





REPUBLIC OF KENYA

MINISTRY OF TRANSPORT AND COMMUNICATIONS

THE NAIROBI BYPASS CONSTRUCTION PROJECT FEASIBILITY STUDY FINAL REPORT

VOLUME 3 (APPENDIX)

FEBRUARY 1988



JAPAN INTERNATIONAL COOPERATION AGENCY







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| 登録 17464 No. | SDF |

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Appendix II

Socio-Economic Profile

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Annual Rainfall
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Unit: mm

| District | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | Annual Mean |
|----------|--------------|-------|-------|--------------|-------|-------|-------|----------------|
| Kiambu | 1,472 | 876 | 959 | 1,126 | 988 | 771 | 184 | 980 |
| Nyeri | 1,018 | 1,255 | 675 | . | 1,137 | 997 | 660 | 831 |
| Kitale | 1,583 | 1,360 | 982 | 1,445 | 1,688 | 1,223 | 886 | 1,363 |
| Kisumu | 1,767 | 1,454 | 1,100 | 1,038 | 1,474 | 1,122 | 1,235 | 1,352 |
| Kisii | 2,272 | 1,558 | 1,716 | 1,752 | 1,869 | 1,954 | 1,691 | 1,931 |
| Kilifi | 1,563 | 1,304 | 912 | 1,006 | - | 951 | 281 | 891 |
| Kericho | 2,354 | 1,723 | - | - | - | 2,183 | 1,168 | 1,146 |
| Garissa | 724 | 531 | 102 | 303 | 433 | 120 | 497 | 390 |
| Kajiado | 5 7 3 | | 350 | _ | 467 | 346 | 222 | 346 |
| Mombasa | 1,227 | 1,523 | 798 | 1,063 | 1,694 | 1,071 | 627 | 1,142 |
| Eldoret | 1,060 | 1,142 | 884 | 1,209 | 1,053 | 1,088 | 419 | 1,063 |
| Nakuru | 1,245 | 960 | 833 | 937 | 1,071 | 926 | 571 | 975 |

Source: Meteorological Department, Statistical Abstruct 1985

| | | | | Unit: 1,000 | Persons |
|---------------------------------|------------|----------------------|---|---------------------------------------|------------------|
| Institute | 1979 | 1984 | 1985 | 1990 | 2000 |
| Metropolitan Growth Strategy | 989 | 1,326 | 1,396 | | |
| Study | | | a de la composición d | | |
| Central Bureau | | | L.1,078 | L.1,343 | 1,999 |
| of Statistics | | · | H.1,109 | H.1,416 | 2,199 |
| Ministry of | - | 1,104 | 1,162 | 1,505 | 2,525 |
| Finance and | | 11 - A | 14 a | | 4 M 1 |
| Planning | | | | de la la c | (1975) (1975) |
| Nairobi City | . . | L.1,041 | , . . | L.1,395 | 2,272 |
| Commission, City Planning | | M.1,110 H.1,168 | | | |
| Department | ·. · | | .* | · · · · · · · · · · · · · · · · · · · | |
| Census | 828 1/ | 1,100 ² / | 1,150 | <u>2</u> / 1,200 <u>2</u> / | - - - |
| | | | | | |

Table A - II - 2 Population Projections of Nairobi

Remarks:

L; Low, M; Medium, H; High <u>1</u>: Census, Central Bureau of Statistics <u>2</u>: Provisional Estimate

| | | fable | A | -11 | *** | 3 |
|-------|----|-------|---|--------|-----|---------|
| Share | of | Gross | I | Domest | ic | Product |

| | | | | | | Unit: | Percentage |
|-------------------------------------|------|------|------|------|------|--------------------|------------------------|
| Industry | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 ^{_1} | J Growth Rate, % |
| Agriculture | 33.1 | 32.2 | 32.1 | 33.0 | 33.3 | 31.8 | 2.4 |
| Manufacture | 13.7 | 13.8 | 13.5 | 13.6 | 13.7 | 14.2 | 4.0 |
| Electricity/Water | 1.6 | 1.5 | 1.7 | 1.7 | 1.7 | 1.8 | 5.0 |
| Transport/Communication | 5.8 | 8.9 | 5.6 | 5.9 | 5.9 | 5.9 | 3.8 |
| Building/Construction | 4.8 | 5.0 | 5.1 | 4.4 | 3.9 | 3.6 | △ 2.9 <u>2</u> / |
| Wholesale/Retail etc. | 12.4 | 12.5 | 11.9 | 10.9 | 10.8 | 11.2 | 1.1 |
| Finance etc. | 7.0 | 6.7 | 8.2 | 7.5 | 8.5 | 9. <u>1</u> | 8.8 |
| Producers of Government Services | 15.6 | 15.9 | 15.7 | 16.1 | 16.2 | 16.5 | 3.2 |
| Others | 6.0 | 6.5 | 6.2 | 6.9 | 6.0 | 5.9 | n.a. |

Remarks;

Source Central Bureau of Statistics, at 1982 constant price.

Provisioanal Minus

1/ : 2/ :

A-11-3

Table A - II - 4

Key Economic and Social Indicators, 1981 - 1985

| | Description | Unít | 1981 | 1982 | 1983 | 1984 | 1985 |
|----------|--|--------------|--------|--------|--------|--------|--------|
| | Population | Mill. Person | 17.3 | 18.0 | 18.8 | 19.5 | 20.2 |
| <u>.</u> | Growth of GDP at constant prices | Per Cent | 6.0 | 2.4 | 3.1 | 0.9 | Ţ.4 |
| | GDP at markat prices | K£ . Mill. | 3,023 | 3,411 | 3,826 | 4,016 | 4,763 |
| ¢. | Net cost of petroleum products | KE . Mill. | 200 | 179 | 214 | 185 | 257 |
| 2. | Trade balance | K£ . Mill. | -479 | -430 | -313 | -373 | -445 |
| 6. | Money supply | K£ . Mill. | 918 | 1,066 | 1,118 | 1,262 | 1,346 |
| | Balance of payments (current account) | Kf. Mill. | -336 | -253 | -89 | -147 | -159 |
| 8. | Coffee marketed production | 1,000 Ton | 91 | 88 | 95 | 119 | 67 |
| 9. | Tea marketed production | 1,000 Ton | 16 | 96 | 119 | 116 | 147 |
| 10. | Maize marketed centrally | 1,000 Ton | 473 | 571 | 636 | 261 | 583 |
| 11. | Wheat marketed centrally | 1,000 Ton | 203 | 235 | 242 | 135 | 194 |
| 12. | Sugar-cane production | 1,000 Ton | 3,822 | 3,108 | 3,286 | 3,611 | 3,463 |
| 13. | Manufacturing output | K£ . Mill. | 1,804 | 2,054 | 2,426 | 2,957 | 3,536 |
| 14. | Construction output | K£ . Mill. | 403 | 402 | 411 | 457 | 461 |
| 15. | Cement consumption | 1,000 Ton | 653 | 579 | 511 | 541 | 610 |
| 16. | Petroleum consumption | 1,000 Ton | 1,585 | 1,491 | 1,373 | 1,482 | 1,479 |
| 17. | Electricity | Mill. Kwh | 1,663 | 1,701 | 1,747 | 1,845 | 2,014 |
| 18. | Tourism earning | K£ . Mill. | | | | | |
| 19. | New registration of vehicles | Number | 18,115 | 15,061 | 13,940 | 15,694 | 16,320 |
| 20. | Rail freight | Mill Ton.Km | 2,241 | 2,097 | 2,091 | 2,034 | 1,858 |
| 21. | Wage employment | 1.000 Person | 1 024 | 1 046 | 1 002 | 1 1 26 | 171 |

Table A - II - 4 (cont'd) -

Key Economic and Social Indicators, 1981 - 1985

| Description | זדתט | + 00 - + | 7027 | C071 | 1 Y 0 4 | 004 | |
|-----------------------------|------|-------------|------|------|---------|-----|------|
| Export volumes | 82 | 103 | 100 | 96 | 95 | 66 | -0.3 |
| Import volumes | 84 | 118 | 100 | 79 | 93 | 86 | -4.9 |
| Terms of trade | 64 | 105 | 100 | 94 | 011 | 92 | 2.7 |
| Real wages | 2-3 | 112 | 100 | 63 | 94 | 16 | 3.1 |
| Agricultural terms of trade | ₽4 | 104 | 100 | 98 | 94 | 94 | 2.1 |

Annual % Rate of change 1982 - 1985 Source, Economic Survey 1986

> •• **---**1

A-11-5

Analysis of Key Fiscal Trends. 1981/82 - 1985/86

8% 1985/86 Unit -7.6 28.6 -34.0 -32.9 50.0 35.4 -21.7 Fiscal year data have been related to G.D.P. by averaging G.D.P.'s for two successive calendar years, e.g. 1984/85 has been related to the average 1983/84 1984/85 22.9 33.6 27.0 -45.8 -31.2 70.6 25.8 -15.6 -50.3 External grants are excluded from revenue in these calculations. 31.5 62.8 23.1 24.1 -8.7 -34.2 -35.1 -25.7 76.1 Net short-term borrowing less increases in cash balances. 1982/83 22.8 32.9 19.2 84.5 -42.9 -17.2 -41.4 -28.7 -63.6 1981/82 -44.5 45.8 26.4 60.5 -21.1 -30.2 -8-2 ł I External grants and loans as % of development plus Net short-term borrowing as % of development plus G.D.P. at current market G.D.P. at Ratio of development expenditure to current Total deficit as % of total expenditures development plus ч О Current surplus as % current revenue 8 Total deficit as % current revenue Total Government expenditure as Description Provisional surplus as % of investment expenditures Current revenue as % of investment expenditure investment expenditure current market prices Remarks : expenditure Current prices ŝ 4. <u>б</u> 4 ഹ് ۍ و တ်

Economic Survey, 1986

Source :

G.D.P. of 1984 and 1985.

A-II-6

Government Revenue and Expenditure

1073.8 1010.2 371.7 463.1 502.0 519.6 516.4 578.3 904.0 142.0 630.3 1023.4 233.8 327.6 586.4 766.5 868.2 951.5 1044.2 1081.7 1208.4 253.9 271.7 299.3 Total Investment 31.8 46.4 33.6 40.8 88.0 97.5 93.5 72.9 78.0 51.8 20.2 18.7 23.4 33.7 44.1 61.7 55,4 21.1 86.1 Expenditure 256.6 262.2 278.2 298.2 į Development 182.6 216.0 44.6 87.8 115.5 118.9 125.5 149.5 198.9 207.4 254.5 24.9 38.6 110.6 108.2 123.1 28.1 31.1 59.1 Recurrent 803.9 731.8 787.6 363.8 910.2 251.2 278.9 357.8 360.0 367.4 416.8 407.9 519.5 788.4 819.5 188.7 207.1 219.5 237.3 328.7 397.7 623.2 721.3 592.1 Recurrent 366.4 393.6 706.9 738.5 722.0 .84.6 244.0 384.2 435.5 613.2 636.4 707.3 795.3 345.3 64.2 211.5 264.3 426.7 454.7 458.7 696.7 902.3 963.1 299.7 Revenue 79/80 82/83 85/86 86/87 65/66 68/69 69/70 71/72 77/78 78/79. 81/82 84/85 67/68 72/73 75/76 1983/84 87/87 1964/65 66/67 73/74 74/75 76/77 1980/81 1970/71 Year

Future Prospects are based on ii Development Plan, 1984-88"

Source: "The Study of National Transport Plan, JICA"

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Appendix III

Transport Sector Analysis

Roads Inventory by Type

| | 1981 | | 1982 | 5 | 1983 | ~ | i i i | 1984 |
|---------------------|-------------|-----------|-----------------------|-----------|-----------------------|-----------|-----------------------|-----------|
| Catergory | Length (km) | Paved (%) | Length (km) Paved (%) | Paved (%) | Length (km) Paved (%) | Paved (%) | Length (km) Paved (%) | Paved (%) |
| International Trunk | 3,594.2 | 65.0 | 3,594.2 | 65.0 | 3,594.2 | 65.0 | 3,594.2 | 65.0 |
| National Trunk | 2,786.1 | 41.1 | 2,786.1 | 41.3 | 2,786.1 | 41.4 | 2,786.1 | 41.4 |
| Primary | 7,750.8 | 23.2 | 7,750.8 | 23.2 | 7,897.1 | 25.5 | 7,897.1 | 25.5 |
| Secondary | 11,066.0 | 6.5 | 11,058.7 | 6.2 | 10,960.1 | 6.5 | 10,960.1 | 6.5 |
| Minor | 20,868.4 | 1.1 | 25,775.6 | 1.1 | 26,595.4 | 1.4 | 26,576.4 | 1.4 |
| Special purpose | 15,751.5 | 2.5 | 12,756.0 | 4.9 | 27,769.0 | 5.0 | 2,770.3 | 5.0 |
| Total | 53,577.0 | 12.0 | 53,788.7 | 11.9 | 54,583.7 | 12.3 | 54,584.2 | 12.3 |
| | | | | | | | | |

Source : Statistical abstract, 1985, pp 180.

A-III-1

Amounts and Ratios of Government Account

among Government Expenditure

| • | 07 GG 98 | Provisional Figure Based on the figure of Fornomic Survey 1096 DD 60 | | ure Are Are | Provisional Figure | Provis | | |
|---------------------|---------------|---|---------------|------------------------------------|--------------------|---------|---------|---------------------------------|
| 3.1 | 51.6 | 2.7 | 39-0 | 3.8 | 47.7 | 4.2 | 49.9 | Development Account of Road |
| 0.4 | 7.5 | 0.6 | 9.6 | 1.6 | 19.6 | 6 3 | 16.1 | Current Accounts of Road |
| 3.5 | 59.0 | ຕ ຕ | 48.6 | 5.4 | 67.4 | 5.5 | 66.0 | Road Sector |
| 5.1 | 85.6 | 4.1 | 60.4 | 6.3 | 78.8 | 6.5 | 77.9 | Transport and Communications |
| 100.0 | 100.0 1,665.1 | 100.0 | 100.0 1,483.2 | 100.0 | 100.0 1,242.4 | 100.0 | 1,190.7 | Total Government Expenditure |
| Ratio % | Amounts Ratio | Ratio % | Amounts | Amounts Ratio % Amounts | Amounts | Ratio Z | Amounts | |
| 1985/86 | 1985 | /85 | 1984/85 | /84 | 1983/84 | 83 | 1982/83 | Description |
| Uint: Million K£ | Uint: N | | | | | | | |
| | | | | מייטייט אסאריזיייראיר העלפוותדרתים | | 0 | | |

Government Financial Source for

Development and Investment Account

| | | • | Unit: | Unit: Million KE |
|---|---------|---------|--------------|------------------|
| Description | 1982/83 | 1983/84 | 1984/85 | 1985/86 |
| Development & Investment Expenditure | 223.1 | 251.1 | 313.5 | 409.8 |
| Financial Sources | | | | |
| Surplus on Current Account | A 142.0 | ۵ 79.3 | ▲ 157.7 | ▲ 89.1 |
| External Loans | 165.4 | 166.0 | 213.2 | 102.7 |
| External Grants | 23.2 | 10.6 | 78.6 | 102.0 |
| Long Term Domestic Borrowing | 272.2 | 21.4 | 53.2 | 50.0 |
| Treasury Bills | △ 36.4 | 109.2 | 34.1 | 214.1 |
| Short Term Borrowing | 7.8 | 36.4 | 4 . 1 | Δ 68.9 |
| Cash Balances | ۵ ده.ا | △ 13.2 | ∆ 45.4 | 0.66 |
| Total | 223.1 | 251.1 | 313.5 | 409.8 |
| | | | | |

Remarks : Provisional

Source : Based on the figures of Economic Survey, 1986, PP.68

Δ : Minus

Road Vehicles, registered with Growth Rate

| Growth Rate, % (1980 - 84) | 1.9 | 3.9 | 1.2 | 8.4 | 4.0 | 2.5 | 1.2 | 2.6 | |
|-------------------------------|-----------|--------------------|-------------------------|---------------|--------------------|---------------------|---------|---------|--|
| 1985 | 122,300 | 64,805 | 24,769 | 7,001 | 17,944 | 18,454 | 11,337 | 266,613 | |
| 1984 | 116,852 | 59,618 | 23,335 | 5,959 | 16,823 | 17,493 | 10,839 | 250,919 | |
| 1983 | 115,316 | 59,358 | 23,634 | 5,724 | 16,870 | 17,367 | 10,893 | 249,162 | |
| 1980 | 114,197 | 57,969 | 23,956 | 5,432 | 16,345 | 17,318 | 10,915 | 246,132 | |
| 1980 | 113,629 | 55,524 | 23,594 | 5,075 | 15,343 | 16,703 | 10,567 | 240,435 | |
| Catergory | Motor Car | Utility, Panel Van | Lorry, Truck, Heavy Van | Bus, Mini-bus | Motor & Auto Cycle | Other motor vehicle | Trailer | Total | |

Source : Statistical Abstract, 1985, pp 181

A-111-4

Central Government Revenue from Road Vehicle, 1976 - 1984

| • | | | | | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 | Unit | Unit : 1,000 K£ | |
|---|----------|----------|----------|----------|--|----------|----------|-----------------|----------|
| Description | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 |
| | | | | | | | | | |
| Licences a)Licenses under traffic ordinance | 2,860.7 | 3,222.8 | 3,503.9 | 4,488.3 | 5,238.4 | 5,524.7 | 6,649.2 | 7,197.8 | 7,558.3 |
| b)Motor-car Drivers' Licences | 256.2 | 539.6 | 608.2 | 728.4 | 803.6 | 875.6 | 1,037.7 | 1,168.3 | 1,159.7 |
| Tctal | 2,116.9 | 3,762.4 | 4,112.1 | 5,216.7 | 6,042.0 | 6,400.3 | 7,636.9 | 8,366.1 | 8,718.0 |
| Petrol and Diesel Oil Taxes | | • | | | | | | | |
| a) Consumption Tax | 7,819.0 | 11,010.0 | 17,313.3 | 21,031.7 | 29,976.2 | 41,710.0 | | | |
| <pre>b) Import Duty (i) Motor Spirits</pre> | 8,338.8 | 118.9 | 11,897.4 | 9,960.8 | 762.1 | 12,605.3 | 10,958.2 | 10,626.0 | 10,404.6 |
| (ii) Diesel Oil | 6,816.1 | 122.7 | 7,232.5 | 6,127.9 | 490.7 | 8,567.5 | 7,382.5 | 7,422.4 | 8,207.3 |
| Total | 22,973.9 | 11,251.6 | 36,443.l | 37,120.4 | 31,229.0 | 42,572.7 | | | |
| Other Import Duties | | | | | | | | | |
| (1) Passenger Cars | 4,332.3 | 6,862.6 | 9,192.3 | 5,919.4 | 9,074.5 | 3,926.5 | 4,783.6 | 4,241.4 | 4,371.0 |
| and Trucks | 2,607.9 | 3,689.8 | 4,279.9 | 5,253.7 | 9,074.5 | 10,219.4 | 9,898.4 | 10,054.2 | 10,855.5 |
| Total | 6,940.2 | 10,552.4 | 13,472.1 | 11,173.1 | 17,916.4 | 14,145.9 | 14,682.0 | 14,295.6 | 15,226.3 |
| | | | | | | | | | |

A-III-5

Table A-III-5 (Cont'd)

Central Government Revenue from Road Vehicle, 1976 - 1984.

| | | | | | | | Unit : 1,000 Kf | 100 KE | |
|--|----------|----------|----------|----------|----------|----------|-----------------|----------|----------|
| Description | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 |
| <pre>b) Chassis with Engines (i) Passenger Motor</pre> | | | | | | | | | |
| Cars (ii) Buses, Lorries. | 1 | 1 | 185.7 | 432.2 | 271.8 | 217.2 | 153.3 | 37.6 | 52.2 |
| etc. | 968.5 | l,044.4 | 304.2 | | l | 86.7 | 110.2 | 239.5 | 1,084.8 |
| Total | 968.5 | 1,044.4 | 489.9 | 432.2 | 271.8 | 303.9 | 263.5 | 277.1 | 1,137.0 |
| c) Bodies and parts for Motor Vehicles | 1,328.3 | 1,177.1 | 1,847.2 | 1,350.9 | I,140.7 | 2,488.2 | 2,808.5 | 2,375.2 | 3,335.7 |
| u) motor venicies, lyres and Tubes | 154.1 | 154.1 | 824.7 | 405.8 | 1,140.7 | 329.0 | 91.4 | 60.5 | 470.0 |
| Total Other Import Duties | 9,396.6 | 12,927.9 | 16,633.9 | 13,362.0 | 20,469.6 | 17,267.0 | 17,845.4 | 17,008.4 | 20,169.0 |
| Total | 35,487.4 | 27,941.9 | 57,189.1 | 55,699.1 | 57,740.6 | 66,358.8 | | | : |
| | | | | | - | | | | |

Source : Central Bureau of Statistics, 1986

A-111-6

Fig. A-III-1

Organization Chart of the M.O.T.C.

M 312 M M

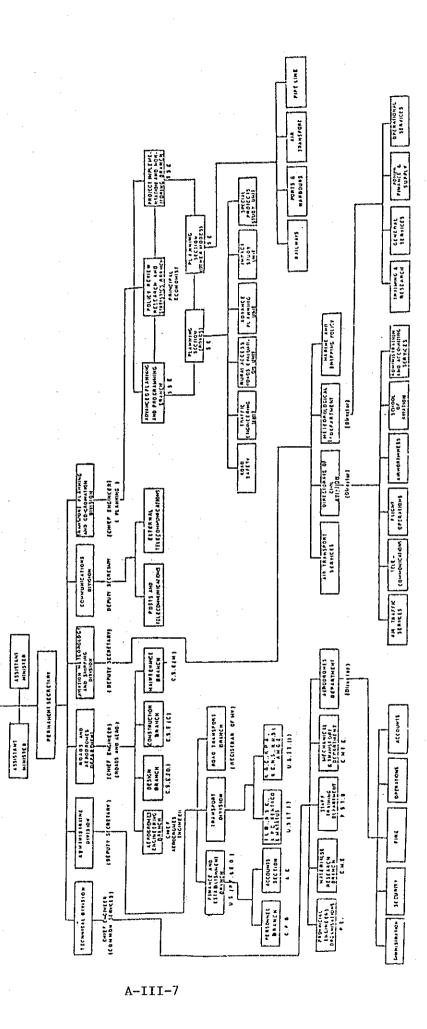
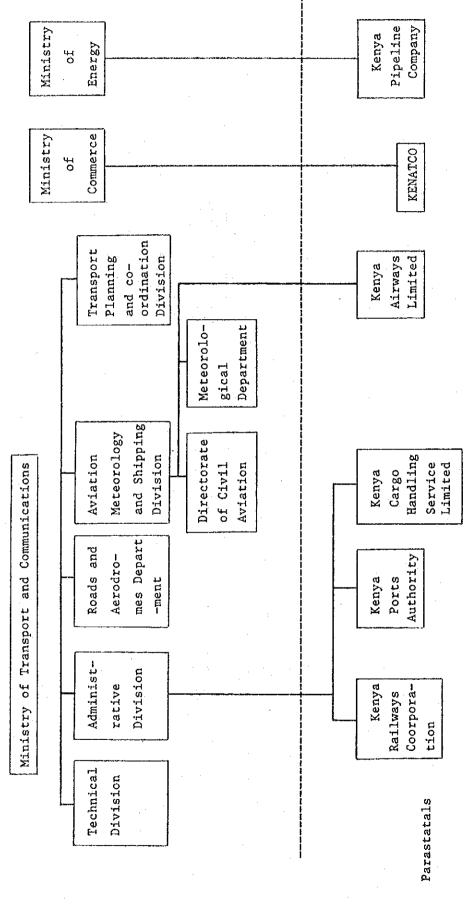


Fig. A-III-2

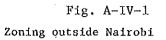
Organisation Chart of Principal Parastatals

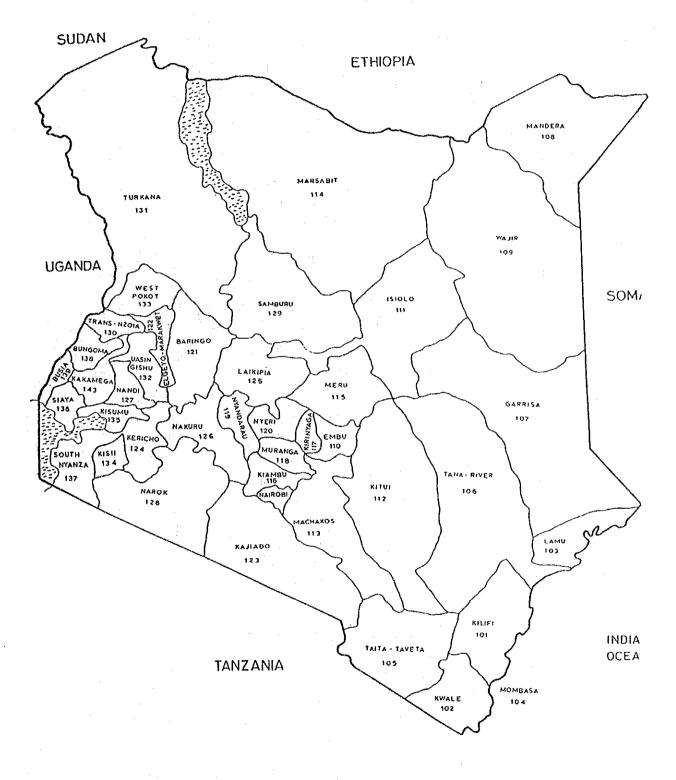


A-III-8

Appendix IV

Project Formation





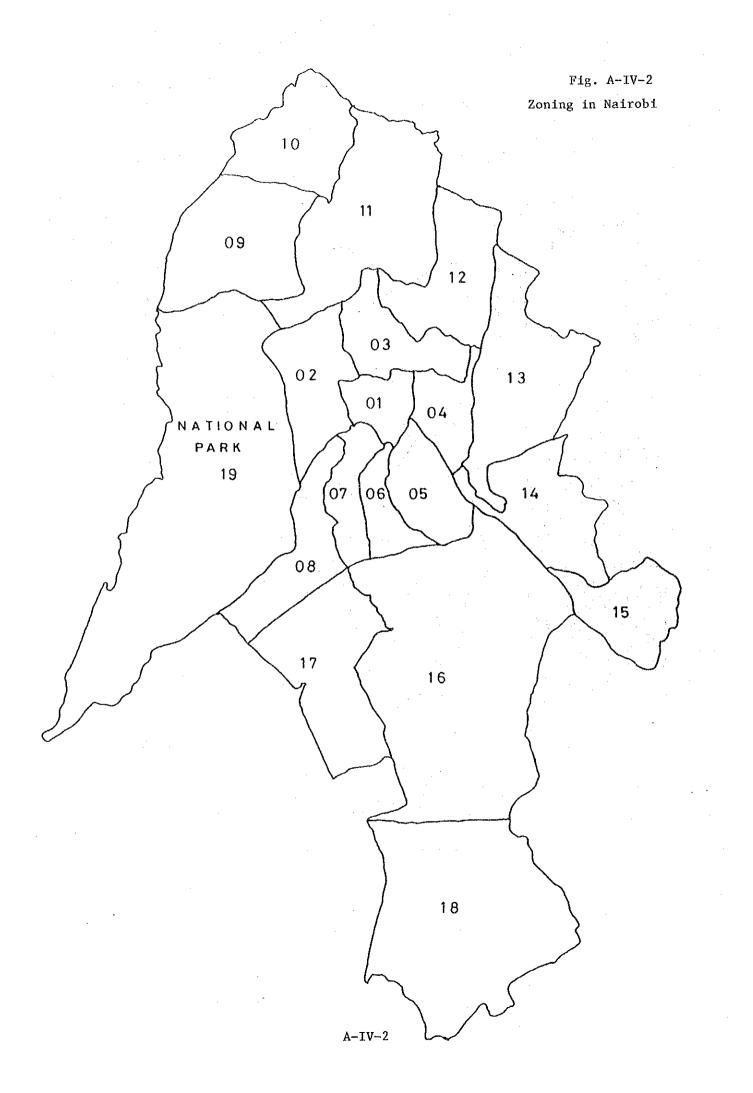


Table A-IV-1

Zone Correspondence between Nairobi

City Planning and Nairobi Bypass Project

| Nairobi Bypass Project | Nairobi City Planning |
|------------------------|-------------------------|
| 1 | (1) |
| 2 | (10) · 0.38 (11) |
| 3 | (4), (6) |
| 4 | (3) |
| 5 | (2), (7) |
| 6 | (8) |
| . 7 | (9) |
| 8 | (10) • 0.24 |
| 9 | (12) • 0.53 |
| 10 | (12) 0.47 |
| 11 | (15) |
| 12 | (5) |
| 13 | (13) |
| 14 | (14) |
| 15 | (17) |
| 16 | (16), (18) |
| 17 | $(10) \cdot 0.38, (20)$ |
| 18 | (19) |
| 19 | n.a. |
| n.a. | (20) |

Table A-IV-2

| | . (| GDP at factor o | ost,% per a |
|------------------------|-----------|-----------------|-------------|
| Item | 1984-1988 | 1988-2000 | 1984-2000 |
| Non-monetary GDP | 3,5 | 3.5 | 3.5 |
| Agriculture | 4.2 | 5.3 | 5.0 |
| Manufacturing | 6.5 | 7.5 | 7.2 |
| Trade | 5.0 | 5.5 | 5.4 |
| Government Services | 3.7 | 5.4 | 5.0 |
| Other Sectors | 5.2 | 6.7 | 6.3 |
| GDP at factor cost | 4.8 | 5.9 | 5.6 |
| Population | 3.8 | 3.7 | 3.7 |
| GDP per capita | 1.0 | 2.1 | 1.8 |

Target Growth Rates by Sector

Source: Economic Management for Renewed Growth, 1986

Table A-IV-3 Irrigation Potential Area and Proposed Implementation Scheme

| Area | Irrigation Scale (ha) | Proposed Implementation Schedule |
|---------------------|--------------------------|-------------------------------------|
| Athi River Basin | · · · | |
| Kibwezi | 13,200 | Phase I 87/88-90/91 |
| | | Phase II 91/92-93/94 |
| Taita/Taveta | 3,780 | 84/85-91/92 |
| Muka/Kukuu | 500 | n.a |
| Sabaki | 15,000 | as irrigation |
| | | potential area |
| Thanantu Valley | 6,500 | Phase 1 82/83-91/92 |
| | | Phase 11 n.a |
| Rubingazi | 3,600 | 82/83-91/92 |
| Tana River Basin | · | . . |
| Bura West | 6,700 6,000 | phase I phase II |
| Lower Tana | 10,000 | Phase 82/83-92/83 |
| · · · | 6,800 | Phase 11 n.a |
| | · . | as irrigation |
| Baringo | 2,391 | potential area |
| Kerio Valley | | |
| Elgeyo Markwet | 2,750 | - do - |
| West Pokot | 2,485 | - do ~ |
| Turkana | 11,510 | - do - |
| Nzoia | 65,000 | - do - |
| Yala | 15,000 | - do - |
| Sondu/Kiriu/Kibos | 60,000 | - do - |
| Victroria Lake Basi | | |
| Kuja/Migori | 25,000 | - do - |
| Mara | 20,000 | - do - |
| Other | 15,000 | - do - |

Source;

" Forward Planning 1982 - 1992", T & ARDA " General Development Plan for the Kerio Valley Basin", KVDA. " Five Year Development Plan 1983 - 1988", LBDA

Table A-IV-4

Population at Residence by Zone in Nairobi

at Present, 1986 and Future, 2000 with Growth Rates

| | | | Unit: 1,000 Person |
|-----------------|-------|-------|--------------------|
| Zone | 1986 | 2000 | Growth Rate |
| No. | | | (1986 - 2000),% |
| 1 | 52 | 54 | 0.3 |
| 2 | 100 | 132 | 2.0 |
| 3 | 55 | 61 | 0.7 |
| 4 | .57 | 63 | 0.7 |
| 5 | 234 | 247 | 0.4 |
| . 6 | 171 | 189 | 0.7 |
| 7 | 10 | 10 | 0 |
| 8 | 22 | 34 | 3.2 |
| 9 | 9 | 29 | 8.7 |
| 10 | 8 | 26 | 8.4 |
| 11 | 143 | 225 | 5.3 |
| 12 | - 26 | 39 | 2.9 |
| 13 | 11 | 29 | 7.2 |
| 14 | 52 | 81 | 3.2 |
| 15 | 32 | 65 | 5.2 |
| 16 | 182 | 387 | 5.5 |
| 17 | 36 | 55 | 3.1 |
| 18 1 | - | 108 | n.a |
| 19 ² | - | - | - |
| n.a 3 | - | 396 | n.a |
| Total | 1,200 | 2,300 | 4.7 |

1:

Outside Nairobi City Boundary at present with Zone No., possible to be inside Nairobi.

2: National Park

3: Outside Nairobi at present, possible to be inside Nairobi.

Table A-IV-5

Population at Residence and Employment at Job Site by Zone at 2000

| | | Unit: 1,000 Person |
|----------|-------------------------|------------------------|
| Zone No. | Population at Residence | Employment at Job Site |
| 1 | 55 | 262 |
| 2 | 147 | 37 |
| 3 | 64 | 42 |
| 4 | 66 | 43 |
| 5 . | 253 | 55 |
| 6 | 197 | 11 |
| 7 | 10 | 156 |
| 8 | 41 | 18 |
| 9 | 34 | 2 |
| 10 | 31 | 1 |
| 11 | 3.52 | 26 |
| 12 | 46 | 2 |
| 13 | 35 | 3 |
| 14 | 97 | 6 |
| 15 | 78 | 11 |
| 16 | 462 | 125 |
| 17 | 58 | 46 |
| 18 | 129 | 16 |
| 19 | n.a. | n.a. |
| n.a. | 473 | n.a. |
| Total | 2,628 | 862 |

P2006 = P2000(1+0.03)⁶ adopted the rate till 2000 in case the Zonal growth rate being less than 3% E2006 = E2000(1+0.03)⁶ adopted 1% for Zone 1

| Table A- | V-6 | |
|----------------------------|--------------|--------------|
| Employment Population at | | |
| Nairobi at Present, 1986 a | nd 2000 with | Growth Rates |

| Cone No. | 1986 | 2000 | Growth Rate (1986 - 2000) % |
|----------|---------|---------|--------------------------------|
| | | | |
| 1 | 197,106 | 247,025 | 1.6 |
| 2 | 10,457 | 30,714 | 8 |
| 3 | 11,888 | 34,917 | 8 |
| 4 | 9,394 | 35,674 | 10 |
| 5 | 12,094 | 45,927 | 10 |
| 6 | 3,197 | 9,390 | 8 |
| 7 | 75,267 | 130,338 | 4 |
| 8 | 1,154 | 14,816 | 20 |
| 9 | . 453 | 1,720 | 10 |
| 10 | 248 | 942 | 10 |
| 11 | 5,833 | 22,151 | 10 |
| 12 | 1,050 | 1,818 | 4 |
| 13 | 1,559 | 2,700 | 4 |
| 14 | 3,128 | 5,417 | 4 |
| 15 | 2,496 | 9,479 | 10 |
| 16 | 8,172 | 104,922 | 20 |
| 17 | 3,025 | 38,839 | 20 |
| 18 | 3,479 | 13,211 | 10 |
| 19 | 0 | 0 | 0 |
| Total | 350,000 | 700,000 | 1.5 |

Table A-IV-7

Population at Residence by Zone except

Nairobi at Present, 1986 and Future, 2000 and 2006

| | | <u></u> | Unit: 1,000 Persor |
|----------|-------|---------|--------------------|
| Zone No. | 1986 | 2000 | 2006 |
| 20 | 10 | 20 | 2.7 |
| 21 | 10 | 20 | 27 |
| 22 | 45 | 80 | 97 |
| 23 | 45 | 80 | 97 |
| 24 | 45 | 80 | 97 |
| 25 | 45 | 80 | 97 |
| 26 | 45 | 80 | 97 |
| 101 | 590 | 1,168 | 1,395 |
| 102 | 395 | 782 | 934 |
| 103 | 58 | 114 | 136 |
| 104 | 467 | 924 | 1,103 |
| 105 | 202 | 399 | 476 |
| 106 | 126 | 249 | 297 |
| 107 | 177 | 350 | 418 |
| 108 | 145 | 287 | 343 |
| 109 | 191 | 378 | 451 |
| 110 | 361 | 528 | 630 |
| 111 | 60 | 88 | 105 |
| 112 | 636 | 929 | 1,110 |
| 113 | 1,391 | 2,032 | 2,427 |
| 114 | 132 | 193 | 223 |
| 115 | 1,127 | 1,647 | 1,968 |
| 116 | 705 | 1,030 | 1,231 |
| 117 | 399 | 584 | 697 |
| 118 | 887 | 1,296 | 1,548 |
| 119 | 320 | 468 | 559 |
| 120 | 666 | 973 | 1,163 |
| 121 | 204 | 337 | 402 |
| 123 | 184 | 303 | 362 |
| 124 | 867 | 1,431 | 1,709 |
| 125 | 184 | 304 | 349 |

Unit: 1.000 Person

Table A-IV-7 (Cont'd)

Population at Residence by Zone except

Nairobi at Present, 1986 and Future, 2000 and 2006

Unit: 1,000 Person

| 2006 | | 2000 | • • | 1986 | Zone No. |
|--------|----------------|--------|-------|--------|----------|
| 1,410 | | 1,181 | | 716 | 126 |
| 808 | | 677 | | 410 | 127 |
| 567 | | 475 | | 288 | 128 |
| 207 | . ⁵ | 173 | . N | 105 | 129 |
| 701 | | 587 | | 356 | 130 |
| 386 | | 323 | | 196 | 131 |
| 812 | | 680 | | 412 | 132 |
| 427 | | 358 | | 217 | 133 |
| 2,439 | | 2,043 | | 1,181 | 134 |
| 1,365 | | 1,143 | | 661 | 135 |
| 1,342 | | 1,124 | | 650 | 136 |
| 2,292 | | 1,920 | | 1,110 | 137 |
| 1,424 | | 1,193 | | 690 | 138 |
| 841 | | 706 | 1. A. | 408 | 139 |
| 2,895 | | 2,425 | | 1,402 | 140 |
| n.a. | | n.a. | | n.a. | 141 |
| 39,046 | | 32,700 | | 19,800 | Total |

Employment Population at Job Site by Zone

except Nairobi at Present, 1986 and Future 2000 & 20006

| | · | | Unit: | 1,000 Person |
|----------|------|------|-------|--------------|
| Zone No. | 1986 | 2000 | 2006 | : |
| 20 | 4 | 9 | 11 | |
| 21 | 4 | 9 | 11 | |
| 22 | 18 | 31 | 37 | |
| 23 | 18 | 31 | .37 | |
| 24 | 18 | 31 | 37 | |
| 25 | 18 | 31 | 37 | |
| 26 | 18 | 31 | 37 | |
| 101 | 231 | 474 | 566 | |
| 102 | 155 | 318 | 380 | |
| 103 | 23 | 47 | 56 | |
| 104 | 183 | 376 | 449 | |
| 105 | 79 | 161 | 192 | |
| 106 | 49 | 100 | 119 | |
| 107 | 69 | 141 | 168 | |
| 108 | 57 | 117 | 140 | |
| 109 | 75 | 154 | 184 | |
| 110 | 141 | 203 | 243 | |
| 111 | 24 | 34 | 42 | |
| 112 | 249 | 359 | 428 | |
| 113 | 545 | 783 | 935 | |
| 114 | 52 | 75 | 91 | |
| 115 | 442 | 632 | 756 | |
| 116 | 276 | 396 | 473 | |
| 117 | 156 | 224 | 267 | |
| 118 | 348 | 499 | 596 | |
| 119 | 125 | 180 | 217 | |
| 120 | 261 | 375 | 448 | · |
| 121 | 109 | 187 | 223 | |
| 122 | 80 | 137 | 164 | |
| 123 | 72 | 123 | 147 | |

Table A-IV-8

Table A-IV-8 (Cont'd)

Employment Population at job Site by Zone except Nairobi at Present, 1986 and Future 2000 & 2006

| | | 1 | · . | |
|----------|-------|--------|--------|-------|
| Zone No. | 1986 | 2000 | 2006 | |
| 124 | 340 | 582 | 695 | . : |
| 125 | 72 | 123 | 147 | |
| 126 | 281 | 482 | 576 | |
| 127 | 161 | 276 | 330 | |
| 128 | 113 | 194 | 232 | |
| 129 | 41 | 70 | 84 | · |
| 130 | 140 | 240 | 287 | |
| 131 | 77 | 132 | 158 | |
| 132 | 161 | 276 | 330 | 1 - A |
| 133 | 85 | 146 | 174 | |
| 134 | 463 | 1,048 | 1,251 | |
| 135 | 259 | 465 | 555 | |
| 136 | 255 | 458 | 547 | |
| 137 | 435 | 781 | 933 | |
| 138 | 270 | 485 | 579 | |
| 139 | 160 | 287 | 343 | : * |
| 140 | 549 | 984 | 1,175 | · . |
| 141 | n.a. | n.a. | n.a. | |
| Tota1 | 7,760 | 13,300 | 15,881 | |

| | Projectic | of Manufe | Projection of Manufacturing Sector Production | tor Product. | ion | | |
|---|-----------|-----------|---|--------------|---------|---------|---------|
| | | | | | | | |
| | | Average | | Average | - | Average | |
| · · | 1981 | Annual | 1988 | Annual | 1983 | Annual | 2000 |
| Commodíty | | Growth | · | Growth | | Growth | : |
| | (K 000) | Rate | (K 000) | Rate | (K 000) | Rate | (K 000) |
| Food Beverages | 110,198 | 4.3% | 147,967 | 3.6% | 176,589 | 2.97 | 215,710 |
| Textiles Clay and Glass Tlon Matallic | • | | • . | | · | | |
| Material | 37,008 | 5.0% | 52,074 | 6.0% | 69,687 | 6.0% | 104,783 |
| Paper | 16,844 | 10.0% | 32,824 | 5.0% | 41,893 | 5.0% | 58,948 |
| Clothing Wood | : | | | | | | |
| Furniture | 21,079 | 4.2% | 28,114 | 4.9% | 35,711 | 5.0% | 50,249 |
| Fertilizer | 1 | 3 | 4,650 | 3.6% | 5,549 | 2.9% | 6,778 |
| Steel | I | I | ı | | 15,000 | ł | 30,000 |
| Petroleum | 25,082 | 2.2% | 29,209 | 2.6% | 33,209 | 3.0% | 40,000 |
| Other | 128,909 | 3.5% | 163,575 | 7.5% | 253,822 | 8.4% | 415,106 |
| Total | 339,120 | 4.4% | 458,413 | 6.0% | 613,460 | 6.0% | 922,417 |

Table A-IV-9

I: Estimated Gross Products Source: National Transport Plan, 1984, JICA

.

