**Belarusian State University   
Faculty of Mechanics and Mathematics  
Department of nonlinear analysis and analysis of the economy**

**Annotation to the diploma work  
"Application of the theory of mass service in regulation of transport flows"**

**Matseichyk Maksim,**

**Diploma advisor Pindrik Olga**

**2017**

**Abstract**

of graduation work "Application of the theory of mass service in regulation of transport flows"

The research paper contains:

* 54 pages
* 14 illustrations
* 6 tables
* 1 appendix
* 17 used sources

Keywords: QUEUEING THEORY, SIMPLEST FLOW, REGULATION OF TRANSPORT FLOWS, MANAGEMENT OF LIGHT-CONTROLLED REGULATION, MOVEMENT OF MOTOR TRANSPORT.

In the research paper the movement of cars in some streets of Minsk is considered.

The purpose of the research paper is the application of the queueing theory for the management of transport flows.

To achieve this goal is used:

* methods of queuing theory,
* methods of mathematical statistics. The research paper includes:
* statistical analysis of the distribution of the number of cars and the intervals between successive arrivals of cars at a regulated intersection
* optimum mode of traffic light

The research paper is essay. The theoretical results necessary for the investigation of the problem of optimal traffic regulation are presented. The properties of some traffic flows in the streets of Minsk have been studied. The thesis was written by the author himself.