

Student Impact Committee Preliminary Report



Presentation to
Transportation Task Force

Jan. 8, 2008

SIC SUBCOMMITTEE 1 ATTENDANCE: Academic Achievement, Health & Safety

	11/19/07	12/6/07	1/3/08
Aste, Mahri			✓
Brigleb, Jay –student			
Carroll, Robin (co-chair)		✓	✓
Jakulski, Jill			✓
Payne, Phyllis (co-chair)	✓	✓	✓
Velkoff, Patricia (chair)	✓	✓	✓
Vennergrund, Carol	✓		✓
Wright, Doug	✓		

SIC SUBCOMMITTEE 2 ATTENDANCE: Sports & Extracurricular Activities

	11/19/07	12/6/07	1/3/08
Bosley, Mary Ann			
Emery, Mark (co-chair)	✓	✓	✓
Harbeck, Judy	✓		✓
Hecht, Jill (co-chair)		✓	✓
Kang, Shirley	✓		
Nicholson, Beanca - student			
Vdovjak, John	✓		

SIC SUBCOMMITTEE 3 ATTENDANCE: Daycare, SACC & Families

	11/19/07	12/6/07	1/3/08
Stephanie Cox			
Roger Cryan (co-chair)		✓	✓
Carlos Galicia			
Christina Kim			
Lory Monaco-Stevenson	✓		
Peter Steinberg (co-chair)		✓	✓
Gayle Wood			

SIC Summary of Attendance:

- Meetings:
 - Nov. 19, 2007: 9 present, 13 absent
 - Dec. 6, 2007: 7 present, 15 absent
 - Jan. 3, 2008: 11 present, 11 absent
- Except for the Subcommittee Chairs, subcommittee members did not have the opportunity to participate due to imposed time constraints
- Recommendations were proposed by 6 members, and voted on by 11 members

SIC 1: Academics

- With later high school start time, students get more sleep – A- E proven **POSITIVE** HS academic impacts:
 - Reduced tardiness
 - Improved attendance, 1st period class & all day
 - Lower drop-out rates
 - Improved preparedness, participation, & alertness in early classes
 - Improved memory, concentration, & learning
 - Improved mental processing speed & creativity
 - Anecdotal report of improved grades

SIC 1: Academics

- 1st and 2nd tiers may more closely match the body clocks of ES students in terms of being ready to learn earlier in the day and tired late in the afternoon.
- ES children have different sleep clocks than teens. No phase delay, so able to fall asleep and wake up earlier. (See handout).
- E has negative impact for elementary students: most schools in tier 3
- Later start time will mean more time for breakfast at home

SIC 1: Academics

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

Recommend: Option A, B, C, D

provide advantages for middle and high school students without disadvantaging elementary school students.

SIC 1: Health

- Increased sleep – A – E **POSITIVE** health impacts:
 - All age levels:
 - Release of growth hormones
 - Improved immunity, cell & tissue repair
 - Improved mood, reduced depression & anxiety
 - ES students in Tier 1 & 2 would have a schedule closer to their circadian rhythm, & parents have control over ES bedtime and evening routines
 - C & D place MS in last tier, with greatest sleep benefits
 - ES students in Tier 1 & 2 would have a schedule closer to their body clock, & parents have control over ES bedtime and evening routines

SIC 1: Health

- Student-reported **POSITIVE** health impacts:
 - Less overall sleepiness, less daytime sleepiness
 - Reduction in unplanned sleep
 - Decreased appetite
 - Improved focus of attention
 - Not falling asleep during homework
- Additional research findings:
 - Improved ability to handle complex tasks
 - Reduced irritability
 - Reduced potential for drug & alcohol use
 - Reduced vulnerability to having auto accidents
 - Decreased hyper-sexuality
- **Recommend: Option A or C**

SIC 1: Health

POSITIVE health effects from reducing sleep deprivation, which causes:

- Physical impairment, poor coordination, delayed reaction time
- Anxiety, depression, and other emotional problems
- Increased incidence of obesity, diabetes, illness in general, high blood pressure, and heart disease
- Poor decision-making, poor judgment, increased risk-taking
- Magnification of the effects of alcohol on the body
- Exacerbation of the symptoms of ADHD, such as impulse control, irritability, and lack of concentration”

SIC 1: Health

■ Other:

■ Breakfast programs:

