This thesis deals with analysis of real-time data of public transport vehicles over open data in Prague. Its main purpose is to create statistics and improve estimation, based on historical data, of a vehicle delay on its route between reference points. For demonstration of the computed data a front-end web app is created. This interactive app is able to show current vehicles locations over a map and other useful information. All components were tested. Open data from Prague public transport company were used to demonstrate that open data can be used for achieving high goals.