

Lampiran A1. Tabel Survey Geometrik Jalan

| | | | |
|-------------------------------|-----------------------|-----------|------------------|
| JALAN PERKOTAAN | Tanggal/Bulan/Tahun | | Ditangani oleh : |
| Lampiran A1 | Provinsi | | Diperiksa oleh : |
| DATA MASUKAN : | Kota | | Ukuran kota : |
| | No. Ruas>Nama Jalan | | |
| - DATA UMUM | Segmen antara : | dan | |
| | Kode | | Tipe daerah : |
| - DATA GEOMETRIK JALAN | Panjang segmen | | Tipe jalan : |
| | Waktu | | Nomor Kasus : |

Denah atau gambar situasi segmen jalan

Potongan melintang jalan

SISI A

SISI B

| Parameter | Sisi A | Sisi B | Total | Rata - rata |
|---------------------------------------|--------|--------|-------|-------------|
| Lebar jalur lalu - lintas rata - rata | | | | |
| Kereb (K) atau Bahu (B) | | | | |
| Jarak kereb ke penghalang terdekat | | | | |
| Lebar efektif bahu (dalam + luar) (m) | | | | |
| | | | | |
| Jumlah bukaan pada median | | | | |

Kondisi pengaturan lalu - lintas

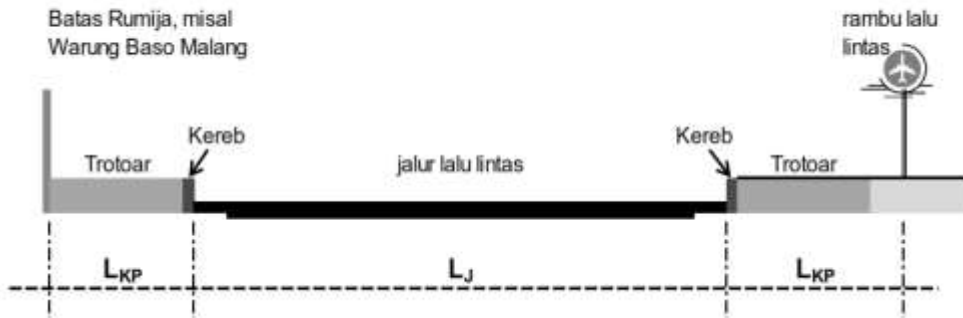
| | |
|--|--|
| Batas kecepatan (km/jam) | |
| Pembatasan akses untuk tipe kendaraan tertentu | |
| Pembatasan parkir (periode waktu) | |
| Pembatasan berhenti (periode waktu) | |
| Lain - lain | |

Lampiran A2. Gambar Geometrik Jalan

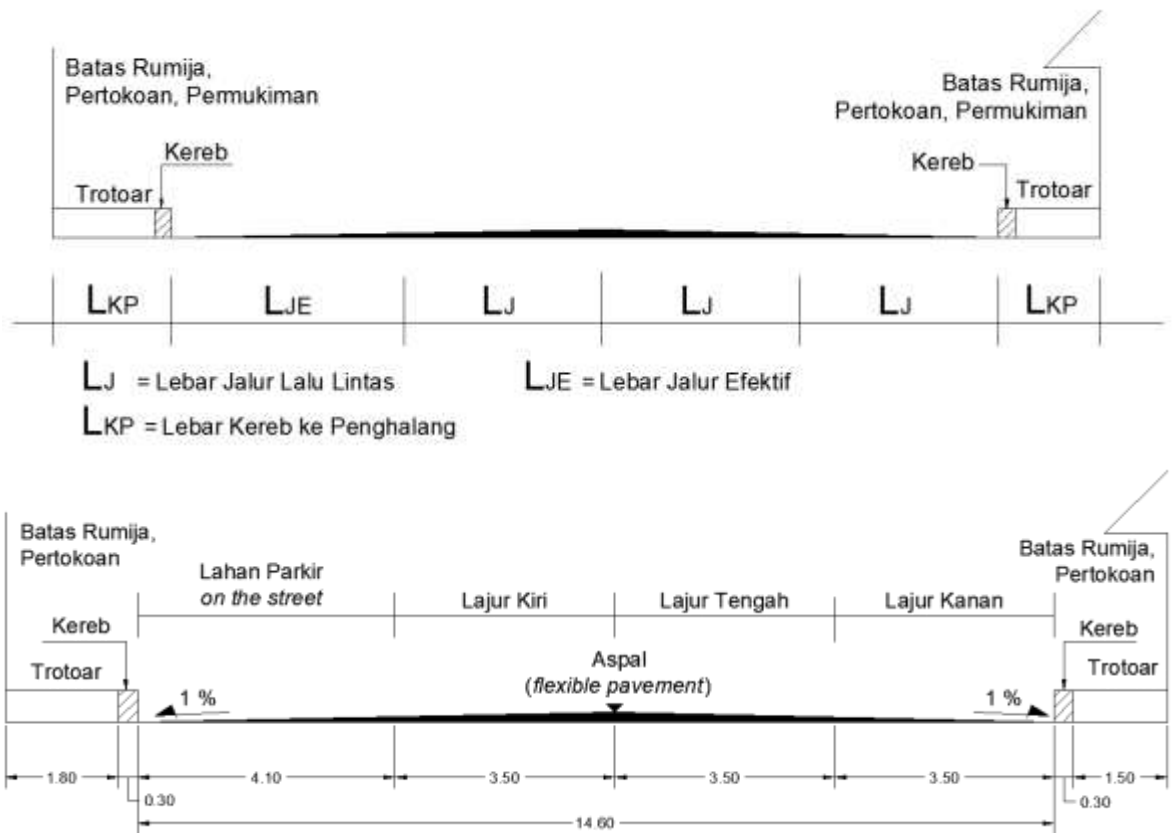
Tipikal Jalan Raya yang berbahu (dilengkapi median)



Tipikal Jalan Sedang (atau jalan Kecil) dengan kereb dan trotoar



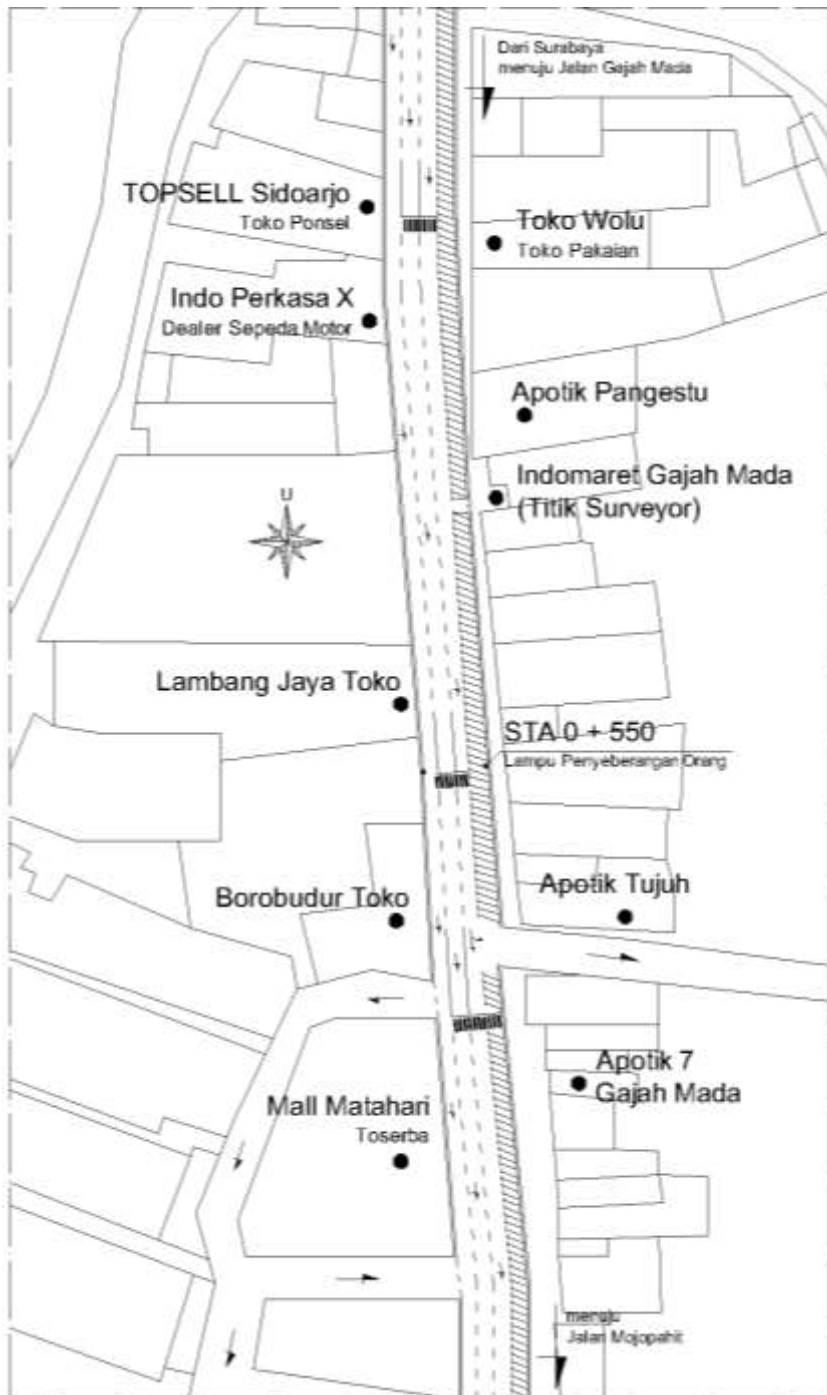
Gambar A.2.1. Elemen potongan melintang jalan yang digunakan dalam analisis
(Sumber : PKJI 2014, Tidak untuk diskalakan)



Gambar A.2.2. Gambar Potongan Melintang Jalan Gajah Mada
(Sumber : Hasil Penelitian 2021, Tidak untuk diskalakan)

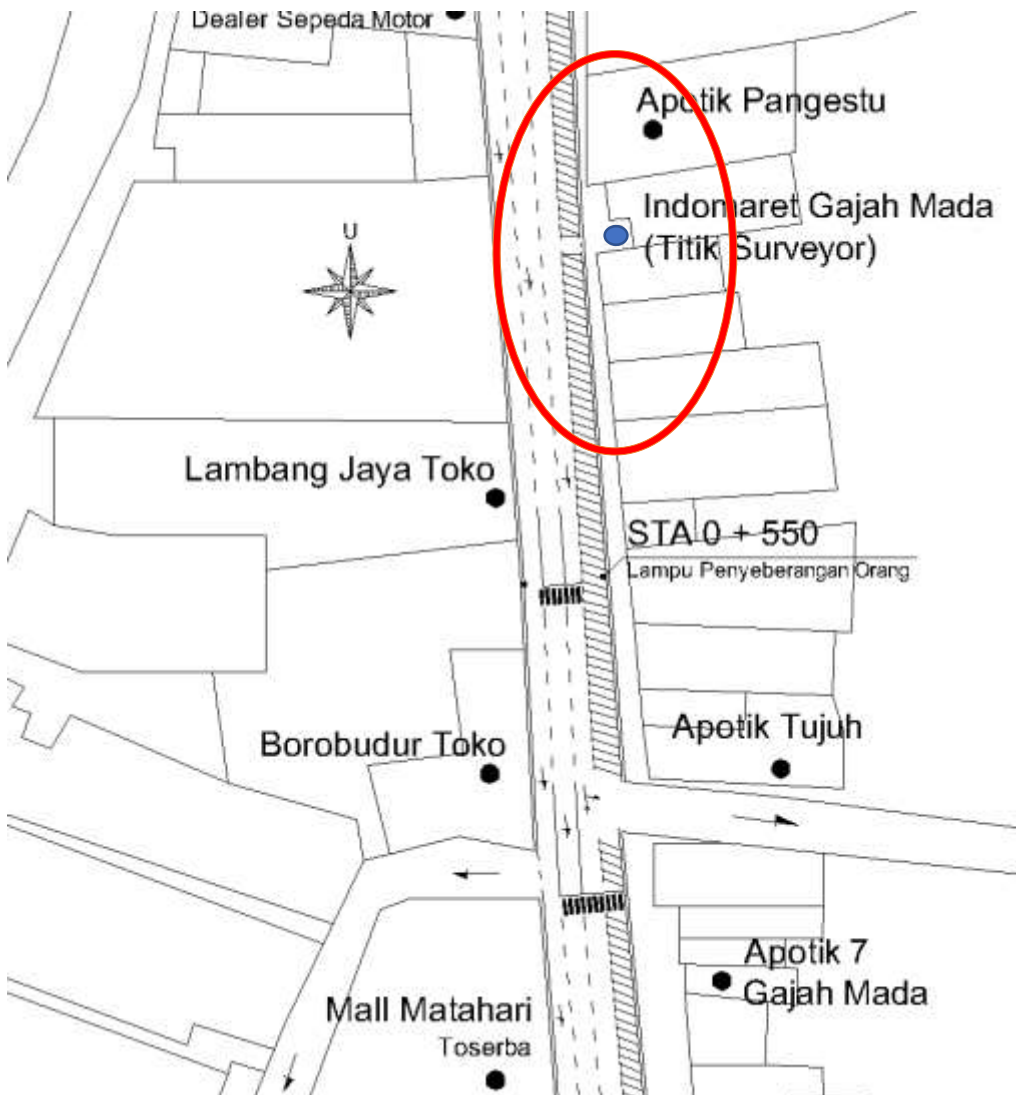


Gambar A.2.2. Gambar Potongan Memanjang Jalan Gajah Mada
(Sumber : Hasil Penelitian 2021, Tidak untuk diskalakan)



Gambar A.2.3. Detail Potongan Memanjang Jalan Gajah Mada
(Sumber : Hasil Penelitian 2021, Tidak untuk diskalakan)

Lampiran A3. Titik Surveyor Pada Survei Volume Lalu Lintas



Gambar A.3.1. Titik Surveyor Pada Survei Volume Lalu Lintas
(Sumber : Google Earth, Tidak untuk diskalakan)

Keterangan :

- : Surveyor yang menghitung volume lalu lintas pada arah Utara – Selatan (Depan Indomaret Gajah Mada).

