# THE REPUBLIC OF INDONESIA

# REPORT

# OF

# THE FEASIBILITY STUDY

# ON

# THE ELECTRIFICATION PROJECT OF MAIN LINE IN JAVA

# APPENDIX

## FEBRUARY 1986

# JAPAN INTERNATIONAL COOPERATION AGENCY

# (JICA)

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APPENDIX


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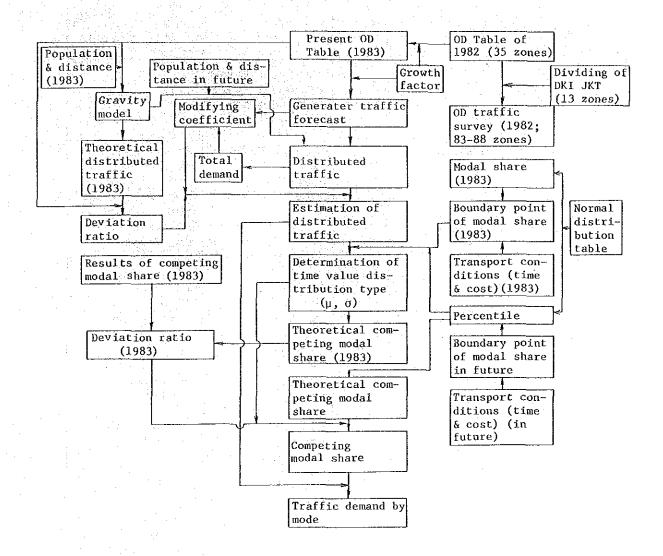

JAPAN INTERNATIONAL COOPERATION AGENCY

(JICA)

APPENDIX LIST

Appendix 4-2-1  Detailed Flow Chart of Traffic Demand Forecast

Population & distance (1983)

Population & distance in future

Present OD Table (1983)

OD Table of 1982 (35 zones)

Growth factor

Dividing of DKI JKT (13 zones)

Gravity model

Modifying coefficient

Generater traffic forecast

OD traffic survey (1982; 83-88 zones)

Theoretical distributed traffic (1983)

Total demand

Distributed traffic

Modal share (1983)

Deviation ratio

Estimation of distributed traffic

Boundary point of modal share (1983)

Normal distribution table

Results of competing modal share (1983)

Determination of time value distribution type $(\mu, \sigma)$

Transport conditions (time & cost)(1983)

Deviation ratio (1983)

Theoretical competing modal share (1983)

Percentile

Boundary point of modal share in future

Theoretical competing modal share

Transport conditions (time & cost) (in future)

Competing modal share

Traffic demand by mode

Note: Gravity Model is applied only to passenger traffic demand forecast.

- 1 -

# Appendix 4-3-1 Zoning

| NO | Zone Name | Kabupaten & Kotamadya | Kecamatan | Kelurahan |
|----|-----------|------------------------|-----------|-----------|
| 1 | Merak | Serang | | |
| 2 | Pandegelang | Pandegelang | | |
| 3 | Rankasbitung | Lebak | | |
| 4 | Tanggerang | Tanggerang | | |
| 5 | Rawabuaya | DKI Jakarta | Penjaringan<br>Cengkareng,Kebon Jeruk | Kamal Muara,Kapuk Muara |
| 6 | Kebayoran | DKI Jakarta | Kebayoran Lama,Kebayo-<br>ran Baru,Cilandak | |
| 7 | Duri | DKI Jakarta | Penjaringan<br><br>Grogol Petamburan<br>Gambir<br>Tambora | Pejagalan,Muara,Angke,<br>Penjaringan<br>Jelambar,Grogol,Tomang<br>Cideng,Duri Pulo |
| 8 | Tanahabang | DKI Jakarta | Grogol Petamburan<br><br><br>Gambir<br>Tanahabang | Tanjung Duren,Pal Merah,<br>Jatipulo,Kota Bambu,<br>Silipi Petamburan<br>Petojo Selatan |
| 9 | Kampung Bandung | DKI Jakarta | Penjaringan | Mangga Dua Utara,<br>Pademangan Barat,<br>Pademangan Timur |
| 10 | Jakarta | DKI Jakarta | Sawah Besar<br><br>Taman Sari | Karanganyar,Kartini,<br>Mangga Dua Selatan |
| 11 | Gambir | DKI Jakarta | Gambir<br><br>Sawah Besar | Petojo Utara,Gambir,<br>Kebon Kelapa<br>Pasar Baru |
| 12 | Manggrai | DKI Jakarta | Menteng,Setiabudi,Tebet | |
| 13 | Pasar Senen | DKI Jakarta | Sawah Besar<br>Kemayoran Senen<br>Cempakaputih | Gunung Sari Utara |
| 14 | Tanjung Priok | DKI Jakarta | Tanjung Priok | |
| 15 | Jatinegara | DKI Jakarta | Pulo Gadung,Matraman<br>Jatinegara | Kampung Melayu,Kelender<br>Bidara Cina,Bali Mester,<br>Rawbangke,Cipinang Besar<br>Cipinang Cempedak,<br>Cipinang Muara,<br>Pondok Bambu |
| 16 | Pasarminggu | DKI Jakarta | Mampang Prapatan,<br>Kramat Jati,Pasar Rebo<br>Pasarminggu | |
| 17 | Kelender | DKI Jakarta | Jatinegara<br><br>Cilincing,Koja,Cakung | Duren Sawit,Malaka,<br>Pondok Kelapa |
| 18 | Bekasi | Bekasi | | |
| 19 | Bogor | Bogor,Kodya Bogor | | |
| 20 | Purwakarta | Pruwakarta | | |
| 21 | Cikampek | Karawang | | |
| 22 | Pegadenbaru | Subang | | |
| 23 | Sukabumi | Sukabumi | | |

| NO | Zone Name | Kabupaten & Kotamadya | Kecamatan | Kelurahan |
|---|---|---|---|---|
| 24 | Cianjur | Cianjur | | |
| 25 | Bandung | Bandung,Kodya Bandung,Sumedang | | |
| 26 | Jatibarang | Indramayu | | |
| 27 | Jatiwangi | Majalengka | | |
| 28 | Cirebon | KUningan,Cirebon,Kodya Cirebon | | |
| 29 | Brebes | Brebes | | |
| 30 | Banjar | Garut,Tasikmalaya,Ciamis,Cilacap,Banjarnegara, Banyumas,Wonosobo,Purbalingga | | |
| 31 | Semarang | Tegar,Kodya Tegar,Pemalang,Pekalongan,Batang, Kodya Pekalongan,Semarang,Kodya Semarang,Kendal, Demak,Jepara,Kudus,Pati,Grobogan | | |
| 32 | Yogyakarta | Kebumen,Purworejo,Purworejo,Kodya Yogyaharta, Temanggung,Magelang,Kulon Progo,Sleman,Bantul, Gunung,Kidul,Kodya Surakarta,Klaten,Boyolali Sukoharjo,Pacitan,Sragen,Karanganyar,Wonogiri | | |
| 33 | Surabaya | Rembang,Bojonegoro,Tuban,Sumenep,Blora,Lamongan Mojokerto,Kodya Surabaya,Bangkalan,Surabaya(Gresik) Kodya Mojokerto,Sidoarjo,Sampang,Pamekasan | | |
| 34 | Madiun | Ponorogo,Magetan,Ngawi,Madiun,Kodya Madiun,Jombang, Nganjuk,Kediri,Trenggalek,Tulungagung,Blitar,Malang | | |
| 35 | Jember | Lumajang,Pasuruhan,Kodya Pasuruhan,Probolinggo, Kodya Probolinggo,Jember,Bondowoso,Situbondo, Banyuwangi | | |

Appendix 4-4-1   Regression Model for Estimation of Bus
Passenger Traffic

The following regression model, based on the actual data in Japan, was used for the estimation:

$$\ell n \ y = -5.7738 + 0.9955 \ \ell n \ x \ (0 \leqq y \leqq 1)$$
$$(8.887)$$

Where:

y  :  share by bus

x  :  distance (km)

$R^2$ (coefficient of determination) = 0.832

R  (correlation coefficient) = 0.912

t value in ( )  (to indicate reliability of the parameter)

Appendix 4-4-2   Present Passenger OD Table (1983)

Passenger OD Table (1983)        Mode: Railway Express                (Unit: 1,000 pass.)

| O／D | 1~19 | 20.PRWAKA | 21.CIKAMPEK | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBUN |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 15.3 | 47.1 | 4.2 | 4.0 | 4.0 | 415.1 | 93.9 | 0.0 | 333.7 |
| 20.PRWAKARTA | 15.3 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 21.CIKAMPEK | 47.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 1.0 | 0.0 | 2.3 |
| 22.PEGADENBARU | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 2.3 |
| 23.SUKABUMI | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 4.3 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 415.1 | 1.0 | 2.0 | 0.0 | 0.0 | 4.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 94.0 | 0.0 | 1.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 28.CIREBON | 334.7 | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 | 0.0 | 2.4 | 0.3 | 0.0 |
| 29.BREBES | 94.2 | 0.0 | 2.9 | 2.1 | 0.0 | 0.0 | 0.0 | 6.9 | 0.0 | 0.7 |
| 30.BANJAR | 351.3 | 10.4 | 14.3 | 1.4 | 0.1 | 3.4 | 255.1 | 1.8 | 0.0 | 7.2 |
| 31.SEMARANG | 639.3 | 0.0 | 4.1 | 2.7 | 0.0 | 0.0 | 0.0 | 3.6 | 0.0 | 6.4 |
| 32.YOGYAKARTA | 1,298.3 | 0.1 | 9.5 | 5.1 | 0.0 | 0.0 | 249.8 | 9.6 | 0.0 | 36.4 |
| 33.SURABAYA | 525.4 | 0.0 | 1.5 | 0.3 | 0.0 | 0.1 | 78.1 | 0.6 | 0.0 | 23.8 |
| 34.MADIUN | 320.7 | 0.0 | 1.3 | 0.1 | 0.0 | 0.0 | 37.5 | 0.6 | 0.0 | 11.5 |
| 35.JEMBER | 7.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 0.0 | 0.2 |
| TOTAL | 4,151.3 | 27.4 | 86.4 | 18.4 | 6.8 | 11.3 | 1,045.6 | 120.6 | 0.0 | 427.3 |

| O／D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.3 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 |
| 4~19.JABOTABEK | 94.1 | 350.5 | 638.4 | 1,293.9 | 523.3 | 318.6 | 7.3 | 4,139.4 |
| 20.PRWAKARTA | 0.0 | 10.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 27.2 |
| 21.CIKAMPEK | 2.9 | 14.3 | 4.1 | 9.5 | 1.5 | 1.3 | 0.0 | 86.3 |
| 22.PEGADENBARU | 2.1 | 1.4 | 2.7 | 5.1 | 0.3 | 0.1 | 0.0 | 18.4 |
| 23.SUKABUMI | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.8 |
| 24.CIANJUR | 0.0 | 3.4 | 0.0 | 0.6 | 0.1 | 0.0 | 0.0 | 11.1 |
| 25.BANDUNG | 0.0 | 255.1 | 0.0 | 249.8 | 78.1 | 37.5 | 2.7 | 1,045.6 |
| 26.JATIBARANG | 6.9 | 1.8 | 3.6 | 9.6 | 0.6 | 0.6 | 0.0 | 120.7 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 0.7 | 7.2 | 6.4 | 36.4 | 23.8 | 11.5 | 0.2 | 427.8 |
| 29.BREBES | 0.0 | 1.6 | 0.0 | 12.7 | 1.1 | 2.3 | 0.0 | 124.9 |
| 30.BANJAR | 1.6 | 0.0 | 0.0 | 160.1 | 78.8 | 34.7 | 6.8 | 925.8 |
| 31.SEMARANG | 0.0 | 0.0 | 0.0 | 145.8 | 121.7 | 0.0 | 0.2 | 925.4 |
| 32.YOGYAKARTA | 12.7 | 160.1 | 145.8 | 0.0 | 189.8 | 52.0 | 33.3 | 2,203.1 |
| 33.SURABAYA | 1.1 | 78.8 | 121.7 | 189.8 | 0.0 | 892.7 | 297.5 | 2,211.4 |
| 34.MADIUN | 2.3 | 34.7 | 0.0 | 52.0 | 892.7 | 0.0 | 96.9 | 1,450.3 |
| 35.JEMBER | 0.0 | 6.8 | 0.2 | 33.3 | 297.5 | 96.9 | 0.0 | 445.3 |
| TOTAL | 124.8 | 925.8 | 925.5 | 2,203.2 | 2,211.5 | 1,450.4 | 445.4 | 14,182.2 |

Passenger OD Table (1983)  Mode: Railway Local  (Unit: 1,000 pass.)

| O＼D | 1～19 | 20.PRUWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.4 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4～19.JABOTABEK | 0.0 | 276.3 | 914.0 | 0.0 | 18.8 | 34.6 | 3.8 | 0.0 | 0.0 | 0.0 |
| 20.PRUWAKARTA | 276.7 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 29.2 | 0.0 | 0.0 | 0.4 |
| 21.CIKAMPEK | 916.6 | 0.2 | 0.0 | 6.3 | 0.0 | 0.0 | 0.0 | 5.0 | 5.0 | 0.4 |
| 22.PEGADENBARU | 0.0 | 0.0 | 6.3 | 0.0 | 0.0 | 0.0 | 0.0 | 27.5 | 0.0 | 7.0 |
| 23.SUKABUMI | 18.8 | 0.0 | 0.0 | 0.0 | 0.0 | 151.9 | 35.6 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 34.6 | 0.0 | 0.0 | 0.0 | 151.9 | 0.0 | 133.6 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 3.8 | 29.2 | 5.0 | 27.5 | 35.6 | 133.6 | 0.0 | 0.0 | 0.0 | 20.3 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.4 | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.5 |
| 28.CIREBON | 0.0 | 0.0 | 0.1 | 1.5 | 0.0 | 0.0 | 0.0 | 20.5 | 11.2 | 11.4 |
| 29.BREBES | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.4 | 65.4 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 0.8 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.SEMARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34.MADIUN | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL | 1,251.6 | 306.2 | 928.9 | 42.3 | 206.3 | 320.5 | 267.6 | 64.3 | 0.0 | 39.3 |

| O＼D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 |
| 4～19.JABOTABEK | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 1,248.6 |
| 20.PRUWAKARTA | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 306.2 |
| 21.CIKAMPEK | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 928.8 |
| 22.PEGADENBARU | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 42.3 |
| 23.SUKABUMI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 206.3 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 320.5 |
| 25.BANDUNG | 11.2 | 65.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 267.6 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 64.2 |
| 27.JATIWANGI | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 39.3 |
| 28.CIREBON | 0.0 | 0.0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.2 |
| 29.BREBES | 0.1 | 0.0 | 0.0 | 21.4 | 0.0 | 0.0 | 0.0 | 88.4 |
| 30.BANJAR | 1.5 | 0.0 | 0.0 | 64.0 | 27.6 | 0.1 | 0.0 | 95.7 |
| 31.SEMARANG | 0.0 | 0.0 | 64.0 | 0.0 | 0.0 | 0.0 | 0.0 | 120.5 |
| 32.YOGYAKARTA | 0.0 | 21.4 | 27.6 | 0.0 | 34.9 | 345.5 | 0.0 | 373.7 |
| 33.SURABAYA | 0.0 | 0.1 | 0.0 | 34.9 | 0.0 | 345.5 | 0.1 | 380.9 |
| 34.MADIUN | 0.0 | 0.1 | 0.0 | 0.1 | 345.5 | 0.0 | 0.4 | 380.9 |
| 35.JEMBER | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.6 | 0.6 |
| TOTAL | 28.2 | 88.4 | 95.7 | 120.5 | 373.7 | 380.9 | 0.6 | 4,515.0 |

Passenger OD Table (1983)　　　Mode: Bus　　　(Unit: 1,000 pass.)

| O \ D | ~19 | 20.PRWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 35.1 | 57.9 | 4.1 | 139.0 | 11.0 | 449.3 | 93.5 | 5.1 | 101.9 |
| 2.PANDEGLANG | 0.0 | 74.1 | 3.1 | 0.0 | 160.7 | 65.3 | 305.6 | 22.7 | 0.0 | 142.6 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 747.3 | 8.1 | 144.0 | 0.0 | 0.0 | 5.1 |
| 4~19.JABOTABEK | 0.0 | 536.0 | 1,913.7 | 1,026.3 | 1,892.0 | 959.4 | 5,744.8 | 1,838.3 | 713.0 | 3,632.2 |
| 20.PRWAKARTA | 645.8 | 0.0 | 274.5 | 542.5 | 11.6 | 49.1 | 577.2 | 107.8 | 0.0 | 294.2 |
| 21.CIKAMPEK | 1,974.7 | 274.5 | 0.0 | 347.7 | 8.2 | 3.7 | 586.7 | 94.2 | 10.0 | 631.8 |
| 22.PEGADENBARU | 1,030.4 | 542.5 | 347.7 | 0.0 | 8.2 | 85.4 | 1,144.8 | 367.8 | 2.4 | 206.0 |
| 23.SUKABUMI | 2,939.0 | 0.0 | 11.6 | 8.2 | 0.0 | 49.4 | 634.2 | 0.0 | 0.0 | 192.9 |
| 24.CIANJUR | 1,043.8 | 49.1 | 3.7 | 85.4 | 49.4 | 0.0 | 1,646.1 | 0.0 | 4.3 | 13.6 |
| 25.BANDUNG | 6,643.7 | 577.2 | 586.7 | 1,144.8 | 634.2 | 1,646.1 | 0.0 | 509.7 | 454.4 | 1,801.0 |
| 26.JATIBARANG | 1,954.5 | 107.8 | 94.2 | 367.8 | 18.4 | 4.3 | 509.7 | 0.0 | 120.3 | 1,101.2 |
| 27.JATIWANGI | 718.1 | 0.0 | 10.0 | 2.4 | 192.3 | 13.6 | 454.4 | 120.3 | 0.0 | 516.5 |
| 28.CIREBON | 3,881.8 | 294.2 | 631.8 | 206.0 | 207.7 | 0.0 | 1,801.0 | 1,101.2 | 516.5 | 0.0 |
| 29.BREBES | 666.7 | 10.5 | 10.5 | 32.5 | 32.5 | 241.1 | 48.2 | 109.4 | 0.0 | 85.8 |
| 30.BANJAR | 3,496.3 | 121.8 | 304.8 | 41.3 | 10.2 | 0.0 | 5,816.8 | 39.9 | 985.3 | 683.3 |
| 31.SEMARANG | 5,720.7 | 30.6 | 132.4 | 137.3 | 20.4 | 5.1 | 607.2 | 219.2 | 15.3 | 1,330.6 |
| 32.YOGYAKARTA | 2,368.7 | 15.3 | 305.6 | 86.6 | 5.1 | 30.6 | 203.8 | 132.4 | 69.3 | 437.1 |
| 33.SURABAYA | 1,594.8 | 0.0 | 5.1 | 5.1 | 0.0 | 0.0 | 183.4 | 0.0 | 0.0 | 147.7 |
| 34.MADIUN | 861.1 | 10.2 | 10.2 | 0.0 | 5.1 | 0.0 | 137.5 | 0.0 | 5.1 | 45.8 |
| 35.JEMBER | 280.2 | 0.0 | 71.3 | 0.0 | 0.0 | 0.0 | 50.9 | 0.0 | 0.0 | 20.4 |
| TOTAL | 35,820.3 | 2,679.5 | 4,754.1 | 4,038.2 | 4,097.1 | 3,172.2 | 21,045.6 | 4,757.0 | 2,920.6 | 11,389.0 |

