

Abstract:

Management of solid waste is an old and familiar subject that continues to raise concerns for municipalities. The problem of any waste management system lies not only in the disposal of waste but also in the cost effectiveness and the efficiency of its method of collection. The New City of Kingston assumed an expanded role in waste management following the 1998 amalgamation of three formerly independent municipalities: the old City of Kingston, Kingston Township, and Pittsburgh Township. In the post-amalgamation period, the New City of Kingston faces challenges and uncertainties as it attempts to in harmonize three different methods of solid waste collection.

Although there were no substantial differences between the waste collection methods in the three municipalities, political and philosophical differences were present. Nevertheless, it is possible for the New City of Kingston to create a unified system of solid waste collection that is both efficient and cost-effective without compromising service levels across the City. A unified system will help to optimize the use of resources (equipment, Blue Box collection, crew members and schedules) and thereby reduce the overall cost of collection.

This study analyzes the waste collection methods before and after amalgamation and recommends improvements. The discussion includes garbage, recycling, yard, and organic waste and large article collection. The analysis of the cost of collection focuses on the capacity and type of truck, the size of crews, and the number of working hours, as well as their incentive system.

The analysis finds that a unified system of solid waste collection has the potential to reduce cost. However, it appears to be less satisfactory with respect to the reduction of landfill waste. Neither waste reduction, which is the objective of provincial policy, nor collection efficiency is achieved by the current method of collection in the New City.

In order to improve efficiency and to meet the waste reduction goal, the City must review its current practices and adopt alternative methods of collection. This report recommends improving recycling, co-collecting recyclables and garbage, adopting 3-stream waste collection, reducing the number of collection days, reducing the size of the crew and increasing the capacity of trucks. Enhancement of public participation through a suitable educational program is also recommended.