- Out of 236 schools & centers, breakfast is served daily:
 - At 161 sites
 - To 140,000 students
- Breakfasts are prepared at a few sites & then distributed
- 20% of all enrolled students receive Free & Reduced-Price meals – both meals and students must arrive early enough for breakfast to be served
- We are gathering additional information

SIC 1: Health Impacts

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

Recommend: Option A and C meet elementary and teen sleep needs

SIC 1: Safety

- Increased sleep – **POSITIVE** safety impacts:
- Driving accidents: #1 cause of teen deaths, with drowsy driving a major contributing factor
 - Reduce drowsy driving by teens
 - Reduce auto accidents involving teens
- Crimes & gang activity
 - Later HS start time means reduced opportunity for youth crime victimization & juvenile crime including gang-related crime, all of which peak during after-school hours
 - These problems will not shift to before-school hours

SIC 1: Safety

- Civil Twilight (CT)
 - Students are safer when they are not walking to school or waiting at the bus stop in the dark; i.e. without civil twilight violations.
 - For elementary students, B, D, and E may create more morning violations since TTF ride time limits are 45 minutes and the 7:30 start time only provides 30 minutes between our civil twilight restrictions and school start time.
 - FTS believes they can fill Tier 1 with short-runs and thus minimize Civil Twilight violations
 - Conclusions:
 - FCPS already selectively violates Civil Twilight
 - FTS will continue to minimize Civil Twilight violations
- **Recommend: Option C**

SIC Subcommittee 1

- **NO NEGATIVE EFFECTS** result from later start times for HS students in:
 - Academic performance
 - Health
 - Safety
- Depending on the specific bell schedule, student in Tier 1 may get less sleep than other Tiers

SIC 2: Sports & Extracurricular Activities

School-Based Athletics

(All HS athletics & VHSL Activities; MS intramurals)

- **POSITIVE** impacts:
 - A-C: Parent-coaches for HS may be easier to recruit
 - B & E: MS sufficient time for intramural sports, health and well activities
 - D & E: Sufficient time for HS athletics after school
 - Before-school practices allow athletes to have more time after school for jobs, homework
 - Before-school practices result in athletes being alert at the start of the school day
 - Adequate sleep has positive impact on athletic performance & sports participation
 - Closer schedule to Loudoun & Arlington counties for intramural sports competitions
 - ES ball fields available earlier for HS, club & community use

SIC 2: Sports & Extracurricular Activities

School-Based Athletics – HS **NEGATIVE** impacts:

- Ball fields & gyms are shared by school, youth & adult community sports teams – their activities would start later & end later than at present
- Possible shorter practice time was debated – coaches would likely find this unacceptable
- For before-school practices, need adequate shower facilities
- For high schools, the 45-minutes between end of school & start of practice is planned for students to get academic support, to convert gyms from set-ups for daytime use, & to get players to alternate facilities – this time could be reduced

SIC 2: Sports & Extracurricular Activities

School-Based Athletics – HS **NEGATIVE** impacts:

- A-D: Swim & Dive: scheduling problems like those at present
- A & B: Away competition, begin to prepare before end of school day
- A-C: Rush hour increases travel time to games/practices
- Warm-up, conditioning, & practice times reduced
- CAREI: negative correlation between before-school practices and letter grades

School-Based Athletics – MS **NEGATIVE** impacts:

- C & D: negatives worse for MS

SIC 2: Sports & Extracurricular Activities

Non-School-Based Athletics – **POSITIVE** impacts:

(community sports teams; individual student sports/athletics, PTA-sponsored ES sports)

- Increased opportunity for recreational athletics:
 - HS: D & E; MS: E; ES: A – D
- A, C & D: MS intramural sports & health & wellness activities take little time – probably no change in participation

Non-School-Based Athletics – **NEGATIVE** impacts:

- HS – A-C and MS – A, C & D: reduced opportunity for recreational athletics
- All grades: increased competition for HS & MS gyms & fields with community groups

SIC 2: Sports & Extracurricular Activities

School-Based Activities (Co-curricular, extracurricular, after-school programs, field trips, theatre & dance, band/chorus/orchestras, literary groups, clubs) –

POSITIVE impacts:

- MS – A, C & D: fewer hours & lower cost for after-school programs
- ES – A-D: increased opportunity for after-school enrichment activities

SIC 2: Sports & Extracurricular Activities

School-Based Activities – **NEGATIVE** impacts:

