

# Student Impact Committee Report



Presentation to  
Transportation Task Force

Jan. 22, 2008

# Student Impact Committee

## TTF parameters

### that guided our work:

- The bell schedule should not result in frequent, common or significant violations of Civil Twilight restrictions for elementary students.
- The bell schedule should reflect age-specific circadian sleep cycles to increase the opportunity for adequate sleep by contrast to the current bell schedules.

# Student Impact Committee

## SIC parameters that guided our work – p. 1:

- Student participation in after school extracurricular activities, both school-sponsored and community-based, is desirable at all age levels.
  - As far as possible, the bell schedule should preserve that opportunity without undue negative impact to the greater community in terms of facility use.
  - Before school activities should not be considered a normal or appropriate alternative to after school activity scheduling.
- The evaluation of bell schedule impacts should give equal weight to effects on students at all school levels: Elementary, Middle and High.

# Student Impact Committee

## SIC parameters that guided our work – p. 2:

- The evaluation of bell schedule impacts should determine whether any impacts, positive or negative, disproportionately affect any student subgroup (such as minority, single parent, economically disadvantaged, immigrant, urban or suburban) or any school level.
- “Quality of Life” – for students and their families – was a significant consideration throughout the SIC’s deliberations and influenced our evaluation of all potential impacts.

# Student Impact Committee

## The SIC process for evaluating the five bell schedules:

- Meetings were held on:
  - November 19, 2007
  - December 6, 2007
  - January 3, 2008
  - January 14, 2008
- E-mail exchanges occurred throughout the process
- Documents were exchanged throughout the process, including:
  - Research findings
  - Draft report sections
- **Note:** Inclusion of a particular point of view, idea, impact or supporting reference in a chart or bibliography does not necessarily indicate SIC consensus on its relative importance, relevance or persuasiveness.

# Student Impact Committee

## Conclusion and Recommendations

- After reviewing the five proposed bell schedules, the SIC by majority vote (nine in favor, two opposed) determined that **Option C** most closely met the agreed criteria.
- Each of the five proposed bell schedules was determined to have advantages and disadvantages.
- Although the charge to the SIC was to select a single or best bell schedule alternative, the SIC recommends that the TTF final report provide at least two alternatives to the School Board in order to enhance flexibility and exchange of views during subsequent Board deliberation and eventual public consideration.

# Student Impact Committee

## Recommended Bell Schedule #1

### OPTION C

	School Start Times			School End Times		
	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
	7:50-8:10	8:35-8:55	9:20-9:40	2:30-2:50	ES 3:15-3:35	ES 4:00-4:20
					HS/MS 3:25-3:45	HS/MS 4:10-4:30
ES	XXXX	XXXX	X	XXXX	XXXX	X
MS		XX	XXXX		XX	XXXX
HS/SS		XXXX	XX		XXXX	XX
	Total time span: 1 hour 50 minutes			Total time span: 2 hours		

# Student Impact Committee

## **Additional “Option F” recommended for further evaluation**

- Notwithstanding its recommendation of Option C, the SIC discussed an additional “Option F,” which would lie at the midpoint between the start/dismissal times of Options C and D.
- The SIC did not vote on the viability of “Option F,” and additional information is needed from FTS before it can be evaluated

# Student Impact Committee

## Recommended Bell Schedule #2

### “Option F”

	School Start Times			School End Times		
	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
	7:40-8:00	8:25-8:45	9:10-9:30	2:20-2:40	ES 3:05-3:25	ES 3:50-4:10
					HS/MS 3:05-3:35	HS/MS 4:00-4:20
ES	XXXX	XXXX	X	XXXX	XXXX	X
MS		XX	XXXX		XX	XXXX
HS/SS		XXXX	XX		XXXX	XX
	Total time span: 1 hour 50 minutes			Total time span: 2 hours		

# SIC Subcommittees

## Student Impact Committee

### Subcommittee 1:

- Academics
- Health
- Safety

### Subcommittee 2:

- Sports
  - School-Based
  - Non-school-Based
- Other Extracurricular Activities
  - School Based
  - Non-School-Based

