



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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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.¹ 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.² 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.³

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.⁴

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.⁵ 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. or later. Some experts are not certain that late start times will ensure 8-10 hours of sleep per

¹ (NM Public Education Department, 2016)

² (Los Alamos Public Schools, 2016)

³ (NM Department of Health, 2015)

⁴ (Wheaton, 2016)

⁵ (National Sleep Foundation)

night. They argue that students will stay up even later at night and get up even later in the morning.⁶

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.⁷ 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.⁸ 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.

⁶ (University of Surrey, 2017)

⁷ (Wheaton, 2016)

⁸ (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.⁹ 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.

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 Bingaman and Pete Domenici.

⁹ (NM Public Education Department, 2016)

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.¹⁰ 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.¹¹

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).¹²

How are LAPS Students Doing?

ACADEMICS

Consistently recognized as a top school district, LAPS was ranked 14th in the nation in 2015 by the U.S. Department of Education.¹³ 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.¹⁴ The district also has a better than average habitual truancy rate of only 1.2 percent.¹⁵

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

¹⁰ (Sperling's Best Places, n.d.)

¹¹ (NM Public Education Department, 2016)

¹² (NM Public Education Department, 2016)

¹³ (Los Alamos Monitor, 2015)

¹⁴ (Public School Review), (Institute of Education Sciences IES, 2016)

¹⁵ (Kids Count Data Center, 2015)

¹⁶ (Los Alamos Public Schools, 2016)

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.¹⁷ 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.¹⁸ Among high school students, over 36 percent report texting or emailing while driving.¹⁹ Some students also report experiencing profound depression and hopelessness.²⁰

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.”²¹ 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.²² 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.²³ Many LAPS students also work after school to earn additional spending money and some to help support their family’s income.²⁴

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

¹⁷ (NM Department of Health, 2015)

¹⁸ (NM Department of Health, 2015)

¹⁹ (NM Department of Health, 2015)

²⁰ (NM Department of Health, 2015)

²¹ (Los Alamos Public Schools, 2016)

²² (LAHS Start Time Working Group, 2017)

²³ (Los Alamos Public Schools, 2017)

²⁴ (LAHS Start Time Working Group, 2017)

²⁵ (LAHS Start Time Working Group, 2017)

²⁶ (LAHS Start Time Working Group, 2017)

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
Preschoolers 3-5 years	10 – 13 hours
School-aged children	9-11 hours
Teenagers 14-17	8-10 hours
Adults 18+	7-9 hours

*National Sleep Foundation, 2017*²⁷

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.²⁸ In an informal LAPS student survey, some students reported that their top two sources of stress were homework and managing fatigue and tiredness.²⁹

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.³⁰ The average teen obtains less than seven hours of sleep on school nights rather than the recommended range of eight to 10 hours.³¹ Most Los Alamos High School students reported “never” or “sometimes” getting eight or more hours of sleep.³²

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 to wake up later in the morning.³³ Biologically speaking, for most teens, the secretion of melatonin does not begin until about 10:45 p.m. and continues until 8 a.m.³⁴ This means that most teenagers are unable to fall asleep until the melatonin secretion stops. This melatonin

²⁷ (National Sleep Foundation, 2017)

²⁸ (UCLA Health, UCLA Sleep Disorders Center)

²⁹ (Hargraves, 2017)

³⁰ (UCLA Health, UCLA Sleep Disorders Center)

³¹ (Wheaton, 2016)

³² (LAHS Start Time Working Group, 2017)

³³ (National Sleep Foundation)

³⁴ (Wahlstrom, 2017)

secretion pattern changes back to an individual’s genetically preferred sleep and wake time once puberty is over.³⁵

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.³⁶ 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.³⁷ They also report significantly higher depression symptoms as well as greater use of caffeine, alcohol, and drugs.³⁸ 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.³⁹

Sleep deprived students also do not perform as well in everything from academics to athletics.⁴⁰ They are less able to be alert, pay attention, solve problems, and retain information.⁴¹ 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.⁴²

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.⁴³ The report projected annual gains to the U.S. economy of nearly \$9.3 billion over 15 years with a cumulative gain of \$140 billion, if high schools started nationwide at 8:30 a.m. rather than the earlier hours that are common.⁴⁴

³⁵ (Wahlstrom, 2017)

³⁶ (Wahlstrom, 2017)

³⁷ (Sally Ibrahim MD, 2012)

³⁸ (Kyla Wahlstrom, 2014)

³⁹ (National Sleep Foundation)

⁴⁰ (National Sleep Foundation)

⁴¹ (National Sleep Foundation)

⁴² (Carroll, 2017)

⁴³ (Wahlstrom, 2017)

⁴⁴ (Hafner, 2017)

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, presenteeism (working while sick) and mortality.⁴⁵ 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.⁴⁶

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.⁴⁷

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.⁴⁸ The blue light screens emit keeps our brains awake by suppressing the release of melatonin.⁴⁹ 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.⁵⁰

Studies show that teen emotional health has been in a decline since 2007 coinciding with the introduction of smartphones.⁵¹ 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.⁵² Rates of teen depression and suicide have skyrocketed since 2011 when the number of Americans who owned a smart phone crossed over 50 percent.⁵³ 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.⁵⁴

⁴⁵ (RAND Review, 2017)

⁴⁶ (RAND Review, 2017)

⁴⁷ (University of Surrey, 2017)

⁴⁸ (Lynette Vernon K. L., 2016)

⁴⁹ (Katherine M. Kidwell, 2015)

⁵⁰ (Vernon, 2017)

⁵¹ (Smerconish, 2017)

⁵² (Smerconish, 2017)

⁵³ (Twenge, 2017)

⁵⁴ (Smerconish, 2017)

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.⁵⁵

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:⁵⁶

- 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.⁵⁷
- 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.

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

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.⁵⁸ While

⁵⁵ (Altrogge, 2016)

⁵⁶ (Katherine M. Kidwell, 2015)

⁵⁷ (AFP Relaxnews, 2017)

⁵⁸ (Wilson Elementary School, n.d.)

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.⁵⁹

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.⁶⁰ 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.⁶¹

Most studies on adolescents and sleep provide evidence that delaying school start time increases weeknight sleep duration among adolescents, primarily by delaying rise times.⁶² 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.⁶³ Later start times also generally corresponded to improved attendance, less tardiness, less falling asleep in class, better grades, and fewer motor vehicle crashes.⁶⁴

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.⁶⁵

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.⁶⁶

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 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

⁵⁹ (Bologna, 2015)

⁶⁰ (Wahlstrom, 2017)

⁶¹ (American Academy of Pediatrics, 2014)

⁶² (Wheaton, 2016)

⁶³ (Wheaton, 2016)

⁶⁴ (Wheaton, 2016)

⁶⁵ (University of Surrey, 2017)

⁶⁶ (University of Surrey, 2017)

mistakes. The Naval Post Graduate School now devotes an entire website on how to implement sleep and crew endurance protocols.⁶⁷

⁶⁷ (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.⁶⁸ 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.⁶⁹

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.⁷⁰ 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.⁷¹

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.⁷² 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.

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

⁶⁸ (LAHS Start Time Working Group, 2017)

⁶⁹ (LAHS Start Time Working Group, 2017)

⁷⁰ (LAHS Start Time Working Group, 2017)

⁷¹ (LAHS Start Time Working Group, 2017)

⁷² (Rosenbaum, 2017)

those students starting school and ending school later in the day.⁷³ The city of Los Alamos currently provides free public transportation with stops near the middle and high school.

⁷³ (National Sleep Foundation)

Chapter 4

CASE STUDIES

In recent years, hundreds of schools in 45 states shifted to later start times.⁷⁴ Here in New Mexico, Las Cruces Public Schools moved its middle and high school start times to 9 a.m. in 2011.⁷⁵ And in Santa Fe, Santa Fe High School starts the day at 8:45 a.m.⁷⁶

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.⁷⁷

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.⁷⁸

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 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

⁷⁴ (Wahlstrom, 2017)

⁷⁵ (Start School Later, Healthy Hours, 2017)

⁷⁶ (Los Alamos Public Schools, 2016)

⁷⁷ (Putterman, 2017)

⁷⁸ (National Sleep Foundation)

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.⁷⁹

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.⁸⁰

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.⁸¹

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 2015.⁸² 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 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.⁸³

⁷⁹ (National Sleep Foundation)

⁸⁰ (National Sleep Foundation)

⁸¹ (Munson, 2017)

⁸² (Ahern, 2015)

⁸³ (Ahern, 2015)

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.)⁸⁴

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.