Table A - IV - 10 Projection of Kenya's Economy Unit Million K£, 1981

346.9 361.4 382.4 388.2 381.3 373.2 373.2 358.8" 393.5 403.7 414.2 434.1 444.3 244.5 293.4 336.1 363.1 424.1 Foreign Funds Investiments Source of 1,081.6 511,9 494.5 520.0 547.8 577.8 610.9 645.8 682.5 721.9 763.9 808.7 856.6 907.5 962.4 1,146.8 1,215.9 ,020.1 Domestic Savings National Transport Plan, Japan International Coorporation Agency, 1984. Formation 739.0 939.2 883.9 1,181.9 1,215.4 1,301.0 l,434.3 1,506.0 1,581.2 1,660.2 858.8 813.4 I,034.0 1,063.8 L;127.0 1,366.1 1,003.3 1,095.1 Capital Sectors 3,572 1,979 2,562 2,707 2,862 3.,025 3,199 3,773 Other 1,463 I,665 2,084 2,195 2,312 2,434 3,381 1,591 1,755 1,857 Manufac-Distribution by turing 510 540 573 644 682 723 813 913 968 342 396 416 436 456 607 7.67 861 481 Sectors Culture 1,506 1,464 1,550 1,225 1,269 1,306 1,344 1,383 I,423 Agri-792 899 937 978 1,020 1,063 1,182 1,101 1,141 GDP at Factor 5,175 3,695 3,876 4,266 4,475 4,695 4,929 5,435 5,706 2,886 3,018 3,169 3,335 3,523 4,067 5,991 6,291 2,597 Cost GDP at 6,632 7,312 3,039 3,355 4,266 4,506 4,959 5,729 6,015 6,316 6,963 5,457 3,683 3,864 4,095 4,727 5,201 3,05 d.n Source: Calender 2000 Year 1989 1996 1998 1999 1984 1985 1986 1988 1990 1991 1992 1993 1994 1995 1997 1987 1981

| : | - - : | Sub-divisional Names in Each Zone | · · · · · · · · · · · · · · · · · · · |
|---|-------------|--|---|
| | Zone No. | Name of Road, Street and Avenue | Names of Estate, Factory, Building etc. |
| | 01. | Aboretum Rd, Uhuru H.w, State House Rd, Dorobo Rd, Mamlaka Rd, Nyerere Rd, Milimani Rd, Valley Rd, Kenyatta Ave., Bishop Rd, Ngong Rd, Haille | Muthurwa, Railway Yd, City Square. |
| | | Sallaise Ave, Hospital Kd, Kagati Kd, Chyulu Kd, Mara Rd, Elgon Rd. Kiambere Rd, Uasara Rd, Tom Mboya St., Moi Ave, Muindí Mbingu St., Koinange St., Parliament Rd, Harambee Ave. | |
| | 03 | Ngong Rd, Forest, Karanja Rd, Kibera Rd, Mucai Drive Rd, Kabaranet Lane, Masava Rd, | Otiende. Kibera Dríve Inn, Kibera, Woodlv, Jamhuri, Kibera, Otinde |
| | | Kinoo Rd, Langata Rd, Mbagathi Rd, Mucia Drive, Kibera Rd, Karanja Rd. | |
| | 03 | Muranga Rd, Kilungy Rd, Elgeyo Marakwet Rd, Oloodumo Pd, Dioni Pd, Voecolo Pd, Weellerd, Pd | Kenton College, Kileleshwa Police Station St Coorcele Drimory |

Table A - IV - 11

A-IV-15

Oleodume Rd, Diani Rd, Korosho Rd, Hendred Rd, Kunde Rd, Makindi Rd, Kingara Rd. Gitanga Rd, Ginge Rd, Argwing Kodhek Rd. Kindaruma Rd,

School, Kilimani Police Station, Parkland Kilimani, Upper Hill, Station, St. George's Primary

Table A - IV - 11 (Cont'd)

Sub-divisional Names in Each Zone

| | | Name of Estate, Factory, Buildings etc |
|--|------------------------------------|---|
| | nguru Rd, Kieni Rd, oodland Rd, | Thompson, Woodley, Kileleshwa |
| Wanga Pala Rd, Iregi Rd, Githuri Rd, Ngao Rd, Suswa Rd, Ita Rd, Butabute I Masari Rd, Shivachi Rd, Mpaka Rd, Rin Muthithi Rd, Westlands Rd, Mogotio R Tarifa Rd, Muhugu Rd, Laikipia Rd, T Kiambu Rd, Old Kiambu Rd, Mau Park R | nga Rd, yakit Rd, | National, Museum, Hockey Stadium, Chiromo, |
| Masari Rd, Shivachi Rd, Mpaka Rd, Ri Muthithi Rd, Westlands Rd, Mogotio R Tarifa Rd, Muhugu Rd, Laikipia Rd, T Kiambu Rd, Old Kiambu Rd, Mau Park R | Mwambao Rd, d, | Westlands, Highridge, City Park, Muthaiga Golf Club, |
| Tarifa Rd, Muhugu Rd, Laikipia Rd, Tl Kiambu Rd, Old Kiambu Rd, Mau Park Ro | g Rd, Ojijo Rd, , Mukinduri Rd, | Muthaiga Police Station, Muthaiga Primary Sch., War |
| | ika Rd, | War Memorial, Lucania Day |
| | | Nursery Sch. Gertrudes Garden |
| Serengeti Ave, Muthaiga Kd, Mutundu Kd, Tchui Rd, | d, Tchui Rd, | Children Hospital, Karura |
| Naivasha Ave., Sergoit Lane, Wambui Rd, Twiga Rd, | d, Twiga Rd, | Health Centre. |

Table A - IV - 11 (Cont'd)

Sub-divisional Names in Each Zone

| Zone | Name of Road, Street and Avenue | Name of Estate, Factory |
|------|---|----------------------------------|
| No. | | Buildings etc. |
| 05 | Ngara Rd, Race Course Rd, Lumbwa St, Kianyanjui St. | Bondeni, Gorofani, Eastleign, |
| | Waruingi St, Marimbi St, Meru Rd, Galole Rd, | Kariokor, Starehe, Ziwani, |
| | Second st, Third St, Fourth St, Fifth St, Sixth | Pumwani Sec. School, Pumwani |
| | St, Seventh St. Eighth St, Ninth St, Tenth St. | Maternity Hosp, Christian |
| | Eleventh St, Wood St, Twelveth St, Thirteenth | Industrial Training Centre, |
| | Fourteenth St, SGT Kahende St, SGT Major | Starehe Boys Centre, Eastleigh |
| | Kamugombe St, Mungai St, Major Kinyanjui | Primary Sch, Answorth St, |
| | St, Muranga Rd, Huruma Rd, Nduro-Runo, Outer | Primary Sch, St. John Community |
| | Ring Rd, Juja Rd, Thika Rd, | Centre, Mathari Mental Hosp. |
| | | Mathari Police Depot, Drive |
| | | In Cinema, Police Traffic |
| | · | Operation Headquarters, |
| | | Mathari Primary Sch, E.A.P and L |
| | | Training Sch, Utalii College |
| | | and Hotel, Huruma, New Mathare |
| 06 | | Mumias Rd, Laiboni Rd, Rubai Rd, |

Mumias Rd, Laiboni Rd, Rubai Rd,

Outering Rd, Buru-Buru. Buru Buru Primary Sch.

Table A - IV - II (cont'd) Sub-divisional Names in Each Zone

| No. | Name OI NOAU, SLIEEL and AVEILLE | Name of Estate, factory, Buildings etc. |
|-----|--|--|
| 07 | Workshop Rd, Bunyala Rd, Commercial St, Lusaka Rd, | Mines and Geological Dept, |
| | Enterprises Rd, Factory St, AddiS Ababa Rd, Bamburi | Cement Works, Railway Yd, |
| | Rd, Changamwe Rd, Dakar Rd, Funzi Rd, Gilgil Rd, | P/T. Nairobí, South Stores, |
| | Homabat Rd, Isiolo Rd, Jilore Rd, Kitui Rd, Kampala | Mobil Kenya Ltd, Total |
| | Rd, Likoni Road, Lunga Lunga Rd, Olkarau Rd, | Nairobi Dep, Esso Nairobi Dep. |
| | Patel Rd, Tanga rd, Wundanyi Rd, Nanyuki Rd, | Shell Filling Plant, Agip |
| | | Nairobi Dep, Railway Mech. |
| | | Eng. Dep, Vehicle Inspection, |
| | | National Youth Service, |
| | | Nairobi Holdings, Railway |
| | | Quaters |
| | | |
| 08 | Mombasa Rd. | Villa Franca Farm, Motor Racing/ |
| | | Club, Firestone Tyre Factory. |
| 60 | Ndege Rd, Langata Park Rd, Bongani Rd, Maasai Lane, Kiho Tane Masai Rd Tamuia Rd Tanion Park Pd | Haddy, Petrol Station, Petrol Station Dominion Number |
| | | station, pominican wurs, St. Thomas A.Q. Seminary |

| | | Name of Estate, Factory, Builings etc. | | Kabeter Veterinary Sch, Kavindin Market, Dagoreti Market, Kawangware Market. | Lavington, Bernhard, Spring Valley, City, Kianda College, Salvation Army, Kinder Garden, Strethmore College, St. Mary's School, Apostolic Delegation, Muthangari Police Station, Mts. Carmel Covent, Lavington Primary School | Highridge, Mathare, K/I/A, Agriculture Dep, Verterinary Coffee Fact. Kabete, Spring Valley, Kihingo,Clos Burn, Loresho, Parklands, St. Benoist, Barton, Kyuna, Kitisuru |
|----------------------------|-----------------------------------|---|-----------------------------------|--|--|---|
| Table A - IV - II (Cont'd) | Sub-divisional Names in Each Zone | Name of Road, Street and Avenue | Marua Lane, Forest Lane, Cut Line | Ngong Rd, Naivasha Rd, Wanjee Rd, Kavandin Rd, Macharia Rd, Kawangare Rd, Muthiora Rd, Kiarie Muchai Rd, Hinga Rd. | Mzima Spring Rd, Njumbi Rd, Isaak Gathanju Rd, Ndoto Rd, Mageta Rd, Othaya Rd, Maji Mazuri Rd, Mbabane Rd, St. Austins Rd, Muthangari Rd, Owashika Rd, Mugumo Rd, Munyani Rd, Kolloh Rd, Gedi Rd. | Parklands Rd, Kitisuru Rd, Redhill Rd, Taylors Rd, Marlborough Rd, Lower Kabete Rd, Peponi Rd, Waiyaki Rd, Wangapala Rd, Ring Rd, Eldamaving Rd, Ngao Rd, Suswa Rd, Mpaka Rd, Masari Rd, Shivach Rd, Spring Valley Rd, Shanzu Rd, Kyuna Rd, |
| | | Zone No. | 10 | 11 | 12 | 13 |

A-IV-19

| Zone No. 15 16 | Name of Road, Street and Avenue Kiambu Rd, Wambuthie Rd, Kamiti Rd. Kahawa Rd, Outering Rd, Kamiti Rd, Thika Rd Thika Rd, Outering Rd, Baba Dogo Ad, Komarock Rd. Lolwe Rd, Outering Rd, Baba Dogo Ad, Komarock Rd. Krapf Rd, Njiwa Rd, Ngiri Rd, Mwea Rd, Maseno Rd. | Name of Estate, Factory, Buildings etc. Buildings etc. Utalii Staff Quarters, Wandera Club. Kenyatta College, M/O/W Camp, Mathari Mental Hosp., Kasarani Disp, Prison, E.A.Enterprise Ltd, Concrete Pipes Ltd, Liala, Aintree, Kigwa, Ridgeway, Marurui Ruaraka P. Station, Admin. Centre, Primary School, Dawa Pharmaceuticals, Kenya Breweries Ltd, Nairobi Airport, Doonholm |
|-------------------------|--|---|
| 17 | Taxi-Way, Run-Way | Kayole, Riverside, Kahu, Njiru Embakasi Village, Doonholm, |
| | | Embakasi Airport, Fire Fighting Training, Adm. Police Train. |
| | | School, Chief's Camp/Sewage |

Table A - IV - 11 (Cont'd)

Sub-divisional Names in Each Zone

| l, Thika Rd, Baba Dogo Rd, Kamunde Rd. Street Road Avenue Highway Yard | | | Buildings etc. |
|---|----------------------|-------------------------------|--|
| St., Rd., Ave., H.W., Yd., | Outering Rd, Thika I | Rd, Baba Dogo Rd, Kamunde Rd. | Dandora, Ruaraka, Karíobangi, Kamuru, Ruaraka Police Station, Dawa Pharmaceuticals, Kenya Breweries |
| ~ ~ ~ ~ | Remark: | | |
| | St., | et | |
| | | | |
| | | ue | |
| | | Way | |
| | | × | |
| • | | 01 | |

Appendix V.

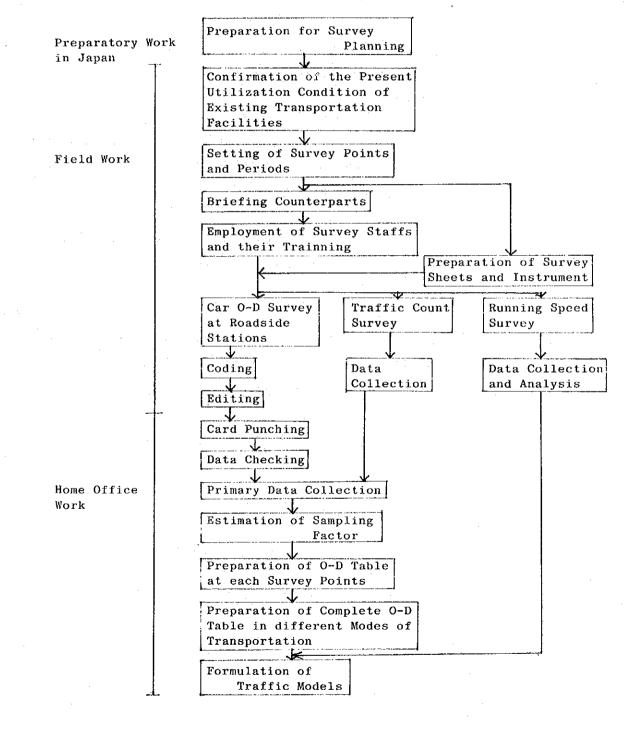
Present Traffic Survey

Appendix Collection and analysis of traffic survey data V.1

> The flow-chart of a traffic survey and the analysis is illustrated

(1)

Flow Chart of Collection and Analysis of Traffic Survey Data



(2)

Traffic Count Survey

Generally speaking, a traffic count survey aims at estimating direction, hourly and vehicle type-wise volumes of traffic, but the following four surveys are particularly proposed under this project:

(a)

d)

One-Week Traffic Count Survey

It will be conducted to investigate typical patterns of daily traffic variation.

b) 0-D Survey at Roadside Stations

It will be conducted to estimate the total traffic volumes, as the O-D survey is of sampling type.

c) Traffic Volume Survey

Volume counts are additionally made at necessary counting locations to complete the O-D survey.

Traffic Volume Survey at Intersections

It will be conducted to obtain volume data in different directions of traffic movements at major intersections of central business districts.

(3) Survey Sites

•

| Site No. | Site Location | Type of Survey | No.of Date |
|-------------|---|-----------------------------------|------------|
| 1 . | At the Agakhan High School (104) | 0.D Survey and 24 hours counts | l day |
| 2. | At Ruaka Trading Centre (C62) (A2) | 0.D Survey and Traffic Counts | - do - |
| 3. | Thika Road at Safari Park Hotel (A2) | 0.D Survey and Traffic Counts | - do - |
| 4. | Towards Airport on C59 at the junction of C98 and C59 (C59) | 0.D Survey and Traffic Counts | - do - |
| 5. | Lusaka/Uhuru Highway Round about at Lusaka Road near the Roundabout | 0.D Survey and Traffic Counts | - do - |
| 6. | Mombasa Road Drive in Cinema | 0.D Survey and Traffic Counts | - do - |
| 7. | At Wilson Airport on (C58) | 0.D Survey and Traffic Counts | - do - |
| 8. | On Ngong Road at Kenya Science Teachers College (C61) | 0.D Survey and Traffic Counts | - do - |
| 9. | Mombasa Road and at Resort Clubs Hotel (A104) | 24 hours traffic Counts only | 7 days |
| 10. | Ongata Rongai Road at the junction of C58 and C63 (C58) | 0.D. Survey and Traffic Counts | l day |
| 11. | Ngong Road C60 between Windy Ridge Road and Tree Lane | 0.D Survey and Traffic Counts | l day |
| 12. | Naivasha Road at the former Zambezi Motel (AlO4) | 0.D. Survey and Traffic Counts | - do - |
| 13. | Kiambu Road C64 at Muthaiga Golf Club (C64) | Traffic Counts Only | - do - |
| 14. | Dagoretti Road C63 at the Bus stop on Karen Health Centre | Traffic Counts Only | - do - |

| Site No. | Site Location | Type of Survey | No of Date |
|-------------|--|---|------------|
| 15. | Koma Rock Road C98 (C98/ C59 junct.) at Kayole Estate Sign Board | O.D Survey and Traffic Counts | - do - |
| 16. | At the Esso Petrol Station (C63) Langata Road C63 after C58 | Traffic Counts Only | - do - |
| | Junction. | enterio de la composición de la composi La composición de la c | |
| 17. | At the Uhuru-Kenyatta Roundabout | Traffic Counts Only | - do - |
| 18. | At Kikuyu Junction C63/ A104 | Traffic Counts Only | - do - |

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and a second second

· · · ,

and a second second

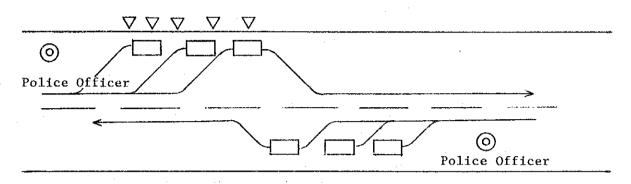
A-V-4

Arrangment of Traffic Survey Staffs

a) Roadside O-D Survey Staff

(4)

(2 parties / 10 persons)

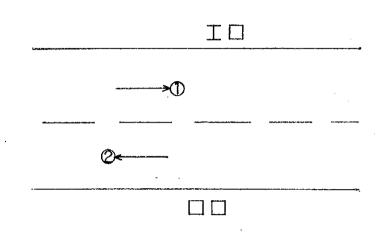


(2 parties / 10 persons)

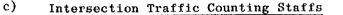
One party consists of five members of staff. All five members of staff are engaged in the interview during the peak hours, while one of these takes a rest during the off peak hours.

Selection of sample cars is made by police officers to make direct inquiry of car drivers. Two police officers at each one O-D survey points are required all the time during the O-D survey.

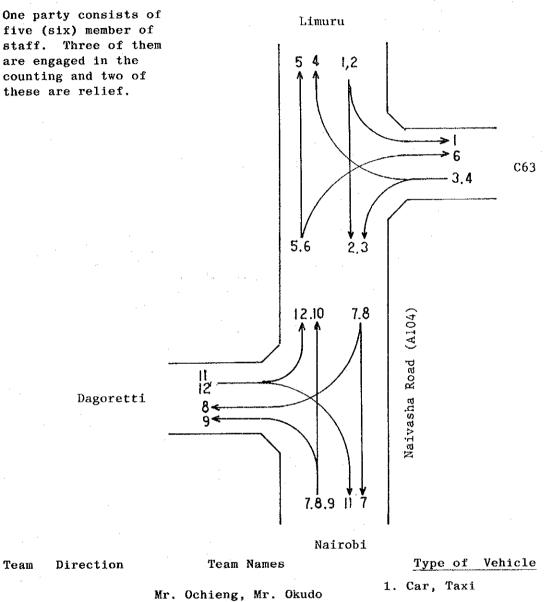
b) Traffic Count Staffs (1 parties / 2 persons)



One party consists of Two members of staff. One of them are engaged in the counting and one of these is relief.



2/12/86



1. Car, Taxi

- 2. Light goods (Include Mini-Bus, Matatu)
- 3. Medium goods
- 4. Heavy goods
- 5. Buses

Mr. Mayabi, Mr. Wanyeki Mr. Katiku, Miss Muthondu D 10 11 12 Miss Kamuhu (5)

А

(6)

в

(5)

С

(6)

 $\mathbf{2}$ 3

1

4 5 6

7 8 9 Mr. Mbari, Mr. Onyango

Mr. Mugo, Mr.Njoroge

Mr. Kuria, Mr. Alouch Mr. Otieno, Mr. Gichubi

Mr. Muga, Mr. Gichuru

Mr. Musyoki, Mr. Kamuhu

Mr. Muriu, Mr. Juma

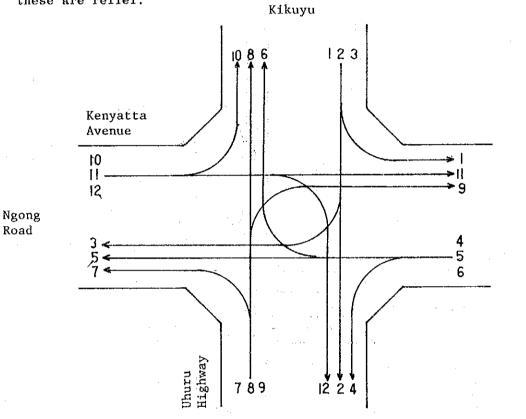
Mr. Mugo

d) Intersection Traffic Count Staffs

3/12/86

Centre

One party consists of five (six) member of staff. Three of them are engaged in the conting and two of these are relief.



Airport

| Team | Direction | Team Names | Type of Vehicle |
|----------|-----------|---|--|
| A (6) | 123 | Mr. Ochieng, Mr. Okudo Mr. Mbari, Mr. Onyango Mr. Mugo, Mr. Njoroge | 1. Car, Taxi 2. Light goods (Include |
| B (5) | 456 | Mr. Kuria, Mr. Alouch Mr. Otieno, Mr. Gichubi Mr. Mugo | Mini-Bus, Matatu) 3. Medium goods 4. Heavy goods |
| C (6) | 789 | Mr. Muga, Mr. Gichuru Mr. Muriu, Mr. Juma Mr. Musyoki, Mr. Kamuhu | 5. Buses |
| D (5) | 10 11 12 | Mr. Mayabi, Mr. Wanyeki Mr. Katiku, Miss Muthondu Miss Kamuhu | |

Table A-V-1(1)

Assignment Schedule and Location by Type of Survey

Location Number of Survey Sites

| Type of Survey | Team Number | umber | | | | | | | N | November | mbe; | ் ப | | | | | | | | | Dec | December | er | | |
|---|------------------|----------------------------|----------|-----|-------|-------------|-----------------|--------------|----|----------|------|------|----------------|----------|-------------|--------------|--------------|-----|----------|-------|------|----------|---------|-----------------------|---------|
| Direction | Name of Membe | of ⁻ Members | 14 17 | 9 | 9 | 17 | 18 | 19 | 20 | 21 (| 0 | 0 | 24 2 | 25 2 | 26 2 | 27 2 | 28 @ | 6 | | 7 | m | 4 | ŝ | 0 | \odot |
| O-D Survey (Up) | 4 A | υ N | ~ ~ | 1 1 | . 1 1 | υ υ ν | 00 00 | | | ოო | | | 2 2 | 60 74 | ~ ~ | 22 | נו | ł | 0101 | 11 | ιi | 11 | 1 1 | 1-1 | 11 |
| O-D Survey (Down) | υA | ιΩ VΩ | ~ ~ | 1 1 | 1 1 | ылы́ | | 9 9 | | ოო | 1 1 | E .I | 77 | 44 | ы 9 9 | 1 1 | | 1 1 | 010 | 11 | ΕI | 1 1 | 1-1 | 1-1 | 1 1 |
| Traffic Counting at the O-D Point (Up) | يت ب | 2 | ~ ~ | 1 1 | 4 1 | ы С | ~ - ∞ ∞ | 99 | | ოო | | 1 1 | 5 7 | 44 | 60 | 12 1 12 1 | | 1 1 | 10 | | 1 1 | I ł | 1-1 | 1-1 | 1 1 |
| Traffic Counting at the O-D point (Down) | Гч | 7 | ~ ~ | t I | E I | ഗഗ | | <u>`</u> 0 0 | | ოო | | | 20 | 44 | 66 | 12 1 12 1 | 11 | 11 | 10 | · I I | Т, Т | 11 | . 1 - 1 | 1-1 | 13 |
| Other Traffic Counting (Up) | U | 2 | | 11 | | | r=4 r =4 | ~ ~ | | 1 1 | | ~ ~ | 51 19 19 | 515 | ן ו סס | | | 1 1 | 16 16 | 11 | I I | 11 | I I | , I - I | 11 |
| Other Traffic Counting (Down) | ш | 7 | | 1 1 | 1 1 | | | ~~~~ | | 1 1 | | | ្តដូ | 5.0 | 00 00 | | 14 - 14 - | 1 1 | 16 16 | 1 1 | 1 1 | 1 1 | 1 1 | I I | ιı |
| Intersection Traffic Counting | W | 20 | I | i | i | Ĩ | Ì | I | I | ł | 1 | | · . | ı I | 3 [| 1 | 1 | I | I | 18 | 3 17 | I N | I. | I | 1 |
| Coding | N | 80 | ı. | I | I | 1 | · · | 1 | 1 | , I | | | | י ו | 1 | 1 | i | ł | ŧ | I | I | 1 | ł | 1 | ł |
| No. of Police, Officers | | | Ś | ı | ı | ŝ | ц | ŝ | ഹ | | 1 | | μ | ŝ | ч, M | ŝ | 1 | 1 | Ś | ł | I | ł | Т | I | 1 |

A-V-9

Table A-V-1 (2)

Standard Hourly Shift by Type of Survey Excluding Intersection Counting

| | | | | | | | | | | | | | | 1 |
|--|--------------|----------------------------------|--------------|------------|---------------|------------|----------------|-----------|------------|-----------|------------|-----------|-----------|---|
| Type of Survey Direction | Tean Name | Number of Team Memb er | - 7 - 7 | ⊳ 8 I | 8 9 -9 -10 | -11 -11 | 11 -12 | 12 -13 | -14 -14 | 14 -15 | -16 -16 | 16 -17 | 17 -18 | I |
| OD Survey | A | Ś | 1 | | I | I | | J | | 1 | | ł | I | |
| (up) | ф | Ń | | ł | 1 | | I | | ı | | 1 | | I | |
| O-D Survey | U | IO | I | | ı | ۱ | | I | | . 1 | | I | ł | |
| (Down) | A | IJ | | * I | I | | 1 ⁻ | | ł | | - 1 | | I | |
| Traffic Counting at the O-D Piont (Up) | 도리 | N | L | i | I | I . | ч н - ч | i . | 1 | 1 | . 1 | . 3 | I | |
| Ditto (Down) | ſ Ŀ ŧ | | I | 1 I I | 1 | I | I | 1 | ŧ. | ļ | . 1 | 1 | e di le | |
| Other Traffic Counting(Up) | ტ | 8 | l | I | | I | 1 | I | 1 | ļ | . 1 | ł | . 1 | |
| Ditto (Down) | щ | N N | ₽] 1 - 1 | · 1 | 1 | ₽ . | ! | I | ł | : 1 | I | I | I | |
| | | | - | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

A-V-10

Table A - V - I (3)

Road Side O.D Questionnaire

| DIALITUL NO. | Sheet | Time õf | l Type of vehicle | | 2 Origin | | 3 Destination | uo | |
|--------------------------|--------------|--------------------------|------------------------------|----------------|------------------------|--------------------------|--------------------------|-------------|------------------|
| | No. | Interview | l Car, Taxi | 5 Bus | Where | Where did the | Where will this | I this end? | 1, |
| | | | 2 Light Goods Vehicle | (nôn KBS) | | trip begin? | | | - |
| Interviewer | | | 3 Medium Goods Vehicles | 6 Matatu | Street/To District. | Street/Town District. | Street/Town District. | цм | |
| | | | 4 Heavy Goods Vehicles | | | | | | |
| | 5 Mojor | | 6 Trip purpose | 8 | epresenta | Representative passenger | 6 | Trúcks | |
| Travel Time | Points | uo | 1 Go to office/working place | ing place 7 | Age | 8 Occupation | No. of | 10 | 11 |
| or time inter | route | | 2 Go to school | | | l Employer | Passenger | Loading | Type of |
| Spend to | Name of | | 3 Come back to home | | | 2 Employer | Aboard | Capacity | Capacity Commo - |
| | route or | | 4 Business | | | 3 Student | | (tons) | dities. |
| | Municipality | •••••• ••••• | 5 Others | | | 4 House Keeper | | | Carried |
| 2 Origin | 3 D | 3 Destination | 4 Travel 5 Major | or 6 Trip | 4 | 8 9 No. 10 | | 11 | |
| Street/Town District. | | Street/Town District. | Time Poi | Points Purpose | se Age | Occu. of pass | Capacity | Ме: | Weight. |
| | | | | | | | | | |
| | | | | | | | | | |

Table A-V-2-1

Average Annual Daily Traffic on the Survey Stations

| Station No. No. 1 Date. Time Sunday to Saturday 11-66 Date. Time Sunday to Saturday 11-66 Date. Time Sunday to Saturday 11-66 Date. Time Sunday to Saturday 11-66 Road/Inter- At Aga Khan Al04 Ratio Correction Ratio Road/Inter- At Aga Khan Al04 Factor Ratio Correction Road/Inter- At Aga Khan Al04 Ratio Correction Ratio Direction Limitu - NBB NRB - Limutu -do- -do- -do- -do- Type of Vehicle 3541 1.21 1.33 1 1 1 1.07 4585 4669 9254 To ary Taxi 3541 1.21 1.33 1 1 1 0.7 487 To ary Taxi 3541 1.26 1.21 1.33 1 1 266 9254 To ary Taxi 3541 1.26 1.20 1 1 267 267 522 To ary Weicle 195 1.466 1 <th>1</th> <th>-</th> <th></th> <th>1</th> <th></th> | 1 | - | | | | | | | | | | | 1 | |
|---|----------------------|------------------------|---|-------------------------------------|-------------|------------------|---------------|--------------|-------------------------------|--------------|----------|-----------------------|-----------|---------|
| Direction Limuru - NRB NRB - Limuru -do- 1194 1.26 1.21 1 1 1 -do- -do- <t< th=""><th>St Da Ro se</th><th></th><th>No. 1 Sunday to 14-11-86 t 11-86 At Aga Kha High Schoo</th><th>Saturday to 23- an Al04 ol</th><th>Daily Ra</th><th>/day Time tio</th><th>Weekly Rat</th><th>Variation</th><th>Seasona Correcti Factor</th><th></th><th>7erage ≜</th><th>nnual Daily (AADT)</th><th>Traffic</th><th></th></t<> | St Da Ro se | | No. 1 Sunday to 14-11-86 t 11-86 At Aga Kha High Schoo | Saturday to 23- an Al04 ol | Daily Ra | /day Time tio | Weekly Rat | Variation | Seasona Correcti Factor | | 7erage ≜ | nnual Daily (AADT) | Traffic | |
| of Vehicle of Vehicle Car, Taxi 3541 3241 1.21 1.33 1 1 1 1.07 4585 4669 Light Good 1307 1194 1.26 1.21 1 1 1 -do- 1762 1564 Vehicle 185 208 1.29 1.20 1 1 1 -do- 255 267 Heavy Goods 155 164 1.39 1.46 1 1 1 -do- 231 256 Vehicle 280 1.51 1.36 1 1 1 -do- 231 256 Watatu Mini 521 537 1.19 1.29 1 1 1 -do- 663 730 bus Matatu Mini 521 537 1.2 1.53 1 1 1 -do- 58 74 Notorcycle 45 45 1.2 1.32 1 1 -do- 58 74 Sicycle 49 46 1.07 1.32 1 1 1 -do- 58 74 Others Others 6083 575 1.24 1.30 8805 8014 | | | Limuru - N | NRB NRB - Limurı | -op- n | - do- | -op- | -do- | ł | Limuru | 1 - NRB | NRB - Limuru | ı Both Di | rection |
| Car, Taxi354132411.211.33111.0745854669Light Good130711941.261.21111-do-17621546VehicleNehicle1852081.261.21111-do-255267Medium Vehicle1852081.291.201111-do-255267Medium Vehicle1551641.391.46111-do-231256Webicle1551641.391.46111-do-231256Bus2802801.511.391.46111-do-633730Matatu Mini5215371.191.29111-do-66374Matatu Mini5215371.191.29111-do-5874Motorcycle45451.21.32111-do-5874Bicycle49461.071.3211-do-5665Others508357551.241.3080628014 | Typ | e of Vehicle | | | | | | | | | | | | |
| Light Good130711941.261.2111-do-17621546VehicleVehicle1852081.291.2011267Medium Vehicle1852081.291.2011267Heavy Goods1551641.391.4611231256Vehicle1551641.391.46111260407Vehicle2802801.511.36111-do-455407Bus2802801.511.29111-do-453730Matatu Mini5215371.191.29111-do-66374busMotorcycle451.271.32111-do-5874Motorcycle49461.071.32111-do-5665Others57551.241.3080628014 | • ~~1 | Car, Taxi | 3541 | 3241 | 1.21 | 1.33 | | 1 | 1.07 | 458 | 35 | 4669 | 9254 | * I |
| Medium Vehicle 185 208 1.29 1.20 1 1 -do- 255 267 Heavy Goods 155 164 1.39 1.46 1 1 -do- 231 256 Vehicle 280 280 1.51 1.36 1 1 -do- 452 407 Bus 280 280 1.51 1.36 1 1 -do- 452 407 Matatu Mini 521 537 1.19 1.29 1 1 -do- 663 730 Motorcycle 45 1.2 1.53 1 1 1 -do- 58 74 Bicycle 49 46 1.07 1.32 1 1 -do- 56 65 Others 6083 575 1.24 1.30 - - - 8062 8014 | 2. | Light Good Vehicle | 1307 | 1194 | 1.26 | 1.21 | | FT. | -do - | 176 | 52 | 1546 | 3308 | |
| Heavy Goods1551641.391.4611-do-231256VehicleVehicle1111-do-452407Bus2802801.511.36111-do-452407Matatu Mini5215371.191.2911-do-663730Matatu Mini5215371.191.2911-do-653730Motorcycle451.21.53111-do-5874Bicycle49461.071.32111-do-5665Others50357551.241.3080628014 | | Medium Vehicle | 185 | 208 | 1.29 | 1.20 | H | Ц | -do- | 25 | 55 | 267 | 522 | |
| Bus2802801.511.36111-do-452407Matatu Mini5215371.191.29111-do-663730Matatu Mini5215371.191.29111-do-663730busMotorcycle451.21.53111-do-5874Motorcycle49461.071.32111-do-5665Dithers608357551.241.3080628014 | 4 | Heavy Goods Vehicle | 1.55 | 164 | 1.39 | 1.46 | Ē | щ | -qo - | 23 | 31 | 256 | 487 | |
| Matatu Mini5215371.191.2911-do-663730busbus451.21.53111-do-5874Motorcycle451.21.53111-do-5665Bicycle49461.071.321115665Others608357551.241.3080628014 | 5 | Bus | 280 | 280 | 1.51 | 1.36 | ,i | •• •• | -qo- | 4 | 52 | 407 | 859 | • |
| Motorcycle 45 1.2 1.53 1 1 -do- 58 74 Bicycle 49 46 1.07 1.32 1 1 65 65 Dithers 6083 5755 1.24 1.30 - - 8062 8014 | • • | Matatu Mini bus | 521 | 537 | 1.19 | 1.29 | rf | | -do - | Ę, | 23 | 730 | 1393 | |
| Bicycle 49 46 1.07 1.32 1 1 -do- 56 65 Others 0thers 1.24 1.30 - - 8062 8014 | 7. | Motorcycle | 45 | 45 | 1.2 | 1.53 | | Ч | -op- | : :. 1 | 38 | 74 | 132 | |
| 6083 5755 1.24 1.30 8062 8014 | 8 | Bicycle Others | 64 | 46 | 1.07 | i | | | -op- | | 26 | 65 | 121 | : |
| | | Total | 6083 | 5755 | 1.24 | 1.30 | • | | | - 806 | 52 - | 8014 | 16076 | |

A-V-12

| No.No.2No.No.2The Monday 24-11-86,12 hrsNo.No.2The Monday 24-11-86,12 hrsNonday 24-11-86,12 hrsNumber ContreeC 62 At RuarakaC 62 At RuarakaAt 1Number ContreeC 62 At RuarakaAt 28Nonday 24Nonday 24Nonday 24Nonday 24Nonday 24Nonday 251.121.111.121.121.121.121.121.121.121.1 | Average Annual Daily Traffic Calculation Sheet No.2 Sonday 24-11-86,12 hrs Daily/day Time Katio Ratio Ratio Ratio Ratio Sold Factor Correction Factor Antige Centre Ratio Ratio Ratio Sold araka - NRB NRB - Ruaraka Antil 100 Ratio Tata 121 121 121 121 123 124 125 127 128 129 129 129 | | | Table A-V-2-2 | -V-2-2 | | | | | |
|---|--|---|-------------|---------------|------------------|-----------------|---------------------------------|--------------|-------|-------|
| No.2 No.2 Monday 24-11-86,12 hrs Daily/day Time Weekly Variation Seasonal Average Annual Daily Traffi C 62 At Ruaraka Ratio Correction (AADT) Trading Centre Ratio Correction (AADT) Trading Centre Ratio Ratio Correction (AADT) Ruaraka NNB - Ruaraka -do- -do- -do- -do- Ruaraka - NRB NRB - Ruaraka -do- -do- -do- -do- -do- -do- Ruaraka - NRB NRB - Ruaraka -do- < | No.2 No.2 Gonday 24-11-86,12 hrs Daily/day Time Weekly Variation Seasonal Average Annual Daily Traffic 6 2 At Ruaraka Ratio Correction Factor 1 2 6 2 At Ruaraka Ratio Correction Average Annual Daily Traffic reding Centre Ratio Ratio Ratio Correction radia NRB - Ruaraka -do- -do- -do- -do- araka - NRB NRB - Ruaraka -do- -do- -do- -do- -do- -do- 34 581 1.22 1.21 1/1.1 1/1.1 1.01 822 651 1,4 471 368 1.21 1.21 1/1.1 1/1.1 1.01 822 651 1,4 471 368 1.27 1.21 1/1.1 1.01 62 46 1 129 107 1.21 1.21 1/0.7 1/0.1 1.01 127 25 1 70 78 1.21 1.21 1/1.1 1.01 193 175 3 158 143 1.21 <th>No.2 Ionday 24-11-86,12 hrs : 62 At Ruaraka</th> <th>Annual</th> <th>ily Trai</th> <th>ffic Cal</th> <th>culation</th> <th>Sheet</th> <th></th> <th>**</th> <th></th> | No.2 Ionday 24-11-86,12 hrs : 62 At Ruaraka | Annual | ily Trai | ffic Cal | culation | Sheet | | ** | |
| Ruaraka - NRB NRB - Ruaraka -do- -do- -do- -do- -do- -do- ruaraka - NRB NRB - Ruaraka Both 734 581 1.22 1.22 1.22 1.22 1.21 1/1.1 1/1.1 1/1.1 375 1, 471 368 1.21 1.21 1/1.1 1/1.2 1.01 822 651 1, 471 368 1.21 1.21 1/1.1 1/1.2 1.01 375 375 cle 129 1.21 1/1.1 1/1.1 1.01 140 127 34 25 1.27 1/27 1/0.7 1/0.7 1/01 62 46 70 78 1.15 1.12 1/1.1 1.01 68 82 158 143 1.21 1.21 1/0.1 1/0.1 1.01 193 175 | araka - NRB NRB - Ruaraka - do- -do- 1,4 1,4 127 1,4 127 127 127 127 127 127 127 127 127 127 127 127 127 127 127 127 127 127 127 126 146 127 126 146 127 126 <t< th=""><th></th><th></th><th>1</th><th>ekly Va Ratio</th><th>riation { Cc</th><th>Seasonal prrection Factor</th><th>Average .</th><th></th><th></th></t<> | | | 1 | ekly Va Ratio | riation { Cc | Seasonal prrection Factor | Average . | | |
| 734 581 1.22 1.22 1.22 1.11 1.11 1.01 822 651 1 471 368 1.21 1.21 1.21 1.21 1.21 1.21 375 471 368 1.21 1.21 1.11 1/1.1 1/1.2 375 cle 129 107 1.29 1.29 1/1.2 1/1.1 1.01 140 127 34 25 1.27 1/0.7 1/0.7 1.01 62 46 70 78 1.15 1.12 1/1.0 1/0.1 1.01 68 82 158 143 1.21 1.21 1/1.0 1/0.1 1.01 193 175 | 734 581 1.22 1.22 1.22 1.11 1/1.1 1/1.1 1.01 822 651 471 368 1.21 1.21 1.21 1.21 1.21 375 129 107 1.29 1.29 1/1.1 1/1.1 1.01 140 127 34 25 1.27 1.27 1/0.7 1/0.7 1.01 62 46 70 78 1.15 1.12 1/1.1 1.01 63 82 158 143 1.21 1.110 1/0.1 1.01 193 175 13 30 1.00 1.00 1/0.5 1/1.2 1.01 193 175 17 20 1.00 1.005 1/1.2 1.01 1.01 193 175 1626 1,352 - - - - - 25 179 1626 1,352 - - - - - 1,798 179 | - NRB NRB - | 5 | | -op- | -do- | | 1 I - | NRB - | Both |
| Taxi7345811.221.221.221/1.11/1.11.018226511c Gods4713681.211.211/1.11/1.21.018226511cle1071.211.211/1.11/1.11/1.21.01127m Vehicle1291071.291.291/291/1.21/1.11.01r Goods34251.271.271/0.71/0.746cle70781.151.151.121/1.11.016882cu Mini1581431.211.211/1.01/0.11.01193175 | 734 581 1.22 1.22 1/1.1 1/1.1 1/1.1 101 822 651 471 368 1.21 1.21 1.21 1.21 1/1.1 1/1.2 375 129 107 1.29 1.29 1/27 1/1.1 1/1.1 1.01 140 127 34 25 1.27 1.27 1/0.7 1/0.7 1/01 62 46 70 78 1.15 1.12 1/1.1 1.01 68 82 70 78 1.21 1.21 1/1.0 1/0.1 1.01 62 46 158 143 1.21 1.121 1/1.0 1/0.1 1.01 193 175 13 30 1.00 1/0.5 1/1.2 1.01 193 175 1626 1.352 - - - - - 17 1626 1.352 - - - - 1.01 193 17 | | | | | | | | | |
| $ \begin{array}{llllllllllllllllllllllllllllllllllll$ | 471 368 1.21 1.21 1.21 1/1.1 1/1.2 1.01 375 129 107 1.29 1.29 1/29 1/1.2 1/1.1 1.01 127 34 25 1.27 1.27 1/0.7 1/0.7 1.01 62 46 70 78 1.15 1.12 1/1.0 1/0.1 1.01 68 82 158 143 1.21 1.21 1/1.0 1/0.1 1.01 193 175 158 143 1.21 1.01 1/0.1 1.01 193 175 13 30 1.00 1.00 1/0.5 1/1.2 1.01 193 175 17 20 1.00 1.00 1/0.5 1/1.2 1.01 34 17 1626 1.352 - - - - - 1798 1798 | | Γ. | | /1.1 | | 1.01 | 822 | 651 | 1,473 |
| Im Vehicle 129 1.29 1.29 1/1.2 1/1.1 1.01 140 127 7 Goods 34 25 1.27 1.27 1/0.7 1/0.7 1.01 62 46 cle 70 78 1.15 1.12 1/1.1 1.01 68 82 cu Mini 158 1.43 1.21 1.21 1/1.0 1/0.1 1.01 193 175 | 129 107 1.29 1.29 1/1.2 1/1.1 1.01 140 127 34 25 1.27 1.27 1/0.7 1/0.7 1.01 62 46 70 78 1.15 1.15 1.1.2 1/1.1 1.01 68 82 158 143 1.21 1.21 1/1.0 1/0.1 1.01 193 175 13 30 1.00 1.00 1/0.5 1/1.2 1.01 193 175 17 20 1.00 1.00 1/0.5 1/1.2 1.01 34 17 1626 1.352 - - - - - 1/498 | | ч. | | | 1/1.2 | 1.01 | | 375 | 898 |
| Heavy Goods 34 25 1.27 1.07 1/0.7 1.01 62 46 Vehicle Nehicle 46 Bus 70 78 1.15 1.1.2 1/1.1 1.01 68 82 Matatu Mini 158 143 1.21 1.21 1/1.0 1/0.1 1.01 193 175 | 25 1.27 1.27 1/0.7 1/0.7 1.01 62 46 78 1.15 1.15 1.1.2 1/1.1 1.01 68 82 143 1.21 1.21 1/1.0 1/0.1 1.01 193 175 30 1.00 1.00 1/0.9 1/1.2 1.101 193 175 20 1.00 1.00 1/0.5 1/1.2 1.01 34 17 1,352 - - - - - 1.857 1498 | | ٦. | | | 1/1.1 | 1.01 | 140 | 127 | 267 |
| 70 78 1.15 1.1.2 1/1.1 1.01 68 82 cu Mini 158 1.43 1.21 1/1.0 1/0.1 1.01 193 175 | 78 1.15 1.1.2 1/1.1 1.01 68 82 143 1.21 1.21 1/1.0 1/0.1 1.01 193 175 30 1.00 1.00 1/0.9 1/1.2 1.01 15 25 20 1.00 1.00 1/0.5 1/1.2 1.01 34 17 1,352 - - - - - 1.857 1498 | ÷ | 1. | | : | 1/0.7 | 1.01 | 62 | 46 | 108 |
| 158 143 1.21 1.21 1/1.0 1/0.1 1.01 193 175 | 143 1.21 1.21 1/1.0 1/0.1 1.01 193 175 30 1.00 1.00 1/0.9 1/1.2 1.01 15 25 20 1.00 1.00 1/0.5 1/1.2 1.01 34 17 1,352 - - - - 1.857 1498 | | | | | 1/1.1 | 1.01 | 68 | 82 | 150 |
| Sng | 30 1.00 1.00 1/0.9 1/1.2 1.01 15 25 20 1.00 1.00 1/0.5 1/1.2 1.01 34 17 1,352 1.857 1498 | | • • · | | | 1/0.1 | 1.01 | 193 | 175 | 368 |
| 30 1.00 1.00 1/0.9 1/1.2 1.01 15 | 20 1.00 1.00 1/0.5 1/1.2 1.01 34 17 1,352 1.857 1498 | | - | | | 1/1.2 | 1.01 | 15 | 25 | 40 |
| 20 1.00 1.00 1/0.5 1/1.2 1.01 34 | 1,352 1.857 1498 | | • | | | 1/1.2 | I.01 | 34 | 17 | 51 |
| 1,352 1.857 1498 | | | | | | 1 | I | 1.857 | 1498 | 3,355 |