| O \ D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 10.2 | 107.0 | 20.4 | 86.6 | 86.6 | 5.1 | 0.0 | 1,156.8 |
| 2.PANDEGLANG | 20.4 | 20.4 | 0.0 | 0.0 | 30.6 | 0.0 | 5.1 | 799.6 |
| 3.RANGKASBITUNG | 0.0 | 127.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1,031.9 |
| 4~19.JABOTABEK | 656.5 | 3,241.5 | 5,700.3 | 2,282.1 | 1,559.1 | 856.0 | 280.2 | 32,832.0 |
| 20.PRWAKARTA | 10.5 | 121.8 | 30.6 | 15.3 | 0.0 | 10.2 | 0.0 | 2,679.5 |
| 21.CIKAMPEK | 0.0 | 304.8 | 132.4 | 305.6 | 5.1 | 0.0 | 71.3 | 4,754.1 |
| 22.PEGADENBARU | 32.5 | 41.3 | 137.5 | 86.6 | 86.6 | 0.0 | 5.1 | 4,038.2 |
| 23.SUKABUMI | 0.0 | 207.7 | 10.2 | 20.4 | 20.4 | 5.1 | 0.0 | 4,097.1 |
| 24.CIANJUR | 0.0 | 241.1 | 0.0 | 5.1 | 0.0 | 0.0 | 5.1 | 3,172.2 |
| 25.BANDUNG | 48.2 | 5,816.8 | 607.2 | 203.8 | 30.6 | 137.5 | 50.9 | 21,045.6 |
| 26.JATIBARANG | 109.4 | 39.9 | 219.2 | 132.2 | 183.4 | 0.0 | 0.0 | 4,757.0 |
| 27.JATIWANGI | 0.0 | 985.9 | 15.3 | 69.3 | 0.0 | 5.1 | 0.0 | 2,920.6 |
| 28.CIREBON | 85.8 | 683.3 | 1,330.6 | 437.1 | 147.7 | 45.8 | 20.4 | 11,389.7 |
| 29.BREBES | 0.0 | 542.9 | 1,538.1 | 82.7 | 82.7 | 0.0 | 0.0 | 3,116.8 |
| 30.BANJAR | 542.9 | 0.0 | 2,801.8 | 2,629.4 | 101.9 | 147.7 | 35.7 | 18,198.3 |
| 31.SEMARANG | 0.0 | 2,801.8 | 0.0 | 5,004.6 | 7,158.9 | 335.8 | 295.5 | 25,338.4 |
| 32.YOGYAKARTA | 1,538.1 | 2,629.4 | 5,004.6 | 0.0 | 1,644.0 | 2,394.0 | 168.1 | 15,567.1 |
| 33.SURABAYA | 82.7 | 101.9 | 7,158.9 | 1,644.0 | 0.0 | 7,272.8 | 2,394.0 | 28,737.3 |
| 34.MADIUN | 0.0 | 147.7 | 335.8 | 2,394.0 | 7,272.8 | 0.0 | 6,175.3 | 17,390.4 |
| 35.JEMBER | 0.0 | 35.7 | 295.5 | 168.1 | 2,394.0 | 6,175.3 | 0.0 | 17,690.4 |
| TOTAL | 3,116.8 | 18,198.3 | 25,338.4 | 15,567.1 | 28,737.3 | 17,390.4 | 17,690.4 | 220,713.0 |

Appendix 4-4-3   Present Freight OD Table (1983)

Freight OD Table (1983)    Mode: Railway    [All Commodities]    (Unit: 1,000 ton)

| O / D | 1~19 | 20.PRWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 82.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 73.3 | 47.7 | 0.0 | 0.0 | 6.4 | 0.0 | 4.5 | 1.0 | 0.0 | 0.1 |
| 20.PRWAKARTA | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21.CIKAMPEK | 1.8 | 0.0 | 0.0 | 22.7 | 0.0 | 0.0 | 21.6 | 27.8 | 0.0 | 45.0 |
| 22.PEGADENBARU | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.SUKABUMI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 13.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |
| 30.BANJAR | 8.7 | 0.8 | 0.7 | 0.0 | 0.0 | 0.0 | 6.7 | 0.0 | 0.0 | 2.0 |
| 31.SEMARANG | 8.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 |
| 32.YOGYAKARTA | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 92.3 | 0.0 | 3.3 | 2.8 | 0.0 | 0.0 | 7.4 | 4.6 | 0.0 | 6.4 |
| 34.MADIUN | 6.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.8 | 0.0 | 0.0 | 0.0 |
| TOTAL | 295.2 | 48.5 | 4.0 | 25.5 | 6.7 | 0.1 | 54.2 | 33.6 | 0.0 | 54.1 |

| O / D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUN | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 82.8 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 4~19.JABOTABEK | 0.0 | 3.5 | 9.8 | 2.6 | 75.3 | 0.6 | 0.2 | 225.0 |
| 20.PRWAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 |
| 21.CIKAMPEK | 0.0 | 20.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 138.3 |
| 22.PEGADENBARU | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 |
| 23.SUKABUMI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 25.BANDUNG | 0.0 | 13.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.9 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 0.0 | 0.0 | 0.0 | 0.0 | 2.4 | 0.0 | 0.0 | 2.7 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 16.5 | 0.0 | 71.1 | 235.4 | 20.3 | 2.4 | 0.0 | 365.6 |
| 31.SEMARANG | 0.0 | 0.3 | 0.0 | 0.0 | 40.1 | 0.0 | 0.0 | 49.7 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 0.1 | 0.0 | 58.6 | 0.0 | 0.0 | 62.8 |
| 33.SURABAYA | 1.2 | 45.7 | 36.2 | 36.1 | 0.0 | 627.3 | 195.6 | 1,058.9 |
| 34.MADIUN | 0.0 | 1.6 | 1.3 | 1.2 | 6.1 | 0.0 | 0.0 | 22.3 |
| 35.JEMBER | 0.0 | 0.3 | 0.3 | 0.0 | 20.8 | 0.0 | 0.0 | 29.2 |
| TOTAL | 17.7 | 85.5 | 118.8 | 275.5 | 223.8 | 630.3 | 195.8 | 2,069.3 |

Freight OD Table (1983)    Mode:  Truck  [All Commodities]    (Unit: 1,000 ton)

| O | 1~19 | 20.PRUWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 11.0 | 0.0 | 42.7 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.0 | 0.0 | 0.0 | 4.2 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 859.5 | 1,243.2 | 120.8 | 5.2 | 518.0 | 325.1 | 1,174.0 | 0.0 | 1.0 | 842.2 |
| 20.PRUWAKARTA | 2,281.3 | 0.0 | 115.1 | 323.6 | 0.0 | 0.0 | 223.4 | 0.0 | 0.0 | 102.7 |
| 21.CIKAMPEK | 462.4 | 3.1 | 0.0 | 0.0 | 35.9 | 0.0 | 17.9 | 0.0 | 0.0 | 0.0 |
| 22.PEGADENBARU | 346.4 | 115.6 | 88.4 | 0.0 | 0.0 | 0.0 | 294.7 | 0.0 | 0.0 | 0.0 |
| 23.SUKABUMI | 94.3 | 0.0 | 0.0 | 0.0 | 0.0 | 7.7 | 20.8 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 428.4 | 16.7 | 0.0 | 0.0 | 2.9 | 0.0 | 47.4 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 69.4 | 165.9 | 56.3 | 150.4 | 173.6 | 248.7 | 0.0 | 101.3 | 134.5 | 246.1 |
| 26.JATIBARANG | 123.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 707.9 | 0.0 | 46.8 | 1,370.8 |
| 27.JATIWANGI | 662.4 | 0.0 | 0.0 | 0.0 | 16.1 | 0.0 | 679.9 | 100.4 | 0.0 | 66.1 |
| 28.CIREBON | 0.0 | 54.2 | 0.0 | 0.0 | 0.0 | 0.0 | 401.5 | 888.6 | 133.5 | 0.0 |
| 29.BREBES | 20.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 0.0 | 0.0 | 15.0 |
| 30.BANJAR | 302.7 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 563.3 | 8.1 | 10.1 | 92.7 |
| 31.SEMARANG | 434.5 | 5.7 | 21.7 | 0.0 | 3.1 | 0.0 | 80.8 | 0.5 | 0.0 | 113.0 |
| 32.YOGYAKARTA | 140.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 33.5 | 0.0 | 0.0 | 5.8 |
| 33.SURABAYA | 477.2 | 1.7 | 0.0 | 0.0 | 1.0 | 0.0 | 39.4 | 0.0 | 0.0 | 63.1 |
| 34.MADIUN | 112.5 | 0.0 | 1.3 | 0.0 | 0.0 | 0.0 | 27.9 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 17.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.9 | 0.0 | 0.0 | 0.0 |
| TOTAL | 6,832.9 | 1,607.6 | 403.6 | 479.2 | 765.2 | 581.5 | 4,377.0 | 888.9 | 325.9 | 2,921.7 |

| O | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 2.5 | 2.4 | 2.1 | 0.0 | 12.5 | 7.3 | 3.1 | 83.6 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18.2 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.6 |
| 4~19.JABOTABEK | 3.1 | 560.6 | 719.1 | 389.8 | 739.5 | 78.9 | 21.7 | 6,742.2 |
| 20.PRUWAKARTA | 0.0 | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 | 0.0 | 1,626.4 |
| 21.CIKAMPEK | 0.0 | 87.2 | 8.6 | 6.2 | 1.0 | 0.0 | 0.0 | 2,441.2 |
| 22.PEGADENBARU | 13.0 | 22.2 | 2.1 | 1.1 | 0.0 | 0.0 | 0.0 | 998.4 |
| 23.SUKABUMI | 0.0 | 45.1 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 424.0 |
| 24.CIANJUR | 0.0 | 6.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 168.1 |
| 25.BANDUNG | 20.9 | 779.0 | 118.6 | 25.0 | 45.5 | 14.8 | 0.0 | 2,709.0 |
| 26.JATIBARANG | 14.0 | 37.3 | 48.9 | 8.3 | 0.0 | 1.1 | 0.0 | 2,304.5 |
| 27.JATIWANGI | 0.0 | 72.7 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 1,044.4 |
| 28.CIREBON | 54.5 | 297.9 | 107.3 | 11.4 | 32.3 | 4.1 | 1.0 | 2,464.8 |
| 29.BREBES | 0.0 | 62.5 | 103.6 | 3.5 | 0.0 | 0.0 | 0.0 | 209.0 |
| 30.BANJAR | 25.5 | 0.0 | 647.1 | 538.1 | 33.9 | 5.2 | 0.6 | 2,228.8 |
| 31.SEMARANG | 109.9 | 224.1 | 0.0 | 1,048.6 | 434.6 | 85.3 | 21.4 | 2,583.2 |
| 32.YOGYAKARTA | 0.0 | 297.7 | 1,487.5 | 0.0 | 105.0 | 86.6 | 5.2 | 2,170.8 |
| 33.SURABAYA | 3.1 | 41.9 | 479.2 | 545.8 | 0.0 | 3,639.0 | 2,990.4 | 8,281.8 |
| 34.MADIUN | 0.0 | 12.6 | 163.1 | 380.2 | 2,447.4 | 0.0 | 361.6 | 3,506.6 |
| 35.JEMBER | 0.0 | 1.4 | 40.0 | 51.6 | 4,166.8 | 248.1 | 0.0 | 4,529.4 |
| TOTAL | 246.5 | 2,551.4 | 3,941.7 | 3,011.7 | 8,018.3 | 4,169.9 | 3,405.0 | 44,538.0 |

Freight OD Table (1983)    Mode: Ship  [All Commodities]    (Unit: 1,000 ton)

| O | 1~19 | 20.PRWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20.PRWAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21.CIKAMPEK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22.PEGADENBARU | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.SUKABUMI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.JATIWANGI | 15.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.SEMARANG | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 30.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.0 |
| 34.MADIUN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 12.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| TOTAL | 63.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.3 |

| O | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 0.0 | 12.7 | 0.0 | 40.7 | 0.0 | 0.0 | 53.4 |
| 20.PRWAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21.CIKAMPEK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22.PEGADENBARU | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.SUKABUMI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.7 |
| 28.CIREBON | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.SEMARANG | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 0.0 | 3.2 | 10.6 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 0.0 | 27.6 | 86.6 |
| 34.MADIUN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.8 |
| TOTAL | 0.0 | 0.0 | 16.2 | 0.0 | 43.3 | 0.0 | 30.8 | 179.1 |

Appendix 4-4-4  Increase Rate of Product by Commodity

| Commodity code | Commodity | Increase rate (%) |
|:---:|:---|:---:|
| 1 | Rice | 4.9 |
| 2 | Maize | 57.6 |
| 3 | Sugar | 16.1 |
| 4 | Coal | -18.8 |
| 5 | Non Meta. Mining | -6.1 |
| 6 | Cattle | 4.7 |
| 7 | Petroleum | 15.7 |
| 8 | Steel | 15.8 |
| 9 | Cement | 2.5 |
| 10 | Fertilizer | 11.7 |
| 11 | Paper | -8.6 |
| 12 | General Cargo | 4.3 |

Source:  STATISTIC YEAR BOOK OF INDONESIA

Appendix 4-5-1 Distance and Running Time of Railway

| No. | Mode From To | Distance (km) | Without Express | Without Local | Without Freight | With Express | With Local | With Freight |
|---|---|---|---|---|---|---|---|---|
| 1 | 1-3 | 69 | 117.0 | 120.0 | 132.0 | 117.0 | 120.0 | 132.0 |
| 2 | 2-3 | 20 | 44.0 | 48.0 | 53.0 | 44.0 | 48.0 | 53.0 |
| 3 | 3-6 | 66 | 110.0 | 128.0 | 119.0 | 109.0 | 127.0 | 118.0 |
| 4 | 4-5 | 10 | 24.0 | 26.0 | 26.0 | 20.5 | 20.5 | 20.5 |
| 5 | 5-7 | 9 | 22.0 | 22.0 | 22.0 | 20.0 | 21.0 | 21.0 |
| 6 | 6-8 | 7 | 14.0 | 17.0 | 14.0 | 14.0 | 14.0 | 14.0 |
| 7 | 7-36 | 1 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| 8 | 7-8 | 4 | 7.0 | 8.0 | 8.0 | 7.0 | 8.0 | 8.0 |
| 9 | 9-36 | 3 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 |
| 10 | 10-36 | 5 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 |
| 11 | 10-11 | 5 | 11.0 | 12.0 | | 11.0 | 12.0 | 12.0 |
| 12 | 11-12 | 4 | 8.0 | 10.0 | 10.0 | 8.0 | 10.0 | 10.0 |
| 13 | 8-12 | 6 | 11.0 | 12.0 | 13.0 | 11.0 | 12.0 | 13.0 |
| 14 | 12-15 | 3 | 6.0 | 7.0 | 5.0 | 6.0 | 7.0 | 5.0 |
| 15 | 9-38 | 3 | 6.0 | 7.0 | 13.0 | 6.0 | 7.0 | 13.0 |
| 16 | 10-37 | 2 | 7.0 | 8.0 | 8.0 | 7.0 | 8.0 | 8.0 |
| 17 | 37-38 | 2 | 4.5 | 5.0 | 5.0 | 4.5 | 5.0 | 5.0 |
| 18 | 14-38 | 3 | 9.0 | 10.0 | 10.0 | 9.0 | 10.0 | 10.0 |
| 19 | 13-37 | 3 | 4.5 | 5.0 | 4.5 | 4.5 | 5.0 | 4.5 |
| 20 | 13-15 | 6 | 12.0 | 13.0 | 11.5 | 12.0 | 13.0 | 11.5 |
| 21 | 15-17 | 3 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 22 | 17-18 | 11 | 16.5 | 16.5 | 16.5 | 16.5 | 16.5 | 16.5 |
| 23 | 12-16 | 9 | 13.0 | 13.0 | 16.5 | 13.0 | 13.0 | 13.0 |
| 24 | 16-19 | 36 | 44.0 | 54.0 | 74.0 | 44.0 | 52.0 | 65.5 |
| 25 | 19-23 | 57 | 215.0 | 236.0 | 142.0 | 215.0 | 236.0 | 142.0 |
| 26 | 23-24 | 39 | 88.5 | 99.0 | 138.0 | 88.5 | 99.0 | 138.0 |
| 27 | 24-39 | 45 | 78.0 | 99.0 | 123.0 | 78.0 | 99.0 | 123.0 |
| 28 | 18-21 | 57 | 49.0 | 72.0 | 93.0 | 41.0 | 65.0 | 83.0 |
| 29 | 20-21 | 19 | 16.0 | 26.5 | 36.0 | 14.0 | 26.5 | 21.5 |
| 30 | 20-39 | 56 | 70.0 | 122.0 | 115.0 | 62.5 | 92.5 | 84.0 |
| 31 | 21-22 | 40 | 43.0 | 83.5 | 110.0 | 27.5 | 50.5 | 38.5 |
| 32 | 22-26 | 55 | 52.0 | 136.0 | 201.0 | 37.5 | 64.0 | 50.0 |
| 33 | 26-28 | 40 | 38.5 | 70.0 | 96.5 | 28.0 | 49.5 | 37.5 |
| 34 | 27-28 | 36 | 83.0 | 90.0 | 98.0 | 83.0 | 90.0 | 98.0 |
| 35 | 25-39 | 15 | 13.0 | 33.0 | 31.5 | 13.0 | 21.5 | 28.5 |
| 36 | 25-30 | 156 | 233.0 | 310.0 | 360.0 | 233.0 | 310.0 | 360.0 |
| 37 | 30-42 | 92 | 130.0 | 271.0 | 252.0 | 130.0 | 271.0 | 252.0 |
| 38 | 28-29 | 64 | 61.5 | 175.0 | 106.0 | 61.5 | 175.0 | 106.0 |
| 39 | 28-40 | 75 | 84.0 | 112.5 | 170.0 | 84.0 | 112.5 | 170.0 |
| 40 | 29-41 | 12 | 13.5 | 24.0 | 22.5 | 13.5 | 24.0 | 22.5 |
| 41 | 40-41 | 40 | 91.0 | 104.0 | 83.0 | 91.0 | 104.0 | 83.0 |
| 42 | 40-42 | 83 | 131.5 | 150.5 | 175.5 | 131.5 | 150.5 | 175.5 |
| 43 | 31-41 | 148 | 190.0 | 512.0 | 506.0 | 190.0 | 512.0 | 506.0 |
| 44 | 32-42 | 140 | 179.0 | 462.0 | 310.0 | 179.0 | 462.0 | 310.0 |
| 45 | 31-43 | 35 | 80.5 | 92.5 | 72.5 | 80.5 | 92.5 | 72.5 |
| 46 | 31-45 | 60 | 84.5 | 180.5 | 137.5 | 84.5 | 180.5 | 137.5 |
| 47 | 32-43 | 119 | 210.0 | 255.0 | 210.0 | 210.0 | 255.0 | 210.0 |
| 48 | 43-46 | 32 | 73.0 | 84.0 | 66.0 | 73.0 | 84.0 | 66.0 |
| 49 | 32-44 | 59 | 93.5 | 193.0 | 158.0 | 93.5 | 193.0 | 158.0 |
| 50 | 44-46 | 42 | 74.0 | 90.0 | 74.0 | 74.0 | 90.0 | 74.0 |
| 51 | 34-44 | 95 | 106.5 | 271.5 | 263.0 | 106.5 | 271.5 | 263.0 |
| 52 | 45-46 | 10 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| 53 | 33-45 | 220 | 301.0 | 349.0 | 665.0 | 301.0 | 349.0 | 665.0 |
| 54 | 34-47 | 69 | 78.0 | 215.0 | 151.0 | 78.0 | 215.0 | 151.0 |
| 55 | 47-49 | 40 | 44.0 | 48.0 | 106.5 | 44.0 | 48.0 | 106.5 |
| 56 | 47-48 | 59 | 99.0 | 131.0 | 113.0 | 99.0 | 131.0 | 113.0 |
| 57 | 48-50 | 104 | 152.0 | 200.0 | 192.0 | 152.0 | 200.0 | 192.0 |
| 58 | 33-49 | 48 | 60.0 | 74.5 | 131.5 | 60.0 | 74.5 | 131.5 |
| 59 | 49-51 | 39 | 49.0 | 61.5 | 106.0 | 49.0 | 61.5 | 106.0 |
| 60 | 33-51 | 34 | 54.5 | 57.0 | 90.0 | 54.5 | 57.0 | 90.0 |
| 61 | 51-52 | 12 | 13.5 | 19.0 | 23.5 | 13.5 | 19.0 | 23.5 |
| 62 | 50-52 | 49 | 59.5 | 78.5 | 106.5 | 59.5 | 78.5 | 106.5 |
| 63 | 35-52 | 150 | 195.5 | 275.0 | 358.0 | 195.5 | 275.0 | 358.0 |

