. 2018)
 - Transportation Study (School Bus Consultants, March 2017)
- **Internal analyses and data collection:**
 - transportation routing scenarios with estimates
 - civil twilight data
 - instructional time lost by student athletes and teachers who coach
 - comparative data from other schools in the region
 - student and parent sleep and time data from Challenge Success

Next Steps:

- Focus Exploration Team solicits interest in participating on the Community Advisory Committee and is responsible for overseeing a rigorous, balanced, and transparent process
- TregoEd contract finalized and details secured for Community Advisory Committee meetings for April-June
- Recommendations and Action Plan delivered to the All Forward Leadership Team, Superintendent, and Board of School Directors in September 2019

● May 2015 ISC issues findings from study

● Jan. 2017 All Forward R & D Committee begins work of gathering research & feasibility data

● March 2019 R & D Committee delivers findings to All Forward Leadership, Superintendent and Board of Directors

● **Spring/Summer 2019** - Community Advisory Committee develops recommendations & action plan

● Fall 2019 Community input on plan gathered

● Winter 2019/2020 Board takes action

What are some options for the advisory committee to consider?

The Flip	Flip the start order for high school and elementary school, so the youngest students start school the earliest (elementary-middle-high).
Re-Order	Re-arrange the start order so that adolescents start later and disruption to extracurriculars are minimized. (elementary-high-middle)
The Push	Maintain current start order and delay all schedules
Two Tiers	Increase the size of the bus fleet, providing enough transportation for all schools to operate on two different schedules instead of three.
Shorten Days, Extend Year	Start school later but continue with the same dismissal time, thereby maintaining the status quo for afterschool activities. Add days to the calendar to make up for lost instructional time.

Working through some exploratory transportation scenarios, we've learned that it is likely that

- (a) the length of the instructional days for students may need to change, and
- (b) it is likely that we will need more buses.

What are some options for the advisory committee to consider?

The Flip

Flip the start order for high school and elementary school, so the youngest students start school the earliest (elementary-middle-high).

What could this look like in Lower Merion?

Current LMSD Student Schedules

HIGH	7:30-2:40	(7 hours, 10 mins.)
MIDDLE	8:15-3:05	(6 hours, 50 mins.)
ELEMENTARY	9:00-3:35	(6 hours, 35 mins.)



"The Flip"

ELEMENTARY	7:30-2:05	(6 hours, 35 mins.)
MIDDLE	8:15-3:05	(6 hours, 50 mins.)
HIGH	9:00-4:10	(7 hours, 10 mins.)

May need to lengthen the elementary school day and/or shorten the high school day to minimize disruption to childcare and after-school activities for high schoolers. Civil twilight violations are likely for elementary and high school students.

What are some options for the advisory committee to consider?

Re-Order

Re-arrange the start order so that adolescents start later, but disruptions to extracurriculars are minimized for high school.

What could this look like in Lower Merion?

Current LMSD Student Schedules

HIGH	7:30-2:40	(7 hours, 10 mins.)
MIDDLE	8:15-3:05	(6 hours, 50 mins.)
ELEMENTARY	9:00-3:35	(6 hours, 35 mins.)



"Re-Order"

ELEMENTARY	7:30-2:05	(6 hours, 35 mins.)
HIGH	8:15-3:25	(7 hours, 10 mins.)
MIDDLE	9:00-3:50	(6 hours, 50 mins.)

May need to lengthen the elementary school day to minimize disruptions for childcare; Transportation analyses estimate that 14 additional buses would be required for this schedule with the current ten schools, but only 10 additional buses would be required once the new middle school is added. Civil twilight violations are likely for elementary and middle school students.

What are some options for the advisory committee to consider?

The Push

Maintain current order and instructional day length, but delay all schedules

What could this look like in Lower Merion?

Current LMSD Student Schedules

HIGH	7:30-2:40	(7 hours, 10 mins.)
MIDDLE	8:15-3:05	(6 hours, 50 mins.)
ELEMENTARY	9:00-3:35	(6 hours, 35 mins.)



"The Push"

HIGH	8:00-3:10	(7 hours, 10 mins.)
MIDDLE	8:45-3:35	(6 hours, 50 mins.)
ELEMENTARY	9:30-4:05	(6 hours, 35 mins.)

Doesn't get to the 8:30 AM goal for high schoolers; Lessons learned from other schools and expert recommendations (Owens) indicate that this may be too late in the day for Elementary students to maintain concentration in the afternoon. Civil twilight violations are likely for elementary students.

What are some options for the advisory committee to consider?

Two Tiers

Increase fleet size to provide enough buses for transporting on two schedules instead of one.

What could this look like in Lower Merion?

Current LMSD Student Schedules

HIGH	7:30-2:40	(7 hours, 10 mins.)
MIDDLE	8:15-3:05	(6 hours, 50 mins.)
ELEMENTARY	9:00-3:35	(6 hours, 35 mins.)



