



ADOLESCENT SLEEP, HEALTH,
AND SCHOOL START TIMES
THE NATIONAL CONFERENCE

Regional/Rural Approach to School Start Time Change

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Biddeford School Department
Dayton School Department
Maine

Maine Overview

State Population: 1,329,328

Students: 177,000

4 Cities over 25,000 in population

Portland 66,881

Lewiston 36,202

Bangor 32,391

South Portland 25,556

Our population is the oldest and least diverse in the US

Percent of Students on Free/Reduced Lunch Statewide: 45.1%

Increase in Number of Deaths from Illicit Drug Overdose: ↑ 340%



State Legislation



Lawmakers hear conflicting views on bill to ban start times before 8:30 a.m. at Maine high schools

Supporters point to the science on adolescents' need for good sleep, but detractors predict scheduling turmoil and say decisions should be made locally. – Portland Press Herald

Maine is 1 of 7 States attempting to mandate legislation

2015: LD711 made it out of the Education & Cultural Affairs with majority approval

- Included a mandate of 8:30 for all middle & high schools
- Minimum of 11 hours between end of school activity and start of school day

2017: LD468 – in review

Would suggest 8:30 AM for all middle & high schools



Education Overview

High Schools Ranked 7 in the country
by [US News & World Report](#)

School districts managed at town, municipal,
and regional school unit level

27 Regional Vocational Centers

Local Control State

School Funding Formula by property valuation,
student count, and disadvantaged population

Average Bus Rides Duration

Suburban: 10-30 minutes

Rural: 40-75 minutes



Regional Overview Biddeford/Saco: Southern Maine's Twin Cities

Four towns, All Independent School Departments, 10 Miles Apart

Region Underwent a Regional School Unit Divorce 1-Year Prior to Start Time Effort

Change Required Cooperation of 4 Separate School Boards and a Private Academy

Town	Population	Student Population	Free & Reduced Lunch	% Caucasian
Biddeford	21,277	2409	59%	94.77%
Dayton	1,965	359	24%	97%
Saco	18,482	2742	32%	96%
Old Orchard Beach	8,624	818	52%	96%



On April 6, 2016, We Became The ONLY Schools In Maine To Comply With AAP and CDC 8:30 A.M. Recommendations



Historic vote required special coordination from Maine Municipal Association to hold a simultaneous school board vote between four towns and private academy.

Held in neutral location in Biddeford's Historic Mill



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Overcoming Barriers

How We Made the Historic Change in Our Schools.....



Biddeford School Department

52 minutes ago



We are proud that our communities are leading the way for change that is in the best interest of health and well-being for our children. We will continue to work with families to make this a smooth transition.

<http://www.pressherald.com/.../biddeford-saco-and-dayton-sch.../>



Biddeford, Saco and Dayton school boards agree to later start times - The Portland Press Herald...

Medical professionals and the federal Centers for Disease Control and Prevention say teenagers are...

PRESSHERALD.COM



Start to Finish Timeline

October 2015	Regional Discussion with 14 School Departments and Maine Principals Association
November-January 2015-2016	Physician of Record School Committee Presentations
February 2016	Regional Work Session (Biddeford, Dayton, Saco, TA)
February-April 2016	Dialogue and Problem Solving
April – May 2016	Regional Vote
June-Today	Real Implementation