Lampiran B1. Hasil Survei Inventaris Jalan

| | |
|-------------------------|------------------------------------|
| Nama Jalan | Jalan Gajah Mada |
| Tipe Jalan | 3/1 |
| Lebar Jalur | 10.5 meter |
| Lebar Per Lajur | 3.50 meter |
| Lebar Trotoar | 1.50 – 1.80 meter |
| Panjang Segmen Jalan | 990 meter |
| Lebar Bahu Jalan (Kiri) | 4.10 meter |
| Jenis Perkerasan | Aspal (<i>flexible pavement</i>) |
| Median Jalan | Tidak ada |

(Sumber : Hasil Survei 2021)

Lampiran B2. Hasil Survei Volume Arus Lalu Lintas

Nama Jalan : Jalan Gajah Mada
 Tanggal : 1 Maret 2021
 Waktu : 06.00-20.00
 Cuaca : Cerah

| Waktu | Utara - Selatan | | | Waktu | Utara - Selatan | | |
|-------------|-----------------|-----|----|-------------|-----------------|------|----|
| | SM | KR | KB | | SM | KR | KB |
| 06.00-06.15 | 2221 | 576 | 8 | 12.30-12.45 | 2474 | 721 | 9 |
| 06.15-06.30 | 2171 | 583 | 6 | 12.45-13.00 | 2357 | 716 | 7 |
| 06.30-06.45 | 2288 | 556 | 7 | 13.00-13.15 | 1857 | 637 | 8 |
| 06.45-07.00 | 2202 | 501 | 9 | 13.15-13.30 | 2361 | 645 | 9 |
| 07.00-07.15 | 2198 | 479 | 10 | 13.30-13.45 | 2302 | 635 | 7 |
| 07.15-07.30 | 2174 | 480 | 9 | 13.45-14.00 | 2388 | 628 | 8 |
| 07.30-07.45 | 2188 | 404 | 10 | 14.00-14.15 | 2385 | 625 | 7 |
| 07.45-08.00 | 2100 | 499 | 8 | 14.15-14.30 | 2375 | 635 | 8 |
| 08.00-08.15 | 2224 | 564 | 12 | 14.30-14.45 | 2367 | 626 | 9 |
| 08.15-08.30 | 2214 | 597 | 12 | 14.45-15.00 | 2389 | 550 | 9 |
| 08.30-08.45 | 2213 | 525 | 9 | 15.00-15.15 | 2330 | 619 | 11 |
| 08.45-09.00 | 2235 | 588 | 12 | 15.15-15.30 | 2321 | 642 | 10 |
| 09.00-09.15 | 2286 | 577 | 9 | 15.30-15.45 | 2377 | 675 | 7 |
| 09.15-09.30 | 2205 | 746 | 10 | 15.45-16.00 | 2421 | 687 | 8 |
| 09.30-09.45 | 2202 | 713 | 10 | 16.00-16.15 | 2509 | 920 | 9 |
| 09.45-10.00 | 2334 | 787 | 9 | 16.15-16.30 | 2600 | 990 | 8 |
| 10.00-10.15 | 2237 | 691 | 12 | 16.30-16.45 | 2699 | 1000 | 10 |
| 10.15-10.30 | 2398 | 708 | 10 | 16.45-17.00 | 2676 | 988 | 9 |
| 10.30-10.45 | 2265 | 731 | 12 | 17.00-17.15 | 2578 | 1029 | 9 |
| 10.45-11.00 | 2144 | 745 | 11 | 17.15-17.30 | 2512 | 996 | 8 |
| 11.00-11.15 | 2148 | 755 | 12 | 17.30-17.45 | 2515 | 1000 | 9 |
| 11.15-11.30 | 2151 | 736 | 10 | 17.45-18.00 | 2403 | 1061 | 11 |
| 11.30-11.45 | 2150 | 782 | 11 | 18.00-18.15 | 2303 | 943 | 9 |
| 11.45-12.00 | 2390 | 808 | 9 | 18.15-18.30 | 2431 | 1019 | 7 |
| 12.00-12.15 | 2454 | 708 | 9 | 18.30-18.45 | 2400 | 981 | 12 |
| 12.15-12.30 | 2456 | 697 | 9 | 18.45-19.00 | 2450 | 1005 | 9 |

| Waktu | Utara - Selatan | | |
|--------------|------------------------|-----------|-----------|
| | SM | KR | KB |
| 19.00-19.15 | 2302 | 952 | 10 |
| 19.15-19.30 | 2205 | 805 | 8 |
| 19.30-19.45 | 2044 | 730 | 8 |
| 19.45-20.00 | 1921 | 718 | 9 |

(Sumber : Hasil Survei 2021)

Nama Jalan : Jalan Gajah Mada
 Tanggal : 2 Maret 2021
 Waktu : 06.00-20.00
 Cuaca : Cerah

| Waktu | Utara - Selatan | | | Waktu | Utara – Selatan | | |
|-------------|-----------------|-----|----|-------------|-----------------|-----|----|
| | SM | KR | KB | | SM | KR | KB |
| 06.00-06.15 | 2200 | 565 | 9 | 13.00-13.15 | 2178 | 758 | 7 |
| 06.15-06.30 | 2221 | 572 | 7 | 13.15-13.30 | 2199 | 752 | 7 |
| 06.30-06.45 | 2158 | 586 | 8 | 13.30-13.45 | 2176 | 754 | 7 |
| 06.45-07.00 | 2001 | 548 | 10 | 13.45-14.00 | 2180 | 729 | 6 |
| 07.00-07.15 | 2033 | 517 | 7 | 14.00-14.15 | 2143 | 632 | 5 |
| 07.15-07.30 | 2261 | 600 | 12 | 14.15-14.30 | 2045 | 726 | 7 |
| 07.30-07.45 | 2182 | 590 | 6 | 14.30-14.45 | 2126 | 715 | 6 |
| 07.45-08.00 | 2232 | 550 | 13 | 14.45-15.00 | 2122 | 718 | 7 |
| 08.00-08.15 | 1814 | 518 | 11 | 15.00-15.15 | 2187 | 721 | 6 |
| 08.15-08.30 | 1894 | 537 | 8 | 15.15-15.30 | 2202 | 692 | 7 |
| 08.30-08.45 | 1819 | 572 | 11 | 15.30-15.45 | 2256 | 730 | 6 |
| 08.45-09.00 | 1937 | 514 | 13 | 15.45-16.00 | 2334 | 760 | 6 |
| 09.00-09.15 | 1794 | 533 | 9 | 16.00-16.15 | 2377 | 973 | 6 |
| 09.15-09.30 | 1947 | 697 | 10 | 16.15-16.30 | 2480 | 985 | 7 |
| 09.30-09.45 | 1936 | 668 | 8 | 16.30-16.45 | 2480 | 892 | 7 |
| 09.45-10.00 | 2122 | 723 | 10 | 16.45-17.00 | 2500 | 952 | 7 |
| 10.00-10.15 | 1552 | 717 | 11 | 17.00-17.15 | 2595 | 954 | 9 |
| 10.15-10.30 | 1644 | 760 | 11 | 17.15-17.30 | 2112 | 965 | 7 |
| 10.30-10.45 | 1877 | 726 | 12 | 17.30-17.45 | 2020 | 952 | 6 |
| 10.45-11.00 | 2098 | 767 | 13 | 17.45-18.00 | 1982 | 940 | 10 |
| 11.00-11.15 | 1908 | 751 | 7 | 18.00-18.15 | 1718 | 985 | 6 |
| 11.15-11.30 | 2131 | 739 | 5 | 18.15-18.30 | 1714 | 952 | 6 |
| 11.30-11.45 | 2078 | 751 | 7 | 18.30-18.45 | 1804 | 995 | 7 |
| 11.45-12.00 | 2032 | 748 | 7 | 18.45-19.00 | 1977 | 944 | 7 |
| 12.00-12.15 | 2131 | 753 | 6 | 19.00-19.15 | 1733 | 983 | 8 |
| 12.15-12.30 | 2213 | 731 | 6 | 19.15-19.30 | 1853 | 717 | 8 |
| 12.30-12.45 | 2280 | 751 | 7 | 19.30-19.45 | 1540 | 736 | 6 |
| 12.45-13.00 | 2205 | 780 | 6 | 19.45-20.00 | 1487 | 720 | 5 |

(Sumber : Hasil Survei 2021)

Nama Jalan : Jalan Gajah Mada

Tanggal : 3 Maret 2021

Waktu : 06.00-20.00

Cuaca : Cerah

| Waktu | Utara - Selatan | | | Waktu | Utara - Selatan | | |
|-------------|-----------------|-----|----|-------------|-----------------|------|----|
| | SM | KR | KB | | SM | KR | KB |
| 06.00-06.15 | 2032 | 796 | 7 | 13.00-13.15 | 2000 | 700 | 6 |
| 06.15-06.30 | 2051 | 705 | 5 | 13.15-13.30 | 2002 | 693 | 8 |
| 06.30-06.45 | 1972 | 725 | 4 | 13.30-13.45 | 2032 | 692 | 6 |
| 06.45-07.00 | 1901 | 716 | 7 | 13.45-14.00 | 2047 | 683 | 5 |
| 07.00-07.15 | 1711 | 787 | 6 | 14.00-14.15 | 2012 | 670 | 4 |
| 07.15-07.30 | 1932 | 730 | 9 | 14.15-14.30 | 1877 | 676 | 8 |
| 07.30-07.45 | 2009 | 706 | 5 | 14.30-14.45 | 1805 | 665 | 5 |
| 07.45-08.00 | 2067 | 798 | 8 | 14.45-15.00 | 1797 | 668 | 6 |
| 08.00-08.15 | 1702 | 768 | 6 | 15.00-15.15 | 1936 | 669 | 10 |
| 08.15-08.30 | 1699 | 754 | 7 | 15.15-15.30 | 1902 | 665 | 6 |
| 08.30-08.45 | 1711 | 710 | 8 | 15.30-15.45 | 1976 | 673 | 5 |
| 08.45-09.00 | 1806 | 743 | 12 | 15.45-16.00 | 2023 | 692 | 5 |
| 09.00-09.15 | 1602 | 738 | 9 | 16.00-16.15 | 2387 | 934 | 5 |
| 09.15-09.30 | 1836 | 947 | 5 | 16.15-16.30 | 2355 | 995 | 6 |
| 09.30-09.45 | 1805 | 918 | 7 | 16.30-16.45 | 2378 | 916 | 7 |
| 09.45-10.00 | 1968 | 965 | 10 | 16.45-17.00 | 2323 | 985 | 6 |
| 10.00-10.15 | 1346 | 847 | 6 | 17.00-17.15 | 2303 | 1005 | 10 |
| 10.15-10.30 | 1403 | 890 | 13 | 17.15-17.30 | 2145 | 1100 | 9 |
| 10.30-10.45 | 1554 | 856 | 8 | 17.30-17.45 | 2087 | 1098 | 5 |
| 10.45-11.00 | 1790 | 894 | 9 | 17.45-18.00 | 2003 | 1005 | 6 |
| 11.00-11.15 | 1700 | 887 | 6 | 18.00-18.15 | 1803 | 1027 | 5 |
| 11.15-11.30 | 1847 | 889 | 4 | 18.15-18.30 | 1787 | 1087 | 5 |
| 11.30-11.45 | 1709 | 898 | 5 | 18.30-18.45 | 1890 | 1036 | 6 |
| 11.45-12.00 | 1990 | 876 | 6 | 18.45-19.00 | 1943 | 1180 | 6 |
| 12.00-12.15 | 2034 | 800 | 9 | 19.00-19.15 | 1856 | 1118 | 10 |
| 12.15-12.30 | 2112 | 877 | 4 | 19.15-19.30 | 1888 | 948 | 6 |
| 12.30-12.45 | 2080 | 695 | 6 | 19.30-19.45 | 1563 | 875 | 5 |
| 12.45-13.00 | 2099 | 715 | 5 | 19.45-20.00 | 1543 | 866 | 4 |

(Sumber : Hasil Survei 2021)

Nama Jalan : Jalan Gajah Mada
 Tanggal : 4 Maret 2021
 Waktu : 06.00-20.00
 Cuaca : Cerah

| Waktu | Utara - Selatan | | | Waktu | Utara – Selatan | | |
|-------------|-----------------|-----|----|-------------|-----------------|-----|----|
| | SM | KR | KB | | SM | KR | KB |
| 06.00-06.15 | 2090 | 601 | 2 | 13.00-13.15 | 2112 | 798 | 2 |
| 06.15-06.30 | 2123 | 600 | 1 | 13.15-13.30 | 2190 | 716 | 2 |
| 06.30-06.45 | 2133 | 616 | 1 | 13.30-13.45 | 2034 | 707 | 2 |
| 06.45-07.00 | 2054 | 603 | 2 | 13.45-14.00 | 2101 | 705 | 1 |
| 07.00-07.15 | 1806 | 699 | 2 | 14.00-14.15 | 2152 | 789 | 0 |
| 07.15-07.30 | 2102 | 605 | 3 | 14.15-14.30 | 2023 | 786 | 3 |
| 07.30-07.45 | 2100 | 613 | 0 | 14.30-14.45 | 2100 | 756 | 1 |
| 07.45-08.00 | 2087 | 698 | 4 | 14.45-15.00 | 2076 | 759 | 2 |
| 08.00-08.15 | 1811 | 657 | 2 | 15.00-15.15 | 2157 | 778 | 1 |
| 08.15-08.30 | 1783 | 663 | 1 | 15.15-15.30 | 2213 | 766 | 2 |
| 08.30-08.45 | 1805 | 609 | 4 | 15.30-15.45 | 2198 | 770 | 1 |
| 08.45-09.00 | 1954 | 635 | 3 | 15.45-16.00 | 2165 | 793 | 0 |
| 09.00-09.15 | 1878 | 656 | 5 | 16.00-16.15 | 2223 | 895 | 1 |
| 09.15-09.30 | 2054 | 833 | 1 | 16.15-16.30 | 2256 | 889 | 2 |
| 09.30-09.45 | 1932 | 806 | 3 | 16.30-16.45 | 2290 | 915 | 3 |
| 09.45-10.00 | 2056 | 847 | 2 | 16.45-17.00 | 2304 | 984 | 2 |
| 10.00-10.15 | 1795 | 698 | 2 | 17.00-17.15 | 2311 | 998 | 4 |
| 10.15-10.30 | 1712 | 705 | 1 | 17.15-17.30 | 2265 | 956 | 2 |
| 10.30-10.45 | 1832 | 704 | 4 | 17.30-17.45 | 2224 | 999 | 0 |
| 10.45-11.00 | 1865 | 716 | 3 | 17.45-18.00 | 2166 | 901 | 2 |
| 11.00-11.15 | 1954 | 748 | 2 | 18.00-18.15 | 2101 | 937 | 1 |
| 11.15-11.30 | 1936 | 755 | 0 | 18.15-18.30 | 1977 | 986 | 1 |
| 11.30-11.45 | 1987 | 770 | 1 | 18.30-18.45 | 2037 | 945 | 0 |
| 11.45-12.00 | 1878 | 765 | 2 | 18.45-19.00 | 2056 | 990 | 2 |
| 12.00-12.15 | 1832 | 798 | 1 | 19.00-19.15 | 2032 | 915 | 3 |
| 12.15-12.30 | 2132 | 766 | 0 | 19.15-19.30 | 1967 | 836 | 2 |
| 12.30-12.45 | 2180 | 745 | 2 | 19.30-19.45 | 1792 | 786 | 1 |
| 12.45-13.00 | 2157 | 724 | 1 | 19.45-20.00 | 1754 | 774 | 0 |

(Sumber : Hasil Survei 2021)

Nama Jalan : Jalan Gajah Mada
 Tanggal : 5 Maret 2021
 Waktu : 06.00-20.00
 Cuaca : Cerah

| Waktu | Utara – Selatan | | | Waktu | Utara - Selatan | | |
|-------------|-----------------|-----|----|-------------|-----------------|------|----|
| | SM | KR | KB | | SM | KR | KB |
| 06.00-06.15 | 2061 | 654 | 1 | 13.00-13.15 | 1972 | 779 | 13 |
| 06.15-06.30 | 2021 | 601 | 0 | 13.15-13.30 | 1896 | 741 | 15 |
| 06.30-06.45 | 1955 | 631 | 1 | 13.30-13.45 | 1837 | 764 | 8 |
| 06.45-07.00 | 1923 | 625 | 2 | 13.45-14.00 | 1823 | 757 | 15 |
| 07.00-07.15 | 1821 | 616 | 2 | 14.00-14.15 | 1793 | 798 | 10 |
| 07.15-07.30 | 1902 | 635 | 4 | 14.15-14.30 | 1881 | 761 | 7 |
| 07.30-07.45 | 1821 | 613 | 3 | 14.30-14.45 | 1746 | 791 | 6 |
| 07.45-08.00 | 1744 | 654 | 2 | 14.45-15.00 | 1946 | 758 | 7 |
| 08.00-08.15 | 1602 | 643 | 2 | 15.00-15.15 | 1905 | 738 | 8 |
| 08.15-08.30 | 1583 | 635 | 6 | 15.15-15.30 | 2036 | 717 | 11 |
| 08.30-08.45 | 1605 | 600 | 2 | 15.30-15.45 | 2045 | 889 | 5 |
| 08.45-09.00 | 1845 | 615 | 5 | 15.45-16.00 | 1913 | 876 | 2 |
| 09.00-09.15 | 1734 | 678 | 3 | 16.00-16.15 | 2034 | 1077 | 1 |
| 09.15-09.30 | 1794 | 908 | 18 | 16.15-16.30 | 2155 | 1045 | 2 |
| 09.30-09.45 | 1831 | 942 | 11 | 16.30-16.45 | 2212 | 1015 | 5 |
| 09.45-10.00 | 1792 | 927 | 8 | 16.45-17.00 | 2256 | 1084 | 4 |
| 10.00-10.15 | 1934 | 780 | 7 | 17.00-17.15 | 2277 | 1098 | 2 |
| 10.15-10.30 | 2073 | 744 | 20 | 17.15-17.30 | 2289 | 1056 | 7 |
| 10.30-10.45 | 1985 | 749 | 11 | 17.30-17.45 | 2089 | 1041 | 1 |
| 10.45-11.00 | 1976 | 753 | 9 | 17.45-18.00 | 2099 | 1031 | 2 |
| 11.00-11.15 | 1879 | 754 | 8 | 18.00-18.15 | 2104 | 1037 | 1 |
| 11.15-11.30 | 1922 | 717 | 12 | 18.15-18.30 | 2121 | 1036 | 4 |
| 11.30-11.45 | 1920 | 824 | 6 | 18.30-18.45 | 2065 | 1035 | 1 |
| 11.45-12.00 | 1899 | 789 | 4 | 18.45-19.00 | 2021 | 1085 | 2 |
| 12.00-12.15 | 1923 | 701 | 5 | 19.00-19.15 | 1932 | 1088 | 4 |
| 12.15-12.30 | 1905 | 700 | 3 | 19.15-19.30 | 1767 | 889 | 1 |
| 12.30-12.45 | 1945 | 745 | 6 | 19.30-19.45 | 1601 | 886 | 2 |
| 12.45-13.00 | 1954 | 735 | 4 | 19.45-20.00 | 1598 | 870 | 1 |