### Subcommittee 3:

- Daycare
- SACC
- Families

# Positive Academic Impacts: Bell Schedule Changes

Bell schedule changes like Option C have been shown to have the following academic impacts:

## ■ ES students:

- 1st and 2nd tiers may more closely match the body clocks of ES students – i.e., ready to learn earlier in the day, tired late in the afternoon

## ■ MS & HS students:

### ■ Reductions in:

- Tardiness

### ■ Improvements in:

- attendance – 1<sup>st</sup> period & all day
- continuous enrollment & lower drop-out rates
- preparedness, participation & alertness in early classes
- handling of complex tasks

# Positive Academic Impacts: Increased Sleep

When students get more sleep, as occurs with bell schedule changes like Option C, the following academic impacts occur:

## ■ ES students:

- Parents can control the bedtime & evening routines of ES more easily than of MS & HS students
- An 8:30 bedtime for ES students allows for the 10 hours of sleep needed at this age, providing abundant sleep for 8:05 school opening time

## ■ MS & HS students:

- Improvements in:
  - Focus of attention
  - Late-day performance
  - Handling of complex tasks
  - Academic performance
- Reductions in:
  - Daytime sleepiness in classes
  - Unplanned sleep & falling asleep during homework

# Recommendations based on **Academics**

	High School	Middle School	Elementary School
<b>Best Options</b>	2 <sup>nd</sup> /3 <sup>rd</sup> tiers A,B,C,D,E	2 <sup>nd</sup> /3 <sup>rd</sup> tiers A,B,C,D	A, B, C, D (1 <sup>st</sup> & 2 <sup>nd</sup> Tiers)
<b>Worst Options</b>	1 <sup>st</sup> tier current	E current	E (late tier 3) current

Based on academic impacts, Option A, B, C or D provide advantages for middle and high school students without disadvantaging elementary school students.

# Positive Health Impacts: Increased Sleep

With more sleep, the following health impacts occur:

## ■ All age levels:

- Improvements in:
  - Release of growth hormones
  - Immune system function
  - Cell & tissue repair
  - Mood
  - response time
  - creativity
- Reductions in:
  - Depression
  - Anxiety
  - Irritability

## ■ ES students:

- Students in Tiers 1 & 2 would have schedule that matches their circadian rhythm; parents have control over ES bedtime & evening routines

## ■ MS students:

- Last tier has greatest sleep benefits
- Later start time will mean more time for breakfast at home

## ■ HS students:

- Reductions in:
  - behavior problems
  - overall & daytime sleepiness
  - unplanned sleep, falling asleep during homework
  - vulnerability to having auto accidents
  - potential for drug & alcohol use

# Health Impact still to be evaluated

## ■ Breakfast programs

- Out of 236 schools & centers, breakfast is served daily:
  - At 161 sites
  - To 32,804 students, or 19.9% of all students
- Breakfast is mandated by federal law for students receiving Free and Reduced Price meals
- Breakfasts are prepared at a few sites & then distributed throughout the county
- Both meals and students must arrive early enough for breakfast to be served
- The breakfast program will require further evaluation and consideration as changes are considered and/or implemented.

# Recommendations based on Health

	High School	Middle School	Elementary School
<b>Best Options</b>	3 <sup>rd</sup> tier A and B	3 <sup>rd</sup> tier C and D	A and C (1 <sup>st</sup> /2 <sup>nd</sup> tier)
<b>Worst Options</b>	1 <sup>st</sup> tier current	E current	B and D (too early) E (late tier 3)

Based on health impacts, Option A, B, C or D provide advantages for middle and high school students without disadvantaging elementary school students.