Appendix 4-5-2  Distance and Running Time of Road

| No. | Node From To | Distance (km) | Time 1 (min.) | Time 2 (min.) | No. | Node From To | Distance (km) | Time 1 (min.) | Time 2 (min.) | No. | Node From To | Distance (km) | Time 1 (min.) | Time 2 (min.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1-53 | 30 | 48 | 48 | 34 | 15-17 | 3 | 8 | 2 | 67 | 32-42 | 143 | 290 | 290 |
| 2 | 2-53 | 21 | 50 | 50 | 35 | 17-55 | 8 | 22 | 6 | 68 | 31-59 | 32 | 45 | 38 |
| 3 | 2-3 | 18 | 40 | 40 | 36 | 16-19 | 40 | 55 | 55 | 69 | 31-43 | 29 | 70 | 70 |
| 4 | 53-54 | 13 | 20 | 20 | 37 | 17-18 | 12 | 29 | 24 | 70 | 43-59 | 23 | 37 | 37 |
| 5 | 3-54 | 21 | 42 | 42 | 38 | 18-19 | 87 | 125 | 125 | 71 | 32-59 | 80 | 120 | 120 |
| 6 | 4-54 | 52 | 81 | 81 | 39 | 19-23 | 61 | 105 | 105 | 72 | 44-59 | 49 | 150 | 150 |
| 7 | 3-19 | 100 | 154 | 154 | 40 | 19-24 | 74 | 165 | 165 | 73 | 32-44 | 58 | 120 | 120 |
| 8 | 4-5 | 10 | 8 | 8 | 41 | 23-24 | 32 | 60 | 60 | 74 | 31-45 | 53 | 120 | 120 |
| 9 | 5-7 | 10 | 8 | 8 | 42 | 18-21 | 64 | 115 | 101 | 75 | 45-61 | 127 | 203 | 203 |
| 10 | 7-36 | 2 | 2 | 2 | 43 | 24-39 | 47 | 90 | 90 | 76 | 45-46 | 15 | 24 | 24 |
| 11 | 7-8 | 4 | 11 | 3 | 44 | 21-56 | 46 | 75 | 75 | 77 | 44-46 | 50 | 60 | 60 |
| 12 | 9-36 | 3 | 8 | 2 | 45 | 20-21 | 19 | 90 | 90 | 78 | 44-60 | 80 | 138 | 138 |
| 13 | 10-36 | 2 | 2 | 2 | 46 | 20-57 | 48 | 70 | 70 | 79 | 34-44 | 81 | 194 | 194 |
| 14 | 9-10 | 1 | 3 | 3 | 47 | 20-39 | 52 | 125 | 125 | 80 | 34-60 | 31 | 65 | 65 |
| 15 | 9-38 | 2 | 5 | 2 | 48 | 25-39 | 18 | 30 | 14 | 81 | 60-61 | 68 | 163 | 163 |
| 16 | 10-37 | 2 | 5 | 2 | 49 | 26-56 | 49 | 110 | 110 | 82 | 34-47 | 73 | 88 | 88 |
| 17 | 10-11 | 6 | 16 | 5 | 50 | 22-56 | 14 | 34 | 34 | 83 | 44-48 | 136 | 326 | 326 |
| 18 | 37-38 | 2 | 5 | 2 | 51 | 22-57 | 22 | 30 | 30 | 84 | 34-48 | 96 | 180 | 180 |
| 19 | 14-38 | 5 | 14 | 4 | 52 | 25-57 | 58 | 70 | 70 | 85 | 33-61 | 118 | 210 | 210 |
| 20 | 14-55 | 8 | 22 | 6 | 53 | 25-27 | 73 | 150 | 129 | 86 | 31-33 | 270 | 432 | 432 |
| 21 | 6-8 | 9 | 25 | 7 | 54 | 25-58 | 121 | 290 | 290 | 87 | 47-49 | 40 | 65 | 65 |
| 22 | 8-11 | 3 | 8 | 8 | 55 | 26-28 | 59 | 80 | 80 | 88 | 47-61 | 171 | 321 | 321 |
| 23 | 8-12 | 6 | 16 | 16 | 56 | 26-27 | 94 | 120 | 120 | 89 | 47-48 | 51 | 120 | 120 |
| 24 | 6-12 | 12 | 33 | 33 | 57 | 27-28 | 38 | 75 | 75 | 90 | 47-50 | 95 | 228 | 228 |
| 25 | 6-16 | 11 | 30 | 30 | 58 | 28-58 | 103 | 165 | 165 | 91 | 33-49 | 43 | 103 | 103 |
| 26 | 11-13 | 2 | 5 | 5 | 59 | 30-58 | 22 | 53 | 53 | 92 | 49-51 | 39 | 47 | 47 |
| 27 | 12-13 | 4 | 11 | 11 | 60 | 30-42 | 91 | 150 | 150 | 93 | 33-51 | 40 | 48 | 45 |
| 28 | 11-12 | 4 | 11 | 3 | 61 | 28-29 | 53 | 75 | 75 | 94 | 51-52 | 14 | 17 | 16 |
| 29 | 13-15 | 6 | 16 | 16 | 62 | 28-42 | 140 | 336 | 336 | 95 | 48-50 | 105 | 172 | 172 |
| 30 | 12-15 | 4 | 11 | 11 | 63 | 29-41 | 13 | 25 | 25 | 96 | 50-62 | 72 | 173 | 173 |
| 31 | 12-16 | 8 | 22 | 6 | 64 | 31-41 | 143 | 343 | 343 | 97 | 50-52 | 59 | 88 | 88 |
| 32 | 15-16 | 12 | 33 | 33 | 65 | 40-41 | 43 | 60 | 60 | 98 | 52-62 | 50 | 95 | 95 |
| 33 | 15-55 | 5 | 14 | 14 | 66 | 40-42 | 90 | 150 | 150 | 99 | 35-62 | 94 | 155 | 155 |

Note:  Time 2 is taken account of speeding up on highways.

## Appendix 4-5-3  Link Distance and Cruising Time of Seaway

| Node From To | Distance (km) | Time (min.) | Node From To | Distance (km) | Time (min.) |
|---|---|---|---|---|---|
| 1 - 9 | 120 | 194 | 14 - 28 | 278 | 451 |
| 1 - 14 | 120 | 194 | 14 - 31 | 437 | 709 |
| 1 - 28 | 352 | 571 | 14 - 33 | 726 | 1177 |
| 1 - 31 | 509 | 826 | 14 - 35 | 769 | 1247 |
| 1 - 33 | 813 | 1318 | 28 - 31 | 204 | 331 |
| 1 - 35 | 856 | 1388 | 28 - 33 | 515 | 835 |
| 9 - 28 | 278 | 451 | 28 - 35 | 557 | 903 |
| 9 - 31 | 431 | 709 | 31 - 33 | 350 | 568 |
| 9 - 33 | 726 | 1177 | 31 - 35 | 393 | 637 |
| 9 - 35 | 769 | 1247 | 33 - 35 | 89 | 145 |

Appendix 4-5-4   Inter-zonal Distance of Railway & Road in Java Island

(Unit: km)

| No. | Place | 1 | 2 | ... | 35 |
|---|---|---|---|---|---|
| 1 | Merak | | 88 | | 1,057 |
| 2 | Pandeglang | 51 | | | 1,007 |
| 3 | Rangkasbitung | 64 | 18 | | 988 |
| 4 | Tanggerang | 95 | 86 | | 938 |
| 5 | Rawabuaya | 105 | 96 | | 928 |
| 6 | Kebayoran | 128 | 119 | | 922 |
| 7 | Duri | 115 | 106 | | 919 |
| 8 | Tanahabang | 119 | 110 | | 915 |
| 9 | Kampung Bandan | 120 | 111 | | 920 |
| 10 | Jakarta | 119 | 110 | | 917 |
| 11 | Gambir | 122 | 113 | | 913 |
| 12 | Manggarai | 125 | 116 | | 909 |
| 13 | Pasar Senen | 124 | 115 | | 912 |
| 14 | Tanjung Priok | 127 | 118 | | 920 |
| 15 | Jatinegara | 129 | 120 | | 906 |
| 16 | Pasarminggu | 133 | 124 | | 918 |
| 17 | Klender | 132 | 123 | | 963 |
| 18 | Bekasi | 144 | 135 | | 892 |
| 19 | Bogor | 164 | 118 | | 954 |
| 20 | Purwakarta | 227 | 218 | | 854 |
| 21 | Cikampek | 208 | 199 | | 835 |
| 22 | Pegadenbaru | 268 | 259 | | 795 |
| 23 | Sukabumi | 225 | 179 | | 953 |
| 24 | Cianjur | 238 | 192 | | 914 |
| 25 | Bandung | 297 | 257 | | 854 |
| 26 | Jatibarang | 303 | 294 | | 740 |
| 27 | Jatiwangi | 370 | 330 | | 736 |
| 28 | Cirebon | 362 | 353 | | 700 |
| 29 | Brebes | 415 | 406 | | 636 |
| 30 | Banjar | 440 | 400 | | 698 |
| 31 | Semarang | 571 | 562 | | 476 |
| 32 | Yogyakarta | 645 | 634 | | 466 |
| 33 | Surabaya | 841 | 832 | | 196 |
| 34 | Madiun | 733 | 724 | | 310 |
| 35 | Jember | 1,039 | 1,030 | | |

Note: The figures on upper part of an oblique line show the railway distances, and those on lower part show the road distances.

- 15 -

Appendix 4-5-5　Terminal Transport Cost and Time

| | Item | Terminal transport cost (Rp.) | | | Termianl transport time (hour) | | |
|---|---|---|---|---|---|---|---|
| No. | Commodity | Rail | Road | Ship | Rail | Road | Ship |
| 1 | Rice | 3,850 | 2,850 | 3,500 | 72 | 3 | 84 |
| 2 | Maize | 3,850 | 2,850 | - | 72 | 3 | - |
| 3 | Sugar | 3,850 | 2,850 | - | 72 | 3 | - |
| 4 | Coal | 2,650 | 2,150 | - | 72 | 5 | - |
| 5 | Non Metalic Mining | 2,650 | 2,150 | 4,630 | 72 | 5 | 84 |
| 6 | Cattle | 3,850 | 2,850 | - | 72 | 6 | - |
| 7 | Petroleum | 260 | 400 | 4,630 | 72 | 4 | 84 |
| 8 | Steel | 1,925 | 2,310 | - | 24 | 4 | - |
| 9 | Cement | 3,850 | 2,850 | 3,500 | 48 | 3 | 84 |
| 10 | Fertilizer | 3,850 | 2,850 | 3,500 | 48 | 3 | 84 |
| 11 | Paper | 3,850 | 2,850 | - | 72 | 3 | - |
| 12 | General Cargo | 3,850 | 2,850 | - | 72 | 3 | - |
| | Passenger | 200 | 100 | - | 1 | 0.5 | - |

(Freight)

Note: Terminal trasport time of railway includes marshalling time on the way.

Apopendix 4-5-6  The Fare/Tariff Estimation Formulas


1.  Passenger

(1)  Railway (Rp./passenger)

  a.  Express train

  (a)  $d \leq 200$

       $y = 687 + 4.742d$

  (b)  $200 < d < 700$

       $y = 773 + 5.578d$

  (c)  $d \geq 700$

       $y = 580 + 6.367d$

  where,  y:  Rp./passenger

          d:  km

  b.  Local train

      $y = (17.25 - 5.1214 \log d) \cdot d$

(2)  Bus (Rp./passenger):  $y = 6.20d$

    To the bus fare, highway toll (96.3 Rp./km/vehicle) was added on a per-passenger basis, adjusting it by the fixed use ratio between non-toll roads and highways.

2.  Freight

(1)  Railway (Rp./ton)

    The same method used for passenger transport fare was applied.  The tariff estimation formulas for each freight commodity are as follows:

  a.  Rice and maize

      $y = 268.92 + 12.55d$

  b.  Sugar and non-metal products

      $y = 674.78 + 10.49d$

c. Coal, cement and fertilizer

$$y = 462.33 + 16.40d$$

d. Cattle

$$y = 451.12 + 12.21d$$

e. Petroleum products

$$y = 27.96d$$

f. Steel, paper and general cargo

$$y = 569.62 + 12.61d$$

(2) Truck (Rp./ton)

Truck tariff for each freight commodity were set as follows:

a. Rice and maize

$$y = 2,950 + 15.65d$$

b. Sugar and non-metal mining products

$$y = 3,300 + 14.49d$$

c. Coal

$$y = 2,580 + 20.40d$$

d. Cattle

$$y = 2,310 + 14.65d$$

e. Petroleum products

$$y = 26.53d$$

f. Steel

$$y = 2,500 + 22.81d$$

g. Cement and fertilizer

$$y = 2,820 + 16.10d$$

h. Paper and general cargo

$$y = 3,200 + 14.81d$$

(3)  Coastal shipping (Rp./ton)

    a.  Rice, cement and fertilizer

       $y = 2,258 + 7.90d$

    b.  Non-metal mining products and petroleum products

       $y = 3,387 + 11.85d$

Appendix 4-6-1   The Forecasting Procedure of Generated
Passenger Traffic


1.  Making the data index

The indices of population, GDP, rail passenger traffic and the number
of buses registered were made with the 1983 data as 100.0.
The following abbreviations are used:

IP   :  Population index

IGDP:  GDP index

IRP  :  Index for rail passenger traffic

IBO  :  Index for the number of buses registered


2.  Standardizing the index

IGDP, IRP and IBO were divided by IP to obtain the following standard-
ized indices:

a.  RIGP = IGDP/IP

b.  RIRP = IRP/IP

C.  RIBOP = IBO/IP


3.  RIRP and RIBOP forecasting models

The simple regression models using RIGP as an independent variable
and RIRP and RIBOP as dependent variables were derived as follows:

(1)  RIRP forecasting model

$$RIRP = -0.5473 + 1.5524 \times (RIGP)$$
$$(5.2370)$$

$$R^2 = 0.821, \ R = 0.906$$

Data observation period:   1976 to 1983


(2)  RIBOP forecasting model

$$RIBOP = -0.9743 + 1.7569 \times (RIGP)$$
$$(7.561)$$

$$R^2 = 0.93, \ R = 0.868$$

Data observation period:   1973 to 1983

4. Forecasting RIRP and RIBOP

The indices of population and GDP in the forecast years were made to obtain RIGP. The RIGP indices were then substituted into the above two models to determine RIRP and RIBOP in the forecast years.

5. Forecasting IRP and IBO

RIRP and RIBOP forecast in 4 above were multiplied by IP to obtain IRP and IBO in the forecast years.

6. Forecasting generated traffic for railway and bus

Using the following equations, generated passenger traffic for railway and bus was calculated based on forecast IRP and IBO as well as rail and bus passenger traffic volumes in 1983.

    a. Generated railway passenger traffic (DRP)

      DRP = IRP/100 × 16,422,000 passengers

    b. Generated bus passenger traffic (DBP)

      DBP = IBO/100 × 220,711,000 passengers

7. Generated passenger traffic (TDP)

The future generated passenger traffic (TDP) was obtained using the following equation:

    TDP = DRP + DBP

Appendix 4-6-2   The Estimating Method of the Growth Factor


During the PELITA IV period, the future production volume was based on the forecast data in it, and was determined using the correlation with the future GDP or the growth rate of GDP, for the years which are not covered in PELITA IV (see Table 4.6.3.1). The past production record is shown in Table 4.6.3.2.

The growth rate of rice was determined on the basis of the population growth rate of Java. While the future production for the other commodities were determined using the following regression models.:

| | | |
|---|---|---|
| . Maize | $Y = -215.36 + 0.1765X$ | (Y: $10^4$ ton) |
| . Sugar | $Y = -90.00 + 0.07680X$ | (Y: $10^4$ ton) |
| . Non-metal mining | $Y = -303,516 + 910.352X$ | (Y: $10^6$ Rp.) |
| . Cattle | $Y = -54.67 + 0.07739X$ | (Y: $10^9$ Rp.) |
| . Steel | $Y = -1,304 + 1.5674X$ | (Y: $10^3$ ton) |
| . Cement | $Y = -4,645.68 + 16.18X$ | (Y: $10^3$ ton) |
| . Paper | $Y = -102.74 + 0.2011X$ | (Y: $10^3$ ton) |

Y:   Production,    X:   GDP ($10^9$ Rp.)