(Sumber : Hasil Survei 2021)

Nama Jalan : Jalan Gajah Mada
 Tanggal : 6 Maret 2021
 Waktu : 06.00-20.00
 Cuaca : Hujan

| Waktu | Utara - Selatan | | | Waktu | Utara - Selatan | | |
|-------------|-----------------|------|----|-------------|-----------------|------|----|
| | SM | KR | KB | | SM | KR | KB |
| 06.00-06.15 | 2045 | 554 | 4 | 13.00-13.15 | 2072 | 960 | 5 |
| 06.15-06.30 | 2024 | 501 | 3 | 13.15-13.30 | 1996 | 941 | 8 |
| 06.30-06.45 | 1932 | 531 | 4 | 13.30-13.45 | 1937 | 952 | 4 |
| 06.45-07.00 | 1921 | 525 | 5 | 13.45-14.00 | 1923 | 941 | 6 |
| 07.00-07.15 | 1712 | 516 | 5 | 14.00-14.15 | 1893 | 900 | 7 |
| 07.15-07.30 | 2243 | 535 | 8 | 14.15-14.30 | 1981 | 921 | 7 |
| 07.30-07.45 | 2167 | 513 | 6 | 14.30-14.45 | 1846 | 914 | 8 |
| 07.45-08.00 | 2162 | 554 | 5 | 14.45-15.00 | 2046 | 921 | 7 |
| 08.00-08.15 | 1915 | 543 | 5 | 15.00-15.15 | 2005 | 933 | 9 |
| 08.15-08.30 | 1993 | 535 | 9 | 15.15-15.30 | 2136 | 945 | 6 |
| 08.30-08.45 | 1909 | 601 | 10 | 15.30-15.45 | 2145 | 942 | 5 |
| 08.45-09.00 | 1868 | 607 | 9 | 15.45-16.00 | 2213 | 889 | 7 |
| 09.00-09.15 | 1822 | 640 | 10 | 16.00-16.15 | 2234 | 988 | 4 |
| 09.15-09.30 | 2022 | 834 | 8 | 16.15-16.30 | 2255 | 997 | 8 |
| 09.30-09.45 | 1790 | 870 | 7 | 16.30-16.45 | 2312 | 1042 | 5 |
| 09.45-10.00 | 1718 | 871 | 9 | 16.45-17.00 | 2356 | 1114 | 6 |
| 10.00-10.15 | 1839 | 992 | 4 | 17.00-17.15 | 2510 | 1105 | 5 |
| 10.15-10.30 | 1802 | 975 | 7 | 17.15-17.30 | 2606 | 1026 | 4 |
| 10.30-10.45 | 1714 | 981 | 9 | 17.30-17.45 | 2608 | 1017 | 2 |
| 10.45-11.00 | 1925 | 1031 | 7 | 17.45-18.00 | 2593 | 1274 | 8 |
| 11.00-11.15 | 1979 | 954 | 7 | 18.00-18.15 | 2356 | 1047 | 7 |
| 11.15-11.30 | 2022 | 975 | 8 | 18.15-18.30 | 2082 | 1138 | 7 |
| 11.30-11.45 | 2020 | 935 | 6 | 18.30-18.45 | 2112 | 1035 | 4 |
| 11.45-12.00 | 1999 | 965 | 7 | 18.45-19.00 | 2213 | 1076 | 6 |
| 12.00-12.15 | 2023 | 942 | 5 | 19.00-19.15 | 2132 | 1056 | 6 |
| 12.15-12.30 | 2005 | 865 | 6 | 19.15-19.30 | 2032 | 979 | 4 |
| 12.30-12.45 | 2045 | 924 | 6 | 19.30-19.45 | 2001 | 976 | 3 |
| 12.45-13.00 | 2054 | 897 | 7 | 19.45-20.00 | 1998 | 965 | 3 |

(Sumber : Hasil Survei 2021)

Nama Jalan : Jalan Gajah Mada
 Tanggal : 7 Maret 2021
 Waktu : 06.00-20.00
 Cuaca : Cerah

| Waktu | Utara - Selatan | | | Waktu | Utara - Selatan | | |
|-------------|-----------------|-----|----|-------------|-----------------|-----|----|
| | SM | KR | KB | | SM | KR | KB |
| 06.00-06.15 | 1560 | 545 | 0 | 13.00-13.15 | 1854 | 860 | 5 |
| 06.15-06.30 | 1500 | 534 | 0 | 13.15-13.30 | 1780 | 821 | 3 |
| 06.30-06.45 | 1515 | 520 | 1 | 13.30-13.45 | 1737 | 812 | 4 |
| 06.45-07.00 | 1654 | 540 | 1 | 13.45-14.00 | 1712 | 835 | 3 |
| 07.00-07.15 | 1612 | 560 | 1 | 14.00-14.15 | 1700 | 889 | 4 |
| 07.15-07.30 | 1654 | 587 | 2 | 14.15-14.30 | 1732 | 800 | 7 |
| 07.30-07.45 | 1723 | 600 | 3 | 14.30-14.45 | 1660 | 812 | 1 |
| 07.45-08.00 | 1865 | 601 | 2 | 14.45-15.00 | 1802 | 802 | 5 |
| 08.00-08.15 | 1715 | 634 | 2 | 15.00-15.15 | 1800 | 803 | 4 |
| 08.15-08.30 | 1793 | 620 | 6 | 15.15-15.30 | 2045 | 815 | 3 |
| 08.30-08.45 | 1823 | 689 | 8 | 15.30-15.45 | 2022 | 822 | 2 |
| 08.45-09.00 | 1945 | 699 | 6 | 15.45-16.00 | 2013 | 800 | 2 |
| 09.00-09.15 | 1905 | 745 | 7 | 16.00-16.15 | 2234 | 811 | 6 |
| 09.15-09.30 | 2100 | 708 | 5 | 16.15-16.30 | 2255 | 813 | 3 |
| 09.30-09.45 | 2055 | 766 | 7 | 16.30-16.45 | 2212 | 825 | 5 |
| 09.45-10.00 | 2024 | 891 | 10 | 16.45-17.00 | 2256 | 904 | 4 |
| 10.00-10.15 | 1934 | 965 | 6 | 17.00-17.15 | 2232 | 998 | 1 |
| 10.15-10.30 | 1900 | 968 | 7 | 17.15-17.30 | 2334 | 956 | 4 |
| 10.30-10.45 | 1754 | 978 | 8 | 17.30-17.45 | 2335 | 936 | 1 |
| 10.45-11.00 | 1764 | 998 | 9 | 17.45-18.00 | 2433 | 987 | 3 |
| 11.00-11.15 | 1779 | 960 | 4 | 18.00-18.15 | 2321 | 903 | 4 |
| 11.15-11.30 | 1780 | 975 | 5 | 18.15-18.30 | 2082 | 954 | 2 |
| 11.30-11.45 | 1793 | 986 | 6 | 18.30-18.45 | 2112 | 889 | 2 |
| 11.45-12.00 | 1799 | 965 | 4 | 18.45-19.00 | 2213 | 899 | 2 |
| 12.00-12.15 | 1803 | 942 | 5 | 19.00-19.15 | 2132 | 910 | 1 |
| 12.15-12.30 | 1805 | 989 | 5 | 19.15-19.30 | 1945 | 995 | 0 |
| 12.30-12.45 | 1822 | 924 | 6 | 19.30-19.45 | 1815 | 886 | 1 |
| 12.45-13.00 | 1824 | 897 | 4 | 19.45-20.00 | 1799 | 870 | 1 |

(Sumber : Hasil Survei 2021)

Lampiran B3. Hasil Analisis Volume Lalu Lintas

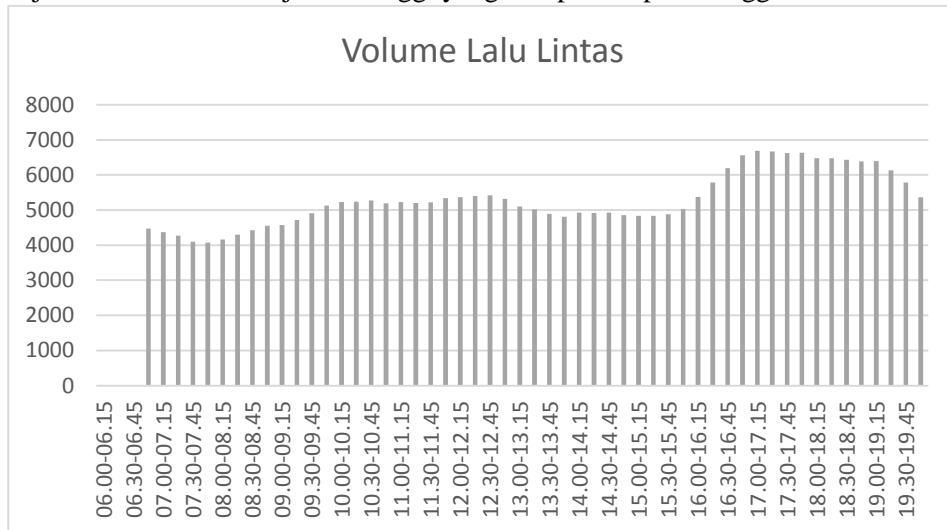
- Berikut terlampir hasil analisis perhitungan volume lalu lintas pada Jalan Gajah Mada pada jam puncak :

Tabel B3.1 Hasil analisis Senin, 1 Maret 2021

| Arah | Jam Puncak | Waktu | Total Volume | |
|-------|------------|-------------|---------------|-------------|
| | | | Kendaraan/Jam | Skr/Jam (Q) |
| U – S | Terendah | 07.00-08.00 | 10559 | 4071,4 |
| | Tertinggi | 16.15-17.15 | 14596 | 6688,45 |

(Sumber : Hasil Analisis 2021)

- Berikut ini akan ditampilkan grafik distribusi volume lalu lintas pada segmen Jalan Gajah Mada di hari dan jam tertinggi yang didapatkan pada tanggal 1 Maret 2021.



Gambar B3.1 Diagram Volume Lalu Lintas Arah Utara - Selatan

(Sumber : Hasil Analisis 1 Maret 2021)

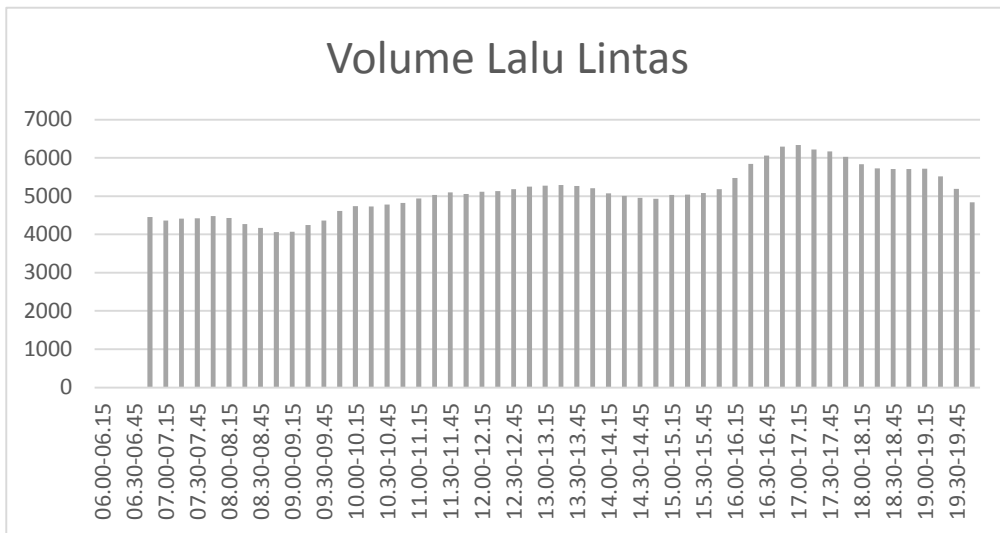
- Berikut terlampir hasil analisis perhitungan volume lalu lintas pada Jalan Gajah Mada pada jam puncak :

Tabel B3.2 Hasil analisis Selasa, 2 Maret 2021

| Arah | Jam Puncak | Waktu | Total Volume | |
|-------|------------|-------------|---------------|-------------|
| | | | Kendaraan/Jam | Skr/Jam (Q) |
| U – S | Terendah | 08.00-09.00 | 9641 | 4058,6 |
| | Tertinggi | 16.15-17.15 | 13868 | 6332,75 |

(Sumber : Hasil Analisis 2021)

- Berikut ini akan ditampilkan grafik distribusi volume lalu lintas pada segmen Jalan Gajah Mada di hari dan jam tertinggi yang didapatkan pada tanggal 2 Maret 2021.



Gambar B3.2 Diagram Volume Lalu Lintas Arah Utara - Selatan
(Sumber : Hasil Analisis 2 Maret 2021)

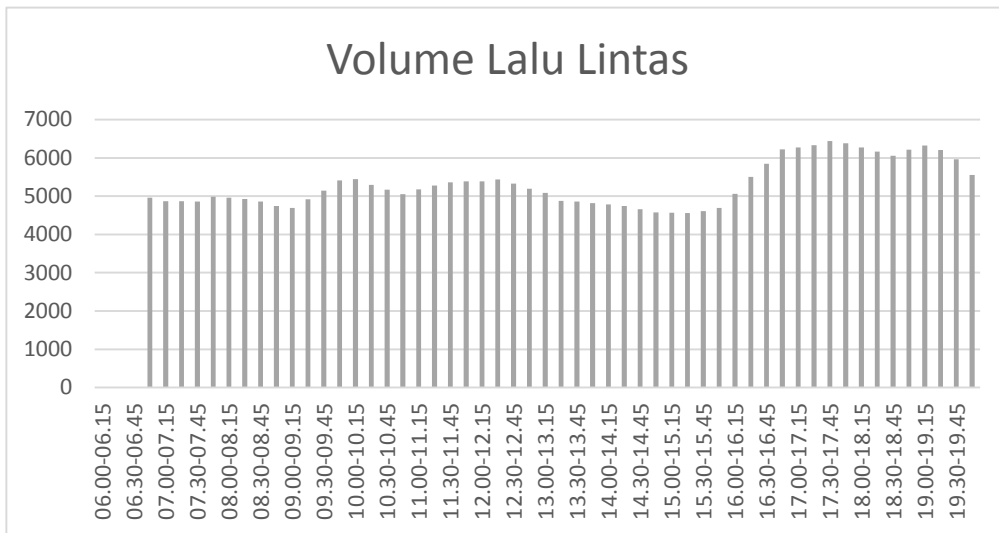
- Berikut terlampir hasil analisis perhitungan volume lalu lintas pada Jalan Gajah Mada pada jam puncak :

Tabel B3.3 Hasil analisis Rabu, 3 Maret 2021

| Arah | Jam Puncak | Waktu | Total Volume | |
|-------|------------|-------------|---------------|-------------|
| | | | Kendaraan/Jam | Skr/Jam (Q) |
| U – S | Terendah | 14.30-15.30 | 9616 | 4559,4 |
| | Tertinggi | 16.45-17.45 | 13297 | 6438,5 |

(Sumber : Hasil Analisis 2021)

- Berikut ini akan ditampilkan grafik distribusi volume lalu lintas pada segmen Jalan Gajah Mada di hari dan jam tertinggi yang didapatkan pada tanggal 3 Maret 2021.