A--V-13

Table A-V-2-3

Average Annual Daily Traffic Calculation Sheet

| St Da Ro Se | Station No. Date, Time Road/Inter- section | No. 3 Friday 21-1 | No. 3 Friday 21-11-86,12 hrs | Daily/de Ratic | Daily/day Time Ratio | | Weekly Variation Ratio | Seasonal Correction Factor | | Average Annual Daily Traffic (AADT) | Traffic |
|-------------------------------------|---|----------------------|---------------------------------|-------------------|-------------------------|----------|---------------------------|----------------------------------|-------------|--|----------------|
| | Direction | Thika - NRB | NRB - Thika | l op ! | ndon | нор Р | - do- | | Thika - NRB | NRB - Thika | Both Direction |
| $\mathbf{T}_{\mathbf{y}\mathbf{p}}$ | Type of Vehicle | | | · | | | | | | | |
| • r-1 | Car, Taxi | 2,437 | 2,561 | I.25 | 1.25 | 1/1.1 | 1/1.1 | 1.07 | 2,963 | 3,114 | 6,077 |
| 2. | Light Goods Vehicle | 1,966 | 1,835 | 1.14 | 1.14 | 1/1.2 | 1/1.3 | 1.07 | 1,998 | 1,722 | 3,720 |
| | Medium Vehicle | :le 618 | 601 | 1.10 | 1.10 | 1/1.1 | 1/1.2 | 1.07 | 661 | 589 | 1,250 |
| 4. | Heavy Goods Vehicle | 150 | 159 | 1.09 | 1.09 | 1/1.2 | 1/1.1 | 1.07 | 146 | 169 | 315 |
| ທີ | Bus | 294 | 286 | l.16 | 1.16 | 1/1.0 | 1/1.0 | 1.07 | 365 | 355 | 720 |
| 6. | Matatu Mini Bus | 748 | 610 | 1.14 | 1.14 | 1/1.0 | 1/1.0 | 1.07 | 912 | 744 | 1656 |
| 7. | Motorcycle | 48 | . 60 | 1.00 | 1.00 | 1/0.8 | 1/1.2 | 1.07 | 64 | 54 | 118 |
| 80 | Bicycle Others | 37 | 30 | 1.00 | 1.00 | 1/0.6 | 1/0.8 | 1.07 | 99 | 52 | 118 |
| | Total | 6,290 | 6,151 | • 1 , | I | I | 1. | . 1 | 7,175 | 6,799 | 13,974 |
| | | | | | | - | | | | | |

A-V-14

| | : | | | | | | | | | |
|--|---|--------------|-------------------------|----------|----------------------------|--|---|--------------|--|---------------|
| · . | | · | | | | · | | | | |
| | | | | Table | Table A-V-2-4 | | | | - | |
| • . | | Averag(| e Annual | Daily T | raffic Cé | Average Annual Daily Traffic Calculation Sheet | n Sheet | | | |
| | | | | | | | | | | |
| Station No. Date, Time Road/Inter- | No. 4 Tuesday 25-11-86,12 hrs A2/Thika Road | | Daily/day Time Ratio | y Time | WeekLy ¹ Rat | y Variation Ratio | WeekLy Variation Seasonal Ratio Correction Factor | | Average Annual Daily Traffic (AADT) | lraffic |
| Direction | Airport - A2 | A2 - Airport | -op- | -qo - | op - | -op- | - B | Airport - A2 | A2 - Airport | Both Directon |
| Type of Vehicle | | | 1 | | | *. | | | | |
| Car, Taxí | 935 | 1.201 | 1.45 | 1.45 | 1/1.1 | 1/1.1 | 1.01 | 1,245 | 1,954 | 3,199 |
| Light Goods Vehicle | 763 | 749 | 1.26 | 1.26 | 1/1.3 | 1/1.1 | 1.01 | 747 | 867 | 1,614 |
| Medium Vehicle | Le 673 | 661 | 1.21 | 1.21 | 1/1.3 | 1/1.1 | 1.01 | 633 | 734 | 1,367 |
| Heavy Goods Vehicle | 155 | 136 | 1 - 16 | 1.16 | 1/0.9 | 1/1.3 | 1.01 | 202 | 123 | 325 |
| Bus | 54 | 51 | 1.52 | 1.52 | 1/1.1 | 1/1.1 | 1.01 | 75 | 71 | 146 |
| Matatu Mini Bus | 293 | 284 | 1.26 | 1.26 | 1/1.3 | 1/0.9 | 1.01 | 287 | 402 | 689 |
| Motorcycle | 20 | 27 | 1.00 | 1.00 | 1/1.8 | 1/0.9 | 1.01 | r r | 30 | 17 |
| Bicycle Others | 53 | 57 | 1.00 | 1.000 | 1/1.5 | 1/0.9 | 1.01 | 36 | 84 | 120 |
| Total | 2,946 | 3,184 | I | I | I | I | ŧ | 3,236 | 4,265 | 7,501 |

Average Annual Daily Traffic Calculation Sheet

| Station No. | No. 5 | | | | | | | | | |
|---------------------------|---------------------------|------------------------------|----------|-----------|-----------|--------------|---------------------------|---------------------------|------------------------------|----------------|
| Date, Time | Monday 17-11-86,12 hrs | 86,12 hrs | Daily/da | lay Time | Weekly Va | ariation | Weekly Variation Seasonal | Average A | Average Annual Daily Traffic | raffic |
| Road/Inter | Lusaka Road | | Rat: | io | Ratio | io | Correction | | (ADT) | |
| section | | | | | | | Factor | | | ÷., |
| Direction | Industrial Area - Al04 | Al04 - Industrial Area | -do- | - do L | -do- | 1 40 1 | ·1 | Industrial Area - AlO4 | Al04 - Industríal Area | Both Direction |
| Type of Vehicle | | | | | | | | | | |
| 1. Car, Taxi | 4,515 | 5,606 | 1.11 | 1.25 | 1/1.1 | 1/1.1 | 1.07 | 5,358 | 6,816 | 12,174 |
| 2. Light Goods Vehicle | 2,756 | 3,209 | 1.24 | 1.27 | 1/1.2 | 1/1.1 | 1.07 | 3,047 | 3,964 | 7,011 |
| 3. Medium Vehicle | cle 405 | 402 | 1.18 | 1.12 | 1/1.1 | 1/1.2 | 1.07 | 465 | 401 | 866 |
| 4. Heavy Goods Vehicle | 211 | 157 | 1.35 | 1.07 | 1/0.7 | 1/0.7 | 1.07 | 435 | 257 | 692 |
| 5. Bus | 60 | 32 | 1.31 | 1.40 | 1/1.1 | 1/1.2 | 1.07 | 76 | 40 | 116 |
| 6. Matatu Mini Bus | 138 | 245 | 1.17 | 1.13 | 1/1.0 | 1/1.0 | 1.07 | 173 | 296 | 469 |
| 7. Motorcycle | 167 | 192 | 1.10 | 1.10 | 1/1.2 | 1/0.9 | 1.07 | 164 | 151 | 415 |
| 8. Bicycle Others | 169 | 174 | 1.00 | 1.05 | 1/1.2 | 1/0.5 | 1.07 | 151 | 391 | 542 |
| Total | 8,421 | 10,017 | 1 | 1 | 1 | ľ | 1 | 9,869 | 12,416 | 22,285 |
| | | | | | | | | | | |

Refer to (Al04/No.9 Cont'd)

| | Sheet | | - |
|---------------|--|---|---|
| V-2-6 | Average Annual Daily Traffic Calculation Sheet | | |
| Table A-V-2-6 | r Traff | | |
| Ĥ | Daily | | |
| | Annual | | |
| | Average | | |
| | | 1 | , |

| Date, Time Wednesday Road/Inter- 12 h section A104 Mon Direction MBA - NRB Type of Vehicle 4,031 1. Car, Taxi 4,031 2. Light Goods 1,635 Vehicle | Wednesday 19-11-86, | | | | | | | : ; ; | |
|---|---------------------|--------------------|---------------|--------------|--|------------------------|--|--------------------------|----------------|
| WB | 12 hrs | Daily/day Ratio | ay Time io | Weekly Ra | Weekly Variation Seasonal Ratio Correctio | Seasonal Correction | Average Annual Daily Traffic (AADT) | T VILA LAILY T (AADT) | raffic |
| | AlO4 Mombasa Road | | - | · | | Factor | | | • |
| | B NRB – MBA | -op- | нор- | -do - | Р | E | MBA – NRB | NRB – MBA | Both Direction |
| s C | | | | | | | | | |
| | 4,540 | 1.25 | 1.22 | 1/0.9 | 1/1.2 | 1.07 | 5,991 | 4,939 | 10,930 |
| | 1,710 | 1.27 | 1.24 | 1/1.2 | 1/1.1 | 1.07 | 1,852 | 2,063 | 3,915 |
| Medium Vehicle 489 | 445 | 1.12 | 1.18 | 1/1.2 | 1.1.0 | 1.07 | 488 | 562 | 1,050 |
| Heavy Goods 207 Vehicle | 182 | 1.07 | l.35 | 1/1.3 | 1/0.9 | 1.07 | 176 | 292 | 468 |
| Bus 54 | 69 | 1.40 | 1.31 | 1/1.0 | 1/1.1 | 1.07 | 81 | 80 | 169 |
| Matatu Mini 413 Vehicle | 318 | 1.13 | 1.17 | 1/1.0 | 1/1.2 | 1.07 | 499 | 332 | 831 |
| Motorcycle 39 | 76 | 1.10 | 1.10 | 1/1.1 | 1/1.5 | 1.07 | 42 | 60 | 102 |
| Bicycle 42 Others | 36 | 1.05 | 1.00 | 1/1.5 | 1/1.2 | 1.07 | 31 | 32 | 63 |
| Total 6,910 | 7,376 | 1 | ł | 1 | ġ | l | 9,160 | 8,368 | 17,528 |

A-V-17

Refer to (Al04/No. 9)

Average Annual Daily Traffic Calculation Sheet

| Date, T: Road/Int section | NO. Ler- | No. / riday 14-1 58/ At Wil | No. / Friday 14-11-86 12 hrs C58/ At Wilson Airport | Daily/day Rati | ay Time :io | Weekly Variation Ratio | Variation Ratio | Seasonal Correction Factor | | Average Annual Daily Traffic (AADT) | Traffic |
|---------------------------------|--------------------------|-----------------------------------|---|-------------------|----------------|---------------------------|--------------------|----------------------------------|---------------|--|--------------------------|
| Dir | Direction La | Langata - NR | NRB NRB - Langata -do- | zata -do- | -op- | - do- | qo | 1 | Langata - NRB | NRB | - Langata Both Direction |
| Type o | Type of Vehicle | | | | | | | | | - | |
| l. Ça | Car, Taxi | 3,099 | 2,405 | 1.31 | 1.31 | 1/1.1 | 1/1.1 | 1.07 | 3,949 | 3,065 | 7,014 |
| 2. Li Ve | Light Goods Vehicle | 1,293 | 1,184 | 1.20 | 1.20 | 1/1.2 | 1/1.3 | 1.07 | 1,386 | 1,169 | 2,555 |
| 3. Me | Medium Vehicle | 239 | 239 | 1.22 | 1.22 | 1/1.1 | 1/1.2 | 1.07 | 284 | 260 | 544 |
| 4. He Ve | Heavy Goods Vehicle | 33 | 26 | 1.09 | 1.09 | 1/1.2 | 1/1.1 | 1.07 | 32 | 28 | 60 |
| 5. Bus | Ŵ. | 134 | 141 | 1.31 | 1.31 | 1/1.0 | 1/1.0 | 1.07 | 188 | 198 | 386 |
| 6. Ma Bu | Matatu Mini Bus | 302 | 293 | 1.20 | 1.20 | 1/1.1 | 1/1.0 | 1.07 | 353 | 376 | 729 |
| 7. Mo | Motorcycle | 24 | 29 | 1.00 | 1.00 | 1/0.8 | 1/1.2 | 1.07 | 32 | 26 | 58 |
| 8. Bi | Bicycle Others | 12 | 6 | 1.00 | 1.00 | 1/0.6 | 1/0.8 | 1.07 | 21 | 12 | 33 |
| To | Total | 5,136 | 4,326 | • 1 | I | • 1 | : | : F | 6,245 | 5,134 | 11,379 |

Refer to (C58/2)

Average Annual Daily Traffic Calculation Sheet

| | NDRØ | Station No. Date, Time Road/Inter- section | No. 8 Tuesday 18-11-8 C61/ Ngong Road | No. 8 Tuesday 18-11-86, 12 hrs C61/ Ngong Road | Daily/ Ra | y/day Time Ratio | Weekly V Rat | Daily/day Time Weekly Variation Ratio | Seasonal Correction Factor | Average A | Average Annual Daily Traffic (AADT) | raffic |
|--|---------|---|---|--|--------------|---------------------|-----------------|--|----------------------------------|--------------------|--|----------------|
| 2,289 2,189 1.23 1.23 1.23 1/1.1 1/0.9 1.07 1,088 998 1.24 1.24 1/1.4 1/1.1 1/0.1 1,088 998 1.24 1.24 1/1.3 1/1.1 1.07 21 1/17 1.17 1/1.1 1/1.1 1.07 31 21 1.17 1.17 1/1.3 1/0.7 300 195 1.22 1.22 1/1.1 1/0.9 1.07 338 273 1.24 1.24 1/1.3 1/0.9 1.07 338 273 1.24 1.24 1/1.3 1/0.9 1.07 113 80 1.00 1.00 1/1.6 1.07 1.07 4,386 4,057 - | | Direction | | NRB - Dagoretti | - фо т | -do- | -op- | -op- | 1 | Dagoretti - NRB | NRB - Dagoretti | Both Direction |
| Car, Taxi2,2892,1891.231.231/1.11/0.91.07Light Goods1,0889981.241.241.241/1.31/1.11.07Vehicle1701491.241.241/1.31/1.11.07Medium Vehicle1701491.241.241/1.31/1.11.07Heavy Goods31211.171.171/171/1.31/0.9Bus3001951.221.221/241/1.31/0.91/07Bus3001951.241.241/1.31/0.91/07Bus3382731.241.241/1.31/0.91.07BusMotorcycle57521.001.001.091.07Bicycle113801.001.001/1.51/0.91.07Chers4,057 | TY | e of Vehicle | | | | | | | | | | |
| Light Goods1,0889981.241.241/1.31/1.11.07VehicleVehicle1701491.241.241/1.31/1.11.07Medium Vehicle1701491.241.241/1.31/1.11.07Heavy Goods31211.171.171/1.31/0.91/1.1Nehicle3001951.221.221/1.11/1.11/07Bus3001951.241.241/1.31/0.91/07Matatu Mini3382731.241.241/1.31/0.91/07BusMotorcycle57521.001.001/0.91.07Bicycle113801.001.001/1.51/0.91.07Cteal4,3864,057 | Τ. | Car, Taxi | 2,289 | 2,189 | 1.23 | 1.23 | 1/1.1 | 1/0.9 | 1.07 | 2,739 | 3,201 | 5,940 |
| Medium Vehicle1701491.241.241/1.31/1.11.07Heavy Goods31211.171.171/0.91/1.31.07Vehicle3001951.221.221/1.11/1.11.07Bus3001951.221.221/1.11/1.11.07Matatu Mini3382731.241.241/1.31/0.91.07Bus3382731.241.241/1.31/0.91.07BusMotorcycle57521.001.001.001.07Bicycle113801.001.001/1.51/0.91.07Cthers1134,3864,057 | 2 | Light Goods Vehicle | 1,088 | 668 | 1.24 | 1.24 | 1/1.3 | 1/1.1 | 1.07 | 1,110 | 1,204 | 2,314 |
| Heavy Goods31211.171.171.171/1.31.07Vehicle3001951.221.221/1.11/1.11.07Bus3382731.241.241/1.31/0.91.07Matatu Mini3382731.241.241/1.31/0.91.07BusMotorcycle57521.001.001/0.91.07Bicycle113801.001.001/1.51/0.91.07Others7521.001.001/1.51/0.91.07Total4,3864,057 | ς. Γ | Medium Vehicl | | 149 | 1.24 | 1.24 | 1/1.3 | 1/1.1 | 1.07 | 174 | 180 | 354 |
| Bus3001951.221.221/1.11/1.11.07Matatu Mini3382731.241.241/1.31/0.91.07BusMotorcycle57521.001.001/0.91.07Bicycle113801.001.001/1.51/0.91.07Chers113801.001.001/1.51/0.91.07Total4,3864,057 | 4 | Heavy Goods Vehicle | 31 | 21 | 1.17 | 1.17 | 1/0.9 | 1/1.3 | 1.07 | 43 | 20 | 63 |
| Matatu Mini 338 273 1.24 1.13 1/0.9 1.07 Bus Bus 57 52 1.00 1.00 1.09 1.07 Motorcycle 57 52 1.00 1.00 1/1.8 1/0.9 1.07 Bicycle 113 80 1.00 1.00 1/1.5 1/0.9 1.07 Dithers 4,386 4,057 - | ъ. | Bus | 300 | 195 | 1.22 | 1.22 | 1/1.1 | 1/1.1 | 1.07 | 356 | 350 | 706 |
| 57 52 1.00 1.00 1/1.8 1/0.9 1.07 113 80 1.00 1.00 1.00 1/1.5 1/0.9 1.07 4,386 4,057 - - - - - - | | Matatu Mini Bus | 338 | 273 | 1.24 | 1.24 | 1/1.3 | 1/0.9 | 1.07 | 354 | 402 | 747 |
| <pre>le 113 80 1.00 1.00 1/1.5 1/0.9 1.07 s 4,386 4,057</pre> | 7. | Motorcycle | 57 | 52 | 1.00 | 1.00 | 1/1.8 | 1/0.9 | 1.07 | 34 | 62 | 96 |
| 4,386 4,057 | α | Bicycle Others | 113 | 80 | 1.00 | 1.00 | 1/1.5 | 1/0.9 | 1.07 | 81 | - 56 | 176 |
| | | Total | 4,386 | 4,057 | ı | ł | 1 | ŝ | ı | 4,882 | 5,514 | 10,396 |

A-V-19

Refer to (C61/3)

Average Annual Daily Traffic Calculation Sheet.

| Station No. Date, Time Road/Inter- section | No. 9 26-11-86 to 27-11-86 AlO4 at the Resort C | No. 9 26-11-86 to 27-11-86 A104 at the Resort Club | Daily/ R | /day Time Ratio | Daily/day Time Weekly Variation Ratio Ratio | | Seasonal Correction Factor | Average | Average Annual Daily Traffic (AADT) | ly Traffic |
|---|---|--|-------------|--------------------|--|-------|----------------------------------|--------------------|--|----------------|
| Direction | Athiriver - NRB | NRB - Athiriver | -do- | -op- | -do- | -do- | a a | Athiriver - NRB | NRB - Athiriver | Both Direction |
| Type of Vehicle | | | - | | | | | | | |
| <pre> Car, Taxi </pre> | 801 | 741 | 1.25 | 1.22 | 1/0.9 | 1/1.2 | 1.01 | 1,124 | 761 | 1,885 |
| 5 | 442 | 437 | 1.27 | 1.24 | 1/1.2 | 1/1.1 | 1.01 | 472 | 496 | 968 |
| 3. Medium Vehicle | 460 | 374 | 1.12 | 1.18 | 1/1.2 | 1/1.0 | 1.01 | 434 | 977 | 880 |
| 4. Heavy Goods Vehicle | 309 | 228 | T.07 | 1.13 | 1/1.3 | 1/0.9 | 1.01 | 257 | 345 | 602 |
| 5. Bus | 82 | 102 | 1.40 | 1.31 | 1/1.0 | 1/1.1 | 1.01 | 116 | 123 | 239 |
| 6. Matatu Mini | 130 | 121 | 1.13 | 1.17 | 1/1.0 | 1/1.2 | 1.01 | 155 | 119 | 274 |
| Bus | | | | | | | • | | | |

27

'n

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20 16

1.01

1/1.2 1.01

1/1.5 1/1.5

1.10 1.00

1.10

30.

20

Motorcycle

7. Mou---8. Bicycle Others

4,894

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1.01

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1.23

1.19

2,016

22,272

Total

Average Annual Daily Traffic Calculation Sheet

| Average Annual Daíly Traffic (AADT) | Ongata Rongai - NRB Both Direction - NRB Ongata Rongai | | 911 930 1,641 | 392 306 698 | 96 123 219 | 9 17 26 | 42 42 84 | 131 105 236 | 11 8 19 | 32 14 46 | 1,624 1,345 2,969 |
|---|---|-----------------|---------------|------------------------|----------------|------------------------|----------|--------------------|------------|-------------------|-------------------|
| Seasonal Correction Factor | - Оп <u></u> | | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | I |
| | do | | 1/1.1 | 1/1.1 | 1/1.1 | 1/0.7 | 1/1.0 | 1/1.0 | 1/1.2 | 1/1.2 | 1 |
| Weekly Variation Ratio | -do- | | 1/1.1 | 1/1.2 | 1/1.2 | 1/0.7 | 1/1.0 | 1/1.0 | 1/0.9 | 1/1.2 | ł |
| Daily/day Time Ratio | -do- | | 1.27 | 1.16 | 1.06 | 1.00 | 1.31 | 1.16 | 1.00 | 1.00 | i |
| Daily/day Ratio | -do- ti | | 1.27 | 1.16 | 1.06 | 1.00 | 1.31 | 1.16 | 1.00 | 1.00 | Ι. |
| 86,12 hrs t C58 and C63) | - NRB Ongata Rongai | • • | 626 | 313 | 126 | 12 | 35 | 90 | 10 | 17 | 1,229 |
| No. 10 Monday 1-12-86,12 hrs (Junction at C58 and C58 and C63) | Ongata Rongai - NRB | | 781 | 368 | 108 | Q | 38 | 112 | 10 | 16 | 1,439 |
| Station Date, Time M Road/Inter- (section | Direction On | Type of Vehicle | Car, Taxi | Light Goods Vehicle | Medium Vehicle | Heavy Goods Vehicle | Bus | Matatu Mini Bus | Motorcycle | Bicycle Others | Total |

A-V-21

Refer to C58/3

Average Annual Daily Traffic Calculation Sheet

| S R D A S R D A | Station No. Date, Time Road/Inter- section | No. 11 Friday 20-11-8 C60 Ngong Road | No. 11 Friday 20-11-86 12 hrs C60 Ngong Road | Daily/da Rat | Daily/day Time Ratio | Weekly Variation Ratio | ariation io | Seasonal Correction Factor | | Average Annual Daily Traffic (AADT) | y Traffic |
|--------------------|---|--|--|-----------------|-------------------------|---------------------------|----------------|----------------------------------|-------------|--|----------------|
| | Direction | Ngong - NRB | NRB – Ngong | opı | -do- | l ob I | -op- | ł | Ngong - NRB | NRB - Ngong | Both Direction |
| Typ | Type of Vehicle | | | | | - | - | - | | | |
| | Car, Taxi | 978 | 590 | 1.45 | 1.45 | 1/1.1 | 1/1.1 | 1.01 | 1,302 | 786 | 2,088 |
| ∾ ₩-22 | Light Good Vehicle | 515 | 607 | 1.63 | 1.63 | 1/1.2 | 1/1.3 | 1.01 | 707 | 518 | 1,225 |
| ę | Medium Vehicle | le 119 | 116 | 1.50 | 1.50 | 1/1.1 | 1/1.2 | 1.01 | 164 | 146 | 310 |
| 4. | Heavy Goods Vehicle | 10 | 4 | 1.00 | 1.00 | 1/1.2 | 1/1.1 | 1.01 | co | Υ Π | 1 |
| ς. | Bus | 47 | 6.7 | 1.37 | 1.37 | 1/1.0 | 1/1.0 | 1.01 | 65 | 68 | 133 |
| . | Matatu Mini Bus | 95 | 103 | 1.63 | 1.63 | 1/1.1 | 1/1.0 | 1.01 | 142 | 170 | 312 |
| 7. | Motorcycle | 20 | . 14 | 1.00 | 1.00 | 1/0.8 | 1/1.2 | 1.01 | 25 | 12 | 37 |
| ω. | Bicycle Others | 37 | 31 | 1.00 | 1.00 | 1/06 | 1./0.8 | 1.01 | 62 | 39 | 101 |
| | Total | 1,821 | 1,316 | 1 | ł | t | I | ł | 2,475 | 1,742 | 4,217 |
| | | | | - | | | | | | | |

A-V-22

Refer to C60/1

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| Station No. Date, Time Road/Inter- section | No. 12 Thrusday 27-11-86, AlO4 Naívasha Road | No. 12 Thrusday 27-11-86,12 hrs AlO4 Naívasha Road | Daily/day Ratio | | Time Weekly Variation Ratio | | Seasonal Correction Factor | Average Annaul Daily Traffic (AADT) | aul Daily ¹ (AADT) | raffic |
|---|--|--|--------------------|-----------|--------------------------------|-----------|----------------------------------|--|----------------------------------|-----------------------|
| Direction | Limuru - NR | Limuru - NRB NRB - Limuru | -do- | - qo - | -qo- | - do - | ł | Limuru - NRB NRB - | - Limuru Bo | Limuru Both Direction |
| Type of Vehicle | e | | | | | | | | | |
| . Car, Taxi | 510 | 496 | 1.12 | 1.33 | 1/1.2 | 1/1.0 | 1.01 | 519 | 654 | 1.193 |
| . Light Goods Vehicle | ls 425 | 418 | 1.26 | 1.21 | 1/1.0 | 1/1.1 | 1.01 | 541 | 464 | I,005 |
| . Medium Vehicle | nicle 194 | 207 | 1.29 | 1.20 | 1/1.1 | 1/1.3 | 1.01 | 320 | 193 | 423 |
| Heavy Goods Vehicle | ls 109 | 162 | 1.39 | 1.46 | 1/1.1 | 1/1.1 | 1.01 | 216 | 217 | 433 |
| 5. Bus | 127 | 112 | 1.51 | 1.36 | 1/1.0 | 1/1.2 | 1.01 | 194 | 128 | 322 |
| 6. Matatu Mini Bus | ii 178 | 124 | 1.19 | 1.27 | 1/1.2 | 1/1.4 | 1.01 | 178 | 114 | 292 |
| . Motorcycle | 6 | 14 | 1.20 | 1.53 | 1/1.2 | 1/1.2 | 1.01 | თ | 18 | 27 |
| 8. Bicycle Others | 15 | 11 | 1.07 | 1.32 | 1/1.4 | 1/1.0 | 1.01 | 12 | 15 | 27 |
| Total | 1,627 | 1,544 | I | I | , I | ł | , I | 1,899 | 1,803 | 3.702 |

Refer to No. 1

Average Annual Daily Traffic Calculation Sheet

| Date, Time Road/Inter- section | Monday 24-11-86,12 hrs (At Muthaiga C64 Golf- Club) | -11-86,12 hrs .ga C64 Golf- Club) | Daily/day Ratio | ay time io | Weekly Ra | Weekly Varíation Seasonal Ratio Correctio Factor | Seasonal Correction Factor | Average | Annual Daily Traffic (AADT) | r Traffic |
|--|---|---|--------------------|---------------|--------------|--|----------------------------------|------------------|--------------------------------------|--------------|
| Direction | Kiambu - NRB | NRB - Kiambu -do- | -op- nc | -op- | -qo- | -op- | • 1 | Kiambu - NRB NRB | <pre>8 - Kiambu Both Direction</pre> | th Direction |
| Type of Vehicle | | | | | | - | | | | |
| l. Car, Taxi | 1,408 | 973 | 1.22 | 1.11 | 1/1.1 | 1/1.1 | 1.01 | 1.277 | 1.090 | 2,667 |
| Light Goods Vehicle | 5 783 | 492 | 1.21 | 1.21 | 1/1.1 | 1/1.2 | 1.01 | 870 | 501 | 1,371 |
| 3. Medium Vehicle | icle 102 | 71 | 1.29 | 1.29 | 1/1.2 | 1/1.1 | 1.01 | 111 | 84 | , 195 |
| 4. Heavy Goods Vehicle | ŝ | œ | 1.27 | 1.27 | 1/0.7 | 1/0.7 | 1.01 | 6 | 5 | 24 |
| 5. Bus | 107 | 92 | 1.15 | 1.15 | 1/1.2 | 1/1.2 | 1.01 | 104 | 97 | 201 |
| 6. Matatu Mini Bus | L 205 | 153 | 1.21 | 1.21 | 1/1.0 | 1/1.0 | 1.01 | 251 | 187 | 438 |
| 7. Motorcycle | Ф | 10 | 1.00 | 1.00 | 1/0.9 | 1/1.2 | 1.01 | 10 | œ | 18 |
| 8. Bicycle Other | 17 | 14 | 1.00 | 1.00 | 1/0.5 | 1/1.2 | 1.01 | 34 | 12 | 46 |
| Total | 2,636 | 1,813 | 1 | Ľ | ł | T | I | 2,966 | 1,994 | 4,960 |

A-V-24

Refer to C62/11

Average Annual Daily Traffic Calculation Sheet

| | Station No. | No. 14 | | | | | | | | | - |
|---------------------------|---------------------------|--|---|--------------------|---------------|--------------|---------------------|---|----------------------|--|---------------------------|
| | Date, Time Road/Inter- | Friday 28-11-86, 1 C63/Dagoretti Road | Friday 28-11-86, 12 hrs C63/Dagoretti Road | Daily/day Ratio | ay time io | Weekly Ra | y Variatio Ratio | Weekly Variation Seasonal Ratio Correction | Avera | Average Annual Daily Traffic (AADT) | <pre>[1y Traffic])</pre> |
| l | Direction | Dagoretti - Karen | Karen - Dagoretti | нр - | - qo - | -op- | I do I | ſ | Dagoretti - Karen | Karen - Dagoretti | Both Direction |
| $\mathbf{T}_{\mathbf{y}}$ | Type of Vehicle | | | | | | | | | | |
| . | Car, Taxi | 351 | 280 | 1.30 | 1.30 | 1/1.1 | 1/1.1 | 1.01 | 419 | 334 | 753 |
| ~. A-V- | Light Goods Vehicle | 191 | 212 | 1.13 | 1.13 | 1/1.2 | 1/1.3 | 1.01 | 182 | 186 | 368 |
| ຕ່ -25 | Medium Vehicle | 55 | 53 | 1.03 | 1.03 | 1/1.1 | 1/1.2 | 1.01 | 52 | 46 | 98 |
| 4. | Heavy Goods Vehicle | ω | 4 | 1.00 | 1.00 | 1/1.2 | 1/1.1 | 1.01 | 7 | 4 | P4 P4 |
| ς. | Bus | .12 | 16 | 1.19 | 1.19 | 1/1.0 | 1/1.0 | 1.01 | 14 | 23 | 37 |
| 6. | Matatu Mini Bus | 13 | 15 | 1.13 | 1.13 | 1/1.1 | 1/1.0 | 1.01 | 13 | 17 | 30 |
| 7. | Motorcycle | ŝ | 4 | 1.00 | 1.00 | 1/0.8 | 1/1.2 | 1.01 | v | , M | 6 |
| ÷. | Bicycle Others | 18 | 47 | 1.00 | 1.00 | 1/0.6 | 1/0.8 | 1.01 | 30 | 59 | 89 |
| | Total | 653 | 631 | I | I | Ĩ | I | I | 723 | 672 | 1,395 |
| | | | | | | | | | | | |

Refer to C63/2

Average Annual Daily Traffic Calculation Sheet

| Weekly Variation Seasonal Average Annual Daily Traffic Ratio Correction Factor | -dodo Kangundo - C59 - Both Direction C59 Kangundo | | 1/1.1 1/0.9 1.01 1.210 1.150 2.360 | 1/1.1 | 1/1.3 1/1.1 1.01 504 689 1.193 | | 1/1.1 1/1.1 1.01 60 65 125 | 1/1.3 1/0.9 1.01 182 266 448 | 1/1.8 1/1.9 1.01 12 26 38 | 1/1.5 1/0.9 1.01 7 18 25 | |
|--|---|-----------------|------------------------------------|--|--------------------------------|---------------------------|----------------------------|------------------------------|---------------------------|--------------------------|---------|
| Daily/day Time Week Ratio | -do- | | 1.22 | 1.18 | 1.07 | 1.00 | 1.29 | 1.18 | 1.000 | 1.00 | 1 |
| | C59do- Kangundo | | 840 1.22 | 646 1.18 | 641 1.07 | 54 1.00 | 55 1.29 | 201 1.18 | 23 1.00 | 16 1.00 | 2.476 - |
| No. 15 Tuesday 25-11-86,12 hrs C98/Komo Rock Road | Kangundo - C59 1 | | 1.080 | 599 | cle 606 | 64 | 51 | 199 | 22 | 11 | 2.632 |
| Station No. Date, Time Road/Inter- section | Direction | Type of Vehicle | l. Car, Taxí | Light Goods Vehicle | 3. Medium Vehicle | 4. Heavy Goods Vehicle | 5. Bus | 6. Matatu Mini Bus | 7. Motorcycle | 8. Bicycle Others | Total |

Refer C98/1

| | • | | | | | | | | | |
|---|--|--|-------------------|---------------------|---------------------|---------------------------|----------------------------------|----------------------------------|--|------------------|
| Station No. Date, Time Road/Inter- section | No. 16 Monday 1-12- Langata Road | No. 16 Monday 1-12-86, 12 hrs Langata Road | Daily/day Rati | //day Time Ratio | Weekly Var Ratio | Weekly Variation Ratio | Seasonal Correction Factor | | Average Annual Daily Traffic (AADT) | ily Traffic) |
| Direction | Dagorettí - Wílson Airport | Wilson Airport - Dagoretti | г Чо г | - do - | - qo - | н фо т | I | Dagoretti - Wilson Airport | Wilson Airport - Dagoretti | Both Direction |
| Type of Vehicle | | | | | | | | | | |
| Car, Taxi | 1,180 | 1,026 | 1.31 | 1.31 | 1/1.1 | 1/1.1 | 1.01 | 1.419 | 1.234 | 2,653 |
| Light Goods Vehicle | 502 | 667 | 1.19 | 1.19 | 1/1.1 | 1/1.2 | 1.01 | 549 | 500 | 1,049 |
| Medium Vehicle | e 79 | 06 | 1.15 | 1.15 | 1/1.2 | 1/1.1 | 1.01 | 76 | 56 | 171 |
| Heavy Goods Vehicle | 20 | 20 | 2.00 | 1.00 | 1/0.7 | 1/0.7 | 1.01 | 58 | 58 | 116 |
| Bus | 29 | 27 | 1.19 | 1.19 | 1/1.0 | 1/1.1 | 1.01 | 29 | 30 | 59 |
| Matatu Mini Bus | 20 | 27 | 1.19 | 1.19 | 1/1.0 | 1/1.1 | 1.01 | 24 | 30 | 54 |
| Motorcycle | 16 | 22 | 1.00 | 1.00 | 1/0.9 | 1/1.2 | 1.01 | 18 | 19 | 37 |
| Bicycle Others | 17 | 15 | 1.00 | 1.00 | 1/0.5 | 1/1.2 | 1.01 | 34 | 13 | 47 |
| Total | 1,863 | 1,726 | I | I | ı | ł | ı | 2.207 | 1.979 | 4.186 |

A-V-27

Refer C63/24

Average Annual Daily Traffic Calculation Sheet

| Direction pe of Vehicle Car, Taxi | Round-about to South | t ture | Daily/day Ratio | ky Tíme | Weekly Var Ratio | ariation io C | Daily/day Time Weekly Variation Seasonal Ratio Ratio Faction Factor | | Average Annual Daily Traffic (AADT) | / Traffic |
|--|-----------------------------|--------------|--------------------|---------|---------------------|------------------|---|---------------|--|------------------|
| Type of Vehicle 1. Car, Taxi | Airport - NRB NRB - Airport | (B - Airport | - qo- | -op- | -do- | lop i | | Airport - NRB | NRB - Airport Both | t Both Direction |
| | | | | | | | | | | |
| | 4,739 | 10,810 | 1.25 | 1.22 | 1/0.9 | 1/1.2 | 1.01 | 6,648 | 11,100 | 17,748 |
| Light Goods Vehicle | 2,997 | 2,997 | 1.22 | 1.22 | 1/1.1 | 1/1.1 | 1.01 | 3,357 | 2,776 | 6,133 |
| 3. Medium Vehicle | 398 | 495 | 1.12 | 1.18 | 1/1.2 | 1/1.0 | 1.01 | 375 | 590 | 965 |
| 4. Heavy Goods Vehicle | 137 | 157 | 1.07 | 1.35 | 1/1.3 | 1/0.9 | 1.01 | 114 | 238 | 352 |
| 5. Bus | 92 | 63 | 1.40 | 1.17 | 1/1.0 | 1/1.1 | 1.01 | 130 | 68 | 198 |
| 6. Matatu Mini Bus | 1 | ł | je je | 1 | I | I | 1 · . | I | I | : |
| 7. Motorcycle | . I | I | I | t | I | J | 1 | İ. | 1 | ì |
| 8. Bicycle Others | : 1. | I | | | 2. 1 | t | a Mali | I | 1 1 1 1 1 1 1 | ł |
| Total | I : | . I . | • | 1 | ŧ. | | ş | 1 | 1 | 25,396 |
| | | | | | | | | | | |
| | | | | | | | | | | |

Average Annual Daily Traffic Calculation Sheet

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| St Da Se | Station No. Date, Time Road/Inter- section | No. 17 Wednesday Kenyatta Avenue toEast | nue toEast | Daily/de Rat | /day Time Ratio | Weekly V. Ra | · Variation Ratio | Daily/day Time Weekly Variation Seasonal Ratio Ratio Correction Factor | Average | Average Annual Daily Traffic (AADT) | Traffic |
|----------------|---|---|-------------------|-----------------|--------------------|-----------------|----------------------|--|-------------------|--|----------------|
| 3 | Directin | Centre - Ngong | Ngong - Centre | -qo- | -do- | - qo - | -op- | 3 | Centre - Ngong | Ngong - Centre | Both Direction |
| Typ | Type of Vehicle | | | | | | | | | | |
| | Car, Taxi | 10,202 | 11,481 | 1.25 | 1.22 | 1/0.9 | 1/1.2 | 1.01 | 14,311 | 11,789 | ł |
| ณ์ 20 | Light Goods Vehicle | 27,738 | 3,845 | 1.22 | 1.22 | 1/1.1 | 1/1.1 | 1.01 | 3,037 | 4,307 | I |
| ÷. | Medium Vehicle | 95 | 164. | 1.12 | 1.18 | 1/1.2 | 1/1.0 | 1.01 | 06 | 195 | 1 |
| 4. | Heavy Goods Vehicle | 592 | 753 | 1.40 | 1.17 | 1/1.0 | 1/1.1 | 1.01 | 837 | 809 | ł |
| ۍ. ۲ | Bus | I | ı | I | ł | 1 | ł | 1 | I | ł | ı |
| 6. | Matatu Mini Bus | ! | I | 1 | I . | I | I | I | L · | I | I |
| 7 | Motorcycle | ł | ł | I | ł | I | ł | ł | | I | ł |
| 8°. | Bicycle Others | I | I | I | J | ŧ | 1 | I | 1 | 1 | . 1 |
| | Total | 13,638 | 16,265 | ł | I. | I | I | ł | 18,284 | 17,133 | I |

A--V--29

Average Annual Daily Traffic Calculation Sheet

| | | Wednesday Uhuru Highway to Nairobi | Daily/day Rati | day Time Ratio | Weekly ' I | Variation Ratio | Weekly Variation Seasonal Ratio Correction Factor | | Average Annual Daily Traffic (AADT) | y Traffic |
|---|--------------------------------|---------------------------------------|-------------------|-------------------|---------------|--------------------|---|--------------|--|---------------|
| Direction L | Limuru - NRB NRB - Limuru -do- | IRB - Limuru | -op- | =do= | -op- | -op- | 9 | Limuru - NRB | Limuru - NRB NRB - Limuru Both Direction | oth Direction |
| Type of Vehicle | | | | | | | | - | | |
| 1. Car, Taxi | 13,614 | 8,990 | 1.21 | 1.33 | 1/0.9 | 1/1.2 | 1.01 | 18,486 | 10,064 | ţ |
| Light Goods Vehicle | 3,054 | 2,496 | 1.24 | 1.23 | 1/1.1 | 1/1.1 | 1.01 | 3,477 | 2,819 | 4 |
| 3. Medium Vehicle | e 455 | 336 | 1.29 | 1.20 | 1/1.2 | 1/1.0 | 1.01 | 767 | 407 | ŀ |
| 4. Heavy Goods Vehicle | 149 | 120 | 1.39 | 1.46 | 1/1.3 | 1/0.9 | 10.1 | 161 | 197 | ا . |
| 5. Bus | 122 | 41 | 1.51 | 1.36 | 1/1.0 | 1/1.1 | 1.01 | 186 | 51 | |
| 6. Matatu Mini | ł | ł | I | I | I | I | | ı | I | ł |
| Bus | • | | | | - | | | | | |
| 7. Motorcycle | ł | 1 | ł | : f . | 1 | | ļ | I | I . | ļ |
| 8. Bicycle Others | I | i | ł | I | 1 | 1 | 1 |] | 2 | 2 |
| Total | 17,394 | 11,983 | I, | ľ | 1 | 1 | ŧ, | 22,804 | 13,538 | ł |

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Average Annual Daily Traffic Calculation Sheet

| Station No. Date, Time Road/Inter. section | No. 17 - Kenyatta Ave | No. 17 - Kenyatta Avenue to West | Daily/d R | day Time Ratio | Daily/day Time Weekly Variation Ratio Ratio | aríation io | Seasonal Correction Factor | | Average Annual Daily Traffic (AADT) | ffic |
|---|-----------------------------|--|--------------|-------------------|--|----------------|----------------------------------|-------------|--|------------|
| Direction | Ngong – NRB | NRB - Ngong -do- | -op- | -do- | - do - | -do- | I | Ngong - NRB | NRB - Ngong Both Direction | Direction |
| Type of Vehicle | | | | | | | | | | |
| . Car, Taxi | 8,564 | 10,574 | 1.21 | 1.31 | 1/0.9 | 1/1.2 | 1.01 | 11,629 | 11,837 | I |
| Light Goods Vehícle | 2,880 | 2,850 | 1.24 | 1.23 | 1/1.1 | 1/1.1 | do | 3,279 | 3,219 | ł |
| . Medium Vehicle | le 125 | 78 | 1.29 | 1.20 | 1/1.2 | 1/1.0 | qo | 136 | 95 | <u>,</u> I |
| . Heavy Goods Vehicle | 26 | 24 | 1.39 | 1.46 | 1/1.3 | 1/0.9 | do | 28 | 68 | I |
| . Bus | 694 | 643 | 1.51 | 1.36 | 1/1.0 | 1/1.1 | qo | 1,058 | 803 | i |
| 6. Matatu Mini Bus | I | I | ł | ٤ | I | I | · 1 | I | I | I |
| . Motorcycle | I | ł | I | ł | ı | } | I | đ | . 1 | I |
| 8. Bicycle Others | I | 1 | I | I | ı | i | i | I | I | I |
| Total | 12.289 | 14.169 | ı | | I | : | | 16 100 | | |

