THE COMPARATIVE ANALYSIS REGARDING THE URBAN TRANSPORT TIMISOARA – LISBON THROUGH THE FASHION OF LINEAR

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INTRODUCTION

The activity of exploitation of urban passenger transport means, must be organized and planned so as to lead to the efficiency of transport. Possible objective, if a well-defined system of indicators and analysis criteria is envisaged.

The indicators and criteria used in the analysis of the activity of passenger transport units are of a qualitative and quantitative (operational) nature.
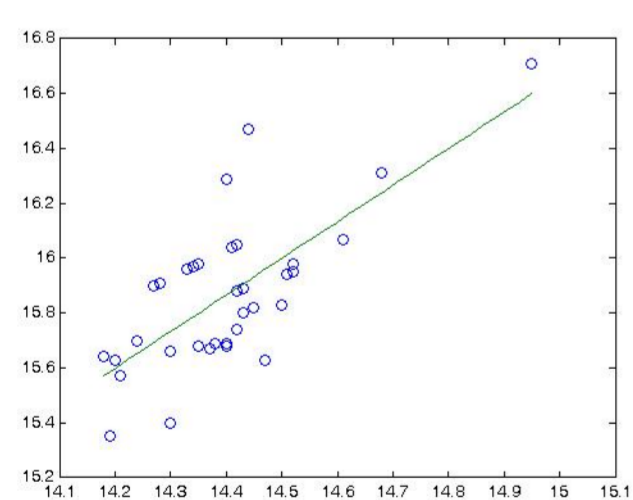
The way the activity of transporting people is qualitatively assessed depends on a series of indicators, namely: the average commercial speed, rhythmicity, punctuality, the loading degree of vehicles, the security of the movement, environmental protection.

The quantitative assessment of the passenger transport activity takes into account the following indicators, namely: the route, the average daily course, the coefficient of use of the vehicle fleet, the performance, production, yield.
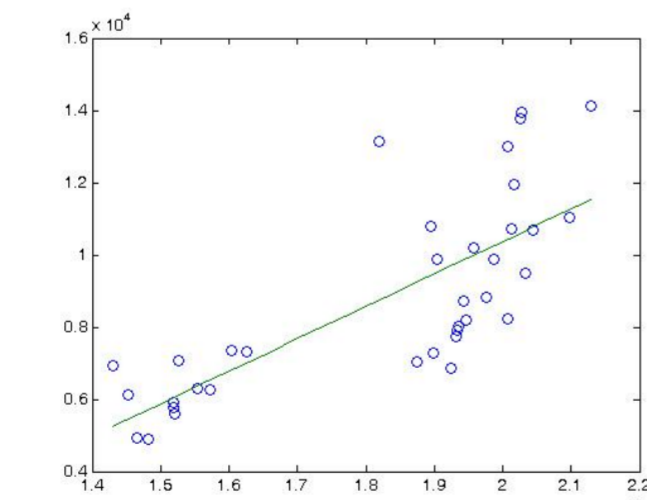
The comparative analysis regarding the urban passenger transport took into account the most significant qualitative and quantitative indicators, an analysis that resulted in a statistical study over the duration of three years between the urban passenger transport activity in the city of Lisbon, the "Carris" transport unit and the urban passenger transport activity in the city of Timisoara, the transport company RAT Timisoara.

RESULTS AND DISCUSSION

The statistical analysis took into account the application of the Matlab Software Regression Method, and as methods of verification of the statistic hypotheses the statistical test t_n

The right regression of the output indicator achieved

Linear and parabolic regression curve of cup indicator

The right regression of the indicator of performance achieved

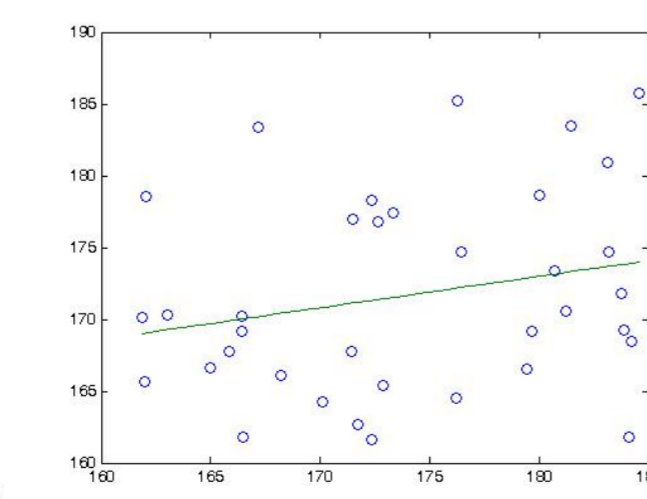Hyperbolic regression curve of the degree of load