Appendix 4-6-3  Basic Data for Demand Forecast for Generated Passenger Traffic

| Item / Year | Population Persons (thousand) | Population Index (IP) | No. of bus registered Units | No. of bus registered Index (IBO) | GDP (1975 price) Rp (billion) | GDP (1975 price) Index (IGDP) | Railway passenger Persons (thousand) | Railway passenger Index (IRP) | $\left(\dfrac{IBO}{IP}\right)$ | $\left(\dfrac{IRP}{IP}\right)$ | $\left(\dfrac{IGDP}{IP}\right)$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1970 | 74,670.8 | 77.1 | 10,428 | 10.3 | | 36.0 | 47,992 | 108.9 | 0.134 | 1.412 | 0.467 |
| 1971 | 76,086.3 | 78.5 | 11,663 | 11.6 | | 39.9 | 46,655 | 105.9 | 0.148 | 1.349 | 0.508 |
| 1972 | (77,029.8) | 79.5 | 13,370 | 13.3 | | 43.6 | 36,792 | 83.5 | 0.167 | 1.050 | 0.548 |
| 1973 | (77,984.9) | 80.5 | 15,440 | 15.3 | | 47.8 | 25,395 | 57.6 | 0.190 | 0.716 | 0.594 |
| 1974 | (78,952.0) | 81.5 | 17,121 | 17.0 | | 52.5 | 24,643 | 55.9 | 0.209 | 0.686 | 0.644 |
| 1975 | 79,929.3 | 82.5 | 19,406 | 19.2 | 6,037.8 | 57.7 | 21,711 | 49.3 | 0.233 | 0.598 | 0.700 |
| 1976 | 83,619.9 | 86.3 | 21,567 | 21.4 | 6,551.3 | 62.6 | 19,839 | 45.0 | 0.248 | 0.521 | 0.725 |
| 1977 | 85,074.5 | 87.8 | 25,921 | 25.7 | 6,869.4 | 65.6 | 20,627 | 46.8 | 0.293 | 0.533 | 0.747 |
| 1978 | 86,575.6 | 89.4 | 32,723 | 32.4 | 7,579.4 | 72.4 | 28,960 | 65.7 | 0.362 | 0.735 | 0.810 |
| 1979 | 88,102.7 | 90.9 | 40,082 | 39.7 | 8,012.9 | 76.5 | 36,758 | 83.4 | 0.437 | 0.917 | 0.842 |
| 1980 | 91,269.5 | 94.2 | 51,399 | 50.9 | 8,955.6 | 85.5 | 38,923 | 88.3 | 0.540 | 0.937 | 0.908 |
| 1981 | 93,340.3 | 96.3 | 65,958 | 65.4 | 10,003.4 | 95.6 | 39,827 | 90.4 | 0.679 | 0.939 | 0.993 |
| 1982 | 95,103.4 | 98.2 | 82,465 | 81.7 | 10,233.5 | 97.8 | 40,605 | 92.2 | 0.832 | 0.939 | 0.996 |
| 1983 | 96,892.9 | 100.0 | 100,895 | 100.0 | 10,468.9 | 100.0 | 44,064 | 100.0 | 1.000 | 1.000 | 1.000 |

Note: 1. All data are on Java.
2. Source: Statistic Indonesia 1981, 1983 (Central Statistics Bureau)
3. Figures in ( ) are estimated value.

Table 4.6.3.1  Production of Major Commodities (Actual and Planned in REPELITA IV)

| Commodity | Unit | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1988 | Remarks for 1988 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Rice | $10^3$ ton | 15,840 | 15,880 | 17,520 | 17,870 | 20,160 | 22,290 | 22,840 | 23,960 | 28,620 | Based on REPELITA IV |
| Maize | $10^3$ ton | 2,570 | 3,140 | 4,030 | 3,610 | 3,990 | 4,510 | 3,230 | 5,090 | 5,720 | Based on REPELITA IV Correlation with GDP in agricultural sector |
| Sugar | $10^3$ ton | | | 1,520 | 1,600 | 1,830 | 1,700 | 1,860 | 2,160 | 2,520 | Same as above |
| Coal | $10^3$ ton | | | 260 | 280 | 300 | 350 | 480 | 390 | 9,390 | Based on REPELITA IV |
| Non-metal mining | $10^9$ Rp. | 72 | 104 | 154 | 208 | | 363 | 409 | 384 | 677 | Based on Actual Gross Output Correlation with GDP in construction sector |
| Cattle | $10^9$ Rp. | | | 184 | 202 | 212 | 220 | 230 | 241 | 290 | Based on Actual Gross Output Correlation with GDP in agricultural sector |
| Petroleum | $10^6$ Br | | | 597 | 580 | 577 | 585 | 488 | 565 | 623 | Crude oil production in REPELITA IV |
| Steel | $10^3$ ton | | 405 | 598 | 860 | 1,334 | 1,510 | 1,842 | 2,133 | 3,489 | Based on REPELITA Correlation with GDP in construction sector |
| Cement | $10^3$ ton | | 2,879 | 3,629 | 4,705 | 5,852 | 6,844 | 7,650 | 7,845 | 11,970 | Based on Actual Gross Output Correlation with GDP in construction sector |
| Fertilizer | $10^3$ ton | | 990 | 1,437 | 1,827 | 1,985 | 2,007 | 1,994 | 2,227 | 5,610 | Based on REPELITA IV |
| Paper | $10^3$ ton | | 84 | 155 | 214 | 232 | 246 | 297 | 271 | 512 | Based on REPELITA Correlation with GDP in construction sector |

Table 4.6.3.2  GDP Trends by Sector (Actual and Forecast)

(Unit:  $10^9$ Rp.)

| | Year | Agriculture | Mining | Manu-facturing | Con-struction | Trans-portation | Others | Total |
|---|---|---|---|---|---|---|---|---|
| Actual | 1976 | 2,944 | 952 | 930 | 385 | 343 | 2,603 | 8,156 |
| | 1977 | 2,981 | 1,070 | 1,057 | 464 | 428 | 2,871 | 8,871 |
| | 1978 | 3,135 | 1,049 | 1,236 | 529 | 514 | 3,104 | 9,567 |
| | 1979 | 3,256 | 1,047 | 1,395 | 563 | 560 | 3,345 | 10,165 |
| | 1980 | 3,425 | 1,035 | 1,705 | 639 | 609 | 3,756 | 11,169 |
| | 1981 | 3,594 | 1,069 | 1,878 | 720 | 677 | 4,117 | 12,055 |
| | 1982 | 3,670 | 940 | 1,901 | 758 | 717 | 4,341 | 12,325 |
| | 1983 | 3,846 | 957 | 1,943 | 805 | 753 | 4,541 | 12,842 |
| Forecast | | | | | | | | |
| | 1988 | 4,330 | 1,080 | 3,180 | 1,030 | 980 | 5,790 | 16,390 |
| | 1992 | 4,610 | 1,230 | 4,240 | 1,210 | 1,170 | 7,090 | 19,550 |
| | 1997 | 4,950 | 1,430 | 5,700 | 1,410 | 1,430 | 8,520 | 23,440 |
| | 2002 | 5,870 | 1,700 | 6,770 | 1,670 | 1,700 | 10,130 | 27,840 |
| | 2007 | 6,980 | 2,020 | 8,040 | 1,980 | 2,020 | 12,030 | 33,070 |

Appendix 4-7-1  Population Forecast by Zone

(Unit: 1,000)

| Zone code | Zone | 1992 | 1997 | 2002 | 2007 |
|---|---|---|---|---|---|
| 1 | Merak | 1,360.5 | 1,470.1 | 1,593.9 | 1,731.2 |
| 2 | Pandegelang | 850.9 | 1,023.8 | 1,110.1 | 1,205.7 |
| 3 | Rangkasbitung | 840.0 | 907.6 | 984.1 | 1,068.7 |
| 4 | Tanggerang | 2,349.4 | 2,655.4 | 3,095.4 | 3,197.2 |
| 5 | Rawabuaya | 990.9 | 1,105.0 | 1,256.1 | 1,696.8 |
| 6 | Kebayoran | 1,083.2 | 1,208.0 | 1,373.2 | 1,435.6 |
| 7 | Duri | 727.7 | 811.5 | 831.3 | 876.6 |
| 8 | Tanahabang | 521.6 | 581.7 | 591.7 | 616.9 |
| 9 | Kampung Bandan | 172.9 | 192.8 | 203.9 | 215.5 |
| 10 | Jakarta | 260.9 | 267.1 | 271.5 | 283.8 |
| 11 | Gambir | 106.7 | 115.2 | 117.5 | 123.0 |
| 12 | Manggarai | 669.5 | 746.6 | 763.3 | 800.5 |
| 13 | Pasar Senen | 649.2 | 663.9 | 675.1 | 705.8 |
| 14 | Tanjung Priok | 333.3 | 371.7 | 422.5 | 441.4 |
| 15 | Jatinegara | 959.6 | 1,070.2 | 1,106.1 | 1,167.6 |
| 16 | Pasarminggu | 1,648.4 | 1,876.5 | 2,231.0 | 2,317.8 |
| 17 | Klender | 1,158.7 | 1,341.9 | 1,547.4 | 1,737.5 |
| 18 | Bekasi | 1,949.0 | 2,202.8 | 2,567.5 | 2,652.3 |
| 19 | Bogor | 4,255.1 | 4,809.7 | 5,105.8 | 6,045.8 |
| 20 | Purwakarta | 554.7 | 599.4 | 649.9 | 705.9 |
| 21 | Cikampek | 1,526.5 | 1,649.4 | 1,788.4 | 1,942.4 |
| 22 | Pegadenbaru | 1,291.2 | 1,395.2 | 1,512.8 | 1,643.0 |
| 23 | Sukabumi | 1,846.1 | 1,994.6 | 2,162.7 | 2,348.9 |
| 24 | Cianjur | 1,672.4 | 1,799.7 | 1,951.4 | 2,119.4 |
| 25 | Bandung | 5,805.3 | 6,272.6 | 6,801.2 | 7,386.6 |
| 26 | Jatibarang | 1,511.8 | 1,633.5 | 1,771.2 | 1,923.7 |
| 27 | Jatiwangi | 1,162.1 | 1,255.6 | 1,361.4 | 1,478.6 |
| 28 | Cirebon | 2,883.5 | 3,115.6 | 3,378.2 | 3,669.0 |
| 29 | Brebes | 1,571.2 | 1,697.7 | 1,840.8 | 1,999.2 |
| 30 | Danjar | 10,921.1 | 11,800.2 | 12,794.7 | 13,896.1 |
| 31 | Semarang | 12,178.0 | 13,158.3 | 14,267.2 | 15,495.4 |
| 32 | Yogyakarta | 14,496.3 | 15,663.3 | 16,983.5 | 18,447.1 |
| 33 | Surabaya | 13,530.6 | 14,619.7 | 15,851.9 | 17,216.5 |
| 34 | Madiun | 12,798.8 | 13,828.9 | 14,994.4 | 16,285.2 |
| 35 | Jember | 8,906.2 | 9,623.2 | 10,434.2 | 11,332.5 |

Source:  REPELITA IV, Master Plan of JABOTABEK 2005, Master Plan
         DKI 2005, JABOTABEK PELITA IV and Statistical Year Book
         of INDONESIA (1983), etc.

## Appendix 4-8-1  Distribution of Time Value at Boundary Point ($\omega_0$)

(Unit:  Rp./min.)

| | No. | Commodity | Mean value ($\mu$) | Standard deviation ($\sigma$) |
|---|---|---|---|---|
| Freight | 1 | Rice | 1.310 | 0.231 |
| | 2 | Maize | 1.310 | 0.231 |
| | 3 | Sugar | 2.129 | 0.550 |
| | 4 | Coal | 0.609 | 0.131 |
| | 5 | Non-metal mining | 2.129 | 0.550 |
| | 6 | Cattle | 0.609 | 0.131 |
| | 7 | Petroleum products | 0.476 | 0.065 |
| | 8 | Steel | 5.078 | 1.236 |
| | 9 | Cement | 0.609 | 0.131 |
| | 10 | Fertilizer | 0.609 | 0.131 |
| | 11 | Paper | 1.134 | 0.206 |
| | 12 | General cargo | 1.134 | 0.206 |
| | | Passenger | -0.140 | 1.186 |

Notes:   1.   Passenger figure is indicated in natural logarithmic value.

2.   $\omega_0$ takes normal distribution pattern.

Appendix 4-9-1  Passenger OD Table (1992)

Passenger OD Table (1992)　[With]　Mode: Express

Passenger OD Table (1992)

(Unit: 1,000 pass.)

| O＼D | 1～19 | 20.PRUWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 11.7 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.6 | 0.0 | 182.4 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.1 |
| 4～19.JABOTABEK | 0.0 | 13.9 | 89.7 | 315.6 | 5.5 | 0.0 | 1,701.1 | 463.4 | 2.8 | 1,264.9 |
| 20.PRUWAKARTA | 13.9 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 1.5 | 7.6 | 0.0 | 0.0 |
| 21.CIKAMPEK | 69.7 | 0.6 | 0.0 | 0.2 | 0.0 | 0.0 | 2.9 | 2.7 | 0.0 | 217.0 |
| 22.PEGADENBARU | 315.6 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 44.1 |
| 23.SUKABUMI | 5.5 | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 | 0.0 | 6.4 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 1,702.0 | 1.5 | 2.9 | 0.0 | 0.0 | 6.4 | 0.0 | 2.2 | 0.0 | 0.0 |
| 26.JATIBARANG | 468.2 | 7.6 | 2.7 | 0.9 | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 | 3.5 |
| 27.JATIWANGI | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 1,467.1 | 0.1 | 217.0 | 44.1 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 |
| 29.BREBES | 186.0 | 0.2 | 1.4 | 31.3 | 0.0 | 0.0 | 0.0 | 10.8 | 0.0 | 1.0 |
| 30.BANJAR | 471.3 | 15.4 | 20.5 | 2.3 | 0.1 | 5.1 | 378.0 | 2.6 | 0.0 | 10.7 |
| 31.SEMARANG | 1,241.8 | 1.1 | 21.9 | 14.6 | 0.0 | 0.0 | 0.0 | 11.7 | 0.0 | 9.5 |
| 32.YOGYAKARTA | 2,404.1 | 0.9 | 53.4 | 14.6 | 0.0 | 1.0 | 370.1 | 18.6 | 0.0 | 54.0 |
| 33.SURABAYA | 783.2 | 0.1 | 3.0 | 0.9 | 0.0 | 0.2 | 115.6 | 0.3 | 0.0 | 35.3 |
| 34.MADIUN | 539.7 | 0.1 | 0.5 | 0.0 | 0.0 | 0.0 | 52.1 | 0.1 | 0.0 | 17.0 |
| 35.JEMBER | 16.8 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 0.3 |
| TOTAL | 9,667.7 | 41.5 | 394.3 | 424.5 | 9.7 | 16.8 | 2,634.3 | 529.2 | 2.8 | 1,859.6 |

| O＼D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUN | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.8 | 0.0 | 0.0 | 5.2 | 4.4 | 3.3 | 0.1 | 56.9 |
| 2.PANDEGLANG | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 187.4 |
| 3.RANGKASBITUNG | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 9.7 |
| 4～19.JABOTABEK | 165.1 | 471.2 | 1,236.5 | 2,372.5 | 778.7 | 536.3 | 16.5 | 9,413.7 |
| 20.PRUWAKARTA | 0.2 | 15.4 | 1.1 | 0.9 | 0.1 | 0.1 | 0.0 | 41.5 |
| 21.CIKAMPEK | 1.4 | 20.5 | 21.9 | 53.4 | 3.0 | 0.5 | 0.5 | 394.3 |
| 22.PEGADENBARU | 31.3 | 2.3 | 14.6 | 14.6 | 0.9 | 0.0 | 0.0 | 424.5 |
| 23.SUKABUMI | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.7 |
| 24.CIANJUR | 0.0 | 5.1 | 0.0 | 1.0 | 0.2 | 0.0 | 0.0 | 16.8 |
| 25.BANDUNG | 0.0 | 378.0 | 370.1 | 370.1 | 115.6 | 52.1 | 3.5 | 2,634.3 |
| 26.JATIBARANG | 10.8 | 2.6 | 18.6 | 18.6 | 0.3 | 0.1 | 0.0 | 529.2 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 |
| 28.CIREBON | 1.0 | 10.7 | 9.5 | 54.0 | 35.3 | 17.0 | 0.3 | 1,859.6 |
| 29.BREBES | 0.0 | 0.5 | 2.3 | 18.4 | 0.4 | 0.0 | 0.1 | 232.4 |
| 30.BANJAR | 0.5 | 0.0 | 0.0 | 237.2 | 116.8 | 51.4 | 12.5 | 1,324.4 |
| 31.SEMARANG | 0.0 | 0.0 | 0.0 | 216.0 | 180.4 | 0.0 | 0.4 | 1,699.7 |
| 32.YOGYAKARTA | 2.3 | 237.2 | 216.0 | 0.0 | 281.3 | 77.1 | 56.1 | 3,802.8 |
| 33.SURABAYA | 18.4 | 116.8 | 180.4 | 281.3 | 0.0 | 1,322.6 | 83.9 | 2,924.8 |
| 34.MADIUN | 0.4 | 51.4 | 0.0 | 77.1 | 1,322.6 | 0.0 | 269.1 | 2,329.7 |
| 35.JEMBER | 0.1 | 12.5 | 0.4 | 56.1 | 63.9 | 269.1 | 0.0 | 443.2 |
| TOTAL | 232.4 | 1,324.4 | 1,699.7 | 3,802.8 | 2,924.0 | 2,329.7 | 443.2 | 28,336.8 |

Passenger OD Table (1992)　[With]　Mode: Local

(Unit: 1,000 pass.)

| O | 1~19 | 20.PRIWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 59.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.6 | 3.9 | 0.0 | 0.0 | 0.0 | 0.5 | 1.7 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 516.6 | 456.3 | 1,367.1 | 600.6 | 29.5 | 49.8 | 400.5 | 0.0 | 0.0 | 5.1 |
| 20.PRIWAKARTA | 1,371.7 | 0.0 | 29.6 | 0.0 | 0.0 | 0.0 | 43.3 | 0.0 | 0.0 | 435.8 |
| 21.CIKAMPEK | 600.6 | 29.8 | 0.0 | 97.0 | 0.0 | 0.0 | 0.1 | 13.8 | 0.0 | 37.5 |
| 22.PEGADENBARU | 29.5 | 0.0 | 97.0 | 0.0 | 0.0 | 0.0 | 0.0 | 114.9 | 0.0 | 131.9 |
| 23.SUKABUMI | 49.8 | 0.0 | 0.0 | 0.0 | 225.1 | 225.1 | 52.8 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 400.5 | 43.3 | 0.0 | 0.0 | 52.8 | 198.0 | 198.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 1.7 | 0.0 | 13.8 | 114.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30.4 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.JATIWANGI | 5.1 | 435.8 | 37.5 | 131.9 | 0.0 | 0.0 | 0.0 | 30.4 | 0.0 | 0.0 |
| 28.CIREBON | 1.1 | 0.0 | 0.0 | 22.2 | 0.0 | 0.6 | 97.0 | 17.4 | 0.0 | 16.8 |
| 29.BREBES | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.SEMARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34.MADIUN | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL | 2,977.1 | 1,025.4 | 1,550.1 | 967.0 | 307.4 | 473.5 | 792.0 | 178.2 | 0.4 | 657.3 |

| O | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.2 |
| 3.RANGKASBITUNG | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 4.5 |
| 4~19.JABOTABEK | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 2,912.2 |
| 20.PRIWAKARTA | 22.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1,025.4 |
| 21.CIKAMPEK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1,550.1 |
| 22.PEGADENBARU | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 967.0 |
| 23.SUKABUMI | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 307.4 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 473.5 |
| 25.BANDUNG | 0.0 | 97.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 792.0 |
| 26.JATIBARANG | 17.4 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 178.2 |
| 27.JATIWANGI | 16.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 28.CIREBON | 0.0 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 | 657.5 |
| 29.BREBES | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 62.3 |
| 30.BANJAR | 0.0 | 0.0 | 0.0 | 31.7 | 0.1 | 0.2 | 0.0 | 131.0 |
| 31.SEMARANG | 5.9 | 0.0 | 31.7 | 94.8 | 40.9 | 0.0 | 0.2 | 142.3 |
| 32.YOGYAKARTA | 0.0 | 31.7 | 94.8 | 0.1 | 0.1 | 51.7 | 0.0 | 178.5 |
| 33.SURABAYA | 0.0 | 0.1 | 40.9 | 0.0 | 511.9 | 511.9 | 0.1 | 553.1 |
| 34.MADIUN | 0.0 | 0.2 | 0.0 | 51.7 | 511.9 | 0.0 | 0.4 | 584.7 |
| 35.JEMBER | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.4 | 0.0 | 0.7 |
| TOTAL | 62.3 | 131.0 | 142.3 | 178.5 | 553.1 | 584.7 | 0.7 | 10,561.2 |