- HS – A-C:
 - significant impact on District bands, orchestras, & choruses
 - reduced practice opportunities
 - Sports attendees (cheerleaders, band, color guard, dance team) out later at night due to later game times
 - Potential increased difficulty finding club/activity sponsors if teachers want/need to get home
- MS – C: negatives worse for MS
- HS – A, C & D: less time for after-school enrichment activities
- MS – E: more after-school programs needed due to early release
- ES – A-D: no opportunity for before-school enrichment activities

SIC 2: Sports & Extracurricular Activities

Non-School-Based Activities (Tutors, jobs, religion classes, Boy/Girl Scouts, explorers, music lessons, youth orchestras (e.g., AYP), art classes, etc.) – **POSITIVE** impacts:

- HS – D & E: adequate time window for service providers
- MS – E: larger window for service providers
- ES – A-D: larger window for service providers

SIC 2: Sports & Extracurricular Activities

Non-School-Based Activities – **NEGATIVE** impacts:

- HS – A-C: reduced job opportunities, esp. with reasonable hours, posit possible disproportionate impact on low-income students
- HS: A-C: reduced time to practice instruments, meet with tutors, etc.
- HS – A-C: smaller time window for service providers
- MS – A, C & D: reduced time to practice instruments, meet with tutors, etc.
- MS – A, C & D: smaller time window for service providers
- Caveat: instrument practicing, tutors, and the like could be moved to before-school times, but this limits the effect of a later bell schedule

SIC 2: Sports & Extracurricular Activities

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

- GPA
- Test scores
- School Attendance
- Lower drug/alcohol use
- Less risk-taking behavior
- College aspirations
- College enrollment
- Civic participation
- Mental health
- Physical health & weight

SIC 2: Sports & Extracurricular Activities

- 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
- **Recommend: Options D or E**

SIC 3: Daycare, SACC, & Families

■ **POSITIVE** impacts:

- Early start for elementary schools would likely ease daycare needs – no need for morning daycare
- MS & HS student schedules would more closely parallel schedules of working parents
- ES in Tier 1 would have more play time after school
- ES in Tiers 2 & 3 would have more leisurely mornings
- Adolescent improvement in mood, behavior, and family interactions

SIC 3: Daycare, SACC, & Families

- **NEGATIVE** impacts:
 - HS students not available to provide daycare for younger siblings; two caveats:
 - ES are transported in all Tiers, so this would not affect all ES students
 - With ES children home earlier in the afternoon, working parents may increase formal daycare to prevent latch-key status
 - Restricted after-school employment opportunities may disproportionately impact low-income families
- **Recommend: Option C**

A Possibility: "Option F"

- Successful implementation of later high school start times has generally located high schools in the middle tier of bussing, around 8:30 a.m.
- Remember: Option C is identical to D in framework, but shifted to 20 minutes earlier
- "Option F" would shift all times to be half-way between C & D or, stated two different ways:
 - Option C would shift 10 minutes earlier
 - Option D would shift 10 minutes later
- SIC did not vote on the viability of "Option F," and additional information is needed from FTS before it can be evaluated

“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 Additional Considerations

■ Financial Impacts:

- Given SB's FY 2009 \$100 million+ deficit, the provision of cost estimates after TTF's final proposed bell schedule increases the potential that our recommendations will be at variance with short-term budgetary realities.
- For better & worse, proposed measures concerning cost savings that are not directly realized by FCPS have been tabled; e.g., fewer teen auto accidents will reduce property damage, medical costs, parental lost work hours, etc.
- For better & worse, many proposed measures involving non-FCPS costs have been tabled; e.g., improve walking paths, add street lights & crossing signals, increase SACC personnel & crime prevention programs
- The possibility of balancing CUTS & COSTS by considering a full range of transportation re-engineering options alongside bell schedule changes was altered by the organization of TTF Phase 2 around bell schedules. Given our short timeline, this effectively devalued the importance of Phase 1 recommendations that did not directly address bell schedule changes

SIC Additional Considerations

- Facilities & Transportation Services (FTS)
 - FTS has consistently accommodated program & specialized transportation requests from SB, sometimes at significant costs (time, money, grief)
 - The evaluation of problems and priorities identified by FTS should be solicited by the School Board and be considered for inclusion in any final recommendations
 - SIC & TTF have discussed the possibility that FTS be consulted before student placement decisions are made when these will impact FTS's provision of services
 - Non-mandated program bussing would benefit from monitoring & withdrawal or modification when students fail to use the bus services arranged to them

