

## The Importance of Development in Laboratory Diagnosis at the Intersection

**Authors :** Agus Sahri, Cahya Putra Dinata, Faishal Andhi Rokhman

**Abstract :** Intersection is a critical area on a highway which is a place of conflict points and congestion due to the meeting of two or more roads. Conflicts that occur at the intersection include diverging, merging, weaving, and crossing. To deal with these conflicts, a crossing control system is needed, at a plot of intersection there are two control systems namely signal intersections and non-signalized intersections. The control system at a plot of intersection can affect the intersection performance. In Indonesia there are still many intersections with poor intersection performance. In analyzing the parameters to measure the performance of a plot of intersection in Indonesia, it is guided by the 1997 Indonesian Road Capacity Manual. For this reason, this study aims to develop laboratory diagnostics at plot intersections to analyze parameters that can affect the performance of an intersection. The research method used is <em>research and development.</em> The laboratory diagnosis includes anamnesis, differential diagnosis, inspection, diagnosis, prognosis, specimens, analysis and sample data analysts. It is expected that this research can encourage the development and application of laboratory diagnostics at a plot of intersection in Indonesia so that intersections can function optimally.

**Keywords :** intersection, the laboratory diagnostic, control systems, Indonesia

**Conference Title :** ICATTML 2019 : International Conference on Artificial Transportation Technologies and Machine Learning

**Conference Location :** Barcelona, Spain

**Conference Dates :** June 11-12, 2019