Passenger OD Table (1992) [With] Mode: Bus (Unit: 1,000 pass.)

| O | 1~19 | 20.PRUWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 85.7 | 6.1 | 205.9 | 16.3 | 665.7 | 138.4 | 7.5 | 140.1 |
| 2.PANDEGLANG | 0.0 | 50.1 | 4.0 | 0.1 | 238.1 | 96.8 | 452.7 | 29.0 | 0.1 | 29.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 1,107.4 | 12.0 | 212.6 | 0.0 | 0.1 | 0.0 |
| 4~19.JABOTABEK | 1,007.2 | 905.1 | 3,344.3 | 856.1 | 3,024.5 | 1,577.0 | 8,095.4 | 2,789.8 | 1,204.6 | 5,376.6 |
| 20.PRUWAKARTA | 3,434.0 | 0.0 | 406.7 | 803.8 | 0.0 | 72.7 | 855.3 | 152.1 | 0.1 | 0.0 |
| 21.CIKAMPEK | 862.3 | 406.7 | 0.0 | 427.3 | 17.2 | 5.4 | 869.3 | 132.3 | 14.9 | 685.2 |
| 22.PEGADENBARU | 4,575.9 | 803.8 | 427.3 | 0.0 | 12.2 | 126.5 | 1,696.1 | 470.2 | 3.1 | 143.1 |
| 23.SUKABUMI | 1,702.1 | 72.7 | 17.2 | 12.2 | 0.0 | 73.2 | 939.6 | 0.1 | 27.3 | 285.8 |
| 24.CIANJUR | 0.0 | 72.7 | 5.4 | 126.5 | 73.2 | 0.0 | 2,438.9 | 0.1 | 6.3 | 20.2 |
| 25.BANDUNG | 9,426.4 | 855.3 | 869.3 | 1,696.1 | 939.6 | 2,438.9 | 0.0 | 752.9 | 673.3 | 2,668.4 |
| 26.JATIBARANG | 2,957.2 | 152.1 | 132.1 | 470.2 | 0.1 | 0.1 | 752.9 | 0.0 | 179.2 | 1,631.5 |
| 27.JATIWANGI | 1,212.3 | 0.1 | 14.9 | 3.1 | 27.3 | 6.3 | 673.3 | 179.2 | 0.0 | 765.0 |
| 28.CIREBON | 5,545.7 | 0.0 | 685.2 | 143.1 | 285.8 | 20.2 | 2,668.4 | 1,631.5 | 765.2 | 0.0 |
| 29.BREBES | 1,107.7 | 15.3 | 3.0 | 0.0 | 0.1 | 0.0 | 71.4 | 160.8 | 0.1 | 127.2 |
| 30.BANJAR | 5,873.6 | 180.5 | 452.4 | 61.0 | 307.7 | 357.2 | 8,618.3 | 59.1 | 1,460.8 | 1,012.4 |
| 31.SEMARANG | 9,257.6 | 44.2 | 180.2 | 193.2 | 15.1 | 0.1 | 899.3 | 318.4 | 22.6 | 1,971.5 |
| 32.YOGYAKARTA | 3,604.3 | 21.9 | 413.6 | 121.3 | 30.2 | 7.5 | 301.9 | 191.9 | 102.7 | 647.0 |
| 33.SURABAYA | 2,683.1 | 0.1 | 6.8 | 7.1 | 0.1 | 45.3 | 271.8 | 0.6 | 0.1 | 218.9 |
| 34.MADIUN | 1,459.7 | 15.0 | 1.4 | 0.1 | 7.5 | 0.1 | 207.2 | 0.8 | 7.5 | 68.0 |
| 35.JEMBER | 472.2 | 0.1 | 105.2 | 0.0 | 0.1 | 0.0 | 76.1 | 0.0 | 0.1 | 30.2 |
| TOTAL | 55,181.3 | 3,575.0 | 7,154.7 | 4,927.3 | 6,292.1 | 4,855.6 | 30,766.2 | 7,007.0 | 4,475.6 | 15,820.9 |

| O | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 14.5 | 159.8 | 26.4 | 103.3 | 0.0 | 44.0 | 7.4 | 1,673.6 |
| 2.PANDEGLANG | 0.1 | 30.2 | 0.0 | 0.0 | 0.0 | 7.5 | 0.1 | 937.9 |
| 3.RANGKASBITUNG | 0.0 | 188.7 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 1,521.1 |
| 4~19.JABOTABEK | 1,093.1 | 5,494.9 | 9,231.2 | 3,501.0 | 2,631.5 | 1,452.1 | 471.5 | 51,048.7 |
| 20.PRUWAKARTA | 15.3 | 180.5 | 44.2 | 21.9 | 0.1 | 15.0 | 0.1 | 3,575.0 |
| 21.CIKAMPEK | 3.0 | 452.4 | 180.2 | 413.6 | 6.8 | 1.4 | 105.2 | 7,154.7 |
| 22.PEGADENBARU | 0.0 | 61.0 | 193.2 | 121.3 | 7.1 | 0.1 | 0.1 | 4,927.3 |
| 23.SUKABUMI | 0.1 | 307.7 | 15.1 | 30.2 | 0.1 | 7.5 | 0.1 | 6,292.1 |
| 24.CIANJUR | 0.0 | 357.2 | 0.1 | 7.5 | 45.3 | 0.1 | 0.0 | 4,855.6 |
| 25.BANDUNG | 71.4 | 8,618.3 | 899.3 | 301.9 | 271.8 | 207.2 | 76.1 | 30,766.2 |
| 26.JATIBARANG | 160.8 | 59.1 | 318.4 | 191.9 | 0.6 | 0.8 | 0.0 | 7,007.0 |
| 27.JATIWANGI | 0.1 | 1,460.8 | 22.6 | 102.7 | 0.1 | 7.5 | 0.1 | 4,475.6 |
| 28.CIREBON | 127.2 | 1,012.4 | 1,971.5 | 647.6 | 218.9 | 68.0 | 30.2 | 15,820.9 |
| 29.BREBES | 0.0 | 804.4 | 2,279.0 | 122.9 | 1.3 | 3.4 | 0.1 | 4,696.7 |
| 30.BANJAR | 804.4 | 0.0 | 4,151.1 | 3,895.8 | 151.0 | 218.9 | 50.4 | 27,654.6 |
| 31.SEMARANG | 2,279.0 | 4,151.1 | 0.0 | 7,414.8 | 10,606.7 | 497.6 | 437.8 | 38,289.2 |
| 32.YOGYAKARTA | 122.9 | 3,895.8 | 7,414.8 | 0.0 | 2,435.8 | 3,547.0 | 242.3 | 23,101.5 |
| 33.SURABAYA | 1.3 | 151.0 | 10,606.7 | 2,435.8 | 0.0 | 10,775.5 | 16,051.9 | 43,256.1 |
| 34.MADIUN | 3.4 | 218.9 | 497.6 | 3,547.0 | 10,775.5 | 0.0 | 9,023.7 | 25,833.4 |
| 35.JEMBER | 0.1 | 50.4 | 437.8 | 242.3 | 16,051.9 | 9,023.7 | 0.0 | 26,490.2 |
| TOTAL | 4,696.7 | 27,654.6 | 38,289.2 | 23,101.5 | 43,256.1 | 25,833.4 | 26,490.2 | 329,377.4 |

Passenger OD Table (1992)　[Without]　Mode: Express　(Unit: 1,000 pass.)

| O | 1~19 | 20.PRUWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUN | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 12.6 | 1.6 | 2.9 | 0.1 | 18.1 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.1 | 0.0 | 0.1 | 0.0 | 0.3 | 0.1 | 0.0 | 0.1 | 8.7 |
| 4~19.JABOTABEK | 0.0 | 7.2 | 69.6 | 237.5 | 5.5 | 0.0 | 947.8 | 98.7 | 0.0 | 426.2 | 130.2 | 415.0 | 984.9 | 2,177.4 | 753.4 | 524.0 | 10.4 | 6,787.8 |
| 20.PRUWAKARTA | 7.2 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 13.6 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 23.0 |
| 21.CIKAMPEK | 69.6 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 2.9 | 1.4 | 0.0 | 3.2 | 0.7 | 17.4 | 6.1 | 14.1 | 2.2 | 0.4 | 0.0 | 118.6 |
| 22.PEGADENBARU | 237.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 3.5 | 3.2 | 2.1 | 4.0 | 7.6 | 0.4 | 0.0 | 0.0 | 258.6 |
| 23.SUKABUMI | 5.5 | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.7 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 | 0.0 | 6.4 | 0.0 | 0.0 | 0.0 | 0.0 | 5.1 | 0.0 | 1.0 | 0.2 | 0.0 | 0.0 | 16.8 |
| 25.BANDUNG | 947.8 | 1.5 | 2.9 | 0.0 | 0.0 | 6.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 378.1 | 0.0 | 370.1 | 115.6 | 52.1 | 3.5 | 1,878.0 |
| 26.JATIBARANG | 98.8 | 0.0 | 1.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 | 10.2 | 2.6 | 5.3 | 14.3 | 0.3 | 0.1 | 0.0 | 136.8 |
| 27.JATIWANGI | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 434.3 | 0.0 | 3.2 | 3.5 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 1.0 | 10.7 | 9.5 | 54.0 | 35.3 | 17.0 | 0.3 | 572.3 |
| 29.BREBES | 130.2 | 0.0 | 0.7 | 3.2 | 0.0 | 0.0 | 0.0 | 10.2 | 0.0 | 1.0 | 0.0 | 0.5 | 2.3 | 18.4 | 0.4 | 0.0 | 0.1 | 167.0 |
| 30.BANJAR | 415.0 | 13.6 | 17.4 | 2.1 | 0.1 | 5.1 | 378.1 | 2.6 | 0.0 | 10.7 | 0.5 | 0.0 | 0.0 | 237.2 | 116.8 | 51.4 | 12.5 | 1,263.2 |
| 31.SEMARANG | 984.9 | 0.0 | 6.1 | 4.0 | 0.0 | 0.0 | 0.0 | 5.3 | 0.0 | 9.5 | 2.3 | 0.0 | 0.0 | 216.0 | 180.4 | 0.4 | 0.4 | 1,409.8 |
| 32.YOGYAKARTA | 2,190.4 | 0.0 | 14.1 | 7.6 | 0.0 | 1.0 | 370.1 | 14.3 | 0.0 | 54.0 | 18.4 | 237.2 | 216.0 | 0.0 | 281.3 | 77.1 | 56.1 | 3,537.6 |
| 33.SURABAYA | 755.1 | 0.0 | 2.2 | 0.4 | 0.0 | 0.2 | 115.6 | 0.3 | 0.0 | 35.3 | 0.4 | 116.8 | 180.4 | 281.3 | 0.0 | 1,322.6 | 83.9 | 2,894.6 |
| 34.MADIUN | 528.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 52.1 | 0.1 | 0.0 | 17.0 | 0.0 | 51.4 | 0.4 | 77.1 | 1,322.6 | 0.0 | 269.1 | 2,316.7 |
| 35.JEMBER | 10.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 0.3 | 0.1 | 12.5 | 0.4 | 56.1 | 83.9 | 269.1 | 0.0 | 436.6 |
| TOTAL | 6,814.9 | 23.0 | 118.6 | 258.6 | 9.7 | 16.8 | 1,878.0 | 136.8 | 0.0 | 572.3 | 167.0 | 1,263.2 | 1,409.8 | 3,537.6 | 2,894.6 | 2,316.7 | 436.6 | 21,854.2 |

Passenger OD Table (1992) [Without] Mode: Local

(Unit: 1,000 pass.)

| O＼D | 1~19 | 20.PRWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 25.7 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.6 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 426.9 | 1,366.5 | 56.3 | 29.5 | 49.8 | 95.8 | 0.0 | 0.0 | 0.0 |
| 20.PRWAKARTA | 453.3 | 0.0 | 29.9 | 29.9 | 0.0 | 0.0 | 43.3 | 0.0 | 0.0 | 0.0 |
| 21.CIKAMPEK | 1,370.6 | 29.9 | 0.0 | 9.4 | 0.0 | 0.1 | 0.0 | 7.5 | 0.0 | 0.6 |
| 22.PEGADENBARU | 56.3 | 0.0 | 9.4 | 0.0 | 0.0 | 3.0 | 0.0 | 40.8 | 0.2 | 10.4 |
| 23.SUKABUMI | 29.5 | 0.0 | 0.0 | 0.0 | 0.0 | 225.1 | 52.8 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 49.8 | 0.0 | 0.1 | 0.0 | 225.1 | 0.0 | 198.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 95.8 | 43.3 | 0.1 | 7.5 | 52.8 | 198.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 0.0 | 0.0 | 7.5 | 40.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30.3 |
| 27.JATIWANGI | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 30.3 | 0.0 | 0.0 |
| 28.CIREBON | 0.0 | 0.0 | 0.6 | 10.4 | 0.0 | 0.8 | 0.0 | 16.6 | 0.0 | 16.8 |
| 29.BREBES | 0.9 | 0.0 | 0.1 | 2.3 | 0.0 | 0.0 | 97.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.SEMARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34.MADIUN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL | 2,056.8 | 526.6 | 1,418.3 | 119.4 | 307.4 | 473.5 | 487.0 | 95.3 | 0.2 | 58.1 |

| O＼D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUN | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.9 |
| 3.RANGKASBITUNG | 0.0 | 0.9 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 4.4 |
| 4~19.JABOTABEK | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2,026.2 |
| 20.PRWAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 526.6 |
| 21.CIKAMPEK | 2.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1,418.3 |
| 22.PEGADENBARU | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 119.4 |
| 23.SUKABUMI | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 307.4 |
| 24.CIANJUR | 0.0 | 97.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 473.5 |
| 25.BANDUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 487.0 |
| 26.JATIBARANG | 16.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 95.3 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 28.CIREBON | 16.8 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 | 58.1 |
| 29.BREBES | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 41.6 |
| 30.BANJAR | 5.9 | 0.0 | 0.0 | 31.7 | 40.9 | 0.2 | 0.0 | 130.8 |
| 31.SEMARANG | 0.0 | 0.1 | 0.0 | 94.8 | 94.8 | 0.0 | 0.0 | 141.8 |
| 32.YOGYAKARTA | 0.0 | 31.7 | 94.8 | 0.0 | 0.1 | 51.7 | 0.2 | 178.5 |
| 33.SURABAYA | 0.0 | 0.1 | 40.9 | 0.1 | 0.0 | 511.9 | 0.1 | 553.1 |
| 34.MADIUN | 0.0 | 0.2 | 0.0 | 51.7 | 511.9 | 0.0 | 0.4 | 564.7 |
| 35.JEMBER | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.4 | 0.0 | 0.7 |
| TOTAL | 41.6 | 130.8 | 141.8 | 178.5 | 553.1 | 564.7 | 0.7 | 7,153.8 |

Passenger OD Table (1992) [Without] Mode: Bus (Unit: 1,000 pass.)

| O D | 1~19 | 20.PRWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 52.0 | 85.7 | 6.1 | 205.9 | 16.3 | 665.7 | 138.6 | 7.5 | 151.8 |
| 2.PANDEGLANG | 0.0 | 84.1 | 4.4 | 0.1 | 238.1 | 96.8 | 452.7 | 33.6 | 0.1 | 211.3 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.1 | 0.0 | 1,107.4 | 12.0 | 213.4 | 0.0 | 0.1 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 941.2 | 3,325.0 | 1,478.4 | 3,024.5 | 1,577.0 | 9,153.6 | 3,156.2 | 1,207.5 | 6,220.1 |
| 20.PRWAKARTA | 1,077.3 | 0.0 | 406.7 | 803.8 | 0.0 | 72.7 | 855.3 | 159.8 | 0.1 | 435.9 |
| 21.CIKAMPEK | 3,435.2 | 406.7 | | 515.2 | 17.2 | 5.4 | 869.3 | 159.6 | 14.9 | 936.0 |
| 22.PEGADENBARU | 1,484.6 | 803.8 | 515.2 | 0.0 | 12.2 | 126.5 | 1,696.1 | 544.9 | 3.3 | 305.2 |
| 23.SUKABUMI | 4,575.9 | 0.0 | 17.2 | 12.2 | 0.0 | 73.2 | 939.6 | 0.1 | 27.3 | 285.8 |
| 24.CIANJUR | 1,702.1 | 72.7 | 5.4 | 126.5 | 73.2 | 0.0 | 2,438.9 | 0.1 | 6.3 | 20.2 |
| 25.BANDUNG | 10,485.4 | 855.3 | 889.3 | 1,696.1 | 939.6 | 2,438.9 | 0.0 | 755.1 | 673.3 | 2,668.4 |
| 26.JATIBARANG | 3,328.4 | 159.8 | 139.6 | 544.9 | 0.1 | 0.0 | 755.1 | 0.0 | 179.2 | 1,631.6 |
| 27.JATIWANGI | 1,215.2 | 0.1 | 14.9 | 3.3 | 27.3 | 6.3 | 673.3 | 179.2 | 0.0 | 765.2 |
| 28.CIREBON | 6,583.2 | 435.9 | 936.0 | 305.2 | 285.8 | 20.2 | 2,668.4 | 1,631.6 | 765.2 | 0.0 |
| 29.BREBES | 1,143.5 | 15.5 | 3.7 | 48.1 | 0.1 | 0.0 | 71.4 | 162.2 | 0.1 | 127.2 |
| 30.BANJAR | 5,929.9 | 182.2 | 455.5 | 61.2 | 307.7 | 357.7 | 8,618.3 | 59.1 | 1,460.8 | 1,012.4 |
| 31.SEMARANG | 9,513.3 | 45.3 | 196.2 | 203.8 | 15.1 | 0.1 | 899.6 | 324.8 | 22.6 | 1,971.5 |
| 32.YOGYAKARTA | 3,818.0 | 22.8 | 452.8 | 128.3 | 30.2 | 7.5 | 301.9 | 196.2 | 102.7 | 647.6 |
| 33.SURABAYA | 2,711.2 | 0.1 | 7.5 | 7.5 | 0.1 | 45.3 | 271.8 | 0.6 | 0.1 | 218.9 |
| 34.MADIUN | 1,472.4 | 15.1 | 1.4 | 0.1 | 7.5 | 0.1 | 207.2 | 0.9 | 7.5 | 68.0 |
| 35.JEMBER | 478.1 | 0.1 | 105.7 | 0.0 | 0.1 | 0.0 | 76.1 | 0.0 | 0.0 | 30.2 |
| TOTAL | 58,953.7 | 4,092.7 | 7,562.3 | 5,940.8 | 6,292.1 | 4,855.6 | 31,827.7 | 7,482.6 | 4,478.7 | 17,707.3 |