Average Annual Daily Traffic Calculation Sheet

| Road/Inter- section | C63 to East | | Ratio | , , | , Ratio | | Correction Factor | · | (AADT) | |
|------------------------|----------------------------------|-----------|-----------|--------------|------------|--------------|----------------------|---------------|-------------------------------|-------------------|
| ion | Kiambu - Al04 Al04 - Kiambu -do- | A104 - Ki | ambu -do- | н ор 1 | -op- | н ор н | ł | Kiambu - AlO4 | Kiambu - AlO4 AlO4 - Kiambu I | Both Direction |
| Type of Vehicle | | | | | | | | | | |
| Car, Taxi | 147 | 116 | 1.30 | 1.30 | 1/1.0 | 1/1.0 | 1.01 | 193 | 152 | 345 |
| Light Goods Vehicle | 061 | 155 | 1.13 | 1.13 | 1/1.1 | 1/1.1 | 1.01 | 197 | 161 | 358 |
| Medium Vehicle | e 39 | 25 | 1.00 | 1.00 | 1/1.1 | 1/1.1 | 1.01 | 37 | 24 | 61 |
| Heavy Goods Vehicle | 12 | Ϋ́ | 1.00 | 1.00 | 1/1.1 | 1/1.1 | 1.01 | 11 | 13 | 14 |
| Bus | . 27 | 14 | 1.15 | 1.15 | 1/1.1 | 1/1.1 | 1.01 | 29 | 15 | 77 |
| Matatu Mini Bus | I | - I | | 1 | 2 | E. | 1 - | | | ₽ |
| Motorcycle | • I | E | I | I | ł | 1 | I | I | | 1 |
| 8. Bicycle Others | I | 1 · · | f | 1 | Ϊ. | ан (, | 1 | t | 1 | 1 1 |
| Total | 415 | 312 | ł | 1 | 1 | 1 | I . | | 1 | 822 |

Average Annual Daily Traffic Calculation Sheet

| S | Station No. | No. 18 | | | .* | - - - | | - - - - | | | |
|-----------------|---------------------------|--------------------------------|----------|--------------------|------|---------------------------|--------------------|------------------|--|----------------------|---------------|
| Å Å Å | Date, Time Road/Inter- | Al04 To North | | Daily/day Ratic | Time | Weekly Variation Ratio | Variation Ratio | Cor | Average Annual Daily Traffic (AADT) | al Daily T (AADT) | raffic |
| ā | tion | Limuru - NRB NRB - Limuru -do- | - Limuru | -qo- | -qo- | do | -do- | r acror | Limuru - NRB NRB - Limuru Both Direction | - Limuru B | oth Direction |
| Ty ₁ | :le | - | | | | | | | | | |
| Ι. | Car, Taxi | 686 | 604 | 1.21 | 1.33 | 1/1.1 | 1/0.9 | 1.01 | 762 | 902 | 1,664 |
| ~ ∧-V- | Light Goods Vehicle | 806 | 729 | 1.24 | I.23 | 1/1.3 | 1/1.0 | 1.01 | 776 | 906 | 1,682 |
| | Medium Vehicle | 233 | 213 | 1.29 | 1.20 | 1/1.3 | 1/1.1 | 1.01 | 234 | 235 | 469 |
| 4 | Heavy Goods Vehicle | 154 | 177 | 1.39 | 1.46 | 1/0.9 | 1/1.1 | 1.01 | 240 | 201 | 441 |
| 5. | Bus | 124 | 63 | 1.51 | 1.36 | 1/1.1 | 1/1.1 | 1.01 | 176 | 116 | 292 |
| 6. | Matatu Míní Vehicle | 1 | I | I | I | I | ł | I | I | I | ł |
| 7. | Motorcycle | i. | ł | I | i | I | ı | I | . 1 | I | ŧ. |
| °. | Bicycle Others | ł | 1 | I | I | 1 · | I | I | I | I | 1. |
| | Total | 2,006 | 1,816 | ł | 1 | ł | 1 | I | ⁻ 1 | t | 4,548 |
| | | | | | | | - | | | | |

(Cont'd From No. 18 - 1)

Average Annual Daily Traffic Calculation Sheet

| Section with C63 Factor Factor Direction Limuru - NRB NRB - Limuru - Go- -do- - Limuru - NRB NRB - Limuru Both Direction ype of Vehicle 681 1.21 1.33 1/1.1 1/0.09 1.01 743 943 1,686 . Nehicle 182 212 1.29 1.20 1/1.3 1/1.1 1.01 220 204 424 Vehicle 182 212 1.39 1/1.1 1.01 220 204 424 Vehicle 118 113 1.51 1.36 1/1.1 1.01 205 204 424 Natau Mini - - - - - - - - - - - - - - - | ertion | Tuesday 2-12-86,12 hrs Al04 At Kikuyu Junc | hrs | Daily/day Rati | day Time Ratio | Weekly Var Ratio | ariation io | Time Weekly Variation Seasonal O Ratio Correction | | Average Annual Daily Traffic (AADT) | Traffic |
|--|------------------------|---|----------|-------------------|-------------------|---------------------|----------------|--|----------|--|----------------|
| Limuru - NRB NRB - Limuru - do- -do- -do- -do- -do- -do- -do- Limuru - NRB NRB - Limuru - NRB NRB - cle cle | | with C63 | | | | | | Factor | | | |
| 638 681 1.21 1.33 1/1.1 1/0.9 1.01 709 1,016 771 759 1.24 1.23 1/1.3 1/1.0 1.01 743 943 cle 182 212 1.29 1.20 1/1.3 1/1.1 1.01 743 943 cle 182 212 1.29 1.20 1/1.3 1/1.1 1.01 743 943 cle 182 212 1.29 1.20 1/1.3 1/1.1 1.01 220 204 118 113 1.51 1.36 1/1.1 1/1.1 1.01 220 204 118 113 1.51 1.36 1/1.1 1/1.1 1.01 220 204 - - - - - - - - - - - - - 118 113 1.51 1.36 1/1.1 1.01 164 141 - - - - - - - - - - | | Limuru - NRB NRB | - Limuru | -op- | -op- | -do- | -do- | L | | ł | 3oth Direction |
| 638 631 1.21 1.33 1/1.1 1/0.9 1.01 709 1.016 s 771 759 1.24 1.23 1/1.3 1/1.0 1.01 743 943 icle 182 212 1.29 1.20 1/1.3 1/1.1 1.01 743 943 icle 182 212 1.29 1.20 1/1.3 1/01 234 s 141 180 1.39 1.46 1/0.9 1/1.1 1.01 220 204 i 1 180 1.39 1.46 1/0.9 1/1.1 1.01 220 204 i - | pe of Vehicle | | | | | | | | | | |
| s 771 759 1.24 1.23 1/1.3 1/1.0 1.01 743 943 icle 182 212 1.29 1.20 1/1.1 1.01 182 234 s 141 180 1.39 1.46 1/0.9 1/1.3 1.01 220 204 i 118 113 1.51 1.36 1/1.1 1/1.1 220 204 i - - - - - - - - - i 1 1.3 1.51 1.36 1/1.1 1/1.1 200 204 i - - - - - - - - - - - i - <t< td=""><td>Car, Taxí</td><td>638</td><td>681</td><td>1.21</td><td>1.33</td><td>1/1.1</td><td>1/0.9</td><td>1.01</td><td>209</td><td>1,016</td><td>1,725</td></t<> | Car, Taxí | 638 | 681 | 1.21 | 1.33 | 1/1.1 | 1/0.9 | 1.01 | 209 | 1,016 | 1,725 |
| icle 182 212 1.29 1.20 1/1.3 1/1.1 1.01 182 234 s 141 180 1.39 1.46 1/0.9 1/1.3 1.01 220 204 118 113 1.51 1.36 1/1.1 1/1.1 1.01 164 141 i | Light Goods Vehicle | 771 | 759 | 1.24 | 1.23 | 1/1.3 | 1/1.0 | 1.01 | 743 | 943 | 1,686 |
| s 141 180 1.39 1.46 1/0.9 1/1.3 1.01 220 204 1 118 113 1.51 1.51 1.36 1/1.1 1/1.1 1.01 164 141 1 - - - - - - - - 1 - - - - - - - - 1 - - - - - - - - - 1 - - - - - - - - - - - 1 - | Medium Vehicl | | 212 | 1.29 | 1.20 | 1/1.3 | $1/1 \cdot 1$ | 1.01 | 182 | 234 | 416 |
| 118 113 1.51 1.51 1.64 141 - - - - - - - - - - - - - - - - - - - - - - - - - - - - </td <td>Heavy Goods</td> <td>141</td> <td>180</td> <td>1.39</td> <td>1.46</td> <td>1/0.9</td> <td>1/1.3</td> <td>1.01</td> <td>220</td> <td>204</td> <td>424</td> | Heavy Goods | 141 | 180 | 1.39 | 1.46 | 1/0.9 | 1/1.3 | 1.01 | 220 | 204 | 424 |
| | VEILLLE | 118 | 113 | 1.51 | 1.36 | 1/1.1 | 1/1.1 | 1.01 | 164 | 141 | 305 |
| | Matatu Míní b | t | I | 1 | l | I | I | | 1 | 1 | |
| | Motorcycle | I | í | | I | I | I | 1 | I | | |
| | Bicycle Others | I | I | I | ŀ | 1 | I | | : - 1 | Ť | ⊧.) |
| | Total | 8 | • | I | ł | ł | | ł | I | I | ł |
| | | | | | | | | | | | |

Average Annual Daily Traffic Calculation Sheet

| | Average Annual Daily Traffic (AADT) | | ti A104 - Both Direction 4 Dagoretti | | 2 309 621 | 3 320 652 | 70 72 142 | 12 17 29 | I3 5 I8 | 1 | ł | I | - 1,463 |
|-------------|--|---------|---|-----------------|--------------|--|-------------------|---------------------------|-------------|-----------------------|---------------|----------------------|---------|
| : | d | Factor | - Dagoretti - AlO4 | | 1.01 1,312 | 1:01 333 | 1.01 | 1.01 | 1.01 1 | i | 1 | 1 | 1 |
| | Weekly Variation Seasonal Ratio Correctio | | -dodo- | | | 1/1.1 1/1.1 | 1/1.1 1/1.1 | 1/1.1 1/1.1 | 1/1.1 1/1.1 | | 1 | I | ł |
| | Daily/day Time 1 Ratio | | -do | | 1.30 1.30 | 1.13 1.13 | 1.03 1.00 | 1.00 1.00 | 1.15 1.15 | 1 | ŧ | 1 | I |
| | ůt | | A104 - Dagoretti | | 235 | 308 | 76 | 19 | Ŋ | ł | I | I | 643 |
| No. 18 | Tuesday C63 To West | | Dagoretti - A104 | | 238 | 321 | :le 74 | 13 | 12 | I | ł | I | 658 |
| Station No. | Date, Time Road/Inter- | section | Direction | Type of Vehicle | l. Car, Taxi | Light Goods Vehicle | 3. Medium Vehicle | 4. Heavy Goods Vehicle | 5. Bus | 6. Matatu Mini Bus | 7. Motorcycle | 8. Bicycle Others | Total |

(Cont'd From No. 18 -1,2, & 3)

Table A- V-3(1)

.

| | | | Traff | Taffic Capacity of | Tab.L. city of | Table A- V-3(1 ty of Present Road | A- V-3(1) Present Road Not-works - | - | | · | | • | | Apper V.3 |
|-----------|-----------------------|----------------------|-------|--------------------|-------------------|--------------------------------------|---|-------------------|---|------|-----|--|--------|--------------|
| LINK NAME | No. of Lane (N) | Lane vídth (H) | (r1) | (rc) | (r _N) | (r ₁) | <pre>(2 lane) (2 lane) C=2,500xrLxrC xrWrT (4 lane 6 more) (4 lane 5 more) C=2,500xrLxrC xrNrIx</pre> | (r _p) | ч со к с с х с т т с с с с с | ~ | A | (2 lane) $C_{12}^{\mu}C_{D} \times \frac{100}{K}$ (4 lane more) $C_{12}^{\mu}C_{D} \times \frac{5000}{K-D}$ | Remark | ndix |
| A104-1 | 2 | 3.5 | 1.0 | 1.0 | 1.0 | 6.0 | 2,250 | 0.75 | 1,687 | 15.2 | 1 | 11,100 | | |
| A104-2 | 4 | 3.5 | 1.0 | 1.0 | 1.0 | 0.8 | 7,040 | 0.80 | 5,630 | 15.2 | 53 | 34,900 | | |
| A104-3 | 7 | 3.5 | 1.0 | 1.0 | 1.0 | 0.8 | 7,040 | 0.80 | 5,630 | 15.2 | 53 | 34,900 | | |
| A104-4 | . 4 | 3.6 | 1.0 | 0.8 | 1.0 | 0.7 | 4,930 | 0.80 | 3,940 | 12.3 | 53 | 30,300 | | |
| A104-5 | Ŷ | 3.0 | 0.85 | 0.8 | 1.0 | 0.7 | 6,280 | 0.80 | 5,030 | 12.3 | 53 | 38,500 | | |
| A104-6 | ¢ | 3.25 | 0.94 | 0.8 | 1.0 | 0.7 | 6,950 | 0.80 | 5,560 | 12.3 | 53 | 42,600 | | |
| A104-7 | vo | 3.20 | 0.94 | 0.8 | 1.0 | 0.7 | 6,950 | 0.80 | 5,560 | 12.3 | 53 | 42,600 | | |
| A104-8 | 9 | 3.20 | 0.94 | 0.8 | 1.0 | 0.7 | 6,950 | 0.80 | 5,560 | 12.3 | 53 | 42,600 | | |
| A104-9 | \$ | 3.0 | 0.85 | 0.8 | 1.0 | 0.7 | 6,280 | 0.80 | 5,030 | 12.3 | 53 | 38,500 | | |
| A104-10 | 2 | 4.25 | 1.0 | 1.0 | 1.0 | 0.8 | 2,000 | 0.80 | 1,600 | 12.9 | t . | 12,400 | | |
| A104-11 | 4 | 3.25 | 0.94 | 0.8 | 1.0 | 0.8 | 5,290 | 0.80 | 4,240 | 12.9 | 60 | 27,400 | | |
| A104-12 | 2 | 3.25 | 0.94 | 1.0 | 1.0 | 0.8 | 1,880 | 0.8 | 1,504 | 13.3 | J | 11,300 | | |
| A104-13 | 2 | 3.50 | 1.0 | 1.0 | 1.0 | 0.8 | 2,000 | 0.75 | 1,500 | 14.1 | i | 10,600 | | |
| A104-14 | 2 | 3.50 | 1.0 | 1.0 | 1.0 | 0.9 | 2,250 | 0.75 | 1,687 | 15.2 | I | 11,100 | | |
| A2-1 | 4 | 5.0 | 1.0 | 1.0 | 1.0 | 0.7 | 6,160 | 0.80 | 4,930 | 11.3 | 56 | 38,900 | | |
| A2-2 | 4 | 3.25 | 0.94 | 1.0 | 1.0 | 0.8 | 6,620 | 0.80 | 5,290 | 11.3 | 56 | 41,800 | | |
| A2-3 | 7 | 3.25 | 0.94 | 1.0 | 1.0 | 0.8 | 6,620 | 0.80 | 5,290 | 11.3 | 56 | 41,800 | | |
| 8-10 | ~ | 3.0 | 0.85 | 1.0 | 1.0 | 0.7 | 1,488 | 06.0 | 1,339 | 15 | ł | 9,300 | | |
| C-58 | 2 | 3.5 | 1.0 | 0.7 | 1.0 | 0.7 | 1,225 | 0.9 | 1,103 | . 15 | ł | 7,400 | | |
| C58-2 | 7 | 3.0 | 0.85 | 1.0 | 1.0 | 0.8 | 1,700 | 0.9 | 1,530 | 12.8 | | 12,000 | | |
| C58-3 | 2 | 2.75 | 0.77 | 1.0 | 1.0 | 0.8 | 1,540 | 0.9 | 1,386 | 19.0 | ı | 7,300 | | · |
| C59-1 | 7 | 3.5 | 1.0 | 1.0 | 1.0 | 0.7 | 1,750 | 0.9 | 1,575 | 13.0 | · 1 | 12,100 | | • |
| C59-2 | 7 | 3.25 | 0.94 | 1.0 | 1.0 | 0.7 | 1,645 | 6.0 | 187"1 | 13.0 | ı | 11,400 | | |
| C59-3 | 5 | 3.25 | 0.94 | 1.0 | 1.0 | 0.7 | 1,645 | 0.9 | 1,481 | 13.0 | -1 | 11,400 | | |
| C59-4 | 64 | 3,5 | 1.0 | 1.0 | 1.0 | 0.7 | 1,750 | 0.9 | 1,575 | 13.0 | ł | 12,100 | | · |
| C59-5 | 2 | 3.25 | 0.94 | 1.0 | 1.0 | 0.7 | 1,645 | 0.9 | 1,481 | 13.0 | ı | 11,400 | | |
| | | | | | | | | | | | | | | |

| | · | | | • | | | (2 lane) | | | | | (2 lane) | |
|-----------|-----------------------|----------------------|------|-------------------|-------------------|------|---|---------------------------|-------------|------|----|---|--------|
| LINK NAME | No. of Lane (N) | Lane width (M) | (11) | (r _C) | (r _N) | (L1) | C=2,500×tr×t ×rN×t (4 lane 6 more) C=2,500×tr×t ×rN*t×N | (<i>t</i> ^b) | CD •C×rP | × | p' | C ₁₂ ^{mC} D ^x <u>K</u> (4 lane more) C ₁₂ ^{mC} D ^x <u>K</u> 000 | Remark |
| C60-1 | 2 | 3.0 | 0.85 | 1.0 | 1.0 | 0.8 | 1,700 | 0.9 | 1,530 | 13.9 | | 11,000 | |
| C60-2 | 2 | 2.75 | 0.77 | 1.0 | 1.0 | 0.8 | 1,540 | 0.9 | 1,386 | 13.9 | t | 10,000 | |
| C61-1 | 5 | 3.50 | 1.00 | 0.85 | 1.0 | 0.7 | 1,488 | 0.9 | 1,339 | 15.7 | ł | 8,500 | |
| C61-2 | 5 | 3.50 | 1.00 | 0.85 | 1.0 | 0.7 | 1,488 | 0.9 | 1,339 | 15.7 | ı | 8,500 | |
| C61-3 | 2 | 3.25 | 0.94 | 1.0 | 1.0 | 0.8 | 1,880 | 0.9 | 1,692 | 15.7 | 1 | 10,800 | |
| C61-4 | 2 | 3.00 | 0.85 | 1.0 | 1.0 | 0.7 | 1,488 | 0.9 | 1,339 | 15.7 | ı | 8,500 | |
| C62-1 | 5 | 3.50 | 1.0 | 1.0 | 1.0 | 0.7 | 1,750 | 0.9 | 1,575 | 15 | ł | 10,500 | |
| C62-2 | 2 | 3.00 | 0.85 | 1.0 | 1.0 | 0.8 | 1,700 | 0.9 | 1,530 | 15 | 1 | 10,200 | |
| C62-3 | 2 | 3.50 | 1.0 | 1.0 | 1.0 | 0.9 | 2,250 | 0.85 | 1,913 | 15 | 1 | 12,800 | |
| C62-4 | 2 | 3.50 | 1.0 | 1.0 | 1.0 | 6 0 | 2,250 | 0.85 | 1,913 | 15 | ı | 12,800 | |
| C63-1 | ~ | 2.75 | 0.77 | 1.0 | 1.0 | 0.8 | 1,540 | 0.9 | 1,386 | 17.5 | ł | 2,900 | |
| C63-2 | 2 | 3.50 | 1.0 | 0.95 | 1.0 | 0.8 | 006'1 | 0.9 | 1,710 | 15.0 | ı | 11,400 | |
| C63-3 | 2 | 3.25 | 0.94 | 1.0 | 1.0 | 6 0 | 2,115 | 0.85 | 1,798 | 15.0 | 4 | 12,000 | |
| C63-4 | 2 | 3.25 | 0.94 | 1.0 | 1.0 | 0.9 | 2,115 | 0,85 | 1,798 | 15.0 | i | 12,000 | |
| C63-5 | 2 | 3.00 | 0.85 | 1.0 | 1.0 | 0.9 | I,913 | 0.85 | 1,626 | 15 | ı | 10,800 | |
| C63-6 | 2 | 3.25 | 0.94 | 0.95 | 1.0 | 6 0 | 2,009 | 0.85 | 1,708 | 15 | ı | 11,400 | |
| C63-7 | 77 | 2.75 | 0.77 | 06.0 | 1.0 | 0.8 | 1,386 | 0.85 | 1,178 | 15 | 1 | 006'4 | |
| C63-8 | 5 | 3.00 | 0,85 | 0.90 | 1.0 | 6.0 | 1,721 | 0.85 | 1,463 | 15 | 1 | 9,800 | |
| C63-9 | 2 | 2.75 | 0.77 | 0.9 | 1.0 | 0.9 | 1,559 | 0.85 | 1,325 | 15 . | 1 | 8,800 | |
| C63-10 | 2 | 2.75 | 0.77 | 1.0 | 1.0 | 0.9 | 1,733 | 0.85 | 1,473 | 15 | 1 | 9,800 | |
| C63-11 | 2 | 3.25 | 0.94 | 0.95 | 1.0 | 0.9 | 2,009 | 0.85 | 1,708 | 15 | ı | 11,400 | |
| C63-12 | 7 | 3.0 | 0.85 | 0.95 | 1.0 | 0.9 | 1,817 | 0.85 | 1,544 | 15 | t | 10,300 | |
| C64-1 | 2 | 2.75 | 0.77 | 1.0 | 1.0 | 0.9 | 1,733 | 0.85 | | 15 | I | 6,800 | |
| C64-2 | 2 | 2.75 | 0.77 | 6-0 | 1.0 | 0.9 | 1,559 | 0.85 | 1,325 | 15 | 1 | 8,800 | |
| C64-3 | - 7 | 2.75 | 0.77 | 6.0 | 1.0 | 0.9 | 1,559 | 0.85 | 1,325 | 15 | 1 | 8,800 | |
| | • | | • | | | | | | | | | | |

| 1 |
|-----------|
| Net-works |
| Road |
| Present |
| of |
| Capacity |
| Traffic |

ń

| Z 3.50 1.0 1.0 0.8 2,000 0.85 1,700 12.2 - 1 Z 3.50 1.0 1.0 1.0 0.8 2,000 0.85 1,700 12.2 - 1 Z 3.50 1.0 1.0 1.0 0.8 1,700 0.85 1,700 12.2 - 1 Z 3.50 0.77 1.0 1.0 0.8 1,700 0.85 1,700 15.2 - 1 Z 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,1309 15 - Z 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - Z 2.755 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - Z 2.275 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 | LINK NAME | No. of Lane (N) | Lane width (M) | (دار) | (rc) | (^N) | (L1) | <pre>(2 lane) C=2,500xrLxrC xrNxr1 (4 lane & more) C=2,500xrLxrC xrNr1xN</pre> | (لا ^ل) | CD *C×rP | м | A | (2 lane) $C_{12}^{-}C_{0}^{-} \times \frac{100}{K}$ (4 lane more) $C_{12}^{-}C_{0}^{-} \times \frac{5000}{K \cdot D}$ | Remark |
|--|------------------|-----------------------|----------------------|-------|------|------------------|------|--|--------------------|-------------|------|----|--|--------|
| Z 3.50 1.0 1.0 1.0 0.8 2,000 0.85 1,700 12.2 - 1 Z 3.50 1.0 1.0 1.0 1.0 0.8 1,700 0.85 1,700 12.2 - 1 Z 3.50 1.0 1.0 1.0 0.8 1,700 0.85 1,300 15 - 1 Z 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - Z 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - Z 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - Z 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - Z 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 <td>C98-1</td> <td>2</td> <td>3.50</td> <td>1.0</td> <td>1.0</td> <td>1.0</td> <td>0.8</td> <td>2,000</td> <td>0 85</td> <td>1,700</td> <td>12.2</td> <td> .</td> <td>13,900</td> <td></td> | C98-1 | 2 | 3.50 | 1.0 | 1.0 | 1.0 | 0.8 | 2,000 | 0 85 | 1,700 | 12.2 | . | 13,900 | |
| Z 3.50 1.0 1.0 0.8 2,000 0.85 1,700 12.2 - 1 Z 3.0 0.85 1.0 1.0 0.8 1,700 0.85 1,45 15 - 15 Z 2.75 0.77 1.0 1.0 0.8 1,500 0.85 1,700 15 - Z 2.75 0.77 1.0 1.0 0.8 1,560 0.85 1,700 15 - Z 2.2.75 0.77 1.0 1.0 0.8 1,560 0.85 1,309 15 - 3 2 2.75 0.77 1.0 1.0 0.8 1,450 0.85 1,309 15 - 3 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,78 | C98-2 | 7 | 3.50 | 1.0 | 1.0 | 1:0 | 0.8 | 2,000 | 0.85 | 1,700 | 12.2 | ł | 13,900 | |
| 2 3.0 0.85 1.0 1.0 0.8 1,700 0.85 1,909 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,708 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,708 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,708 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.070 0.85 1.0 1.0 0.8 1,463 0.85 1,700 1,540 0.95 1,718 < | C98-3 | 7 | 3.50 | 1.0 | 1.0 | 1.0 | 0.8 | 2,000 | 0.85 | 1 700 | 12.2 | ı | 13,900 | |
| 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,138 1.5 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,138 1.5 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,138 1.5 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,290 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,290 15 - 2 2.775 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.775 0.77 1.0 1.0 0.8 1,540 0.85 1,708 15 - 2 2.775 0.77 1.0 1.0 0.8 1,190 0.9 1,718 15 - 2< | n378-1 | 7 | 3.0 | 0.85 | 1.0 | 1.0 | 0.8 | 1,700 | 0.85 | 1,445 | 15 | ı | 9,600 | |
| 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,738 5 - 2 2.75 0.77 0.9 1.0 0.8 1,540 0.85 1,73 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,244 15 - 2 2.275 0.77 1.0 1.0 0.8 1,540 0.85 1,244 15 - 2 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,599 15 - 2 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,73 15 - 2 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,73 15 - 2 2 2.75 0.77 1.0 1.0 0.8 1,1360 0.9 1,173 | D378-2 | 8 | 2.75 | 0.77 | 1.0 | 1.0 | 0.8 | 1,540 | 0.85 | 1,309 | 15 | ı | 8,700 | |
| 2 2.75 0.77 1.0 1.0 0.8 1,366 0.85 1,178 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,190 0.9 1,178 15 - 2 3.00 0.85 1.0 0.8 1,190 0.9 1,178 15 - 2 2.75 0.77 1.0 1.0 0.8 1,309 15 - - - - - <td< td=""><td>D400</td><td>2</td><td>2.75</td><td>0.77</td><td>1.0</td><td>1.0</td><td>0.8</td><td>1,540</td><td>0.85</td><td>1,309</td><td>15</td><td>1</td><td>8,700</td><td></td></td<> | D400 | 2 | 2.75 | 0.77 | 1.0 | 1.0 | 0.8 | 1,540 | 0.85 | 1,309 | 15 | 1 | 8,700 | |
| 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 0.95 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,396 0.85 1,190 0.85 1,718 15 - 2 2.75 0.77 1.0 1.0 0.8 1,399 0.9 1,190 0.9 1,118 15 - 2 2.00 0.85 0.7 1.0 1.0 0.8 1,399 15 - - 2 2.75 0.77 1.0 1.0 0.8 1,399 15 - - - - - - - - - - - | D400-2 | 2 | 2.75 | 0.77 | 0.9 | 1.0 | 0.8 | 1,386 | 0.85 | 1,178 | 15 | ı | 7,900 | |
| 2 2.75 0.77 1.0 0.8 1,463 0.85 1,244 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,306 0.9 1,071 15 - 2 2.75 0.77 1.0 1.0 0.8 1,309 0.9 1,971 15 - 2 2.75 0.77 1.0 0.8 1,309 0.9 1,971 15 - 2 2.75 0.77 1.0 1.0 0.8 1,309 0.9 1,971 15 - 2 2.75 0.77 1.0 1.0 0.8 1,445 0.9 1,911 1 - - | D407-1 | 2 | 2.75 | 0.77 | 1.0 | 1.0 | 0.8 | 1,540 | 0.85 | 1,309 | 15 | i | 8,700 | |
| 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,70 15 - 2 3.00 0.85 0.9 1.0 0.8 1,940 0.85 1,718 15 - 2 3.00 0.85 0.7 1.0 0.8 1,190 0.9 1,718 15 - 2 2.755 0.77 1.0 1.0 0.8 1,309 15 - 2 2.755 0.77 1.0 1.0 0.8 1,309 15 - 2 2.755 0.77 1.0 1.0 0.8 1,240 0.95 1,011 15 - 2 2.755 0.77 1.0 1.0 0.8 1,240 0.9 1,241 15 - 2 2.755 <td>D407-2</td> <td>2</td> <td>2.75</td> <td>0.77</td> <td>0.95</td> <td>1.0</td> <td>0.8</td> <td>1,463</td> <td>0.85</td> <td>1 244</td> <td>15</td> <td>÷</td> <td>8,300</td> <td></td> | D407-2 | 2 | 2.75 | 0.77 | 0.95 | 1.0 | 0.8 | 1,463 | 0.85 | 1 244 | 15 | ÷ | 8,300 | |
| Z 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,309 15 - Z 2.75 0.77 1.0 1.0 0.8 1,340 0.85 1,309 15 - Z 3.00 0.85 0.9 1.0 0.8 1,190 0.85 1,71 15 - Z 3.00 0.85 0.7 1.0 1.0 0.8 1,190 0.9 1,071 15 - Z 2 2.75 0.77 1.0 1.0 0.8 1,540 0.9 1,178 15 - Z 2 2.75 0.77 1.0 1.0 0.8 1,540 0.9 1,178 15 - Z 2 2.75 0.77 1.0 1.0 0.8 1,540 0.9 1,301 15 - Z 2 2.75 0.77 0.90 1.0 0.9 1,240 0.9 1,301 15 - SIIN 2 2.077 0.90 1.0 | D407-3 | 2 | 2.75 | 0.77 | 1.0 | 1.0 | 0.8 | 1,540 | 0.85 | 1,309 | 15 | ï | 8,700 | |
| 2 2.75 0.77 1.0 1.0 0.8 1,540 0.85 1,70 15 - 2 3.00 0.85 0.9 1.0 0.8 1,190 0.9 1,718 15 - 2 3.00 0.85 0.7 1.0 0.8 1,190 0.9 1,178 15 - 2 3.00 0.85 0.77 1.0 1.0 0.8 1,309 0.9 1,178 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.9 1,386 15 - 2 2.75 0.77 1.0 1.0 0.8 1,299 0.9 1,386 15 - 2 2.75 0.77 1.0 1.0 0.8 1,299 0.9 1,316 15 - 2 2.75 0.77 0.90 1.0 0.8 1,445 0.9 1,301 15 - 8TIN 2 2 2.75 0.77 0.90 1,446 0.9 1,447 <td>D407-4</td> <td>2</td> <td>2.75</td> <td>0.77</td> <td>1.0</td> <td>1.0</td> <td>0.8</td> <td>1,540</td> <td>0.85</td> <td>1 309</td> <td>15</td> <td>ı</td> <td>8,700</td> <td></td> | D407-4 | 2 | 2.75 | 0.77 | 1.0 | 1.0 | 0.8 | 1,540 | 0.85 | 1 309 | 15 | ı | 8,700 | |
| Z 3.00 0.85 0.7 1.0 0.8 1,136 0.85 1,718 15 - Z 3.00 0.85 0.7 1.0 0.8 1,190 0.9 1,071 15 - Z 2.755 0.77 0.85 1.0 0.8 1,540 0.9 1,178 15 - Z 2.755 0.77 1.0 1.0 0.8 1,540 0.9 1,78 15 - Z 2.755 0.77 1.0 1.0 0.8 1,540 0.9 1,386 15 - Z 2.755 0.77 1.0 1.0 0.8 1,445 0.9 1,386 15 - ROAD 2 2.775 0.77 0.90 1.0 0.8 1,445 0.9 1,361 15 - ROAD 2 2.775 0.77 0.90 1.0 0.8 1,445 0.9 1,247 15 - ROAD 2 2.775 0.77 0.90 1.0 1.0 <t< td=""><td>D409-1</td><td>2</td><td>2.75</td><td>0.77</td><td>1.0</td><td>1.0</td><td>0.8</td><td>1,540</td><td>0.85</td><td>1,309</td><td>15</td><td>ł</td><td>8,700</td><td></td></t<> | D409-1 | 2 | 2.75 | 0.77 | 1.0 | 1.0 | 0.8 | 1,540 | 0.85 | 1,309 | 15 | ł | 8,700 | |
| 2 3.00 0.85 0.7 1.0 0.8 1,190 0.9 1,071 15 - 2 2.75 0.77 0.85 1.0 0.8 1,309 0.9 1,178 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.9 1,178 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.9 1,386 15 - 2 2.75 0.77 1.0 1.0 0.8 1,445 0.9 1,361 15 - 2 2.755 0.77 0.90 1.0 0.8 1,445 0.9 1,361 15 - ROAD 2 2.755 0.77 0.90 1.0 0.8 1,345 0.9 1,361 15 - ROAD 2 2.755 0.77 0.90 1.0 0.8 1,345 0.9 1,247 15 - ROAD 2 2.755 0.77 0.90 1.0 0.9 | D409-2 | 2 | 3.00 | 0.85 | 6 0 | 1.0 | 0.8 | 1,386 | 0.85 | 1,178 | 15 | 1 | 7,900 | |
| 2 2.75 0.77 0.85 1.0 0.8 1,309 0.9 1,178 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.9 1,386 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.9 1,386 15 - 2 2.75 0.77 0.75 1.0 0.9 1,299 0.95 1,361 15 - 2 2.75 0.77 0.77 0.90 1.0 0.8 1,445 0.9 1,316 15 - ROAD 2 2.75 0.77 0.90 1.0 0.8 1,445 0.9 1,311 15 - ROAD 2 2.75 0.77 0.90 1.0 0.8 1,386 0.9 1,311 15 - ROAD 2 2.75 0.77 0.90 1.0 1.0 1.445 0.9 1,247 15 - ROAD 2 3.5 1.0 1.0 1. | D410-1 | 7 | 3.00 | 0.85 | 0.7 | 1.0 | 0.8 | 1,190 | 0.9 | 1,071 | 15 | Ļ | 7,100 | |
| -3 2 2.75 0.77 1.0 1.0 0.8 1,540 0.9 1,386 15 - 2 2.75 0.77 1.0 1.0 0.8 1,540 0.9 1,386 15 - AUSTIN 2 2.75 0.77 1.0 1.0 0.8 1,540 0.9 1,386 15 - AUSTIN 2 2.755 0.77 0.75 1.0 0.8 1,445 0.9 1,301 15 - AN ROAD 2 2.755 0.77 0.90 1.0 0.8 1,445 0.9 1,247 15 - AN ROAD 2 2.755 0.77 0.90 1.0 0.8 1,386 15 - AN ROAD 2 2.755 0.77 0.90 1.0 0.8 1,386 15 - AN ROAD 2 2.1.0 1.0 1.0 1.0 1.23 15 - KARD 4 3.5 1.0 1.0 1.0 0.7 6,160 0.9 | D410-2 | 2 | 2.75 | 0.77 | 0.85 | 1.0 | 0.8 | 1,309 | 0.9 | 1,178 | 15 | ì | 2,900 | |
| 2 2.75 0.77 1.0 1.0 0.8 1,540 0.9 1,386 15 - AUSTIN 2 2.75 0.77 0.75 1.0 0.9 1,299 0.85 1,104 15 - HA ROAD 2 3.00 0.85 0.85 1.0 0.8 1,445 0.9 1,301 15 - HA ROAD 2 2.75 0.77 0.90 1.0 0.8 1,445 0.9 1,301 15 - SSIE AVE 4 3.5 1.0 1.0 0.8 1,386 0.9 1,247 15 - SSIE AVE 4 3.5 1.0 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 KA ROAD FAST 4 3.5 1.0 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 KA ROAD FAST 4 3.5 1.0 0.7 6,160 0.9 12.3 53 " WEST 2 3.5 1.0 | D410-3 | 2 | 2.75 | 0.77 | 1.0 | 1.0 | 0.8 | I,540 | 0.9 | 1,386 | 15 | ŧ | 9,200 | |
| Z 2.75 0.77 0.75 1.0 0.9 1,299 0.85 1,104 15 - AUSTIN Z 3.00 0.85 0.05 1.0 0.8 1,445 0.9 1,301 15 - AN ROAD Z 3.00 0.85 0.09 1.0 0.8 1,445 0.9 1,301 15 - AN ROAD Z 2.75 0.77 0.90 1.0 0.8 1,386 0.9 1,247 15 - SSIE AVE 4 3.5 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 HIES ROAD 4 3.5 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 KA ROAD FAST 4 3.5 1.0 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 "WEST 2 3.5 1.0 0.7 6,160 0.9 1,2.3 53 "WEST 2 3.5 1.0 0.7 4,9310 <td>D412</td> <td>2</td> <td>2.75</td> <td>0.77</td> <td>1.0</td> <td>1.0</td> <td>0.8</td> <td>1,540</td> <td>0.9</td> <td>1,386</td> <td>15</td> <td>ŧ</td> <td>9,200</td> <td>•</td> | D412 | 2 | 2.75 | 0.77 | 1.0 | 1.0 | 0.8 | 1,540 | 0.9 | 1,386 | 15 | ŧ | 9,200 | • |
| 2 3.00 0.85 0.85 1.0 0.8 1,445 0.9 1,301 15 - 2 2.75 0.77 0.90 1.0 0.8 1,386 0.9 1,247 15 - 4 3.5 1.0 1.0 1.0 0.7 0.01 0.0 5,540 12.3 53 6 16.0 0.9 5,540 12.3 53 4 3.5 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 6 3.5 1.0 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 6 3.5 1.0 1.0 1.0 0.7 4,930 0.9 4,440 12.3 53 5 3.5 1.0 0.7 1,487 0.9 1,338 12.3 53 5 3.5 1.0 1.0 1.0 0.8 1,338 12.3 53 5 3.5 1.0 1.0 0.8 0.9 1,800 12.3 </td <td>E433</td> <td>2</td> <td>2.75</td> <td>0.77</td> <td>0.75</td> <td>1.0</td> <td>0.9</td> <td>1,299</td> <td>0.85</td> <td>1,104</td> <td>15</td> <td>ı</td> <td>7 ,400</td> <td></td> | E433 | 2 | 2.75 | 0.77 | 0.75 | 1.0 | 0.9 | 1,299 | 0.85 | 1,104 | 15 | ı | 7 ,400 | |
| 2 2.75 0.77 0.90 1.0 0.8 1,386 0.9 1,247 15 - 4 3.5 1.0 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 6 3.5 1.0 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 1ST 4 3.5 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 1ST 4 3.5 1.0 1.0 0.7 4,930 0.9 4,440 12.3 53 1ST 2 3.5 1.0 0.8 1.0 0.7 1,487 0.9 1,038 12.3 53 1ST 2 3.5 1.0 1.0 0.8 1,036 12.3 53 53 2 3.5 1.0 1.0 0.8 2,000 0.9 1,900 12.3 53 2 3.5 1.0 1.0 0.8 2,000 0.9 1,800 12.3 53 53 <td>ST. AUSTIN</td> <td>5</td> <td>3.00</td> <td>0.85</td> <td>0.85</td> <td>1.0</td> <td>0.8</td> <td>1,445</td> <td>0.9</td> <td>1,301</td> <td>15 .</td> <td>I</td> <td>8,700</td> <td></td> | ST. AUSTIN | 5 | 3.00 | 0.85 | 0.85 | 1.0 | 0.8 | 1,445 | 0.9 | 1,301 | 15 . | I | 8,700 | |
| 4 3.5 1.0 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 AST 4 3.5 1.0 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 AST 4 3.5 1.0 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 AST 4 3.5 1.0 1.0 0.7 4,930 0.9 4,440 12.3 53 SST 2 3.5 1.0 0.7 4,930 0.9 1,338 12.3 53 Z 3.5 1.0 1.0 0.8 1.0 0.9 1,338 12.3 53 Z 3.5 1.0 1.0 0.8 2,000 0.9 1,800 12.3 5 Z 3.5 1.0 1.0 0.8 2,000 0.9 1,800 12.3 5 | NGECHA ROAD | 2 | 2.75 | 0.77 | 06.0 | 1.0 | 0.8 | 1,386 | 0.9 | 1,247 | 15 | 1 | 8,300 | |
| 4 3.5 1.0 1.0 1.0 0.7 6,160 0.9 5,540 12.3 53 IST 4 3.5 1.0 0.8 1.0 0.7 4,930 0.9 4,440 12.3 53 IST 2 3.5 1.0 0.8 1.0 0.7 4,930 0.9 4,440 12.3 53 IST 2 3.5 1.0 0.85 1.0 0.7 1,487 0.9 1,338 12.3 - IST 2 3.5 1.0 1.0 0.8 2,000 0.9 1,800 12.3 - IST 2 3.5 1.0 1.0 0.8 2,000 0.9 1,800 12.3 - IST 1.0 1.0 1.0 0.8 2,000 0.9 1,800 12.3 - | SELASSIE AVE | 4 | 3.5 | 1.0 | 1.0 | 1.0 | 0.7 | 6,160 | 6-0 | 5,540 | | 53 | 42,500 | |
| NST 4 3.5 1.0 0.8 1.0 0.7 4,930 0.9 4,440 12.3 53 SST 2 3.5 1.0 0.85 1.0 0.7 1,487 0.9 1,338 12.3 - Z 3.5 1.0 0.85 1.0 0.7 1,487 0.9 1,338 12.3 - Z 3.5 1.0 1.0 1.0 0.8 2,000 0.9 1,800 12.3 - Z 3.5 1.0 1.0 1.0 0.8 2,000 0.9 1,800 12.3 - Z 3.5 1.0 1.0 1.0 0.8 2,000 0.9 1,800 12.3 - | LANDHIES ROAD | 4 | 3.5 | 1.0 | 1.0 | 1.0 | 0.7 | 6,160 | 6.0 | 5,540 | 12.3 | 53 | 42,500 | |
| 25T 2 3.5 1.0 0.85 1.0 0.7 1,487 0.9 1,338 12.3 - 2 3.5 1.0 1.0 1.0 0.8 2,000 0.9 1,800 12.3 - 2 3.5 1.0 1.0 1.0 0.8 2,000 0.9 1,800 12.3 - 2 3.5 1.0 1.0 1.0 0.8 2,000 0.9 1,800 12.3 - | LUSAKA ROAD FAST | 4 | 3.5 | 1.0 | 0.8 | 1:0 | 0.7 | 4,930 | 0.9 | 4,440 | 12.3 | 53 | 34,100 | · |
| 2 3.5 1.0 0.8 2,000 0.9 1,800 12.3 - 2 3.5 1.0 1.0 1.0 0.8 2,000 0.9 1,800 12.3 - | " WEST | 7 | 3.5 | 1.0 | 0.85 | 1.0 | 0.7 | 1,487 | 6.0 | 1,338 | 12.3 | ı | 10,100 | |
| 2 3.5 1.0 1.0 0.8 2,000 0.9 1,800 12.3 ~ | NBAGATHI ROAD | 2 | 3.5 | 1.0 | 1.0 | 1.0 | 0.8 | 2,000 | 0.9 | 1,800 | 12.3 | ı | 14,600 | |
| | VALLY ROAD | 7 | 3.5 | 1.0 | 1.0 | 1.0. | 0.8 | 2,000 | 0.9 | 1,800 | | | 14,600 | |

Traffic Capacity of Present Road Net-works - 4

| LINK NAME | No. of Lane (N) | Lane width (M) | (rl) | (r _L) (r _C) (r _N) | (r _N) | (I,I) | <pre>(2 lane) C=2,500xrLxrC xrNxrI (4 lane 6 more) C=2,500xrLxrC xrNrIxN</pre> | (rp) | CD CD C | м | P | (2 lane) C ₁₂ ^m C _D x <u>100</u> (4 lane more) C ₁₂ ^m C _D x <u>8.0</u> | Remark |
|---------------------|-----------------------|----------------------|------|---|-------------------|-------|--|------|---------------|------|----|---|--------|
| UNIVERSITY ROAD | 4 | 3.25 | 0.94 | 6.0 | 1.0 | 0.8 | 5,960 | 6.0 | 5,360 | 12.3 | 53 | 41,100 | |
| MURANGA ROAD | * | 3.5 | 1.0 | 0.9 | 1.0 | 0.8 | 6,340 | 0.9 | 5,700 | 12.3 | 53 | 43,740 | |
| RING ROAD | 2 | 3.5 | 1.0 | 0.7 | 1.0 | 0.8 | 1,400 | 0.9 | 1,260 | 12.3 | ı | 10,200 | |
| JULA EAST ROAD | 5 | 3.5 | 1.0 | 1.0 | 1.0 | 0.8 | 2,000 | 0.9 | 1,800 | 12.3 | ı | 14,600 | |
| EASTLEIGH FIRST AV. | 4 | 3.0 | 0.85 | 0.95 | 1.0 | 0.8 | 5,680 | 0.9 | 5,120 | 12.3 | 53 | 41,600 | |
| JOCOO ROAD EAST | 3 | 3.5 | 1.0 | 6.0 | 1.0 | 0.8 | 1,800 | 0.9 | 1,620 | 12.3 | T | 13,200 | |
| " CENTER | 4 | 3.5 | 1.0 | 1.0 | 1.0 | 0.8 | 7 ,040 | 0.9 | 6.340 | 12.3 | 53 | 48,600 | |
| " WEST | 4 | 3.5 | 1.0 | 0.95 | 1.0 | 0.8 | 6,690 | 0.9 | 6,020 | 12.3 | 53 | 46,200 | |
| LIKONI ROAD | 2 | 3.5 | 1.0 | 1.0 | 1.0 | 0.8 | 2,000 | 0.9 | 1,800 | 12.3 | ι | 14,600 | |
| ENTERPRISE ROAD | 10 | 3.0 | 0.85 | 1.0 | 1.0 | 0.8 | 1,360 | 0.9 | 1,224 | 12.3 | ı | 9,600 | |
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Appendix V.4

Traffic Capacity Calculation Formula

The method of calculations are shown the following formula applied the Road Capacity Manual of Japan.

