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## Innovative Approach to Capacity Calculation Methodology for Unsignalized T-intersection

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This work challenges one section of the gap acceptance theory related to the analysis of unsignalized intersections. The focus is on the methodology for capacity calculations put forward by Siegloch in 1973 which is still widely used today. Analyzing data from a given intersection in Dresden, it is shown that one of Siegloch's assumptions—exponential distribution of time clearances on the main road, presented in his capacity calculation—does not correspond with our data. For this reason, other time clearance distributions are considered and used. Lastly, it is shown that the interpretation and use of linear approximation for Siegloch's function—mean number of vehicles that accept a given gap, in the capacity calculation—is often used incorrectly and its correction further improves resulting capacities.

**Primary author:** GROVEROVÁ, Nikola (Department of Mathematics, FNSPE, Czech Technical University in Prague)

**Co-author:** KRBÁLEK, Milan (Department of Mathematics, FNSPE, Czech Technical University in Prague)

**Presenter:** GROVEROVÁ, Nikola (Department of Mathematics, FNSPE, Czech Technical University in Prague)

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