"Two Tiers"

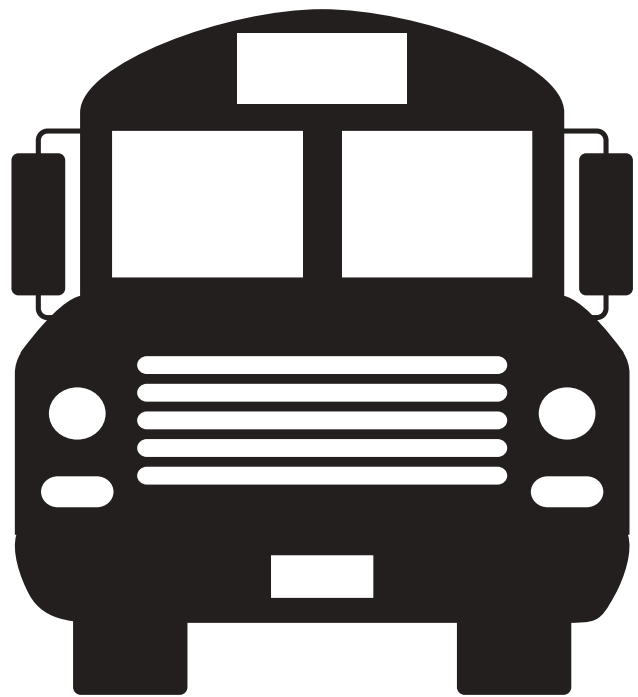
ELEMENTARY	7:45-2:20	(6 hours, 35 mins.)
HIGH	8:30-3:40	(7 hours, 10 mins.)
MIDDLE	8:30-3:20	(6 hours, 50 mins.)

Initial transportation estimates indicate a need for 47 additional buses under the two-tier scenario.

Transportation

LMSD is responsible for transporting 7,726 public school students and 1,961 independent school students to 127 school locations each day.

Key considerations for restructuring transportation around new schedules include:



- the time between tiers needed to maximize each vehicle's use at all levels
- site-based limitations to the space available for staging buses for drop-off and pick-up
- transportation of non-public riders on arrival and departure schedules set by other institutions
- ensuring arrival times that allow students to access breakfast programs
- the safety of riders getting on or off the bus in darkness
- commute times that will fluctuate from estimates due to the volume of traffic encountered on new schedules
- limited parking for additional fleet vehicles

Out-of-School Activities

When school starts later, it also ends later. The logistics around school-sponsored out-of-school activities will be affected by new schedules.

Key considerations when considering new schedules include:

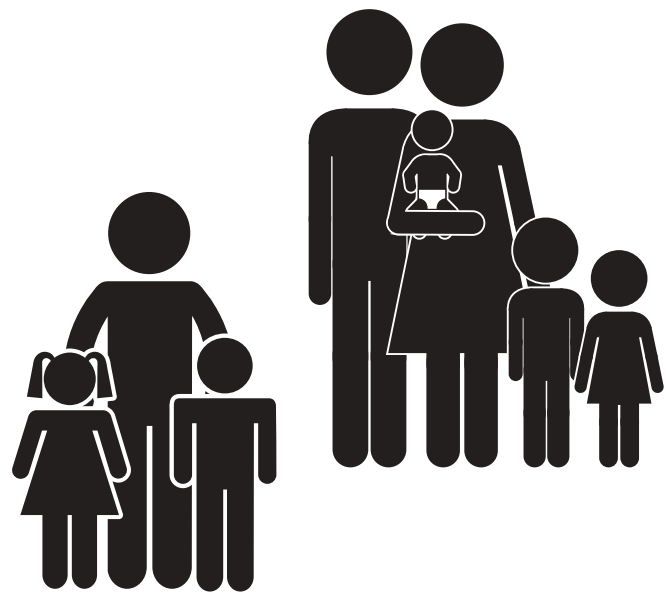


- ensuring outdoor lighting for activities pushed further into the evening, particularly near or after daylight saving ends
- out-of-district competitions that require early dismissals and lost instructional time for athletes and coaches who teach
- consideration of policies around the length of time that out-of-school meetings or practices should take place and limits on how long into the evening they should go
- critical reflection on, and communication of, homework expectations

Related Impacts

LMSD families, staff members, and the community have organized their lives around the current school schedules. Those impacts must be considered.

Key considerations when considering new schedules include:



- childcare arrangements for LMSD families who use out-of-school services or who count on siblings, extended family, neighbors, or friends for childcare
- childcare arrangements for staff commuting on new schedules
- changes in length of commutes for staff
- traffic patterns and commute times for those driving through the District
- student and staff members' out-of-school work schedules

The community advisory committee will have access to information and data needed for critical examination of each of these key issues within the context of the Lower Merion School District.

In the meantime, interested community members can view all reports and information in the online R & D Resource Archive at www.lmsd.org

Learn

Review district presentations and reports on sleep and school start times on the *All Forward* website by typing "sleep" in the search box at www.lmsd.org.

Scan actions taken by other school districts in the region by reviewing materials posted by the Regional Adolescent Sleep Needs Coalition at <https://www.startschoollater.net/pa---southeastern.html>

Connect

Connect with your Home and School Association and the Interschool Council to learn about opportunities to connect with other LMSD families on this topic.

Engage

Monitor school communications for forthcoming opportunities to participate in surveys and public forums to solicit feedback on recommendations.

Submit your comments and concerns to communitycomments@lmsd.org for distribution to the All Forward Sleep and Start Times Focus Exploration Team.