- 1. Possible Capacity
 - 1) a single carriageway $C = 2,500 r_{I} \cdot r_{C} \cdot r_{N} \cdot r_{I} (p.c.u/h)$

2) a dual carriageway

 $C = 2,200 r_L \cdot r_C \cdot r_N \cdot r_I \times N (p.c.u/h)$

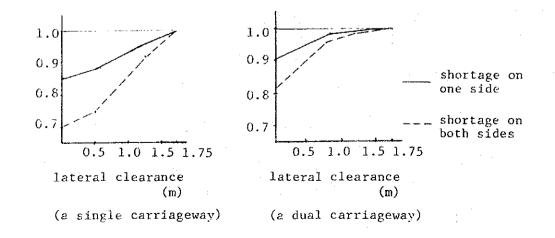
C : possible capacity

| $\mathbf{r}_{\mathbf{L}}$ | : | adjustment | factor | of | lane width | |
|---------------------------|---|-------------|--------|----|--------------------------------|--|
| $\mathbf{r}_{\mathbf{C}}$ | : | 11 | | of | lateral clearance | |
| r _N | : | n | | | including motor cycle and ycle | |
| rı | : | Ĥ | | of | roadside conditions | |
| N | : | No. of lane | 25. | | | |

- Adjustment for lane width (r_L)

| lane width (m) | (r _L) Adjustment Factor |
|----------------|--|
| 3.50 | 1.00 |
| 3.25 | 0.94 |
| 3.00 | 0.85 |
| 2.75 | 0.77 |

- Adjustment for lateral clearance (r_C)



- Adjustment for mixing of motorcycle and bicycle (r_N)

$$r_{N} = \frac{100}{100 + \alpha P_{m} + \beta \cdot P_{B}}$$

 $r_{\rm N}$: adjustment factor for including motor cycle and bicycle α : conversion factors for passenger car in motor cycle

 P_m : percentage of motor cycle (%)

 $\boldsymbol{\beta}$: conversion factors for passenger car in bicycle

 P_{β} : percentage of bicycle (%)

- Adjustment for roadside condition (r₁)

| No. of lanes Roadside conditions | 2 lanes | Multi-lane |
|--|---------|------------|
| • free way | 1.00 | 1.00 |
| • mountainous area | 0.90 | 0.95 |
| • level terrain | 0.85 | 0.90 |
| • urban area | 0.70 | 0.75 |

(1) Adjustment Factor for roadside conditions

(2) Adjustment Factor for roadside conditions

| Degree of urbanaization | adjustment |
|----------------------------|------------|
| Rural area | 1.0 ~ 0.9 |
| Suburb | 0.9 0.8 |
| Urban area | 0.8 % 0.7 |

2. Design Capacity

 $C_{D} = C \times r_{p}$

C_D : Design Capacity (p.c.u./h)

C : Possible Capacity (p.c.u./h)

 \mathbf{r}_{D} : reduced ratio for Level of Service

| Level of | Adjustment factor f | or Level of Service |
|----------|---------------------|---------------------|
| Service | rural area | urban area |
| 1 | 0.75 | 0.80 |
| 2 | 0.85 | 0.90 |
| 3 | 1.00 | 1.00 |

3. Calculation of Daytime 12 hours Traffic Capacity

(Multi-lane road)

$$C_{12} = \frac{C_D/2}{(K/100) \times (D/100)} = C_D \times \frac{5,000}{K \times D}$$

(Single carriageway road)

$$C_{12} = \frac{C_D}{K/100} = C_D \times \frac{100}{K}$$

where

C12: Daytime 12 hrs traffic capacity

C_D : Design Capacity (p.c.u./h)

- K : Percentage of 30th hourly volume in yea within average daytime 12 hrs traffic.
- D : Percentage of heavy direction in peak hour traffic

<u>K-value</u>

$$K = \frac{a \times Q_p + b}{Q_{12}} \times 100$$

where K

 K : Percentage of 30 th hourly volume in Average Annual Daytime 12 hrs. Traffic
 Q_p : Peak hour traffic (p.c.u./h)
 Q₁₂ : Daytime 12 hrs. traffic (p.c.u./l2 hrs)

12

a,b : parameter

| Roadside condition | а | ь |
|---------------------|------|-------|
| Urban area | 1.12 | 20.4 |
| Level terrain | 1.06 | 167.5 |
| Mountainous terrain | 1.01 | 377.6 |

D-value

$$D = \frac{\max (P_u, P_d)}{P_u + P_d} \times 100$$

where D

: Percentage of heavy direction in peak hour traffic

 $P_{\mathbf{U}}$: Up-stream traffic in peak hour (p.c.u./h)

 P_d : Down-stream traffic in peak hour (p.c.u./h)

Appendix V.5

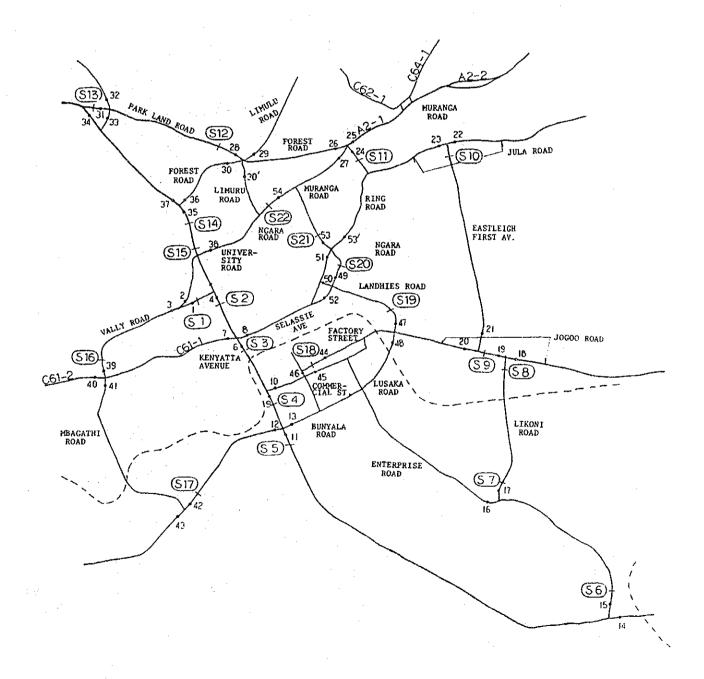
Present Road Inventory

The present road condition in the Nairobi area were surveied at 22 points in the central area of the Nairobi and at 31 points in and around the Nairobi area as shown in the next Figure.

The detail condition of the roads are shown in the next table of the present road inventory.

Survey and Measure Points of Present Conditions of Road (C.B.D.)

Fig A- V-5.1



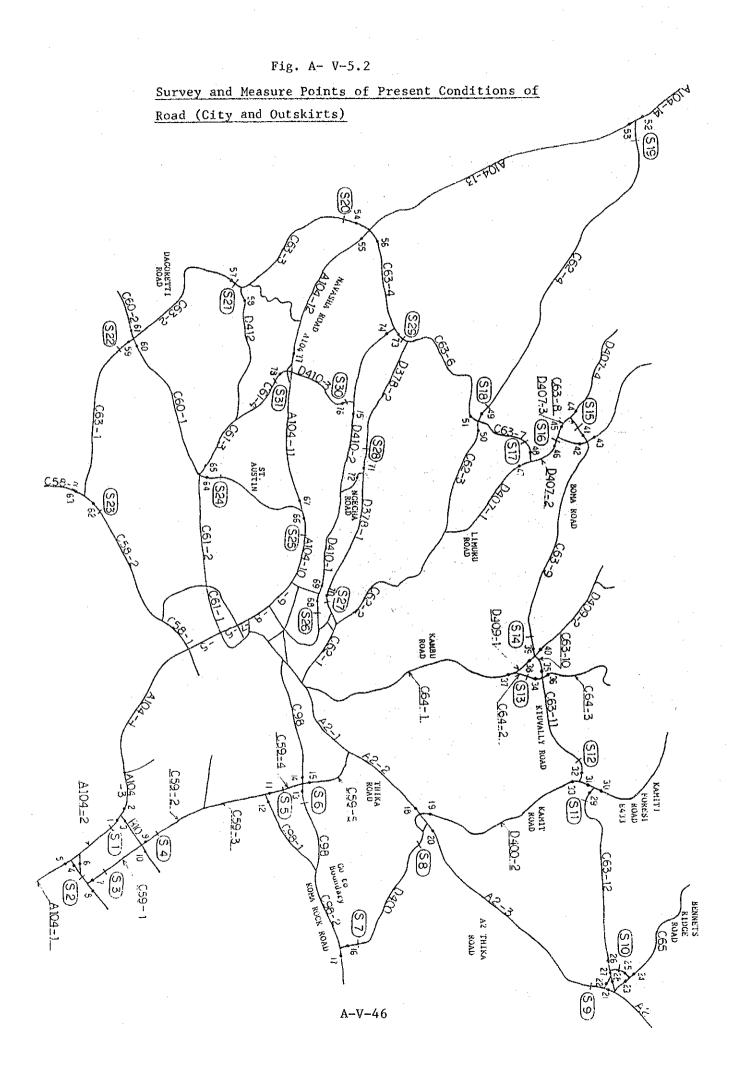


Table A- V-5.3

Present Road Inventory

REGION: C.B.D.

, • • •

| | | Remarks | · · · | | Up - 3 lanes Down - 2 lanes | Ditection S1+SI5 (one way) | Single catriageway - 2 way | Dual carriageway S2→S3 | ™ | Dual carriageway | I¢ = 31 0¢ = 60 | No.7 - single carriageway - 2 way | Single carriageway - 2 way | Dual carriageway | Ib = 43.5 Ob = 65.5 | S5+S18 single c. way - 2 way | Dual carriageway | Single c.way 2 way | $I\phi = 43.0 O\phi = 77$ | Dual carriageway | Síngle c. way | | 90.0m | Elliptical $I\phi_1 = 90.0, 0\phi_1 = 108$ | 34.5 $I\phi_2 = 34.5, C\phi_2 = 50.4$ | Reserve onleft = 4.0m |
|-------------------------|-------------|----------|-------------|--------------------|-----------------------------|----------------------------|---|------------------------|---------|------------------|-----------------|-----------------------------------|----------------------------|------------------|---------------------|------------------------------|------------------|--------------------|----------------------------|------------------|-------------------|-------|------------|--|---|-----------------------|
| © | | | 1 | Pedest- rian | 2M | 2 | 1.5 | 4.5 | 5.0 | 2M | 2.0 | 1.5 | 2.0 | 4.5 | | 4.0 | 3.0 | 2.0 | | 1 | 1 | , | 1 | 3.0 | | 4.0 |
| () () () | | | E Đ | Pedest- rian | 1 MOL | m | 1.5 | 4.5 | 4.5 | 6.0 | 1.5 | 2.0 | 1.5 | 4 ° 0 | • = | 5.0 ; | 4.0 | None | | | 1 | 1 | | 2.0 1 | · | |
| g up central reserve | | 96 | 2 2 2 | Shoul- | | • | • | r . r | i. T | 1 | 1 | - | 1 | 1 | | 1 | t | | - | 3.0 | 3.0 | 4.0 | 2.0 | 1.0 | • | 1.0 |
| 5 | ງ]]] ຊື | | 5 | Shoul- der | , | I | | | 1 | | 1 | , , | · · | | | 1 | 1 | – ۱ | | 3.0 | 3.0 | 3 0 | 3.0 | 1.0 | | I |
| . (1) | E of | | - | Central Reserve | IM | 1 | I | 5.5 | 5,5 | 0.7 | ł | 6.0 | ł | 0.6 | | ı | 13.0 | J | | 28.5 | 1 | 1 | F | 6.0 | | 1 |
| | No. of | lanae | | | 5 | 2 | 4 | ę | Ŷ | Q | 4 | 9 | 2 | 6.0 | | 2.0 | 4 | 2 | | 4 | 6 | м | 7 | 4 | - | 0 |
| | Width of | i. | way (m) | | 16M | 6.5 | 13.5 | 19 | 19.5 | 21.0 | 0.11 | 19.0 | 0.6 | 38 | - | 0.6 | 14.5 | 7.0 | | 14.0 | 6.0 | 6.0 | 7.0 | 16 | | 8.0 |
| | Name of | the road | | | Kenyatta. Av. | Nyerere Rd. | Valley Rd. | Ξ. | 1 | H. Sellas- | = | Uhuru Rgw. | Commercial | Uhuru Hgw. | | Lusaka Rd. | Uhuru Hgw. | Langaku Rd | | A104 | Enterprise Rd. | = | Likoni Rd. | Jogoo Rd. | | : |
| | Measured | | | | - | 7 | e | ŝ | 4 | ω | 7 | • •9 | 10 | 6 | | 13 | 11 | 12 | | 14 | 15 | 16 | 17 | 19 | : | 18 |
| ction | | T | round | about | 1 | | . <u>. </u> | o | | ¢ | | | 0 | | | c | | | | 1 | 4 | 1 | 1 | ٥ | | с |
| Intersection | | <u> </u> | with | signal | o | | | 0 | | ¢ | | | c | | | c | | | | ۱ | i | ۱ | , | I | | 1 |
| | Survey | | | | SI | | | S2 | | S3 | _ | | S4 | | | S5 | | | | S6 | | S7 | | S8 | | |

Table-

REGION: C.B.D.

| No.2 | | | | Remarks | | | | $\begin{bmatrix} 5.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1$ | $0\phi_2 = 43.5$ | Shoulder within 10m carriageway Right reserve 5m | No reserve on left; Right reserve≖5m | Reserve on fight 7m, reserve on left=11.5 | Reserve on left∞9m, Roundabout I¢ = 59,0 0¢ = 73.0 | Left reserve = 22m (Including pedestrian) Right " = 8m | | Left reserve = 7.0m, Right reserve = 3.0m | Right reserve =13.5m, Left reserve = 9.0m | Roundabout Ith1 = 24.5m 00, = 40.5 | Right reserve * 8, Left reserve = 6m | Left reserve = 3m | <pre>Parking = 3 (Right)</pre> | 3.0 including R. | Rd. reserve of right = 4.5 | Right reserve = 4m, Left reserve = 4.0m | | |
|------|-------------|----------------------|-----------------|----------|----------|---------|--------|---|------------------|---|--------------------------------------|--|---|---|------------|---|---|---------------------------------------|--------------------------------------|-------------------|--------------------------------|---------------------|----------------------------|---|-------|---|
| | (| ll Berne Berne | er | ж | Pedest- | rian | | | , 3.0 | 3.0 | 3.0 | 1.0 | 1.5 | 3.0 | 6.5 | . I | | Ē | ŝ | 9.5 | 1.0 | 3.0 Inclu | 5 | ۱ | 2.0 | - |
| | | reserve 3 mm | shoulder | H Ø | Pedest- | | - - | 4 | 3.0 | 3.0 | 1.5 | 3.5 | 2.0 | 1 | 5.5 | 1 | | ₩0- € | 1.5 | 1 | 4 5 | 3.5 | | 1 | 1.0 | |
| | сі л фан | central res | carriage way | ē | Shoul- | der | - | | 0.7 | I | 1 | 1 | | 1 | 0.5 | 1.5 | 1.0 | 1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 73 - | ı | |
| | (| 3 | | N O | · Shoul- | der | | | . I.O | ، ــــــ | 1 | 1 | 1 | ، | - 0.5 | , I.5 | 1.0 | | 1.0 | 1.0 | 0 | 0 -1 | 1 3.0 | | ۲ | |
| | |) () () | pedes- trian | ē | Central | Reserve | | ı | 8.5 | 1 | ì | 4.0 | 1.5 | | • 1 | I | 1 | 0.6 | 1 | | . ! | 1 | ·1 | ł | 2.5 | |
| | | | No. of | lanes | | | Ÿ | , | 4 | 2 | 2 | ব | 4 | 7 | 4 | 7 | 7 | 4 | 10 | 5 | 171 | 7 | 7 | <u>رم</u> | ¢ | |
| | | utath of | carriage | way (m) | | | ¢ ¢ | | 15 | 10 | 10 | 14 | 20 | 7.0 | 14.0 | 6.0 | 7.5 | 14.0 | 7.5 | 7.0 | 7.0 | 6.0 | 6.5 | 8,0 | 18.0 | · |
| | | | Name of | the road | | | | - COM 1911-40 | Jogoo Rd. | Juja Rd. | Juja Rd. | Forest Rd. | Muranga Rd. | Ring Rd. | Muranga Rd | Forest Rd. | | Forest Rd. | Limuni Rd. | Parklands Rd. | Parkland " | Lonce Kab | Ring Rd Westlands | Waiyalc1 | | |
| | | | Measured | point | | | 16 | 17 | 20 | 22 | 23 | 26 | 25 | 24 | 27 | 30 | 8 | 56 | 29 | 28 | 31 | 32 | 33 | 34 | 37. | - |
| | | ection | | - | punoi | about | | > | c | 1 | 1 | c | c | 0 | 0 | c | с | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | |
| | | Intersection | | | wî th | signal | | 1 | I | I | | , | 1 | 1 | 1 | 1 | ! | 1 | ا . | ۱ | 1 | ı | I | | ł | |
| | | | Survey | point | | | 000 | | | S10 | _ | S11 | | | | S12 | | | | a A | S13 | | | | S14 | |

| 1 | C.B.D. | |
|---|--------|--|
| | | |

| . No.3 | | | | Keeatks | | Left reserve=6.0 = Right reserve Roundabout: I\$ = 54 0\$ = 70 | Right reserve = 5m, Left reserve = 10m | Left reserve + pedestrian = 6m | Left reserve = 10 = Right reserve | " " = 3m Roundabout I∳=53.5 0¢ = 67.5m | Reserve on Right = 3.0m | Reserve on each side 10.0m | Reserve on right = $5m$, on left = $7m$ | Left reserve =4.0 = Right reserve Roundabout = I¢ = 30, 0¢ = 44 | Left reserve = 5.5 = Right reserve | Left & right reserve = 2.5m | Left reserve = 8m Right reserve = 10m Roundabout I | | Roundabout not circular | Left reserve = 4.5 | | Reserve on right = 9m | $I\phi = 46 O\phi = 62$ | 1 | | |
|--------|-----|--------------|---------------------|---------|--------------------|---|--|--------------------------------|-----------------------------------|---|-------------------------|----------------------------|--|--|------------------------------------|-----------------------------|---|-----|-------------------------|--------------------|-------|-----------------------|--------------------------|-------|---------|---|
| | (| Shim - | 1 1 2 | ® | ? Pedest- | 4.5 | | | 2.0 | ı | 5 | 3 0 | ι | 1 | 4 | 1.0 | 4.0 | 3.0 | m | Ś | 4.0 | 4.0 | 4.0 | 3.0 | 3.0 | |
| | | reserve 3 | shoulder | щ | Pedest-7 rian | 4.5 | 3.0 | | 2.5 | 2.0 | 2.0 | 3.5 | 5.0 | 1 | 3°0 | 1.5 | 0.E | 5.0 | m | m | 5.0 | 1 | 1.5 | 3.0 | 1.5 | - |
| | | central res | age | õ | Shoul- der | 1 | 2.0 | 8 | 1.0 | 2.5 | 1.0 | | 3.0 | 1.0 | 1.0 | I | 1 | 1.5 | 57 | 1.0 | 2.5 | ۱ | 1.0 | , | - 2 | - |
| | . (| 2 | carriage() | Э Ж | Shoul- der | | | ۱ | 1.0 | - T | 1.0 | • | ı | 1.5 | 1.0 | 1 | I | 1.5 | 3 | 1-0 | 5 | 1 | 1.5 | 1 | 2.0 | |
| | 6 | | pedes- trian | ж Ю | Central Reserve | 5.5 | н | ı | I | 7.0 | ł | ı | ł | ł | ı | ; | 11.5 | 4.0 | è | 1.5 | 7.5 | . F | <u>م</u> | 1.0 | 9.5 | |
| | | | 10 .01 | lanes | | ę | 2 | 4 | 73 | 7 | 2 | 2 | 2 | 5 | 2 | 2 | 4 | 4 | 17 | 4 | 4 | 5 | 7 | 4 | 4 | |
| | - | Width of | carriage | way (m) | | 19.0 | 0.6 | 13.0 | 7.0 | 14.0 | 11.5 | 7.5 | 7.0 | 6.5 | 7.0 | 7.5 | 14.0 | 17 | 14.0 | 12 | 14.0 | 7.0 | 12 | 14.0 | 15.0 | |
| | | | Name of the road | | | Սիսrս | Meuseum ₁₁ | Univ. way | Ngong Rd. | Mbaguth1 Rd. | Valley Rd. | Langath Rd | = | W/shop Rd. | Commercial | Factory St | | | Hallese- | | Ngara | Ngara | Ring Rd. | | Muranga | |
| | | | neasurea | point | | 35 | 36 | 38 | 40 | 41 | 39 | 42 | ¢3 | 46 | 45 | 77 | 48 | 47 | 52 | 50 | 65 | 23 | 53 | 51 | 54 | |
| | 7 | CCLION | | round | about | 0 | 0 | 0 | 0 | o | c | I | i | o | ¢ | 0 | 0 | D | c | c | 0 | 0 | 0 | • | 1 | |
| | | Intersection | | with | signal | 1 | t | I | 1 | 1 | 1 | 1 | 1 | 1 | I | 1 | I | 1 | 1 | I | I | 1 | I | 1 | 1 | |
| | · | | autvey | point | | S14 | | S 15 | S16 | | | 817 | | S18 | | | S19 | | S20 | | | S21 | | | S22 | |

Table A-V-5.4

REGION: CITY & OUTSKIRTS

| | Remarks | | | · · · | | | | | | I.D. = ,138.5,89 , 0.D. = ,154.5,105 | יחר הדרתומו / | out I.D. = 79.5 0.D. = 93.5 | 4 to S5 | Reserve on the left | Reserves Roundabout I.D.=21.5 0.D.=36.5 | | Reserve on the left to fence | | | Point 18 already done during | 0.D. survey. | (not curcular) $OD = 196,150m$ | | | | | |
|--------------|-----------------|-----------|--------------------|-------|-------|------|---------|---------|-------|--------------------------------------|---------------|-----------------------------|------------|---------------------|--|----------|------------------------------|---------|-----|------------------------------|--------------|---|----------|-------|---------|---|---|
| • | | ÷. | | | | | One-way | One-way | | | I.D. = 1 | י | Roundabout | Direction | Reserve | Reserves | AZ to S6 | Reserve | | S8 to S7 | | <pre>> 0.D. survey > pointerpoint</pre> | (not | | • | | |
| © | (14 | ۳G. | ' Pedest- | 1 | · 1 | 1 | 1 | - , | ı | 1 | \$ | 1 | , | 1 | | 8.5 | 10 | | | | - | | | | 1 | | |
| erve | shoulder | म. (च) | Pedest- rian | , | 1 | } | 1 | 1 | • | 1 | J | | 1 | 1 | 10:0 | 7.0 | 10 | 5.0 | | | | Ĩ | | | F | | |
| central res | ase () | 9 | Shoul- der | m | | 2.6 | 1 2.5 | 1.0 | 3.0 | 1 2.5 | 2.5 | 2.0 | 5.5 | 1 4.0 | 3.0 | 4.5 | 3.0 | 3.0 | 3.0 | 1 2.5 | 2-0 | 4.0 | | 1 2.5 | 4.0 | | |
| <u>ه</u> | carriage way | H CO | Shoul- der | 3.0 | 1 2.5 | 4.0 | 1.7 | 1 2.0 | 1 3.0 | 1 2.5 | 2.5 | 2.5 | 2.5 | 3.0 | 2.5 | 3.0 | . 3.0 | 3.0 | 2.0 | 2.5 | 1 2.5 | 3.5 | _ | . 2.0 | 0 * · 0 | | - |
| | pedes- trian | Ψ | Central Reserve | 26.0 | 1 | 30.5 | I | ı | ı | 40.5 | 1 | 1 | 1 | i | I | 1 | I | | | 1 | | 2.0 | | - | 18 | | |
| • | No. of | Lanes | | -7 | 2 | 4 | 2 | 77 | 2 | 4 | 5 | 2 | 2 | 5 | 2 | 7 | 7 | ~ | 2 | 2 | 2 | 4 | | 2 | 4 | | |
| Width of | carriage | way (m) | | 14.0 | sc. | 14.0 | 6.5 | 6.7 | 7.0 | 14.0 | 7.0 | 6.5 | 6.5 | 7.0 | 7.0 | 6.0 | 6.5 | 7.5 | 0.6 | 5.5 | 6.0 | 13.0 | | 6.5 | 14.0 | | |
| | Name of | the road | - | A104 | B10 | A104 | | | A104 | | C59 | c59 | D100 | C59 | | C98 | C59 | C98 | C98 | 0070 | D400 | A2 | | | A2 | | |
| | Measured | point | | 2 | e | I | 9 | 4 | 5 | 80 | 7 | | 10 | 11 | 12 | 13 | 15 | 14 | 17 | 16 | 61 | 20 | | 22 | 21 | | |
| | | round | about | - | 1 | 1 | ı | | | с | o | 0 | 0 | ı | | 0 | ٥ | 0 | c | 1 | ¢ | c | | 1 | 1 | | _ |
| Intersection | | with | signal | I | 1 | 1 | 1 | | | | | | | I | | | | | I | .: | | <u>.</u> | <u> </u> | 1 | 1 | | |
| | Survey | polnt | | sı | | | S2 | | | S3 . | | S4 | | S5 | | S6 | | | S7 | | S8 | | | 6S | | - | |

RECION: CITY AND OUTSKIRTS

| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | | | | | | | | | | | |
|---|-----|--------|--------|----------|----------|----------|--------|---------------------|---------------|-----------------|-----------------|-----------------|--|
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | Inters | ection | , | | utdeb of | | Ē | ନ | tral res | :rve | 0 | |
| vith round point the round way (m) Janues $\overline{\mathbb{O}}$ H | vey | | | Measured | Name of | cartlage | No. of | pedes- trian | 03 | ∥ - œ ∎ * | should | er | |
| signal about central Shoul- Release- rian rian - - 27 C63 6.0 2 - 1.0 2.0 - - Acc. Jane = 3.0m - - 28 6.0 2 - 1.0 2.0 - - Acc. Jane = 3.0m - - 28 6.0 2 - 1.0 2.0 - - Acc. Jane = 3.0m - - 28 6.0 2 - 1.0 1.0 - - Acc. Jane = 3.0m - - 28 6.0 2 - 1.0 1.0 - - Acc. Jane = 3.0m - - 28 6.0 2 - 1.0 1.0 - Acc. Jane = 3.0m - - 28 6.0 2 2 1.0 1.0 - Acc. Jane | nt | with | round | point | the road | way (m) | lanes | щ | | 1 | | ы | Remarks |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | signal | about | | | | | Central. Reserve | Shoul- der | Shoul- der | Pedest- rian | Pedest- rian | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 10 | 1 | 1 | 27 | C63 | 6.0 | 2.0 | | 2.5 | 2.0 | 1 | - - | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | 1 | 1 | 28 | C63 | 6.0 | 5 | 1 | 1.0 | 2.0 | | , | Acc. lane = 3.0π |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | 1 | 1 | 26 | C63 | 6.0 | 2 | | | 1 1.5 | ı | ۰ | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | 1 | 1 | 23 | C63 | 6.0 | 3 | 1 | 2.5 | 2.0 | 7.0 | 1 | A2 - C65 (pt 23 + 24) |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | I | 1 | 24 | C63 | 6.1 | 2 | 1 | 2.5 | 2.0 | 7.0 | , - | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 115 | 1 | 1 | 29 | C63 | 6.0 | 2 | | 1.0 | 0 | 1 | , | Direction S10 + S11 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | ۱ | 1 | 30 | E433 | 5.5 | 2 | 1 | 1 | | • | ' | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | 1 | 1 | 31 | C63 | 6.5 | 2 | 1 | 1.5 | 2.0 | 1 | ' | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 12 | 1 | 1 | 32 | C63 | 6.5 | 2 | 1 | 1.5 | 1.5 | , | ı _ | s13 + S12 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | 1 | ı | 33 | D6400 | 5.5 | 8 | | I.0 | 5.0 | 1 | ı | A2 + S12 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 13 | I | 1 | 37 | C64 | 5.5 | 2 | 1 | 2.0 | 1.5 | 1 | , | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | 1 | 0 | 34 | | 5.5 | 2 | 1 | 1.0 | 1.0 | 1 | , | Pt 37 → 34 |
| - 0 36 C64 5.0 2 - 1.5 1.0 - - Pt 34+36 - - 40 D409 6.0 2 - 1.0 1.5 - - - - - 38 C64 5.0 2 - 1.0 1.5 - <td></td> <td>1</td> <td>¢</td> <td>35</td> <td>C63</td> <td>5.0</td> <td>2</td> <td>1</td> <td>2.0</td> <td>2.0</td> <td>I</td> <td>t </td> <td>S12 + S14 direction</td> | | 1 | ¢ | 35 | C63 | 5.0 | 2 | 1 | 2.0 | 2.0 | I | t | S12 + S14 direction |
| - 40 $b409$ 6.0 2 - 1.0 1.5 - - - - 38 $C64$ 5.0 2 - 2.5 2.0 - - - - 38 $C64$ 5.0 2 - 1.5 1.0 - - - - 38 $C64$ 5.0 2 - 1.5 - | | 1 | с | 36 | C64 | 5.0 | 2 | 1 | 1.5 | 0.1 | ŧ | 1 | Pt 34 → 36 |
| - $ -$ | 14 | ł | I | 40 | 0409 | 6.0 | 7 | 1 | 1.0 | 1.5 | I | , | |
| - | | ، | 1 | 38 | C64 | 5.0 | 5 | ¥ | 2.5 | 2.0 | ; | 1 | |
| - - 42 E427 6.0 2 - 1.5 1.5 1.5 - - - Pt - - - 41 C63 6.0 2 - 1.5 1.5 - - Pt - - 41 C63 6.0 2 - 1.0 1.5 - - Pt - - 43 E427 6.0 2 - 1.5 2.0 - - Pt - - 44 D407 5.5 2 - 3.0 3.0 - - Pt - - 45 D407 5.5 2 - 1.0 2.0 - - - Pt - - 45 D407 5.5 2 - 2.0 2.0 - - - Dir | | 1 | 1 | 39 | C63 | 5.5 | 7 | 1 | 1.5 | 0.1 | 1 | 1 | Steep horizontal slope to Kiambay from Intersection. |
| - - 41 C63 6.0 2 - 1.0 1.5 - - Ft - - - 43 E427 6.0 2 - 1.5 2.0 - - Ft - - - 43 E427 6.0 2 - 1.5 2.0 - - Ft - - 46 D407 5.5 2 - 3.0 3.0 + - - Ft - - 45 D407 5.5 2 - 1.5 2.0 - 0.1 - - 45 D407 5.5 2 - 2.0 2.0 - - D11 | :15 | 1 | | 42 | E427 | 6.0 | 2 | 1 | 1.5 | 1 1.5 | 1 | 1 | |
| - - 4.3 E427 6.0 2 - 1.5 2.0 - <t< td=""><td></td><td>'</td><td>۱ </td><td>15</td><td>C63</td><td>6.0</td><td>3</td><td>į</td><td>1.0</td><td>1.5</td><td>1</td><td>1</td><td></td></t<> | | ' | ۱ | 15 | C63 | 6.0 | 3 | į | 1.0 | 1.5 | 1 | 1 | |
| 44 D407 5.5 2 - 3.0 3.0 + 46 D407 5.5 2 - 1.5 2.0 | | r | ! | 43 | E427 | 6.0 | 5 | 1 | 1.5 | 1 2.0 | 1 | ۱ | Pt 43+42 direction |
| 46 0407 5.5 2 - 1.5 2.0 | | 1 | ! | 44 | D407 | 5.5 | 2 | 1 | 3.0 | 3.0 | • | + _ | 45+44 |
| - 45 7407 5.5 2 - 2.0 2.0 | 16 | 1 | • | 46 | D407 | 5.5 | 2 | 1 | 1.5 | . 2.0 | `ı | ، | Direction. Pt 45-46 |
| | | t | 1 | 45 | 10407 | 5.5 | 7 | 1 | . 2.0 | 2.0 | | | |
| | | | | | | | | | | <u>.</u> . | | | |

A-V-51

No.2

REGION: CITY AND OUTSKIRTS

| | | | | | | | | | | | | | | entre | | tentre | 00 = 35.5 | | · | | | - | | te = 7m | | |
|------|-----------------|------------------------------|------------|---------------------|------|--------------------|----------------------|-------------------|----------------------|-----------------------|-----------------------|-------------------|-----------------------|--------------------------------|---------------------|--------------------------------|---|-------------------|---------------------|---------------------|------------|-----------------------|---|--------------------------------|------------------------------------|----------------------|
| | | Remarks | | | | Direction D407+C63 | Direction Pt 50 → 49 | Direction S18+S19 | Direction Pt 51 + 56 | Direction 52 + 53 pt. | Direction 52 + 53 pt. | Direction S20+S18 | Direction pt. 54 ~ 56 | Direction pt. 54 + City centre | Direction S21 + S22 | Direction pt. 58 + City centre | Direction S22 + S23 Roundabout I.¢ = 21.5 Od | Direction S22+S23 | Direction pt. 61+60 | Direction pt. 63+62 | S23 + A104 | Roundabout (K.S.T.C.) | Direction S24+S25 Right reserve - 3m | Road reserve on each site = 7m | Reserve on right = 7m left = 2m | |
| | | er Su | 5 | 1 Pedest- 1 rian | 1 | , | | 1 | ı | 1 | 1 | 1 | 1 | 1 | | ۱ - | ł | ļ | 1 | ; ; | 1 | , , , | 1.5 | 1 2.5 | 1.5 | • |
| 1 | | shoulder | 5 | Pedest- rian | 1 | 1 | 1 | 1 | ı - | ؛ | , | 1 | ر | 1 | ، | 1 | . 1 | 1 | 1 | ı | | + | 1 | 1 2.0 | · · · | |
| dn 🗱 | central reserve | carriage vay Nu : Ou : | 5 | Shoul- der | 2.0 | 1.0 | 4.0 | 1 2.5 | 2.0 | 2.5 | 1.5 | 3.0 | 3.5 | 2.5 | 1.0 | 3°0' | 2.5 | Ê. | 3.0 | 2.5 | 2.5 | 3.0 | I | 1) 1) 2) | 1.0 | ر بوج بوج مد ب |
| ĺ | ລ∜ | 0 | 5 | Shoul- der | 2.0 | 1.5 | 2.5 | 2.5 | 1 1.5 | 3.0 | 3.5 | 3.0 | 3.5 | 2.0 | 1 2.5 | 2.0 | 2.0 | ÷۲ | 2.0 | 2.5 | 1 3.0 | 3.0 | 1.0 | *. | 8 | |
| | | pedes- trian | Ð | Central Reserve | 1 | ı | ı | i | 1 | | ı | 1 | 1 | ł | ł | ı | 1 1 | ł | ł | 1 | | 1 | I | 0.6 | 1 | |
| | No. of | lanes | C LIDT | | 2 | 5 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 5 | 2 | 5 | 5 | 2 | 2 | ~ | ~ | 4 | 7 | |
| | Width of | carriage | way (m) | | 5.5 | 5.0 | 7.0 | 7.0 | 6.5 | 7.0 | 7.0 | 6.5 | 6.5 | 6.0 | 7.0 | 5.0 | 5.0 | 6.0 | 5.5 | 5.5 | . 0.9 | 6.5 | 6.0 | 13 | 5°8 | : |
| | Name of | the road | | | 0407 | C63 | C62 | C62 | C63 | A104 | A104 | C63 | C63 | A104 | C63. | D412 | C63 | C60 | C60 | c58 | C58 | C61 | | A104 | A104 | |
| | Mencered | | - + # + or | | 47 | 87 | 50 | 67 | 51 | 52 | 53 | 56 | 54 | 55 | 57 | 58 | 59 | 60 | 61 | 63 | 62 | 65 | 79 | 67 | 66 | · |
| | ection | | round | about | 1 | 1 | ŀ | 1 | 1 | I | 1 | 1 | 1 | , | 1 | T | 0 | 0 | 0 | 1 | | c | <u>o</u> | i | 1 | |
| | Intersection | | with | signal | 1 | 1 | 1 | 1 | ł | F | I | 1 | 1 | 1 | 1 | 1 | I | 1 | ı | i | 1 | l. | | ı | .! | |
| | verces | out vey | burnd | | s17 | | S18 | | | 819 | | S20 | | | S21 | | S22 | | | S23 | | S24 | | \$25 | | |

No. 3

| OUTSKIRTS |
|-----------|
| AND |
| CITY |
| REGION: |

| No.4 | | | Remarks | | Left reserve = 10.0. r[ohr = 2 0m | Left & right reserves * 5m each | Reserve on left = 2m to fence | Direction pt. 72 + Githathuni Rd | Direction S28 + S29 | Direction S29+S30 | | | Direction E422 → Kahete cammus | Direction S31 + City centre | Reserve on right = $13.0m$ on left = $9.5m$ | | | | | | | | | |
|------|---|-----------------|----------|----------------------------------|-----------------------------------|---------------------------------|-------------------------------|----------------------------------|---------------------|--------------------|------------|---------------|--------------------------------|-----------------------------|--|-------------|-----|-------|---|---|---|------------|---|--|
| | - Com | er | ЭM | Pedest- ' Pedest- rian ' rian | 1 | 0.5 | . <u>.</u> | 1 | 1 | <u>,</u> | (| + | ۰ | | I | | | | | | | | | |
| | up reserve 3 | shoulder | н Ф | | 2.5 | 3.0 | 1 | ı | ı | I | ł | . 1 | 1 | • • | 1 | | _ / | - | | | _ | . . | | |
| | t up central res | carriage way | Ō | Shoul- | 2.5 | | 2.0 | | , , , | 2.0 | 4.0 | - 3.5 - | 5.0 | 3.0 | 5.5 | | | | | | | | - | |
| | ଜା | Γ | й Ю | Shoul- der | | 1 | 2.0 | 1.1.5 | 3.0 | 2.5 | | ۱ | 3.0 | 1 3.0 | 4.0 | | | | | | | - | | |
| | () () () () () () () () () () () () () (| pedes- trian | Ð | Central Reserve | ł | ł | ı | F. | ł | ı | | . 1 | T | ł | Ŀ | | | | | | | | | |
| | | No. of | lanes | | 2 | 2 | 2 | 2 | 5 | 2 | 2 | 8 | 7 | 2 | 7 | _ | | | | | | | | |
| | Width of | carriage | way (m) | | 5.5 | 6.0 | 6.0 | 5.0 | 5.0 | 6.0 | 6.0 | 5.5 | 4.5 | 6.0 | 6.5 | | | | · | | | | | |
| | | Name of | the road | | Ioner | 1000 | Peponi Rd. | Naecha Rd. | Githathuni | Ioner Kabete gd | C63 (1724) | E422 | D410 | | A104 | | | | | | | | | |
| | • | Measured | point | | 68 | 69 | 70 | 72 | 11 | - 74 | 73 | 75 | 76 | 78 | 27 | | | | | | | | , | |
| | Intersection | | round | | ţ | 1 | 1 | 1 | 1 | 1 | I | 1 | 1 | 0 | 1 | <u></u> | | | | | | | | |
| | Inters | | vith | signal | t | I | ł | ı | 1 | 1 | ! | 1 | ł | | 1 | | | | | | | | | |
| ſ | | Survey | point | | S26 | | | 528 | | S29 | | s30 | | S31 | | | | | | · | | | | |