⁸⁴ (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

BIBLIOGRAPHY

- AFP Relaxnews. (2017, Sept 30). New research looks into causes of teenage sleep problems . *AFP Relaxnews*. Retrieved from <http://www.msn.com/en-us/health/healthtrending/new-research-looks-into-causes-of-teenage-sleep-problems/ar-AA5CZqX?li=AA5LBhu&ocid=spartandhp>
- Ahern, M. A. (2015, Aug 5). *CPS students protest changing start times as new school year approaches*. Retrieved Sept 29, 2017, from NBC Chicago Channel 5: <http://www.nbcchicago.com/blogs/ward-room/CPS-Students-Protest-Changing-Start-Times-320828591.html>
- Altrogge, S. (2016, July 21). *Zapier*. Retrieved Sept 13, 2017, from [zapier.com](https://zapier.com/blog/stay-focused-avoid-distractions/): <https://zapier.com/blog/stay-focused-avoid-distractions/>
- American Academy of Pediatrics. (2014). *Let Them Sleep: AAP Recommends Delaying Start Times of Middle and High Schools to Combat Teen Sleep Deprivation*. Retrieved Sept 1, 2017, from <https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/let-them-sleep-aap-recommends-delaying-start-times-of-middle-and-high-schools-to-combat-teen-sleep-deprivation.aspx>
- American Medical Association AMA. (2016, June 14). *AMA Supports Delayed School Start Times to Improve Adolescent Wellness*. Retrieved Sept 1, 2017, from www.ama-assn.org: <https://www.ama-assn.org/ama-supports-delayed-school-start-times-improve-adolescent-wellness>
- Beale, A. (2014, August 28). Los Alamos ranked as 2nd most-affluent city in America. *Albuquerque Business First*. Retrieved September 1, 2017, from <https://www.bizjournals.com/albuquerque/news/2014/08/28/los-alamos-ranked-as-2nd-most-affluent-city-in.html>
- Bologna, C. (2015, Sept 4). Unrealistic Bedtime Rules Shared by Elementary School Go Viral. *Huffington Post*. Retrieved from http://www.huffingtonpost.com/entry/unrealistic-bedtime-rules-shared-by-elementary-school-go-viral_us_55e9a723e4b093be51bb33e8
- Buckhalt, J. A. (2017, Feb 27). Earlier School Start Times for Elementary School Students. *Psychology Today*. Retrieved Sept 1, 2017, from <https://www.psychologytoday.com/blog/child-sleep-zzzs/201702/earlier-school-start-times-elementary-school-students>
- Carroll, A. E. (2017, Sept 13). The Economic Case for Letting Teenagers Sleep a Little Later. *New York Times*. Retrieved Oct 2, 2017, from <https://www.nytimes.com/2017/09/13/upshot/the-economic-case-for-letting-teenagers-sleep-a-little-later.html?smid=fb-nytimes&smtyp=cur>
- Centers for Disease Control and Prevention. (2015). *School Start Times for Middle School and High School Students — United States, 2011–12 School Year*. CDC. Retrieved Sept 1, 2017, from <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a1.htm>
- Greenwald, D. (2015, March 6). Researchers Disagree with Later Start Time Findings. *The Davis Vanguard*. Retrieved Sept 1, 2017, from <http://www.davisvanguard.org/2015/03/researchers-disagree-with-later-start-time-findings/>
- Hafner, M. (2017). *Later school start times in the U.S., An economic analysis*. Rand Corporation. Retrieved Sept 26, 2017, from https://www.rand.org/pubs/research_reports/RR2109.html
- Hargraves, B. a.-N. (2017, Aug 22). LAPS School Board Members. (P. Blackwell, Interviewer)
- Institute of Education Sciences IES. (2016). *Public High School Graduation Rate Reaches New High, but Gaps Persist*. IES. Retrieved from https://ies.ed.gov/whatsnew/pressreleases/10_17_2016.asp
- Irving, D. (2017). *The Costs of Poor Sleep Are Staggering*. Rand. Retrieved Sept 1, 2017, from <https://www.rand.org/blog/rand-review/2017/03/the-costs-of-poor-sleep-are-staggering.html>
- Katherine M. Kidwell, M. H. (2015). *Sleep and School*. University of Nebraska-Lincoln. Retrieved Sept 13, 2017, from http://k12engagement.unl.edu/strategy-briefs/Sleep%20and%20School%2012-30-15_0.pdf
- Kids Count Data Center. (2015). *Habitual truancy rates, New Mexico Locations*. Retrieved Sept 1, 2017, from <http://datacenter.kidscount.org/data/tables/6719-habitual-truancy-rates#detailed/10/4723-4811/true/1145,1229,1483,1549/any/13801>
- Kyla Wahlstrom, B. D. (2014). *Examining the Impact of Later High School Start Times on the Health and Academic Performance of High School Students: A Multi-Site Study*. University of Minnesota, College of Education and Human Development. Center for Applied Research and Educational Improvement. Retrieved Sept 1, 2017, from <https://conservancy.umn.edu/handle/11299/162769>
- LAHS Start Time Working Group. (2017). *Status Report: School Start Time Surveys*. Los Alamos Public Schools. Retrieved Sept 29, 2017
- Los Alamos Monitor. (2015, Sept 8). LAPS ranked best school district in state. *Los Alamos Monitor*. Retrieved Sept 26, 2017, from <http://www.lamonitor.com/content/laps-ranked-best-school-district-state>

- Los Alamos Public Schools. (2016). *Los Alamos Public Schools Strategic Plan*. Los Alamos: Los Alamos Public Schools. Retrieved Sept 22, 2017
- Los Alamos Public Schools. (2017, Sept 21). *LAPS students in athletics and activities*. Retrieved Sept 21, 2017
- Lynette Vernon, B. L. (2015, July 13). Adolescent Problematic Social Networking and School Experiences: The Mediating Effects of Sleep Disruptions and Sleep Quality. *Cyberpsychology, Behavior, and Social Networking*, 18(7). Retrieved Sept 1, 2017, from <http://online.liebertpub.com/doi/abs/10.1089/cyber.2015.0107?src=recsys&journalCode=cyber&>
- Lynette Vernon, K. L. (2016, Aug 5). Tracking Effects of Problematic Social Networking on Adolescent Psychopathology: The Mediating Role of Sleep Disruptions. *Journal of Clinical Child and Adolescent Psychology*, 46(2 Sleep and Developmental Psychopathology). Retrieved Sept 1, 2017, from <http://www.tandfonline.com/doi/abs/10.1080/15374416.2016.1188702?journalCode=hcap20&>
- Moyer, M. W. (2016, May 10). In Defense of Absurdly Early Bedtimes. *Slate*. Retrieved Sept 1, 2017, from http://www.slate.com/articles/double_x/the_kids/2016/05/put_your_kids_to_bed_early_to_make_them_smarter_happier_and_fitter.html
- Munson, E. (2017, Sept 9). Later school start times are causing transportation problems. *Greenwich Time*. Retrieved from <http://www.greenwichtime.com/local/article/Later-school-start-times-are-causing-12185525.php>
- National Sleep Foundation. (2017). *How much sleep do babies and kids need?* National Sleep Foundation. Retrieved Sept 12, 2017, from <https://sleepfoundation.org/excessivesleepiness/content/how-much-sleep-do-babies-and-kids-need>
- National Sleep Foundation. (n.d.). *Backgrounder: Later School Start Times*. Retrieved Sept 1, 2017, from <https://sleepfoundation.org/sleep-news/backgrounder-later-school-start-times>
- National Sleep Foundation. (n.d.). *Changing School Start Times: Arlington, Virginia*. The National Sleep Foundation. Retrieved Aug 2, 2017
- National Sleep Foundation. (n.d.). *Changing School Start Times: Denver, Colorado*. The National Sleep Foundation. Retrieved Aug 2, 2017
- National Sleep Foundation. (n.d.). *Changing School Start Times: Wilton, Connecticut*. Retrieved Aug 2, 2017
- National Sleep Foundation. (n.d.). *Teens and Sleep*. Retrieved Sept 1, 2017, from <https://sleepfoundation.org/sleep-topics/teens-and-sleep>
- Naval Postgraduate School. (n.d.). *About Crew Endurance*. Retrieved Sept 1, 2017, from Naval Postgraduate School: <https://my.nps.edu/web/crewendurance/about-crew-endurance>
- NM Department of Health. (2011). *Test Report*. Corrales: Balas Publishing.
- NM Department of Health. (2015). *New Mexico Youth Risk and Resiliency Survey, High School Survey Results, Los Alamos Public Schools, Grades 9-12, and middle school*. Retrieved from <http://www.youthrisk.org/>
- NM Public Education Department. (2010). *About Us*. Retrieved May 3, 2011, from www.ped.nm.us
- NM Public Education Department. (2016). *Los Alamos Public Schools, School District Report Card 2015-2016*. Retrieved Sept 1, 2017, from http://webed.ped.state.nm.us/sites/conference/2016%20District%20Report%20Cards/041_LOS_ALAMOS_PUBLIC_SCHOOLS_DRC2016_.pdf
- Public School Review. (n.d.). *Los Alamos High School*. Retrieved Sept 1, 2017, from <https://www.publicschoolreview.com/los-alamos-high-school-profile>
- Putterman, A. (2017, April 12). How School Start Times Affect High-School Athletics. *The Atlantic*. Retrieved Sept 1, 2017, from <https://www.theatlantic.com/education/archive/2017/04/how-school-start-times-affect-high-school-athletics/522537/>
- RAND Review. (2017, March 1). *The Costs of Poor Sleep are Staggering*. Retrieved Aug 22, 2017, from <https://www.rand.org/blog/rand-review/2017/03/the-costs-of-poor-sleep-are-staggering.html>
- Rosenbaum, K. (2017, Sept 26). LAPS Transportation Director. (P. Blackwell, Interviewer)
- Sally Ibrahim MD, D. G. (2012). *Sleep Disorders and Obesity in Your Teen*. Cleveland Clinic. Retrieved Sept 13, 2017, from https://my.clevelandclinic.org/health/transcripts/1417_sleep-disorders-and-obesity-in-your-teen
- Smerconish, M. (2017, Sept 5). My Turn: Michael Smerconish: Smartphones are making teens miserable. *Providence Journal*. Retrieved Sept 25, 2017, from <http://www.providencejournal.com/opinion/20170905/my-turn-michael-smerconish-smartphones-are-making-teens-miserable>
- Sperling's Best Places. (n.d.). *Sperling's Best Places*. Retrieved Sept 28, 2017, from Sperling's Best Places: http://www.bestplaces.net/economy/city/new_mexico/los_alamos
- Start School Later, Healthy Hours. (2017, Sept 25). *Start School Later*. Retrieved from Start School later: <http://www.startschoollater.net/success-stories.html>
- The Hilarys Group Limited. (n.d.). *Sleep Calculator for Kids*. Retrieved Sept 1, 2017, from Web-Blinds: <https://www.web-blinds.com/resources/kids-sleep-calculator/>
- Thompson, J. (2011, February 1). Chief Operating Officer, Albuquerque Convention and Visitors Bureau. (P. I. Breeden, Interviewer) Retrieved 2011, from www.acvb.org???

