

Ministry of Environmental Protection of Israel
Center of Ecological Systems and Technologies (ECOST)

ROAD TRANSPORT AND URBAN ECOLOGY OF ISRAEL

Guide for Russian-speaking immigrants

By financial support from the Ministry of Environmental Protection of Israel

Supported by:

- * Ministry of Immigrant Absorption of Israel
- * Municipality of Jerusalem
- * Office of the Municipality of Immigrant Absorption
Jerusalem
- * Jerusalem Immigrant Community House

Jerusalem, 2012

Authors:

Dr. Valery Anfimov, Introduction, chapters 1-7, 8,10,12-15.

M.Sc. Elena Goldman, chapters 6,7,9,11,14.

Under the scientific editorship of Prof. Nona Manusova and Dr. Valery Anfimov

Contents	
Introduction	5
1. City - a great system. The classification of cities. Cities of Israel. Features of the big cities	8
2. Number of cars per 1000 inhabitants. Park cars in Israel. Park cars in the cities of Israel	19
3. Struktural scheme of the system VADOS. The processes occurring during the motion of vehicles in urban areas.....	27
4. Characterization of waste from road transport. Waste from the engines (pollutants). Waste from the brake wear. Waste from tire wear. Waste asphalt pavement wear.....	33
5. Models to determine the amount of waste from the operation of road transport	57
6. Modes vehicular traffic in urban areas. The intensity and composition of the movement. The speed of the movement.....	74
7. Effect of the condition of roads and streets to the speed of the movement. The dependence of the volume of waste from speed of movement for different types of vehicles	83.
8. Calculation of volumes of waste from wear of brake, tire of vehicles and asphalt pavement	97
9. Calculation of amount of waste motor vehicles on streets and intersections in the city (for example, Jerusalem).....	107
10. Effect of waste transport to the level of the disease population.....	115
11. Transformation wastes transport	125
12. Complex model of system VADOS.....	134
13 Determination of amount of waste in the cities on the basis of statistical reporting	139
14 Zoning of the urban area based on biotope.....	146
15. Management of VADOS system. Measures to reduce the amount of pollution from motor vehicles	154
References	168