#### HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 733 Middle School and High School Start Times SPONSOR(S): Temple and others TIED BILLS: None. IDEN./SIM. BILLS: SB 1112

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Choice & Innovation Subcommittee	17 Y, 1 N	Dixon	Sleap
2) PreK-12 Appropriations Subcommittee		Bailey	Potvin
3) Education & Employment Committee			

#### SUMMARY ANALYSIS

In a 2014 policy statement on school start times for adolescents, the American Academy of Pediatrics (AAP) referenced two researched biological factors that make it easier for adolescents to stay awake later. The first biological factor is the delayed timing of nocturnal melatonin secretion released throughout adolescence, which corresponds to a shift in circadian phase preference from more "morning" to more "evening" type. The second biological factor is an altered sleep drive during adolescence in which the pressure to fall asleep accumulates more slowly. This research indicates that the average teenager in today's society has difficulty falling asleep before 11:00 p.m. and is best suited to wake at 8:00 a.m. or later.

The AAP also recognizes that insufficient sleep in adolescents is an important public health issue which affects the health, safety, and academic success of middle and high school students. According to the AAP, a key modifiable contributor to insufficient sleep in adolescents is early school start times (i.e., before 8:30 a.m.).

To allow middle and high school students in Florida to achieve optimal levels of sleep, to improve their physical and mental health, safety, academic performance, and quality of life, the bill requires that no later than July 1, 2026, the instructional day for all public and charter middle schools must begin no earlier than 8:00 a.m. and no earlier than 8:30 a.m. for high schools. District school boards and charter school governing boards must inform their communities, including parents, students, teachers, school administrators, athletic coaches, and other stakeholders, about the health, safety, and academic impacts of sleep deprivation on middle school and high school students. Stakeholders must also be made aware of the benefits of a later school start time and discuss local strategies to successfully implement the later school start times.

The bill may have an indeterminate fiscal impact on local government expenditures beginning in Fiscal Year 2026-2027. See Fiscal Analysis.

The bill has an effective date of July 1, 2023.

#### FULL ANALYSIS

### I. SUBSTANTIVE ANALYSIS

## A. EFFECT OF PROPOSED CHANGES:

### **Present Situation**

#### Background

### Adolescent Wellness

In a 2014 policy statement on school start times for adolescents, the American Academy of Pediatrics (AAP) presented factors influencing insufficient sleep in adolescents. The AAP stated that from a biological perspective, most adolescence begin to experience a sleep-wake "phase delay" which can manifest as a shift of up to 2 hours, relative to their pre-adolescence sleep-wake cycle. Research identifies two biological factors that can be attributed to the delayed sleep-wake cycle. One factor is delayed timing of nocturnal melatonin secretion across adolescence that parallels a shift in circadian phase preference from more "morning" type to more "evening" type, which consequently results in difficulty falling asleep at an earlier bedtime. The second biological factor is an altered sleep drive across adolescence in which the pressure to fall asleep accumulates more slowly. These two biological factors make it easier for adolescents to stay awake later. Research indicates that the average teenager in today's society has difficulty falling asleep before 11:00 p.m. and is best suited to wake at 8:00 a.m. or later.<sup>1</sup>

The AAP recognizes insufficient sleep in adolescents as an important public health issue which affects the health, safety, and academic success for middle and high school students. According to the AAP, a key modifiable contributor to insufficient sleep in adolescents is early school start times (i.e., before 8:30 a.m.). In their policy statement, the AAP urged school districts to aim for start times that allow middle and high school students to achieve optimal levels of sleep, 8.5 to 9.5 hours, to improve physical and mental health, safety, academic performance, and quality of life.<sup>2</sup>

Other professional organizations and societies, such as the Medical Academy of Sleep Medicine,<sup>3</sup> the American Medical Association,<sup>4</sup> and the National Sleep Foundation<sup>5</sup> support school start times of 8:30 a.m. or later for middle and high schools.