A--V-53

Present OD table of total vehicles

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| | | | (20) | - 19 | 15487 | 8969 | 4451 | 1355 | 1349 | 3127 | 11038 | 3225 | 1430 | 160 | 5181 | 4303 | 149 | 280 | 1586 | 3850 | 3621 | 33 | 133 | 69727 | 955 | 1227 | 1210 | 1208 | 971 | 874 | 1600 | 8045 | | |
| | | | (19) | 19 * | о М | Ś | ø | 0 | 0 | 0 | ¢ | iبر ا | 4 | 0 | 0 | ŝ | 0 | • | 0 | 0 | 0 | 0 | 0 | \$9 | ~ | 0 | 0 | 0 | 0 | 0 | 0 | Ņ | • | |
| | | ٥. | 18) | 18 | o | 3 2 | 0 | 0 | 0 | 0 | N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | ò | 0 | 0 | | |
| | | UNIT: TRIP | 17) | 7 | 570 | 447 | 238 | 124 | 149 | 122 | 302 | 72 | 25 | o | 137 | 104 | 18 | 0 | 32 | 310 | N | o | 0 | 604 | 12 | 8 | 20 | 20 | 31 | 17 | оñ М | 188 | | |
| | | | | | | | 126 | | | | | | | | | | • | | 66 | | | | | 590° 3. | | | 31, | 63 | 30 | 58 | 45 | 65 | | |
| | • | | ~ | | | | | | | | | | | | | 4 | ŝ | o | م | N | 0 | 0 | | 6.2 35 | | | | | | | | | | |
| | | | 35 | 15 | 68 | 5 | 112 | | | | | | | | | 7 | | | | - | | | | 16 | | | | | | | | | | |
| | | | (11) | 14 | ζ γ | 0 | ŝ | 0 | \$ | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 89 | 0 | 0 | o | 0 | N | 0 | 0 | N | | |
| | | | (13) | 13 | ~ | σ | • | 0 | o | N | v | 0 | 13 | N | 10 | 28 | 2 | Ŷ | 0 | •== 9== | 0 | Q | 0 | 105 | 80 | 2 | 0 | 0 | ¢ | ŝ | 0 | 21 | | |
| | | | (12) | 12 | 1681 | 205 | 833 | 191 | 59 | 79 | 260 | 26 | 32 | 2 | 78 | 150 | 32 | ŝ | 9 9 | S 9 | -111- | 0 | 14 | 3901 | ň | 94 | о , | 0 M | 62 | 11 | 32 | 171 | | |
| | | | (11) | 11 | 2925 | 398 | 750 | 108 | 527 | 212 | 678 | 100 | 88 | 10 | 190 | 101 | 18 | 19 | 34 | 223 | 132 | 4 | Ň | 6121 | 79 | 190 | 11 | 12 | 56 | 20 | 50 | 405 | | |
| е С = + Н = + С = + | | | (10) | 10 | 28 | 20 | 10 | M | 0 | 0 | 2 | ~ | 22 | N | 45 | 4 | 0 | 0 | 0 | 10 | N | 0 | N | 157 | 0 | ~ | n | ¢ | 0 | ö | 14 | 19 | | |
| 1H3> 4 | ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ | | 6 | o | 196 | 151 | 88 | 28 | 14 | 41 | 272 | 11 | 5 | 32 | 116 | 61 | • | 0 | 21 | 51 | 32 | 0 | ŝ | 1162 | 12 | 35 | m | ~ | 0 | 0 | ŝ | 57 | | |
| (2) 'YPE O | T01AL T01AL T01AL | | ŝ | æ | 720 | 285 | 36 | 22 | พา | 68 89 | 339 | \$9 | 0 | 0 | 28 | ŝ | 0 | 0 | 212 | 124 | 89 | Ś | 0 | 886 | ŝ | 4 | m | 12 | 19 | Ś | 21 | 65 | | |
| SHUUKE1 ALE BY 1 | с Г С С | ł | 2, | ~ | 843 | 961 | 1014 | 544 | 293 | 472 | 690 | 770 | 163 | 38 3 | 526 | 240 | 17 | 23 | 239 | 934 | 707 | ~ | 6 | 182 | 104 | 92 | 270 | 231 | 131 | 164 | 4.47 | 439 | | |
| 4 | NO. ON VEHI | | | | | | | | | | | | | | | | | | | | | | | 242 14 | - | | | اب | Ś | ~ | o | **. 0 | | |
| ***** ENT 00 | STATION DIRECTI TYPE OF | | ~ | | n. | | | | | | | | | | | | | | | | | 0 | | 15 22 | ~ | ጉ. ው | 0 | \$ • 9 | . 5 | 53 | 54 | 56 1 | | |
| * * * * * * * * * * * * * * * * * * * | NOF | | ~ · | | | | | | | | | | | | | | | | | ÷ | | | | 2 | | | | | | | | N | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 1112 | | | | | | | | | | |
| | | | ŝ | n | 161 | 431 | 297 | 1.9 | - - - | 26 | 758 | 160 | 132 | ŝ | 599 | 938 | 80 | ŝ | 74 | 189 | 269 | 0 | ŝ | 4186 | δ£ | 53 | 113 | 66 | 45 | 20 | 5 | 389 | | |
| | | | 2 | N | 1910 | 813 | .127 | 135 | 311 | 372 | 1389. | 080 | 122 | 28 | 318 | 274 | 13 | ° 20 | Р | 386 | 347 | ŝ | 22 | 7309 | 06 | 85 | 53 | 35 | 6 5 | 27 | 49 | 367 | | |
| | | | 2 | çul | 276 | 2977 | 299 | 54 | 60 7 | 987 | 2764 | 1379 | 615 | 54 | 2695 | 1803 | 19 | 150 | 272 | 766 | 1590 | ~ | | 7290 | 533 | 652 | 600 | 588 | 473 | 137 | 672 | 3955 | | |
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| | | | | | **1 | ~ | ħJ | 4 | Ś | Ŷ | ~ | œ | о | 10 | 11 | 75 | 13 | 14 | 15 | 15 | 2 | 60 | 19 | 510 | 20 | 21 | 22 | 2 | 54 | 25 | n, | 126 | | |
| | | | | | - | 2 | m. | , , | ч Ч | ، | . ~ | °. | °. | 0 | 11. | ŝ | m | 4 | 15. | Ś | | 18. | 19. | 20.* | 21. | 22. | 23. | - 72 | 25. | 26. | 27. | 28. * | | |
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| | | (20) | , 1 | ;5 | 0 | 349 | ~ | 27 | 0 | Ň | 271 | 24 | 133 | 061 | ٥ | 503 | 140 | 85 | 526 | 104 | 411 | 60 | क्ष्म क्ष्म | 333 | 72 | 88 88 | 309 | 2 | 202 | 0 | 5 C | ⊃ ç | 2 | 9 M M | 14 | 0 | o | ŝ | 54 | 7.8 | 125 | 1.1 | 321 |
|----------------------------|------------|-------------|------------|------|-----|------------|-----|----------------|----------|-----|-----|----------|------------|----------|-----|----------|------|---------|-----|-----|-----|-----|----------------|-----|---------|---------------|----------------|------------|------------|---------------|---------------|----------|-----|----------|-----|-----|-----|-----|-----|-----|-----|----------|-------|
| | | 01 6 0 | • | | | | | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | 0 | 00 | | > c | > c | o c | 0 | 0 | 0 | 0 | 0 | | •• | 56 84 |
| | | 5.5 | 4 | | _ | | - | _ | _ | | | _ | - | | _ | | ~ | | _ | _ | - | - | _ | - | | _ | • | _ | | _ | • | | | | | _ | _ | • | | | ~ | | č |
| | AIP AIP | 8 | 2 | 00 | | 0 | 0 | 0 | ¢ | o | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ¢ | C | o | 0 | 0 | 0 | Ç | 0 | 0 | Q | ¢ | ç | 0 | 00 | | | | | | | Ű | Ő | | 0 | | 5 |
| | | 66 | | • o | 0 | ~ | 0 | 0 | 0 | 0 | ŝ | 0 | 0 | 11 | 0 | Ŷ | 2 | •-1 | 17 | N | 0 | 0 | 0 | 0 | Ŷ | 0 | 44 | 0 | Ö | 0 | 0 0 | þ Ç | 4 C |) C | • c | 0 | 0 | 0 | 0 | 0 | 0 | 113 | 3905 |
| | | 35) | • | , o | 0 | - 00 | 0 | 0 | 0 | o | ۲ì | 0 | 0 | 124 | 0 | 0 | 15 | 0 | 18 | 4 | ŝ | 0 | v | 13 | ¢, | 2 | 5 | 0 | 0 | 01 | ~ (| 5,₩ | n c | > 0 |) C | 0 | 0 | 0 | ÷ | ŝ | м | 245 | 4100 |
| | | 155 | | • o | 0 | ŝ | 0 | 0 | 0 | 0 | Ś | 0 | ~ | 21 | 0 | Þ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$ | 0 | 0 | ω | 0 | 0 | 0 | 0 0 | 2 4 | 00 | C | . c | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 1752 |
| | | (14) | Ċ | 0 | o | 0 | ¢ | 0 | ¢ | o | 0 | 0 | 0 | m | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | m | 0 | 0 | 0 | 00 | > c | > c | > c | • c | 0 | 0 | 0 | 0 | 0 | 0 | Ŷ | 26 |
| | | б С | , с | s un | 0 | 0 | 0 | 0 | 0 | 0 | 0 | • | o | m | 0 | 0 | 0 | 0 | 0 | 0 | o | 0 | 0 | 0 | 0 | 0 | 0 | ¢ | 0 | 0 | 0 0 | 5 C | 00 | 0 | • c | 0 | 0 | 0 | 0 | 0 | o | 90 | 134 |
| | | <u>6</u> 2 | ; c | • • | | N | 0 | 0 | 0 | 0 | o | 0 | 0 | 50 | 0 | 18 | 0 | 0 | ŝ | 0 | ¢ | 0 | 0 | 0 | 0 | Ś | <u>م</u> | 0 | 0 | 0 (| 0 | , | • c | > ~ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 4172 |
| | | | . c | , o | 0 | 32 | 0 | 0 | 0 | N | 0 | 0 | N | 70 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | ~ | 0 | 4 | ň | 0 | 0 | 0 | 50 | o c | > c | • C | • 0 | 0 | 0 | 0 | 0 | 0 | 0 | 136 | 6666 |
| | | 10) | 2 | 0 | 0 | 0 | o | 0 | 0 | • | 0 | 0 | | | | | | | | | | | | | | | | | | | - | | | | | | | | | | | ~ | 178 |
| 0TAL > 0TAL > 0TAL > | • | 6 o | c | 0 | 0 | 0 | o | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | • | 0 | • | 0 | 0 | 0 | ~ | | ∾ • | 0 | - | òc | ¢ | • c | 0 | 0 | 0 | 0 | 0 | N | ¢ | | 1235 |
| | | ົສ | , c | 0 | ¢ | \$ | 0 | 0 | 0 | 0 | ¢ | 0 | 0 | 50 80 | 0 | 0 | - | • | o | 0 | 0 | o | 0 | ¢ | 0 | 0 | οŭ (| o e | 0 | o 0 | > < | ò | Ċ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 87 | 2038 |
| CLE | | ~ ~ | c | 0 | 0 | 129 | Ģ | ហ | 0 | 0 | 77 | Ð, | ٠. | 327 | 0 | 46 | 5 | 9 19 | 75 | ç | 113 | ¢ | ¢ | 2 | ∾ 28 | 131 | 5 8 7 5 8 7 | э · | 3 I 2 | ^ • | | • • | Ċ | | 5 | 0 | 0 | ŝ | Ś | 54 | 62 | 481 | 102 |
| ND. 0N VEHI | | ~ 6~0 | | 0 | 0 | 0 | ç | , , | 0 | 0 | 15 | o | 9 | 11 | 0 | 0 | ŝ | 0 | 89 | 0 | 36 | 0 | 0 | 69 | 4 | 0 | • • | , c | 0 0 | > c | , c | • ¢ | c | 0 | 00 | Ð | 0 | 0 | αÚ | 00 | 0 | .75 | 07 17 |
| ATION RECTI | | ~ | _ | 0 | _ | | | - | | 0 | 0 | 4 | 0 | N O | 0 | ŝ | ~ | 0 | 0 | 0 | ÷ | 0 | 0 | Ŷ | 0 | 0. | <u>د</u> | . . | 0 0 | , | | , c | 0 | . 0 | N | 0 | 0 | 0 | 0 | 0 | Ŷ | N N | 5 |
| 101 | | | • | | | | | | | | • | _ | | ~ | | _ | _ | _ | ~ | ~ | - | _ | | | • | | | | ~ . | ~ • | | | | ~ | | ~ | • | ~ | 10 | ~ | | ÷ | 4 |
| | | 9 4 - | | | | | | | | | | | | 4 | | | | | | | | | | | | | - | | | | 00 | | | | | | | | | | | ÷ | 144 |
| | | ົາ ກ ~ | o | 0 | 0 | 15 | 0 | v | o | 0 | ¢ | 0 | | 100 | 0 | 0 | 2 | Υ | 11 | ŝ | ¢ | 0 | 0 | 101 | in 1 | 0 | ~ (| 2 (| 0 |) (| > c | 0 | 0 | 0 | rv; | 0 | 0 | 0 | 0 | o | | ĩ | ~ |
| | | ริ ณ | 0 | 0 | 0 | 56 | 0 | ÷ | 0 | 0 | 51 | ŝ | | 127 | 0 | 7 | 28 | o | 18 | ~ | 17 | 0 | 0 | 17 | 0 | | 2 C | | - C | - - |) c | 0 | 0 | 0 | ŝ | 0 | o | 0 | 0 | 0 | | m | |
| | | - - - | Þ | ŝ | 0 | 113 | N | р. | 0 | 0 | 162 | 9 | <u> </u> | 882 | 0 | 105 | 58.2 | 43 | 312 | 82 | 198 | αÓ | 5 I | 178 | 27 | οι Νι 1 | 5 C 5 7 | | ሳ ሀ ታ | . . | n C | 36 | 0 | 22 | 105 | • | 0 | 0 | 0 | 95 | ~ | 0 | Å. |
| | | | 101 | 102 | 103 | 104 | 105 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 221 | 071 | - 0 | 100 | 140 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | -141 | JTAL |
| | | | • | 30. | - | D 2 | s a | | ۰. ۱۰ | | | | : | | • | , N 1 | | • | • | • | | , | | | | | | | | | | | | | | M | · • | , | • | | | * : o | |

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********** SHUKEI (2) *********** Present od table by type of vehicle

A-V-55

| | | | ~ | | 5 | | 0 | N | ю | ~ | ¢ | \$ | ~ | .+ | m | \$ | 0 | 0 | ŝ | N | | 0 | o | \$ | ы | ŝ | ۲'n | 5 | M | 0 | 2 | • • | |
|------------------------|------------------------------|-------|---------|--------|----------|---------|-----|----|------|----|----------|----|------|----|----|----|-----|----|----|--------|---------------|----|-----|----------|--------|----------------|----------|-------------|-------------------|-------------|-----|--------|---|
| | | | | | | | | 62 | M | ō. | 44 | v | | | ñ | 26 | Ť | | 51 | | सं | | Ū | 1586 | | | m | e -4 | - M | - | 4 | 117 | |
| | | | (39) | 112 | 14 | 12 | \$ | 0 | 4 | ಖ | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Ö | 0 | 56 | 0 | 0 | 0 | 0 | Ö | 0 | 0 | 0 | |
| | | d I H | ŝ | 111. | | | | ` | v | 0 | 12 | 0 | 4 | 0 | ы | 0 | 0 | 0 | ¢ | 2 | 0 | 0 | 0 | 77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | (37) | | | ¢ | ŝ | 2 | 20 | 37 | 36 | 0 | 0 | ø | ~ | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 219 | o | 4 | 0 | 0 | N | 0 | 0 | Ŷ | |
| | | หก | (36) (| | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | •0 | 0 | 0 | 0 | o | o | 0 | 0 | 0 | |
| | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ŝ | 0 | 0 | ŝ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | (32) | | ~ | 0 | 80 | 0 | 4 | و | 4 | 0 | 0 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | ö | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | (36) | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | | (33) | | | | | 0 | | | | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | 0 | 0 | 0 | 0 | |
| | | | (32) | 101 | 102 | 26 | 0 | 11 | | ~ | 56 | 0 | 0 | 0 | 0 | • | o | 0 | 0 | 2 | 0 | 0 | 0 | 228 | •~1 | ¢ | ۍ، ۱ | 10 | 2 | € -1 | 36. | 63 | • |
| | • . | | (31) | 103 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ¢ | o | 0 | 0 | 0 | • | 0 | <u>.</u> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| * * * 10 * 11 | | | (30) | 102 | o | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | P | 0 | o | 0 | 0 | 0 | 0 | 0 | |
| ***** VEHIC | ~~~ | • | (53) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ò | 0 | |
| 2) PE 0F | TOTAL TOTAL TOTAL | | (28) (3 | | 36 | 72 | 77 | 13 | 52 | 52 | 81 | 29 | . 87 | 0 | 03 | 54 | 76 | 14 | 27 | 98 | 00 | ¢ | ∾ ฺ | 47 | 54 | 55 | 00 7 | 44 19 | 54 | 9 | 27 | 60 | |
| ΕI Υ | ົ້ມມີມ | | | | | | | | | | | | | | | | | | | | | | | v | | | | | | | | ∾ 0 | |
| SHUUK ABLE B | ND. Jn Vehicle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | |
| *** 00 T | ECTION NO. | | (26) | 25 | 274 | 17 | ¢. | 60 | ž | £Ε | 120 | 23 | o | ¢ | 20 | S | 0 | ~ | °. | 17 | 24 | • | • | 656 | 0 | \$ | Ę. | <u>.</u> | Ś | 0 | 0 | 22 | |
| ***** PEGENT | STAT DIRE 3410 3475 | | (52) | 54 | 331 | M. N | 52 | 26 | 27 | 41 | 50 50 | 12 | ŝ | 0 | δ | 77 | £ 7 | 0 | N | 47 | 26 | °, | 0 | 122 | N. | ¢ | ĉ | 0 | 2 | 0 | 0 | 30 | |
| ÷ 4 | | | (32) | ₹ 2 | 353 | 37 | 40 | 38 | 5 | 27 | 216 | 12 | 0 | 0 | 4 | ñ | 16 | ~ | 19 | ۲ 9 | <u>ө</u> М | 0 | 0 | 726 | Š, | • | 7 | ~ | 1 2 | 0 | ø | 46 | |
| | | | (23) | 22 | 640 | 73 | 111 | ŝ | 24 | 36 | 247 | 19 | ~ | o | 0 | D | 4 | 0 | 0 | 74 | 44 | ò | ò | 1318 | 4 | - 7 | o | 0 | o | 0 | 28 | 55 | |
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Appendix VI

Traffic Demand Forcast

| | | | | | | | | | | | | | | | • | | | | | 0 12484 | | | | | | | | | | 0 3242 | 4 18131 |
|-------|-------|--------------|------------|----------------|------|------|----------|--------------|--------------|-------|----------|-----------|-----|--------------|------|----------|-----|------|------|------------|---------------|----------------|----------|------------|-----|-------------------|----------|----------|-----|--------|---------|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TRIP | (18 | 18 | N N N | m | Ň | <u>ज</u> | 4 | in et | 24 | ÷. | 00 +-1 | | 4 | 17 | 4-4 | ιn | 25 | 76 | 27 | 31 | | 426 | i Na | ~ | 'n | ŝ | Ŷ | 17 | -0 | 502 |
| | UNIT: | (17) | 17 | 2003 | 2236 | 587 | 005 | 431 | 319 | 383 | 378 | 705 | 0 | 2380 | 026 | 106 | C | 507 | 3540 | 14 | 1112 | 0 | 15937 | 137 | 327 | 872 | 370 | 223 | n n | 303 | 2266 |
| | - | (16) | 16 | 757 | 1004 | 224 | 155 | 158 | 444 | 786 | 669 | 589 | 60 | 1316 | 571 | 17 | 161 | 191 | 3212 | 2467 | 1008 | • | 14361 | 32 | 232 | 26 | 253 | 204 | 547 | 194 | 1609 |
| | | (12) | 54 | 782 | 319 | 182 | 137 | 296 | 323 | 178 | 225 | 102 | o | 168 | 174 | 17 | ¢ | 67 | 775 | 225 | 247 | 0 | 4199 | 4-4 4-4 | o | 53 | 23 | 10 | 0 | 8 | 109 |
| | | (14) | 14 | . 68 | 0 | Ś | 0 | ø | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | • | ~ | • | ¶33 | ¢ | ¢ | ¢ | 0 | 11 | 0 | 0 | 11 |
| | ; | (13) | 13 | 11 | 51 | 0 | ō | 0 | m | v | 0 | 28 | n | 0£ | 106 | ~ | ¢ | 0 | 14 | Þ | 4 | 0 | 246 | 7 m | ~ | 0 | 0 | ~ | ŝ | 0 | 53 |
| | | (12) | 22 | 1792 | 327 | 1128 | 307 | : * 8 | 175 | 322 | 62 | 110 | 13 | 267 | 353 | 72 | භ | 251 | 277 | 563 | 87 | 6 10 | 6237 | 49 | 125 | 0 | 41 | 91 | 18 | 110 | 434 |
| | | (11) | 11 | 3351 | 1079 | 1420 | 236 | 371 | 808 | 1031 | 1137 | .734 | 129 | 1233 | 331 | 26 | 37 | 198 | 1289 | 1332 | 406 | ŝ | 15153 | 415 | 956 | с 5 | 51 | 185 | 52 | 372 | 2.091 |
| | | (10) | 10 | ň | 07 | 23 | ¢ | 0 | 0 | 0 | 6 | 26 | 12 | 247 | 14 | 0 | 0 | 0 | 20 | 4 | 22 | Ś | 589 | 0 | 4 | ₽~. | 0 | o | ¢ | 32 | н 7 |
| LAL > | | (6) (6) | ¢ | 241 | 431 | 179 | ŝ | 33 | 36 | 549 | 3 | 878 | 68 | 726 | 267 | 2 | • | 16 | 119 | 267 | 89 10 | 17 | 4138 | 104 | 213 | 0 | 33 | 0 | o | 14 | 373 |
| < T01 | | 8 | R) | 851 | 1329 | 230 | 87 | £9 ₽ | 144 | 979 | 830 | 399 | 0 | 403 | 80 | 0 | 0 | 263. | 839 | 1048 | 265 | o | 7415 | 10 | ŝ | യ | 21 | 124 | 78 | 66 | 312 |
| IICLE | | (2) | ~ | 3907 | 2435 | 1067 | 620 | 327 | 529 | 2786 | 1690 | 967 | 159 | 1076 | 347 | 17 | 5 | 417 | 1394 | 981 | 435 | 14 | 18730 | 278 | 212 | 420 | 383 | 190 | 236 | 732 | 5449 |
| 0F VE | | (9) | v | 55.8 | 249 | 134 | 2 | 57 | 090 | . 346 | 396 | .111 | 0 | 533 | 92 | 0 | 10 | 153 | 630 | 169 | 131 | ŝ | 3755 | 109 | 80 | 25 | 91 | 5 7 | 41 | 55 | 975 |
| TYPE | | 3 | 5 | 29 | 240 | v | 0 | 20 | 27 | 176 | 230 | 26 | 0 | 175 | 105 | ~ | 14 | 230 | 102 | 271 | 5 | 12 | 2037 | 34 | 21 | 115 | 174 | 86 | 82 | 115 | 638 |
| | | G . | -7 | 2 6 | 185 | 4 | 0 | ŝ | 23 | 198 | 85 | 100 | 2 | 299 | 444 | •1 | ¢ | 5 | 107 | 239 | 22 | 0 | 1888 | 56 | 2 | 23 | 110 | 5 | 53 | 129 | 416 |
| | | Ê | m | 166 | 512 | 315 | 51 | 97 | 108 | 802 | 503 | 316 | 11 | 1169 | 1222 | 11 | ŝ | 150 | 347 | 761 | 109 | 2 | 6229 | м 6- | 115 | 200 | 109 | 114 | 50 | 104 | 770 |
| | | 2 | 2 | 1965 | 1168 | 506 | 185 | £07 | 687 | 1533 | 1104 | 482 | 152 | 876 | 477 | 14 | 44 | 293 | 1069 | 1337 | 9 H M M | 5 7 2 | 12550 | 386 | 256 | 26 | 110 | <u>с</u> | 16 | 195 | 1151 |
| | | | -1 | 275 | 3134 | 304 | 54 | 63 | 1003 | 2779 | 1728 | 811 | 85 | 3227 | 1903 | 20 | 162 | 516 | 693 | 2024 | 215 | 67 | 19415 | 613 | 767 | 5 S S | 179 | 517 | 506 | 752 | 6777 |
| | | | | F-1 | N 1 | | 4 | S | v 0 · | | 8 | 0 | 0 | | 2 | m | 4 | | • | ~ | 0 0 ' | с. · | <u>,</u> | 0 | (| ~ | FO - | 4 | 5 | Ŷ | Ŷ |
| | | | | | | | | | • | | - | | ÷ | , | | , | ń | -1 | ÷. | - 1 | - | ~ | | Ň | ∿ i | ~ | ∾ | 54 | ~ | Ň | nv I |

Appendix VI.1

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TYPE OF VEHICLE ( TOTAL )

|      |          |                       |        |          |     |        |        |     |         |     |       |     |          |            |     |     |     |     |        |              |          |        |         |          |             |             |         |      |        |            |       |          |          | ÷     |         |          |         |               |     |        |          |                            |             |
|------|----------|-----------------------|--------|----------|-----|--------|--------|-----|---------|-----|-------|-----|----------|------------|-----|-----|-----|-----|--------|--------------|----------|--------|---------|----------|-------------|-------------|---------|------|--------|------------|-------|----------|----------|-------|---------|----------|---------|---------------|-----|--------|----------|----------------------------|-------------|
|      | 6        | ò                     | ь<br>5 | 26       | 0   | 126    | М      | 99  | 0       | N   | 04    | 77  | 187      | 20         | 0   | 20  | 50  | 17  | M<br>T | 154          | 50       | থ<br>শ | 27      | 560      | ň           | 8           | 71      | N    | 70     | 5          | 72    | 0 (      | b c      | ,<br> | 8       | 0        | 0       | v             | 48  | 24     | 17       | n t<br>Q t                 | n<br>o      |
|      | S        | <del>بر</del> ما<br>ا |        |          |     | ¢      |        |     |         | •   | 4     |     | <b>.</b> | 0          | į.  | м   | Ņ   | -1  | ¢.     | e-1          | Ŷ        |        |         | ŝ        | <b>**1</b>  | <b>9</b> ~1 | m<br>H  |      | м      |            |       |          |          |       | N       |          |         |               |     |        | N        | 202                        | 500         |
|      | 39)      | *                     | 0      | 0        | 0   | 0      | 0      | 0   | 0       | 0   | 0     | 0   | o        | 0          | 0   | Ö   | 0   | 0   | 0      | 0            | Ö        | 0      | 0       | ¢        | 0           | 0           | o       | 0    | 0      | Ø.         | 0     | 0.0      | o c      | 00    | 0       | •        | Ó       | 0             | 0   | 0      | 0        | •                          | -<br>       |
|      | ű        | ~                     |        |          |     |        |        |     |         |     |       |     | •        |            |     |     |     |     |        |              |          |        | • .     |          |             |             |         |      |        |            | •     | •        |          | . •   | :       | •        |         | 1             |     |        |          |                            |             |
|      | 18)      | 8                     | 0      | ¢        | 0   | ¢      | 0      | 0   | 0       | 0   | m     | 0   | 0        | <b>9</b> 6 | 0   | 0   | 5   | 0   | 7 M    | 4            | ęч       | 0      | Ś       | 22       | <b>e</b> ~1 | -           | 18      | 0    | 0      | 0          | ivi - | 0 1      | 0 C      | 0     | 0       | 0        | 0       | 0             | Ś   | N      | ų.       | 262                        | ŝ           |
| dla. | 5        | 474                   |        |          |     |        |        |     |         |     | ÷     |     |          |            |     |     | -   | •   |        |              |          |        |         |          |             |             |         |      |        |            |       | :        | ÷        |       |         |          |         |               |     |        |          | i                          | ì           |
| 1:13 | 17)      | ~                     | 0      | 0        | 0   | 223    | 0      | 0   | 0       | 0   | Ŷ     | 0   | 0        | 79         | 0   | ¢   | ю   | 2   | 36     | 17           | 0        | 0      | 0       | C        | 16          | 0           | 235     | 0    | 0      | 0          | 0     | 0        | ) t<br>0 | 0     | 0       | 0        | 0       | <b>ب</b><br>ا | 0   | 0      | 0        | 680                        | 1<br>2<br>0 |
| (N)  | ç        | <b></b>               |        |          |     |        |        |     |         |     |       |     |          |            |     | •   |     |     |        |              |          | :      |         |          |             | 5           |         |      | -      |            | •     | -        |          |       |         |          |         |               |     |        |          | -                          | 4           |
|      | (16)     | 2                     | 0      | ¢        | 0   | 127    | 0      | 0   | 0       | 0   | ŝ     | 0   | 0        | 305        | 0   | 0   | 65  | Ö   | 108    | 14           | 4        | 0      | τ.<br>γ | 69       | ŝ           | m           | 53      | 0    | 0      | 0          | ~     | 0        | 20       | 0     | 0       | 0        | 0       | 0             | 1   | ω      | 4        | 500                        | 202         |
|      | U        | •                     |        |          |     |        |        |     |         |     |       |     |          |            |     | , · | 2   |     |        |              |          |        | •       | • •      |             |             |         |      |        |            | •     |          |          |       |         | •        | , e     |               |     | _      |          |                            | )<br>*      |
|      | 153      | 15                    | ¢      | 0        | 0   | Ч<br>Ч | 0      | ¢   | 0       | 0   | • • • | 0   | €.       | 74         | 0   | 0   | Ò   | 0   | ø      | 0            | 0        | 0      | 0       | \$       | 0           | 0           | 20      | 0    | °.     | 0          | 0     | 0 (      | > c      | 000   | Ö       | o        | 0       | 0             | ¢   | 0      | 0        | 80 v                       | 2           |
|      | ÷        |                       |        |          |     |        |        |     |         |     |       |     |          |            |     |     | . : | i.  | •      | د<br>بر<br>ب | •        |        |         |          | -           |             |         | <br> |        | · _ ·      |       | <u>.</u> |          |       | -       | : .<br>_ |         | _             | _   |        | _        |                            | ,           |
|      | 14)      | 75                    | 0      | 0        | 0   | 0      | 0      | 0   | 0       | o   | 0     | 0   | 0        | ŝ          | 0   | 0   | 0   | о   | ¢      | <b>°</b>     | 0        | o      | 0       | 0        | ¢           | 0           | m       | 0    | 0      | о<br>      | 0     | 00       | > c      | 0     | 0       |          | 0       | ç             | 0   | 0      | 0        | 00                         |             |
|      | č        |                       | _      |          | _   | ~      | ~      | _   | ~       | _   |       |     | ~        |            | ~   | ~   |     | ~   | ~      | ~            | ~        |        | _       | .'.<br>~ |             | ~           | ~       | ~    | ~      | ~          |       | ~ ⁄      |          |       | 0       | <u> </u> |         |               | ~   | ~      | ~        | ~ •                        | n           |
|      | 133      | ň                     | 0      | 5        | 0   | ¢      | 0      | 0   | Q       |     | .0    | 0   | 0        | 4          | 0   |     | Č   | ;   | 0      |              | Ĵ        | Ċ      | Ö       |          |             | Ű           |         | Ŭ    | ÿ      | 0          | 0     | 0.       |          | , 0   | U       | č        | Č       | Ŷ             | Ŭ.  | Č      | Č        | ***                        | 1           |
|      | ž        |                       | ~      | ~        |     | •      | ~      | ~   | ~       | ~   | 0     | 0   | 0        | N          | 0   | •   | ÷   | 0   | 60     | 0            | N        |        | 0       | 0        | j<br>o      | :<br>•0     | ю       | 0    | ò      | 0          | 0     | 00       | ) c      |       | 0       | 0        | ं.<br>० | 0             | 0   | 0      | 0        | <b>м</b> ,                 | ‡           |
|      | (12)     | 2                     | Č      | Ŭ        | Č   |        | -      | Ť   | ļ       | Ū   | Ū     | Ĩ   | •        | <b>6</b> 0 | -   | Ñ   | -   |     |        |              |          |        |         |          | Ξ.          |             |         | _    |        |            |       | -        |          | 2     |         | -        |         |               |     |        |          | 5.5                        | 3           |
|      | ~        |                       | 0      | 0        | 0   | 0      | 0      | 0   | 0       | ~   | 0     | 0   | N        | N          | 0   | 0   | 0   | 0   | ,<br>M | 0            | 0        | 0      | 0       | 4        | 0           | 0           | m       | 0    | 。<br>。 | 0          | 0     | 0 0      | 5 c      |       | 0       | 0        | 0       | 0             | 0   | 0      | 0        | n c                        |             |
|      | C11      | 11                    | -      | •        | -   | 80     |        | •   |         |     |       |     |          | 11         |     |     |     |     | -9     |              |          | • . •  |         |          |             |             | m       | ,    |        |            |       |          |          |       |         |          |         |               |     |        |          | 2<br>2<br>2<br>2<br>2<br>2 |             |
|      | ~        |                       | 0      | 0        | 0   | 0      | 0      | 0   | ं.<br>0 | 0   | 0     | 0   | 0        | 0          | 0   | 0   | 0   | 0   | 0      | •            | 0        | 0      | 0       | 0        | 0           | ò           | 'n      | õ    | ò      | 0          | 0     | 0        | > c      | ò     | 0       | 0        | 0       | 0             | 0   | 0      | 0        |                            | *           |
|      | (10)     | 20                    |        |          |     |        |        |     |         |     |       |     |          |            |     |     |     |     |        |              |          |        |         |          |             |             |         |      |        |            |       |          |          |       | •       |          |         |               |     |        |          | 14                         | 5           |
|      | ~        | _                     | 0      | 0        | o   | 0      | 0      | 0   | 0       | ¢   | 0     | 0   | o        | 4          | 0   | 0   | 0   | 0   | o      | ¢            | 0        | o      | 0       | 0        | 0           | 0           | ŝ       | 0    | 00     | ¢          | 0     | 0 0      | > c      | 0     | o       | ¢        | 0       | ¢             | 0   | m      | 0        | ġ.                         | 4           |
|      | ŝ        | ¢                     |        |          |     |        |        |     |         |     |       |     |          |            |     | 1   |     |     |        |              | ·        |        | . •     | •        |             |             |         | :    |        |            |       |          | ι.       |       |         |          | 2       |               |     |        |          | , N                        | ,<br>r.     |
|      | <u></u>  | _                     | 0      | 0        | o   | 8      | 0      | 0   | 0       | o   | 0     | 0   | 0        | õ          | 0   | 0   | ŝ   | o   | ¢      | ò            | 0        | 0      | 0       | 0        | 0           | 0           | 0       | ö    | ¢      | 0          | 0     | 0 0      | , c      | 0     | 0       | ø        | 0       | 0             | o   | ¢      | \$       |                            | -           |
|      | е<br>С   | æ                     |        |          |     |        |        |     |         | ۰.  |       |     |          | ÷          |     |     | ۰.  | e.  |        | •••          | •        |        |         |          |             |             |         |      |        |            |       |          |          |       |         |          |         |               |     |        | Ĩ        | M c                        | j<br>J      |
|      | <u>.</u> |                       | 0      | 0        | 0   | 23     | 0      | m   | 0       | 0   | 6     | o,  | 0        | 31         | 0   | 5   | 57  | 22  | ò      | 11           | 80       | 0      | 0       | 52       |             | M           | 11      | o    | 78     | <b>6</b> 0 | 80    | 0 #      | n c      |       | 57      | o        | 0       | ÷             | ŝ   | 54     | 6        | -<br>-<br>-<br>-           | 2           |
|      | ~        | r~                    |        |          |     | 202    |        | •   |         |     | ŝ     |     | ۍ<br>۲   | 4          |     | ž   |     |     | ž      |              | ĩ        |        |         | -1       |             |             | r)      |      |        |            |       |          | -        |       |         |          |         |               |     | •      | -        |                            | j<br>V      |
|      | ŝ        | ~                     | 0      | 0        | 0   | Þ      | 0      | •** | 0       | 0   | 35    | 0   | ~        | 07         | 0   | 14  | 80  | Ö   | 20     | 0            | 62.0     | ő      | 0       | 02       | Ś           | 0           | ~       | ò    | ö      | 0          | ö     | 0 0      | > c      | ó     | 53      | 0        | 0       | 0             | 12  | N<br>N | o        | 80. g                      |             |
|      | č        | Č                     |        |          |     |        |        |     |         |     | •     |     |          | ň          |     | ÷   | ۰.  | ۰.  | +      |              |          |        | ۰.      | e-t      |             | ť           |         |      |        |            |       |          |          |       |         |          |         |               |     |        |          | ~ 0                        | кі<br>Р.,   |
|      | 3        | ŝ                     | 0      | 0        | ¢   | Ŷ      | 0      | 0   | o       | 0   | 50    | ~   | 0        | 26         | 0   | ю   | m   | 0   | 76     | 0            | 0<br>E   | 0      | 0       | 6        | 0           | •           | 77      | ¢    | ¢      | ø          | ¢.    | 0 0      | o c      | 0     | ~       | o        | 0       | 0             | 0   | 0      | æ        | 000                        | •           |
|      | ~        |                       |        |          |     |        |        |     | -       |     | .±    | ÷.  | •        |            |     | ;   |     | •   |        | •            |          |        |         | . •      |             |             |         | -    | ÷      | ÷          | :     | ĩ        |          |       |         |          |         |               |     | 5      |          |                            |             |
|      | 3        | 3                     | 15     | 0        | 0   | 0      | 0      | 0   | 0       | 0   | 0     | 0   | 60       | 67         | 20  | •   | ~   | 0   | 0      | 0            | <b>%</b> | 0      | 0       | ¢        | ò           | 0           | 29      | N    | 0      | ¢          | 0     | 0 0      | ~ C      | 0     | 9       | •        | •       | ¢             | o,  | 0      |          | 214                        | -           |
|      | -        |                       |        |          |     |        |        |     | •       |     | •     |     | • .      |            |     |     |     |     |        | -            |          | ,      | 13      |          |             |             |         |      |        |            |       |          |          |       |         |          |         |               |     |        |          | , ,                        | ì           |
|      | ŝ        | ۳î                    | 0      | 0        | 0   | 52     | 0      | 27  | ¢       | o   | 12    | 0   | 0        | 117        |     | 0   | N   | v   | 16     | ¢            | 7<br>1   | 0      | 0       | 12       | ~           | 0           | 202     | 0    | 0      | 0          | 0     | 00       | > 0      | 0     | m       | ¢        | 0       | 0             | 0   | 0      |          | 287                        | 5           |
|      | ~        |                       |        |          |     |        |        |     | •       | 1   |       |     |          | ·          |     |     |     |     |        |              |          |        |         |          | 2           | •           |         |      |        |            |       | 5.       |          |       | •       |          |         | _             | _   | _      |          | r                          |             |
|      | \$       | N                     | 0      | 0        | 0   | 77     | 0      | ~   | 0       | 0   | 5     | 0   | þ        | 204        | ¢   | 47  | 43  | 0   | 36     | 4            | ŝ        | 0      | 0       | ñ        | 0           | 79          | 5 2     | 0    | లు     | 0          | 0     | 0 0      | 00       |       | 17      | 0        | 0       | 0             | ¢   | o      | 4        | 619                        |             |
|      | ~        |                       |        |          |     |        |        |     |         |     |       |     |          |            |     |     |     |     |        |              | •        |        | •       | _        |             |             | 1       |      | 2      |            |       |          |          |       | -       | _        |         | _             | _   |        |          |                            | •           |
|      | ÷        | <b>-</b> -1           | 24     | ł)<br>ei | 0   | 131    | ħ      | 18  | 0       | 0   | 202   | •   | 0        | 919        |     | 137 | ŝ   | ŝ   | 339    | ዮ            | 23       |        |         | 8        | 4           | m           | ň       |      | Ň      | ~          | M     | 9        | t<br>t   | 10    | 150     | O        | 0       | 0             | Ų   | 4      | v        | 3571                       | ,           |
|      | ~        |                       |        |          |     |        |        |     |         |     |       |     |          |            |     |     |     |     |        | •            | 2        |        |         |          |             |             |         |      |        |            |       | •        |          | •     |         |          |         |               |     |        |          | - 1 (P                     | ì           |
|      |          |                       |        |          |     |        |        |     |         |     |       |     |          |            |     |     |     |     |        |              |          |        |         |          |             | •           |         |      |        |            |       |          |          |       |         |          |         |               |     |        |          |                            |             |
|      |          |                       |        |          |     |        |        |     | _       | _   |       |     |          |            |     |     |     |     | ~      | ~            | :_       |        | ~       | **       |             |             | <i></i> | ~    |        | r.         | ~     |          |          |       |         | Ś        |         | <b>6</b> 77   | •   | ~      |          | _ =                        | J           |
|      |          |                       | 101    | 102      | 103 | 104    | 105    | 107 | 108     | 109 | 110   | 111 | 112      | 113        | 114 | 115 | 116 | 117 | 118    | 119          | 120      | 121    | 122     | 121      | 124         | 125         | 126     | 127  | 128    | 123        | ň     |          |          | ň     | 5.5     | 136      | 13.     | 138           | 13  | 14(    | 14       | -141                       |             |
|      |          |                       |        |          |     |        | • .    |     |         |     |       |     |          |            | -   |     |     |     |        |              |          |        |         |          |             |             |         | •    |        |            | •     |          |          |       |         |          |         |               |     |        |          | *                          |             |
|      |          |                       | 29.    | 30.      | 31. | 32.    | ю<br>М | 34. | γ<br>Ν  | 36. | i M   | ~   | ŝ.       | 0          |     | ~   | ×۵. | .+  | 10     | 46           | ē.       | 87     | Dh.     | 0        | ÷           | Ω.          | м       | 54   | 525    | 56.        | 5     | 000      |          | 61.   | 29<br>9 | 63       | \$      | 5°.           | 6 Q | 67.    | 80<br>90 | 6 C                        | 2           |
|      |          |                       |        |          |     |        |        |     |         |     |       |     |          |            |     |     |     |     |        |              |          |        |         |          | 2           |             | •       | •.   |        |            |       |          |          |       |         |          |         |               |     |        |          |                            |             |
|      |          |                       |        |          |     |        |        |     |         |     |       |     |          |            |     |     |     |     |        |              | _        |        |         |          |             |             |         |      |        |            |       |          |          |       |         |          |         |               |     |        |          |                            |             |

л водоосоосоосоосоосоо мин м ус , ( 0.22 0.22 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 200 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2 

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( TOTAL )

TYPE OF VEHICLE

| ******                      |              |
|-----------------------------|--------------|
| NALROBI ROAD-USER-INTERVIEW | PE 0         |
| ********                    | FUTURE OD T/ |