| O D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUN | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 15.2 | 159.8 | 30.7 | 121.9 | 46.8 | 7.8 | 0.5 | 1,712.3 |
| 2.PANDEGLANG | 0.1 | 30.2 | 0.0 | 0.0 | 7.5 | 0.1 | 0.1 | 1,159.2 |
| 3.RANGKASBITUNG | 0.0 | 188.7 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 1,522.0 |
| 4~19.JABOTABEK | 1,128.2 | 5,551.2 | 9,482.6 | 3,696.1 | 2,656.8 | 1,464.4 | 477.4 | 54,580.2 |
| 20.PRWAKARTA | 15.5 | 182.2 | 45.3 | 22.8 | 0.1 | 15.1 | 0.1 | 4,092.7 |
| 21.CIKAMPEK | 3.7 | 455.5 | 196.2 | 452.8 | 7.5 | 1.4 | 105.7 | 7,562.3 |
| 22.PEGADENBARU | 48.1 | 61.2 | 203.8 | 128.3 | 7.5 | 0.1 | 0.0 | 5,940.8 |
| 23.SUKABUMI | 0.1 | 307.7 | 15.1 | 30.2 | 0.1 | 7.5 | 0.1 | 6,292.1 |
| 24.CIANJUR | 0.0 | 357.2 | 0.1 | 7.5 | 45.3 | 0.1 | 0.1 | 4,855.6 |
| 25.BANDUNG | 71.4 | 8,618.3 | 899.6 | 301.9 | 271.8 | 207.2 | 76.1 | 31,827.6 |
| 26.JATIBARANG | 162.2 | 59.1 | 324.8 | 196.2 | 0.6 | 0.9 | 0.0 | 7,482.6 |
| 27.JATIWANGI | 0.1 | 1,460.8 | 22.6 | 102.7 | 0.1 | 7.5 | 0.1 | 4,478.7 |
| 28.CIREBON | 127.2 | 1,012.4 | 1,971.5 | 647.6 | 218.9 | 68.0 | 30.2 | 17,707.3 |
| 29.BREBES | 0.0 | 804.4 | 2,229.0 | 122.9 | 1.3 | 3.4 | 0.1 | 4,782.9 |
| 30.BANJAR | 804.4 | 0.0 | 4,151.1 | 3,895.8 | 151.0 | 218.9 | 50.4 | 27,715.9 |
| 31.SEMARANG | 2,279.0 | 4,151.1 | 0.0 | 7,414.8 | 10,606.7 | 497.6 | 437.8 | 38,579.3 |
| 32.YOGYAKARTA | 122.9 | 3,895.8 | 7,414.8 | 0.0 | 2,435.8 | 3,547.0 | 242.3 | 23,386.6 |
| 33.SURABAYA | 1.3 | 151.0 | 10,606.7 | 2,435.8 | 0.0 | 10,775.5 | 16,051.9 | 43,285.3 |
| 34.MADIUN | 3.4 | 218.9 | 497.6 | 3,547.0 | 10,775.5 | 0.0 | 9,023.7 | 25,846.3 |
| 35.JEMBER | 0.1 | 50.4 | 437.8 | 242.3 | 16,051.9 | 9,023.7 | 0.0 | 26,496.6 |
| TOTAL | 4,782.9 | 27,715.9 | 38,579.3 | 23,366.6 | 43,285.3 | 25,846.3 | 26,496.6 | 339,266.4 |

# Appendix 4-9-2　Link Traffic of Railway Passengers

(One way: Per Year; Unit: 1,000 pass.)

| Link No. | Track Capacity | | 1992 | | | | 1997 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Traffic Demand | | Traffic Volume | | Traffic Demand | | Traffic Volume | |
| | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH |
| 1 | 3551.5 | 3551.5 | 18.3 | 57.1 | 18.3 | 57.1 | 23.4 | 72.5 | 20.0 | 61.9 |
| 2 | 1588.8 | 1588.8 | 26.3 | 247.8 | 26.3 | 247.8 | 35.5 | 333.7 | 35.4 | 315.6 |
| 3 | 5233.8 | 5233.8 | 57.9 | 319.0 | 57.9 | 319.0 | 75.5 | 424.1 | 70.8 | 394.6 |
| 4 | 8411.4 | 8411.4 | 50.0 | 391.3 | 50.0 | 391.3 | 64.7 | 508.3 | 58.0 | 473.5 |
| 5 | 8411.4 | 8411.4 | 54.6 | 559.6 | 54.6 | 559.6 | 70.6 | 725.4 | 63.9 | 675.9 |
| 6 | 8037.6 | 8037.6 | 74.7 | 550.2 | 74.7 | 550.2 | 97.3 | 722.3 | 92.1 | 672.9 |
| 7 | 22430.4 | 22430.4 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 8 | 18878.9 | 18878.9 | 65.8 | 696.2 | 65.8 | 696.2 | 85.0 | 901.7 | 78.1 | 839.6 |
| 9 | 16075.1 | 16075.1 | 0 | 0 | 1.6 | 1.6 | .0 | .0 | 2.1 | 2.1 |
| 10 | 10841.4 | 10841.4 | 0 | 0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 11 | 12897.5 | 12897.5 | 24.0 | 24.0 | 24.0 | 24.0 | 29.5 | 29.5 | 29.5 | 29.5 |
| 12 | 16075.1 | 16075.1 | 2491.0 | 2541.8 | 2491.0 | 2541.8 | 3154.9 | 3219.1 | 2761.1 | 2777.3 |
| 13 | 12336.7 | 12336.7 | 144.0 | 1430.6 | 144.0 | 1430.6 | 186.8 | 1861.6 | 174.2 | 1727.8 |
| 14 | 21495.8 | 21495.8 | 2866.9 | 4812.5 | 2866.9 | 4812.5 | 3642.3 | 6172.5 | 3231.4 | 5546.9 |
| 15 | 5233.8 | 5233.8 | 4.4 | 28.2 | 6.0 | 29.8 | 5.6 | 36.4 | 7.6 | 35.9 |
| 16 | 18878.9 | 18878.9 | 1610.1 | 1751.2 | 1610.1 | 1751.2 | 2007.4 | 2180.9 | 1922.2 | 2107.4 |
| 17 | 22430.4 | 22430.4 | 220.9 | 343.5 | 220.9 | 343.5 | 285.0 | 443.3 | 255.8 | 405.2 |
| 18 | 14579.8 | 14579.8 | 216.5 | 315.3 | 216.5 | 315.3 | 279.4 | 406.9 | 250.2 | 371.4 |
| 19 | 22430.4 | 22430.4 | 1827.7 | 2091.5 | 1827.7 | 2091.5 | 2288.1 | 2619.7 | 2173.9 | 2508.4 |
| 20 | 11962.9 | 11962.9 | 4214.9 | 4725.6 | 4214.9 | 4725.6 | 5234.3 | 5869.3 | 4825.2 | 5481.9 |
| 21 | 22430.4 | 22430.4 | 7780.2 | 10585.2 | 7780.2 | 10585.2 | 9773.2 | 13388.3 | 8898.3 | 12279.3 |
| 22 | 22430.4 | 22430.4 | 8160.9 | 11383.5 | 8160.9 | 11383.5 | 10265.1 | 14430.6 | 9390.1 | 13299.4 |
| 23 | 22430.4 | 22430.4 | 62.4 | 482.3 | 62.4 | 482.3 | 79.2 | 627.2 | 78.6 | 600.2 |
| 24 | 7663.7 | 7663.7 | 55.3 | 69.6 | 55.3 | 69.6 | 70.0 | 88.6 | 69.9 | 87.2 |
| 25 | 3364.6 | 3364.6 | 89.7 | 89.7 | 89.7 | 89.7 | 114.9 | 114.9 | 114.9 | 114.9 |
| 26 | 3738.4 | 3738.4 | 336.9 | 336.9 | 336.9 | 336.9 | 426.8 | 426.8 | 426.8 | 426.8 |
| 27 | 3925.3 | 3925.3 | 269.2 | 269.2 | 269.2 | 269.2 | 340.6 | 340.7 | 340.5 | 340.4 |
| 28 | 15327.4 | 22430.4 | 8782.4 | 12555.7 | 8782.4 | 12555.7 | 11067.3 | 15948.8 | 10192.3 | 14811.0 |
| 29 | 6168.4 | 7103.0 | 1968.6 | 3605.6 | 1968.9 | 3605.9 | 2501.6 | 4615.4 | 2501.5 | 4574.3 |
| 30 | 6168.4 | 7103.0 | 1536.2 | 2659.0 | 1536.2 | 2659.0 | 1948.1 | 3406.3 | 1948.0 | 3405.8 |
| 31 | 6729.1 | 10467.5 | 5474.7 | 8913.7 | 5474.7 | 8913.7 | 6855.4 | 11273.9 | 5974.0 | 10045.2 |
| 32 | 5794.5 | 10467.5 | 5242.0 | 8273.9 | 5242.0 | 8273.9 | 6560.0 | 10443.2 | 5676.1 | 9305.3 |
| 33 | 7009.5 | 10467.5 | 5176.4 | 7757.1 | 5176.4 | 7757.1 | 6478.8 | 9782.7 | 5614.9 | 8686.8 |
| 34 | 3551.5 | 3551.5 | .2 | 3.2 | .2 | 3.2 | .3 | 4.1 | .2 | 3.9 |
| 35 | 21495.8 | 22430.4 | 1804.2 | 2927.1 | 1804.7 | 2927.6 | 2288.0 | 3746.2 | 2287.9 | 3745.6 |
| 36 | 3644.9 | 3644.9 | 1472.7 | 1534.0 | 1472.7 | 1534.0 | 1864.7 | 1942.6 | 1831.6 | 1841.6 |
| 37 | 2990.7 | 2990.7 | 1006.2 | 1006.2 | 1006.2 | 1006.2 | 1275.1 | 1275.1 | 1214.6 | 1090.7 |
| 38 | 3551.5 | 3551.5 | 2541.7 | 2967.3 | 2541.7 | 2967.3 | 3166.8 | 3704.1 | 2813.4 | 3456.3 |
| 39 | 5233.8 | 5233.8 | 2293.5 | 2558.8 | 2293.5 | 2558.8 | 2890.9 | 3229.1 | 2442.5 | 2568.8 |
| 40 | 3738.4 | 3738.4 | 2388.3 | 2727.6 | 2388.3 | 2727.6 | 2973.8 | 3401.9 | 2639.1 | 3165.8 |
| 41 | 4673.0 | 4673.0 | 19.1 | 19.1 | 19.1 | 19.1 | 24.2 | 24.2 | 23.1 | 20.8 |
| 42 | 4859.9 | 4859.9 | 2312.6 | 2577.9 | 2312.6 | 2577.9 | 2915.1 | 3253.3 | 2465.6 | 2589.5 |
| 43 | 3644.9 | 3644.9 | 2369.4 | 2708.7 | 2369.4 | 2708.7 | 2949.8 | 3377.9 | 2616.3 | 3145.2 |
| 44 | 3644.9 | 3644.9 | 3290.8 | 3556.2 | 3290.8 | 3556.2 | 4154.8 | 4493.0 | 3644.9 | 3644.9 |
| 45 | 2990.7 | 2990.7 | 855.9 | 868.9 | 855.9 | 868.9 | 1083.9 | 1099.9 | 1005.7 | 1051.0 |
| 46 | 2897.3 | 2897.3 | 1026.6 | 1062.7 | 1026.6 | 1062.7 | 1278.8 | 1323.8 | 1167.5 | 1252.5 |
| 47 | 3738.4 | 3738.4 | 310.8 | 310.8 | 310.8 | 310.8 | 393.9 | 393.9 | 393.9 | 393.9 |
| 48 | 3551.5 | 3551.5 | 545.1 | 558.1 | 545.1 | 558.1 | 690.0 | 706.0 | 611.9 | 657.1 |
| 49 | 5420.7 | 5420.7 | 818.7 | 818.7 | 818.7 | 818.7 | 1037.5 | 1037.5 | 1016.0 | 972.0 |
| 50 | 3364.6 | 3364.6 | 545.1 | 558.1 | 545.1 | 558.1 | 690.0 | 706.0 | 611.9 | 657.1 |
| 51 | 3925.3 | 3925.3 | 1363.8 | 1376.7 | 1363.8 | 1376.7 | 1727.5 | 1743.5 | 1627.9 | 1629.1 |
| 52 | 3738.4 | 3738.4 | 0 | 0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 53 | 2803.8 | 2803.8 | 1026.6 | 1062.7 | 1026.6 | 1062.7 | 1278.8 | 1323.8 | 1167.5 | 1252.5 |
| 54 | 4486.1 | 4486.1 | 2690.2 | 2690.2 | 2690.2 | 2690.2 | 3409.2 | 3409.2 | 3394.1 | 3363.1 |
| 55 | 6448.7 | 6448.7 | 2690.2 | 2690.2 | 2690.2 | 2690.2 | 3409.2 | 3409.2 | 3394.1 | 3363.1 |
| 56 | 4112.2 | 4112.2 | 0 | 0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 57 | 2803.8 | 2803.8 | 0 | 0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 58 | 5794.5 | 5794.5 | 2348.5 | 2348.5 | 2348.5 | 2348.5 | 2976.1 | 2976.1 | 2961.9 | 2932.9 |
| 59 | 2803.8 | 2803.8 | 341.8 | 341.8 | 341.8 | 341.8 | 433.1 | 433.1 | 432.2 | 430.2 |
| 60 | 7009.5 | 7009.5 | 95.4 | 102.0 | 95.4 | 102.0 | 120.6 | 128.9 | 119.0 | 127.4 |
| 61 | 8411.4 | 8411.4 | 437.2 | 443.8 | 437.2 | 443.8 | 553.7 | 562.1 | 551.2 | 557.6 |
| 62 | 5233.8 | 5233.8 | 0 | 0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 63 | 3738.4 | 3738.4 | 437.2 | 443.8 | 437.2 | 443.8 | 553.7 | 562.1 | 551.2 | 557.6 |

- 34 -

| Link No | Track Capacity | | 2002 | | | | 2007 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Traffic Demand | | Traffic Volume | | Traffic Demand | | Traffic Volume | |
| | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH |
| 1 | 3551.5 | 3551.5 | 29.1 | 90.4 | 19.5 | 60.9 | 36.1 | 112.2 | 18.9 | 59.4 |
| 2 | 1588.8 | 1588.8 | 44.3 | 416.4 | 44.0 | 339.8 | 55.0 | 517.2 | 50.6 | 357.0 |
| 3 | 5233.8 | 5233.8 | 94.1 | 529.1 | 80.5 | 419.6 | 116.9 | 657.1 | 87.7 | 436.7 |
| 4 | 8411.4 | 8411.4 | 83.0 | 659.8 | 63.3 | 532.9 | 101.1 | 797.3 | 64.5 | 546.6 |
| 5 | 8411.4 | 8411.4 | 90.6 | 938.1 | 70.8 | 747.1 | 111.7 | 1188.4 | 74.4 | 792.9 |
| 6 | 8037.6 | 8037.6 | 122.0 | 911.4 | 105.6 | 715.0 | 150.8 | 1121.7 | 115.7 | 731.2 |
| 7 | 22430.4 | 22430.4 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 8 | 18878.9 | 18878.9 | 108.1 | 1151.1 | 86.6 | 908.3 | 133.1 | 1448.5 | 92.0 | 952.5 |
| 9 | 16075.1 | 16075.1 | .0 | .0 | 2.7 | 2.7 | .0 | .0 | 3.2 | 3.3 |
| 10 | 10841.4 | 10841.4 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 11 | 12897.5 | 12897.5 | 35.7 | 35.7 | 35.7 | 35.7 | 43.3 | 43.4 | 43.3 | 43.4 |
| 12 | 16075.1 | 16075.1 | 3804.8 | 3882.3 | 2717.5 | 2737.0 | 4628.7 | 4722.9 | 2675.3 | 2698.4 |
| 13 | 12336.7 | 12336.7 | 235.4 | 2348.5 | 196.4 | 1834.3 | 290.4 | 2917.2 | 212.1 | 1891.0 |
| 14 | 21495.8 | 21495.8 | 4406.7 | 7609.7 | 3265.9 | 5761.4 | 5365.9 | 9317.0 | 3277.7 | 5851.1 |
| 15 | 5233.8 | 5233.8 | 6.9 | 44.8 | 8.9 | 36.6 | 8.5 | 54.7 | 10.2 | 36.8 |
| 16 | 18878.9 | 18878.9 | 2452.6 | 2661.3 | 2216.7 | 2391.2 | 3005.4 | 3259.0 | 2441.0 | 2608.5 |
| 17 | 22430.4 | 22430.4 | 365.0 | 566.2 | 276.0 | 422.1 | 443.5 | 688.3 | 282.4 | 416.0 |
| 18 | 14579.8 | 14579.8 | 358.1 | 521.5 | 269.8 | 388.3 | 435.0 | 633.5 | 275.4 | 382.4 |
| 19 | 22430.4 | 22430.4 | 2812.3 | 3222.2 | 2487.4 | 2807.9 | 3442.5 | 3940.8 | 2716.9 | 3018.0 |
| 20 | 11962.9 | 11962.9 | 6375.3 | 7150.3 | 5225.2 | 5839.6 | 7784.6 | 8726.6 | 5521.4 | 6090.6 |
| 21 | 22430.4 | 22430.4 | 11884.1 | 16408.4 | 9433.5 | 12949.8 | 14505.6 | 20066.3 | 9821.9 | 13363.0 |
| 22 | 22430.4 | 22430.4 | 12507.7 | 17743.1 | 10056.0 | 14189.9 | 15285.6 | 21746.3 | 10543.4 | 14769.7 |
| 23 | 22430.4 | 22430.4 | 99.2 | 818.2 | 95.9 | 698.1 | 121.2 | 994.0 | 111.8 | 737.7 |
| 24 | 7663.7 | 7663.7 | 87.2 | 110.1 | 87.1 | 105.0 | 106.7 | 136.5 | 104.5 | 123.8 |
| 25 | 3364.6 | 3364.6 | 142.3 | 142.4 | 142.3 | 142.4 | 179.8 | 179.8 | 179.8 | 179.8 |
| 26 | 3738.4 | 3738.4 | 531.8 | 531.8 | 531.8 | 531.8 | 662.3 | 662.3 | 662.3 | 662.3 |
| 27 | 3925.3 | 3925.3 | 425.0 | 425.0 | 424.7 | 424.6 | 528.3 | 528.3 | 527.7 | 527.6 |
| 28 | 15327.4 | 22430.4 | 13536.7 | 19703.0 | 11084.9 | 16120.5 | 16539.3 | 24123.6 | 11705.0 | 16934.2 |
| 29 | 6168.4 | 7103.0 | 3096.7 | 5789.3 | 3096.2 | 5615.7 | 3789.4 | 7092.5 | 3518.7 | 6362.6 |
| 30 | 6168.4 | 7103.0 | 2404.9 | 4276.9 | 2404.4 | 4275.0 | 2930.3 | 5214.3 | 2726.6 | 4857.1 |
| 31 | 6729.1 | 10467.5 | 8295.8 | 13829.6 | 5825.4 | 9887.8 | 10092.1 | 16931.7 | 5708.3 | 9751.5 |
| 32 | 5794.5 | 10467.5 | 7933.8 | 12774.7 | 5494.8 | 9229.1 | 9653.2 | 15627.8 | 5343.0 | 9220.7 |
| 33 | 7009.5 | 10467.5 | 7836.2 | 11952.6 | 5417.9 | 8593.0 | 9535.9 | 14608.1 | 5243.9 | 8568.1 |
| 34 | 3551.5 | 3551.5 | .3 | 5.0 | .3 | 4.0 | .4 | 6.2 | .3 | 4.1 |
| 35 | 21495.8 | 22430.4 | 2829.0 | 4701.0 | 2828.4 | 4698.8 | 3457.4 | 5741.4 | 3253.5 | 5383.9 |
| 36 | 3644.9 | 3644.9 | 2305.3 | 2400.2 | 2200.0 | 2224.4 | 2846.8 | 2962.6 | 2563.5 | 2601.6 |
| 37 | 2990.7 | 2990.7 | 1591.0 | 1591.0 | 1398.8 | 1271.2 | 1976.1 | 1976.1 | 1553.7 | 1424.6 |
| 38 | 3551.5 | 3551.5 | 3831.8 | 4490.6 | 2828.7 | 3471.7 | 4664.2 | 5470.6 | 2846.7 | 3502.0 |
| 39 | 5233.8 | 5233.8 | 3498.3 | 3914.5 | 2262.7 | 2393.6 | 4259.7 | 4769.0 | 2113.0 | 2246.9 |
| 40 | 3738.4 | 3738.4 | 3594.1 | 4118.0 | 2648.9 | 3156.0 | 4374.3 | 5014.3 | 2664.0 | 3158.1 |
| 41 | 4673.0 | 4673.0 | 30.2 | 30.2 | 26.6 | 24.3 | 37.5 | 37.5 | 30.8 | 28.3 |
| 42 | 4859.9 | 4859.9 | 3528.5 | 3944.7 | 2289.7 | 2417.8 | 4297.2 | 4806.5 | 2143.8 | 2275.2 |
| 43 | 3644.9 | 3644.9 | 3564.2 | 4088.0 | 2622.5 | 3132.0 | 4337.1 | 4977.1 | 2633.6 | 3130.2 |
| 44 | 3644.9 | 3644.9 | 5075.6 | 5491.7 | 3644.9 | 3644.9 | 6218.5 | 6727.8 | 3644.9 | 3644.9 |
| 45 | 2990.7 | 2990.7 | 1324.4 | 1343.8 | 1104.1 | 1143.1 | 1624.2 | 1647.7 | 1225.5 | 1259.7 |
| 46 | 2897.3 | 2897.3 | 1554.2 | 1609.1 | 1240.8 | 1317.5 | 1900.1 | 1967.1 | 1333.5 | 1403.5 |
| 47 | 3738.4 | 3738.4 | 491.5 | 491.5 | 491.5 | 491.5 | 610.4 | 610.4 | 610.4 | 610.4 |
| 48 | 3551.5 | 3551.5 | 832.9 | 852.2 | 612.6 | 651.6 | 1013.8 | 1037.3 | 615.0 | 649.3 |
| 49 | 5420.7 | 5420.7 | 1294.7 | 1294.7 | 1226.5 | 1181.1 | 1607.8 | 1607.8 | 1319.5 | 1276.6 |
| 50 | 3364.6 | 3364.6 | 832.9 | 852.2 | 612.6 | 651.6 | 1013.8 | 1073.3 | 615.0 | 649.3 |
| 51 | 3925.3 | 3925.3 | 2127.6 | 2146.9 | 1839.1 | 1832.7 | 2621.6 | 2645.1 | 1934.5 | 1925.9 |
| 52 | 3738.4 | 3738.4 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 53 | 2803.8 | 2803.8 | 1554.2 | 1609.1 | 1240.8 | 1317.5 | 1900.1 | 1967.1 | 1333.5 | 1403.5 |
| 54 | 4486.1 | 4486.1 | 4254.5 | 4254.5 | 4206.4 | 4174.4 | 5283.4 | 5283.4 | 4409.3 | 4380.5 |
| 55 | 6448.7 | 6448.7 | 4254.5 | 4254.5 | 4206.4 | 4174.4 | 5283.4 | 5283.4 | 4409.3 | 4380.5 |
| 56 | 4112.2 | 4112.2 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 57 | 2803.8 | 2803.8 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 58 | 5794.5 | 5794.5 | 3714.0 | 3714.0 | 3669.0 | 3639.0 | 4612.1 | 4612.1 | 3844.2 | 3817.3 |
| 59 | 2803.8 | 2803.8 | 540.5 | 540.5 | 537.4 | 535.4 | 671.2 | 671.2 | 565.0 | 563.2 |
| 60 | 7009.5 | 7009.5 | 149.9 | 160.2 | 145.6 | 153.8 | 185.8 | 198.3 | 177.9 | 186.0 |
| 61 | 8411.4 | 8411.4 | 690.4 | 700.7 | 683.0 | 689.2 | 857.0 | 869.6 | 742.9 | 749.2 |
| 62 | 5233.8 | 5233.8 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 63 | 3738.4 | 3738.4 | 690.4 | 700.7 | 683.0 | 689.2 | 857.0 | 869.6 | 742.9 | 749.2 |

