



LAPS COMMUNITY FORUMS

# Pros and Cons of Adjusting School Start Times

## BACKGROUND REPORT

- This report provides information for the community forums taking place fall 2017 regarding school start times for the Los Alamos Public Schools district.

### CONVENER

Los Alamos Public Schools (LAPS)

### FACILITATOR

New Mexico First



**Los Alamos**  
PUBLIC SCHOOLS



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**New Mexico First**  
P. O. Box 56549  
Albuquerque, New Mexico 87187  
Phone: 505-225-2140  
Website: [www.nmfirst.org](http://www.nmfirst.org)

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# EXECUTIVE SUMMARY

Los Alamos Public Schools, along with school districts around the country, are looking closely at adjusting K-12 school start times to better align with data on the amount of time students need to sleep and when.

## Ch 1: Los Alamos Public School District

The Los Alamos Public Schools (LAPS) district serves over 3,570 K-12 students living in Los Alamos, White Rock, Española, Pojoaque, the Jemez Mountains and surrounding rural northern New Mexico communities.<sup>1</sup> The district includes one high school, one middle school, the Topper Freshman Academy and five elementary schools.

While many LAPS students are high achieving, many students need additional emotional support and guidance from the district to ensure that they are college or career ready by the time they graduate.<sup>2</sup> The 2015 New Mexico Youth Risk and Resiliency Survey (YRRS) shows that many Los Alamos middle and high school students, although comparatively fewer than surrounding counties, engage in risky and dangerous behaviors that can impede their ability to succeed.<sup>3</sup>

## Ch 2: Importance of Sleep for Children K-12

Studies show that people of all ages need more sleep, with children and teens needing significantly more than adults to support their rapid mental and physical development. In addition, biological sleep patterns for adolescents naturally shift later during this time of life, meaning it is natural for teens to not be able to sleep before 11 p.m. and wake up later in the morning.<sup>4</sup>

Teens getting less than the recommended eight to ten hours of sleep per night do not do as well in school, are not as healthy, and report significantly higher depression symptoms. They also are at greater risk of substance abuse, decreased ability to cope, poor impulse control, and violence.<sup>5</sup> By inhibiting academic performance, lack of sleep may ultimately hurt a student's opportunity and economic future.

Experts provide many suggestions for improving the quality and duration of sleep for children and teens. These suggestions include adjusting lighting from bright at daytime to dimmer at night, limiting use of screens and social media, using mindfulness apps, incorporating sleep hygiene into the school curriculum, and moving middle and high school start times to 8:30 a.m.

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<sup>1</sup> (NM Public Education Department, 2016)

<sup>2</sup> (Los Alamos Public Schools, 2016)

<sup>3</sup> (NM Department of Health, 2015)

<sup>4</sup> (Wheaton, 2016)

<sup>5</sup> (National Sleep Foundation)

or later. Some experts are not certain that late start times will ensure 8-10 hours of sleep per night. They argue that students will stay up even later at night and get up even later in the morning.<sup>6</sup>

### **Ch: 3 – Challenges of Implementing Later Start Times**

Many studies conclude that starting school later creates potential benefits including improved academic, athletic and extracurricular activity performance, and better overall physical and mental health.<sup>7</sup> However, later start times also create challenges. Some students and families worry that a late start time will conflict with already demanding daily schedules, participation in afterschool activities including work, homework and tutoring, after-school competitions, and caring for younger siblings.

In addition, the ability to shift to later start times is dependent on a school district's capacity to change school bus schedules and related transportation costs. School districts must also consider community traffic patterns.

### **Ch: 4 - Case Studies**

In recent years, hundreds of schools in 45 states have shifted to later start times.<sup>8</sup> The case studies in this report provide examples of how some school districts addressed community concerns and why others opted not to change. Transitioning to later start times is not an easy task. It comes with logistical and financial challenges as well as fervent supporters and opposition. School districts that consider implementing later start times conduct extensive outreach to garner community members' feedback before making the change. These school districts commonly develop an outcome survey or study on how the change affected student academic performance and behavior.

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<sup>6</sup> (University of Surrey, 2017)

<sup>7</sup> (Wheaton, 2016)

<sup>8</sup> (Wahlstrom, 2017)

# FOREWORD

## Purpose of the Project

The purpose of the upcoming community and school meetings is to engage the public and Los Alamos Public Schools (LAPS) stakeholders on whether to adjust the school start times for LAPS schools including the high school, middle school and elementary schools. The meetings will also consider how to optimally set school start times for LAPS students and their families. This report helps to inform the stakeholder discussions.