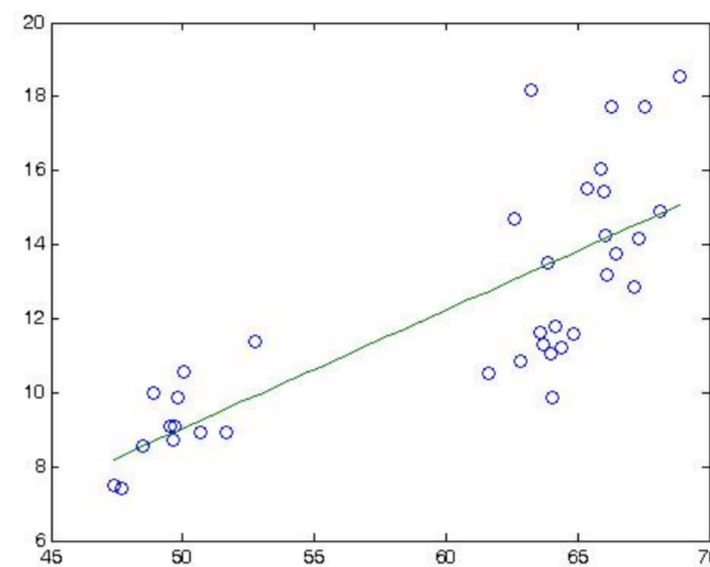The regression right of the average commercial speed indicator

