Literature Review

In this linear programming problem we are ensuring that we properly use funds in the 532d TRS. We are optimizing that all instructors get an opportunity to go to at least one professional development every year. This ensures better instruction and more rounded instructors. This is very similar to the endeavor of the Compstat used by the NYPD [1]. This showed that resources should be allocated to areas with more reported crimes [1]. Like this idea we are showing that we should allocate professional development money to areas where it would improve overall instruction. This linear programming model will ensure that we make the most of the resources in our organization. We are also focusing on goal programming. The GP technique was first used by Charnes and Cooper in 1960s. The Rubber Plantation example shows how the owner of the process will give the priority to the goals that are set in the project [2]. We are using weighted constraints that determine who is going on professional development trips based on the budget, improving instruction, minimum and maximum trip targets, and finally merit. We are going to be using data from the previous year so we are assuming that the budget will be the same for years in the future.

[1] COMPSTAT: Its Origins, Evolution, and Future in Law Enforcement, Bureau of Justice Assistance Police Executive Research Forum, Washington D.C., 2013 <https://www.bja.gov/Publications/PERF-Compstat.pdf>

[2] A Goal Programming Approach to Rubber Plantation Planning in Tripura, Department of Mathematics Assam University, Silchar, India, 2012 <http://www.m-hikari.com/ams/ams-2012/ams-121-124-2012/nandiAMS121-124-2012.pdf>