People who attend the stakeholder discussions should include students, parents and caregivers, teachers, school administrators, and business and community leaders.

## Convener

Los Alamos Public Schools (LAPS) is a school district serving over 3,500 K-12 students living in Los Alamos, White Rock, Española, Pojoaque, the Jemez Mountains and surrounding rural northern New Mexico communities.<sup>9</sup> Approximately 334 teachers and 850 staff work to support LAPS students. The district seeks to prepare capable and confident life-long learners. Its mission is to enable students to become resilient and resourceful adults who can achieve their personal goals in an ever-changing world.

The district is committed to:

- Students achieving at least expected academic growth each year.
- All students attaining skills, knowledge, and abilities to succeed in 21st-century society.
- All schools and workplaces being safe and civil.
- Effectively communicating with parents, students, employees and the Los Alamos community.

## Facilitator

**New Mexico First** engages people in important issues facing their state or community. For over 30 years, the public policy organization has offered unique town halls and forums that bring together people to develop their best ideas for policymakers and the public. New Mexico First also produces nonpartisan public policy reports on education, economy, healthcare, natural resources and effective government. These resources are available at [nmfirst.org](http://nmfirst.org).

Our state's two U.S. Senators – Tom Udall and Martin Heinrich – serve as New Mexico First's honorary co-chairs. The organization was co-founded in 1986 by former U.S. Senators Jeff

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<sup>9</sup> (NM Public Education Department, 2016)

Bingaman and Pete Domenici.



## Report Authors

This New Mexico First report was prepared by Pamela K. Blackwell and edited by Heather Balas.

# INTRODUCTION

“Early to bed, early to rise, makes a person healthy, wealthy and wise,” the saying goes. However, for teenagers, studies show that “later to bed, later to rise” may make for healthier, better performing students. Adjusting school start times is one of the strategies Los Alamos Public Schools (LAPS) and school districts around the country are considering to improve student academic performance, health and wellness.

At LAPS, as in many school districts, students’ success is increasingly measured by both academic performance and growth and by their physical and mental well-being. For many students, sleep – rather than sleep deprivation – is the secret ingredient to success. Studies show that there is a direct correlation between the amount of sleep children get and how they do in school, interact with others, and feel about themselves. Given the shifted biological clocks of adolescents, it stands to reason that later start times have been proposed to harness more rest for sleep-deprived students.

People of all ages need more and better, quality sleep. However, it is more critical for children and teens because they are rapidly developing both physically and mentally.

However, there are many challenges associated with making district-wide changes. This type of change would not just affect the high school; all levels of K-12 would have to adjust because of shared school buses. After-school sports and other extracurricular activities would have to make scheduling adjustments, and some teenagers’ ability to hold down after-school jobs might be challenged. These and other hurdles are presented in this report – along with potential strategies for addressing them

The upcoming community meetings present LAPS leaders, students, parents, educators and the community with a unique opportunity to work together and consider the potential benefits and challenges of late start times, including how to best ensure good health and life-long learning for all students.

## Chapter 1

# LOS ALAMOS PUBLIC SCHOOLS

Before the community decides whether to make major changes to its school schedule, it is useful to review its student make-up, as well as district strengths and challenges.

### Who are LAPS Students?

The LAPS district includes one high school (Los Alamos High School), one middle school (Los Alamos Middle School), the Topper Freshman Academy, and five elementary schools (Aspen, Barranca, Chamisa, Mountain and Piñon). While Los Alamos is ranked as one of the most affluent cities in the nation – with a median household income of \$107,000 – many LAPS students do not come from wealthy families.<sup>10</sup> As previously noted, the school district serves students from a wide geographic range including White Rock, Barranca, Española, Taos and Las Vegas. Income ranges for LAPS families vary widely, including 12 percent who are eligible for the Free and Reduced Lunch Program.<sup>11</sup>

The district also serves a diverse population of students. Close to 60 percent of students are Caucasian, 31 percent Hispanic, over five percent Asian, close to 3 percent Native American and just over one percent African American. Two percent of students are English Learners (ELs).<sup>12</sup>

### How are LAPS Students Doing?

#### ACADEMICS

Consistently recognized as a top school district, LAPS was ranked 14<sup>th</sup> in the nation in 2015 by the U.S. Department of Education.<sup>13</sup> Rankings were based on math and reading proficiency, state assessment tests and other factors such as student-teacher ratio. In addition, LAPS' 86 percent high school graduation rate is higher than New Mexico's state average of 72 percent – and higher than the national average of 83 percent.<sup>14</sup> The district also has a better than average habitual truancy rate of only 1.2 percent.<sup>15</sup>

Given these successes, some community members may wonder why LAPS is considering changes. The district recognizes that while many students are high achieving, those students

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<sup>10</sup> (Sperling's Best Places, n.d.)

