

km/h. The most influential in travel times was the speed increase at 20 km/h and the change of the gap acceptance to 3.5 seconds, while the two speed variation scenarios were the ones that most influenced the average length of queues. The two scenarios of variation gap were, most notably, the one that most influenced the results of the total number of conflicts.

Although an in-depth study was needed to understand the operation of both the software used in this dissertation and the high volume of work associated with data collection on the ground. It is possible to conclude that the work was completed successfully, and it was possible to develop a properly calibrated and validated traffic model that can be used to evaluate the future performance of the Fermentões node and the other nodes that precede it (Hospital) and succeed (Azurém). However, it should be noted that the objective of this work was not to assess the performance of the node in terms of fluidity, but rather to evaluate the safety conditions using the results of microscopic traffic models. Therefore, a vehicle conflict analysis tool/software (SSAM) was used to identify the number and location of the conflicts and thus to evaluate and analyze the safety levels of the ferment node.

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