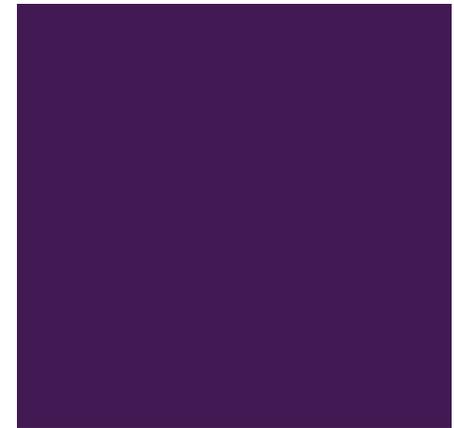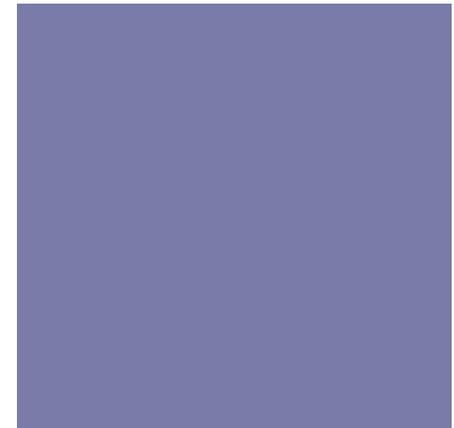WHOLE **SCHOOL,** WHOLE **COMMUNITY,** WHOLE **CHILD**
*A collaborative approach to learning and health*

Talawanda Health Coordinating Council
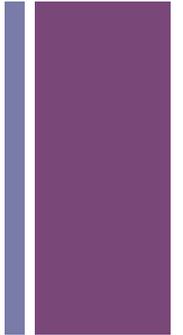
Board of Education Presentation
November 2015

Purpose of the Health Coordinating Council

- *To create a healthier community by addressing non-academic barriers to learning, building upon family and community strengths, and involving families and other community members in all phases of student success.*
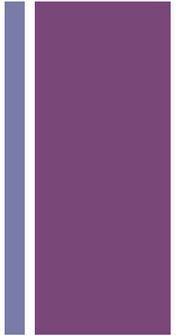
American Academy of Pediatrics "Let Them Sleep"

- August 25, 2014 – New policy statement released

- "Chronic sleep loss in children and adolescents is one of the most common – and easily fixable – public health issues in the U.S. today." Judith Owens, MD
  - Delaying early school start times is one key factor that can help adolescents get the sleep they need to grow and learn.
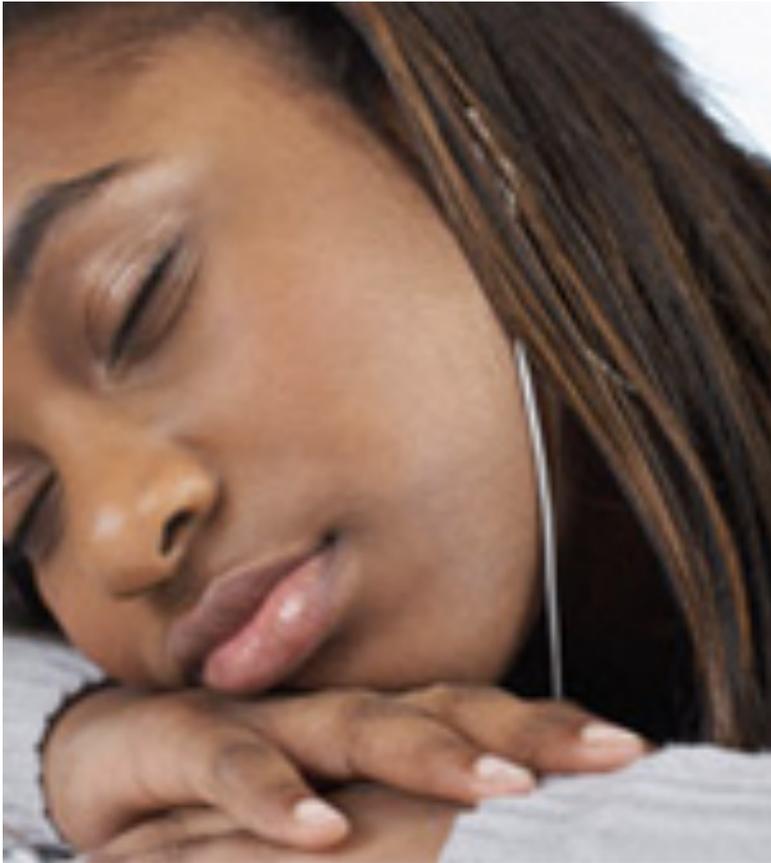
+ Adolescent Sleep Deprivation

- Adolescents need 8.5-9.25 hours per night
  - Only 9.2% get 8.5 hours per night
  - On average, most teens sleep 6.75 hours on school nights

(Source: Carsakadon et al, 1980; National Sleep Foundation, 2009)

Adolescent Sleep Cycles

- Natural sleep cycles shift up to 2 hours, making it difficult for teens to fall asleep prior to 11:00 p.m. (Source: American Academy of Pediatrics)

- Current middle and high school start times are out of sync with biological clocks of young people

  - Melatonin secretion doesn't stop until 7:30 a.m.