- Twenge, J. (2017, Sept 15). PhD Professor of Psychology, San Diego State University. *Smartphones: the new teen mental health crisis?* (M. Smerconish, Interviewer) CNN. Retrieved from <http://www.cnn.com/videos/tv/2017/09/15/smartphones-the-new-teen-mental-health-crisis.cnn>
- UCLA Health, UCLA Sleep Disorders Center. (n.d.). *Sleep and Teens*. Retrieved Sept 1, 2017, from <http://sleepcenter.ucla.edu/sleep-and-teens>
- University of Surrey. (2017, March 24). *Mathematicians predict delaying school start times won't help sleep deprived teenagers*. University of Surrey. Retrieved Sept 1, 2017, from <https://www.surrey.ac.uk/mediacentre/press/2017/mathematicians-predict-delaying-school-start-times-won%E2%80%99t-help-sleep-deprived>
- Vernon, L. (2017, May 29). Mobile Phones in the Bedroom: Trajectories of Sleep Habits and Subsequent Adolescent Psychosocial Development. *Child Development*. Retrieved from <https://www.ncbi.nlm.nih.gov/labs/articles/28556891/>
- Wahlstrom, K. (2017, Sept 12). Sleepy teenage brains need school to start later in the morning. *The Conversation*. Retrieved Sept 22, 2017, from <https://theconversation.com/sleepy-teenage-brains-need-school-to-start-later-in-the-morning-82484>
- WebMD. (n.d.). *How much sleep do children need?* Retrieved Sept 1, 2017, from WebMD: <http://www.webmd.com/parenting/guide/sleep-children#1>
- Wheaton, A. a. (2016, April 3). School Start Times, Sleep, Behavioral Health, and Academic Outcomes, A Review of the Literature. *Journal of School Health*, 86(5), 363-381. Retrieved Sept 24, 2017, from <http://onlinelibrary.wiley.com/doi/10.1111/josh.12388/abstract?systemMessage=Wiley+Online+Library+will+be+unavailable+on+Saturday+7th+Oct+from+03.00+EDT+%2F+08%3A00+BST+%2F+12%3A30+IST+%2F+15.00+SGT+to+08.00+EDT+%2F+13.00+BST+%2F+17%3A30+IST+%2F+20.00+SGT>
- Wilson Elementary School. (n.d.). *Wilson Elementary School*. Retrieved Sept 1, 2017, from <http://wilson.kusd.edu/>
- Zauzmer, J. (2015, Feb 5). Teachers overwhelmingly oppose later high school start times in Montgomery. *The Washington Post*. Retrieved Sept 29, 2017, from https://www.washingtonpost.com/local/education/teachers-overwhelmingly-oppose-later-high-school-start-times-in-montgomery/2015/02/06/c53daf22-ae19-11e4-abe8-e1ef60ca26de_story.html?utm_term=.9d3e3dc26bb1



LAPS COMMUNITY FORUMS

Pros and Cons of Adjusting School Start Times

FINAL REPORT

- This report presents results from community forums on October 24-25, 2017 regarding school start times for the Los Alamos Public Schools District.

CONVENER

Los Alamos Public Schools

FACILITATOR

New Mexico First



Los Alamos
PUBLIC SCHOOLS



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EXECUTIVE SUMMARY

The Los Alamos Public Schools district, like many school districts around the country, is looking closely at adjusting K-12 school start times or more flexible schedules to better align with data on the amount of time students need to sleep and when. The purpose of this series of community and school forums was to engage the public and Los Alamos Public Schools stakeholders on whether to adjust school start times for LAPS. The first three focus areas for the school district are student well-being, student learning and teacher and staff well-being and excellence. These focus areas were the catalyst for convening these interactive feedback sessions.

Over 100 forum participants, which included students, parents, LAPS teachers and staff and community members, engaged in thoughtful discussions about factors that should be considered when making decisions about changing school start times. Many participants identified the difficult balance between serving students' need for more sleep and maintaining after-school extracurriculars, homework and family time. Participants also discussed factors including potential impacts on families living outside Los Alamos and those with economic challenges; coordination and care of younger children; transportation, traffic and bus schedules; coordination with the Los Alamos National Laboratory, Los Alamos County and local businesses; and the cost of any schedule change. Though most students expressed that they would like school to start later so they can get more sleep, they were reluctant to make a change that meant less time for extracurriculars and homework in the afternoon and evening. Comments from the over 200 people who took the LAPS online survey were consistent with those expressed by forum participants. (See Appendices for specific forum and survey comments.)

Participants gave mixed reviews for the proposed school start time options developed by the LAPS Transportation Department. Some participants favor a later start time and cited research that generally supports later wake-up times for middle school and high school students and suggests that it would improve student performance and quality of life. Others expressed concerns that the suggested changes might be too dramatic and result in too many logistical challenges.

Students, staff from Los Alamos High School and other community members suggested their own solutions offering that the district could instead make a shift within the current schedule, allowing additional sleep for students who want that time, while minimizing the impact on the rest of the day.

The Los Alamos School Board will review the feedback from these forums and results of the LAPS electronic community survey at its next meeting in November 2018. Any change to school schedules would begin with the 2018-2019 school year.

FOREWORD

Purpose of the Project

The purpose of this series of community and school forums was to engage the public and Los Alamos Public Schools stakeholders on whether to adjust school start times for LAPS schools including the high school, middle school, and elementary schools, and on how to optimally set school start times for LAPS students and their families. The first three focus areas for Los Alamos Public Schools are student well-being, student learning, and teacher and staff well-being and excellence, and these were the catalyst for organizing these interactive listening sessions.