Appendix 4-9-3   Freight OD Table (1992)

Freight OD Table (1992)   [With]   Mode:   Railway  [All Commodities]   (Unit: 1,000 ton)

| O | 1~19 | 20.PRWAKA | 21.CIKAMPEK | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBARAN | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 4~19.JABOTABEK | 0.0 | 53.2 | 0.0 | 0.2 | 10.1 | 0.0 | 9.6 | 2.6 | 0.0 | 114.7 |
| 20.PURWAKARTA | 3.6 | 0.0 | 0.0 | 56.8 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 84.6 |
| 21.CIKAMPEK | 2.9 | 0.0 | 0.0 | 58.0 | 0.0 | 0.0 | 55.1 | 71.0 | 0.0 | 114.8 |
| 22.PEGADENBARU | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.SUKABUMI | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 22.0 | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 |
| 27.JATIWANGI | 15.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 43.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.6 | 0.0 | 0.0 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 13.7 | 1.7 | 1.4 | 0.0 | 0.2 | 0.0 | 12.0 | 0.2 | 0.0 | 5.0 |
| 31.SEMARANG | 45.3 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 |
| 32.YOGYAKARTA | 20.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 201.2 | 0.0 | 8.5 | 7.1 | 0.2 | 0.0 | 12.9 | 11.8 | 0.0 | 15.4 |
| 34.MADIUN | 13.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.9 | 0.0 | 0.0 | 0.0 |
| TOTAL | 431.4 | 57.2 | 10.8 | 122.1 | 10.8 | 0.1 | 110.8 | 99.2 | 0.0 | 336.5 |

| O | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.3 | 0.0 | 0.2 | 0.0 | 0.5 | 0.0 | 0.0 | 1.4 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 6.9 | 114.9 | 128.8 | 313.7 | 11.3 | 2.4 | 768.7 |
| 20.PURWAKARTA | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 146.9 |
| 21.CIKAMPEK | 0.0 | 51.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 354.7 |
| 22.PEGADENBARU | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.6 |
| 23.SUKABUMI | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 24.CIANJUR | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 25.BANDUNG | 0.0 | 27.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 52.8 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 1.4 | 0.0 | 5.1 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.8 |
| 28.CIREBON | 0.0 | 0.0 | 0.0 | 0.3 | 3.2 | 0.0 | 0.0 | 60.8 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 42.2 | 0.0 | 155.9 | 419.0 | 46.0 | 4.5 | 0.0 | 702.4 |
| 31.SEMARANG | 0.0 | 0.3 | 0.0 | 0.0 | 49.7 | 0.0 | 0.2 | 97.5 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 0.2 | 0.0 | 70.6 | 0.0 | 0.0 | 93.3 |
| 33.SURABAYA | 3.0 | 96.9 | 77.7 | 76.3 | 0.0 | 911.8 | 475.0 | 1,037.6 |
| 34.MADIUN | 0.0 | 2.1 | 1.6 | 2.3 | 7.4 | 0.0 | 0.6 | 34.5 |
| 35.JEMBER | 0.0 | 0.3 | 0.5 | 0.0 | 25.6 | 0.2 | 0.0 | 36.8 |
| TOTAL | 45.2 | 186.6 | 353.2 | 626.7 | 516.7 | 929.2 | 478.3 | 4,314.8 |

Freight OD Table (1992) [Without] Mode: Railway [All Commodities] (Unit: 1,000 ton)

| O \ D | 1~19 | 20.PURWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABUTABEK | 0.0 | 52.7 | 0.0 | 0.0 | 8.4 | 0.0 | 4.2 | 2.6 | 0.0 | 0.2 |
| 20.PURWAKARTA | 3.1 | 0.0 | 0.0 | 58.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21.CIKAMPEK | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 55.1 | 71.0 | 0.0 | 114.8 |
| 22.PEGADENBARU | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.SUKABUMI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 20.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 33.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 13.1 | 1.7 | 0.0 | 0.0 | 0.2 | 0.0 | 12.6 | 0.2 | 0.0 | 5.0 |
| 31.SEMARANG | 10.5 | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 |
| 32.YOGYAKARTA | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 157.2 | 0.0 | 8.5 | 7.1 | 0.2 | 0.0 | 12.9 | 11.8 | 0.0 | 15.4 |
| 34.MADIUN | 7.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.9 | 0.0 | 0.0 | 0.0 |
| TOTAL | 257.3 | 54.4 | 9.9 | 65.1 | 8.8 | 0.1 | 102.1 | 85.6 | 0.0 | 135.4 |

| O \ D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.8 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABUTABEK | 0.0 | 3.0 | 21.8 | 2.3 | 144.3 | 1.0 | 1.9 | 244.4 |
| 20.PURWAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 61.1 |
| 21.CIKAMPEK | 0.0 | 51.3 | 0.0 | 4.3 | 0.0 | 0.0 | 0.0 | 285.0 |
| 22.PEGADENBARU | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 |
| 23.SUKABUMI | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 24.CIANJUR | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 0.0 | 27.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 47.4 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 0.0 | 0.0 | 0.0 | 0.3 | 3.2 | 0.0 | 0.0 | 36.5 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 42.2 | 0.0 | 155.9 | 419.0 | 46.0 | 4.5 | 0.2 | 701.8 |
| 31.SEMARANG | 0.0 | 0.3 | 0.0 | 0.0 | 49.7 | 0.0 | 0.0 | 61.8 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 0.2 | 0.0 | 70.6 | 0.0 | 0.0 | 76.4 |
| 33.SURABAYA | 3.0 | 96.9 | 77.7 | 76.3 | 0.0 | 911.8 | 475.0 | 1,853.6 |
| 34.MADIUN | 0.0 | 2.1 | 1.6 | 0.0 | 7.4 | 0.6 | 0.0 | 28.6 |
| 35.JEMBER | 0.0 | 0.3 | 0.5 | 0.0 | 25.6 | 0.2 | 0.0 | 36.1 |
| TOTAL | 45.2 | 182.5 | 257.7 | 502.2 | 347.2 | 917.5 | 477.7 | 3,448.7 |

## Appendix 4-9-4  Link Traffic of Railway Freights

1997 (Per Year; Unit: 1,000 tons)

| Link No | Track Capacity | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Traffic Demand | | Traffic Volume | | Traffic Demand | | Traffic Volume | |
| | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH |
| 1 | 346.8 | 346.8 | 1.0 | 1.7 | 1.0 | 1.5 | 6.8 | 7.3 | 6.8 | 7.3 |
| 2 | 155.1 | 155.1 | .0 | 2.0 | .0 | 2.0 | .2 | .2 | .2 | .2 |
| 3 | 511.0 | 511.0 | 1.0 | 3.8 | 1.0 | 3.5 | 8.0 | 8.6 | 8.0 | 8.6 |
| 4 | 821.3 | 821.3 | .0 | 1.8 | .0 | .9 | .0 | 4.6 | .0 | 4.6 |
| 5 | 821.3 | 821.3 | .0 | 106.7 | .0 | 70.2 | .0 | 51.3 | .0 | 51.3 |
| 6 | 784.8 | 784.8 | 1.0 | 35.7 | 1.0 | 24.7 | 8.5 | 23.6 | 8.5 | 23.6 |
| 7 | 2190.0 | 2190.0 | 7.1 | 7.2 | 7.1 | 7.2 | .0 | .0 | .0 | .0 |
| 8 | 1843.3 | 1843.3 | 7.4 | 170.9 | 7.4 | 115.1 | .0 | 79.0 | .0 | 79.0 |
| 9 | 1569.5 | 1569.5 | .0 | .0 | .0 | .0 | 7.1 | 7.2 | 7.1 | 7.2 |
| 10 | 1058.5 | 1058.5 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 11 | 1259.3 | 1259.3 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 12 | 1569.5 | 1569.5 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 13 | 1204.5 | 1204.5 | 10.0 | 332.9 | 10.0 | 234.0 | 8.7 | 127.8 | 8.7 | 127.8 |
| 14 | 2098.8 | 2098.8 | 1.5 | 453.6 | 1.5 | 318.3 | 13.6 | 170.2 | 13.6 | 170.2 |
| 15 | 511.0 | 511.0 | .0 | 30.7 | .0 | 20.1 | 10.1 | 22.5 | 10.1 | 22.5 |
| 16 | 1843.3 | 1843.3 | 104.2 | 135.1 | 103.1 | 101.8 | 168.9 | 178.7 | 168.9 | 178.7 |
| 17 | 2190.0 | 2190.0 | 148.8 | 258.6 | 148.2 | 209.9 | 67.2 | 83.0 | 67.2 | 83.0 |
| 18 | 1423.5 | 1423.5 | 155.9 | 235.1 | 155.3 | 197.0 | 64.2 | 67.7 | 64.2 | 67.7 |
| 19 | 2190.0 | 2190.0 | 253.1 | 393.7 | 251.4 | 311.7 | 236.2 | 261.8 | 236.2 | 261.8 |
| 20 | 1168.0 | 1168.0 | 253.1 | 395.5 | 251.4 | 312.9 | 236.2 | 263.4 | 236.2 | 263.4 |
| 21 | 2190.0 | 2190.0 | 257.3 | 896.5 | 255.5 | 662.9 | 271.9 | 479.3 | 271.9 | 479.3 |
| 22 | 2190.0 | 2190.0 | 257.4 | 953.4 | 255.6 | 700.7 | 281.2 | 515.0 | 281.2 | 515.0 |
| 23 | 2190.0 | 2190.0 | 12.9 | 33.6 | 12.9 | 33.6 | .3 | 86.6 | .3 | 65.5 |
| 24 | 748.3 | 748.3 | 11.1 | 13.7 | 11.1 | 13.7 | .2 | 63.2 | .2 | 49.8 |
| 25 | 197.1 | 197.1 | 8.8 | 11.2 | 8.8 | 11.2 | 1.9 | 2.0 | 1.9 | 2.0 |
| 26 | 219.0 | 219.0 | .2 | .4 | .2 | .3 | 2.2 | 2.2 | 2.2 | 2.2 |
| 27 | 230.0 | 230.0 | .2 | .3 | .2 | .3 | 2.2 | 2.2 | 2.2 | 2.2 |
| 28 | 1496.5 | 2190.0 | 259.3 | 958.0 | 257.6 | 703.7 | 301.4 | 536.0 | 301.4 | 536.0 |
| 29 | 602.3 | 693.5 | 176.2 | 191.0 | 176.2 | 191.0 | 42.1 | 199.0 | 42.1 | 166.8 |
| 30 | 361.4 | 416.1 | 123.5 | 139.6 | 123.5 | 139.6 | 40.1 | 48.2 | 40.1 | 48.1 |
| 31 | 657.0 | 1022.0 | 459.5 | 1297.2 | 457.7 | 955.0 | 269.2 | 499.9 | 269.2 | 499.9 |
| 32 | 565.8 | 1022.0 | 397.5 | 1174.0 | 395.8 | 857.9 | 271.4 | 501.9 | 271.4 | 501.9 |
| 33 | 684.4 | 1022.0 | 318.9 | 1099.8 | 317.1 | 800.5 | 282.3 | 527.5 | 282.3 | 527.5 |
| 34 | 346.8 | 346.8 | .0 | .0 | .0 | .0 | .0 | 22.6 | .0 | 22.6 |
| 35 | 2098.8 | 2190.0 | 123.7 | 139.8 | 123.7 | 139.8 | 42.4 | 50.3 | 42.4 | 50.2 |
| 36 | 213.5 | 213.5 | 92.7 | 97.9 | 92.7 | 97.9 | 66.1 | 66.9 | 52.6 | 53.4 |
| 37 | 292.0 | 292.0 | 763.8 | 763.8 | 581.2 | 510.3 | 152.4 | 152.4 | 65.0 | 65.0 |
| 38 | 346.8 | 346.8 | 194.3 | 568.4 | 194.3 | 448.9 | 254.4 | 428.0 | 254.4 | 428.0 |
| 39 | 306.6 | 306.6 | 5.5 | 179.6 | 3.6 | 74.5 | 10.2 | 29.5 | 10.2 | 29.5 |
| 40 | 365.0 | 365.0 | 194.3 | 568.3 | 194.3 | 448.9 | 302.7 | 476.3 | 302.7 | 476.3 |
| 41 | 456.3 | 456.3 | .3 | .3 | .3 | .3 | 222.6 | 222.6 | 222.6 | 222.6 |
| 42 | 284.7 | 284.7 | 5.9 | 180.0 | 4.0 | 74.9 | 232.9 | 252.1 | 232.9 | 252.1 |
| 43 | 355.9 | 355.9 | 371.8 | 745.9 | 371.8 | 626.4 | 258.0 | 431.5 | 258.0 | 431.5 |
| 44 | 355.9 | 355.9 | 540.3 | 714.5 | 355.8 | 355.8 | 155.9 | 175.2 | 68.6 | 87.8 |
| 45 | 175.2 | 175.2 | 1.1 | 17.4 | 1.1 | 14.1 | 10.2 | 18.4 | 10.2 | 18.4 |
| 46 | 282.9 | 282.9 | 222.0 | 447.5 | 222.0 | 364.1 | 326.2 | 443.1 | 326.2 | 443.1 |
| 47 | 219.0 | 219.0 | .0 | .0 | .0 | .0 | .2 | .2 | .2 | .2 |
| 48 | 208.1 | 208.1 | 1.1 | 17.4 | 1.1 | 14.1 | 9.9 | 18.1 | 9.9 | 18.1 |
| 49 | 529.3 | 529.3 | 135.7 | 135.7 | 116.2 | 108.7 | 240.3 | 240.3 | 97.7 | 97.7 |
| 50 | 197.1 | 197.1 | 1.1 | 17.4 | 1.1 | 14.1 | 9.9 | 18.1 | 9.9 | 18.1 |
| 51 | 383.3 | 383.3 | 136.9 | 153.2 | 117.4 | 122.8 | 250.3 | 258.5 | 107.7 | 115.9 |
| 52 | 219.0 | 219.0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 53 | 273.8 | 273.8 | 222.0 | 447.5 | 222.0 | 364.1 | 326.2 | 443.1 | 326.2 | 443.1 |
| 54 | 438.0 | 438.0 | 139.1 | 139.1 | 121.5 | 114.7 | 1175.1 | 1175.1 | 438.0 | 438.0 |
| 55 | 629.6 | 629.6 | 139.1 | 139.1 | 121.5 | 114.7 | 1175.1 | 1175.1 | 438.0 | 438.0 |
| 56 | 401.5 | 401.5 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 57 | 273.8 | 273.8 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 58 | 565.8 | 565.8 | 138.5 | 138.5 | 120.9 | 114.0 | 1166.9 | 1166.9 | 434.9 | 434.9 |
| 59 | 273.8 | 273.8 | .6 | .6 | .6 | .6 | 8.1 | 8.1 | 3.0 | 3.0 |
| 60 | 684.4 | 684.4 | 509.2 | 509.9 | 509.2 | 509.2 | 32.0 | 33.0 | 32.0 | 33.0 |
| 61 | 821.3 | 821.3 | 509.9 | 510.5 | 509.9 | 509.9 | 40.2 | 41.2 | 35.1 | 36.1 |
| 62 | 511.0 | 511.0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 63 | 365.0 | 365.0 | 509.9 | 510.5 | 509.9 | 509.9 | 40.2 | 41.2 | 35.1 | 36.1 |