Gambar B3.3 Diagram Volume Lalu Lintas Arah Utara - Selatan
(Sumber : Hasil Analisis 3 Maret 2021)

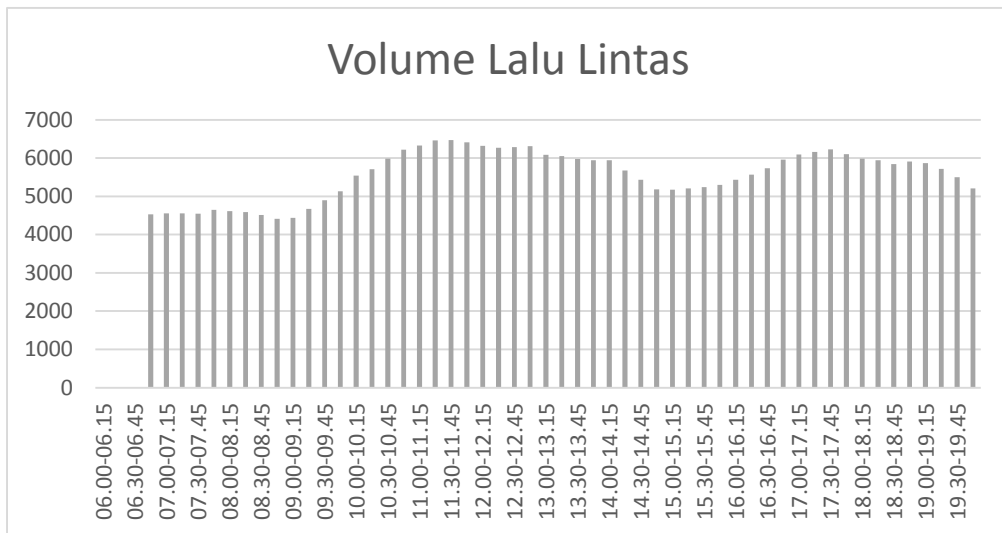
- Berikut terlampir hasil analisis perhitungan volume lalu lintas pada Jalan Gajah Mada pada jam puncak :

Tabel B3.4 Hasil analisis Kamis, 4 Maret 2021

| Arah | Jam Puncak | Waktu | Total Volume | |
|-------|------------|-------------|---------------|-------------|
| | | | Kendaraan/Jam | Skr/Jam (Q) |
| U – S | Terendah | 08.00-09.00 | 9927 | 4414,25 |
| | Tertinggi | 10.45-11.45 | 13049 | 6471,7 |

(Sumber : Hasil Analisis 2021)

- Berikut ini akan ditampilkan grafik distribusi volume lalu lintas pada segmen Jalan Gajah Mada di hari dan jam tertinggi yang didapatkan pada tanggal 4 Maret 2021.



Gambar B3.4 Diagram Volume Lalu Lintas Arah Utara - Selatan
(Sumber : Hasil Analisis 4 Maret 2021)

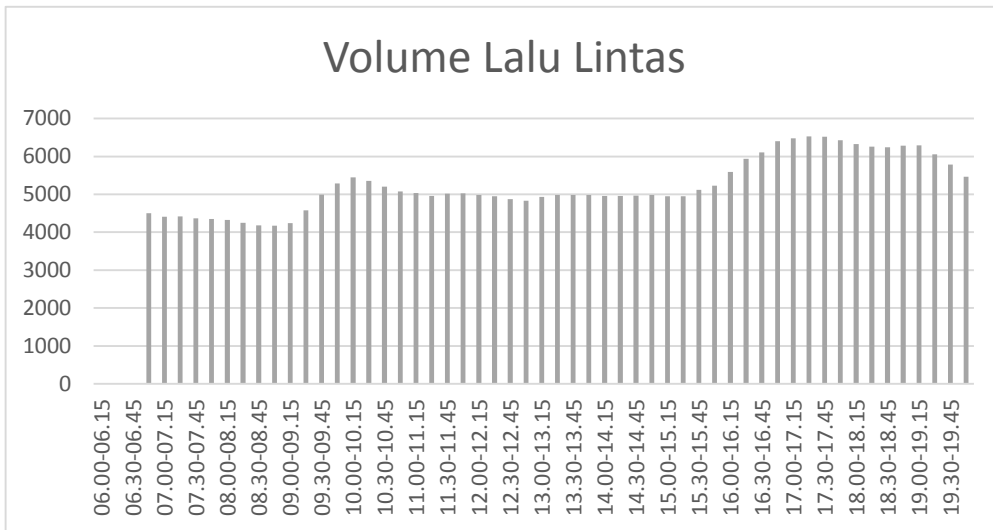
- Berikut terlampir hasil analisis perhitungan volume lalu lintas pada Jalan Gajah Mada pada jam puncak :

Tabel B3.5 Hasil analisis Jumat, 5 Maret 2021.

| Arah | Jam Puncak | Waktu | Total Volume | |
|-------|------------|-------------|---------------|-------------|
| | | | Kendaraan/Jam | Skr/Jam (Q) |
| U – S | Terendah | 08.00-09.00 | 9078 | 4169,75 |
| | Tertinggi | 16.30-17.30 | 13305 | 6533,1 |

(Sumber : Hasil Analisis 2021)

- Berikut ini akan ditampilkan grafik distribusi volume lalu lintas pada segmen Jalan Gajah Mada di hari dan jam tertinggi yang didapatkan pada tanggal 5 Maret 2021.



Gambar B3.5 Diagram Volume Lalu Lintas Arah Utara - Selatan
(Sumber : Hasil Analisis 5 Maret 2021)

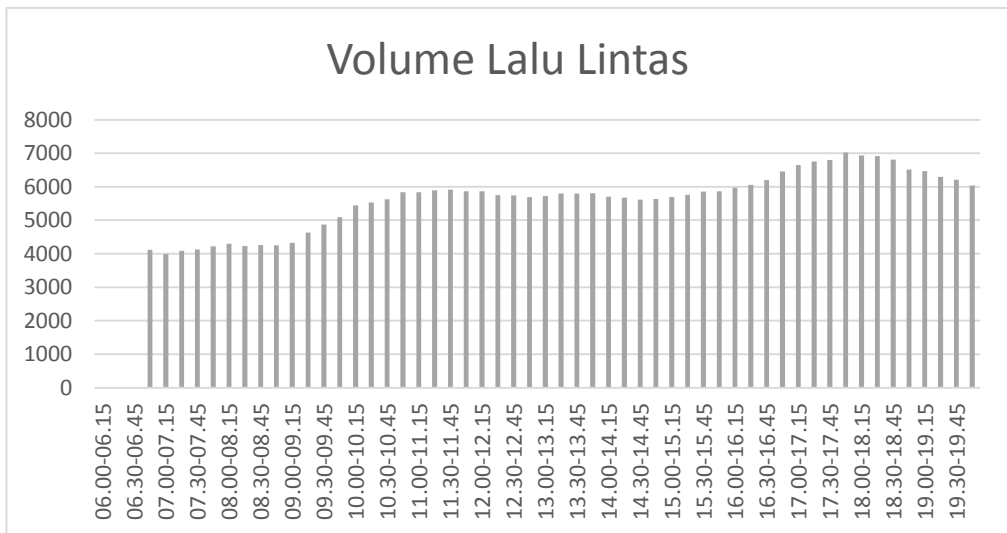
- Berikut terlampir hasil analisis perhitungan volume lalu lintas pada Jalan Gajah Mada pada jam puncak :

Tabel B3.6 Hasil analisis Sabtu, 6 Maret 2021

| Arah | Jam Puncak | Waktu | Total Volume | |
|-------|------------|-------------|---------------|-------------|
| | | | Kendaraan/Jam | Skr/Jam (Q) |
| U – S | Terendah | 06.15-07.15 | 9679 | 3990,65 |
| | Tertinggi | 17.00-18.00 | 14758 | 7024,05 |

(Sumber : Hasil Analisis 2021)

- Berikut ini akan ditampilkan grafik distribusi volume lalu lintas pada segmen Jalan Gajah Mada di hari dan jam tertinggi yang didapatkan pada tanggal 6 Maret 2021.



Gambar B3.6 Diagram Volume Lalu Lintas Arah Utara - Selatan
(Sumber : Hasil Analisis 6 Maret 2021)

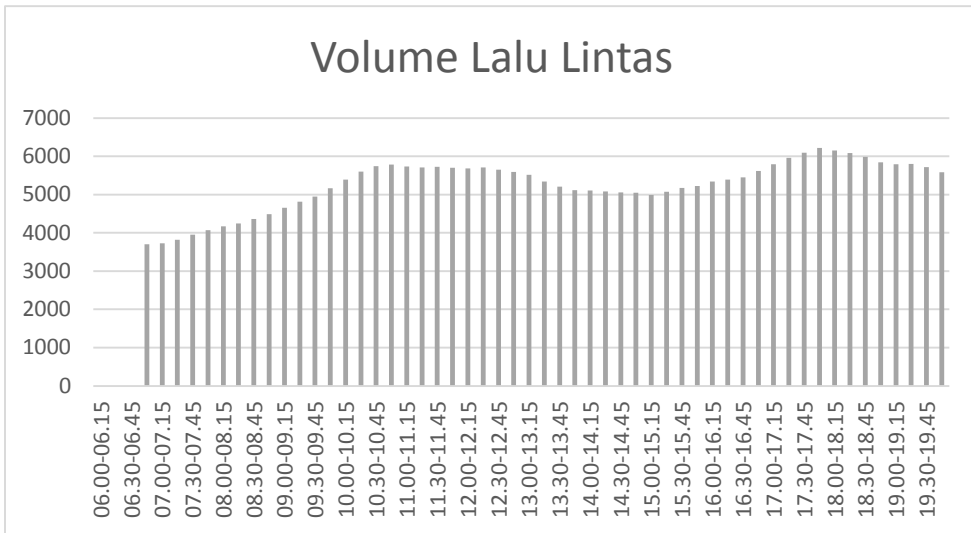
- Berikut terlampir hasil analisis perhitungan volume lalu lintas pada Jalan Gajah Mada pada jam puncak :

Tabel B3.7 Hasil analisis Minggu, 7 Maret 2021

| Arah | Jam Puncak | Waktu | Total Volume | |
|-------|------------|-------------|---------------|-------------|
| | | | Kendaraan/Jam | Skr/Jam (Q) |
| U – S | Terendah | 06.00-07.00 | 8370 | 3698,65 |
| | Tertinggi | 17.00-18.00 | 13220 | 6221,3 |

(Sumber : Hasil Analisis 2021)

- Berikut ini akan ditampilkan grafik distribusi volume lalu lintas pada segmen Jalan Gajah Mada di hari dan jam tertinggi yang didapatkan pada tanggal 6 Maret 2021.



Gambar B3.7 Diagram Volume Lalu Lintas Arah Utara - Selatan
(Sumber : Hasil Analisis 7 Maret 2021)

Lampiran B4. Hasil Survei Hambatan Samping

| Waktu | Senin, 1 Maret 2021 | | | | Waktu | Senin, 1 Maret 2021 | | | |
|---------------|---------------------|----|----|----|---------------|---------------------|----|----|----|
| | Surabaya - Malang | | | | | Surabaya - Malang | | | |
| | KP | PK | UM | MK | | KP | PK | UM | MK |
| 06.00 – 06.15 | 237 | 8 | 3 | 13 | 15.00 – 15.15 | 833 | 7 | 9 | 53 |
| 06.15 – 06.30 | 235 | 7 | 4 | 12 | 15.15 – 15.30 | 802 | 5 | 10 | 55 |
| 06.30 – 06.45 | 237 | 4 | 3 | 11 | 15.30 – 15.45 | 788 | 4 | 12 | 56 |
| 06.45 – 07.00 | 348 | 5 | 3 | 22 | 15.45 – 16.00 | 762 | 7 | 11 | 60 |
| 07.00 – 07.15 | 422 | 5 | 6 | 30 | 16.00 – 16.15 | 723 | 9 | 14 | 61 |
| 07.15 – 07.30 | 543 | 4 | 5 | 22 | 16.15 – 16.30 | 732 | 12 | 9 | 65 |
| 07.30 – 07.45 | 538 | 3 | 6 | 26 | 16.30 – 16.45 | 739 | 13 | 11 | 67 |
| 07.45 – 08.00 | 543 | 6 | 5 | 28 | 16.45 – 17.00 | 764 | 16 | 8 | 64 |
| 08.00 – 08.15 | 772 | 8 | 6 | 28 | 17.00 – 17.15 | 813 | 15 | 9 | 61 |
| 08.15 – 08.30 | 781 | 4 | 4 | 27 | 17.15 – 17.30 | 872 | 18 | 10 | 58 |
| 08.30 – 08.45 | 783 | 6 | 7 | 30 | 17.30 – 17.45 | 816 | 16 | 8 | 55 |
| 08.45 – 09.00 | 835 | 4 | 9 | 29 | 17.45 – 18.00 | 787 | 14 | 11 | 58 |
| 09.00 – 09.15 | 837 | 2 | 9 | 33 | 18.00 – 18.15 | 814 | 20 | 13 | 54 |
| 09.15 – 09.30 | 890 | 6 | 7 | 31 | 18.15 – 18.30 | 822 | 20 | 14 | 50 |
| 09.30 – 09.45 | 899 | 4 | 7 | 40 | 18.30 – 18.45 | 827 | 18 | 13 | 48 |
| 09.45 – 10.00 | 923 | 3 | 7 | 41 | 18.45 – 19.00 | 833 | 18 | 11 | 49 |
| 10.00 – 10.15 | 932 | 7 | 8 | 60 | 19.00 – 19.15 | 908 | 14 | 16 | 51 |
| 10.15 – 10.30 | 981 | 3 | 9 | 62 | 19.15 – 19.30 | 814 | 21 | 14 | 46 |
| 10.30 – 10.45 | 988 | 4 | 9 | 61 | 19.30 – 19.45 | 797 | 16 | 12 | 44 |
| 10.45 – 11.00 | 1105 | 8 | 7 | 64 | 19.45 – 20.00 | 702 | 10 | 9 | 40 |
| 11.00 – 11.15 | 1116 | 6 | 11 | 58 | | | | | |
| 11.15 – 11.30 | 1006 | 10 | 14 | 60 | | | | | |
| 11.30 – 11.45 | 1200 | 18 | 15 | 63 | | | | | |
| 11.45 – 12.00 | 1207 | 20 | 14 | 59 | | | | | |
| 12.00 – 12.15 | 1202 | 21 | 12 | 64 | | | | | |
| 12.15 – 12.30 | 1089 | 23 | 11 | 58 | | | | | |
| 12.30 – 12.45 | 993 | 18 | 8 | 57 | | | | | |
| 12.45 – 13.00 | 989 | 15 | 9 | 64 | | | | | |
| 13.00 – 13.15 | 981 | 16 | 4 | 58 | | | | | |
| 13.15 – 13.30 | 937 | 12 | 3 | 56 | | | | | |
| 13.30 – 13.45 | 879 | 7 | 7 | 55 | | | | | |
| 13.45 – 14.00 | 869 | 5 | 10 | 48 | | | | | |
| 14.00 – 14.15 | 888 | 7 | 7 | 45 | | | | | |
| 14.15 – 14.30 | 814 | 6 | 8 | 46 | | | | | |
| 14.30 – 14.45 | 826 | 5 | 9 | 49 | | | | | |
| 14.45 – 15.00 | 825 | 8 | 7 | 51 | | | | | |