Community Forum Process

During two days of community meetings, students, parents and caregivers, teachers, school administrators, business and community leaders, school board members, and other stakeholders provided input about the pros and cons of the current school schedule and the possible implications of two proposed start time options. The LAPS Transportation Department developed the two transportation options for discussion based on the number of buses required, traffic, state funding, and the availability of bus drivers.

The facilitated meetings included large group and small group discussion. All participants were invited to provide input. Most of the meetings also included group prioritization of the most important pros and cons to be considered when considering a schedule change.

Convener

Los Alamos Public Schools 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. 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. Established in 1986, the public policy organization offers 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.

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 Bingaman and Pete Domenici.

Report Authors

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

Next Steps

The Los Alamos School Board will review the feedback and results of an electronic community survey at the school board work session on November 30, 2018. The school board will base its decision on what is best for students. The public is encouraged to attend the work session. Any change to school schedules would begin with the 2018-2019 school year.

INTRODUCTION

Adjusting school start times has become a hot topic across the country, as school districts review research on sleep, especially for teenagers, and consider whether later start times may improve student academic performance, health, and wellness. On October 24-25, 2017, students, parents, school staff, school administrators, school board members, and community members all came together to discuss the potential benefits and challenges of later start times in the Los Alamos Public Schools district.

New Mexico First and LAPS facilitated meetings on:

October 24:

- 1:30 p.m. at Los Alamos Middle School: Middle School Staff and Parents
- 2:30 p.m. at Los Alamos Middle School: Middle School Students
- 5:30 p.m. at Los Alamos High School: Community Members

October 25:

- 11:30 a.m. at Los Alamos High School: High School Students
- 3:00 p.m. at Los Alamos High School: High School Staff
- 5:30 p.m. at Piñon Elementary School: Community Members

Meeting participants reviewed the existing school district schedule and two possible alternatives developed by the LAPS Transportation Department. (See Appendix A for the options discussed.) More than 100 people participated in discussions over the two days, and over 200 community members submitted feedback via the district's online survey. Comments from those who took the survey were consistent with those expressed by forum participants.

During the meetings, participants answered questions about what is working well and not working well with the current schedule, and about the potential pros and cons of the possible alternatives. In most meetings, participants also worked together to identify priority concerns that should be considered in the decision process.

This report provides an overview of the benefits and challenges that arose as common themes over the multiple meetings. The comments received each meeting are included in Appendix B.

COMMUNITY FEEDBACK

Forum participants provided a wide variety of comments on important factors affecting any possible change and potential advantages and disadvantages of two options developed by the LAPS Transportation Department. (See Appendix A for the options considered at the forums.) Many participants identified the difficult balance between serving students' need for more sleep and maintaining after school extracurriculars, homework and family time.

Factors Important to Forum Participants

STUDENT SLEEP

Participants at all forums noted that many students are tired in the morning, and that early morning school times affect students' abilities to be focused, alert, and effective during the day. Many students said that they currently wake between 5:30 a.m. and 7:00 a.m., and some said that they struggle to get out the door in time, skipping breakfast to get as much sleep as possible. Other students did say that they get enough sleep and tend to be early risers anyway. Some participants noted how important it is to support students' mental health, and that lack of sleep is associated with depression and diminished health, happiness and overall quality of life.

Some participants suggested that with a later start time even if students do not get more sleep (i.e. they stay up later), shifting their sleep schedule to a later wake-up time would be beneficial due to adolescents sleep circadian rhythm which has generally been shown to cause most teens to be alert later in the day. Some high school students stated that they are already up very late, often until midnight, and they dislike the idea of shifting to an even later bedtime. Some student participants said that they like to get to sleep at a "decent time." Other participants suggested that a shifted sleep schedule would fail to result in better quality sleep since students would still have to wake early for extracurriculars that were shifted to the earlier in the morning.

AFTERNOON ACTIVITIES

When evaluating late start time options, participants noted that the "end time" or when students finish their day must also be considered. Many forum participants expressed concerns about the importance of current afternoon activities and not disrupting activities that are important to students and families. Most students participate in sports or extracurricular activities during the school year. Some activities take place early in the morning before school, but most occur in the late afternoon or early evening. Under a later start time schedule, activities might begin later causing students to return home later in the evening.

A handful of students noted that practices for some sports, like soccer, need to be done before dark posing additional scheduling challenges. Another participant said that some activities already take place in the morning, and suggested that a later school start time could mean more

activities would switch to before school. Moving afternoon activities to morning could partially defeat the purpose of a school schedule change. Others wondered whether there would be changes to the availability and costs of before-school and after-school child care programs. One person stated that the current schedule does not allow enough time for elementary students to participate in clubs or enrichment activities.

Another factor frequently mentioned especially by students and parents was the need to stagger school release times so older siblings can assist in caring for and picking-up younger siblings after school. Several students said that they are responsible for picking up or watching their younger siblings, with both high school students and middle school students taking responsibility for younger students. These participants said that the order of school release is important for this reason, and a change that let elementary students out first would be challenging for some families.

Other afternoon activities discussed included after-school jobs, homework time, time with friends, down time and family time. One respondent did express a concern about students spending too much time “hanging out”, but others said that some free time is important. Some students said that later school release could make them arrive home at or after dinnertime, pushing the entire family’s schedule later.

ADDRESSING THE NEEDS OF FAMILIES LIVING OFF THE HILL

The possible effect of a change on families living off the hill was hard to estimate, and forum participants questioned whether a change would be an advantage or disadvantage for those families. Some participants said that early mornings are especially hard for families who live off the hill, as they need to leave early for the longer commute. Others said that a later schedule might result in more difficulties, as it would be more difficult for those students to participate in after-school activities and they would get home later, maybe after dinnertime. Others also noted that if many off-the-hill parents are tied to a specific work schedule, it may be difficult for those families to adjust to a change, and those students would be arriving at school long before the first bell.

OTHER FACTORS

Forum participants mentioned other factors that should be considered in the decision about changing school start times. These factors included:

- Time for homework support: Students said that the set “academic time” that takes place at the end of the school day in which no activities can take place is useful and important to maintain. A middle school student said that it is nice to have teachers on hand in the morning to help with homework. Several forum participants stated that the amount of homework is a primary reason why students do not get enough sleep.
- Bus rides: For some students, bus rides are long, and this impacts their day on both ends of the school schedule. Some students board the bus early in the morning, and some middle school students noted that they arrive at school long before they need to. Others said that

their current afternoon bus ride does not end until 4:30 p.m. One person stated that elementary students are currently most affected by bad weather and other delays that slow down buses, and they are the most likely to have to wait outside in cold or bad weather.

- Arriving home in the dark: Students and adults said that later school times could result in students more frequently coming home in the dark. They expressed concerns about safety and about a desire to keep the student schedule during daylight hours.
- Effects on families with economic challenges: Participants said that families with economic challenges might be hardest hit by the change, as they often have the least flexible schedules and cannot afford additional child care and other costs.
- Individual and family sleep practices: One participant noted that parent and student decisions about screen time, bedtimes, and scheduling have much more weight than the school schedules.
- Los Alamos National Laboratory interactions: Some participants asked whether the lab had been consulted and whether there would be coordination with lab management to determine the effects.
- Cost: Some participants wondered if any of the options had a cost advantage over the others.

Forum Participant Responses to Schedule Change Options

RESPONSES TO ANY CHANGE

Many forum participants expressed support for a better sleep schedule for students, but hesitation about a change because of the factors outlined above related to afternoon activities. However, students in particular expressed concerns about participating after-school activities and arriving home later. Another concern related to the later afternoon release was the need for students to supervise younger siblings.

Other concerns related to the later morning start include conflicts between work times and school times that would require students to arrive at school early. Some suggested there could be a negative effect on attendance if students are no longer taken to school by their parents in the morning, particularly on parents' way to work. A student suggested that a later start time might encourage kids to procrastinate at night and try to do homework in the morning. Some suggested that more before-school programs might be necessary, and others expressed concerns about a resulting shift to more before-school activities that would defeat the purpose of a later start.

Some students said that they think a change smaller than either of the current options would be even better, suggesting only a 15- or 20-minute shift. A number of participants wondered if a change to the schedule would actually result in more sleep for students. One individual wondered if the change might cause more stress for students and families, defeating the purpose of the change.

One person noted that elementary students, who need the most sleep, might be getting less under either of the options.

RESPONSES SPECIFIC TO OPTION 1

Many participants liked that Option 1 would have a big impact and potential large benefit, but expressed concerns about its practical implementation. A number of people noted that sleeping later would fit a more natural sleep pattern and is backed up by research. One person suggested Option 1 would fit both sleep and sports schedules better. Several said that if there is a change, it should be a big change that has a potential large and measurable benefit. One person also noted that traffic patterns would be better, because the school rush would be after most of the LANL traffic rush. Some after-school jobs and activities might switch to the morning, but some felt that students, businesses, and parents would be able to work out those issues.