  (Source: www.startschoollater.net)

Public Health Benefits to Increasing Adolescent Sleep
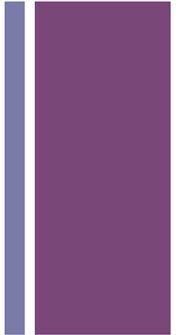
- Fewer Sports Injuries
  - 68% fewer sports injuries among teens with more than 8 hours of sleep compared to less than 8 hours (Dr. Milewski, 2012, AAP Annual Conference)
- Healthier Weight
  - Association between increased BMI and inadequate sleep (Taheri, 2004)
- Metabolic Health
  - Independent of age, race, gender and obesity, elevated insulin resistance associated with shorter sleep duration (Matthews et al, 2012)

+ Additional Health Benefits
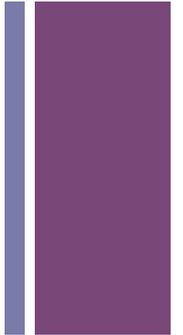
- Positive Mental Health
  - Teens who report they sleep 9+ hours on school nights reported more positive moods than their peers (National Sleep Foundation, 2006)
- Academic Performance
  - Increase in GPA in core courses in 5 of 6 high schools studied after changing start times (Wahlstrom et al, 2014)
- Emotional intelligence
  - Better stress management, increased empathy, better constructive thinking (Kilgore et al, 2008)

# Safety Benefits to Increasing Adolescent Sleep
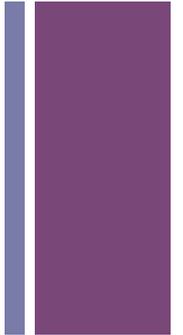
- Safer Driving Conditions– especially for new drivers
  - Mahtomedi School District moved start times from 7:30 a.m. to 8:00 a.m. – auto accidents that year among 16-18 year olds decreased 65% (Wahlstrom et al, 2014)
  - Jackson Hole School District moved start times from 7:35 a.m. to 8:55 a.m. – auto accidents that year decreased by 70% (Wahlstrom et al, 2014)
- Safer for Pedestrians
  - 50% increase in "hits" or "close calls" in virtual reality cross-walks when sleep restricted - study with 14 and 15 year olds (Davis et al, 2013)
- Safe Schools
  - High school boys with insufficient sleep were more likely to carry a weapon on school property (Hildenbrand et al, 2013)

Additional Safety Benefits

- Current release time = significant amount of unsupervised time in the afternoon

- Safe Routes to School at TMS
  - Parent Survey - #1 reason for not allowing children to walk/bike to school was early start time, therefore traveling in the dark.
  - Approximately 29% of the student body lives in walking & biking distance.

+ National Movement
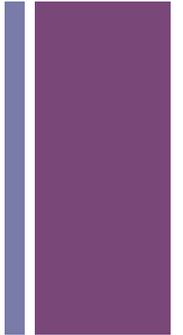
- "Returning to later, healthier, safer, evidence-based school hours is a reform with the potential to improve the health, safety, and academic achievement of all students."

(Source: Start School Later.Net Healthy Hours)

School Start Times Geographic Comparison

School District	Total Mileage	High School Start Time	Elementary Start Time
Adams County/ Ohio Valley Local	487	8:00 a.m.	8:00 a.m.
Riverview Local	376	7:49 a.m.	8:23 a.m.
Madison-Plains Local	248	7:45 a.m.	7:45 a.m.
Tri-Valley	230	7:50 a.m.	9:15 a.m.
Edison	208	7:51 a.m.	9:00 a.m.
Warren Local	196	7:45 a.m.	9:05 a.m.
Union County Liberty, IN	183	8:15 a.m.	8:10 a.m.
Wilmington City	161	7:50 a.m.	9:15 a.m.

School Start Times
Butler County

School	School Start Time
Lakota High Schools	8:05 a.m.
Hamilton High School	7:55 a.m.
Edgewood High School	8:10 a.m.
Madison High School	7:42 a.m.
Monroe High School	7:40 a.m.
Fairfield High School	8:00 a.m.

Students benefit when school is in sync with sleep needs!
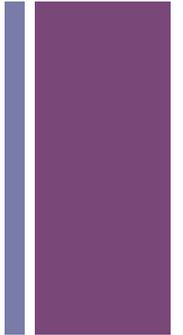
- Improved memory, attention, & cognitive processing skills

- Improved academic performance

- Reduced tardiness, truancy and drop-out rates

- Reduced depression and anxiety; improve mood & impulse control

- Improved athletic performance

- Reduced risk of stimulant and other substance use and high risk behaviors

- Fewer car crashes & increased visibility during commutes to school

Source: www.startschoollater.net

+ Health Coordinating Council Recommendation

- We recommend moving Talawanda Middle School and Talawanda High School start times back by 45 minutes.
    - THS: 7:15 a.m. to 8:00 a.m.
    - TMS: 7:30 a.m. to 8:15 a.m.

- We are compelled to consider this for the health & safety of our students.