



**Project Summary**  
**for**  
**Fox Chapel Area School District**  
**Pittsburgh, PA.**

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**Submitted by:**

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## PROJECT SUMMARY

Fox Chapel Area School District (FCASD) and Transfinder have had a business relationship since 2012 when FCASD purchased Routefinder Pro, Transfinder's flagship routing software.

Transfinder's Professional Services (TPS) team has also had a business relationship with the district since that time, providing services that converted the data from their previous routing software to Routefinder Pro.

In 2018 FCASD engaged TPS to analyze the district's current bus routes and bell times to provide a Bell Time Study offering options that would enable the district to shift school start times for middle school and high school students later in the day.

Below is a summary of the options provided in the Bell Time Analysis:

- Option 1 bell schedule moves secondary students to the last tier of service with 60 minutes between morning times. It increases the number of buses needed by 26 from the current year.
- Option 2 bell schedule moves elementary schools to the secondary tier. It maintains 60 minutes between tiers of service. It also increases the number of buses needed by 26 from current year.
- Option 3 again has secondary in the second tier, but only has 45 minutes between tiers. Like the previous options, this would increase the bus fleet by 26 buses.
- Option 4 has secondary schools split with 45 minutes between tiers. This option will increase the bus fleet by 19 buses.
- Option 5 maintains the current three tier system with 45 minutes between tiers. This option has high school arriving after 9:00 am and dismissing after 4:00pm. This option would increase the bus fleet by 6 buses.
- Option 6 is exactly like option 5, except that Hartwood is on the elementary tier of service. It will increase the fleet by 12 buses.

Transfinder summarized the potential operational impact by the number of additional buses that may be needed. The key influencer of transportation expenditures is the number of buses utilized. Though efficiencies may be found at the individual bus run level, the cost of operating a bus, even for a single run, will drive overall expenditures. This is especially true in contracted operations.

TPS was tasked with providing route consulting services that assumed all students will ride. Additionally, TPS also did not consider potential efficiency measures, such as stop consolidations or changes in walk zones, that might enable FCASD to reduce the number of buses projected in the summary above. This was to accommodate the Transportation Departments focus on effective service rather than efficiency.

FCASD found that they were most interested in Option 4 from the Bell Time Study. The original analysis by TPS indicated that option 4 would require an additional 19 buses to operate.

FCASD then engaged TPS to provide route consulting services which would produce a modified set of regular education bus routes (AM and PM bus runs) based on the chosen bell time option 4 with slightly modified times in order to have a proof of concept that this chosen bell time option would work.

Below are the times FCASD requested:

<b>School</b>	<b>AM Start Time</b>	<b>PM End Time</b>
Dorseyville Middle School	7:50	2:35
Hartwood Elementary	7:50	2:35
O'Hara Elementary	7:50	2:30
Fairview Elementary	8:35	3:10
Kerr Elementary	8:35	3:10
Fox Chapel High School	8:35	3:30

TPS created a new Routefinder Pro database and built out a routing scenario based on the chosen times. During the route consulting project, TPS found that option 4 could be accomplished using 12 additional big buses and 7 additional Vans. This option leaves ample amount of time between the school bell times and maintains extra capacity on the buses for flexibility and future growth. It is the professional opinion of Transfinder Professional Services that should FCASD choose to move forward with this option it can be a successful routing scenario.

Any time there is significant change to a districts bus routing structure it is important to keep the community well informed of changes. This is especially true when changes are made to school bell times. TPS recommends that FCASD adopt a well-defined communications plan to ensure that the community is fully informed.