(Sumber : Hasil Survei 2021)

| Waktu | Selasa, 2 Maret 2021 | | | | Waktu | Selasa, 2 Maret 2021 | | | |
|---------------|----------------------|----|----|----|---------------|----------------------|----|----|----|
| | Surabaya - Malang | | | | | Surabaya - Malang | | | |
| | KP | PK | UM | MK | | KP | PK | UM | MK |
| 06.00 – 06.15 | 235 | 8 | 3 | 13 | 15.00 – 15.15 | 830 | 7 | 9 | 53 |
| 06.15 – 06.30 | 233 | 7 | 4 | 12 | 15.15 – 15.30 | 800 | 5 | 10 | 55 |
| 06.30 – 06.45 | 245 | 4 | 3 | 11 | 15.30 – 15.45 | 785 | 4 | 12 | 56 |
| 06.45 – 07.00 | 345 | 5 | 3 | 22 | 15.45 – 16.00 | 760 | 7 | 11 | 60 |
| 07.00 – 07.15 | 420 | 5 | 6 | 30 | 16.00 – 16.15 | 720 | 9 | 14 | 61 |
| 07.15 – 07.30 | 540 | 4 | 5 | 22 | 16.15 – 16.30 | 730 | 12 | 9 | 65 |
| 07.30 – 07.45 | 536 | 3 | 6 | 26 | 16.30 – 16.45 | 736 | 13 | 11 | 67 |
| 07.45 – 08.00 | 540 | 6 | 5 | 28 | 16.45 – 17.00 | 762 | 16 | 8 | 64 |
| 08.00 – 08.15 | 770 | 8 | 6 | 28 | 17.00 – 17.15 | 810 | 15 | 9 | 61 |
| 08.15 – 08.30 | 778 | 4 | 4 | 27 | 17.15 – 17.30 | 870 | 18 | 10 | 58 |
| 08.30 – 08.45 | 781 | 6 | 7 | 30 | 17.30 – 17.45 | 813 | 16 | 8 | 55 |
| 08.45 – 09.00 | 832 | 4 | 9 | 29 | 17.45 – 18.00 | 785 | 14 | 11 | 58 |
| 09.00 – 09.15 | 835 | 2 | 9 | 33 | 18.00 – 18.15 | 811 | 20 | 13 | 54 |
| 09.15 – 09.30 | 887 | 6 | 7 | 31 | 18.15 – 18.30 | 820 | 20 | 14 | 50 |
| 09.30 – 09.45 | 897 | 4 | 7 | 40 | 18.30 – 18.45 | 824 | 18 | 13 | 48 |
| 09.45 – 10.00 | 920 | 3 | 7 | 41 | 18.45 – 19.00 | 831 | 18 | 11 | 49 |
| 10.00 – 10.15 | 930 | 7 | 8 | 60 | 19.00 – 19.15 | 905 | 14 | 16 | 51 |
| 10.15 – 10.30 | 978 | 3 | 9 | 62 | 19.15 – 19.30 | 812 | 21 | 14 | 46 |
| 10.30 – 10.45 | 986 | 4 | 9 | 61 | 19.30 – 19.45 | 794 | 16 | 12 | 44 |
| 10.45 – 11.00 | 1102 | 8 | 7 | 64 | 19.45 – 20.00 | 700 | 10 | 9 | 40 |
| 11.00 – 11.15 | 1114 | 6 | 11 | 58 | | | | | |
| 11.15 – 11.30 | 1003 | 10 | 14 | 60 | | | | | |
| 11.30 – 11.45 | 1198 | 18 | 15 | 63 | | | | | |
| 11.45 – 12.00 | 1205 | 20 | 14 | 59 | | | | | |
| 12.00 – 12.15 | 1199 | 21 | 12 | 64 | | | | | |
| 12.15 – 12.30 | 1087 | 23 | 11 | 58 | | | | | |
| 12.30 – 12.45 | 990 | 18 | 8 | 57 | | | | | |
| 12.45 – 13.00 | 987 | 15 | 9 | 64 | | | | | |
| 13.00 – 13.15 | 978 | 16 | 4 | 58 | | | | | |
| 13.15 – 13.30 | 935 | 12 | 3 | 56 | | | | | |
| 13.30 – 13.45 | 876 | 7 | 7 | 55 | | | | | |
| 13.45 – 14.00 | 867 | 5 | 10 | 48 | | | | | |
| 14.00 – 14.15 | 885 | 7 | 7 | 45 | | | | | |
| 14.15 – 14.30 | 812 | 6 | 8 | 46 | | | | | |
| 14.30 – 14.45 | 823 | 15 | 9 | 49 | | | | | |
| 14.45 – 15.00 | 823 | 8 | 7 | 51 | | | | | |

(Sumber : Hasil Survei 2021)

| Waktu | Rabu, 3 Maret 2021 | | | | Waktu | Rabu, 3 Maret 2021 | | | |
|---------------|--------------------|----|----|----|---------------|--------------------|----|----|----|
| | Surabaya - Malang | | | | | Surabaya - Malang | | | |
| | KP | PK | UM | MK | | KP | PK | UM | MK |
| 06.00 – 06.15 | 234 | 7 | 2 | 12 | 15.00 – 15.15 | 829 | 6 | 8 | 52 |
| 06.15 – 06.30 | 232 | 6 | 3 | 11 | 15.15 – 15.30 | 799 | 4 | 9 | 54 |
| 06.30 – 06.45 | 244 | 3 | 2 | 10 | 15.30 – 15.45 | 784 | 3 | 11 | 55 |
| 06.45 – 07.00 | 344 | 4 | 2 | 21 | 15.45 – 16.00 | 759 | 6 | 10 | 59 |
| 07.00 – 07.15 | 419 | 4 | 5 | 29 | 16.00 – 16.15 | 719 | 8 | 13 | 60 |
| 07.15 – 07.30 | 539 | 3 | 4 | 21 | 16.15 – 16.30 | 729 | 11 | 8 | 64 |
| 07.30 – 07.45 | 535 | 2 | 5 | 25 | 16.30 – 16.45 | 735 | 12 | 10 | 66 |
| 07.45 – 08.00 | 539 | 5 | 4 | 27 | 16.45 – 17.00 | 761 | 15 | 7 | 63 |
| 08.00 – 08.15 | 769 | 7 | 5 | 27 | 17.00 – 17.15 | 809 | 14 | 8 | 60 |
| 08.15 – 08.30 | 777 | 3 | 3 | 26 | 17.15 – 17.30 | 860 | 17 | 9 | 57 |
| 08.30 – 08.45 | 780 | 5 | 6 | 29 | 17.30 – 17.45 | 812 | 15 | 7 | 54 |
| 08.45 – 09.00 | 831 | 3 | 8 | 28 | 17.45 – 18.00 | 784 | 13 | 10 | 57 |
| 09.00 – 09.15 | 834 | 1 | 8 | 32 | 18.00 – 18.15 | 810 | 19 | 12 | 53 |
| 09.15 – 09.30 | 886 | 5 | 6 | 30 | 18.15 – 18.30 | 819 | 19 | 13 | 49 |
| 09.30 – 09.45 | 896 | 3 | 6 | 39 | 18.30 – 18.45 | 823 | 17 | 12 | 47 |
| 09.45 – 10.00 | 919 | 2 | 6 | 40 | 18.45 – 19.00 | 830 | 17 | 10 | 49 |
| 10.00 – 10.15 | 929 | 6 | 7 | 59 | 19.00 – 19.15 | 904 | 13 | 17 | 50 |
| 10.15 – 10.30 | 977 | 2 | 8 | 61 | 19.15 – 19.30 | 811 | 20 | 13 | 45 |
| 10.30 – 10.45 | 985 | 3 | 8 | 60 | 19.30 – 19.45 | 793 | 15 | 11 | 43 |
| 10.45 – 11.00 | 1101 | 7 | 6 | 63 | 19.45 – 20.00 | 699 | 9 | 8 | 39 |
| 11.00 – 11.15 | 1113 | 5 | 10 | 57 | | | | | |
| 11.15 – 11.30 | 1002 | 9 | 13 | 59 | | | | | |
| 11.30 – 11.45 | 1197 | 17 | 14 | 62 | | | | | |
| 11.45 – 12.00 | 1204 | 19 | 13 | 58 | | | | | |
| 12.00 – 12.15 | 1198 | 20 | 11 | 63 | | | | | |
| 12.15 – 12.30 | 1086 | 22 | 10 | 57 | | | | | |
| 12.30 – 12.45 | 980 | 17 | 7 | 56 | | | | | |
| 12.45 – 13.00 | 986 | 14 | 8 | 63 | | | | | |
| 13.00 – 13.15 | 977 | 15 | 3 | 57 | | | | | |
| 13.15 – 13.30 | 934 | 11 | 2 | 55 | | | | | |
| 13.30 – 13.45 | 875 | 6 | 6 | 54 | | | | | |
| 13.45 – 14.00 | 866 | 4 | 9 | 47 | | | | | |
| 14.00 – 14.15 | 884 | 6 | 6 | 44 | | | | | |
| 14.15 – 14.30 | 811 | 5 | 7 | 45 | | | | | |
| 14.30 – 14.45 | 822 | 4 | 8 | 48 | | | | | |
| 14.45 – 15.00 | 822 | 7 | 6 | 50 | | | | | |

(Sumber : Hasil Survei 2021)

| Waktu | Kamis, 3 Maret 2021 | | | | Waktu | Kamis, 3 Maret 2021 | | | |
|---------------|---------------------|----|----|----|---------------|---------------------|----|----|----|
| | Surabaya - Malang | | | | | Surabaya - Malang | | | |
| | KP | PK | UM | MK | | KP | PK | UM | MK |
| 06.00 – 06.15 | 235 | 7 | 3 | 12 | 15.00 – 15.15 | 830 | 6 | 9 | 52 |
| 06.15 – 06.30 | 232 | 7 | 3 | 12 | 15.15 – 15.30 | 799 | 5 | 9 | 55 |
| 06.30 – 06.45 | 245 | 3 | 3 | 10 | 15.30 – 15.45 | 785 | 3 | 12 | 55 |
| 06.45 – 07.00 | 34]4 | 5 | 2 | 22 | 15.45 – 16.00 | 759 | 7 | 10 | 60 |
| 07.00 – 07.15 | 420 | 4 | 6 | 29 | 16.00 – 16.15 | 720 | 8 | 14 | 60 |
| 07.15 – 07.30 | 539 | 4 | 4 | 22 | 16.15 – 16.30 | 729 | 12 | 8 | 65 |
| 07.30 – 07.45 | 536 | 2 | 6 | 25 | 16.30 – 16.45 | 736 | 12 | 11 | 66 |
| 07.45 – 08.00 | 539 | 6 | 4 | 28 | 16.45 – 17.00 | 761 | 16 | 7 | 64 |
| 08.00 – 08.15 | 770 | 7 | 6 | 27 | 17.00 – 17.15 | 810 | 14 | 9 | 60 |
| 08.15 – 08.30 | 777 | 4 | 3 | 27 | 17.15 – 17.30 | 860 | 18 | 9 | 58 |
| 08.30 – 08.45 | 78]1 | 5 | 7 | 29 | 17.30 – 17.45 | 813 | 15 | 8 | 54 |
| 08.45 – 09.00 | 831 | 4 | 8 | 29 | 17.45 – 18.00 | 784 | 15 | 10 | 58 |
| 09.00 – 09.15 | 835 | 1 | 9 | 32 | 18.00 – 18.15 | 811 | 19 | 13 | 53 |
| 09.15 – 09.30 | 886 | 6 | 6 | 31 | 18.15 – 18.30 | 819 | 20 | 13 | 50 |
| 09.30 – 09.45 | 897 | 3 | 7 | 39 | 18.30 – 18.45 | 824 | 17 | 13 | 47 |
| 09.45 – 10.00 | 919 | 3 | 6 | 41 | 18.45 – 19.00 | 830 | 18 | 10 | 50 |
| 10.00 – 10.15 | 930 | 6 | 8 | 59 | 19.00 – 19.15 | 905 | 13 | 18 | 50 |
| 10.15 – 10.30 | 977 | 3 | 8 | 62 | 19.15 – 19.30 | 811 | 21 | 13 | 46 |
| 10.30 – 10.45 | 986 | 3 | 9 | 60 | 19.30 – 19.45 | 794 | 15 | 12 | 43 |
| 10.45 – 11.00 | 1101 | 8 | 6 | 64 | 19.45 – 20.00 | 699 | 10 | 8 | 40 |
| 11.00 – 11.15 | 1114 | 5 | 11 | 57 | | | | | |
| 11.15 – 11.30 | 1002 | 10 | 13 | 60 | | | | | |
| 11.30 – 11.45 | 1198 | 17 | 15 | 62 | | | | | |
| 11.45 – 12.00 | 1204 | 20 | 13 | 59 | | | | | |
| 12.00 – 12.15 | 1199 | 20 | 12 | 63 | | | | | |
| 12.15 – 12.30 | 1086 | 23 | 10 | 58 | | | | | |
| 12.30 – 12.45 | 981 | 17 | 8 | 56 | | | | | |
| 12.45 – 13.00 | 986 | 15 | 8 | 64 | | | | | |
| 13.00 – 13.15 | 978 | 15 | 4 | 57 | | | | | |
| 13.15 – 13.30 | 934 | 12 | 2 | 56 | | | | | |
| 13.30 – 13.45 | 876 | 6 | 7 | 54 | | | | | |
| 13.45 – 14.00 | 866 | 5 | 9 | 48 | | | | | |
| 14.00 – 14.15 | 885 | 6 | 7 | 44 | | | | | |
| 14.15 – 14.30 | 811 | 6 | 7 | 46 | | | | | |
| 14.30 – 14.45 | 823 | 4 | 9 | 48 | | | | | |
| 14.45 – 15.00 | 822 | 8 | 6 | 51 | | | | | |

(Sumber : Hasil Survei 2021)

| Waktu | Jum'at, 5 Maret 2021 | | | | Waktu | Jum'at, 5 Maret 2021 | | | |
|---------------|----------------------|----|----|----|---------------|----------------------|----|----|----|
| | Surabaya - Malang | | | | | Surabaya - Malang | | | |
| | KP | PK | UM | MK | | KP | PK | UM | MK |
| 06.00 – 06.15 | 235 | 9 | 3 | 14 | 15.00 – 15.15 | 830 | 8 | 9 | 54 |
| 06.15 – 06.30 | 235 | 7 | 6 | 12 | 15.15 – 15.30 | 802 | 5 | 12 | 55 |
| 06.30 – 06.45 | 245 | 5 | 3 | 12 | 15.30 – 15.45 | 75 | 5 | 12 | 57 |
| 06.45 – 07.00 | 347 | 5 | 5 | 22 | 15.45 – 16.00 | 762 | 7 | 13 | 60 |
| 07.00 – 07.15 | 420 | 6 | 6 | 31 | 16.00 – 16.15 | 720 | 10 | 14 | 62 |
| 07.15 – 07.30 | 542 | 4 | 7 | 22 | 16.15 – 16.30 | 732 | 12 | 11 | 65 |
| 07.30 – 07.45 | 536 | 4 | 6 | 27 | 16.30 – 16.45 | 736 | 14 | 11 | 68 |
| 07.45 – 08.00 | 542 | 6 | 7 | 28 | 16.45 – 17.00 | 764 | 16 | 10 | 64 |
| 08.00 – 08.15 | 770 | 9 | 6 | 29 | 17.00 – 17.15 | 810 | 16 | 9 | 62 |
| 08.15 – 08.30 | 780 | 4 | 6 | 27 | 17.15 – 17.30 | 863 | 18 | 12 | 58 |
| 08.30 – 08.45 | 781 | 7 | 7 | 31 | 17.30 – 17.45 | 813 | 17 | 8 | 56 |
| 08.45 – 09.00 | 834 | 4 | 11 | 29 | 17.45 – 18.00 | 787 | 15 | 13 | 58 |
| 09.00 – 09.15 | 835 | 3 | 9 | 34 | 18.00 – 18.15 | 811 | 21 | 13 | 55 |
| 09.15 – 09.30 | 890 | 6 | 9 | 31 | 18.15 – 18.30 | 822 | 20 | 16 | 50 |
| 09.30 – 09.45 | 897 | 5 | 7 | 41 | 18.30 – 18.45 | 824 | 19 | 13 | 49 |
| 09.45 – 10.00 | 922 | 3 | 9 | 41 | 18.45 – 19.00 | 833 | 18 | 13 | 50 |
| 10.00 – 10.15 | 930 | 8 | 8 | 61 | 19.00 – 19.15 | 905 | 15 | 18 | 52 |
| 10.15 – 10.30 | 980 | 3 | 11 | 62 | 19.15 – 19.30 | 814 | 21 | 16 | 46 |
| 10.30 – 10.45 | 986 | 5 | 9 | 62 | 19.30 – 19.45 | 794 | 17 | 12 | 45 |
| 10.45 – 11.00 | 1104 | 8 | 9 | 64 | 19.45 – 20.00 | 702 | 10 | 11 | 40 |
| 11.00 – 11.15 | 1114 | 7 | 11 | 59 | | | | | |
| 11.15 – 11.30 | 1005 | 10 | 16 | 60 | | | | | |
| 11.30 – 11.45 | 1198 | 19 | 15 | 64 | | | | | |
| 11.45 – 12.00 | 1207 | 20 | 16 | 59 | | | | | |
| 12.00 – 12.15 | 1199 | 22 | 12 | 65 | | | | | |
| 12.15 – 12.30 | 1089 | 23 | 13 | 58 | | | | | |
| 12.30 – 12.45 | 981 | 19 | 8 | 58 | | | | | |
| 12.45 – 13.00 | 989 | 15 | 11 | 64 | | | | | |
| 13.00 – 13.15 | 978 | 17 | 4 | 59 | | | | | |
| 13.15 – 13.30 | 937 | 12 | 5 | 56 | | | | | |
| 13.30 – 13.45 | 876 | 8 | 7 | 56 | | | | | |
| 13.45 – 14.00 | 869 | 5 | 12 | 48 | | | | | |
| 14.00 – 14.15 | 885 | 8 | 7 | 46 | | | | | |
| 14.15 – 14.30 | 814 | 6 | 10 | 46 | | | | | |
| 14.30 – 14.45 | 823 | 6 | 9 | 50 | | | | | |
| 14.45 – 15.00 | 825 | 8 | 9 | 51 | | | | | |