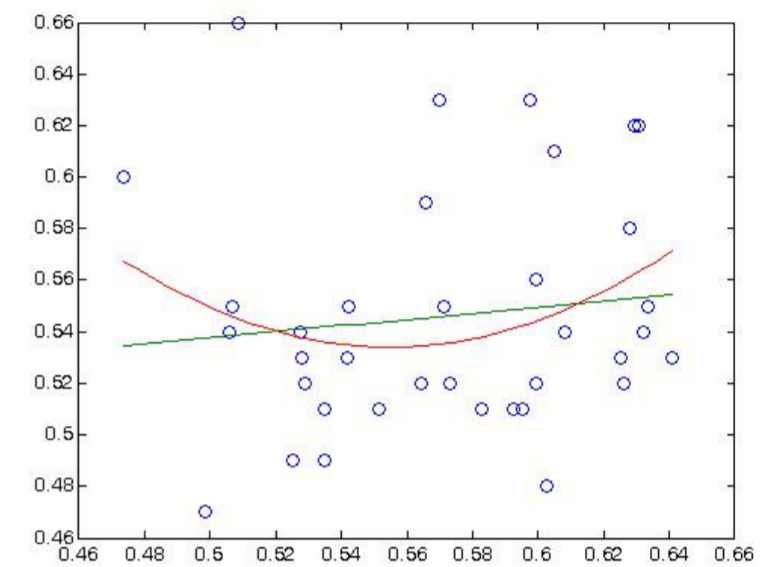The right regression of the indicator the number of people transported
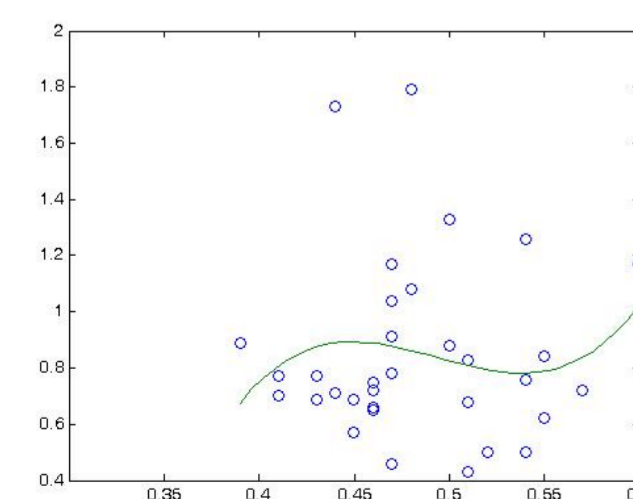
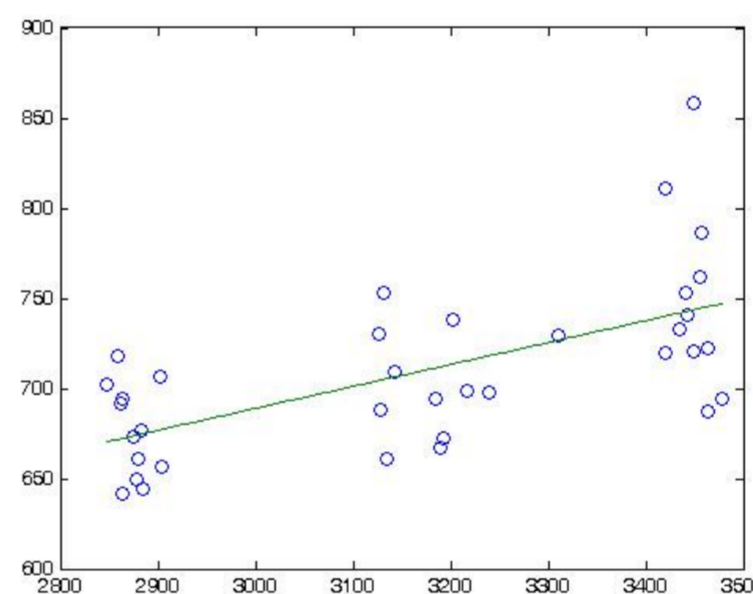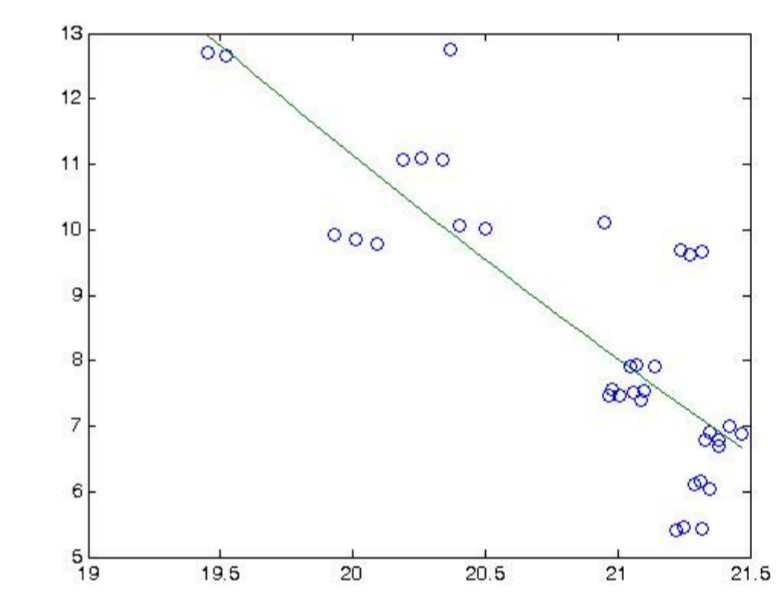The polynomial regression curve of the third degree of the rhythmicity indicator

The right regression of the PMZ indicator

CONCLUSIONS

Following the comparative analyses, the following conclusions can be highlighted:

➢studies performed indicates that between Carris Lisbon and RAT Timisoara, there is a possibility that in the autonomous transport administration Timisoara we can apply the regression model;

➢to analyze the statistical analysis made over the three-year period, using the regression method, established the methods of evolution of the nine indicators of the RAT Timisoara administration compared to the nine indicators from the Carris Lisbon company;

➢the values of the analyzed indicators, by using the regression method, are subject to linear, quadratic, respectively hyperbolic statistical models;

➢models are statistically supported with a confidence level of about 97%, they allow the prediction of the values of the indicators for RAT Timisoara based on the indicators of the company Carris Lisbon.

In conclusion RATT must focus on:

➢increasing the quality of the services provided to the travelling public by improving the qualitative indicators of rhythmicity and punctuality;

➢increasing the average commercial speed of public transport means by improving superstructure, infrastructure and prioritising public transport;

➢ensuring at European Community level the safety and safety of passenger movements as well as the protection of the environment by upgrading the vehicle inventory fleet;

➢increasing the number of passengers by improving comfort in public transport by renewing the vehicle fleet;

➢improving the operating indicators, in particular, the average daily journey and the coefficient of use of the park by purchasing state-of-the-art passenger transport means.