SIC Additional Considerations

- Under-represented groups
 - SIC discussions have noted that students from under-privileged groups (low-income, English-as-a-Second-Language, single-parent households, etc.) may be disproportionately negatively affected by TTF recommendations
 - At-risk students have been singled out by the Virginia Board of Education as needing “policy, statutory, fiscal, or regulatory changes ... to increase the high school graduation rates”
 - Research from Minneapolis shows that the socioeconomic status of families has a significant impact on their ability to adjust and cope with the changes; more affluent suburban families are often better able to accommodate changes in routine than are urban or low-income families. They also found significant differences in implementation challenges and outcomes between urban and suburban communities.
 - These and a range of other fiscal priorities have not been discussed by TTF as vying for FCPS SB budgetary priorities

SIC Additional Considerations

- SIC discussed pros and cons without consensus:
 - Impact of bell schedules on teens driving during morning or evening rush hour: some felt that rush hour was so long as to make its effect on any particular bell schedule irrelevant; others felt that students could be at greater risk if schools began closer to 8:30 than to 7:30
 - SACC is at capacity in all ES; SACC should expand but may not be able to expand due to staffing & space considerations
 - Possibly shortened time for mid-day field trips because of changes in bus availability – need more information
 - HS employment: some felt that this could disproportionately negatively affect low-income students; others pointed out that FCPS policy allows students to leave school early if family work obligations and/or personal hardship make this necessary

SIC Additional Considerations

- TTF discussed pros and cons without consensus:
 - Although Special Education students are 7% of the student population, they require 34.6% of transportation expenditures – low by national standards. Proposals still need to be developed on how to provide appropriate transportation for these students with greater efficiency & at reduced cost

SIC Additional Considerations

- Recommendations unrelated to bell schedules for ongoing consideration:
 - Since MPS found that 35-55% of buses transport students out-of-boundary, FTS should continue to evaluate how to reduce, eliminate, consolidate, and improve transportation to all out-of-boundary programs
 - The Consortia Plan, begun in 2007-8, should be expanded to include all school levels. Differential instruction for all grades would allow for transportation to be based within each Consortium, reducing transportation costs.
 - FCPS should evaluate the cost savings of centralized depots, particularly for HS & MS students (model of the two Magnet ES programs)

SIC Additional Considerations

- Recommendations unrelated to bell schedules (cont'd)
 - Additional proposals that may need to stay on the table:
 - Shorten the time for transporting students who are grandfathered after school/program boundary changes
 - Set a minimum number of riders for Academy shuttles
 - Create single runs to and from outlying destinations
 - Consolidate bus stops
 - Re-evaluate boundaries for programs and/or schools so that school attendance areas are more compact, contiguous, & amenable to more efficient transportation routes & schedules
 - Develop student & parent education program concerning teen sleep needs and how to achieve optimal sleep

SIC Additional Considerations

- Recommendations unrelated to bell schedules (cont'd)
 - Additional proposals that may need to stay on the table (con'd):
 - Add GT programs and/or modify GT boundaries to reduce transportation demands
 - Design routes with multiple destinations & eliminate/reduce route duplication
 - Increase walking distance to bus stops and to schools
 - Add bus support staff 12 hours daily
 - Reduce the daily percentage of out-of-service buses
 - Seek a volunteer school to pilot use of Metro buses

Neither SIC nor TTF has had the time to evaluate how our recommendations fit into competing educational priorities as defined by the state Constitution, the Board of Education, and the FCPS School Board. Some of those priorities are listed below.

The Virginia Constitution states that each child will:

- Acquire basic knowledge & competence in fundamental learning skills
- Acquire skills & knowledge needed for employment or for education beyond high school
- Acquire a sense of personal worth & dignity
- Develop attitudes & values that lead to responsible citizenship
- Develop understanding of one's relationship to his ecological, physical, economic & social environment
- Understand & appreciate people of different nationalities & ethnic groups
- Develop personal habits for continuing physical & mental health
- Appreciate beauty as it contributes to daily life

FCPS Student Achievements Goals include:

- **Academics**: All students will obtain, understand, analyze, communicate, and apply knowledge & skills to achieve success in school and in life.
- **Essential Life Skills**: All students will demonstrate the aptitude, attitude, & skills to lead responsible, fulfilling, and respectful lives.
- **Responsibility to the Community**: All students will understand and model the important attributes that people must have to contribute to an effective and productive community and the common good of all.