# Positive **Safety** Impacts: **Bell Schedule Changes**

When students get more sleep, the following safety impacts occur:

## ■ **Civil Twilight (CT)**

- Students are safer when not walking to school or waiting for buses in the dark
- FCPS already selectively violates Civil Twilight
- FCPS will continue to minimize Civil Twilight violations
- TTF agreed to limit CT violations for base school students to 11 days maximum, with the earliest pickup at 7:00 a.m.
- Options B, D & E would be more expensive due to cost of avoiding CT violations
- Options B, D & E create more morning CT violations for ES students; Option C does not

# Positive **Safety** Impacts: **Increased Sleep**

When students get more sleep, the following safety impacts occur:

## ■ **MS & HS students:**

- Reduction in unsupervised time after school if in Tier 2 or 3

## ■ **HS students:**

- Driving accidents are the #1 cause of teen death, with drowsy driving a major contributing factor
- Later HS start times reduce drowsy driving and increase HS student driving during daylight hours

## ■ **Crime & gang activity**

- After-school hours are peak time for juvenile crime & youth victimization, including gang related crime
- Later dismissal time means reduced opportunity for juvenile crime & victimization, including gang related crime

# Recommendations based on Safety

	High School	Middle School	Elementary School
<b>Best Options</b>	2 <sup>nd</sup> /3 <sup>rd</sup> tier A, B, C, D, E	3 <sup>rd</sup> tier C, D	Late 1 <sup>st</sup> tier A, C or 2 <sup>nd</sup> /3 <sup>rd</sup> tier
<b>Worst Options</b>	1 <sup>st</sup> tier current	1 <sup>st</sup> tier, E current	Early 1 <sup>st</sup> tier B, D, E

Based on safety impacts, Option C provides the greatest advantages for all grade levels.

# Sports & Extracurricular Activities

## School-Based Athletics:

- HS sponsored athletics
- Virginia High School League activities
- MS intramurals

## Non-School-Based Athletics:

- All community sports teams
- All individual student sports & athletics
- PTA sponsored ES sports

## School-Based Activities:

- Co-curricular, extra-curricular
- Field trips
- Theatre, dance & performance
- Band, chorus, orchestras
- After-school programs
- Interest clubs, yearbook, newspapers, literary magazine
- Student government, honors societies

## Non-School-Based Activities:

- Jobs
- Religion classes
- Boy Scouts, Girl Scouts, Explorers, etc.
- Music lessons
- Art classes
- Youth orchestras (e.g., AYP)

# Positive Sports & Extracurricular Activities Impacts

Bell schedule changes are expected to have the following impacts:

## ■ All grade levels:

- Adequate sleep has positive impact on athletic performance & sports participation
- Athletes need sleep time to recover from sports training and from the demanding schedule of school & sports
- Sports participation improves time management skills
- ES ball fields available earlier for HS, club & community use

## ■ ES students:

- Increased opportunity for after-school enrichment activities
- Larger window than at present for service providers (tutors, music teachers, art & religion classes, etc.)

# Positive Sports & Extracurricular Activities Impacts

Bell schedule changes are expected to have the following impacts:

## ■ MS students:

- Reduced need for MS after-school programs, lowering costs
- Sufficient time for intramural sports, health & wellness activities
- No change expected in participation

## ■ HS students:

- May be easier to recruit coaches
- Schedule more like Loudoun & Arlington Counties for interscholastic sports competitions

## ■ Community for-profit programs (schools of dance, gymnastics, martial arts, music teachers, tutors, etc.) are expected to adjust to any changes in the school schedule to maintain profitability

# Negative Sports & Extracurricular Activities Impacts

- **All grade levels:**
  - Ball fields & gyms are shared by school, youth & adult community sports teams
  - Increased competition for HS & MS gyms & fields with community groups with HS & MS activities starting later
- **ES & MS students:**
  - Before-school enrichment activities would shift to after-school times, which could change opportunity for some students
- **MS students:**
  - Possible reduced opportunity for private instrument practice, meeting with tutors, etc.
  - Option C would shift MS after school activities more than would other Options, with MS dismissal at 4:00 to 4:20 p.m.