Others said that Option 1 seems like too large of a change, with too late of a shift in both the morning and afternoon. Students in particular expressed concerns about after school activities and about missing more school time when traveling for out-of-town events, time that is difficult to make up. Students also noted that Option 1 would be hard on families with students in elementary and older grades. Some suggested that it would be difficult to get middle school students to school, and those students are not yet independent enough to get to school on their own.

RESPONSES SPECIFIC TO OPTION 2

Many forum participants liked that Option 2 seemed like a smaller change and a compromise position that would coordinate better with existing work, extracurricular, and family schedules. One person liked that the timing could have a large impact on sleep with a minimal impact on after-school activities. Others said that Option 2 is similar to the schedule that was in place a few years ago and worked well at that time. Another person noted that the school schedules are closer in Option 2, so there is more time for families to be together.

One person wondered whether it would be possible to measure an impact with Option 2, given that it is a smaller change, and suggested that the community would not know whether it really had a positive impact on students.

Suggestions Related to School Scheduling

Participants provided other suggestions to modify the school schedule to try to address some of the concerns.

High school teachers and community members wondered if it might be possible to instead keep the current start and end times, but provide more flexibility in class scheduling (e.g., first period could be optional), in order to achieve the same goal.

Multiple students suggested that it would be beneficial to try to find a way to shorten the school day. Some high school students suggested shortening the passing periods and shifting that time

to the start of the school day for a later start time or to the lunch period for longer lunch hour as some students are not having enough time to eat lunch. One community member suggested considering year-round school.

Middle school students disagreed with the suggestion to shorten passing periods, with a few noting that the middle school passing periods are currently too short resulting in congestion and a crush of students trying to get to class. High school students and teachers both said that the current block schedule of longer class-periods works well allowing for instruction and time to do homework in class with guidance from the teacher as needed.

High school students said that the lunch period is currently too short and too early. While this could change with later school start and end times, high school teachers noted that a change could result in high school students and employees of local businesses frequenting local restaurants and cafes at the same time. This could create more lunchtime traffic congestion and possibly cause students to miss lunch or be late to afternoon classes.

Elementary school parents noted that the current schedule gives elementary school students time to run around and play before school, getting energy out before class which is helpful in providing for more focused students. They are concerned that a change could decrease that time.

Conclusion

There was not unequivocal support or opposition from the community forums, and many individuals noted that there would be both advantages and challenges in a school schedule change. Community forum participants engaged in thoughtful discussions about how to best serve the children of the district and provided valuable feedback with a multitude of ideas to be used by LAPS as it continues to seek long-term student health, wellness, and growth.

Appendix A

SCHOOL START TIME OPTIONS

School Start Time Options	<ul style="list-style-type: none"> • These options were developed by the LAPS Transportation Department • The schedules are impacted by the number of busses, traffic, state funding, and availability of bus drivers
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	START	LUNCH	END
CURRENT			
ELEMENTARY	8:20	varies 45 min. to 1 hour includes recess	3:20 PM
LAHS	7:50	11:15-11:50	3:10 PM*
LAMS	8:00	11:34-12:21	3:00 PM
OPTION 1			
ELEMENTARY	8:00	varies 45 min. to 1 hour includes recess	3:00 PM
LAHS	8:50	12:15-12:50	4:10 PM*
LAMS	9:00	12:34-1:21	4:00 PM
OPTION 2			
ELEMENTARY	8:00	varies 45 min. to 1 hour includes recess	3:00 PM
LAHS	8:30	11:55-12:30	3:50 PM*
LAMS	8:40	12:14-1:01	3:40 PM

***Last 35 minutes of the High School Schedule is Academic Time**

LAPS: 10-27-17, Working Draft

Appendix B

MEETING FEEDBACK BY GROUP

Multiple meetings took place on Oct. 24-25. The facilitation process for each meeting was adjusted slightly based on the stakeholder group and the time available for discussions. Some meetings allowed for a prioritization of pros and cons of school start times.

Session 1a: Middle School Staff and Parents

Tuesday, October 24, 1:30 PM

Question 1: What is working well with the current start time schedule? What things would you like to still happen if there is a new schedule? What is not working well with the current start time schedule?

- Well:
 - Daughter can get off in time to take care of younger sibling
 - Older kids get home ahead of younger kids (meet at bus stop)
 - Earlier afternoons gave opportunity to work after school
 - Help out lab employees who had to come from Santa Fe/Espanola Valley; they're used to it
 - Parent Perspective - more family time and homework time after sports
- Not Well:
 - Daughter gets up at 5:30 am to get ready - tough (MS level)
 - Hard/Struggle to get up and out the door in time
 - Athletics - had to wait for community member coach to get off of work (practice started late) - What are kids doing during that in-between time? (Starbucks?)
 - Screens or just because, it's hard to get to sleep in time
 - Early mornings are killers - especially coming from White Rock (e.g., on road by 7:15 to be on time/Bus by 7:10)

Question 2: Given the proposed start time options, what are the potential benefits of each option? What are the potential cons of each option?

- Benefits:
 - Option 1 especially: Sleep later; more ready to get on school work and more natural sleep patterns
 - Option 1: Would fit schedules better - sports & sleep
 - Some jobs are morning jobs and some are afternoon jobs - parents and businesses can "work it out"
- Cons:
 - Parents drop off kids early because they need to get to work early

- Option 2: Not different enough; if we have a good result, we won't know its source
- Getting kids to school and/or work at different times
- Older kids not coming home first
- What will be in place if parents have to show up earlier/activities in the morning (less before care in elementary; for MS & HS); particular concern for off-the-hill families
- Not sure kids will make it to school if parents aren't taking them right to school in the morning (attendance concerns)
- How are we going to gauge how it worked? Did it make a difference?

Session 1b: Middle School Students

Yellow Group: Tuesday, October 24, 2:30 PM

Question 1: What is working well with the current start time schedule? What things would you like to still happen if there is a new schedule? What is not working well with the current start time schedule?

- Well:
 - Athletics/Dance - good ending time to be able to get home and get homework done
 - Getting pretty good amount of sleep
 - Ending time works well with the amount of homework (increases with grades)
 - Starting time is good because of commute from Espanola; teachers are on hand in morning to help with homework
 - More time with friends after school
 - Older sibling can meet younger sibling
 - Amount of time in each class and amount of break time between classes (able to talk to friends)
 - Longer bus rides still get home by 4:30 (later times could interfere with dinner)
 - After school homework support
 - Prepares for future when will need to wake up early
- Not Well:
 - Squeeze in academic time; shorter class periods - extra period/study block
 - Not enough time to get to bus after school - need to run/rush
 - Teaching goes too fast - pace of classes
 - Jazz band starts an hour before school starts
 - Passing periods aren't long enough - hard to visit lockers
 - People who live further away - White Rock or out of county - very early wake up; a change would allow them to make before-school activities
 - Length of bus rides - not a reasonable wake up time

- Everyone asleep on their desks first period
- Bus comes really early in the morning

Question 2: Given the proposed start time options, what are the potential benefits of each option? What are the potential cons of each option?

- Benefits:
 - Works better even if same amount of sleep - better with sleep schedule
 - Melatonin levels don't stop being there until 10 am
 - Any change towards later will help
- Cons:
 - Walk home in dark
 - Atomic City bus system routes may not accommodate later times
 - Band/Choir/Orchestra concerts would be even later
 - Multiple after school activities become harder to configure
 - Activities that are unrelated to school system - worried about whether they will adjust
 - Change might not help sleep schedule - would just go to bed later rather than getting more sleep.
 - With multiple activities, very hard to get homework done - later times would make it even worse
 - Procrastination - would encourage putting off homework until the morning
 - Stay with current - better for out-of-town folks
 - If end at later time, after school activities will need to change their time
 - In winter will be more in the dark after school - safety
 - Current schedule works with work schedules (lab/county)
 - Won't make a difference - will need to stay up later to get work done if school ends later

Other Comments and Concerns:

- It doesn't make a difference between the two options
- Both are bad, and we should stick with what we've got
- Like 1 better than 2
- Option 2 might work better with more people's schedules – compromise
- Anything is better than what we've got
- When buses are late getting to school, it's hard to get organized at school
- Passing periods need more time

Session 1b: Middle School Students

Blue Group: Tuesday, October 24, 2:30 PM

Question 1: What is working well with the current start time schedule? What things would you like to still happen if there is a new schedule? What is not working well with the current start time schedule?