<sup>11</sup> (NM Public Education Department, 2016)

<sup>12</sup> (NM Public Education Department, 2016)

<sup>13</sup> (Los Alamos Monitor, 2015)

<sup>14</sup> (Public School Review), (Institute of Education Sciences IES, 2016)

<sup>15</sup> (Kids Count Data Center, 2015)

and many others may need additional support and guidance to ensure that all students are college or career ready by the time they graduate.<sup>16</sup>

### PHYSICAL AND EMOTIONAL WELLNESS

While challenging and supportive academics are critical to student success, so too is student physical and emotional wellness. The New Mexico Youth Risk and Resiliency Survey (YRRS) is a tool used to assess the health risk behaviors and resiliency factors of New Mexico high school and middle school students; the assessment is given every other year.<sup>17</sup> The 2015 survey shows that many Los Alamos middle and high school students engage in risky behaviors like using tobacco, alcohol and illegal drugs, participating in or are victims of physical fights, dating and sexual violence, bullying at school and electronically, and sexual activity.<sup>18</sup> Among high school students, over 36 percent report texting or emailing while driving.<sup>19</sup> Some students also report experiencing profound depression and hopelessness.<sup>20</sup>

District leaders hold that academics and wellness go hand in hand stating in the 2016 LAPS Strategic Plan, “Physical and emotional wellness is important to a student’s ability to focus on learning.”<sup>21</sup> One of the key tenets of the plan calls for all students to be educated, well-rounded, healthy, and emotionally stable and lists the following strategies for LAPS.

- Identify students at risk, and to the extent possible in the school setting, address the issues that limit their ability to develop and succeed.
- Make mental health in our schools and community a priority. Prior to adopting any new policy and programmatic changes, identify potential mental health impacts.
- Prioritize solutions that work toward systematic change related to mental health and inspire a collaborative, positive workforce as well as an emotionally healthy student body.

### LAPS Student After School Activities

LAPS students are active in school sponsored extracurricular activities. Approximately 75 percent of students participate in school-sponsored sports, music, performing arts, clubs and other activities.<sup>22</sup> Traveling to other New Mexico cities and towns to compete in these activities after school and on weekends are key parts of many families’ lives. Approximately 316 middle school students and 441 high school students participate in athletics.<sup>23</sup> Many LAPS students also work after school to earn additional spending money and some to help support their family’s income.<sup>24</sup>

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<sup>16</sup> (Los Alamos Public Schools, 2016)

<sup>17</sup> (NM Department of Health, 2015)

<sup>18</sup> (NM Department of Health, 2015)

<sup>19</sup> (NM Department of Health, 2015)

<sup>20</sup> (NM Department of Health, 2015)

<sup>21</sup> (Los Alamos Public Schools, 2016)

<sup>22</sup> (LAHS Start Time Working Group, 2017)

<sup>23</sup> (Los Alamos Public Schools, 2017)

<sup>24</sup> (LAHS Start Time Working Group, 2017)

Many district staff also serve as coaches and extracurricular activity sponsors.<sup>25</sup> Additional staff activities outside school include second jobs and being child and family caregivers.<sup>26</sup>

## Chapter 2

# ROLE OF SLEEP ON DEVELOPMENT

## The Biology of Sleep

Studies show that people of all ages need more sleep, with children and teens needing significantly more sleep than adults to support their rapid mental and physical development.

Age	Recommended
<b>Preschoolers 3-5 years</b>	10 – 13 hours
<b>School-aged children</b>	9-11 hours
<b>Teenagers 14-17</b>	8-10 hours
<b>Adults 18+</b>	7-9 hours

*National Sleep Foundation, 2017*<sup>27</sup>

Like most adults, most teens do not get enough sleep due to competing demands on their time. These demands include keeping up with academics, extracurricular activities, work after school, caring for younger siblings and spending time with friends.<sup>28</sup> In an informal LAPS student survey, some students reported that their top two sources of stress were homework and managing fatigue and tiredness.<sup>29</sup>