# Negative Sports & Extracurricular Activities Impacts

## ■ HS students:

- Possible reduced opportunity for recreational athletics
- Possible reduced opportunity for after-school enrichment activities
- Possible shorter practice time was debated - inconclusive
- Travel in rush hour could increase travel time to games & practices
- Warm-up, conditioning & practice time could be reduced; increased need for lighted fields due to later practices
- Time between end of school & start of practice might be reduced; that time is currently used for:
  - Converting gyms from daytime use set-up
  - Transport players to alternate facilities, when needed
  - Academic support

# Negative Sports & Extracurricular Activities Impacts

## ■ HS students:

- Expected impact on District bands, orchestras, & choruses
- Possible reduced opportunity for private instrument practice, meeting with tutors, etc.
- Smaller window than at present for service providers
- Possible reduced job opportunities, esp. with reasonable hours

- Coaches may find later practice & game time schedule unacceptable
- If teachers want to get home, potential difficulty finding club & activity sponsors

## ■ Caveat:

- Instrument practicing, tutoring, and the like could be moved to before-school times, as some activities & teams do now, but this would limit the effect of a later bell schedule for those students

# Negative Sports & Extracurricular Activities Impacts

## Within FCPS:

- Approximately 70% of the high school population participates in student activities
- Nearly 40% of all high school students participate in Virginia High School League (VHSL) athletic or academic activities
- Over 50% of the middle school population participates in the after-school program
- SIC discussed multiple perspectives on the place of sports in bell schedule decisions, with some advocating the importance of these programs being available to the majority of students, and others concerned that this “tail” excessively wags the “dog”

# Negative Sports & Extracurricular Activities Impacts

A large body of research evidence establishes the positive impact of participation in athletic & other extracurricular activities on:

- GPA
- Test scores – HS & college; & college & graduate school admissions tests
- School attendance
- Lower drug/alcohol use
- Less risk-taking behavior
- College aspirations
- College enrollment
- Success after college
- Civic participation
- Mental health
- Physical health & weight

# Recommendations based on Sports & Extracurricular Activities

	High School	Middle School	Elementary School
<b>Best Options</b>	D, E	B, E	A - E
<b>Worst Options</b>	A, B, C	A, C, D, E	--

# Positive HS Student Employment Impacts

- Current start times may impose a greater hardship on students who work 20+ hours weekly than they do on non-working students.
- Under the current FCPS bell schedule, students who work 20+ hours weekly average 37 minutes less sleep per school night than non-working students.
- Later HS start times are expected to increase the amount of sleep for working students.

# HS Student Employment Impacts

## No Agreement

- Members did not agree on the potential impact of later HS start times on some aspects of student employment:
- Some members cited FCPS employer interviews and research in other jurisdictions, concluding that there would be no impact on student employment from moving start times
- Others expressed concern that restricted after-school employment opportunities could disproportionately impact low-income families

# Recommendations based on Student Employment

	High School	Middle School	Elementary School
<b>Best Options</b>	C, D, E	NA	NA
<b>Worst Options</b>	A, B	NA	NA

# Student Impact Committee

## Limitations on Conclusion, Additional Recommendations – p. 1

- **Costs and consistency with other goals not fully considered.**
  - Neither the SIC nor the TTF has had the time to evaluate how our recommendations fit into competing educational priorities as defined by the Commonwealth's Constitution, the Virginia Board of Education, and the Fairfax County School Board.
  - If additional or diverted resources would be necessary, SIC was not able to weigh as an impact the possible effect on other school programs, goals or objectives.
  - The SIC did not have adequate access to cost information or to whether additional resources and/or diversion of existing resources would be needed to implement a particular bell schedule. As a result, the SIC was not able to compare costs of one schedule to another.

# Student Impact Committee

Limitations on Conclusion, Additional Recommendations – p. 2

## ■ Targeted input required.

- Because certain population groups, in particular minority, single parent, economically disadvantaged and immigrant families, may have been underrepresented on the SIC and the TTF, and may experience different or disproportionate impacts from any bell schedule change, the School Board should undertake appropriate efforts to elicit input from those groups to assure that the TTF and the School Board has have fully evaluated and considered those impacts.

