

1135-VF-2524 **Zeinab Bandpey** (zeinab.bandpey@morgan.edu), Baltimore, MD 21251, **Isabelle Kemajou-Brown** (elisabeth.brown@morgan.edu), Baltimore, MD 21251, **Xiao-Xiong Gan**, Baltimore, MD 21251, and **Ahlam Tannouri*** (Ahlam.Tannouri@morgan.edu), Baltimore, MD 21251. *Urban snow removal - just in time mathematical model and algorithm.*

Winter urban traffic issues and performance constitute an important problem in certain countries. In urban areas, there is a need of efficient methods for snow removal. There have been several discussions on modeling snow removal, for which we notice several approaches. In this project, we plan to develop a new routing problem for snow removal that can complement the existing models. The main questions are design of models for efficient routes for snow removal, optimizing time and cost. Our questions are based on the Maryland State Highway Administration final research report SP007B4N (2002) for snow emergency decision support system. In this report, the authors in their model, considered the constraints that ensure continuity of the truck routes and consideration of a single depot, using a new approach. In our project, we plan to generalize the previous models, not only on constraints extension on truck routes, but also on constraints on budgets and time. We also plan to use a more suitable model or approach to solve the projected snow removal problem which will be introduced as emergency transportation model, using Just In Time model. (Received September 26, 2017)