$MQ_T >> 1$), то поскольку тогда (как следует из свойств матожидания и дисперсии) $M\,Q_T$, и $D\,Q_T$ растут пропорционально T, отсюда вытекает, что $M\,q$ и VMR не будут зависеть от величины этого промежутка. Таким образом, в этом случае появляется дополнительная свобода в выборе опорного промежутка.

Заключение

Таким образом, как показывают полученные в данной работе результаты, в общем случае удается ввести содержательное понятие «приведения транспортного спроса по вариации» и получить достаточно простые аналитические выражения для непосредственного проведения соответствующей процедуры.

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REDUCING TRAFFIC DEMAND BY VARIATION (AT SIGNALIZED INTERSECTION)

The day-to-day practice of designing/reorganizing traffic management at a controlled intersection typically relies on the use of a traffic demand model. The selection of such a model is usually guided by considerations of the optimal balance between the complexity of the model and the significance of the effects that can be accounted for. However, in some situations, researchers prefer to use simplified demand models even when it is known that its use will lead to significant deviations in the results. One of such examples is the problem of selecting a design value of traffic demand intensity for designing/redesigning of traffic light control. Typically, here one prefers to rely only on the expectation value of the demand intensity, at best knowingly overestimating it for calculations by means of some, as a rule, rather speculatively

chosen method. However, it seems that this practice of not paying due attention to the specifics of transport demand variation cannot be considered as satisfactory because, firstly, the most typical at the present time situations are the ones with high, close to the maximum possible capacity of the intersection, intensity of transport demand, which means that the assumptions about the insignificance of the specifics of transport demand variation for the level of service are no longer justified. And secondly, the typical for cities close spaced locations of signalized intersections with different lengths of signal cycles leads to the growth of transport demand fluctuations, and hence makes their influence on the final results of calculations significant. In order to solve this problem without significantly complicating the existing approaches and techniques, this paper proposes, by analogy with the already known procedures of reducing traffic flows by different characteristics, the introduction of a natural concept of reducing transport demand by variation. A specific variant of the procedure of such an adjustment is also proposed.

***Keywords**: signalized intersection, nonuniform traffic demand, mathematical modeling of traffic demand, index of dispersion.*

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