- Well:
 - HS students can take care of younger kids and pick them up from school; elementary get out last, so there's time to pick them up even if a MS sibling has to pick them up
 - I like the bus schedule because buses come on time
 - Not too late, not too early; but the 7:50 time seems too early
 - Some people have extracurricular activities that don't end too late, when it's getting dark with a later time
 - Bus comes early so have time before school start, get to talk to friends
 - Get enough time for sports and get home, do homework and get to bed at a decent time, normal comfortable schedule
 - Enough time in afternoon to do sports
 - Like the school schedule but not early bus schedule, bored for 30 minutes, getting here before I need to
 - Sibling care
 - Good end time, get things done, but start time takes an hour to get to school
- Not Well:
 - Because if up late due to homework, then have to get up early in the morning
 - Sometimes wake up late and can't get breakfast in morning, and tired
 - Not enough time from when bell rings to get to class
 - Don't like early bus schedule, have to get up at 5 or 5:30 to get ready and do other things, 15 minutes on bus
 - Bus schedule, lot of routes are too early, so get here to MS way too early, and in the afternoon it takes a long time to get home, it takes an hour to get home
 - Letting in to the MS only through three doors in the morning and lots of pushing and shoving to get to lockers and class; should open doors 10 minutes earlier

Question 2: Given the proposed start time options, what are the potential benefits of each option? What are the potential cons of each option?

- Benefits:
 - Like Option 2 - an extra 40 minutes would help people get more sleep
 - Option 2 - Would mean more sleep in morning
 - Option 2 - Same as before, use mostly for sleeping; option 1 seems too late
 - Option 2 - 40 minutes seems about right, 1 hour seems like too much, 40 minutes more would help from being tired in first period
 - Option 2, modified - extra 40 minutes is good, but still takes an hour to get home, so maybe less than 40 minutes

- Option 1, modified, but MS needs to get out earlier than ES for sibling care
- Option 2 - keeps more of the order how schools are now with more time for sleep
- Option 2, modified to 20 minutes difference, would make a helpful difference
- Option 2, modified to 30 minutes instead, with an option of a shorter school day to allow for more afternoon
- Option 2 helps with getting ready for school, and there still is plenty of time after school
- Option 2, modified to 20-25 min instead; soccer practice is already abbreviated because of how late elementary schools start, we're sharing field time, and we have to be done before dark so less time to play
- Cons:
 - Conflict with sports and less time for homework
 - 8th graders might not be able to get to HS to do high school sports
 - Sibling care concerns; would make it hard to get younger siblings
 - Moving the schedule might make extracurriculars like dance go even later
 - Many times sports start right after school
 - Will adjust to stay up later, so won't make a difference in amount of sleep I get

Session 3: Community Feedback

Tuesday, October 24, 5:30 PM

*At this and subsequent meetings, participants created a list of different answers to the questions and then identified the most important ideas to consider when making a decision about school schedules. Where applicable, the numbers after ideas indicate the number of responses in a dot-voting process; the highest number indicates the highest priority. Highest-priority ideas are in **bold**.*

Question 1: What is working well with the current start time schedule? What things would you like to still happen if there is a new schedule? What is not working well with the current start time schedule?

- Well:
 - **Sports and after-school: Getting out in afternoons earlier so kids with sports can get home at a reasonable hour (in winter, if later there will be very few daylight hours for sports and other activities) (11)**
 - Before school activities (3)
 - Academic time: After official end of school when teachers are available to students; time gap after school to catch up with teachers (6)
 - Student travel activities: When students travel (e.g. athletics), they miss less school time (4)

- Traffic: congestion happens *after* drop offs (morning and afternoon) (0)
- Coordination with lab: Start and stop times are aligned with lab hours - youngest children are dropped off last. Impact on lunch hours? For high school, it hits downtown businesses before lab lunch traffic (1)
- Siblings: High school kids are released before younger, and allows them to look after younger siblings (not same experience for all families - bus schedules and family location) (0)
- After school employment: Co-op program/after school employment (1)
- Not Well:
 - **Mental health: High number of kids with depression, other mental health/quality of life (alertness, happiness, effectiveness) (10)**
 - Elementary school start times: Start times are too late (some schools have before school programs); issues with supervision of younger kids (5)
 - Early mornings: Waking kids up in morning/waking up in morning; some older teenagers need sleep and can't get to sleep before 11pm (7)
 - Teacher and parent schedules: Scheduling challenges for teachers & parents with elementary-age students (there are more after-school programs than before-school programs); early drop-off needs at elementary level (1)
 - Before school activities: Activities start very early (some start at 6am) (0)
 - Demands on students: Up late doing homework; activities; "being a kid" time (7)
 - Impacts on families: Especially those with less economic flexibility and those that live off the hill (4)
- Other Questions and Variables:
 - Effects on truancy?
 - Community asked for a change, but need to weigh solutions and level of community buy-in; is there a mandate?
 - Families with economic challenges may have the hardest time with the change
 - Students may think they can stay up later; is it just a shift of the problem?
 - Training: college and jobs don't start later (although you may be able to sleep later in college)
 - What happens to after-school programs, and their cost to families?

Question 2: Given the proposed start time options, what are the potential benefits of each option? What are the potential cons of each option?

- Pros and Cons of Option 1:
 - Less resources (if it really is cheaper); Option 2 would cost more money & challenges filling bus positions
 - Maximum time benefit to students; if changing, might as well do the bigger change
 - Traffic patterns are better; not dealing with lab traffic
- Pros and Cons of Option 2:

- Less of a change for high school students
- Best chance to have a good morning, which changes the day - but not too much
- Biorhythms; big impact on sleep with minimal impact on sports/activities after school
- Worked previously and was better for mental health
- Might sync up elementary & MS schedules (longer bus routes for some families)
- Compromise
- Closer schedules for families with different age kids; more time together as a family
- Pros and Cons of No Change:
 - More resources used for transportation & other means less for other needs
 - Having kids come home after dark is scary
 - In some families, kids get up early anyway
 - Reasonable hour at home
 - With either change, MS kids would get home close to 5 with no after-school activities

Other Questions and Variables:

- Year-round school?
- Kids having time to themselves
- 75% of students are part of school-sponsored activities

Session 3: High School Students

Wednesday, October 25, 11:30 AM

Question 1: What is working well with the current start time schedule? What things would you like to still happen if there is a new schedule? What is not working well with the current start time schedule?

- Well:
 - **Time after school for sports and other extracurricular activities, academic work (20)**
 - **Get home a reasonable time for dinner & homework (even with after-school activities) (16)**
 - Most activities are not happening in the morning (0)
 - Siblings - care for younger siblings (2)
- Not Well:
 - **Sleep - would like more, tired in first period (12)**
 - **Need more time for lunch (12)**
 - Morning practice pushes wake-up time another hour to 1.5 hours (2)

- Morning PLUS afternoon activities shortens time available for sleep (0)
- Traffic issues (coming up from White Rock & the valley) (5)
- Academic time would be better before school rather than after school (1)
- Other Questions and Variables:
 - Would be nice to have more time for eating lunch
 - Before-school activities are very early
 - Academic time is a variable
 - Many students are up until 11:30 or midnight currently, and wake up between 6:00 and 7:00 a.m.
 - Don't have enough time to eat breakfast, sometimes miss dinner, and lunch is short and too early

Question 2: Given the proposed start time options, what are the potential benefits of each option? What are the potential cons of each option?

- Pros and Cons of Option 1:
 - May be a bit excessive - big gap between elementary and HS Start times would be tough on families with both
 - Hard on parents who need to get their kids to school - and kids who might be waiting around, because they need to get to school just as early because of parents' work schedules
 - Would be less traffic
 - Would be missing even more class time for out-of-town games and meets, and it would be more work to make up
 - Students might get more sleep
- Pros and Cons of Option 2:
 - Get more sleep as well as helping with extracurriculars - wouldn't push them back too far
 - An hour seems like a lot - seems like a better amount of time - compromise solution
 - Allows for working after school - employers would be more lenient with 30 minutes rather than a full hour
 - Would be less traffic
- Pros and Cons of Both:
 - Having a later start time will push athletics later, which pushes back things at home
 - Outside sports run into less daylight
 - Students will be doing homework closer to sleep time
 - Less time for middle school students to do homework before after school activities
 - Harder to coordinate siblings in the morning

Other Questions and Variables:

- What would happen to current after-school activities? Would they shift to morning?
- How will Atomic City buses adjust to the new schedule?
- What will happen when missing school for games and meets, and to academic time?
- Could be hard for people off the hill to get to school and work
- Maybe academic time should be moved to before school
- Students would like a longer lunch period
- Students need to work on a consistent sleep pattern themselves

Session 4: High School Staff

Wednesday, October 25, 3:00 PM

Question 1: What is working well with the current start time schedule? What things would you like to still happen if there is a new schedule? What is not working well with the current start time schedule?

