

**Sistem Pendukung Keputusan Dalam Menentukan Prioritas Lokasi
Perbaikan Jalan Menggunakan Metode *Simple Additive Weighting* (SAW) :
Studi Kasus di Kabupaten Jember (*Decision support System in Determining
The Priority of Road Repair Locations Using Simple Additive Weighting method :
Case Study in Jember District*), Khafidurrohman Agustianto, S.Pd, M.Eng.,
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ABSTRACT

Jember Regency is a regency in the horseshoe area of East Java, so it must be ready and fast in handling infrastructure repairs, especially in repairing damaged roads. According to data results for 2020, the total length of roads in 3 sub-districts in Jember Regency, namely Kaliwates, Patrang and Summersari sub-districts, is 246.33 km with a total of 257 sections. Of the total length of the road sections, 16.61% were heavily damaged, 1.1% lightly damaged, 20.3% moderate, and 61.88% in good condition. Road repairs have been planned by the Department of Public Works, Highways and Water Resources, Jember Regency, by repairing 50 roads in the Jember City area. This road repair was carried out in order to increase the quality of roads in good condition to 70% from 61.88% originally. Solutions to these problems can be provided, namely creating a priority recommendation system for road repair locations in Jember Regency, so that decisions can be made more quickly. The recommendation system for priority road repair locations in Jember Regency uses the Simple Additive Weighting (SAW) method. The Simple Additive Weighting (SAW) method is used to evaluate the total weight of the rating on each alternative on all attributes. The test results show an effectiveness value of 95.59%. Then it has a system accuracy rate with the first scenario of 82%, and system accuracy with the second scenario of 4%.

Key Word: *Decision Support System, Simple Additive Weighting, Website*