Teens are finding they do not have time to do it all so they choose to sacrifice sleep. They view sleep as expendable, something that keeps them from doing other things.<sup>30</sup> The average teen obtains less than seven hours of sleep on school nights rather than the recommended range of eight to 10 hours.<sup>31</sup> Most Los Alamos High School students reported “never” or “sometimes” getting eight or more hours of sleep.<sup>32</sup>

In addition, besides needing more sleep, the biological sleep patterns for adolescents shift toward later times, meaning it is natural for teens to not be able to fall sleep before 11p.m. and

<sup>25</sup> (LAHS Start Time Working Group, 2017)

<sup>26</sup> (LAHS Start Time Working Group, 2017)

<sup>27</sup> (National Sleep Foundation, 2017)

<sup>28</sup> (UCLA Health, UCLA Sleep Disorders Center)

<sup>29</sup> (Hargraves, 2017)

<sup>30</sup> (UCLA Health, UCLA Sleep Disorders Center)

<sup>31</sup> (Wheaton, 2016)

<sup>32</sup> (LAHS Start Time Working Group, 2017)

to wake up later in the morning.<sup>33</sup> Biologically speaking, for most teens, the secretion of melatonin does not begin until about 10:45 p.m. and continues until 8 a.m.<sup>34</sup> This means that most teenagers are unable to fall asleep until the melatonin secretion stops. This melatonin secretion pattern changes back to an individual’s genetically preferred sleep and wake time once puberty is over.<sup>35</sup>

The perception that teens are lazy because they have to be dragged out of bed in the morning is not a fair judgement. Essentially, adolescents’ ability to be fully awake early in the morning is a matter of human biology – not a matter of attitude.<sup>36</sup> Biologically, to function properly, adolescents need more sleep coupled with later bedtimes and later wake up times than younger children and adults.

The long-term health consequences of lack of sleep are far more significant than many students and their families realize. Teens sleeping less than eight hours a night are not as healthy and report more absences due to illness. They are more likely to become obese, which leads to higher rates of type 2 diabetes, asthma, orthopedic problems, hypertension and heart disease later in life.<sup>37</sup> They also report significantly higher depression symptoms as well as greater use of caffeine, alcohol, and drugs.<sup>38</sup> Young people who do not get enough sleep night after night also carry a significant risk for drowsy driving, emotional and behavioral problems such as irritability, poor impulse control, and becoming perpetrators or victims of violence.<sup>39</sup>

Sleep deprived students also do not perform as well in everything from academics to athletics.<sup>40</sup> They are less able to be alert, pay attention, solve problems, and retain information.<sup>41</sup> By inhibiting optimal academic performance, lack of sleep may ultimately hurt a student’s opportunity and economic future.

A Brookings Institution report found that the academic benefit of later start times, assuming students sleep more, would be equivalent to about two additional months of schooling calculated to about \$17,500 to a student’s earning over their lifetime.<sup>42</sup>

A newly released report by the RAND Corporation quantified the “costs” to society of early high school start times in terms of lost income due to impaired academic and professional performance and car crashes for teens who are sleep-deprived.<sup>43</sup> The report projected annual gains to the U.S. economy of nearly \$9.3 billion over 15 years with a cumulative gain of \$140

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<sup>33</sup> (National Sleep Foundation)

<sup>34</sup> (Wahlstrom, 2017)

<sup>35</sup> (Wahlstrom, 2017)

<sup>36</sup> (Wahlstrom, 2017)

<sup>37</sup> (Sally Ibrahim MD, 2012)

<sup>38</sup> (Kyla Wahlstrom, 2014)

<sup>39</sup> (National Sleep Foundation)

<sup>40</sup> (National Sleep Foundation)

<sup>41</sup> (National Sleep Foundation)

<sup>42</sup> (Carroll, 2017)

<sup>43</sup> (Wahlstrom, 2017)

billion, if high schools started nationwide at 8:30 a.m. rather than the earlier hours that are common.<sup>44</sup>

Interestingly, sleep deprivation also affects the workforce after high school. Lack of sleep costs the U.S. economy as much as \$411 billion in lost productivity every year due to the absenteeism, presenteesim (working while sick) and mortality.<sup>45</sup> Researchers suggest that the surest way to regain these productivity losses is for workers to get another one to two hours of sleep each day. They estimate that this would boost the economy by around \$226 million every year.<sup>46</sup>

## Suggestions for Improving Sleep

While this report informs whether to change LAPS school start times, it is noteworthy that there are several ways to improve sleep. Experts' recommendations are fairly common sense and include:

