Abstract

Traffic density identification system is a system used to identificate traffic density automatically by using video recording. This system captures frames from video become single image that processed using image processing technique. Video is processed with input variables in the system such as length of road, sketch of road, process time, and treshold of object density and average velocity. Outputs of system are object density, average velocity, counter and traffic density on path of road. To processing road video recording, this system makes some steps like capture frame from video, resize frame, remove noise, motion detection, segmentation, and object identification. Then system will count object density and average velocity. Finally, system will make decision about traffic density by compare the result to the input threshold. There are three categories traffic density in this system. They are traffic jams, synchronized flow, and free flow.

Keywords: video, object density, average velocity, counter, traffic density