# Delayed School Start Times

In 2014, the University of Minnesota's Center for Applied Research and Educational Improvement published the results of a three-year research study with over 9,000 students in eight public high schools in three states. The research found that high schools with a start time at 8:30 a.m. or later allowed for more than 60 percent of students to obtain at least eight hours of sleep per school night. Academic performance outcomes, including national achievement tests, attendance rates, and reduced tardiness showed significantly positive improvement with the start times of 8:35 a.m. or later.

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<sup>&</sup>lt;sup>1</sup> Rhoda Au, et al., *Policy Statement, School Start Times for Adolescents*, 134 Pediatrics, 3 (2014), *available at* <u>https://publications.aap.org//pediatrics/article/134/3/642/74175/School-Start-Times-for-Adolescents?autologincheck=redirected</u> (last visited Feb. 28, 2023).

 $<sup>^{2}</sup>$  Id.

<sup>&</sup>lt;sup>3</sup> Nathaniel F. Watson et al., Delaying Middle School and High School Start Times Promotes Student Health and Performance: An American Academy of Sleep Medicine Position Statement, 13 Journal of Clinical Sleep Medicine, Vol. 4 (2017).

<sup>&</sup>lt;sup>4</sup> American Medical Association, *AMA supports delayed school start times to improve adolescent wellness*, (June 14, 2016), *available at* <u>https://www.ama-assn.org/press-center/press-releases/ama-supports-delayed-school-start-times-improve-adolescent-</u>wellness#:~:text=AMA%20supports%20delayed%20school%20start%20times%20to%20improve.earlier%20than%208%3A30%20a.

<sup>&</sup>lt;sup>5</sup> National Sleep Foundation, *Healthy Adolescent School Start Times: A Sleep Health Policy Statement from the National Sleep Foundation*, (2021), *available at <u>https://www.thensf.org/wp-content/uploads/2021/08/NSF-Sleep-Health-Policy-Statement\_School-Start-Times.pdf*.</u>

Additionally, the number of car crashes for teen drivers from 16 to 18 years of age was reduced by 70 percent when a school shifted start times from 7:35 a.m. to 8:55 a.m.<sup>6</sup>

### Other States' Efforts

Other states have passed legislation related to later school start times. Most recently, in 2019, California passed legislation requiring the school day for high schools to start no earlier than 8:30 a.m., and middle schools to start no earlier than 8:00 a.m. Additionally, the law encouraged the California Department of Education to post available research on the impact of sleep deprivation on adolescents and the benefits of a later school start time, as well as examples of successful strategies for managing the transition to a later school start time, and to advise school districts and charter schools of this posting. Under the law, school districts, charter schools, and community organizations were encouraged to inform their communities, including parents, teenagers, educators, athletic coaches, and other stakeholders, about the health, safety, and academic consequences of sleep deprivation on middle and high school students. The law requires stakeholders to be made aware of the benefits of a later school start time and discuss local strategies for successfully implementing the later school start time. The law went into effect on July 1, 2022.<sup>7</sup>

In 2015, the New Jersey Legislature directed the New Jersey Department of Education to conduct a study on issues, benefits, and options for a later start time to the school day in middle and high school.<sup>8</sup> Subsequently, the study found that a later start time would result in positive outcomes for students' health, safety, well-being and academic performance, but would pose logistical challenges. In 2019, New Jersey enacted a four-year pilot program on later school start times for high school students in five selected school districts.<sup>9</sup>

In 2014, Maryland passed legislation requiring a study to be conducted on safe and healthy school hours by the Maryland Department of Health and Mental Hygiene to address science related to the sleep needs of children and adolescents.<sup>10</sup> The study encouraged the Maryland State Board of Education to use its authority to advise local school systems of the benefits of later school start time policies and encourage them to conduct feasibility studies regarding the implementation of school start times of 8:00 a.m. or later.<sup>11</sup> In response to the study, in 2016, the Maryland legislature passed the Orange Ribbon for Healthy School Hours certification. The Orange Ribbon program does not require districts to change their bell schedule, but establishes a three-tier certification system for districts that are adjusting start times with those that are more consistent with recommendations from the AAP.<sup>12</sup>

<sup>&</sup>lt;sup>6</sup> Kyla L. Wahlstrom, Examining the Impact of Later High School Start Times on the Health and Academic Performance of High School Students: A Multi-Site Study (2014), *available at* 

https://conservancy.umn.edu/bitstream/handle/11299/162769/Impact%20of%20Later%20Start%20Time%20Final%20Report.pdf?seq\_uence=1&isAllowed=y.

