

Oklahoma City School Transportation Office

Overview:

The public transportation system for students in Oklahoma City is not sufficient as magnet programs have increased the need while more kids are enrolling in private schools, leading to a decrease in funding.

Question 1:

The Oklahoma City School Transportation Office contains a large problem in its structure. One of its strongest assets, Sharon Jackson, is stretched too thin and is still participating in time-wasting jobs such as resending copies of information to school secretaries and driving buses when the drivers do not show up to work. Essentially, she is doing whatever she can to keep their organization running, but this presents the problem of preventing her from being able to perform the tasks that are necessary to improve and sustain a viable good for Oklahoma City as effectively as possible. Instead of attempting to find a solution to set up bus routes in the summer when families are moving, Sharon's attention is in other places. With Ben Johnson only being a temporary director, temporary workers needing to be hired and thrust into positions with little training and personnel changing, her job does not seem to be getting easier anytime soon either. On top of their lack of resources in terms of workers, the organization lacks information. After the summer months, half of the kids are in a different location and they do not know where. This dramatically changes their bus routes and may even require more bussing, but they do not know until parents are complaining to undertrained employees on the phone.

Sharon Jackson needs to be able to work on the big picture. She needs to figure out where kids are and where they need to be taken. Without her efforts being focused in developing Student Stop or training other employees or expanding her knowledge in Luminous, SMART Route and EZ-Trans, these software systems are not providing their maximum potential. The School Transportation Office must be able to complete their three missions and also be set up to complete those missions in the future. Exhausting resources in an inefficient manner to survive for a small amount of time is a solution. In short, the School Transportation Office needs to better its system and software to improve its own service, eliminate its compounding issues created by complaint calls and guarantee a promising future.

Question 2:

The School Transportation Office needs to communicate with parents in order to successfully transit the children effectively. In order to try and provide a solution, I investigated the cause of one of their main problems.

Half of families move during the school year, with most being in the summer months. Why exactly are these family moving? According to a census done by the government¹, the last two census's done have indicated that the most popular reasons to move are families looking for a new or better home, an "other" housing reason or an "other" family reason. In fact, 48% of families move because of housing and 30% move because of family and only 20% being due to employment. With this information, I believe that the School Transportation Office will be able to set up a system to properly communicate further with families in the public school system. Possibilities include a simple Possible Relocation Form done at the end of a school year that each family enrolling in a public school the following year is highly encouraged to fill out to ensure proper bus routing and allocation. Of course, all information provided would be optional and confidential.

To properly utilize this form, the organization needs to understand the reasons people move and how they can identify a possible move. Looking at the top reasons that people decide to change residences, all seem to be something that does not happen on a whim and can be foreseeable. Leasing agreements are explicitly known. Any family that has an apartment or home for rent that's lease ends in the near future with a possibility of relocating could be indicating that on the Possible Relocation Form. Families typically do not just want a new or better home on a whim. Any desire could be indicated with a scale 1-10 in interest in moving. According to a divorce website², any divorce in Oklahoma involving a family with a minor has a waiting period of at least 90 days. Summers are typically three months and divorces have a high chance of the child changing addresses, so any pending divorce could be indicated on the hypothetical Possible Relocation Form. Once families opt to inform the School Transportation Office of their possible move, follow ups could be scheduled to learn whether or not the families did indeed move.

To summarize, I believe that the School Transportation Office can better create their initial bus routes at the beginning of each school year instead of attempting to fix them once parents angrily inform the phone lines. I would expect much less parent phone calls as some responsibility is shifted to the families to truly engage themselves in communication. This would produce many beneficial consequences that would be useful year to year:

- 1) Less temporary workers need to be hired to answer phone calls. Their will be less rotation of personnel in that department and less untrained workers.
- 2) The routers that are rushed to create routes once they truly learn where students are residing can be more prepared. These routers should now have more time on their hands that can be used to learn how to operate the routing software packages that have a high learning curve.
- 3) Sharon Jackson will hopefully not have to help routers as much. Two of the reasons in the Case Study involve routers needing her help.

Another possible solution also involves refocusing the job of Sharon Jackson. With so many people attempting to communicate with her and asking questions, their should be some

¹<https://www.census.gov/prod/2014pubs/p20-574.pdf>

² http://www.divorcenet.com/states/oklahoma/ok_faq01

type of filter. There is no need for her to waste time resending a list of students that she has already informed people how to print out. Any sort of assistant that could be added immediately under her could provide this help. While that may require some extra work in terms of training in the immediate future, this is something that is sustainable as it improves future operations. Ideally, this assistant will either know EZ Trans or show capability to learn it in order to create a key or interpret a key that aids the routers about the different elements on the student's chart on EZ Trans. The assistant can also handle all other smaller tasks such as finding a replacement bus driver or retelling a school secretary how to print off a SMART Route list.

With this assistant, I expect Sharon to have less repetitive responsibilities and the implementation of a new director when Ben Johnson leaves to go smoother as there are more people at the top of the organization working together to ensure everything works together. And most importantly, Sharon, the only person with proficiency in the software systems that are being used, can focus on implementing Student Shop and training others in all of the different software systems in order to improve how routing is done, seen and shown to parents.

Question 3:

If I was given the opportunity to intern at enFocus, I believe I should work on my first solution, setting up a Possible Relocation Form. As a Computer Science major and Applied and Computational Mathematics and Statistics supplementary major, inputting, working with and analyzing data is something I am familiar with. Engineering courses have helped me improve my abilities to problem solve and when I do not know an answer, do my best to quickly find one. The critical thinking and analytical skills that are necessary for my courses will be effective as I compile a list of all the reasons of why families would be moving and figuring out the best way to gather this information.