TO: King Philip School Committee  
FR: Patrick Francomano, Chair  
RE: Adolescent Sleep * Later School Day Start  
DA: April 2, 2018  

This is in follow up to the forum which was held on Thursday March 22nd. This was extremely well attended especially given the time of year, some competing events and the prevailing weather concerns of that week. The audience expressed a desire for the district to investigate this matter further. I am attaching a brief PowerPoint summary prepared by Plainville resident Julie Kinney. The science appears to be indisputable and the issue is a serious physical and mental health problem that we have turned a blind eye to because the dangers and consequences are more subtle than other health crisis we have been asked to address.  

The forum recording has been posted to the KPTV site: https://www.youtube.com/watch?v=Pr1iGXoT8yU.  
I would also recommend viewing researcher Wendy Troxel’s TED Talk on the topic:  
Wendy Troxel: Why school should start later for teens ... - TED Talks.  

It should be understood from the outset that any feasible proposal cannot require the “flipping” of the elementary school schedules to an earlier start time and that any direct impact on the elementary districts must be avoided.  

I strongly recommend that at its annual retreat or when district goals are determined that the KP School Committee establish a formal study group under the charge of incoming Superintendent Paul Zini to review both the science and implementation behind early start times and to make a recommendation to the King Philip School Committee concerning the advisability and feasibility of implantation in the 2019 – 2020 school year or thereafter. The group should include 2 school committee members, High School principal, Middle School principal, Director of Special Education, Director of Finance, a teacher from each school, representatives from each of the three elementary districts, municipal representative(s) from each of the three elementary districts, parents from each of the schools. The group would conduct community surveys of specific stakeholder groups, actively investigate the science and experiences of other districts, sponsor multiple community forums to share data and listen to the community and report its findings to the full School Committee along with specific recommendations.  

This is an extremely important issue and your attention is greatly appreciated.
Scientists have discovered a revolutionary new treatment that makes you live longer. It enhances your memory, makes you more attractive. It keeps you slim and lowers food cravings. It protects you from cancer and dementia. It wards off colds and flu. It lowers your risk of heart attacks and stroke, not to mention diabetes. You'll even feel happier, less depressed, and less anxious. Are you interested?

* Matthew Walker, PhD, Author of "Why We Sleep"
Organizations recommending HS and MS start no earlier than 8:30 a.m.

- The American Academy of Pediatrics
- American Medical Association
- Center for Disease Control
- American Academy of Sleep Medicine
- American Academy of Child and Adolescent Psychiatry
- National Association of School Nurses/Society of Pediatric Nurses
- American Psychological Association
Organizations recommending later school start times cont.

- Massachusetts Medical Society
- Massachusetts Interscholastic Athletic Association (MIAA)
- American Sleep Association
- National Education Association
- National Sleep Foundation
Why are later start times recommended?

- Circadian rhythm shifts forward approx. 2 hours.
- Fall asleep between 10:30 p.m. and 1 a.m. depending on "owl" or "lark" tendencies
- Early start times cut-off of REM sleep important for learning, memory consolidation and problem solving, as well as the brain's clean-sweeping of toxic chemicals
Benefits of later start times

- Improved academic outcomes, including standardized test scores
- Better capacity to retain, retrieve and utilize knowledge and information
- Increased concentration, efficiency and alertness
- Fewer risk-taking behaviors
- Quicker reaction times and less fatigue
- Reduced irritability and mood swings
Benefits cont.

- Higher attendance
- Reduced tardiness
- Reduced drop-out rates
- Positive health, wellness and safety benefits (see next slide)
Example of Academic Improvement:
Edina, Minn. (from 7:25-8:30)

- Avg. SAT scores of top performing students year prior to change:
  - Verbal 606
  - Math: 683

- Avg. SAT scores of top performing students year after change:
  - Verbal: 761
  - Math: 739
Teen Safety

- 56 percent of licensed teens admit to having driven when too tired to drive their best and nearly 1 in 10 teens report having fallen asleep at the wheel. (SADD and Liberty Mutual Study, 2016)

- Car crashes reduced in communities with later start times
  - Teton County School District: 70% reduction in car crashes when school shifted from 7:35 am to 8:55 start time
  - Study comparing 2 counties with different start times showed a 40 percent higher crash rate where school starts earlier (Fayette County, KY, NBC news)
Impact of sleep loss on adolescent health and functioning

- Decreased academic/cognitive functioning
- Increased risk of:
  - Mental health problems (depression, suicide, anxiety, substance abuse, mood swings, suicidal ideation and potential impacts on brain development)
  - Physical health problems (obesity, diabetes, heart disease)
  - Sports-related injuries
  - Motor vehicle accidents
Local schools with later start times:

- Burlington (2018/19): 8:35 am
- Ashland (2017): 8:20 am
- Lexington (2018/19) – 8:30 am
- Sharon (2010) – 8:05 am
- Medway – 8:04 am
- Hingham (2013) – 8:05 am
- Canton – 8:00 am (confirm)
- Needham – 8:00 am
- Franklin – Just established task force
- Taunton – Just set up task force
- Masconomet Regional School District – (looking at 8, 8:20, 8:30)
Challenges

- Transportation costs
- Transportation – coordinating with elementary schools
- Athletic schedules
- Child care schedules
- Union contract on teacher start/finish time
Additional Resources

- Children’s National Medical Center Report: Blueprint for Change (April 2014)
- Hanover Research: Impact of School Start Times on Student Learning (Feb. 2013)
- Successful Approaches (SLEEPinFairfax)
- *All found on startschoollater.net
Local Schools' Approaches

- Many districts have put their processes and research online
  - Ashland
  - Sharon
  - Lexington
  - Masconomet
  - Burlington