Start with the Science

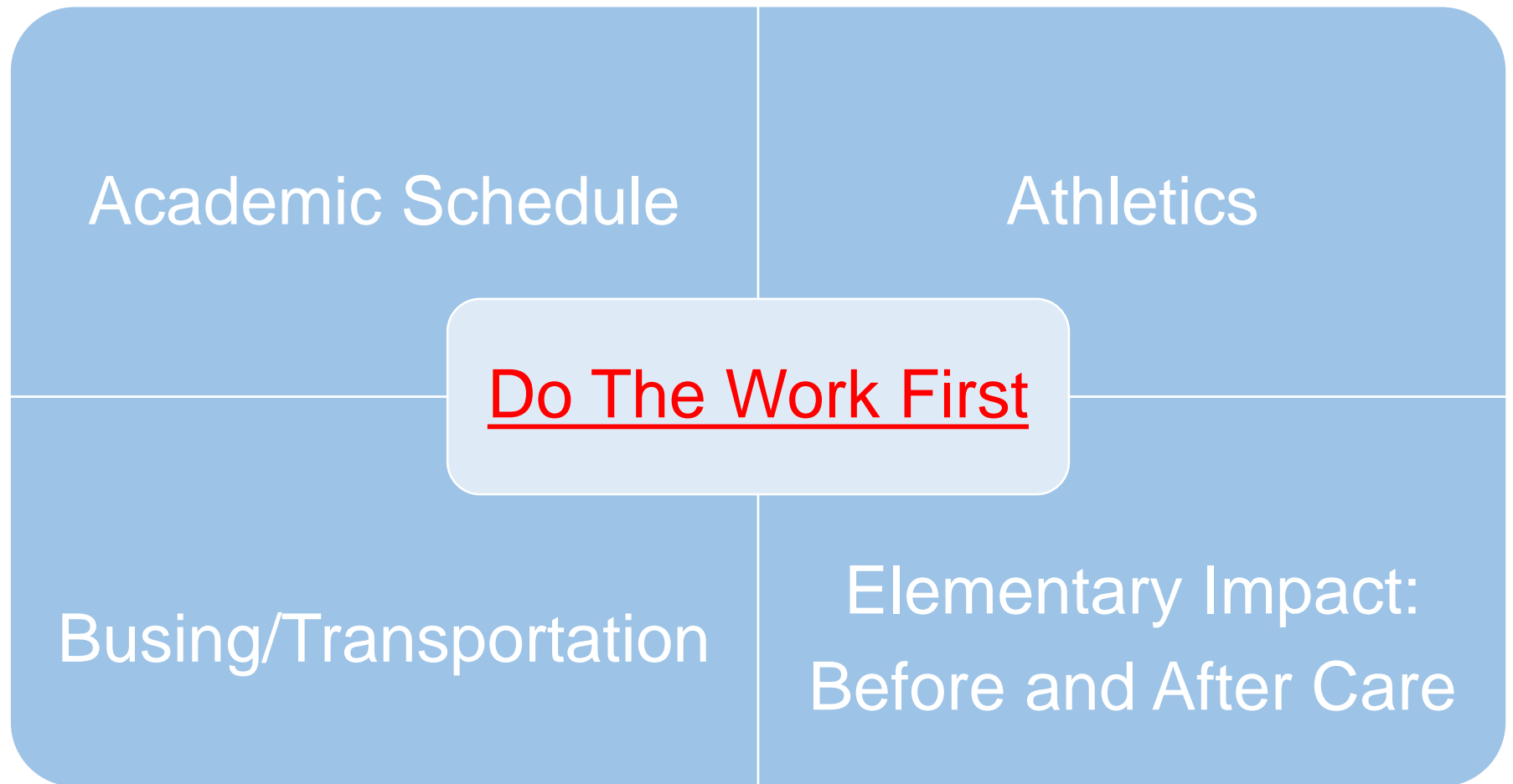
Public Health Matters in Maine Schools

We have pediatricians of record who oversee our nursing staff and guide policy decisions.

- Immunization requirements
- Drug education programs
- Wellness Policies
- Concussion protocols
- Infection Prevention and Information
 - Whooping Cough
 - Lice
 - Flu shots
 - Attendance policies



Local Administrators Created a “Can Do” Mindset



Impact on Schedule

Comparison of Neighboring High School vs. New Times for Biddeford High School

A later start time results in 5 more hours of sleep per week during hours that are proven to be better for concentration and time management.

EARLY START TIME		LATER START TIME
Rise and shine	6:00	Sleep
Be at the Bus Stop	6:45	Sleep
	7:00	Rise and shine
Arrive at school	7:30	
Period 1 begins	7:45	Be at Bus Stop
School	8:30	Arrive at School
School	8:45	Period 1 begins
School	12:30	School
School ends 2:15	2:00	School
Sports Practice begins	3:00	School ends 3:15
Sports	4:00	Sports Practice Begins
Sports	4:30	Sports
Sports practice ends	5:00	Sports
	6:00	Sports practice ends
Dinner with family	6:30	Dinner with family
	7:00	
Bed time = 7 hrs. of sleep	11:00	Bed time = 8 hrs. of sleep



How Does It Impact This Year's Athletic Schedule?

