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PREPARATION OF DATA FOR FORECASTING THE FORMATION OF DEMOLITION WASTE IN ST. PETERSBURG

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Introduction. In many large cities, the management system for disposing of construction and demolition waste often faces significant challenges. A common practice involves sending a substantial portion of this waste to landfills for burial, leading to environmental concerns and inefficiencies in resource utilization. However, a promising solution to address this issue lies in the accurate prediction of waste generation for future repurposing and recycling efforts. By implementing effective waste forecasting strategies, cities can move towards a more sustainable and efficient waste management approach, optimizing resources and reducing the burden on landfills[1].To prepare data for further forecasting of demolition waste, data for the city of St. Petersburg were used.

Main Body. Predictive models are tools in various fields that offer insights into future trends and outcomes based on historical data and statistical analysis. The accuracy of these models is of paramount importance because it directly affects decision-making processes, resource allocation, environmental sustainability, and compliance with regulations.

Collecting data on past demolition projects is an initial step and includes details such as the types of structures, demolition methods used and the amount of waste generated. In addition, collecting information about specific materials present in demolished structures, from concrete and wood to metal, provides a holistic view of the composition of waste [2].

One of the fundamental elements of ensuring the accuracy of predictive models is the quality of the data on which they are built. Careful data preparation and purification processes are necessary to ensure that the data accurately reflects the main patterns, trends and relationships in the field under study. Moreover, well-prepared data allows predictive models to adapt to changing conditions, such as changes in demolition methods, building materials, or economic factors. The ability to incorporate new data and adjust models ensures their continued relevance and effectiveness.

Conclusions. The preparation of data for forecasting waste during demolition of buildings in St. Petersburg plays a key role in ensuring the accuracy and effectiveness of the forecasting model. Completing data preparation tasks provides a reliable and high-quality basis for the development of a successful model, which in turn helps to improve the management of construction waste in the urban environment and contributes to more sustainable use of resources and reduction of negative environmental impacts.

Literature review

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