### **ADJUSTING LIGHTING AT HOME AND SCHOOL**

Expose students to bright lights and more daylight during the day and dimmer light in the evening and off at bedtime.<sup>47</sup>

### **LIMITING THE USE OF SOCIAL MEDIA AND SCREEN TIME BEFORE BED**

Use of social media has been shown to increase sleep disruptions for teens, reducing the amount of sleep they get each day.<sup>48</sup> The blue light screens emit keeps our brains awake by suppressing the release of melatonin.<sup>49</sup> In addition, recent studies have shown that the use of smart phones and social media are far more harmful in themselves to a student's mental health and well-being beyond preventing sleep. Increased night-time mobile phone use is also directly associated with students' decreased enjoyment in school, an increase in externalizing behaviors such as students disobeying rules, physical aggression, and threatening others, a decrease in self-esteem and capacity to cope.<sup>50</sup>

Studies show that teen emotional health has been in a decline since 2007 coinciding with the introduction of smartphones.<sup>51</sup> Compared to millennials who also had access to the internet but not continual connectivity, teens in this "iGen" generation are not hanging out as much with friends, are in no rush to drive, dating less, and getting less sleep. Most alarming, despite their continual connectivity, they are lonely.<sup>52</sup> Rates of teen depression and suicide have skyrocketed since 2011 when the number of Americans who owned a smart phone crossed over 50

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<sup>44</sup> (Hafner, 2017)

<sup>45</sup> (RAND Review, 2017)

<sup>46</sup> (RAND Review, 2017)

<sup>47</sup> (University of Surrey, 2017)

<sup>48</sup> (Lynette Vernon K. L., 2016)

<sup>49</sup> (Katherine M. Kidwell, 2015)

<sup>50</sup> (Vernon, 2017)

<sup>51</sup> (Smerconish, 2017)

<sup>52</sup> (Smerconish, 2017)

percent.<sup>53</sup> Experts suggest that besides limiting screen time, teens should regularly engage in in-person activities which are more fulfilling and beneficial to their health and wellness.<sup>54</sup>

**USING “MINDFULNESS” AND “DISTRACTION BLOCKER” APPS**

These apps can help students focus by blocking websites and other apps that normally distract a student from study and sleep.<sup>55</sup>

**INCORPORATING SLEEP HYGIENE INTO SCHOOL HEALTH AND WELLNESS CURRICULUMS**

Educating parents and children on the importance of sleep, the recommended amount of sleep for children based on their age, and how to improve sleep hygiene has proven helpful. Positive sleeping hygiene habits and behaviors include:<sup>56</sup>

- Create and maintain a regular bedtime schedule (e.g., in bed by 8 p.m. each night).
- Follow a consistent bedtime routine each night.
- Be physically active during the day and engage in in-person activities.
  - Exercise may also prevent adolescents’ seep problems that persist into adulthood.<sup>57</sup>
- Do not consume caffeine in the afternoon or evening.
- No heavy late-night snacks.
- Spend time close to bedtime “winding down” with quiet activities like reading.
- Do not look at any screens for an hour before bed. Institute a media curfew – no television, videogames, or smart phones.
- Make sure the room is dark, cool and quiet. Remove the nightlight and close the curtains.
- Remove everything that distracts from sleep including pets.
- Use beds for sleeping only.

<b>WHEN SHOULD YOUR CHILD GO TO BED?</b>							
<b>Wake-up Time</b>							
	<b>6:00 AM</b>	<b>6:15 AM</b>	<b>6:30 AM</b>	<b>6:45 AM</b>	<b>7:00 AM</b>	<b>7:15 AM</b>	<b>7:30 AM</b>
<b>Sleeping Time</b>							
<b>5 years</b>	6:45 PM	7:00 PM	7:15 PM	7:30 PM	7:30 PM	8:00 PM	8:15 PM
<b>6 years</b>	7:00 PM	7:15 PM	7:30 PM	7:30 PM	8:00 PM	8:15 PM	8:30 PM
<b>7 years</b>	7:15 PM	7:15 PM	7:30 PM	8:00 PM	8:15 PM	8:30 PM	8:45 PM
<b>8 years</b>	7:30 PM	7:30 PM	8:00 PM	8:15 PM	8:30 PM	8:45 PM	9:00 PM
<b>9 years</b>	7:30 PM	8:00 PM	8:15 PM	8:30 PM	8:45 PM	9:00 PM	9:15 PM
<b>10 years</b>	8:00 PM	8:15 PM	8:30 PM	8:45 PM	9:00 PM	9:15 PM	9:30 PM
<b>11 years</b>	8:15 PM	8:30 PM	8:45 PM	9:00 PM	9:15 PM	9:30 PM	9:45 PM
<b>12 years</b>	8:15 PM	8:30 PM	8:45 PM	9:00 PM	9:15 PM	9:30 PM	9:45 PM