# TYPE OF VEHICLE ( TOTAL )

|     | (40) | 20     | c     | o        | c      | > c  | > c  |            | 5   | 0   | 14  | 0   | 0   | 28  | ¢   | o   | 1    | 12  | €0<br>€1 | 0          |     | ļ   | ò             | 5 C        | > (            | Ċ   | o          | 57         | o      | 0   | 0   | 0   | 0   | Ð.  | 0   | 0        | ው   | o   | 0   | 0   | 0   | 0   | o   | 165   | 2397     |
|-----|------|--------|-------|----------|--------|------|------|------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|----------|------------|-----|-----|---------------|------------|----------------|-----|------------|------------|--------|-----|-----|-----|-----|-----|-----|----------|-----|-----|-----|-----|-----|-----|-----|-------|----------|
|     | (39) | 0      | 0     | o        | C      |      | ) с  |            | 2   | ¢   | 0   | 0   | ¢   | 0   | 0   | 0   | 0    | a   | 0        | 0          | 0   | o c | o c           | > c        | 5. (           | o   | 0          | 0          | o      | м   | 0   | 0   | 0   | •   | o   | 0        | 0   | 0   | 0   | .0  | 0   | 0   | 0   | м     | 81       |
| ЯIР | (38) |        | 0     | 0        | c      | ) C  | ò    | • c        | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | o    | 0   | 0        | 0          | 0   | • c | > c           | <b>,</b> c | > (            | Þ   | 0          | 0          | 0      | 0   | 0   | 0   | 0   | 0   | ¢   | 0        | 0   | 0   | b   | 0   | 0   | 0   | 0   | 0     | 52       |
| 7:7 | (37) | , o    | 0     | 0        | м с    | ) C  | Ċ    | <b>,</b> , |     | 0   | •   | 0   | 0   | 25  | o   | °.  | 0    | 0   | Ö        | 0          | 0   | • c | 00            | 5·¢        | ) (            | 0   | 0          | 0          | 0      | 0   | 0   | O,  | 0   | 0   | c   | 0        | O   | •   | 0   | 0   | 0   | 0   | 0   | 48    | 672      |
|     | (36) | 0      | 0     | 0        | c      | ¢    |      |            | 3   | 0   | 0   | o   | 0   | 0   | o   | •   | 0    | 0   | 0        | 0          | 0   |     | • c           | > <        | 2              | 0.  | 0          | 0          | Ö      | 0   | 0   | 0   | 0   | •   | o   | 0        | 0   | •   | 0   | 0   | 0   | 0   | 0   | 0     | 13       |
|     | (32) | 0      | 0     | ¢        | c      | o c  | 0    | •          | 2   | O.  | 0   | 0   | 0   | 0   | 0   | 0   | o    | 0   | 0        | 0          | 0   | , c | • •           | > c        | > (            | Ð   | <b>O</b> . | <b>O</b> . | o      | 0   | 0   | 0   | 0   | Þ,  | 0   | •        | 0   | ¢   | 0   | 0   | 0   | 0   | •   | 0     | 10       |
|     | (34) | 0      | 0     | 0        | C      |      |      |            | 5   | •   | 0   | 0   | 0   | 10  | 0   | 0   | 0    | 0   | 0        | 0          | 0   | • c | > <           | > <        | > (            | 0   | 0          | O.         | o      | 0   | 0   | 0   | 0   | 0   | 0   | 0        | 0   | 0   | •   | 0   | 0   | 0   | 0   | 10    | 67       |
|     | (33) | 0      | C     | 0        | C      | e ic | • c  |            | 2   | 0   | 13  | 0   | 0   | 0   | ¢   | 0   | 0    | 0   |          | 0          | .0  |     | • c           | 2          |                | 0   | 0          | 14         | 0      | 0   | 0   | ¢   | ¢   | 0   | 0   | •        | 0   | °   | 0   | ¢   | 0   | 0   | 0   | 27    | . 84     |
|     | (32) | ~      |       |          |        |      | •    |            |     |     |     |     |     |     |     |     |      |     |          |            |     |     |               |            |                |     |            |            |        |     | 0   |     |     |     |     |          |     |     |     | · . |     |     | 66  | 4+1   | 812      |
|     | (31) | 0      | 0     | 0        | c      | • c  | • c  | •          |     | ø   | 0   | 0   | 0   | •   | 0   | 0   | 0    | 0   | 0        | 0          | .0  |     | > c           | > <b>c</b> | <b>&gt;</b> .( | D   | •          | 0          | ò      | o   | 0   | ò   | 0   | 0   | 0   | 0        | 0   | •   | °   | 0   | 0   | 0   | 0   | 0     | <b>°</b> |
| ÷   | (30) | 0      | C     | 0        | c      |      |      | 0          | S   |     |     |     |     |     |     |     |      |     |          |            |     |     |               |            |                |     |            |            |        |     |     |     |     |     |     |          |     |     |     | ÷   |     | 0   |     |       |          |
|     | (29) | •      | 0     | 0        | 2      |      | o c  | •          | 2   |     |     |     |     |     |     |     |      |     |          |            |     |     |               |            |                |     |            |            |        |     |     |     |     |     |     |          |     |     | -   |     |     | 0   |     |       | -        |
|     | (28) | •      |       |          |        |      |      |            |     |     |     |     |     |     |     |     |      |     |          |            |     | , . | •••           |            |                |     |            |            |        |     |     |     |     |     |     |          |     |     |     |     |     | 0   |     |       | 12       |
|     | (22) | , °    | 0     | 0        | đ<br>C | 3 0  |      | <b>)</b> ( |     | 0   | 0   | Ð   | 0   | 31  | 0   | 22  | •    | •   | 0        | 0          | Ċ   |     | > <b>&lt;</b> | ⊃ ⊧<br>*   | 11             | ¢   | ¢          | 11         | ¢      | 36  | •   | m   | °.  | 0   | D   | <u>،</u> | 0   | •   | Ó   | 0   | 0   | 0   | 0   | 166   | 2483     |
|     | (26) | ,<br>, |       | • •      |        |      |      |            |     |     |     |     |     | F   | • . |     |      | 1   |          |            |     |     |               |            |                |     |            |            |        |     |     |     |     | :   |     |          |     |     |     |     |     | 0   |     |       | 1140     |
|     | (52) | J      |       |          |        |      |      |            |     |     |     |     |     |     |     |     |      |     |          |            |     | •   |               |            |                |     |            |            |        |     |     |     |     |     |     |          |     |     |     |     |     | 0   |     |       | ÷        |
|     | (24) | Ĵ      |       |          | ſ      | U    |      |            |     |     |     |     |     | 1.1 |     |     |      |     |          |            |     |     |               | •          |                |     |            |            |        |     |     |     |     |     |     |          |     |     |     |     |     | 0   |     |       | 18       |
|     | (23) | •      |       |          |        |      |      |            |     |     |     |     |     | -   |     |     |      | •   |          |            |     |     |               |            |                |     |            |            |        |     |     |     |     |     |     | -        |     |     |     |     |     | 0   |     |       | 4        |
|     | (22) | v      |       |          |        |      |      |            |     |     |     |     |     |     |     |     |      |     |          |            |     |     |               | •          | v              |     |            |            |        |     |     |     |     |     |     |          |     |     | -   |     |     | 0   |     | •     | 40       |
|     | (21) | •      | ) C   | o c      | * (    | ሳረ   | 00   |            | 0   | 0   | 0   | 0   | 0   |     | 0   | 0   | . 10 | 1   | α        | о <b>с</b> | o c | , c |               | <b>-</b>   | 0              | 0   | 7          | ~          | °.     | ~   | 0   | ¢   | o   | 0   | 0   | o        | 0   | •   | 0   | 0   | 0   | 0   | 0   | 87    | 1339     |
|     |      | 101    |       |          | •••    |      |      | 101        | 108 | 109 | 110 | 111 | 112 |     | 114 | 115 | 915  | 117 |          | 0          |     |     |               | 221        | 165            | 124 | 125        | 126        | 127    | 128 | 129 | 130 | 131 | 132 | 133 | 134      | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 171-* |          |
|     |      | 0      | • • • | •<br>• • |        |      | •••• |            | 35. | 36. | ~   | 0   | 0   | 707 |     | .23 | 1    | 44. | v        | 1.4        |     | < 0 |               | 5 7 7      | 0              | 51. | 52.        | 53.        | - 24 - | 55. | 56. | 57. | 58. | 59. | ¢   | -        | N   | 63. | 4   | 65. | -0  | 67. | 63. | 0     | 0        |

TYPE OF VEHICLE < TOTAL )

|          | (60) | 133 | 0   | M       | 0  | C  | 0   | 0  | 0       | 0           | 0  | 0  | Ö  | C            | 0   | 0 | 0  | c   | 0  | 0       | 0        | n, M | ð  | 0  | C  | 0      | C  | 0  | C  | 0        |
|----------|------|-----|-----|---------|----|----|-----|----|---------|-------------|----|----|----|--------------|-----|---|----|-----|----|---------|----------|------|----|----|----|--------|----|----|----|----------|
| •        | (65) | 132 | 16  | ¢       | 14 | 0  | 18  | 1  | 40      | 0           | 0  | 0  | 0  | o            | 0   | Ċ | 0  | 2   | 0  | ~       | 0        | 142  | 0  | 0  | o  | 0      | Ċ  | 0  | 0  | 0        |
| dI       | (58) | 131 | 0   | 0       | 0  | o  | 0   | m  | i ni    | 0           | 0  | °. | 0  | 0            | 0   | 0 | 0  | Ó   | 0  | 0       | 0        | S    | 0  | m  | 0  | 0      | 0  | 0  | 0  | ы        |
| INIT: TE | (22) | 130 | 20  | N       | 0  | 0  | 13  | 0  | 15      | o           | ŝ  | 0  | N  | 0            | ~   | ¢ | 0  | 0   | Ó  | цų      | 0        | 94   | Ö  | 4  | 0  | ¢      | 0  | 0  | 0  | 4        |
|          | (95) | 129 | 12  | 0       | 0  | 0  | 0   | 0  | 0       | 0           | 0  | 0  | o  | 0            | 0   | 0 | 0  | 0   | 0  | 0       | D        | 12   | 0  | Ð  | 0  | 0      | 0  | 0  | 0  | 0        |
|          |      |     |     |         |    |    |     |    | 20      |             |    |    |    |              |     |   |    |     |    |         |          |      |    |    |    |        |    |    |    |          |
|          | (34) | 127 | N   | ò       | 12 | v  | 0   | 0  | 0       | 0           | 0  | 0  | 0  | 0            | 0   | 0 | 0  | 0   | 0  | 0       | 0        | 20   | 0  | 0  | 0  | 0      | 0  | 0  | 0  | 0        |
|          | (23) | 126 | 456 | 54      | 79 | 81 | 102 | 38 | 230     | i<br>1<br>1 | 0  | 0  | 37 | · <b>r</b> . | 67  | 0 | 28 | 119 | 02 | с.<br>Г | 0        | 1379 | 0  | N  | 0  | ò      | 0  | 0  | 0  | 8        |
|          | (52) | 125 | 10  | 9       | 18 | 80 | 23  | o  | 33      | o           | 10 | 0  | 16 | 0            | 0   | 0 | 0  | 4   | 0  | -       | 0        | 129  | 0  | 0  | 0  | 0      | 0  | 10 | 0  | 10       |
|          | (12) | 124 | 81  | è<br>n  | 11 | 0  | 0   | 21 | 'n      | 0           | 0  | 0  | 0  | 0            | 0   | 0 | 0  | 0   | 0  | 0       | 0        | 155  | o  | 0  | 0  | 0      | 0  | 0  | 0  | 0        |
|          | (20) | 123 | 235 | 4 3     | 40 | 18 | ٥   | 28 | 39      | o           | m  | 0  | 17 | -9 e         | 0   | 0 | 0  | 15  | භ  | ŝ       | 0        | 474  | 21 | 31 | o  | 31     | 16 | 0  | 10 | 109      |
|          | (67) | 122 | 0   | •       | 0  | ¢  | ¢   | ò  | m       | 0           | 0  | 0  | ¢  | 0            | o   | 0 | •  | ¢   | 0  | 0       | 0        | ۴'n  | ¢  | 0  | 0  | 0      | 0  | 0  | 0  | 0        |
|          | (87) | 121 | ŝ   | ò       | 0  | 0  | 0   | Ð  | ŝ       | 0           | 0  | 0  | 0  | Ö.           | ò   | 0 | o  | 0   | 17 | 0       | 0        | ŝ    | 0  | Ö  | 0  | 0      | 0  | 0  | 0  | c        |
| ÷        | (42) | 120 | 341 | 38<br>1 | ~  | 27 | 20  | 52 | 67      | 0           | 18 | •  | 25 | 0            | 0   | 0 | n  | 22  | 44 | ~       | 0        | 686  | 0  | ¢  | o  | 0      | 0  | 0  | 0  | 0        |
|          | (97) | 119 | 167 | ŝ       | e¢ | ç  | Ň   | m  | 8<br>28 | ¢,          | 0  | 0  | ¢  | 0            | 11. | 0 | 0  | 0   | o  | 0       | o        | 233  | 0  | 0  | 0  | ~<br>₹ | \$ | 0  | 0  | 18<br>18 |
|          | (42) | 118 | 211 | 6.      | 22 | 68 | 46  | 92 | 771     | •           | 10 | 0  | 15 | 19           | 0   | • | 0  | 57  | 12 | 14      | <b>0</b> | 277  | ~  | N  | 27 | 0      | 4  | 0  | 0  | 07       |
|          | (77) | 117 | 40  | 26      | 12 | 0  | ¢   | 0  | 32      | •           | 0  | ò  | \$ | ö            | 0   | 0 | 0  | 17  | 29 | ŝ       | Ð        | 195  | 0  | 0  | 0  | 0      | 0  | 0  | 0  | 0        |
|          | -    | •   |     |         |    |    |     |    | 24      |             |    |    |    |              |     |   |    |     |    |         |          |      |    |    |    |        |    |    |    |          |
|          |      |     |     |         |    |    |     |    | 07      |             |    |    |    |              |     |   |    |     |    |         |          |      |    |    |    |        |    |    |    |          |
|          | (1)  | 114 | N   | \$      | 0  | •  | 0   | o  | o       | •           | 0  | ¢  | o  | o            | 0   | 0 | 0  | 0   | 0  | ø       | 0        | ¢    | 0  | ¢  | 0  | 0      | 0  | 0  | ¢  | ø        |
|          |      |     |     |         |    |    |     |    |         |             |    |    |    |              |     |   |    |     |    |         |          |      |    |    |    |        |    |    |    |          |

## TYPE OF VEHICLE ( TOTAL )

|    |             | _        |     | _   |     |     |     |     | _   |     | _   |      |               |     |     |     |            | ~ .           | _          | ~        | ~          |     | _   | _          |     |          | _   |     |     |     | -   | ~        | ~   | _    | ~   | _        |          |               | ~   |     |     |          |     |              |     |
|----|-------------|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|---------------|-----|-----|-----|------------|---------------|------------|----------|------------|-----|-----|------------|-----|----------|-----|-----|-----|-----|-----|----------|-----|------|-----|----------|----------|---------------|-----|-----|-----|----------|-----|--------------|-----|
|    | (09)        | ì        | 0   | o   | o   | 0   | ç   | o   | 0   | 0   |     |      | , .           |     | , . |     |            |               | Ű          | 0        | Ő          | 0   |     |            |     |          |     |     | , с |     |     |          |     |      |     |          |          |               |     |     | , , |          | ,   | ) M          |     |
|    | (59)        | 3        | 0   | 0   | 23  | 0   | 0   | 0   | 0   | 0   | . 6 |      | 1.            | ; с | • c | Ċ   |            | 5             | ö          | 0        | Ð          | 0   | o   | 0          | Ċ   | 0        | 0   | Ċ   |     | • • | 0   | 0        | 0   | 0    | ¢   |          |          | 0             | C   | C   | 0   |          | 707 | 182          | 1   |
| G. | (58)        |          | 0   | o   | o   | 0   | 0   | 0   | 0   | 0   | 0   | o c  | o c           | C   |     | o ⊂ | > <        | > <           | 0          | C        | 0          | 0   | 0   | 0          | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0        | 0   | o    | 0   | 0        | o        | 0             | 0   | c   | 0   | o o      | 0   | 0            |     |
| -  | 130         | 2        | o   | o   | 0   | ¢   | Ó   | 0   | 0   | 0   | 0   | • c  | 0             | , c | òc  | > c | •          | <b>,</b>      | 0          | 0        | 0          | 0   | o   | 0          | Ċ   | 0        | 0   | 0   | 0   | 0   | Ó   | 0        | 0   | 0    | 0   | 0        | 0        | 0             | 0   | 0   | 0   | 0        | 0   | 80           |     |
| _  | (56)        | J        | 0   | 0   | 0   | 0   | 0   | o   | 0   | 0   | 0   | o c  | 0             | ) C | ) c | • c | > (        |               | Ð          | 0        | 0          | 0   | 0   | 0          | o   | 0        | ø   | 0   | 0   | 0   | 0   | ò        | 0   | 0    | 0   | 0        | Ģ        | •             | •   | 0   | 0   | 0        | 0   | • ~ <b>₽</b> | • . |
|    | (55)        | 5.<br>v  | 0   | 0   | 0   | o   | 0   | 0   | 0   | 0   | 0   | , c  | . 0           | • c | e e | • c | > <        |               | 5          | 0        | 0          | ¢   | 0   | 0          | Ø   | 0        | 0   | 0   | 0   | 0   | 0   | 0        | 0   | 0    | 0   | 0        | 0        | 0             | 0   | 0   | 0   | 14       | 4   | 208          | •   |
|    | (24)        | 0        | 0   | 0   | 0   | 0   | 0   | 0   | ¢   | 0   | C   | ċ    | 0             | • c | Ċ   | • c | > c        | > 0           | 5          | 0        | 0          | 0   | 0   | 0          | C   | 0        | ò   | 0   | 0   | 0   | 0   | 0        | 0   | 0    | 0   | 0        | 0        | 0             | 0   | 0   | 0   | o        | 0   | 50           |     |
|    | 233         | ~        | 0   | 0   | 59  | 16  | 0   | 0   | 0   | 33  | 0   | 0    | 37            | , c | • • | ) C | • •        | > <           | 5          | 0        | 0          | 0   | 0   | 59         | 0   | 0        | ۲.  | 0   | 0   | 0   | •   | 0        | 0   | 0    | 0   | o        | 0        | <b>0</b><br>: | 0   | 0   | 0   | 0        |     | 1609         |     |
|    | (52) (      | <u>۱</u> | 0   | o   | 0   | o   | 0   | 0   | 0   | 0   | 07  | • •  | 18            | 0   | c   | c   |            | <b>,</b>      | ə •        | 0        | ¢          | 0   | 0   | 0          | 0   | 0.       | ň   | 0   | ø   | 0   | •   | ¢        | 0   | ¢    | 0   | 0        | 0        | •<br>•        | •   | 0   | 0   | 0        | 21  | 160          |     |
|    | 51)<br>34   | 0        | 0   |     | 21  | 0   | ō   | 0   | ö   | 0   | 0   | - TO | 12            | 0   | c   | ¢   | эс         | <b>.</b>      | 5 (        | о.       | ~          | 0   | 0   | 0          | ¢   | 0        | 0   | 0   | 0   | 0   | ò   | 0        | 0   | ¢    | 0   | 0        | 0        | •             | 0   | 0   | 0   | 0        | 5   | 190          |     |
|    | 50)         | 0        | 0   | ¢   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 12            | 0   | 0   |     | 4 C        | ).c<br>r      | , i        | 0.       | Ś          | 0   | 0   | 44         | 0.  | 0        | ø   | 0   | 0   | 0   | 0   | 0        | 0   | 0    | þ   | 0        | 0        | 0             | 0   | 0   | 0   | 0        | 55  | 638          | f . |
|    | <u>ج</u>    | -<br>0   | ¢   | 0   | 0   | 0   | 0   | 0   | ¢   | 0   | 0   | 0    | 0             |     | Ċ   |     | <b>,</b> , | > <b>c</b>    | <b></b> c  | о.       | 0          | 0   | .0  | 0          | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0        | 0   | 0    | o   | 0        | 0        | 0             | 0   | 0   | 0   | 0        | 0   | 'n           | ж   |
|    |             | •        |     |     |     |     |     |     |     |     |     |      |               |     |     |     |            |               |            |          |            |     |     |            |     |          |     |     |     |     | •   |          | _   |      | _   | _        |          | •             |     | _   |     |          |     | •            | •   |
|    | (48)        | •        | 0   | 0   | 0   | Ċ   | 0   | ¢   | 0   | 0   | 0   | 0    | Ö             |     | ¢   |     | ) (C       | >.<           | 2.0        | o        | <b>O</b> · | ç   | o   | ¢          | ¢   | ¢        | 0   | 0   | 0   | 0   | 0   | 0        | 0   | ç    | ç   | 0        | ¢        | 0             |     | 0   | 0   | <u>0</u> | C   | 5£           | -   |
|    | (27)        | •        | 0   | o   | 11  | 0   | 0   | 0   | Ö   | 0   | 0   | 0    |               | 0   |     | ) C |            | <b>,</b>      | 5          | 0        | 0          | ¢   | 0   | 28         | 0   | 0        | 0   | 0   | 0   | 0   | 0   | <b>.</b> | 0   | Ð    | 0   | <b>0</b> | .0<br>:, | 0             | •   | 0   | 0   | Ģ        | 51  | 737          |     |
|    | (46)        | •        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |      | 11            | 0   | Ċ   | ).C |            | <b>.</b>      | 5          | 0        | Ö          | 0   | 0   | . <b>™</b> | ò   | <u>o</u> | ¢   | 0   | 0   | 0   | 0   | 0        | 0   | 0    | ò   | 0        | 0        | 0             | •   | 0   | 0   | ò        | 14  | 265          | -   |
|    | (45)<br>118 |          | 0   | 0   | ~   | ¢   | 0   | 0   | 0   | 0   | o   | • 0  | 0             | Ċ   |     | • c | <b>,</b>   | >. ¢          |            | 0        | 0          | 0   | Ð   | 22         | D   | O        | 0   | 0   | M   | 0   | 0   | 0        | •   | Þ    | o   | 0        | 0        | 0             | 0   | 0   | 0   | o        | 67  | 866          |     |
|    | (77)        |          | 0   | •   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | • c  | - <b>5</b> -7 | ı c | · c | • c | > (        | <b>&gt;</b> < | 0          | 0        | 0          | 0   | 0   | Ö          | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0        | 0   | o    | Ö   | 0        | 0        | 0             | 0   | 0   | •   | 0        | 12  | 207          |     |
|    | (43)        | 2        | 0   | 0   | 0   | о   | 0   | ¢   | o   | 0   | 0   | • c  | 'n            | • C | Ċ   | • c | <b>,</b>   | > 0           | 0          | c        | 0          | ¢   | 0   | 0          | 0   | 0        | 00  | 0   | 0   | ¢   | 0   | 0        | 0   | o    | 0   | 0        | 0        | 0             | 0   | 0   | o   | 0        | 51  | 200          |     |
|    | (42)        | n<br>H   | 0   | 0   | 10  | 0   | 0   | 0   | 0   | 0   | 0   | o c  | 1             | 10  | , c | о с | <b>)</b> ( | > 0           | <b>•</b> • | <b>0</b> | 0          | 0   | 0   | Þ          | 0   | 0        | 0   | 0   | 0   | 0   | o   | 0        | o   | ¢    | 0   | 0        | o        | ¢             | 0   | ¢   | 0   | 0        | 25  | 336          |     |
|    | (41)        | 1<br>    | 0   | ¢   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | , c  | , c           | • c | • c | • c | <b>,</b>   | <b>&gt;</b> ( | 0          | 0        | 0          | 0   | 0   | D          | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0        | 0   | 0    | 0   | 0        | 0        | 0             | ,o  | 0   | 0   | 0        | 0   | ¢            |     |
|    | ·           |          |     |     |     |     |     |     |     |     |     |      |               |     |     |     |            |               |            |          |            |     |     |            |     |          |     |     |     |     |     |          |     |      |     |          |          |               |     |     |     |          |     |              |     |
|    |             | 101      | 102 | 103 | 107 | 105 | 107 | 108 | 109 | 110 | 111 |      |               |     |     |     | 1 0        | ~ (           | 815        | 119      | 120        | 121 | 122 | 123        | 124 | 125      | 126 | 127 | 128 | 129 | 130 | 131      | 132 | 133. | 134 | 135      | 136      | 137           | 138 | 139 | 140 | 141      | 141 | OTAL         |     |

\*\*\*\*\*\*\*\*\* NAIROBI ROAD-USER-INTERVIEW FUTURE OD TABLE BY TYPE OF VEHICLE

\*\*\*\*\*\*\*

TYPE OF VEHICLE ( TOTAL )

| (70)<br>10141 | Ē              | 696 | \$2 | 5  | 20 | 5  | 530 | 23 | 33       | ~   | 8 | - <b>1</b> | ÷              | œ      | 22 | 650 | 65  | 25 | <b>N</b> | 2   | 35  | 5  | -   | \$ | ~4<br>09 | 86 | 5 | 8   |
|---------------|----------------|-----|-----|----|----|----|-----|----|----------|-----|---|------------|----------------|--------|----|-----|-----|----|----------|-----|-----|----|-----|----|----------|----|---|-----|
| (69)<br>- 141 | 315            | 35  | ŝ   | 60 | ŝ  | 2  |     |    |          | .•0 | æ | 131        | 88             | 10     | 76 | ŝ   | 179 | ~  | 0        | -   | ¢ 5 | 78 | 117 | 83 | 76       | 19 | ÷ | 582 |
| (68)<br>141 * | 8              | 0   | 10  | Ģ  | ¢  | 0  | 53  | •  | •        | 0   | 0 | 0          | 0              | 0      | 0  | 0   | 0   | 0  | o        | 147 | 0   | ¢  | 0   | •  | o        | 0  | 0 | 0   |
| (67)          | -              | 0   | 0   | 0  | 'n | 40 | 0   | 0  | 0        | 0   | 0 | 0          | •              | 0      | 0  | D   | ¢   | o  | 0        | 61  | •   | 0  | 0   | •  | 0        | 0  | 0 | 0   |
| (66)<br>139   | ŝ              | 0   | 0   | m  | 0  | 0  | •   | 0  | <b>o</b> | 0   | • | o          | 0              | 0      | 0  | 0   | P   | o  | 0        | 2   | 0   | ¢  | 0   | 0  | 0        | 0  | 0 | ¢   |
| (65)<br>138   |                | 1.8 | 0   | 0  | 0  | 0  | 11  | 0  | 0        | 0   | 0 | 0          | 0              | 0      | 0  | 0   | \$  | 0  | 0        | 35  | 0   | 0  | 0   | 0  | 0        | ō  | o | 0   |
| (64)          | , <del>-</del> | 0   | 0   | 0  | 0  | 10 | 2   | 0  | <b>o</b> | 0   | 0 | 25         | o <sub>.</sub> | 0      | 0  | 0   | 0   | 0  | 0        | 53  | 0   | 0  | 0   | 0  | 0        | ¢  | 0 | 0   |
| (63)<br>136   | •              | 0   | 0   | 0  | 0  | 0  | 0   | 0  | 0        | 0   | o | 0          | 0              | 0      | 0  | ۴N  | 0   | -1 | o        | ~7  | 0   | 0  | 0   | 0  | 0        | 0  | 0 | 0   |
| (62)<br>135   | ្ព             | 31  | 9   | 22 | 0  | 21 | 80  | 0  | o        | 0   | ¢ | 0          | 0              | 9<br>7 | 0  | 14  | 0   | Ċ, | 0        | 296 | 0   | 0  | 0   | 0  | 0        | 0  | 0 | 0   |
| (61)          |                | O,  | ò   | o  | o  | 12 | 14  | ~  | <b>.</b> | o   | ¢ | 0          | o              | 0      | 0  | •   | °.  | o  | 0        | 37  | 0   | 0  | 0   | 0  | 0        | 0  | 0 | 0   |

4 W ON 00 0 ្ឋ 1115. 1115. 1116. 1116. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. 1117. NM

UNIT:TRIP

TYPE OF VEHICLE ( TOTAL )

UNIT:TRIP

| (70)<br>TOTAL    | Ś | 26 | 0   | 1354 | Ň  | 81 | 0 |   | 478 | 12  | ¢.  | 3365 | -   | 326 | 0   | 144 | õ   | Ň   | 668 |     |   | 2.18 |     | Ŵ      | .vri |     |     | 15       |     | 0   | 1,98 |          | ň   | 32.6    | ·   | 0   |     | 61  | - 1 | 297 |            | 89897          |
|------------------|---|----|-----|------|----|----|---|---|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|---|------|-----|--------|------|-----|-----|----------|-----|-----|------|----------|-----|---------|-----|-----|-----|-----|-----|-----|------------|----------------|
| 9<br>7<br>7<br>1 | - |    | 0   |      | ** |    | 0 | ¢ | 71  | 0   | 0   | 247  |     | ~   | 36  | 23. | 50, | .ò  | 11  | 0   | ō | 133  | 14  | °<br>· | 150  | 0   | ۰¢  | 0        | •   |     | 87   | ¢        | ÷.  | ×4<br>1 | Ö   | 0   | 5   | 13  | ~   | 80  | 9 E        |                |
| (68)<br>141 *    |   | 0  | 0   | 132  |    | 0  | 0 | 0 | ò   | o   | 0   | N    | 0   | ò   | o   | 0   | 0   | ò   | o   | Ó   | 0 | 0    | ¢   | 0      | 0    | O,  | 0   | o        | ò   | ¢   | 0    | °        | •   | ò       | 0   | 0   | 0   | 0   | 0   | 0   | m          | 281            |
| (67)<br>140      | - | 0  | 0   | 0    | ¢  | 0  | 0 | Ö | 0   | 0   | 0   | ŝ    | Ö   | 0   | 0   | 0   | 0   | ò   | o   | ō   | o | ò    | ò   | ю      | 0    | Ö   | o   | 0        | 0   | o   | 0    | •        | o   | 0       | 0   | 0   | 0   | 0   | 0   | 0   | ţΩ.        | 99             |
| (66)<br>139      |   | 0  | 0   | ۶'n  | 0  | 0  | 0 | 0 | ō   | Ó   | 0   | Ö    | ò   | 0   | o   | 0   | 0   | 0   | 0   | 0   | o | ò    | o   | 0      | 0    | 0   | 0   | 0        | Þ   | 0   | ¢    | ō        | 0   | 0       | 0   | ¢   | 0   | 0   | 0   | 0   | m          | <b>9</b><br>72 |
| (65)<br>138      | ÷ | 0  | 0   | ~*   | 0  | 0  | o | Q | 0   | ò   | 0   | м    | 0   | ¢   | 0   | 0   | 0   | ò   | o   | 0   | 0 | 0    | þ   | ò      | Ð    | o   | 0   | 0        | 0   | o   | 0    | 0        | 0   | ò       | 0   | 0   | 0   | 0   | 0   | 0   | ~          | 4              |
| (64)             |   |    | b   | 7    | 0  | 0  | 0 | Ö | 0   | Ó   | 0   | ò    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | ¢ | ò    | 0   | •      | ò    | 0   | 0   | •        | o   | •   | 0    | 0        | 0   | 0       | 0   | 0   | 0   | 0   | 0   | 0   | - <b>3</b> | 57             |
| (63)<br>136      |   | 0  | 0   | 5    | 0  | 0  | o | 0 | 0   | C   | 0   | 0    | 0   | 0   | ò   | 0   | ¢   | ¢   | 0   | 0   | ¢ | 0    | 0   | Ģ      | 0    | 0   | o   | 0        | ò   | 0   | 0    | ò        | 0   | 0       | 0   | 0   | 0   | 0   | 0   | 0   | Ś          | ٥              |
| (62)<br>135      |   | 0  | 0   | 54   |    | ¢  | o | o | 0   | C   | 0   | 17   | o   | N   | o   | 0   | 0   | 0   | •   | 0   | 0 | 0    | ¢   | 0      | 0    | 0   | 0   | <b>0</b> | o   | 0   | •    | 0        | 0   | m       | 0   | 0   | 0   | 0   | 0   | 0   |            | 377            |
| (61)<br>134      | 0 | 0  | 0   | ŝ    | 0  | 0  | 0 | 0 | o   | Ċ   | 0   | 4    | 0   | 0   | ō   | 0   | 0   | °   | 0   | ò   | o | 0    | 0   | 0      | 0    | 0   | 0   | Ō        | 0.  | •   | 0    | <b>0</b> | 0   | 0       | •   | 0   | 0   | 0   | o   | Ð   | ¢          | 46             |
|                  |   |    | 103 |      |    |    |   |   |     | 111 | 112 | 113  | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 |   | 123  | 124 | 125    | 126  | 127 | 128 | 129      | 130 | 131 | 132  | 133      | 134 | 135     | 136 | 137 | 138 | 139 | 140 | 141 | *-141      |                |

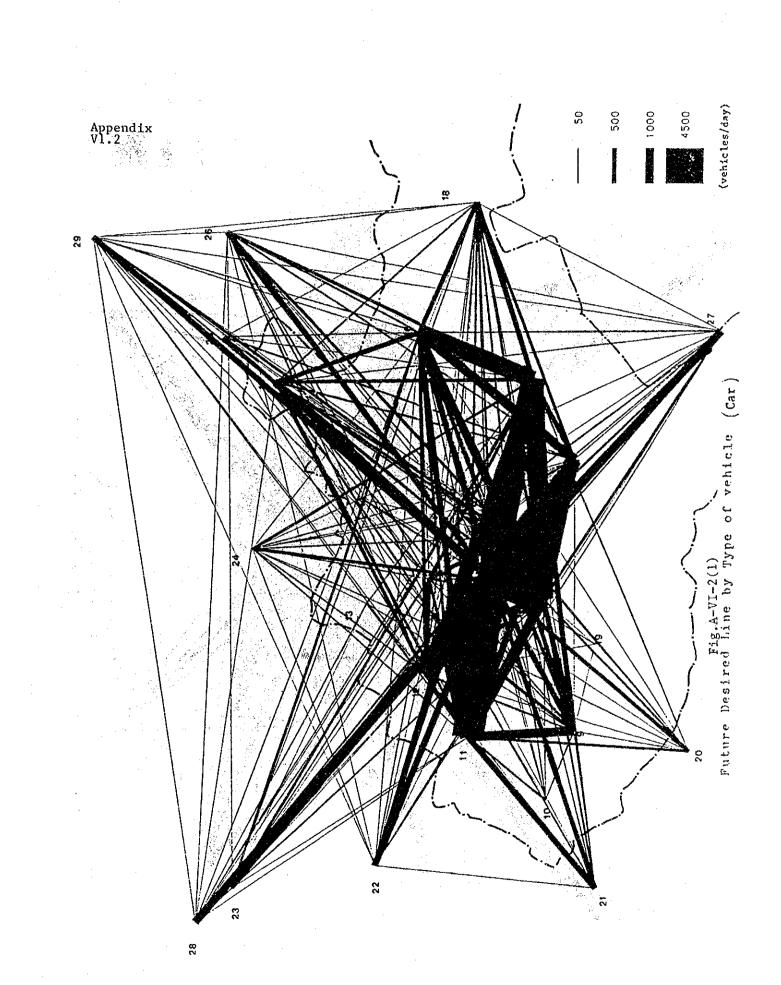
.

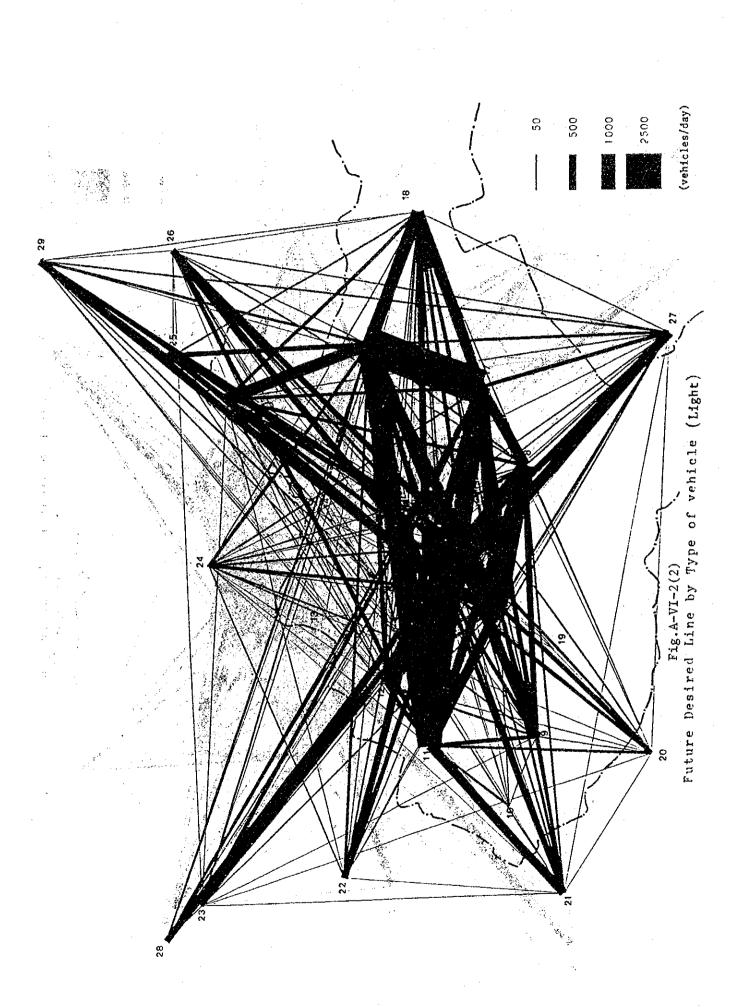
890

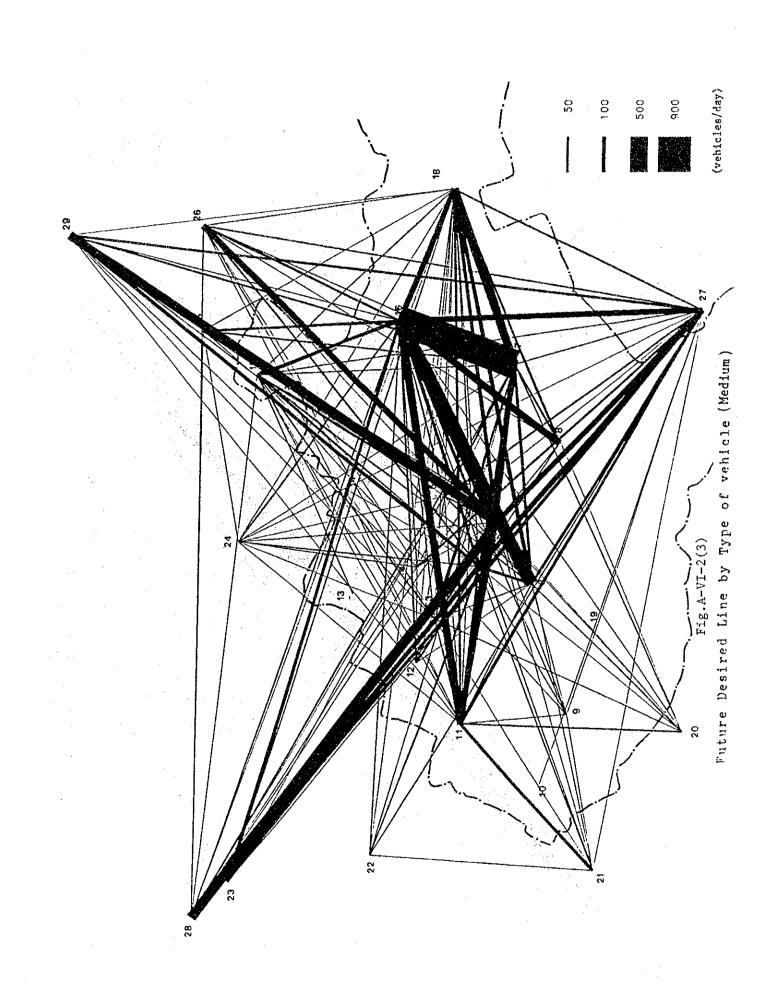
1000

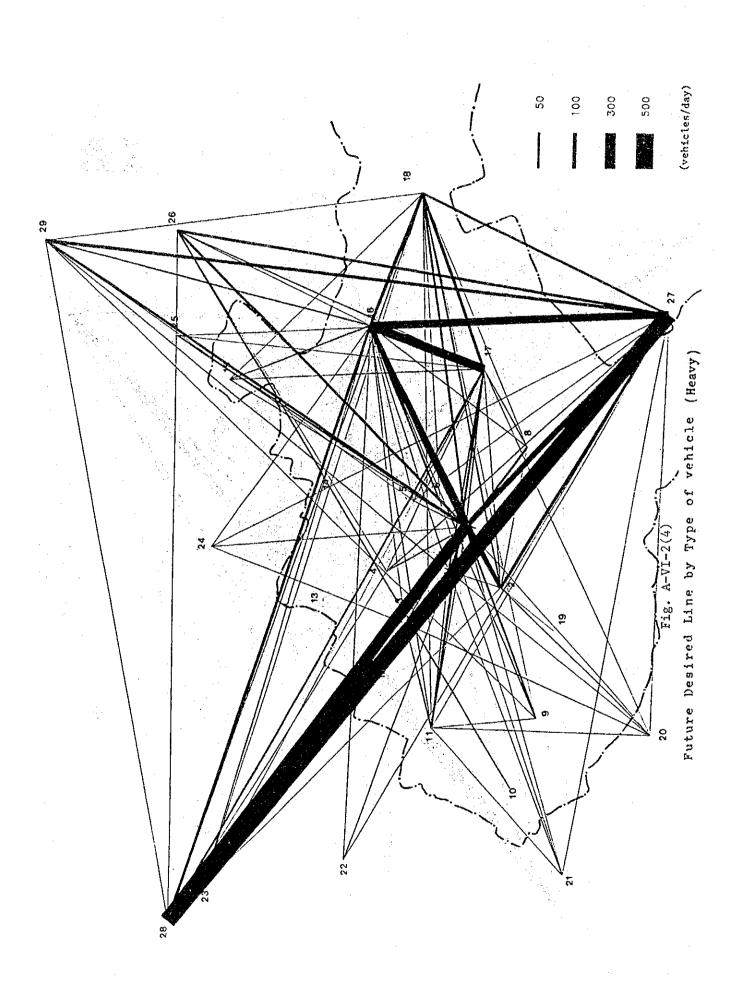
665. 665. 768. 700.

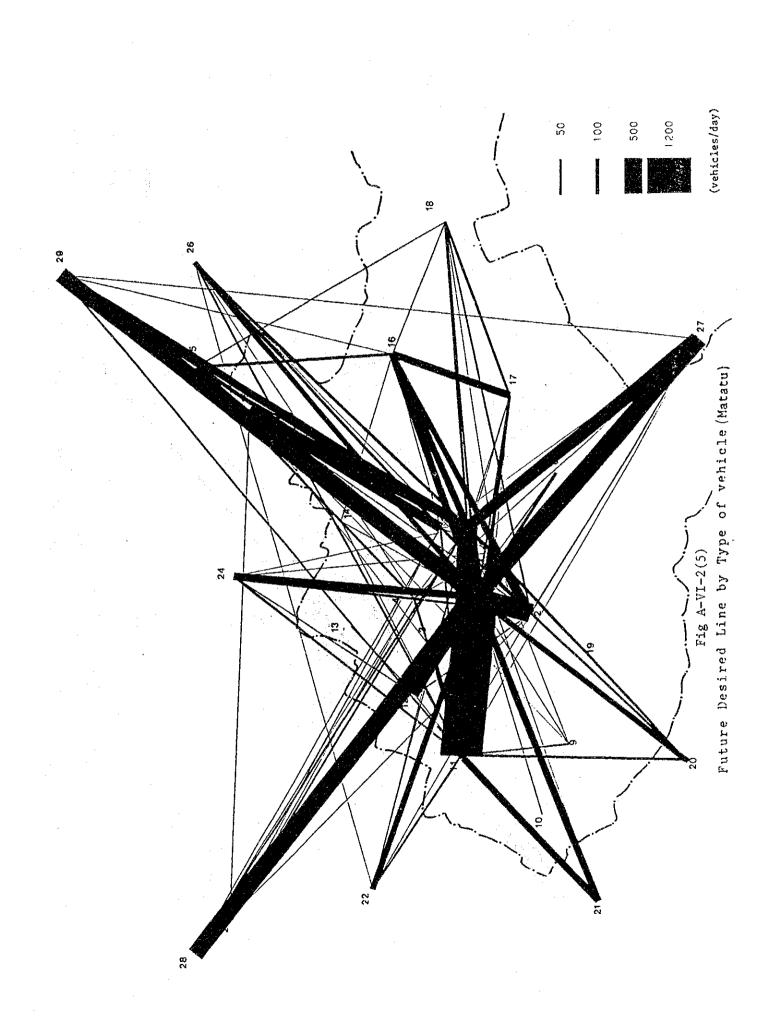
62. 63.