(Sumber : Hasil Survei 2021)

| Waktu | Sabtu, 6 Maret 2021 | | | | Waktu | Sabtu, 6 Maret 2021 | | | |
|---------------|---------------------|----|----|----|---------------|---------------------|----|----|----|
| | Surabaya - Malang | | | | | Surabaya - Malang | | | |
| | KP | PK | UM | MK | | KP | PK | UM | MK |
| 06.00 – 06.15 | 237 | 6 | 3 | 16 | 15.00 – 15.15 | 945 | 6 | 9 | 53 |
| 06.15 – 06.30 | 237 | 5 | 6 | 14 | 15.15 – 15.30 | 968 | 7 | 11 | 56 |
| 06.30 – 06.45 | 247 | 3 | 4 | 14 | 15.30 – 15.45 | 996 | 7 | 12 | 58 |
| 06.45 – 07.00 | 349 | 3 | 7 | 24 | 15.45 – 16.00 | 1023 | 9 | 13 | 61 |
| 07.00 – 07.15 | 422 | 3 | 6 | 33 | 16.00 – 16.15 | 1124 | 12 | 12 | 64 |
| 07.15 – 07.30 | 544 | 2 | 7 | 24 | 16.15 – 16.30 | 1254 | 14 | 8 | 65 |
| 07.30 – 07.45 | 538 | 2 | 8 | 28 | 16.30 – 16.45 | 1243 | 16 | 11 | 70 |
| 07.45 – 08.00 | 544 | 5 | 7 | 30 | 16.45 – 17.00 | 1232 | 18 | 10 | 67 |
| 08.00 – 08.15 | 772 | 6 | 6 | 30 | 17.00 – 17.15 | 1204 | 18 | 9 | 65 |
| 08.15 – 08.30 | 782 | 4 | 6 | 28 | 17.15 – 17.30 | 1266 | 20 | 11 | 61 |
| 08.30 – 08.45 | 783 | 6 | 7 | 32 | 17.30 – 17.45 | 1255 | 19 | 8 | 58 |
| 08.45 – 09.00 | 836 | 4 | 8 | 30 | 17.45 – 18.00 | 1254 | 17 | 13 | 60 |
| 09.00 – 09.15 | 800 | 3 | 9 | 35 | 18.00 – 18.15 | 1243 | 23 | 12 | 57 |
| 09.15 – 09.30 | 870 | 5 | 9 | 32 | 18.15 – 18.30 | 1233 | 22 | 14 | 52 |
| 09.30 – 09.45 | 840 | 4 | 7 | 42 | 18.30 – 18.45 | 1245 | 21 | 13 | 51 |
| 09.45 – 10.00 | 900 | 3 | 9 | 42 | 18.45 – 19.00 | 1198 | 17 | 13 | 52 |
| 10.00 – 10.15 | 876 | 6 | 8 | 62 | 19.00 – 19.15 | 1190 | 14 | 16 | 54 |
| 10.15 – 10.30 | 899 | 3 | 9 | 63 | 19.15 – 19.30 | 1196 | 20 | 16 | 48 |
| 10.30 – 10.45 | 865 | 4 | 9 | 63 | 19.30 – 19.45 | 1092 | 16 | 12 | 47 |
| 10.45 – 11.00 | 890 | 4 | 9 | 65 | 19.45 – 20.00 | 995 | 9 | 11 | 42 |
| 11.00 – 11.15 | 900 | 7 | 12 | 61 | | | | | |
| 11.15 – 11.30 | 912 | 9 | 14 | 62 | | | | | |
| 11.30 – 11.45 | 923 | 10 | 14 | 66 | | | | | |
| 11.45 – 12.00 | 932 | 11 | 15 | 61 | | | | | |
| 12.00 – 12.15 | 945 | 13 | 11 | 67 | | | | | |
| 12.15 – 12.30 | 899 | 16 | 11 | 60 | | | | | |
| 12.30 – 12.45 | 984 | 17 | 8 | 60 | | | | | |
| 12.45 – 13.00 | 992 | 13 | 10 | 66 | | | | | |
| 13.00 – 13.15 | 981 | 15 | 4 | 61 | | | | | |
| 13.15 – 13.30 | 940 | 10 | 5 | 58 | | | | | |
| 13.30 – 13.45 | 879 | 6 | 7 | 58 | | | | | |
| 13.45 – 14.00 | 872 | 3 | 11 | 50 | | | | | |
| 14.00 – 14.15 | 888 | 6 | 7 | 48 | | | | | |
| 14.15 – 14.30 | 817 | 4 | 9 | 47 | | | | | |
| 14.30 – 14.45 | 826 | 4 | 9 | 51 | | | | | |
| 14.45 – 15.00 | 828 | 6 | 10 | 52 | | | | | |

(Sumber : Hasil Survei 2021)

| Waktu | Minggu, 7 Maret 2021 | | | | Waktu | Minggu, 7 Maret 2021 | | | |
|---------------|----------------------|----|----|----|---------------|----------------------|----|----|----|
| | Surabaya - Malang | | | | | Surabaya - Malang | | | |
| | KP | PK | UM | MK | | KP | PK | UM | MK |
| 06.00 – 06.15 | 203 | 12 | 3 | 16 | 15.00 – 15.15 | 954 | 5 | 9 | 53 |
| 06.15 – 06.30 | 225 | 11 | 6 | 14 | 15.15 – 15.30 | 968 | 6 | 11 | 56 |
| 06.30 – 06.45 | 214 | 13 | 4 | 14 | 15.30 – 15.45 | 997 | 6 | 12 | 58 |
| 06.45 – 07.00 | 223 | 10 | 7 | 24 | 15.45 – 16.00 | 1005 | 8 | 13 | 61 |
| 07.00 – 07.15 | 235 | 8 | 6 | 33 | 16.00 – 16.15 | 1103 | 11 | 12 | 64 |
| 07.15 – 07.30 | 312 | 6 | 7 | 24 | 16.15 – 16.30 | 1214 | 13 | 8 | 65 |
| 07.30 – 07.45 | 325 | 5 | 8 | 28 | 16.30 – 16.45 | 1243 | 15 | 11 | 70 |
| 07.45 – 08.00 | 365 | 4 | 7 | 30 | 16.45 – 17.00 | 1232 | 17 | 10 | 67 |
| 08.00 – 08.15 | 456 | 5 | 6 | 30 | 17.00 – 17.15 | 1215 | 19 | 9 | 65 |
| 08.15 – 08.30 | 476 | 3 | 6 | 28 | 17.15 – 17.30 | 1200 | 21 | 11 | 61 |
| 08.30 – 08.45 | 488 | 5 | 7 | 32 | 17.30 – 17.45 | 1204 | 20 | 8 | 58 |
| 08.45 – 09.00 | 490 | 3 | 8 | 30 | 17.45 – 18.00 | 1254 | 16 | 13 | 60 |
| 09.00 – 09.15 | 678 | 2 | 9 | 35 | 18.00 – 18.15 | 1243 | 22 | 12 | 57 |
| 09.15 – 09.30 | 658 | 4 | 9 | 32 | 18.15 – 18.30 | 1206 | 21 | 14 | 52 |
| 09.30 – 09.45 | 699 | 3 | 7 | 42 | 18.30 – 18.45 | 1187 | 20 | 13 | 51 |
| 09.45 – 10.00 | 608 | 3 | 9 | 42 | 18.45 – 19.00 | 1105 | 16 | 13 | 52 |
| 10.00 – 10.15 | 895 | 7 | 8 | 62 | 19.00 – 19.15 | 1004 | 13 | 16 | 54 |
| 10.15 – 10.30 | 876 | 4 | 9 | 63 | 19.15 – 19.30 | 1003 | 19 | 16 | 48 |
| 10.30 – 10.45 | 850 | 5 | 9 | 63 | 19.30 – 19.45 | 1000 | 15 | 12 | 47 |
| 10.45 – 11.00 | 877 | 5 | 9 | 65 | 19.45 – 20.00 | 995 | 8 | 11 | 42 |
| 11.00 – 11.15 | 921 | 8 | 12 | 61 | | | | | |
| 11.15 – 11.30 | 903 | 10 | 14 | 62 | | | | | |
| 11.30 – 11.45 | 932 | 11 | 14 | 66 | | | | | |
| 11.45 – 12.00 | 934 | 12 | 15 | 61 | | | | | |
| 12.00 – 12.15 | 945 | 14 | 11 | 67 | | | | | |
| 12.15 – 12.30 | 945 | 15 | 11 | 60 | | | | | |
| 12.30 – 12.45 | 984 | 16 | 8 | 60 | | | | | |
| 12.45 – 13.00 | 985 | 12 | 10 | 66 | | | | | |
| 13.00 – 13.15 | 981 | 14 | 4 | 61 | | | | | |
| 13.15 – 13.30 | 950 | 9 | 5 | 58 | | | | | |
| 13.30 – 13.45 | 880 | 7 | 7 | 58 | | | | | |
| 13.45 – 14.00 | 889 | 4 | 11 | 50 | | | | | |
| 14.00 – 14.15 | 888 | 5 | 7 | 48 | | | | | |
| 14.15 – 14.30 | 823 | 3 | 9 | 47 | | | | | |
| 14.30 – 14.45 | 826 | 3 | 9 | 51 | | | | | |
| 14.45 – 15.00 | 828 | 5 | 10 | 52 | | | | | |

(Sumber : Hasil Survei 2021)

Lampiran B5. Hasil Analisis Hambatan Samping

- **Hasil Analisis perhitungan hambatan samping perjam (Senin, 1 Maret 2021)**

| Waktu | Senin, 1 Maret 2021 | | | | Total Kej/Jam |
|---------------|---------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 1057 | 12 | 5,2 | 40,6 | 1114,8 |
| 07.00 – 08.00 | 2046 | 9 | 8,8 | 74,2 | 2138 |
| 08.00 – 09.00 | 3171 | 11 | 10,4 | 79,8 | 3272,2 |
| 09.00 – 10.00 | 3549 | 7,5 | 12 | 101,5 | 3670 |
| 10.00 – 11.00 | 4006 | 11 | 13,2 | 172,9 | 4203,1 |
| 11.00 – 12.00 | 4529 | 27 | 21,6 | 168 | 4745,6 |
| 12.00 – 13.00 | 4273 | 38,5 | 16 | 170,1 | 4497,6 |
| 13.00 – 14.00 | 3666 | 20 | 9,6 | 151,9 | 3847,5 |
| 14.00 – 15.00 | 3353 | 13 | 12,4 | 133,7 | 3512,1 |
| 15.00 – 16.00 | 3185 | 11,5 | 16,8 | 156,8 | 3370,1 |
| 16.00 – 17.00 | 2958 | 25 | 16,8 | 179,9 | 3179,7 |
| 17.00 – 18.00 | 3288 | 31,5 | 15,2 | 162,4 | 3497,1 |
| 18.00 – 19.00 | 3296 | 38 | 20,4 | 140,7 | 3495,1 |
| 19.00 – 20.00 | 3221 | 30,5 | 20,4 | 126,7 | 3398,6 |

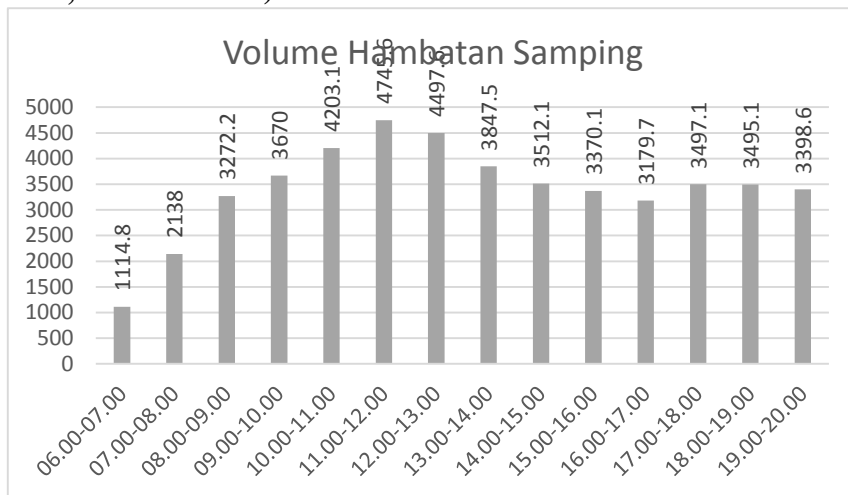
(Sumber : Hasil Analisis 2021)

- **Hasil Analisis perhitungan hambatan samping jam puncak (Senin, 1 Maret 2021)**

| Waktu | Senin, 1 Maret 2021 | | | | Total Kej/Jam |
|---------------|---------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 1057 | 12 | 5,2 | 40,6 | 1114,8 |
| 11.00 – 12.00 | 4529 | 27 | 21,6 | 168 | 4745,6 |

(Sumber : Hasil Analisis 2021)

- **Grafik Hasil Analisis perhitungan hambatan samping jam puncak (Senin, 1 Maret 2021)**



Gambar B5.1 Diagram Hambatan Samping Arah Utara - Selatan
(Sumber : Hasil Analisis 1 Maret 2021)

- **Hasil Analisis perhitungan hambatan samping perjam (Selasa, 2 Maret 2021)**

| Waktu | Selasa, 2 Maret 2021 | | | | Total Kej/Jam |
|---------------|----------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 1058 | 12 | 5,2 | 40,6 | 1115,8 |
| 07.00 – 08.00 | 2036 | 9 | 8,8 | 74,2 | 2128 |
| 08.00 – 09.00 | 3161 | 11 | 10,4 | 79,8 | 3262,2 |
| 09.00 – 10.00 | 3539 | 7,5 | 12 | 101,5 | 3660 |
| 10.00 – 11.00 | 3996 | 11 | 13,2 | 172,9 | 4193,1 |
| 11.00 – 12.00 | 4520 | 27 | 21,6 | 168 | 4736,6 |
| 12.00 – 13.00 | 4263 | 38,5 | 16 | 170,1 | 4487,6 |
| 13.00 – 14.00 | 3656 | 20 | 9,6 | 151,9 | 3837,5 |
| 14.00 – 15.00 | 3343 | 13 | 12,4 | 133,7 | 3502,1 |
| 15.00 – 16.00 | 3175 | 11,5 | 16,8 | 156,8 | 3360,1 |
| 16.00 – 17.00 | 2948 | 25 | 16,8 | 179,9 | 3169,7 |
| 17.00 – 18.00 | 3278 | 31,5 | 15,2 | 162,4 | 3487,1 |
| 18.00 – 19.00 | 3286 | 38 | 20,4 | 140,7 | 3485,1 |
| 19.00 – 20.00 | 3211 | 30,5 | 20,4 | 126,7 | 3388,6 |