<sup>53</sup> (Twenge, 2017)

<sup>54</sup> (Smerconish, 2017)

<sup>55</sup> (Altrogge, 2016)

<sup>56</sup> (Katherine M. Kidwell, 2015)

<sup>57</sup> (AFP Relaxnews, 2017)



Understanding the importance of students of all ages getting enough sleep Wilson Elementary School in Kenosha, WI created the above bedtime and wake-up time guide for parents.<sup>58</sup> While parents and experts see merits in this guidance, it further highlights how difficult it is to provide your children with enough time to sleep particularly for working parents and considering the time demands of homework and other after-school activities.<sup>59</sup>

### **MOVING HIGH SCHOOL AND MIDDLE SCHOOL START TIMES TO 8:30 A.M. OR LATER**

Due to the biological sleep rhythms of adolescents, the American Academy of Pediatrics (AAP), the American Medical Association, the Centers for Disease Control and Prevention and the American Academy of Sleep Medicine recommend that middle and high schools delay the start of class to 8:30 a.m.<sup>60</sup> Doing so will align school schedules to adolescents' sleep-wake cycles that begin to shift up to two hours later in the day at the start of puberty, states an AAP report.<sup>61</sup>

Most studies on adolescents and sleep provide evidence that delaying school start time increases weeknight sleep duration among adolescents, primarily by delaying rise times.<sup>62</sup> Most of the studies saw a significant increase in sleep duration even with relatively small delays in start times of half an hour or so.<sup>63</sup> Later start times also generally corresponded to improved attendance, less tardiness, less falling asleep in class, better grades, and fewer motor vehicle crashes.<sup>64</sup>

For very early start times, as in some U.S. school districts, any benefit gained from delaying school start times could be lost unless it is coupled with good sleep hygiene habits including strict limits on the amount of evening artificial light consumption such as that emitted from screens.<sup>65</sup>

Some experts are not certain that later start times will ensure that students receive 8-10 hours of sleep per day. They argue that students will stay up even later at night and get up even later in the morning.<sup>66</sup>

### **U.S. NAVY – SLEEP PROTOCOL FOR OPTIMAL READINESS**

Parents and educators who seek optimal school and career readiness for students may be interested in looking to the U.S. Navy's example. Recognizing the importance of sleep for optimal readiness, the U.S. Navy has promoted a protected sleep concept for its sailors. The concept is a combination of sleep hygiene and shift scheduling to match human's circadian

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<sup>58</sup> (Wilson Elementary School, n.d.)

<sup>59</sup> (Bologna, 2015)

<sup>60</sup> (Wahlstrom, 2017)

<sup>61</sup> (American Academy of Pediatrics, 2014)

<sup>62</sup> (Wheaton, 2016)

<sup>63</sup> (Wheaton, 2016)

<sup>64</sup> (Wheaton, 2016)

<sup>65</sup> (University of Surrey, 2017)

<sup>66</sup> (University of Surrey, 2017)

rhythms. Sailors must be able to be alert throughout their shifts and able to make accurate split second life and death decisions when necessary. U.S. Navy leaders found that sleep deprivation rather than making sailors tougher, actually made them less effective and more apt to make mistakes. The Naval Post Graduate School now devotes an entire website on how to implement sleep and crew endurance protocols.<sup>67</sup>

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<sup>67</sup> (Naval Postgraduate School, n.d.)

### Chapter 3

# CHALLENGES OF IMPLEMENTING LATER START TIMES

## Practical Student and Family Impacts

In April 2017, the LAHS Start Time Working Group surveyed students, parents and staff about school start times. Over 450 students and 320 parents completed the survey. Approximately 60 percent of students and staff, and just over 50 percent of parents, preferred the current schedule over a later schedule. Most LAPS students predicted they would get more sleep with a later start time.<sup>68</sup> However, the trade-off for some students seemed to be that more sleep could mean less time for extracurricular activities, work, study and family responsibilities.<sup>69</sup>

Common concerns for students, parents and staff centered around how students will have enough time in the afternoon and evening to work, participate in extracurricular activities, do homework, and receive additional academic assistance like tutoring.<sup>70</sup> Some are also concerned about students consistently missing afternoon classes due to extracurricular competitions and events, and consequently how to find time for make-up lessons and exams. (See Appendix A for a table of Los Alamos High School competing school district start times.)