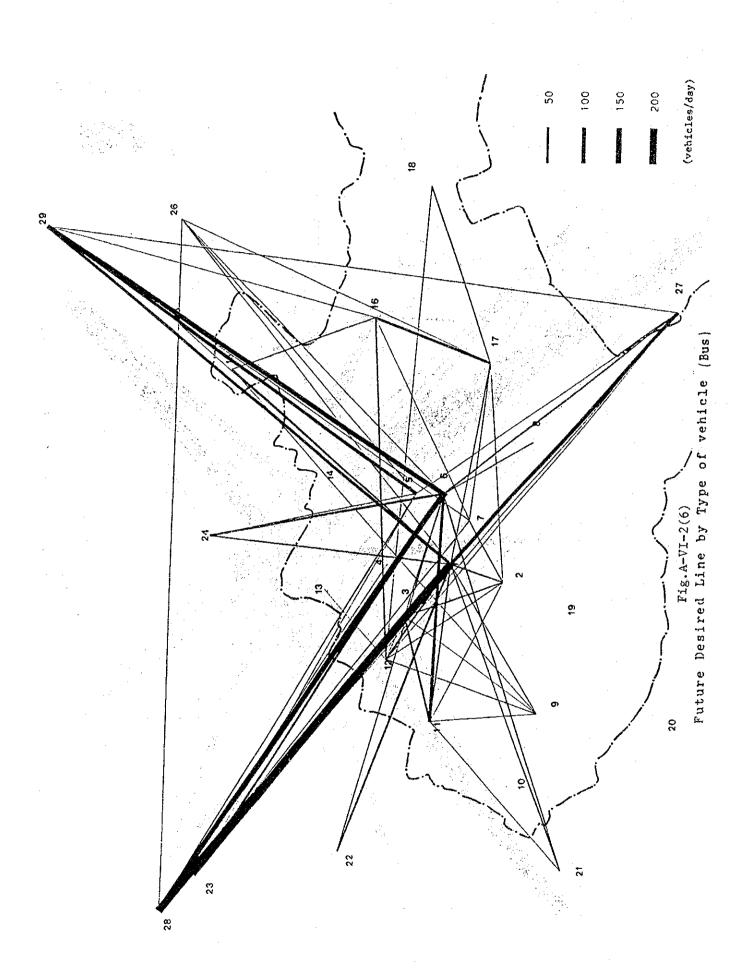












## Appendix

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VI.3

## Traffic Capacity by Link by Alternative Network

|      |          |          |                  |                          | (A -      | 0)              |
|------|----------|----------|------------------|--------------------------|-----------|-----------------|
| Link | A - Node | B - Node | Distance<br>(km) | Capacity<br>(P.C.U./day) | Road Name | Carriage<br>way |
| 1001 | 1        | 107      | 1.40             | 12,000                   | A104      | Dual            |
| 1002 | 107      | 1        | 1.40             | 12,000                   | - do -    | - do -          |
| 1003 | 131      | 8        | 4.90             | 18,000                   | - do -    | - do -          |
| 1004 | 8        | 131      | 4.90             | 18,000                   | - do -    | - do -          |
| 1005 | 130      | 121      | 10.20            | 14,000                   | - do -    | Single          |
| 1006 | 121      | 28       | 280.00           | 14,000                   | - do -    | - do -          |
| 1007 | 29       | 121      | 50.00            | 14,000                   | - do -    | - do -          |
| 1008 | 101      | 1        | 1.30             | 12,000                   | - do -    | Dua1            |
| 1009 | 1        | 101      | 1.30             | 12,000                   | - do -    | - do -          |
| 1010 | 102      | 101      | 0.90             | 22,000                   | - do -    | - do -          |
| 1011 | 101      | 102      | 0.90             | 22,000                   | - do -    | - do -          |
| 1012 | 103      | 102      | 1.70             | 22,000                   | - do -    | - do            |
| 1013 | 102      | 103      | 1.70             | 22,000                   | - do -    | - do -          |
| 1014 | 104      | 103      | 1.30             | 20,000                   | - do -    | - do -          |
| 1015 | 12       | 104      | 2.00             | 20,000                   | - do -    | – do –          |
| 1016 | 125      | 12       | 6.20             | 16,000                   | - do -    | - do -          |
| 1017 | 12       | 125      | 6.20             | 16,000                   | - do -    | - do -          |
| 1018 | 22       | 125      | 7.10             | 20,000                   | - do -    | - do -          |
| 1019 | 127      | 22       | 2.40             | 20,000                   | - do -    | - do -          |
| 1020 | 126      | 127      | 2.10             | 20,000                   | - do -    | - do -          |
| 1021 | 23       | 126      | 7.70             | 20,000                   | - do -    | - do -          |
| 1022 | 30       | 23       | 250.00           | 14,000                   | - do -    | Single          |
| 1023 | 101      | 105      | 2.70             | 16,000                   | А2        | Dual            |
| 1024 | 105      | 101      | 2.70             | 16,000                   | - do -    | - do            |
| 1025 | 105      | 106      | 1.10             | 16,000                   | - do -    | - do -          |
| 1026 | 106      | 105      | 1.10             | 16,000                   | ~ do -    | <b>-</b> do -   |
| 1027 | 106      | 112      | 3.40             | 20,000                   | - do -    | - do -          |
| 1028 | 112      | 106      | 3.40             | 20,000                   | - do      | - do -          |
| 1029 | 112      | 113      | 1.40             | 20,000                   | - do -    | - do -          |
| 1030 | 113      | 112      | 1.40             | 20,000                   | - do -    | - do -          |

Link Value Table

|      |          |             |                  | · · · ·                  | (A-0)     |                 |
|------|----------|-------------|------------------|--------------------------|-----------|-----------------|
| Link | A - Node | B – Node    | Distance<br>(km) | Capacity<br>(P.C.U./day) | Road Name | Carriage<br>way |
| 1031 | 113      | 114         | 2.70             | 24,000                   | A2        | Dual            |
| 1032 | 114      | 113         | 2.70             | 24,000                   | - do -    | - do -          |
| 1033 | 114      | 115         | 6.10             | 24,000                   | - do -    | - do - '        |
| 1034 | 115      | 114         | 6.10             | 24,000                   | – do –    | - do -          |
| 1035 | 115      | 116         | 5.60             | 24,000                   | - do -    | - do -          |
| 1036 | 116      | 115         | 5.60             | 24,000                   | - do -    | - do -          |
| 1037 | 116      | 117         | 0.90             | 24,000                   | - do -    | - do -          |
| 1038 | 117      | 116         | 0.90             | 24,000                   | - do -    | - do -          |
| 1039 | 117      | 31          | 200.00           | 24,000                   | - do -    | - do -          |
| 1040 | 31       | 117         | 200.00           | 24,000                   | - do -    | - do -          |
| 1041 | 8        | 130         | 4.00             | 18,000                   | A104      | – do <b>–</b>   |
| 1042 | 130      | 8           | . 4.00           | 18,000                   | - do -    | - do -          |
| 1043 | 107      | 131         | 2.70             | 18,000                   | - do -    | - do -          |
| 1044 | 131      | 107         | 2.70             | 18,000                   | - do -    | – do –          |
| 1055 | 123      | 136         | 3.60             | 12,000                   | New Road  | Single          |
| 1056 | 103      | 104         | 1.30             | 20,000                   | A104      | Dual            |
| 1057 | 104      | 12          | 2.00             | 20,000                   | - do -    | - do -          |
| 1058 | 125      | 22          | 7.10             | 20,000                   | - do -    | - do -          |
| 1059 | 22       | 1 <b>27</b> | 2.40             | 20,000                   | - do -    | - do -          |
| 1060 | 127      | 126         | 2.10             | 20,000                   | - do -    | - do -          |
| 1061 | 126      | 23          | 7.70             | 20,000                   | A104      | - do -          |
| 2001 | 108      | 1           | 2.20             | 18,000                   | C60       | - do -          |
| 2002 | 109      | 108         | 1.50             | 18,000                   | - do -    | - do -          |
| 2002 | 110      | 136         | 2.00             | 18,000                   | - do -    | - do -          |
| 2004 | 11       | 110         | 3.00             | 10,000                   | C61       | Single          |
| 2005 | 11       | 125         | 3.00             | 10,000                   | - do -    | - do -          |
| 2005 | 133      | 110         | 4.00             | 12,000                   | C60       | - do            |
| 2007 | 10       | 134         | 5.40             | 12,000                   | C63       | - do -          |
| 2008 | 22       | 124         | 6.90             | 12,000                   | - do -    | - do -          |

Link Value Table

|      |          | <u> </u> |                  |                          | (         | A-0)            |
|------|----------|----------|------------------|--------------------------|-----------|-----------------|
| Link | A - Node | B - Node | Distance<br>(km) | Capacity<br>(P.C.U./day) | Road Name | Carriage<br>way |
| 2009 | 21       | 10       | 8.00             | 8,000                    | C60       | Single          |
| 2010 | 9        | 122      | 1.90             | 10,000                   | C63       | - do -          |
| 2011 | 10       | 9        | 5.50             | 10,000                   | do        | - do -          |
| 2012 | 122      | 123      | 1.90             | 22,000                   | C58       | Dual            |
| 2013 | 132      | 2        | 2.20             | 20,000                   | - do -    | - do -          |
| 2014 | 2        | 107      | 1.90             | 20,000                   | - do -    | - do -          |
| 2015 | 107      | 7        | 1.30             | 16,000                   | Lusaka Ro | ad Single       |
| 2016 | 129      | 114      | 7.50             | 10,000                   | D400      | - do -          |
| 2017 | 22       | 111      | 10.80            | 10,000                   | C63       | - do -          |
| 2018 | 23       | 111      | 15.00            | 10,000                   | C62       | - do -          |
| 2019 | 128      | 24       | 10.30            | 10,000                   | C63       | - do -          |
| 2020 | 111      | 128      | 5.50             | 10,000                   | - do -    | - do -          |
| 2021 | 111      | 13       | 9.10             | 10,000                   | C62       | - do -          |
| 2022 | 13       | 106      | 5.30             | 10,000                   | - do -    | - do -          |
| 2023 | 24       | 106      | 10.50            | 10,000                   | C64       | - do -          |
| 2024 | 24       | 129      | 6.00             | 12,000                   | C63       | - do -          |
| 2025 | 25       | 116      | 0.50             | 12,000                   | - do -    | - do -          |
| 2026 | 120      | 16       | 7.80             | 16,000                   | C98       | - do -          |
| 2027 | 16       | 18       | 15.00            | 10,000                   | - do -    | - do -          |
| 2028 | 114      | 16       | 7.20             | 10,000                   | D400      | - do -          |
| 2029 | 112      | 120      | 4.70             | 12,000                   | C59       | - do -          |
| 2030 | 119      | 120      | 2.20             | 12,000                   | - do -    | - do -          |
| 2031 | 118      | 119      | 3,20             | 12,000                   | - do -    | - do -          |
| 2032 | 20       | 122      | 16.70            | 8,000                    | C58       | - do -          |
| 2033 | 129      | 25       | 9.70             | 12,000                   | C63       | - do -          |
| 2034 | 118      | 130      | 5.60             | 12,000                   | C59       | - do -          |
| 2035 | 107      | 2        | 1.90             | 20,000                   | C58       | Dual            |
| 2036 | 2        | 132      | 2.20             | 20,000                   | - do      | - do -          |
| 2037 | 123      | 132      | 2.00             | 22,000                   | C58       | - do -          |
| 2038 | 132      | 123      | 2.20             | 22,000                   | - do -    | - do -          |
| 2039 | 123      | 122      | 1.90             | 22,000                   | - do -    | - do -          |
| 2040 | 1        | 108      | 2.20             | 18,000                   | C60       | - do -          |

Link Value Table

|      |          | · .      |                  |                          | (A-0)      |                 |
|------|----------|----------|------------------|--------------------------|------------|-----------------|
| Link | A - Node | B - Node | Distance<br>(km) | Capacity<br>(P.C.U./day) | Road Name  | Carriage<br>way |
| 2041 | 108      | 109      | 1.50             | 18,000                   | C60        | Dual            |
| 2042 | 136      | 109      | 1.20             | 18,000                   | - do       | - do -          |
| 2043 | 109      | 136      | 1.20             | 18,000                   | - do -     | - do -          |
| 2044 | 136      | 110      | 2.00             | 18,000                   | - do -     | - do -          |
| 2045 | 10       | 133      | 2.60             | 12,000                   | C60        | Single          |
| 2046 | 124      | 134      | 1.20             | 12,000                   | C63        | - do -          |
| 3001 | 104      | 3        | 1.00             | -                        | Access Lin | k Nil           |
| 3002 | 27       | 109      | 1.00             | -                        | - do -     | - do -          |
| 3003 | 105      | 5        | 2.70             | · <u> </u>               | - do -     | - do -          |
| 3004 | 5        | 6        | 2.00             | <del></del> ·            | - do -     | - do -          |
| 3005 | 7        | . 6      | 2.00             | —                        | - do -     | - do -          |
| 3006 | 6        | 119      | 3.80             |                          | - do -     | - do -          |
| 3007 | 8        | 118      | 2.40             | -                        | - do -     | - do -          |
| 3008 | 118      | 17       | 3.00             | -                        | - do -     | - do -          |
| 3009 | 123      | 19       | 0.60             | <del></del>              | - do -     | - do -          |
| 3010 | 102      | 4        | 1.20             | + · · ·                  | - do -     | - do -          |
| 3011 | 4        | 105      | 1.60             | <b>-</b>                 | - do -     | - do -          |
| 3012 | 14       | 113      | 1.60             | -                        | - do -     | - do -          |
| 3013 | 15       | 115      | 0.90             | -                        | - do -     | - do -          |
| 3014 | 117      | 26       | 3.00             | _                        | - do -     | – do –          |

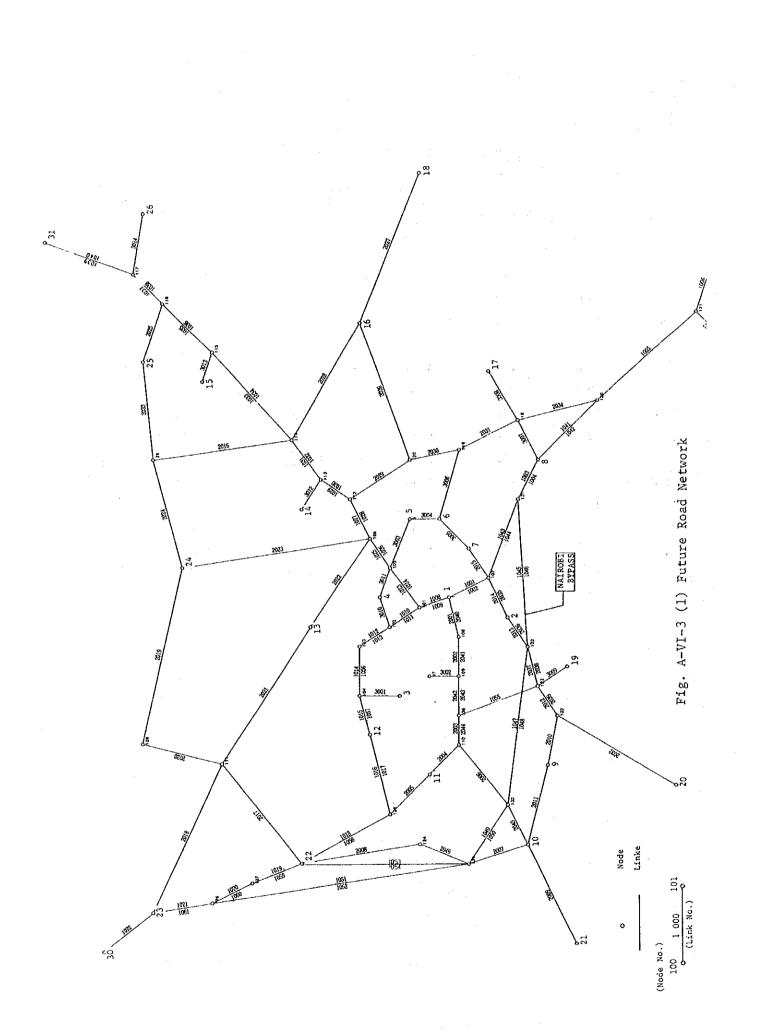
Link Value Table

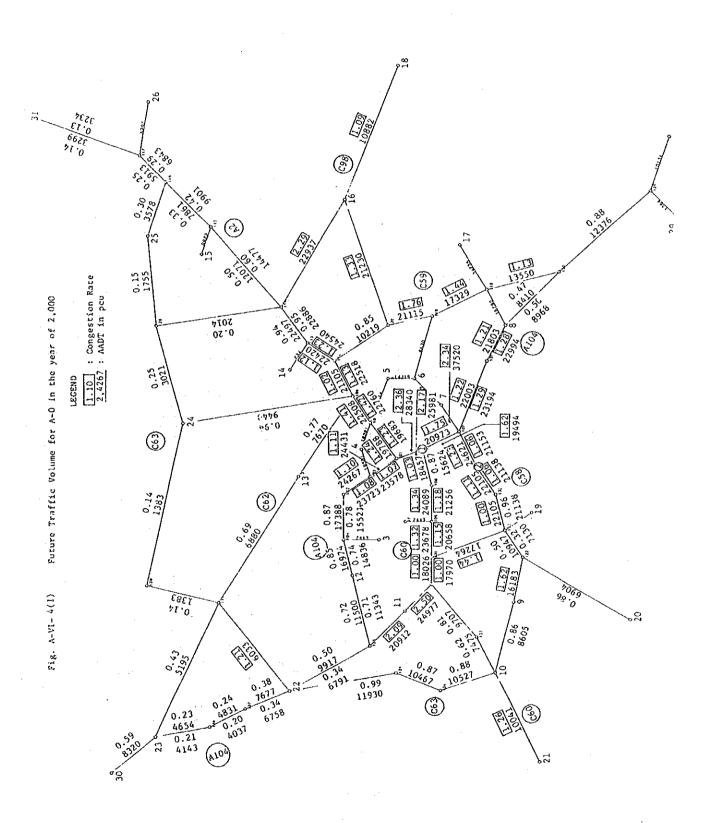
A-VI-18

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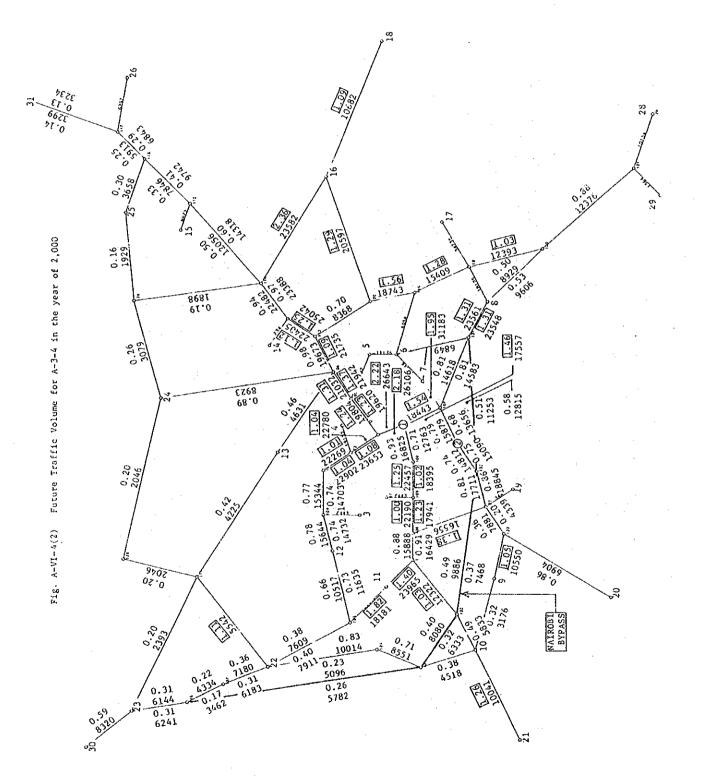
|      |          |          | · .              |                          |                             |
|------|----------|----------|------------------|--------------------------|-----------------------------|
| Link | A - Node | B – Node | Distance<br>(km) | Capacity<br>(P.C.U./day) | Carriage<br>Alternative way |
| 1045 | 132      | 131      | 5.70             | 22,000                   | A-3-4, A-1-4 Dual           |
| 1046 | 131      | 132      | 5.70             | 22,000                   | - do do -                   |
| 1047 | 133      | 132      | 8.70             | 20,000                   | - do do -                   |
| 1048 | 132      | 133      | 8.70             | 20,000                   | - do do -                   |
| 1049 | 134      | 133      | 5.10             | 20,000                   | - do do -                   |
| 1050 | 133      | 134      | 5.10             | 20,000                   | - do do -                   |
| 1051 | 126      | 134      | 9.50             | 22,000                   | A-3-4 - do -                |
| 1052 | 134      | 126      | 9.50             | 22,000                   | - do do -                   |
| 1053 | 22       | 134      | 6.90             | 22,000                   | A-1-4 - do -                |
| 1054 | 134      | 22       | 6.90             | 22,000                   | - do do -                   |
| 1062 | 131      | 132      | 5.70             | 11,000                   | A-3-2, A-1-2 Single         |
| 1063 | 132      | 133      | 8.70             | 11,000                   | - do do -                   |
| 1064 | 133      | 134      | 5.10             | 11,000                   | - do do -                   |
| 1065 | 134      | 126      | 9.50             | 11,000                   | A-3-2 - do -                |
| 1066 | 134      | 22       | 6.90             | 11,000                   | A-1-2 - do -                |
|      |          |          |                  |                          |                             |

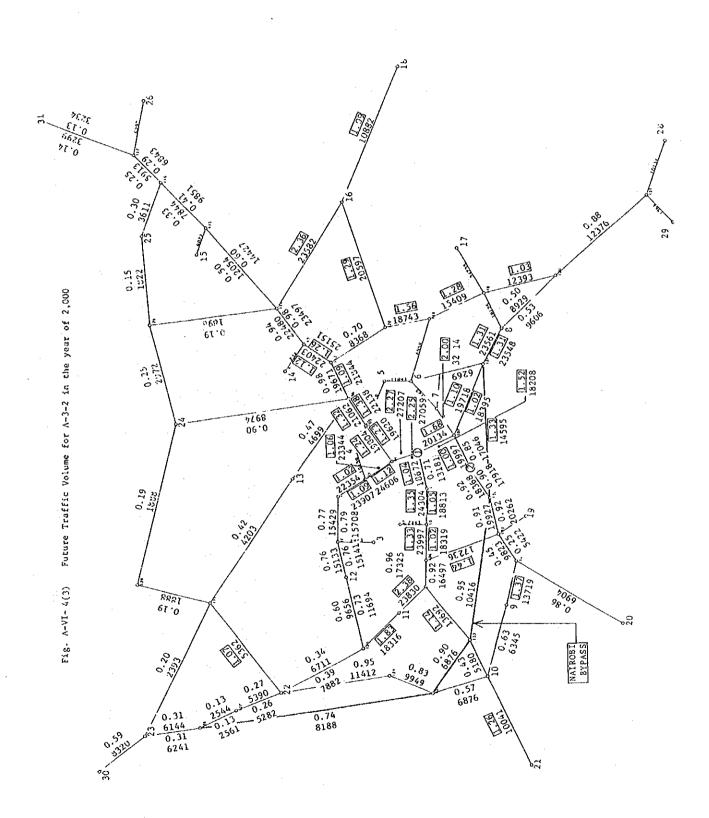
Link Value Table of Nairobi By-pass

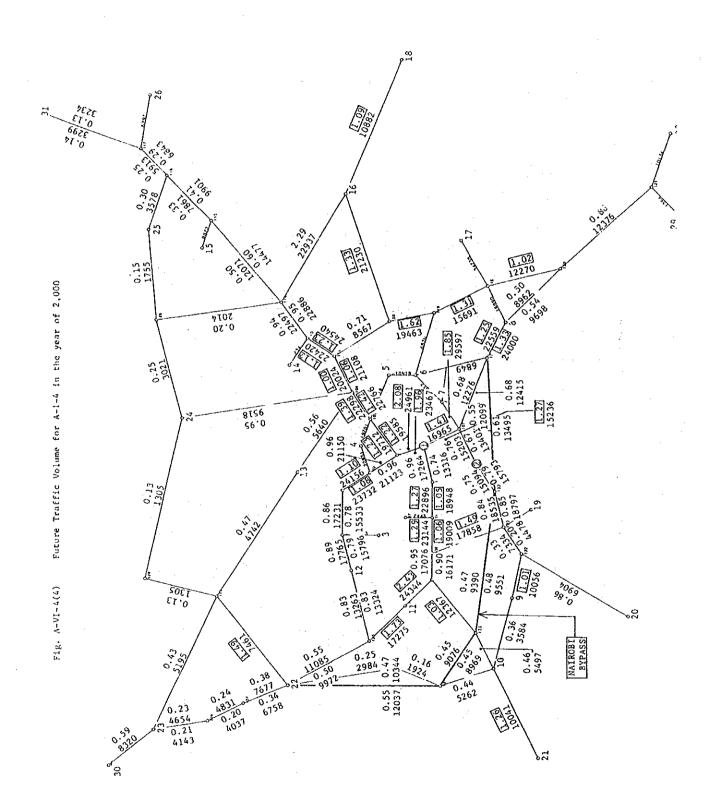




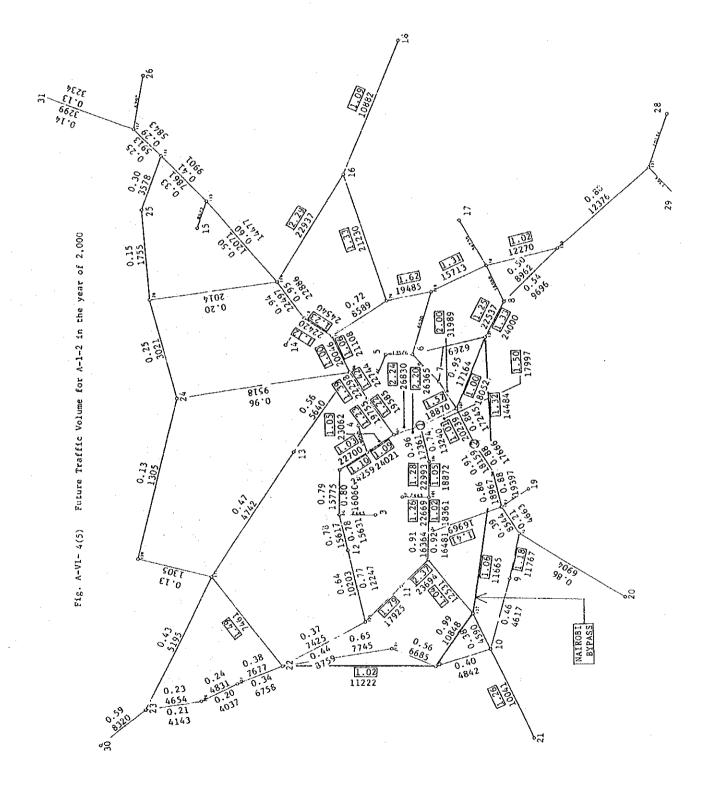
Appendix VI.4 Future Traffic Volume by Alternative Networks

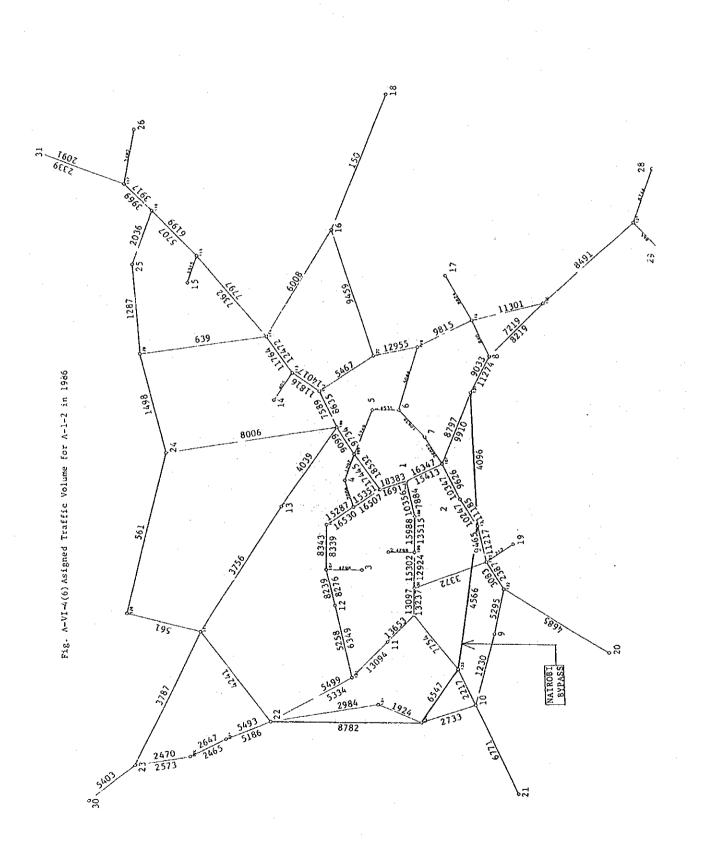






A-V1-24





Appendix VI.5 Converted OD trips to the Bypass

| $\hat{G} = \hat{G} = $                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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|--------------------------------------------------------------------|------------------|----------------------------------------|----------|----------------------------------------------|--------------|------------|-----------------|---------------|-------------------------|-------------|------------|---------------|----------|------------------------|-------------------|---------------|--------|---------------|--------------------|----------|---------------|----------|-----------------------------------------|--------------------|-----------------------------------|----|
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|                                                                    |                  |                                        |          |                                              |              |            |                 |               |                         |             |            |               |          |                        |                   |               |        |               |                    |          |               |          |                                         | . Ħ .              | A104                              |    |
|                                                                    |                  |                                        |          |                                              |              |            |                 |               |                         |             |            |               |          |                        |                   |               |        |               | •                  |          |               |          |                                         | OD TRIPS           | CONVERSION RATE<br>TED TRIPS FROM |    |
|                                                                    |                  |                                        |          |                                              |              |            |                 |               |                         |             |            |               |          |                        |                   |               |        |               |                    |          |               |          |                                         | 8.5                | 7 E                               | Į  |
|                                                                    |                  |                                        |          |                                              |              |            |                 |               |                         |             |            |               |          |                        |                   |               |        |               |                    |          |               |          |                                         | CONVERTED          | TRIPS                             |    |
|                                                                    |                  |                                        |          |                                              |              |            |                 |               |                         |             |            |               |          |                        |                   |               |        |               |                    |          |               |          | LECEND                                  | ER S               | E E                               |    |
|                                                                    |                  |                                        |          |                                              |              |            |                 |               |                         |             |            |               |          |                        |                   | •             |        |               |                    |          |               | ÷.,      | 3                                       | IN I               | z o                               |    |
|                                                                    |                  |                                        |          |                                              |              |            |                 |               |                         |             |            |               |          |                        |                   |               | •      |               |                    |          |               | -        |                                         |                    |                                   |    |
|                                                                    |                  |                                        | ·        |                                              | •            |            |                 |               |                         |             |            |               |          |                        |                   |               |        |               | 11                 |          |               |          |                                         | UPPER : NO, OF     | δĒ                                | ł  |
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| ~                                                                  |                  | -                                      |          |                                              |              |            |                 |               |                         |             | ·          |               |          | ×.,                    |                   |               |        |               |                    |          | 5             | : 1      | $\{ e_{1}, e_{2} \}$                    |                    |                                   |    |
| z                                                                  |                  |                                        |          | ÷.,                                          |              |            |                 |               |                         |             |            |               |          |                        |                   |               |        |               |                    |          |               |          |                                         |                    |                                   |    |
|                                                                    | _                | ~ ~                                    | $\sim$   | ~~~                                          |              | ~~         | ~               | ~ ~           |                         |             | -          | ~ ~           |          |                        | 20                |               |        |               | ~                  | ~ ~      |               |          | ~ ~                                     | ~ ~                |                                   | ~  |
| ~                                                                  | TOTAL            | 200<br>700                             | ~?       |                                              |              | G          | ିଳ              | 6.9           | 2                       | പ           | <u> </u>   | 6 6<br>000    | 6        |                        | ر<br>مربع<br>مربع | 50 K          |        | <u> </u>      | 6                  | 88       |               | 5 F-     | ء<br>مىنىدە                             | ( 23.0)            | 23308 m                           | Ē  |
|                                                                    | ្តភ្ន            | ිසිං                                   | 44       | <u> </u>                                     | <u>.</u>     | මුල්ද      | 36              |               | ୍ଟିଟ୍                   | <u>ത</u> ്. | ~~~        | 000           | ្តន្តអ   | Š                      | 377-C             | 8 88          |        | - <u>S</u>    | So.                | ي جي جي  |               | 300      |                                         | n                  | gg c                              | 2  |
| Ś.                                                                 |                  | $\sim \sim$                            | ~        | <u> </u>                                     |              | ~~~        | ~~-             |               | $\sim$                  | ~           | <u> </u>   |               |          | ~~~                    | <u> </u>          | - · · · ·     |        |               | <u> </u>           |          |               | 10       |                                         | - `                | <ul><li></li></ul>                | ~  |
| Z                                                                  |                  |                                        |          | 1 .                                          |              |            |                 |               |                         |             | ÷.,        |               | •        |                        |                   |               |        |               |                    |          | - 1 - Nr<br>- | <br>     |                                         |                    |                                   |    |
| <u>,</u>                                                           |                  |                                        |          |                                              |              |            |                 |               |                         |             |            |               |          |                        |                   |               |        | 11.           | · . ·              |          |               |          |                                         |                    |                                   |    |
| CLE: TOTAL                                                         |                  |                                        |          |                                              |              |            |                 |               |                         | ÷           |            | ·             |          |                        |                   | _             |        |               |                    |          |               |          |                                         | •                  | 2                                 |    |
| ν÷                                                                 | Ĩ.               | <u></u>                                | ି        | -e e                                         | : e          | ; e        | ą               | ခုခဲ့         | ୍                       | ୍           | ି କ        | 8°8           | ିର       | e,                     | 6.6               |               |        | 9 9           | 6 8                | 6 6      | 2             | 9 6      | ୍ ଚ୍ରା ସ                                |                    | <u>3</u> - 8                      | ŝ  |
| NO                                                                 | 15               |                                        | $\sim$   |                                              | $\sim$       | $\sim$     | 200             | 000           | 00                      | 000         | 000        | 000           | 00       | $-\infty$              | 200               |               |        |               | $\sim \sim \sim$   | ဘဲ့တဲ့   | i oc          | òcòc     | $\infty$                                | 5 00               | $\sim \infty$                     | Š, |
| <⊱                                                                 | Ŭ                | $\sim$ $\sim$                          | $\sim$   | $\sim$                                       | · `          | · •        | ن<br>ب          | -             | <u> </u>                | $\sim$      | $\sim$ .   |               |          | <u> </u>               | $\sim$ $\sim$     | - · ~         | ت م    |               | <u> </u>           | ب ب      | • ~           | ~ ~      | <u>с</u> с                              |                    | <u> </u>                          |    |
| רש∼<br>שר                                                          | _                | 88                                     |          | 8 8                                          |              | ×8         | ex <sub>x</sub> | 88            | 6                       | 6           | 8 3        | ခုံခြ         | ିତ       | S.x                    | 8 8               | 3 8           | s e    | 6 6           | 8 8                | 5 6      | ਂ ਵ           | ×8.      | ,8 S                                    | 8 8                | 5 - 6                             | Э  |
| <u>n</u>                                                           | ୍ବାଚ୍ଚି          | 2000                                   |          |                                              | . 000        | ΩQ.        | θÖC             | ്റ്           | ം                       | ಂದಂ         | òò         | 000           | òò       | ŝ                      | $\sim$            | 5 00          | $\sim$ | $\sim$        | òòò                | ്റ്റ     | 00            | Ŷ        | ĝgoo                                    |                    |                                   | ġ  |
| <u></u> 0                                                          | $\sim$           | - $-$                                  | $\sim$   | $\sim \sim$                                  | · ·          | E AI       | 610             | $\cup$ $\cup$ | <u> </u>                | $\smile$    | $\sim$ .   |               | <u>ت</u> | đ                      | $\sim$ $\sim$     |               | . U    | رت ارد        | 0.                 | ں ر      | · · ·         | 10       | ē.                                      | <u>،</u> ر         | - H                               | 2  |
| 11-<br>7                                                           |                  | 66                                     | പ        | 88                                           | 6            | ŝ          | 8               | 66            | ି ଛେ                    | ର           | ຣ່ະ        | ຣ່ອ           | 6        | ିଚ                     | ର ଶ               | 3 8           | Ś      | ×°,           | ×8 3               | 3 8      | ່ອ            | 8 8      | 8,2                                     | s ∶e               | ຣີຊ                               |    |
|                                                                    | କ୍ଥିକ            | ×<br>×                                 | <u>~</u> | ಂದರ                                          |              | • •        | $\sim$          | gooj          | 20                      | <u></u> -   | Ś          | 000           | 00       | 000                    | $\sim \infty$     | 5             | $\sim$ | XOO-          | -00                | 500      | · òc          | ÷        |                                         | 2 00               | 181<br>                           | -  |
| нн<br>Ш<br>->                                                      | 19               | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | -2       | <u>,                                    </u> | . L          | . Ú        | $\overline{}$   | ਰ ਹ           |                         | ~~~~        | <u> </u>   | ت ت           | - U      | ال :                   | U .               |               | 000    |               | Ξ.                 | 」 し      |               | ت ز      | 500                                     |                    | ्र <u>भ</u> ्                     | 2  |
| Z<br>Din                                                           | Η.               | 8 9                                    | ଜ        | 8 8                                          | 8            | 8          | 6               | ່ອ ອ          | 0                       | Ω.          | <u>a</u> 3 | ຣ່ວ           | . 8      | 6                      | 8 8               |               |        |               | <u>م</u> ا         | э a      | e e           | 8 8      |                                         |                    |                                   | 2  |
| Dia.                                                               | 2000             | 6.9<br>XXXXX                           | ۵ř       | $\sim \sim \sim$                             |              | 000        | ∞i≁             | 66            | 0-3)<br>0-3)            | Nox         | $\sim$     | 500           | 00       |                        | $\sim$            |               | 600    | $\sim \sim$   | $\frac{1}{2}$      | 6        |               | $\sim$   | 6,26                                    |                    |                                   | -  |
| 20                                                                 | 200              | ුසු                                    | 20       | $\overline{}$                                |              |            |                 | 10<br>10      | r-0                     | 400         | ~ `        | 10            |          |                        | <u> </u>          | , <b>-</b> 9  | 2 2    | æΞ.           | 9                  |          |               |          | _ <b>≫</b> ⊆                            | 3                  | <u> </u>                          | 2  |
| ъш                                                                 |                  | ~ ~                                    | ~        | ~ ~                                          |              |            |                 | 22            | Ä                       | ~           | ~ ~        | <u> </u>      | ~        |                        | 22                |               |        |               |                    |          |               |          | 22                                      |                    |                                   |    |
| 7 7 7<br>7 7<br>7 7<br>7 7<br>7 7<br>7 7<br>7 7<br>7 7<br>7 7<br>7 | <u>≺</u> ∼       |                                        | ~~~      | <u> </u>                                     | 8            | ୍          | <u>.</u>        | <u>e e</u>    | e.<br>A                 | <u> </u>    |            | 3.6           |          | <u> </u>               | 9.6               |               |        |               |                    | <u> </u> | E             |          | 9.6                                     |                    |                                   | 2  |
| <u> </u>                                                           | 4 <u>8</u>       | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |          | ~~~                                          | ~            | ~~~        |                 | ~~~           | ~~                      | ~~          | ~~~        |               | ~        |                        | ~~~~              | $\gamma \sim$ |        | ~~~           |                    |          |               |          |                                         |                    |                                   | ,  |
|                                                                    | ല                | ~ ~                                    | ~        | ~ ~                                          |              | ~          | ~               | ~ ~           | ~                       | Š           | <u> </u>   |               | ~        | ~                      |                   |               |        |               | $\sim$             |          | · `           |          | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | <u> </u>           |                                   |    |
| n<br>D                                                             | 0                | 88                                     | 0        | 8.8                                          | 0            | <u> </u>   | <u> </u>        | <u>e</u> e    | - 6                     | 6           | <u> </u>   | 9.9           |          | ିତ୍                    | ୍ରୁ               | ) <u> </u>    |        | 28            | <u>e</u> (         | 9.9      | 6             | <u>8</u> | ຣູຣ                                     | 9 S                | è a                               | 5  |
| 5                                                                  | 500              | ~~~~                                   | ~~       |                                              |              | <u>ج</u>   | بب              |               | 0                       |             |            | 000           | 00       |                        |                   |               |        | ~~~~~~        |                    | 000      | 00            | xxx      |                                         |                    |                                   | >  |
| 2                                                                  | F                |                                        | <u> </u> | $\frac{1}{2}$                                |              | <u> </u>   | č               | $\sim$        | <u> </u>                | . U         | <u> </u>   |               |          |                        | <u> </u>          | 1             |        |               | $\sim$             |          | ·             |          | $\sim$                                  | · ~                | · `                               | 1  |
| CONVERTED                                                          | D<br>S<br>S<br>S | 88                                     | 8        | 8.8                                          | 6            | 8          | 9               | ອຸອຸ          | - S                     | <u>e</u> .  | 6          | <u>6</u> 6    | 6        | 8                      | 6 6               |               |        | 6             | ຸຣຸຊ               | 9 8      | _ e           | 99       | 8.6                                     |                    | 3 6                               |    |
|                                                                    | <u>69</u> -      |                                        | $\infty$ | 200                                          | 00           | 000        | 200             | 000           | 000                     | $\sim c$    | xxxx       | 000           | $\infty$ | 000                    | $\infty$          | $\sim \infty$ | $\sim$ | $\sim \sim$   | <u> </u>           | $\sim$   | 00            | 000      | $\infty \infty$                         | 5 00               | ်ခင                               | >  |
| ደ<br>1)                                                            |                  | $\overline{}$                          | $\sim$   | -                                            | <u> </u>     | <u> </u>   | $\sim$          | $\sim$        | <u>ب</u>                | $\sim$      | $\sim$     | $\sim$ $\sim$ | $\sim$   | $\sim$                 | $\sim$            | <li></li>     | · . •  | · •           | $\sim$             | - · ·    | ÷             | · · ·    | $\sim$                                  | · ·                |                                   | -  |
| >                                                                  |                  | 6 6                                    | 6        | 6 6                                          | _ ⊗          | *°>        | 6               | 6.6           | 8                       | 6           | 6          | ခုခ           | 6        | ×8                     | 63                |               |        | 9             | 8,8                | 9 8      | 2             | ye,      | 8 8 S                                   |                    | ) a                               | 3  |
| Z.                                                                 | 8                |                                        |          | 0000                                         | $\mathbb{C}$ | 5<br>S     | 380             | 000           | $\infty$                | $\sim$      |            | 000           | $\sim$   | 88-                    | 000               | $\sim$        |        | $\dot{\circ}$ |                    | 500      |               | 18       |                                         | $\sim \infty$      | 88                                | Ś. |
| 2                                                                  | 1                | $\sim$                                 | $\sim$   | $\sim \sim$                                  |              | . O        | 0               | $\sim$        | <u> </u>                | $\sim$      | $\sim$     | $\sim$        | $\sim$   | 5                      | $\sim$            | / ~           | · · ·  | $\sim$        |                    | $\sim$   | · -           | 9        | $\sim$ $\sim$                           | <ul><li></li></ul> | ر هر                              |    |
| <u>,</u>                                                           |                  | 88                                     | 8        | 6.6                                          | ~            | *8         | 6               | 8 8           | 6                       | 8           | 6 6        | 6 6           | 6        | 8%                     | 6 6               |               | 6      | 6             | 6 6                | 3 6      | e             | x6,      | (8) E                                   | 6 6                | B F                               | 2  |
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| -i -                                                               | $\sim$           | $\sim$ $\sim$                          | $\sim$   | - $-$                                        | ت ا          | <u></u>    | 9               | -             | $\sim$                  | . U         | $\sim$ .   | <u>ں</u> ب    | ∵ U      | 53                     | $\sim$ .          | ~             | · •    | ت م           |                    |          | · •           | , C      | 0 J                                     | ~ _                | , ω <u>΄</u>                      |    |
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| +<br>><br>•                                                        | 19               | -                                      | $\sim$   | $\sim \sim$                                  | 5            | - C-       | ĕ               | $\sim \sim$   | <u> </u>                | $\sim$      | <u> </u>   | じし            | <u> </u> | ē                      | υu                |               | · ~    | - U           | <u> </u>           |          |               |          | ਰ ਪ                                     | ÷ -                | ಸ್                                | -  |
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| บ                                                                  | 3                |                                        | $\sim$   | -                                            | . uc         |            | g               | 00            |                         | $\smile$    | <u> </u>   | <u>ں ا</u> ر  | Ĵ        | 9                      | Ξ.                | ノー            |        |               | <u> </u>           |          |               | , ĕ      |                                         | , L                | ` ಜಿ                              |    |
| ante                                                               | _                |                                        |          |                                              |              |            |                 |               |                         |             |            |               |          |                        |                   |               |        |               |                    |          |               |          |                                         |                    |                                   |    |
| ช<br>-                                                             | а<br>Н           |                                        |          |                                              |              |            |                 |               |                         |             |            |               |          |                        |                   |               |        |               |                    |          |               |          |                                         |                    | TH.                               |    |
| ·                                                                  | Ϊĝ-              | - 01 0                                 | ∽ <      | t 10                                         | çe           | r- c       | 0 0             | 2             | = 9                     | 2 2         | 21         | 5             | 19       | 11 12<br>11            | រ គ្ន             | ຊ             | 31     | ខ្លួន         | 3 হ                | ស្ល      | 8             | 88       | 3 8                                     | 31                 | TOTAL                             |    |
|                                                                    |                  |                                        |          |                                              |              |            |                 |               |                         |             |            |               |          | -                      |                   | 1             |        |               |                    |          |               |          |                                         |                    |                                   |    |
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|                                                                    |                  | <u> </u>                               |          | -7 3                                         | ւլ           | J          | 1               | <u>ି</u> ଷ (  | υа                      | I           | v 1        | v             |          |                        |                   |               | 18     | UBO I         | ٨N                 | яа       | 1211          | 10-      |                                         | >                  |                                   |    |
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Table A.VI-5(1) CONVERTED OD TRIPS ON THF BYPASS (FINK-1) IN 2000

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