

## Ideas for Tweaking the School Transportation System

### Two-and-a-half tiers:

1. High schools and middle schools at 8-8:15 a.m., on same routes.
2. Most elementary schools at 8:45-9:15 a.m.
- 2½. Some elementary schools at 7:40, where routes are short and can be run between 7:10 and 7:35.
- 2½. Other elementary schools opening throughout 7:45 to 9:15, if more busses are needed than can serve HS and MS in one tier.

To make this work, extend elementary school day (preferably recess) by 20 minutes to make morning and afternoon bus schedules more compatible.

### Eliminate Monday 1/2 days to give consistency to weekly schedule.

This should allow hiring more drivers with mid-day jobs, combining driving jobs with other school jobs staff. This could include splitting driving jobs between an ES teacher's aide (who drives in the morning) and a HS custodian (who drives in the afternoon). A more continuous workday would make the jobs more appealing.

If additional teacher work time is needed, close each ES school once each 3 weeks, on days that differ by school. Expand SACC to accommodate this change. Opening for 2 full Mondays would be cheaper than opening for 3 half-Mondays.

### When optimizing bus schedules:

- Include some value for student's time; even a minimal value (say, \$1/hour) will generate a more reasonable schedule.
- Include some value for student's sleep time.
- Adhere to policies about drop-off and pick-up.
  - o Do not drop off students before the building is open.
  - o Do not drop off ES students more than 15 minutes before start time.
  - o Do not drop off MS/HS students more than 25 minutes before start time.
  - o No ES kids out beyond civil twilight.
- Do not assume limited capacity: **recognize that more busses and more drivers are needed.**
- **Above all, recognize that, once the objectives are defined, this is a problem that can be economically optimized, and FCPS should be willing to accept help from any direction on that basis.**
  - o **Objective:** Minimize time from pick-up to school start time
  - o **Objective:** Minimize cost of running system
  - o The two objectives can be combined by setting a dollar value on students' time.
  - o The means of achieving the objectives are defined by the transportation options and their costs, including walking, bussing, public transportation, cabs.
  - o The objectives of this optimization are constrained by need to meet minimum standards, **for example:**
    - No ES students outside beyond civil twilight.
    - Provide transportation for all students meeting specific criteria.
    - All HS start times between 7:45 and 8:20

Such an optimization can be defined if FCPS transportation department is willing to open itself to all options.

**Set performance standards for the FCPS transportation department that reward them for successful provision of service, rather than for discouraging ridership.**

**Use public transportation.**

- Give any student that asks, and whose route from home to school is served by public transportation, a student-only bus/Metro pass.
- Experiment with optional use of public transportation before using it to replace any routes.

**Improve fleet efficiency.**

- 25% redundancy (1200 busses plus 400 spares) is too high.

**Establish more GT programs, in all middle schools and up half of elementary schools.**

- More GT programs means fewer kids going out of zone.
- Require families to provide transportation for bussing to GT centers when in-school GT is available.

**Forget about green busses, unless full funding is available for incremental costs.**

**Explore bigger busses, where appropriate.**

**Don't grandfather routes for more than one year.**

**FCPS should work actively with PTA's to improve pedestrian routes: advocate sidewalks, crossing signals.**

**Recognize that many high schools have enforced "study hall" between school and after-school activities. Eliminating this provides more cushion for starting later without sacrificing after-school activities.**

**Find more data from benchmarking in other systems:**

- Cost per student
- Fleet redundancy
- Etc.

**Comparable systems in previous studies may not be representative. Local govt. agencies have a way of finding cohorts that makes their system look good.**