Staff who are parents of school-age children and who also lead after-school activities may not feel they have enough time after-school to do both, leaving schools without coaches and activity sponsors.<sup>71</sup>

## Transportation

Much of the ability to shift to later start times is dependent on a school district's capacity to change school bus schedules without substantially adding transportation costs. Community traffic patterns are another consideration for the busing schedules. Los Alamos has three main roads and over 18,000 cars traveling into the city each day, most going to Los Alamos National Labs. The heaviest traffic time is between 7:30-8:15 am.<sup>72</sup> If a car accident occurs, detour options are limited and can be time consuming, resulting in motor vehicles traveling a longer route or idling in traffic.

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<sup>68</sup> (LAHS Start Time Working Group, 2017)

<sup>69</sup> (LAHS Start Time Working Group, 2017)

<sup>70</sup> (LAHS Start Time Working Group, 2017)

<sup>71</sup> (LAHS Start Time Working Group, 2017)

<sup>72</sup> (Rosenbaum, 2017)

Some school districts who have switched to later start times have utilized city public transportation systems to alleviate transportation costs and increased traffic associated with those students starting school and ending school later in the day.<sup>73</sup> The city of Los Alamos currently provides free public transportation with stops near the middle and high school.

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<sup>73</sup> (National Sleep Foundation)

## Chapter 4

# CASE STUDIES

In recent years, hundreds of schools in 45 states shifted to later start times.<sup>74</sup> Here in New Mexico, Las Cruces Public Schools moved its middle and high school start times to 9 a.m. in 2011.<sup>75</sup> And in Santa Fe, Santa Fe High School starts the day at 8:45 a.m.<sup>76</sup>

However, many school systems around the nation opted *not* to change – facing challenges like those presented in the previous chapter. The following case studies illustrate districts that either:

- Navigated the changes successfully
- Experienced mixed results
- Are facing significant challenges or opposition

The case studies also offer examples of how different school districts handled transportation and community input. For example, the issue of athletes missing afternoon classes due to competitions was resolved by a Massachusetts high school principal who made a simple request to a competing school that the games start later in the day. The competing school agreed.<sup>77</sup>

### **ARLINGTON, VA: TRAIL BLAZER FOR LATER START TIMES**

Arlington schools implemented late start time policy in 2001 after a two-year review and extensive public outreach process. Arlington’s major challenge was to incorporate the following assumptions into a plan for change: improved instruction and academic achievement; ensured student and public safety; no significant disadvantage to any other group or school level; no significant compromise in participation in extracurricular activities; and transportation costs could not increase. A post-implementation stakeholder survey indicated that with a later start time high school students felt more alert and prepared. In addition, no teachers left their position due to the change, and parents felt their children had better attitudes due to more sleep.<sup>78</sup>

### **DENVER, CO: SUPPORTED STUDENT CHOICE WITH TWO START TIMES**

Denver’s late start time plan allowed students to choose their start time options so that the students could start at 7:30 a.m. each day and end at 2:15 p.m., or start later and end as late as 4:15 p.m. To avoid increased transportation costs the district enlisted the help of the local

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<sup>74</sup> (Wahlstrom, 2017)

<sup>75</sup> (Start School Later, Healthy Hours, 2017)

<sup>76</sup> (Los Alamos Public Schools, 2016)

<sup>77</sup> (Putterman, 2017)

<sup>78</sup> (National Sleep Foundation)

transportation authority providing high school students bus passes to ride public transit for free. Extending the hours school are open has reportedly provided the district with additional benefits including: making computer and science labs more available for student use; providing tutoring opportunities, study skills classes and ACT/SAT prep courses; and allowing students to take extra classes to graduate sooner or catch up.<sup>79</sup>

#### **WILTON, CT: MIXED RESULTS FROM FLIPPING ELEMENTARY & MIDDLE/HIGH SCHOOL TIMES**

A public sleep awareness and outreach campaign were critical to the Wilton school district implementing a later middle and high school start time. After flipping the elementary with middle and high school start times, parents and teachers reported improvements in student behavior and participation in activities increased. Surveys showed that students were sleeping an additional 35 minutes to one hour per day. There was no noticeable improvement in attendance and tardiness rates however, and there were problems for students who had to be pulled out of class early for away games throughout the year. Student grades generally showed an upward trend but not a definitive increase in this high-achieving district.<sup>80</sup>