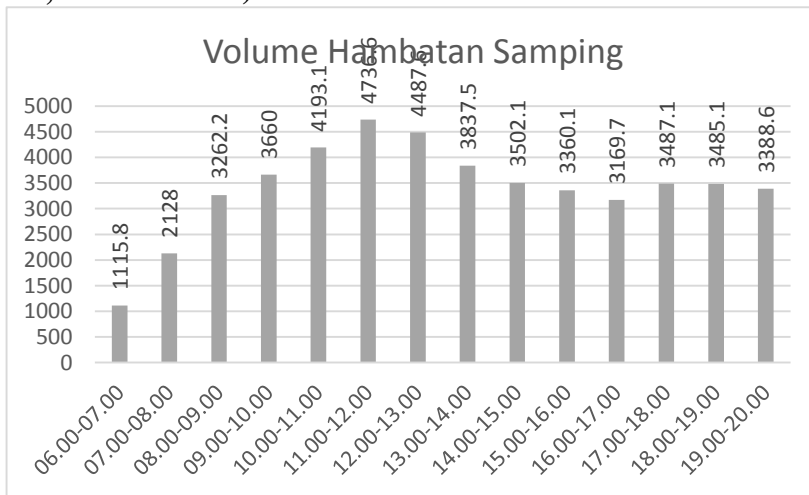
(Sumber : Hasil Analisis 2021)

- Hasil Analisis perhitungan hambatan samping jam puncak (Selasa, 2 Maret 2021)

| Waktu | Selasa, 2 Maret 2021 | | | | Total Kej/Jam |
|---------------|----------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 1058 | 12 | 5,2 | 40,6 | 1115,8 |
| 11.00 – 12.00 | 4520 | 27 | 21,6 | 168 | 4736,6 |

(Sumber : Hasil Analisis 2021)

- Grafik Hasil Analisis perhitungan hambatan samping jam puncak (Selasa, 2 Maret 2021)



Gambar B5.2 Diagram Hambatan Samping Arah Utara - Selatan
(Sumber : Hasil Analisis 2 Maret 2021)

- Hasil Analisis perhitungan hambatan samping perjam (Rabu, 3 Maret 2021)

| Waktu | Rabu, 3 Maret 2021 | | | | Total Kej/Jam |
|---------------|--------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 1054 | 10 | 3,6 | 37,8 | 1105,4 |
| 07.00 – 08.00 | 2032 | 7 | 7,2 | 71,4 | 2117,6 |
| 08.00 – 09.00 | 3157 | 9 | 8,8 | 77 | 3251,8 |
| 09.00 – 10.00 | 3535 | 5,5 | 10,4 | 98,7 | 3649,6 |
| 10.00 – 11.00 | 3992 | 9 | 11,6 | 170,1 | 4182,7 |
| 11.00 – 12.00 | 4516 | 25 | 20 | 165,2 | 4726,2 |
| 12.00 – 13.00 | 4250 | 36,5 | 14,4 | 167,3 | 4468,2 |
| 13.00 – 14.00 | 3652 | 18 | 8 | 149,1 | 3827,1 |
| 14.00 – 15.00 | 3339 | 11 | 10,8 | 130,9 | 3491,7 |
| 15.00 – 16.00 | 3171 | 9,5 | 15,2 | 154 | 3349,7 |
| 16.00 – 17.00 | 2944 | 23 | 15,2 | 177,1 | 3159,3 |
| 17.00 – 18.00 | 3265 | 29,5 | 13,6 | 159,6 | 3467,7 |
| 18.00 – 19.00 | 3282 | 36 | 18,8 | 138,6 | 3475,4 |
| 19.00 – 20.00 | 3207 | 28,5 | 19,6 | 123,9 | 3379 |

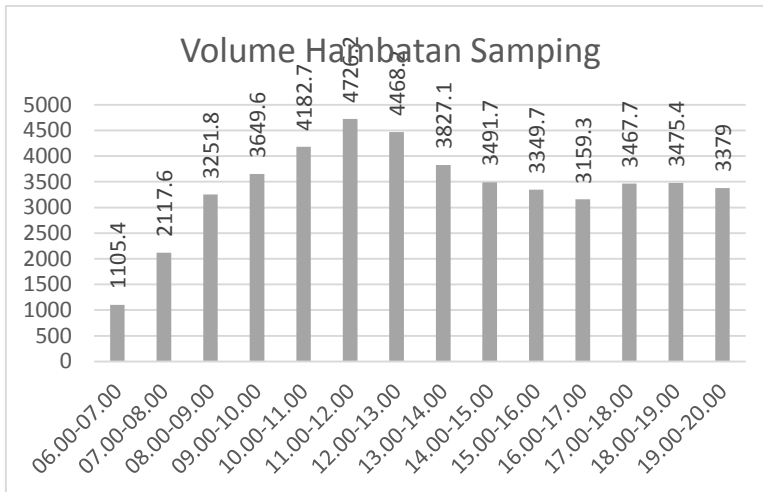
(Sumber : Hasil Analisis 2021)

- Hasil Analisis perhitungan hambatan samping jam puncak (Rabu, 3 Maret 2021)

| Waktu | Rabu, 3 Maret 2021 | | | | Total Kej/Jam |
|---------------|--------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 1054 | 10 | 3,6 | 37,8 | 1105,4 |
| 11.00 – 12.00 | 4516 | 25 | 20 | 165,2 | 4726,2 |

(Sumber : Hasil Analisis 2021)

- **Grafik Hasil Analisis perhitungan hambatan samping jam puncak (Rabu, 3 Maret 2021)**



Gambar B5.3 Diagram Hambatan Samping Arah Utara - Selatan
(Sumber : Hasil Analisis 3 Maret 2021)

- **Hasil Analisis perhitungan hambatan samping perjam (Kamis, 4 Maret 2021)**

| Waktu | Kamis, 4 Maret 2021 | | | | Total Kej/Jam |
|---------------|---------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 1056 | 11 | 4,4 | 39,2 | 1110,6 |
| 07.00 – 08.00 | 2034 | 8 | 8 | 72,8 | 2122,8 |
| 08.00 – 09.00 | 3159 | 10 | 9,6 | 78,4 | 3257 |
| 09.00 – 10.00 | 3537 | 6,5 | 11,2 | 100,1 | 3654,8 |
| 10.00 – 11.00 | 3994 | 10 | 12,4 | 171,5 | 4187,9 |
| 11.00 – 12.00 | 4518 | 26 | 20,8 | 166,6 | 4731,4 |
| 12.00 – 13.00 | 4252 | 37,5 | 15,2 | 168,7 | 4473,4 |
| 13.00 – 14.00 | 3654 | 19 | 8,8 | 150,5 | 3832,3 |
| 14.00 – 15.00 | 3341 | 12 | 11,6 | 132,3 | 3496,9 |
| 15.00 – 16.00 | 3173 | 10,5 | 16 | 155,4 | 3354,9 |
| 16.00 – 17.00 | 2946 | 24 | 16 | 178,5 | 3164,5 |
| 17.00 – 18.00 | 3267 | 31 | 14,4 | 161 | 3473,4 |
| 18.00 – 19.00 | 3284 | 37 | 19,6 | 140 | 3480,6 |
| 19.00 – 20.00 | 3209 | 29,5 | 20,4 | 125,3 | 3384,2 |

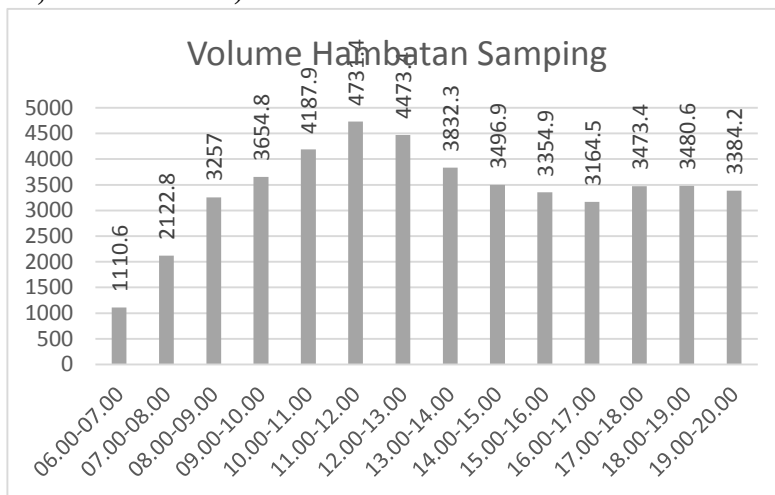
(Sumber : Hasil Analisis 2021)

- Hasil Analisis perhitungan hambatan samping jam puncak (Kamis, 4 Maret 2021)

| Waktu | Kamis, 4 Maret 2021 | | | | Total Kej/Jam |
|---------------|---------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 1056 | 11 | 4,4 | 39,2 | 1110,6 |
| 11.00 – 12.00 | 4518 | 26 | 20,8 | 166,6 | 4731,4 |

(Sumber : Hasil Analisis 2021)

- Grafik Hasil Analisis perhitungan hambatan samping jam puncak (Kamis, 4 Maret 2021)



Gambar B5.4 Diagram Hambatan Samping Arah Utara - Selatan
(Sumber : Hasil Analisis 4 Maret 2021)

- Hasil Analisis perhitungan hambatan samping perjam (Jum'at, 5 Maret 2021)

| Waktu | Jum'at, 5 Maret 2021 | | | | Total Kej/Jam |
|---------------|----------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 1062 | 13 | 6,8 | 42 | 1123,8 |
| 07.00 – 08.00 | 2040 | 10 | 10,4 | 75,6 | 2136 |
| 08.00 – 09.00 | 3165 | 12 | 12 | 81,2 | 3270,2 |
| 09.00 – 10.00 | 3544 | 8,5 | 13,6 | 102,9 | 3669 |
| 10.00 – 11.00 | 4000 | 12 | 14,8 | 174,3 | 4201,1 |
| 11.00 – 12.00 | 4524 | 28 | 23,2 | 169,4 | 4744,6 |
| 12.00 – 13.00 | 4258 | 39,5 | 17,6 | 171,5 | 4486,6 |
| 13.00 – 14.00 | 3660 | 21 | 11,2 | 153,3 | 3845,5 |
| 14.00 – 15.00 | 3347 | 14 | 14 | 135,1 | 3510,1 |
| 15.00 – 16.00 | 3179 | 12,5 | 18,4 | 158,2 | 3368,1 |
| 16.00 – 17.00 | 2952 | 26 | 18,4 | 181,3 | 3177,7 |
| 17.00 – 18.00 | 3273 | 33 | 16,8 | 163,8 | 3486,6 |
| 18.00 – 19.00 | 3290 | 39 | 22 | 142,8 | 3493,8 |
| 19.00 – 20.00 | 3215 | 31,5 | 22,8 | 128,1 | 3397,4 |

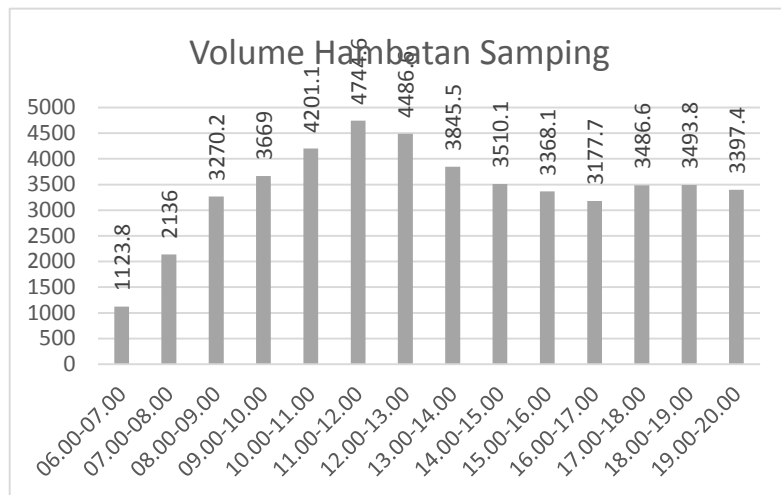
(Sumber : Hasil Analisis 2021)

- Hasil Analisis perhitungan hambatan samping jam puncak (Jum'at, 5 Maret 2021)

| Waktu | Jum'at, 5 Maret 2021 | | | | Total Kej/Jam |
|---------------|----------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 1062 | 13 | 6,8 | 42 | 1123,8 |
| 11.00 – 12.00 | 4524 | 28 | 23,2 | 169,4 | 4744,6 |
| 18.00 – 19.00 | 3290 | 39 | 22 | 142,8 | 3493,8 |

(Sumber : Hasil Analisis 2021)

- **Grafik Hasil Analisis perhitungan hambatan samping jam puncak (Jum'at, 5 Maret 2021)**



Gambar B5.5 Diagram Hambatan Samping Arah Utara - Selatan
(Sumber : Hasil Analisis 5 Maret 2021)

- **Hasil Analisis perhitungan hambatan samping perjam (Sabtu, 6 Maret 2021)**

| Waktu | Sabtu, 6 Maret 2021 | | | | Total Kej/Jam |
|---------------|---------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 1070 | 8,5 | 8 | 47,6 | 1134,1 |
| 07.00 – 08.00 | 2048 | 6 | 11,2 | 80,5 | 2145,7 |
| 08.00 – 09.00 | 3173 | 10 | 10,8 | 84 | 3277,8 |
| 09.00 – 10.00 | 3410 | 7,5 | 13,6 | 105,7 | 3536,8 |
| 10.00 – 11.00 | 3530 | 8,5 | 14 | 177,1 | 3729,6 |
| 11.00 – 12.00 | 3667 | 18,5 | 22 | 175 | 3882,5 |
| 12.00 – 13.00 | 3820 | 29,5 | 16 | 177,1 | 4042,6 |
| 13.00 – 14.00 | 3672 | 17 | 10,8 | 158,9 | 3858,7 |
| 14.00 – 15.00 | 3359 | 10 | 14 | 138,6 | 3521,6 |
| 15.00 – 16.00 | 3932 | 14,5 | 18 | 159,6 | 4124,1 |
| 16.00 – 17.00 | 4853 | 30 | 16,4 | 186,2 | 5085,6 |
| 17.00 – 18.00 | 4979 | 37 | 16,4 | 170,8 | 5203,2 |
| 18.00 – 19.00 | 4919 | 41,5 | 20,8 | 148,4 | 5129,7 |
| 19.00 – 20.00 | 4473 | 29,5 | 22 | 133,7 | 4658,2 |

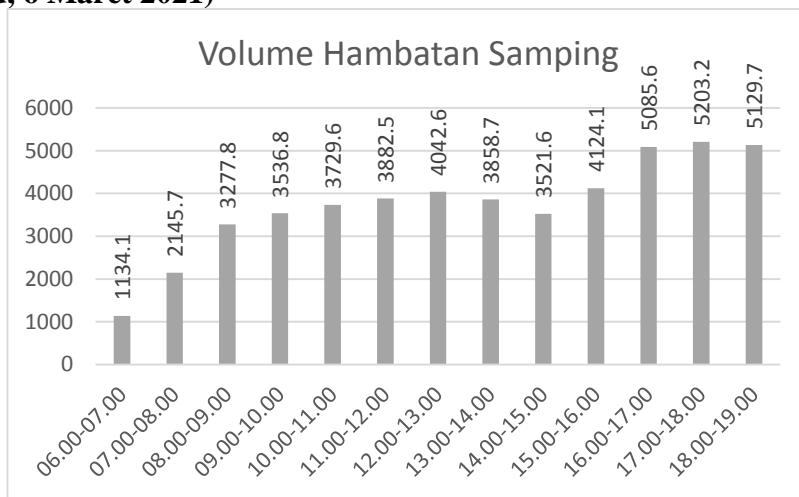
(Sumber : Hasil Analisis 2021)

- Hasil Analisis perhitungan hambatan samping jam puncak (Sabtu, 6 Maret 2021)

| Waktu | Sabtu, 6 Maret 2021 | | | | Total Kej/Jam |
|---------------|---------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 1070 | 8,5 | 8 | 47,6 | 1134,1 |
| 17.00 – 18.00 | 4979 | 37 | 16,4 | 170,8 | 5203,2 |