- Well:
 - **Allows enough time for extracurriculars**
 - **Ability to participate in Co-op, keep after school jobs**
 - **Lunch is different than rest of town**
 - **Academic time is at end of day**
 - Truancy rate better than previous years
 - Everyday period is at end of day
 - 30 min passing period
 - Block schedule is working/allows students time to complete graduation requirements
- Not Well:
 - Students not getting enough sleep
 - Long commute to school

Question 2: Given the proposed start time options, what are the potential benefits of each option? What are the potential cons of each option?

- Option 2:
 - Increase bus routes (from 17 to 28)
 - Puts lunch at noon, conflicts with lab/rest of town

Other Questions and Variables:

- Need before school programs for elementary
- Students may not actually get more sleep

- Athletics/after school activities pushed back, or moved to before school, resulting in later bed time/still not enough sleep
- Idea - Provide more flexibility/options for timing of classes in order to achieve the same goal (i.e., first period off)
- Find creative solutions
- After school sports/activities running out of daylight
- Students missing class time
- Parents and school staff may struggle with getting kids to school/working around their own job start time/not being at home to make sure kids went to school
- Increased after school care costs
- Traffic concerns/working around Lab schedule
- Change may incur more stress overall for students, which defeats the purpose
- Choices made by parents and students hold as much, if not more, weight than changing start time (screen time, parenting, over-scheduling, etc.)
- Careful planning is essential
- If we make a change, will it be measurable?

Session 5: Community Feedback

Wednesday, October 25, 5:30 PM

Question 1: What is working well with the current start time schedule? What things would you like to still happen if there is a new schedule? What is not working well with the current start time schedule?

- Well:
 - **High school students get home in time to do sports and have time for homework (4)**
 - Gives high school students time for work, coop, extracurricular activities
 - Allows time for doctor's appointments without missing class
 - Elementary students have plenty of time to play before school, have "recess" before they go in, helps with children who have more energy so more focused in class
 - Works better for out of district elementary students and their families
 - Older siblings available to watch younger siblings
- Not Well:
 - Parents with children concurrently at two different elementary schools, difficult to coordinate so end up having to pull out some children before others
 - Students are tired getting to school, have to "drag" themselves there and for early morning classes

- For elementary, current end time doesn't allow enough time for tutoring or after-school clubs and other enrichment
- Difficult to get students up in elementary school, it will be even more difficult, creates family strife, impacts everyone's school and work day
- Elementary students are last to be picked up in the morning, so if there is an accident or bad weather, elementary students are outside and cold weather and difficult for families to pick up children. (e.g. If picked up earlier, don't have to worry as much about traffic back ups that would slow bus pick up.)
- Other Questions and Variables:
 - **Amount of homework causes students not to get enough sleep (7)**
 - Concern that if change the time there will be no effect, because activities will be squeezed back in earlier in the morning.
 - What are the other things causing students not to get enough sleep, how is their health?
 - Suggestion: Flexible high school schedule, students could choose early or later start time
 - Number of students tardy in first period, will this change?
 - Transportation cost and coordination differences between current and options?

Question 2: Given the proposed start time options, what are the potential benefits of each option? What are the potential cons of each option?

- Pros and Cons of Option 1:
 - Requires parents to arrange for after school care, additional cost to families
 - Middle school students starting too late
 - Too much time before school for middle school students, they are not as independent to get themselves to school. Parents will have a more difficult time making sure children get to school.
 - Support Option 1 based on research, but worried about children's maturity, practical implementation from the parents' perspective
 - Middle school is a longer commute and means more time on the bus
 - Too late for students to get home, cuts into home and homework time
- Pros and Cons of Option 2:
 - Requires parents to arrange for after school care, additional cost to families
 - Better than Option 1 because middle school students start earlier
 - More expensive, transportation costs to district

Other Questions and Variables:

- Elementary school students need the most sleep, but would be getting less
- Having dinner as a family is important, would have to wait more for high school age children

- Missing more class time for students for practice, school activities and competitions
- Middle school students not independent enough to get themselves ready and to school
- Teachers being supportive of missing class for sports, how to make sure students are adequately supported
- Consider the same start times but apply them to different ages, so elementary starts first?
- Has the lab and management been consulted?

Appendix C

AFTER-SCHOOL ACTIVITIES

After-school activities impact a large number of LAPS students.¹ Los Alamos High School staff estimates that 70 percent of the student body, totaling approximately 700 students, participates in some sort of school-sponsored sport or band at some point during the school year. Sports participation includes:

- Fall season, August-November:
 - Football: 56 students
 - Volleyball: 34 students
 - Cross-Country: 75 students
 - Soccer: 93 students
 - Golf: 23 students
- Winter season, October-February:
 - Girls Basketball: 38 students
 - Boys Basketball: 60 students
 - Boys Swimming: 29 students
 - Girls Swimming: 35 students
 - Cheerleading: 18 students
 - Wrestling: 37 students
 - Diving: 20 students
- Spring season, January-May: Numbers of participating students unavailable
 - Baseball
 - Softball
 - Tennis
 - Golf
 - Track and Field

During sports seasons, practices occur Monday-Friday between 3:30 and 6:00 p.m. Competitions are scheduled starting between 4:00 and 7:00 p.m.

In addition, approximately 300 students participate in band, with practices occurring Monday-Friday between 6:30 and 8:00 p.m. during the season.

Student ROTC meets in the early morning, at 6:00 or 6:30 a.m. Approximately 30 students participate in ROTC.

¹ Interview with LAHS staff, November 3, 2017.

In addition, student clubs meet before, during and after school. Many students also participate in community clubs and activities that are not school-sponsored. At this time, information on the number of students participating in those activities is not available.

Appendix D

COMPARISON OF START TIMES

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

Appendix E

LAPS SURVEY RESULTS

Source: The analysis and summary below were prepared by LAPS staff.

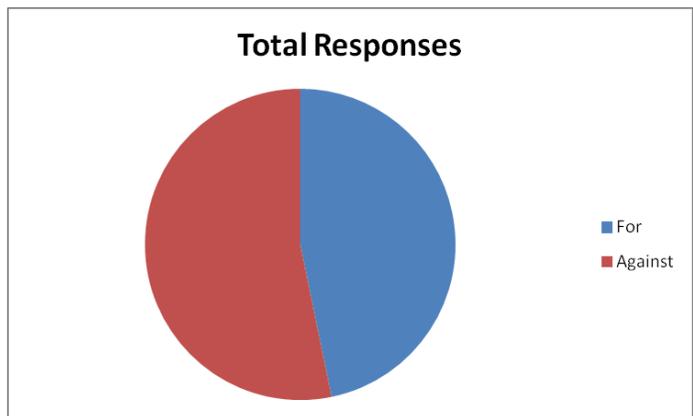
BACKGROUND

The Start Time Comment Survey was created and opened to the public on Oct. 13, 2017, as a way for the community to post comments and concerns regarding the proposal to change school start times. The survey allowed two choices, “For changing the school start times” or “Against changing school start times,” and provided the option to submit additional comments. The survey was posted on the district website and a link to the survey was sent to all employees in a newsletter Oct. 22. Information with the link was also posted on social media sites by LAPS staff. The Start Time Comment Survey was closed at 9:30 a.m. on Nov. 6.

The total number of respondents was **216**, which includes a range of stakeholder groups including parents, teachers, students, staff and community members. The responses were anonymous, so identifying individual stakeholders by group was not possible.

To make the survey easily accessible to non-Google users, the feature restricting multiple submissions had to be disabled. The survey instructions asked the public to only vote once, but it is possible people may have commented more than once. Also, a few respondents submitted a comment but did not specify “For” or “Against.”

The “Transportation Options” document had not been released at the time the survey was released, but was available at the time of the community meetings on Oct. 24-25. As such, some respondents did not know the exact start time options when they voted and, conversely, others specifically mentioned which option they preferred.