#### **GREENWICH, CT: TRAFFIC PROBLEMS RESULTED FROM CHANGE TO START TIME**

Starting in 2016-2017, Greenwich High School shifted its opening bell from 7:30 a.m. to a staggered start between 8 a.m. and 8:45 a.m. Residents complained that city traffic worsened considerably after the change. It resulted in more parent and school vehicles on the road at the same time professionals are trying to get to work. “With this new start time at schools – of course heavily into rush hour traffic – it’s making congestion everywhere,” said Sergeant Patrick Smyth, head of the Greenwich Police Traffic Division. The congestion contributed to more traffic violations, including speeding, illegal U-turns, and parents stopping in the middle of the streets to drop off their students. In response to the complaints, the district is gathering community feedback for the 2017-18 year. In addition to the traffic concerns, the district will look at data on attendance, teacher sick days, car accidents and other measures of school life to evaluate the new start times. They also plan to issue surveys on student stress levels and sleep.<sup>81</sup>

#### **CHICAGO, IL: DISTRICT CHANGED SCHOOL TIMES WITHOUT STRONG COMMUNITY SUPPORT**

One of the nation’s largest school districts, Chicago Public Schools, switched school start times for more than 80 schools in 2015.<sup>82</sup> Most high schools shifted later, from 8:00 a.m. to 9:00 a.m., while elementary schools moved the start times up to 7:30 a.m. or 7:45 a.m. Transportation cost-savings were a primary reason for the change to the budget-strapped district. However, many parents and students disagreed with the change and even protested before the school year started. There were many reasons for this opposition including: financial problems for students who work after school to help their families or care for younger siblings; challenges to

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<sup>79</sup> (National Sleep Foundation)

<sup>80</sup> (National Sleep Foundation)

<sup>81</sup> (Munson, 2017)

<sup>82</sup> (Ahern, 2015)

practice and game times for students who play sports; homework completion concerns; and safety fears about students walking home in the dusk or dark during winter months.<sup>83</sup>

**MONTGOMERY COUNTY, MD: TEACHERS UNSUCCESSFULLY OPPOSED LATE START TIMES**

In 2015, teachers overwhelmingly opposed later high school start times in Montgomery County, MD, though most parents preferred the proposed change. The teachers' viewpoints were captured in a survey answered by 12,000 elementary, middle and high school educators (or half the school district's teachers). Of those, 63 percent were against changing school start times. They expressed doubt that the changes would create a positive effect on academic achievement. Other concerns mirrored the Chicago example above (impacts to low-income families, concerns about care for younger siblings, and participation in extracurricular activities.)<sup>84</sup>

**TAKE-AWAYS**

Each of these examples present learning opportunities for LAPS and the communities it serves. They illustrate the importance of careful planning, thoughtful stakeholder input including with leaders of after-school activities, upfront coordination with public safety and transportation officials, and ongoing evaluation of changes if enacted.

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<sup>83</sup> (Ahern, 2015)

<sup>84</sup> (Zauzmer, 2015)

# CONCLUSION

The LAPS community forums will provide an opportunity for students, parents, educators and community leaders to consider late start times as a strategy for improving LAPS students' health and wellness and their academic performance and growth.

Changing school start times is about more than just when the bell rings. It is about how students get to school, how they are engaged once they get there, and how they are supported when they are home. As the potential benefits and challenges of school start times are considered, LAPS and the communities it serves are undoubtedly committed to bringing long-term good health, wellness and opportunities to all students.



## Appendix A

## COMPETING DISTRICT START TIMES

Source: LAPS Staff, 2017

LAHS Competing School District Start Times		
School	Start	End
Belen	7:15	2:20
Cleveland	7:20	2:30
Albuquerque Public Schools	7:25	2:25
Cottonwood Classical	7:35	3:00
Pojoaque	7:35	2:58
Lordsburg	7:45	3:45
Quemado	7:45	3:55
Texico	7:50	3:45
Albuquerque Academy	8:00	3:32
Aztec	8:00	3:22
Gallup-McKinley Public Schools	8:00	3:25
Rehoboth	8:00	3:05
Roswell/Goddard	8:00	3:05
Santa Fe Prep	8:00	3:25
Santa Fe Waldorf	8:00	3:10
Shiprock	8:00	3:25
Portales	8:05	3:05
Alamo Navajo School Board, Inc.	8:15	3:30
Monte Del Sol (Santa Fe)	8:30	3:40
Capital High School (Santa Fe)	8:40	3:40
Santa Fe High School	8:45	3:55

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