# Student Impact Committee

## Limitations on Conclusion, Additional Recommendations – p. 5

### ■ Other possibilities considered.

- Other possible improvements may exist and should be considered, particularly those that could ameliorate potential negative impacts. Additional consultation with Facilities and Transportation Services will be necessary so that their suggested improvements and changes are included before implementation of any new bell schedule, should the School Board decide to proceed.

### ■ Extensive general public input required.

- Before selection or implementation of a new schedule, the School Board should be diligent in providing parents, schools, and the community at large with all relevant information on the advantages and disadvantages of schedule change.
- Before selection or implementation of a new schedule, the School Board should provide adequate opportunity for public comment through local forums, meetings and/or appropriate surveys in addition to formal hearings.

# Student Impact Committee

## Limitations on Conclusion, Additional Recommendations – p. 6

### ■ **Transportation Re-engineering required.**

- Phase I Committees of the TTF (Flip, Slide and Tweak) proposed a range of transportation re-engineering recommendations for implementation and/or further study.
- These recommendations were designed to both improve the management of current resources and to help balance or offset any expense which may be associated with a bell schedule change. Conclusions on these recommendations by the TTF included:
  - Adoption of recommendation
  - No consensus on recommendation
  - Table, not fully consider, or no vote on recommendation
- The SIC requests that the TTF fully revisit the work of the Phase I Committees and entertain all suggestions for improving efficiency and flexibility of the bus system and for reducing costs.

# Student Impact Committee

## Review

- **Option C** most closely met the agreed criteria established by TTF and SIC.
- **“Option F”** was found to be an alternative bell schedule worth consideration by TTF.
- SIC recommends that the TTF final report provide at least two alternatives to the School Board in order to enhance flexibility and exchange of views during subsequent Board deliberation and eventual public consideration.

# Student Impact Committee

## Recommended Bell Schedule #1

### OPTION C

	School Start Times			School End Times		
	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
	7:50-8:10	8:35-8:55	9:20-9:40	2:30-2:50	ES 3:15-3:35	ES 4:00-4:20
					HS/MS 3:25-3:45	HS/MS 4:10-4:30
ES	XXXX	XXXX	X	XXXX	XXXX	X
MS		XX	XXXX		XX	XXXX
HS/SS		XXXX	XX		XXXX	XX
	Total time span: 1 hour 50 minutes			Total time span: 2 hours		

# Student Impact Committee

## Recommended Bell Schedule #2

### “Option F”

	School Start Times			School End Times		
	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
	7:40-8:00	8:25-8:45	9:10-9:30	2:20-2:40	ES 3:05-3:25	ES 3:50-4:10
					HS/MS 3:05-3:35	HS/MS 4:00-4:20
ES	XXXX	XXXX	X	XXXX	XXXX	X
MS		XX	XXXX		XX	XXXX
HS/SS		XXXX	XX		XXXX	XX
	Total time span: 1 hour 50 minutes			Total time span: 2 hours		

# Student Impact Committee Members

## ■ Academic Achievement, Health, & Safety

Subcommittee 1 led by: Robin Carroll & Phyllis Payne

- Aste, Mahri
- Brigleb, Jay –student
- Carroll, Robin
- Jakulski, Jill
- Payne, Phyllis
- Vennergrund, Carol
- Wright, Doug

## ■ Sports & Extracurricular Activities

Subcommittee 2 led by: Mark Emery & Jill Hecht

- Bosley, Mary Ann
- Emery, Mark
- Harbeck, Judy
- Hecht, Jill
- Nicholson, Beanca – student
- Vdovjak, John

## ■ SACC, Daycare, Family, & Student Employment

Subcommittee 3 led by: Roger Cryan & Peter Steinberg

- Cox, Stephanie
- Cryan, Roger
- Galicia, Carlos - student
- Kim, Christina
- Monaco-Stevenson, Lory
- Steinberg, Peter