<sup>&</sup>lt;sup>7</sup> Cal. Elementary and Secondary Education Code § 46148.(a)(1)-(2) (2019). This requirement does not apply to rural schools. <sup>8</sup> 2015 NL Law 96, see also New Jarsey Department of Education. Final Penert of the Study Crown on Later School Start Time

<sup>&</sup>lt;sup>8</sup> 2015 N.J. Law 96, see also New Jersey Department of Education, Final Report of the Study Group on Later School Start Times (2017), available at

https://www.startschoollater.net/uploads/9/7/9/6/9796500/new jersey final report of the study group on later school start times april 2017.pdf.

<sup>&</sup>lt;sup>9</sup> 2019 N.J. Public Law, c. 224.

<sup>&</sup>lt;sup>10</sup> The legislation required the Maryland Department of Health and Mental Hygiene to consult with the following entities for the study: the State Board of Education; the Maryland Association of Boards of Education; the Public School Superintendents Association of Maryland; the Maryland State Education Association; the Maryland Association of School Principals; the State Department of Education; a mental health professional who specialized in young adult and adolescent health issues; the School Psychologists Associations; a pediatrician who has expertise in adolescent health care; the Maryland Chapter of the American Academy of Pediatrics; a doctor who specializes in child and adolescent sleep disorders; the Maryland Sleep Society; the Maryland Depart ment of Transportation; Start School Later; the Maryland PTA; a student enrolled in a Maryland public high school; an athletic director or a coach employed by a Maryland public middle or high school who has expertise in after-school sports activities; and one representative of the Maryland School Psychologist Association.

<sup>&</sup>lt;sup>11</sup> MD. CODE ANN., Education § 2-1246 (2014), *see also* The Maryland Department of Health and Hygiene, *Study of Safe and Healthy School Hours for Maryland Public Schools* (2014), *available at* 

http://www.startschoollater.net/uploads/9/7/9/6/9796500/maryland dhmh school start time report 123114.pdf.

Under the certification, an elementary school should begin no earlier than 8:00 a.m. and middle and high school no earlier than 8:30 a.m.

## School Start Times in Florida

Under current law, district school boards are responsible for the opening and closing of public schools; however, the opening date for public schools in the district may not be earlier than August 10 of each year<sup>13</sup> and public schools must operate for a minimum of 180 days or the hourly equivalent.<sup>14</sup> Charter schools are required to provide instruction for at least the same number of days as public schools.<sup>15</sup>

While current law addresses the number of minimum days a school must operate and the earliest date to begin a school year, school start times are established by the local district school board or charter governing board. The Office of Program Policy Analysis and Government Accountability (OPPAGA) conducted research on school start times in Florida and found that start times vary across the state and even within the school district. The OPPAGA found that for Florida public schools, on average, high schools begin at 7:47 a.m., elementary schools begin at 8:14 a.m., and middle schools begin at 9:06 a.m.<sup>16</sup> For charter schools, OPPAGA found, on average, charter high schools begin at 7:44 a.m., charter elementary schools begin at 8:08 a.m., and charter middle schools begin at 8:09 a.m.<sup>17</sup>

The OPPAGA research regarding the distribution of school start times based on the organization of the school's level (elementary school, middle school, high school) is shown in the table below.