Athletic Team Number of Early (15 minutes) Dismissals High School

Football	0	Swimming	0
JV Football	0	Wrestling	0
Freshman Football	0	Indoor Track	0
Girls Soccer	0	Baseball	3
Boys Soccer	0	First Team Baseball	0
Volleyball	1	Softball	0
Golf	0	Boys Lacrosse	0
Field Hockey	1	Girls Lacrosse	1
Cross County	2	Boys Tennis	6
Boys Basketball	0	Girls Tennis	5
Girls Basketball	0	Girls Outdoor Track	4
Boys Ice Hockey	1	Boys Outdoor Track	3
Girls Ice Hockey	1		
		Total: 28 (420 minutes)	
		Total Yearly Instructional Minutes: 55,640	

Percent Missed: .754%



Transportation Criteria

Flipped Busing Model

MS/HS 8:30 or Later

No Elementary School Start Before 7:50

No Child Waiting for a Bus Before 7 AM

Biddeford School Department				
School	Bus Drop	Start	End	Bus Pick-Up
JFK	7:40	7:50	2:20	2:20
BPS	7:45	7:50	2:25	2:20
BIS	7:45	7:50	2:25	2:25
BMS	8:20	8:40	3:10	3:10
BHS	8:25	8:35	2:45	3:00
COT		8:35	2:45	
Saco Schools/Thornton Academy				
School	Bus Drop	Start	End	Bus Pick-Up
Fairfield	7:40	8:00	2:30	2:20
Young	7:40	8:00	2:30	2:20
Burns	7:45	8:10	2:30	2:25
SMS	8:20	8:30	3:00	3:10
TA	8:20	8:30	2:45	3:00
COT		8:30	2:45	2:30
Dayton School Department				
School	Bus Drop	Start	End	Bus Pick-Up
DCS	7:40	7:45	2:10	2:05
SMS	8:20	8:30	3:00	3:10
TAMS	8:25	8:30	2:45	3:00
TA	8:25	8:30	2:45	3:00
Old Orchard Beach (RSU 23)				
School	Bus Drop	Start	End	Bus Pick-Up
Jameson	7:40	8:00	2:15	2:15
LMS - 3-5	7:40	8:00	2:15	2:15
LMS 6-8	8:15	8:30	2:45	2:45
OOBHS	8:15	8:30	2:45	2:45
TIDES*	8:15	8:30	2:45	2:45



Overcoming Barriers

We did all of that work before we communicated to the public

AND what we DIDN'T ...

Create a committee to “study” the issue

Survey parents if they were in favor of a later start change

Allow rumors, speculation, and misinformation to go unanswered



Managing the FEAR!

Students engage with students at other schools

Surveyed parents about their child care needs if the school start changed

Developed a \$4.00/day after care with parks & rec department (1 hour of care) and decreased overall child care costs (family caps)

Eliminated before care costs for parents by opening school early for breakfast

Opened libraries for students if parents needed drop off alternatives (less than a dozen students use this option)

Provided answers to any questions that parents had in a timely fashion



Solutions Based Approach to Feedback

Small Group Education

Leveraged Local Physicians

Made Friends with Start School Later Local Chapters to Manage Social Media

Controlled the Story in the Media

Plan, Do, Adjust, Communicate



Measurements -- Six Months Later

- Decrease in Middle School tardiness by 52 %
- Decrease in Middle School Absenteeism 39%
- Decrease in High School Absenteeism 26%
- Morning visits to school nurse down by half, including early morning visits, fewer medications being administered and fewer students being sent home.
- Decrease in Period 1 Failures 20%
- Increase in the percent of students eating at breakfast at school
- Staff report students are more alert in their classrooms
- The majority (75%) of students surveyed report they are going to bed at a reasonable hour and getting over 8 hours of sleep.
- Visible decrease in students consuming caffeinated drinks in morning



Questions