(Sumber : Hasil Analisis 2021)

- Grafik Hasil Analisis perhitungan hambatan samping jam puncak (Sabtu, 6 Maret 2021)



Gambar B5.6 Diagram Hambatan Samping Arah Utara - Selatan
(Sumber : Hasil Analisis 6 Maret 2021)

- Hasil Analisis perhitungan hambatan samping perjam (Minggu, 7 Maret 2021)

| Waktu | Minggu, 7 Maret 2021 | | | | Total Kej/Jam |
|---------------|----------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 867 | 23 | 8 | 47,6 | 943,6 |
| 07.00 – 08.00 | 1237 | 11,5 | 11,2 | 80,5 | 1340,2 |
| 08.00 – 09.00 | 1910 | 8 | 10,8 | 84 | 2012,8 |
| 09.00 – 10.00 | 2643 | 6 | 13,6 | 105,7 | 2768,3 |
| 10.00 – 11.00 | 3498 | 10,5 | 14 | 177,1 | 3699,6 |
| 11.00 – 12.00 | 3690 | 20,5 | 22 | 175 | 3907,5 |
| 12.00 – 13.00 | 3859 | 28,5 | 16 | 177,1 | 4080,6 |
| 13.00 – 14.00 | 3700 | 17 | 10,8 | 158,9 | 3886,7 |
| 14.00 – 15.00 | 3365 | 8 | 14 | 138,6 | 3525,6 |
| 15.00 – 16.00 | 3924 | 12,5 | 18 | 159,6 | 4114,1 |
| 16.00 – 17.00 | 4792 | 28 | 16,4 | 186,2 | 5022,6 |
| 17.00 – 18.00 | 4873 | 38 | 16,4 | 170,8 | 5098,2 |
| 18.00 – 19.00 | 4741 | 39,5 | 20,8 | 148,4 | 4949,7 |
| 19.00 – 20.00 | 4002 | 27,5 | 22 | 133,7 | 4185,2 |

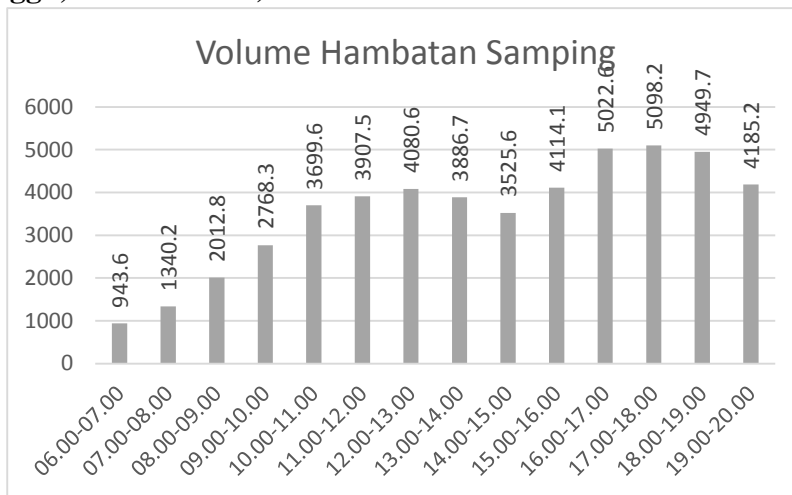
(Sumber : Hasil Analisis 2021)

- Hasil Analisis perhitungan hambatan samping jam puncak (Minggu, 7 Maret 2021)

| Waktu | Minggu, 7 Maret 2021 | | | | Total Kej/Jam |
|---------------|----------------------|---------|---------|---------|------------------|
| | Surabaya – Malang | | | | |
| | KP | PK | UM | MK | |
| | kej/jam | kej/jam | kej/jam | kej/jam | |
| 06.00 – 07.00 | 865 | 23 | 8 | 47,6 | 943,6 |
| 17.00 – 18.00 | 4873 | 38 | 16,4 | 170,8 | 5098,2 |

(Sumber : Hasil Analisis 2021)

- **Grafik Hasil Analisis perhitungan hambatan sampung jam puncak (Minggu, 7 Maret 2021)**



Gambar B5.7 Diagram Hambatan Sampung Arah Utara - Selatan
(Sumber : Hasil Analisis 7 Maret 2021)

Lampiran B6. Tabel Tingkat Pelayanan Ruas Jalan Pada Sistem Jaringan

Lampiran B6.1 Jalan Tol

| Tingkat Pelayanan | Karakteristik Operasi Terkait |
|-------------------|--|
| A | <ul style="list-style-type: none"> • Arus bebas • Kecepatan lalu lintas > 100 km/jam • Service volume 1400 smp perjam pada 2 lajur 1 arah |
| B | <ul style="list-style-type: none"> • Arus stabil dengan kecepatan tinggi • Kecepatan lalu lintas ≥ 90 km/jam • Service volume maksimal 2000 smp perjam pada 2 lajur 1 arah |
| C | <ul style="list-style-type: none"> • Arus masih stabil • Kecepatan lalu lintas sekurang – kurangnya ≥ 80 km/jam • Service volume rate pada 2 lajur 1 arah tidak melebihi 75% dari <i>capacity rate</i> (yaitu 1500 smp perjam per lajur atau 3000 smp perjam untuk 2 lajur) |
| D | <ul style="list-style-type: none"> • Arus mendekati tidak stabil dan peka terhadap perubahan kondisi • Kecepatan lalu lintas umumnya berkisar 65 km/jam • Volume lalu lintas sekitar 0,9 dari kapasitas • Arus puncak 5 menit tidak melebihi 3600 smp per jam untuk 2 lajur 1 arah |
| E | <ul style="list-style-type: none"> • Arus tidak stabil • Kecepatan lalu lintas Antara 50 – 60 km perjam • Volume mendekati kapasitas, sekitar 2000 smp per lajur per arah |
| F | <ul style="list-style-type: none"> • Arus tertahan • Kecepatan lalu lintas < 50 km perjam |

(Sumber : KM14, 2006)

Lampiran B6.2 Jalan Arteri Primer

| Tingkat Pelayanan | Karakteristik Operasi Terkait |
|-------------------|--|
| A | <ul style="list-style-type: none"> • Arus bebas • Kecepatan lalu lintas > 100 km/jam • Jarak pandang bebas untuk mendahului harus selalu ada • Volume lalu lintas mencapai 20% dari kapasitas (yaitu 400 smp perjam, 2 arah) • Sekitar 75% dari gerakan mendahului dapat dilakukan dengan sedikit atau tanpa tundaan |

| Tingkat Pelayanan | Karakteristik Operasi Terkait |
|--------------------------|---|
| B | <ul style="list-style-type: none"> • Awal dari kondisi arus stabil • Kecepatan lalu lintas ≥ 80 km/jam • Volume lalu lintas dapat mencapai 45% dari kapasitas (yaitu 900 smp perjam, 2 arah) |
| C | <ul style="list-style-type: none"> • Arus masih stabil • Kecepatan lalu lintas ≥ 65 km/jam • Volume lalu lintas dapat mencapai 70% dari kapasitas (yaitu 1400 smp perjam, 2 arah) |
| D | <ul style="list-style-type: none"> • Mendekati arus tidak stabil • Kecepatan lalu lintas turun sampai 60 km/jam • Volume lalu lintas dapat mencapai 85% dari kapasitas (yaitu 1700 smp perjam, 2 arah) |
| E | <ul style="list-style-type: none"> • Kondisi mencapai kapasitas dengan volume mencapai 2000 smp perjam, 2 arah • Kecepatan lalu lintas pada umumnya berkisar 50 km/jam |
| F | <ul style="list-style-type: none"> • Kondisi arus tertahan • Kecepatan lalu lintas < 50 km/jam • Volume dibawah 2000 smp per jam |

(Sumber : KM14, 2006)

Lampiran B6.3 Jalan Kolektor Primer

| Tingkat Pelayanan | Karakteristik Operasi Terkait |
|--------------------------|--|
| A | <ul style="list-style-type: none"> • Kecepatan lalu lintas ≥ 100 km/jam • Volume lalu lintas sekitar 30% dari kapasitas (yaitu 600 smp/jam/lajur) |
| B | <ul style="list-style-type: none"> • Awal dari kondisi arus stabil • Kecepatan lalu lintas sekitar 90 km/jam • Volume lalu lintas tidak melebihi 50% kapasitas (yaitu 1000 smp/jam/lajur) |
| C | <ul style="list-style-type: none"> • Arus stabil • Kecepatan lalu lintas ≥ 75 km/jam • Volume lalu lintas tidak melebihi 75% kapasitas (yaitu 1500 smp/jam/lajur) |

| Tingkat Pelayanan | Karakteristik Operasi Terkait |
|--------------------------|--|
| D | <ul style="list-style-type: none"> • Mendekati arus tidak stabil • Kecepatan lalu lintas sekitar 60 km/jam • Volume lalu lintas sampai 90% kapasitas (yaitu 1800 smp/jam/lajur) |
| E | <ul style="list-style-type: none"> • Arus pada tingkat kapasitas (yaitu 2000 smp/jam/lajur) • Kecepatan lalu lintas sekitar 50 km/jam |
| F | <ul style="list-style-type: none"> • Arus tertahan, kondisi terhambat (<i>congested</i>) • Kecepatan lalu lintas < 50 km/jam |

(Sumber : KM14, 2006)

Lampiran B6.4 Jalan Lokal Sekunder

| Tingkat Pelayanan | Karakteristik Operasi Terkait |
|--------------------------|---|
| A | <ul style="list-style-type: none"> • Arus relatif bebas dengan sesekali terhenti • Kecepatan perjalanan rata – rata ≥ 40 km/jam |
| B | <ul style="list-style-type: none"> • Arus stabil dengan sedikit tundaan • Kecepatan perjalanan rata – rata ≥ 30 km/jam |
| C | <ul style="list-style-type: none"> • Arus stabil dengan tundaan yang masih dapat diterima • Kecepatan perjalanan rata – rata ≥ 25 km/jam |
| D | <ul style="list-style-type: none"> • Mendekati arus tidak stabil dengan tundaan yang masih dalam toleransi • Kecepatan perjalanan rata – rata ≥ 15 km/jam |
| E | <ul style="list-style-type: none"> • Arus tidak stabil • Kecepatan perjalanan rata – rata < 15 km/jam |
| F | <ul style="list-style-type: none"> • Arus tertahan • Macet • Lalu lintas pada kondisi terhambat |

(Sumber : KM14, 2006)

Lampiran B6.5 Jalan Arteri Sekunder dan Kolektor Sekunder

| Tingkat Pelayanan | Karakteristik Operasi Terkait |
|--------------------------|---|
| A | <ul style="list-style-type: none"> • Arus bebas • Kecepatan perjalanan rata – rata ≥ 80 km/jam • V/C ratio $\leq 0,6$ • <i>Load factor</i> pada simpang = 0 |
| B | <ul style="list-style-type: none"> • Arus stabil • Kecepatan perjalanan rata – rata turun s/d ≥ 40 km/jam • V/C ratio $\leq 0,7$ • <i>Load factor</i> $\leq 0,1$ |
| C | <ul style="list-style-type: none"> • Arus stabil • Kecepatan perjalanan rata – rata turun s/d ≥ 30 km/jam • V/C ratio $\leq 0,8$ • <i>Load factor</i> $\leq 0,3$ |
| D | <ul style="list-style-type: none"> • Mendekati arus tidak stabil • Kecepatan perjalanan rata – rata turun s/d ≥ 25 km/jam • V/C ratio $\leq 0,9$ • <i>Load factor</i> $\leq 0,7$ |
| E | <ul style="list-style-type: none"> • Arus tidak stabil, terhambat, dengan tundaan yang tidak dapat ditolerir • Kecepatan perjalanan rata – rata sekitar 25 km/jam • Volume pada kapasitas • <i>Load factor</i> pada simpang ≤ 1 |
| F | <ul style="list-style-type: none"> • Arus tertahan, macet • Kecepatan perjalanan rata – rata < 15 km/jam • V/C ratio permintaan melebihi 1 • Simpang jenuh |

(Sumber : KM14, 2006)

Lampiran B7. Kondisi Dasar Untuk Menetapkan Kecepatan Arus Bebas Dasar Dan Kapasitas Dasar

| No | Uraian | Spesifikasi penyediaan prasarana jalan | | | |
|----|--|--|--|----------------------|------------------------------------|
| | | Jalan Sedang tipe 2/2TT | Jalan Raya tipe 4/2T | Jalan Raya tipe 6/2T | Jalan Satu arah tipe 1/1, 2/1, 3/1 |
| 1 | Lebar jalur lalu lintas (m) | 7,0 | 4x3,5 | 6x3,5 | 2x3,5 |
| 2 | Lebar Bahu efektif di kedua sisi (m) | 1,5 | Tanpa bahu, tetapi dilengkapi kereb di kedua sisinya | | 2,0 |
| 3 | Jarak terdekat kereb ke penghalang (m) | - | 2,0 | 2,0 | 2,0 |
| 4 | Median | Tidak ada | Ada, tanpa bukaan | Ada, tanpa bukaan | - |
| 5 | Pemisahan arah (%) | 50-50 | 50-50 | 50-50 | - |
| 6 | Kelas Hambatan Samping | Rendah | Rendah | Rendah | Rendah |
| 7 | Ukuran kota (juta jiwa) | 1,0-3,0 | 1,0-3,0 | 1,0-3,0 | 1,0-3,0 |
| 8 | Tipe alinemen jalan | Datar | Datar | Datar | Datar |
| 9 | Komposisi KR:KB:SM | 60%:8%:32% | 60%:8%:32% | 60%:8%:32% | 60%:8%:32% |
| 10 | Faktor-k | 0,08 | 0,08 | 0,08 | |

(Sumber : PKJI 2014)

Lampiran C. Dokumentasi Penelitian (Jalan Gajah Mada Kab. Sidoarjo)



Gambar C.1 STA 0 + 000 (Titik Awal)



Gambar C.2 STA 0 + 025



Gambar C.3 STA 0 + 050



Gambar C.4 STA 0 + 075



Gambar C.5 STA 0 + 100



Gambar C.6 STA 0 + 125



Gambar C.7 STA 0 + 150



Gambar C.8 STA 0 + 175



Gambar C.9 STA 0 + 200



Gambar C.10 STA 0 + 225



Gambar C.11 STA 0 + 250



Gambar C.12 STA 0 + 275



Gambar C.13 STA 0 + 300



Gambar C.14 STA 0 + 325



Gambar C.15 STA 0 + 350



Gambar C.16 STA 0 + 375



Gambar C.17 STA 0 + 400



Gambar C.18 STA 0 + 425



Gambar C.19 STA 0 + 450



Gambar C.20 STA 0 + 475



Gambar C.21 STA 0 + 500



Gambar C.22 STA 0 + 525



Gambar C.23 STA 0 + 550



Gambar C.24 STA 0 + 575



Gambar C.25 STA 0 + 600



Gambar C.26 STA 0 + 625



Gambar C.27 STA 0 + 650



Gambar C.28 STA 0 + 675



Gambar C.29 STA 0 + 700



Gambar C.30 STA 0 + 725



Gambar C.31 STA 0 + 750



Gambar C.32 STA 0 + 775



Gambar C.33 STA 0 + 800



Gambar C.34 STA 0 + 825



Gambar C.35 STA 0 + 850



Gambar C.36 STA 0 + 875



Gambar C.37 STA 0 + 900



Gambar C.38 STA 0 + 925



Gambar C.39 STA 0 + 950



Gambar C.40 STA 0 + 990



Gambar C.41 STA 0 + 400
(Dokumentasi Drone)



Gambar C.42 STA 0 + 500
(Dokumentasi Drone)



Gambar C.43 STA 0 + 650
(Dokumentasi Drone)



Gambar C.44 STA 0 + 700
(Dokumentasi Drone)



Gambar C.45 Tabel Survey Volume



Gambar C.46 Alat Ukur



Gambar C.47 Alat Hitung



Gambar C.48 Full Team Surveyor
(Keterangan : Ari, Doni, Tri)



Gambar C.49 Titik Surveyor Arah Utara - Selatan
(Keterangan : Depan Indomaret Jalan Gajah Mada)