Public Schools						
School Level	Start Times					
	Before 7:30 a.m.	7:30 – 7:59 a.m.	8:00 – 8:29 a.m.	8:30 a.m. or later		
High School	48%	19%	9%	24%		
Middle School	3%	5%	8%	83%		
Elementary School	2%	31%	30%	37%		
Public Charter Schools						
School Level	Start Times					
	Before 7:30 a.m.	7:30 – 7:59 a.m.	8:00 – 8:29 a.m.	8:30 a.m. or later		
High School	26%	31%	30%	13%		
Middle School	4%	17%	48%	32%		
Elementary School	1%	13%	58%	29%		

In comparison to the AAP recommended school start time of 8:30 a.m. or later for middle and high school students, results from the OPPAGA research found that for public schools, 76 percent of high

<sup>17</sup> E-mail, OPPAGA (Feb. 23, 2023). OPPAGA obtained start times for 577 of the 734 charter schools operating in Florida. **STORAGE NAME:** h0733b.PKA **DATE:** 3/15/2023

<sup>&</sup>lt;sup>13</sup> Section 1001.42(4)(f), F.S.

<sup>&</sup>lt;sup>14</sup> Section 1001.42(12)(a), F.S. Hourly equivalent equates to 900 hours for students in grades 4 through 12 and 720 hours for students in kindergarten through grade 3, *see* s. 1011.61(1)(a)1., F.S. Florida law does not require a minimum number of hours or minutes per school day.

<sup>&</sup>lt;sup>15</sup> Section 1002.33(9)(m), F.S.

<sup>&</sup>lt;sup>16</sup> Office of Program Policy Analysis and Government Accountability (OPPAGA), Presentation to the Committee on Education & Employment (Feb. 9, 2023), at 5, *available at* 

<sup>&</sup>lt;u>https://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?PublicationType=Committees&CommitteeId=3243&Session=20</u> <u>23&DocumentType=Meeting+Packets&FileName=cis+2-9-23.pdf</u>. The OPPAGA obtained start times for 522 public high schools, 483 public middle schools, and 1,480 public elementary schools.

schools and 16 percent of middle schools start before 8:30 a.m.<sup>18</sup> For public charter schools, OPPAGA found that 87 percent of high schools and 69 percent of middle schools start before 8:30 a.m.<sup>19</sup>

# **Effects of Proposed Changes**

The bill requires that no later than July 1, 2026, the instructional day for all public and charter middle schools must begin no earlier than 8:00 a.m. and no earlier than 8:30 a.m. for high schools. District school boards and charter school governing boards must inform their communities, including parents, students, teachers, school administrators, athletic coaches, and other stakeholders, about the health, safety, and academic impacts of sleep deprivation on middle school and high school students. Stakeholders must be made aware of the benefits of a later school start time and discuss local strategies to successfully implement the later school start times.

### **B. SECTION DIRECTORY:**

- **Section 1:** Amends s. 1001.42, F.S.; providing requirements for middle school and high school start times; requiring such school start times to be implemented by a specified date; providing district school board requirements.
- **Section 2:** Amends s. 1002.33; requiring charter schools to meet certain requirements relating to middle school and high school start times.
- **Section 3:** Provides an effective date of July 1, 2023.

# II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

- A. FISCAL IMPACT ON STATE GOVERNMENT:
  - 1. Revenues:

None.

2. Expenditures:

None.

- B. FISCAL IMPACT ON LOCAL GOVERNMENTS:
  - 1. Revenues:

None.

2. Expenditures:

There may be a fiscal impact on school districts if compliance with the required start times for middle schools and high schools necessitates the acquisition of additional school buses. The implementation of the new start times for middle and high schools is required by July 1, 2016; thus, the potential fiscal impact is indeterminate.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None.

D. FISCAL COMMENTS:

<sup>19</sup> OPPAGA e-mail, *supra* note 17. OPPAGA's analysis of the distribution of charter school start times includes duplication due to the same charters serving multiple grade levels (i.e. K-8 or K-6).
STORAGE NAME: h0733b.PKA

<sup>&</sup>lt;sup>18</sup> OPPAGA Presentation, *supra* note at 16, at 6.

#### **III. COMMENTS**

### A. CONSTITUTIONAL ISSUES:

- 1. Applicability of Municipality/County Mandates Provision: None.
- 2. Other:

None.

- B. RULE-MAKING AUTHORITY: None.
- C. DRAFTING ISSUES OR OTHER COMMENTS: None.

# IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

None.