SURVEY AND RESULTS

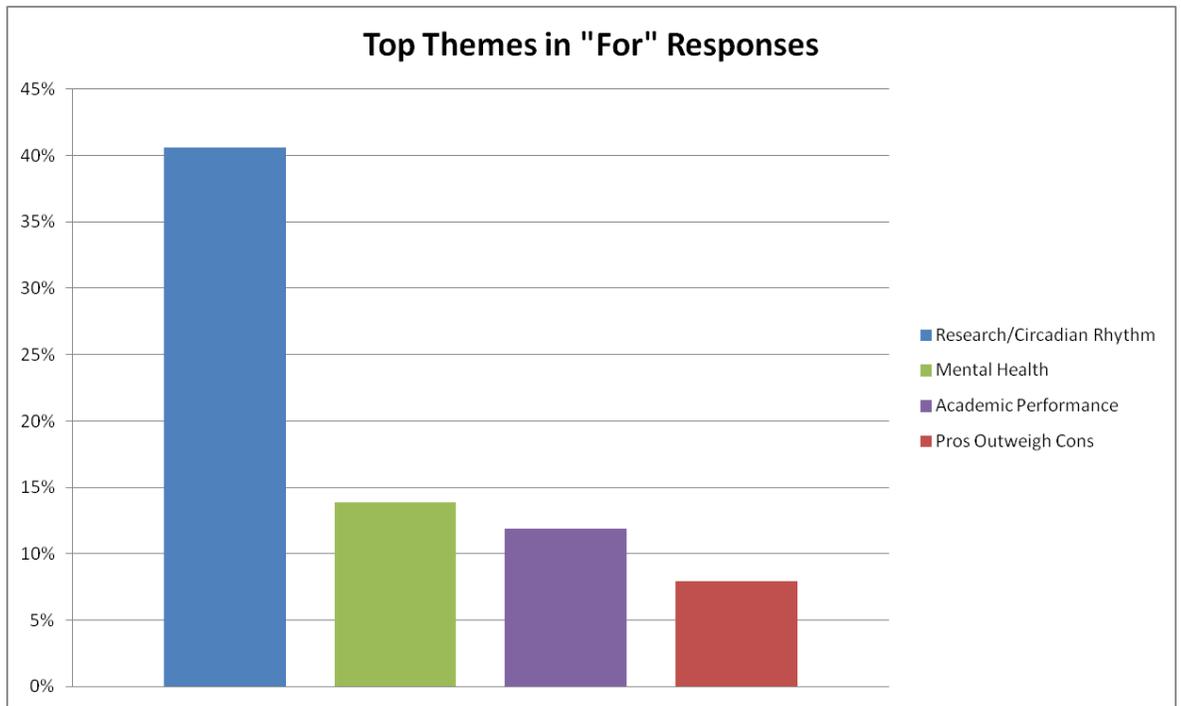
The split between for and against the start time proposal was **101 “For”** and **115 “Against.”** During the course of the survey, the split was very close together with little or no gap. Towards the end of the survey, the gap widened a bit and favored “Against.”

The overarching themes include: the later start time is in line with the research on adolescents’ circadian rhythm and would be beneficial for their mental health; the later start

time would push back after school activities and students would stay up later and not actually get extra sleep.

After the survey was closed, the comments were sorted between “For” and “Against.” Each comment was read and comments were organized into common themes. The top common themes are listed below and pictured in the graphs. The percentages in the charts represent the number of respondents that made a comment in line with a specific theme out of the number of votes in that category (for or against). For example, 14 out of 101 people in the “For” category commented that they believed a later start time would be beneficial for student’s mental health and well-being, which is 14 percent.

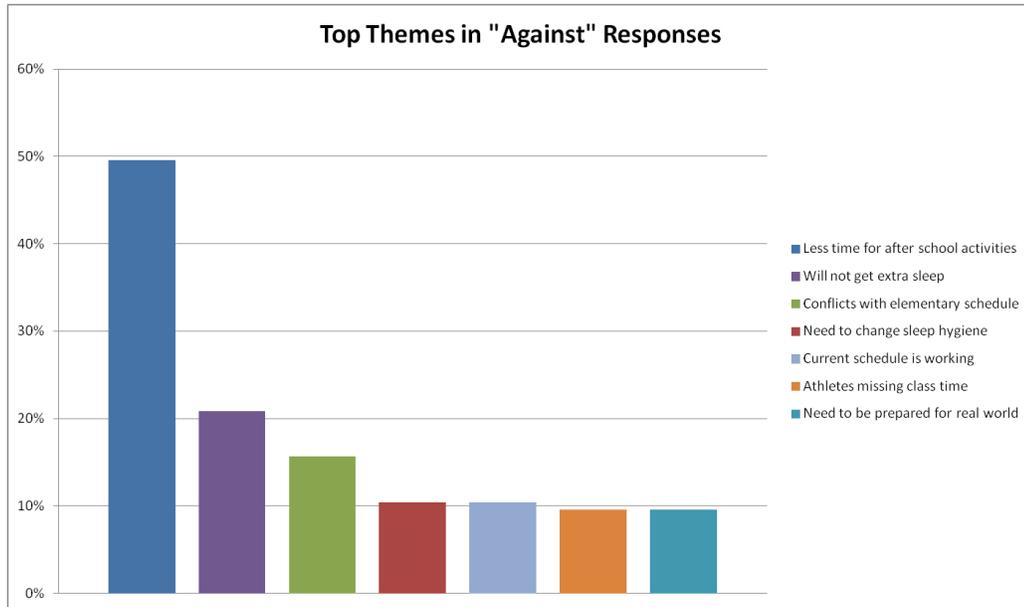
Many other concerns and/or suggestions regarding this proposal were mentioned and the top comments are also listed in bulleted form below.



“FOR” RESPONSES:

- About 41 percent of “For” responses agreed with the research that a later start time would be beneficial due to adolescents’ natural circadian rhythm (# of comments = 41)
- The second most prevalent theme was that more sleep would be better for students' overall well-being and mental health (14)
- More sleep would help students be more alert, productive and overall have better academic performance (12)
 - Better test scores

- Improving academic performance through this change is more important than worrying about after school activities/sports (8)
 - The pros outweigh the cons
 - The community will adjust to the change with time
- Some believe a later time would be better for parent's schedules (3)
- A later start time will help students avoid heavy lab traffic in the morning (3)



“AGAINST” RESPONSES:

- A later start time will result in after school activities pushed back (57)
 - Less time for sports, jobs, family time, and homework
 - Less daylight for after school activities/ kids coming home in dark
- Students will stay up later and not get extra sleep (24)
- This change would conflict with the elementary schedule and make it hard for working parents to drop off (18)
 - Parents prefer having HS students out the door in the AM first and being able to focus on younger kids
 - Worried teens will not go to school if left on their own
 - It will be hard to find before school activities/programs, as well as after school supervision, since older siblings will still be in school
- The problem is not start time, it is parents enforcing/kids practicing good sleep hygiene (12)
 - Kids/parents need to cut down on kids extracurricular activities
 - The change needs to happen at home
- Believe current schedule is working and allows adequate time for after school responsibilities (12)
- Students, especially athletes, would miss more class time (11)

- Teachers will not want to teach fourth period because students involved in afternoon competitions would be consistently absent
- Teens need to be prepared for the "real world" (11)
- This is inequitable for students supporting families with jobs (3)

ALTERNATE SUGGESTIONS AND CONCERNS:

- Traffic was a concern on both sides
 - Some think traffic would be worse in town, especially during lunch hour
 - Others think a later start time would help students avoid lab traffic
- Too much homework is the problem
- Later practices and activities mean staff stay later and some might not be willing to stay/commute so late
- There is no data to support this
 - Similarly, some mentioned that the research on circadian rhythm came out before the prevalent use of screens/smart phones
 - There is not enough information to make an informed decision
- "Making them go to school to save money is a false economy"
- A change would increase dropout rates
 - On the flip side, some also mentioned a later start time would increase attendance and result in fewer tardies
- "The proposed changes for the transportation schedule do not take into account academic time...the current transportation schedule treats AT like it isn't even part of the school day and does not give students the opportunity to go."
- Moving activities to before school defeats the purpose
- Alternative Suggestions:
 - Have a year-round schedule
 - Have a five-minute period between bus drop off and start of school so kids are not left in cold and unsupervised
 - Swap academic time to 1st period or shorten academic time
 - Flip the bus schedules so elementary is picked up first, then HS to give them a few extra minutes of sleep
 - Change core classes to second period and teach electives during first period
 - If ATC is used to supplement the school bus system, one or more buses should be dedicated to school students so they get to school via the most direct route