

INTISARI

Ruang henti khusus sepeda motor merupakan salah satu fasilitas bagi sepeda motor untuk berhenti di persimpangan selama fase merah. Ruang henti khusus ini telah diujicoba dalam skala terbatas untuk mendukung pergerakan sepeda motor pada persimpangan bersinyal di kota-kota besar di Indonesia. Penelitian ini bertujuan untuk mengevaluasi simpang tersebut kemudian direncanakan ruang henti khusus sesuai dengan banyaknya penumpukan sepeda motor selama fase merah di persimpangan tersebut.

Metode survei yaitu dengan mengadakan pengamatan langsung kondisi eksisting di lapangan. Survei dilaksanakan pada jam sibuk yaitu pukul 06.00-09.00 WIB pada tanggal 14 November 2016 untuk simpang MM UGM lengan timur, 10 Oktober 2016 untuk simpang mirotta kampus lengan Timur, dan 13 Desember 2016 untuk simpang sagan lengan selatan. Data survei yang didapat yaitu panjang antrian kendaraan, jumlah antrian sepeda motor sepeda motor. Metode perhitungan berpedoman pada Manual Kapasitas Jalan Indonesia (MKJI) 1997 dan Ruang Henti Khusus Desktop dan Mobile Web Application (<http://rhk.pusjatan.pu.go.id/rhk/rhkapp.php>).

Hasil penelitian menunjukkan bahwa perilaku lalulintas persimpangan kondisi eksisting adalah, simpang MM UGM lengan timur derajat kejenuhan (DS) 0,673; panjang antrian 43m. Simpang mirotta kampus lengan timur derajat kejenuhan (DS) 0,949; panjang antrian 170m. Simpang sagan lengan selatan derajat kejenuhan (DS) 0,624; panjang antrian 32m. Disain ruang henti khusus simpang MM UGM lengan timur 2 lajur tanpa pendekat dan luasnya 60,8m²; simpang sagan lengan selatan 2 lajur tanpa pendekat dan luasnya 70,4m².

Kata kunci: ruang henti khusus, metode survei, perilaku lalulintas

ABSTRACT

Motorcycle special stopping space is one of the facilities used by motorcycle to stop at the intersection during red phase. The motorcycle special stopping space has been tested in limited scale to support motorcycle movement in several big cities in Indonesia. The purpose of this research is to evaluate the intersection and plans the motorcycle special stopping space according to the quantity of motorcycle accumulated at intersection during red phase. The intersection evaluation is done based on primary and secondary data.

The survey method is done by directly observing existing field condition, which was held at 06.00-09.00 WIB (morning rush hour) on 14 November 2016 at MM UGM east segment, 10 October 2016 at Mirota Kampus east segment, and 13 December 2016 at Sagan south segment. The observation data includes vehicles queue line and amount of motorcycle queue. The analysis refers to Manual Kapasitas Jalan Indonesia (MKJI) 1997, Ruang Henti Khusus Desktop and Mobile Web Application (<http://rhk.pusjatan.pu.go.id/rhk/rhkapp.php>).

The research concludes existing traffic behavior of each intersecton, such as the degree of saturation (DS) of MM UGM intersection east segment is 0,673 while the queue line length is 43 m. Mirota Kampus intersection with degree of saturation (DS) is 0,949 and queue line length is 170 m. Sagan intersection south segment with degree of saturation (DS) of 0,624; while the queue line length is 32 m. the motorcycle special stopping space design of MM UGM east segment contains 2 lane without approach with the area of 60,8m²; while Sagan south segment contains 2 lane without approach with the area of 70,4m².

Keyword: special stopping space, survey method, traffic behavior