

APLIKASI PEMERIKSAAN VISUAL SECARA CEPAT BANGUNAN (RAPID VISUAL SCREENING) DI KOTA JAYAPURA UNTUK MENDUKUNG KESIAPAN PEMAD SEBAGAI UPAYA MITIGASI TERHADAP GEMPABUMI

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ABSTRACT

Jayapura City is one of earthquake-prone regions as it lies in Zone V of Indonesia Earthquake Zone. The earthquake measuring 6.9 on the Richter Scale which struck Nabire on February 6, 2004 resulted in damaged houses, buildings, and cracked walls, not to mention 22 people killed and 600 injured, and paralyzed the city. The local government of Jayapura City was not prepared to deal with the disaster due to the absence of mitigation efforts. Rapid visual screening of buildings as a mitigation effort is very likely to be applied in Jayapura City.

The research was conducted in Jayapura City using the rapid visual screening form (The Assessment and Improvement of the Structural Performance of Earthquake Risk Building – New Zealand, 1996). In line with the objectives, the research employed qualitative descriptive approach. The buildings evaluated comprised 11 school buildings, 2 state hospitals, and 7 government offices. Fifth semester students of the University of Science and Technology of Jayapura majoring in Civil Engineering were involved in the research.

The results of the research showed that in Jayapura City 30% of public service buildings were identified as high-risk buildings while 70% as low-risk buildings. Rapid visual screening as an earthquake mitigation effort corresponding to the condition of Jayapura City has also been formulated. It is recommended that high-risk buildings be assigned to a more detailed rapid visual screening in order to maximally forestall more earthquake casualties.

Keywords : *Earthquake, Evaluation, Mitigation Efforts*