(Per Year; Unit: 1,000 tons)

| Link No | Track Capacity | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Traffic Demand | | Traffic Volume | | Traffic Demand | | Traffic Volume | |
| | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH |
| 1 | 346.8 | 346.8 | 1.2 | 2.1 | 1.2 | 1.6 | 8.1 | 8.7 | 8.1 | 8.7 |
| 2 | 155.1 | 155.1 | .0 | 2.5 | .0 | 2.4 | .2 | .2 | .2 | .2 |
| 3 | 511.0 | 511.0 | 1.2 | 4.6 | 1.2 | 4.1 | 9.2 | 10.0 | 9.2 | 10.0 |
| 4 | 821.3 | 821.3 | .0 | 2.2 | .0 | .8 | .0 | 5.6 | .0 | 5.6 |
| 5 | 821.3 | 821.3 | .0 | 130.4 | .0 | 69.7 | .0 | 62.6 | .0 | 62.6 |
| 6 | 784.8 | 784.8 | 1.2 | 43.7 | 1.2 | 25.2 | 10.0 | 28.4 | 10.0 | 28.4 |
| 7 | 2190.0 | 2190.0 | 7.1 | 7.3 | 7.1 | 7.3 | .0 | .0 | .0 | .0 |
| 8 | 1843.3 | 1843.3 | 7.5 | 207.3 | 7.5 | 114.3 | .0 | 96.5 | .0 | 96.5 |
| 9 | 1569.5 | 1569.5 | .0 | .0 | .0 | .0 | 7.1 | 7.2 | 7.1 | 7.2 |
| 10 | 1058.5 | 1058.5 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 11 | 1259.3 | 1259.3 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 12 | 1569.5 | 1569.5 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 13 | 1204.5 | 1204.5 | 10.6 | 406.0 | 10.6 | 235.8 | 10.2 | 155.8 | 10.2 | 155.8 |
| 14 | 2098.8 | 2098.8 | 1.8 | 555.5 | 1.8 | 320.5 | 16.3 | 207.6 | 16.3 | 207.6 |
| 15 | 511.0 | 511.0 | .0 | 37.6 | .0 | 19.9 | 10.7 | 25.9 | 10.7 | 25.9 |
| 16 | 1843.3 | 1843.3 | 124.3 | 162.2 | 122.5 | 101.2 | 205.4 | 217.4 | 205.4 | 217.4 |
| 17 | 2190.0 | 2190.0 | 154.5 | 286.4 | 153.6 | 201.9 | 81.3 | 100.6 | 81.3 | 100.6 |
| 18 | 1423.5 | 1423.5 | 161.6 | 256.1 | 160.7 | 189.2 | 77.7 | 82.0 | 77.7 | 82.0 |
| 19 | 2190.0 | 2190.0 | 278.8 | 448.7 | 276.1 | 303.1 | 286.8 | 318.1 | 286.8 | 318.1 |
| 20 | 1168.0 | 1168.0 | 278.8 | 450.9 | 276.1 | 304.3 | 286.8 | 320.1 | 286.8 | 320.1 |
| 21 | 2190.0 | 2190.0 | 283.9 | 1064.4 | 281.1 | 656.5 | 329.0 | 582.4 | 329.0 | 582.4 |
| 22 | 2190.0 | 2190.0 | 284.0 | 1133.9 | 281.2 | 694.2 | 340.1 | 625.7 | 340.1 | 625.7 |
| 23 | 2190.0 | 2190.0 | 14.3 | 39.5 | 14.3 | 39.5 | .4 | 106.4 | .4 | 67.0 |
| 24 | 748.3 | 748.3 | 12.0 | 15.2 | 12.0 | 15.2 | .2 | 77.9 | .2 | 51.2 |
| 25 | 197.1 | 197.1 | 9.2 | 12.1 | 9.2 | 12.1 | 1.9 | 2.0 | 1.9 | 2.0 |
| 26 | 219.0 | 219.0 | .3 | .5 | .3 | .4 | 2.2 | 2.2 | 2.2 | 2.2 |
| 27 | 230.0 | 230.0 | .2 | .4 | .2 | .3 | 2.2 | 2.2 | 2.2 | 2.2 |
| 28 | 1496.5 | 2190.0 | 286.4 | 1139.4 | 283.6 | 697.3 | 364.1 | 650.7 | 364.1 | 650.7 |
| 29 | 602.3 | 693.5 | 198.9 | 216.8 | 198.9 | 216.8 | 49.7 | 237.2 | 49.7 | 175.0 |
| 30 | 361.4 | 416.1 | 146.2 | 165.6 | 146.2 | 165.6 | 47.2 | 57.1 | 47.2 | 56.9 |
| 31 | 657.0 | 1022.0 | 536.7 | 1555.6 | 534.0 | 943.8 | 326.4 | 608.1 | 326.4 | 608.1 |
| 32 | 565.8 | 1022.0 | 462.8 | 1408.4 | 460.0 | 847.1 | 328.8 | 610.4 | 328.8 | 610.4 |
| 33 | 684.4 | 1022.0 | 368.9 | 1320.0 | 366.2 | 790.8 | 341.7 | 640.8 | 341.7 | 640.8 |
| 34 | 346.8 | 346.8 | .0 | .0 | .0 | .0 | .0 | 27.6 | .0 | 27.6 |
| 35 | 2098.8 | 2190.0 | 146.4 | 165.9 | 146.4 | 165.9 | 49.5 | 59.2 | 49.5 | 59.0 |
| 36 | 213.5 | 213.5 | 111.8 | 118.0 | 111.8 | 118.0 | 80.1 | 81.1 | 62.5 | 63.5 |
| 37 | 292.0 | 292.0 | 911.7 | 911.7 | 629.0 | 566.7 | 188.2 | 188.2 | 73.4 | 73.4 |
| 38 | 346.8 | 346.8 | 219.8 | 676.3 | 219.8 | 446.3 | 306.2 | 518.4 | 306.2 | 518.4 |
| 39 | 306.6 | 306.6 | 6.6 | 219.4 | 3.7 | 65.9 | 12.6 | 35.9 | 12.6 | 35.9 |
| 40 | 365.0 | 365.0 | 219.8 | 676.3 | 219.8 | 446.3 | 363.8 | 576.0 | 363.8 | 576.0 |
| 41 | 456.3 | 456.3 | .4 | .4 | .4 | .4 | 269.0 | 269.0 | 269.0 | 269.0 |
| 42 | 284.7 | 284.7 | 7.1 | 219.9 | 4.1 | 66.4 | 281.6 | 305.0 | 281.6 | 305.0 |
| 43 | 355.9 | 355.9 | 435.0 | 891.5 | 435.0 | 661.5 | 310.5 | 522.7 | 310.5 | 522.7 |
| 44 | 355.9 | 355.9 | 641.5 | 854.4 | 355.9 | 355.9 | 192.6 | 216.0 | 77.8 | 101.1 |
| 45 | 175.2 | 175.2 | 1.4 | 21.3 | 1.4 | 14.6 | 12.1 | 22.2 | 12.1 | 22.2 |
| 46 | 282.9 | 282.9 | 248.4 | 523.2 | 248.4 | 363.2 | 392.2 | 535.3 | 392.2 | 535.3 |
| 47 | 219.0 | 219.0 | .0 | .0 | .0 | .0 | .2 | .2 | .2 | .2 |
| 48 | 208.1 | 208.1 | 1.4 | 21.3 | 1.4 | 14.6 | 11.8 | 21.9 | 11.8 | 21.9 |
| 49 | 529.3 | 529.3 | 166.7 | 166.7 | 135.9 | 129.2 | 295.1 | 295.1 | 108.9 | 108.9 |
| 50 | 197.1 | 197.1 | 1.4 | 21.3 | 1.4 | 14.6 | 11.8 | 21.9 | 11.8 | 21.9 |
| 51 | 383.3 | 383.3 | 168.1 | 188.0 | 137.3 | 143.8 | 307.0 | 317.1 | 120.7 | 130.8 |
| 52 | 219.0 | 219.0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 53 | 273.8 | 273.8 | 248.4 | 523.2 | 248.4 | 363.2 | 392.2 | 535.3 | 392.2 | 535.3 |
| 54 | 438.0 | 438.0 | 170.9 | 170.9 | 143.1 | 137.0 | 1314.0 | 1314.0 | 438.0 | 438.0 |
| 55 | 629.6 | 629.6 | 170.9 | 170.9 | 143.1 | 137.0 | 1314.0 | 1314.0 | 438.0 | 438.0 |
| 56 | 401.5 | 401.5 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 57 | 273.8 | 273.8 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 58 | 565.8 | 565.8 | 170.1 | 170.1 | 142.3 | 136.2 | 1303.9 | 1303.9 | 434.6 | 434.6 |
| 59 | 273.8 | 273.8 | .7 | .7 | .7 | .7 | 10.1 | 10.1 | 3.3 | 3.3 |
| 60 | 684.4 | 684.4 | 596.8 | 597.6 | 596.8 | 596.3 | 39.4 | 40.7 | 39.4 | 40.7 |
| 61 | 821.3 | 821.3 | 597.6 | 598.4 | 597.6 | 597.1 | 49.5 | 50.8 | 42.8 | 44.0 |
| 62 | 511.0 | 511.0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 63 | 365.0 | 365.0 | 597.6 | 598.4 | 597.6 | 597.1 | 49.5 | 50.8 | 42.8 | 44.0 |

2007

| Link No. | Track Capacity | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Traffic Demand | | Traffic Volume | | Traffic Demand | | Traffic Volume | |
| | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH | WITHOUT | WITH |
| 1 | 346.8 | 346.8 | 1.4 | 2.5 | 1.4 | 1.8 | 9.6 | 10.3 | 9.6 | 10.3 |
| 2 | 155.1 | 155.1 | .0 | 3.0 | .0 | 2.9 | .2 | .2 | .2 | .2 |
| 3 | 511.0 | 511.0 | 1.4 | 5.6 | 1.4 | 4.8 | 10.8 | 11.6 | 10.8 | 11.6 |
| 4 | 821.3 | 821.3 | .0 | 2.6 | .0 | .7 | .0 | 6.8 | .0 | 6.8 |
| 5 | 821.3 | 821.3 | .0 | 158.1 | .0 | 69.2 | .0 | 76.0 | .0 | 76.0 |
| 6 | 784.8 | 784.8 | 1.4 | 53.0 | 1.4 | 25.9 | 11.6 | 33.9 | 11.6 | 33.9 |
| 7 | 2190.0 | 2190.0 | 7.1 | 7.3 | 7.1 | 7.3 | .0 | .0 | .0 | .0 |
| 8 | 1843.3 | 1843.3 | 7.5 | 249.9 | 7.5 | 113.5 | .0 | 117.0 | .0 | 117.0 |
| 9 | 1569.5 | 1569.5 | .0 | .0 | .0 | .0 | 7.1 | 7.2 | 7.1 | 7.2 |
| 10 | 1058.5 | 1058.5 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 11 | 1259.3 | 1259.3 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 12 | 1569.5 | 1569.5 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 13 | 1204.5 | 1204.5 | 11.3 | 492.0 | 11.3 | 237.7 | 11.9 | 188.0 | 11.9 | 188.0 |
| 14 | 2098.8 | 2098.8 | 2.2 | 675.7 | 2.2 | 322.6 | 19.4 | 250.8 | 19.4 | 250.8 |
| 15 | 511.0 | 511.0 | .0 | 45.6 | .0 | 19.7 | 11.3 | 29.8 | 11.3 | 29.8 |
| 16 | 1843.3 | 1843.3 | 148.0 | 193.9 | 145.4 | 100.7 | 249.0 | 263.5 | 249.0 | 263.5 |
| 17 | 2190.0 | 2190.0 | 161.3 | 319.4 | 160.0 | 195.7 | -97.9 | 121.3 | 97.9 | 121.3 |
| 18 | 1423.5 | 1423.5 | 168.4 | 281.0 | 167.1 | 183.3 | 93.6 | 98.7 | 93.6 | 98.7 |
| 19 | 2190.0 | 2190.0 | 309.4 | 513.3 | 305.5 | 296.4 | 346.9 | 384.9 | 346.9 | 384.9 |
| 20 | 1168.0 | 1168.0 | 309.4 | 516.0 | 305.5 | 297.6 | 346.9 | 387.2 | 346.9 | 387.2 |
| 21 | 2190.0 | 2190.0 | 315.5 | 1262.0 | 311.5 | 651.7 | 396.7 | 703.3 | 396.7 | 703.3 |
| 22 | 2190.0 | 2190.0 | 315.6 | 1346.4 | 311.6 | 689.3 | 409.6 | 755.3 | 409.6 | 755.3 |
| 23 | 2190.0 | 2190.0 | 15.9 | 46.5 | 15.9 | 46.5 | .5 | 129.8 | .5 | 68.3 |
| 24 | 748.3 | 748.3 | 13.1 | 17.1 | 13.1 | 17.1 | .3 | 95.2 | .3 | 52.4 |
| 25 | 197.1 | 197.1 | 9.7 | 13.3 | 9.7 | 13.3 | 2.0 | 2.0 | 2.0 | 2.0 |
| 26 | 219.0 | 219.0 | .3 | .6 | .3 | .5 | 2.3 | 2.3 | 2.3 | 2.3 |
| 27 | 230.0 | 230.0 | .2 | .5 | .2 | .4 | 2.3 | 2.3 | 2.3 | 2.3 |
| 28 | 1496.5 | 2190.0 | 318.5 | 1353.1 | 314.5 | 692.7 | 438.2 | 785.1 | 438.2 | 785.1 |
| 29 | 602.3 | 693.5 | 225.4 | 247.0 | 225.4 | 247.0 | 58.6 | 281.9 | 58.6 | 184.7 |
| 30 | 361.4 | 416.1 | 172.7 | 196.0 | 172.7 | 196.0 | 55.6 | 67.5 | 55.6 | 67.2 |
| 31 | 657.0 | 1022.0 | 627.4 | 1859.0 | 623.4 | 933.7 | 394.0 | 734.7 | 394.0 | 734.9 |
| 32 | 565.8 | 1022.0 | 539.5 | 1683.9 | 535.5 | 837.4 | 396.8 | 737.5 | 396.8 | 737.5 |
| 33 | 684.4 | 1022.0 | 427.8 | 1578.7 | 423.8 | 782.5 | 411.9 | 773.6 | 411.9 | 773.6 |
| 34 | 346.8 | 346.8 | .0 | .0 | .0 | .0 | .0 | 33.6 | .0 | 33.6 |
| 35 | 2098.8 | 2190.0 | 173.0 | 196.3 | 173.0 | 196.3 | 57.9 | 69.6 | 57.9 | 69.4 |
| 36 | 213.5 | 213.5 | 134.0 | 141.4 | 134.0 | 141.4 | 96.7 | 97.9 | 74.3 | 75.5 |
| 37 | 292.0 | 292.0 | 1086.1 | 1086.1 | 685.2 | 630.9 | 230.4 | 230.4 | 82.0 | 82.0 |
| 38 | 346.8 | 346.8 | 250.0 | 803.3 | 250.0 | 444.6 | 367.5 | 624.3 | 367.5 | 624.3 |
| 39 | 306.6 | 306.6 | 8.0 | 266.3 | 3.7 | 58.0 | 15.5 | 43.5 | 15.5 | 43.5 |
| 40 | 365.0 | 365.0 | 250.0 | 803.3 | 250.0 | 444.6 | 436.0 | 692.8 | 436.0 | 692.8 |
| 41 | 456.3 | 456.3 | .6 | .6 | .6 | .6 | 323.6 | 323.6 | 323.6 | 323.6 |
| 42 | 284.7 | 284.7 | 8.6 | 266.9 | 4.3 | 58.6 | 339.1 | 367.2 | 339.1 | 367.2 |
| 43 | 355.9 | 355.9 | 509.6 | 1063.0 | 509.6 | 704.2 | 372.6 | 629.4 | 372.6 | 629.4 |
| 44 | 355.9 | 355.9 | 761.1 | 1019.3 | 355.9 | 355.9 | 235.9 | 263.9 | 87.5 | 115.6 |
| 45 | 175.2 | 175.2 | 1.6 | 25.7 | 1.6 | 15.1 | 14.5 | 26.7 | 14.5 | 26.7 |
| 46 | 282.9 | 282.9 | 279.6 | 612.3 | 279.6 | 363.3 | 469.9 | 642.9 | 469.9 | 642.9 |
| 47 | 219.0 | 219.0 | .0 | .0 | .0 | .0 | .3 | .3 | .3 | .3 |
| 48 | 208.1 | 208.1 | 1.6 | 25.7 | 1.6 | 15.1 | 14.2 | 26.4 | 14.2 | 26.4 |
| 49 | 529.3 | 529.3 | 205.1 | 205.1 | 160.9 | 154.9 | 359.6 | 359.6 | 120.1 | 120.1 |
| 50 | 197.1 | 197.1 | 1.6 | 25.7 | 1.6 | 15.1 | 14.2 | 26.4 | 14.2 | 26.4 |
| 51 | 383.3 | 383.3 | 206.8 | 230.9 | 162.6 | 170.1 | 373.6 | 386.1 | 134.3 | 146.5 |
| 52 | 219.0 | 219.0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 53 | 273.8 | 273.8 | 279.6 | 612.3 | 279.6 | 363.3 | 469.9 | 642.9 | 469.9 | 642.9 |
| 54 | 438.0 | 438.0 | 210.4 | 210.4 | 170.6 | 165.2 | 1476.9 | 1476.9 | 438.0 | 438.0 |
| 55 | 629.6 | 629.6 | 210.4 | 210.4 | 170.6 | 165.2 | 1476.9 | 1476.9 | 438.0 | 438.0 |
| 56 | 401.5 | 401.5 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 57 | 273.8 | 273.8 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 58 | 565.8 | 565.8 | 209.5 | 209.5 | 169.6 | 164.2 | 1464.3 | 1464.3 | 434.2 | 434.2 |
| 59 | 273.8 | 273.8 | .9 | .9 | .9 | .9 | 12.5 | 12.5 | 3.7 | 3.7 |
| 60 | 684.4 | 684.4 | 698.8 | 699.7 | 698.8 | 697.7 | 48.8 | 50.3 | 48.8 | 50.3 |
| 61 | 821.3 | 821.3 | 699.7 | 700.7 | 699.7 | 698.6 | 61.3 | 62.8 | 52.5 | 54.0 |
| 62 | 511.0 | 511.0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 63 | 365.0 | 365.0 | 699.7 | 700.7 | 699.7 | 698.6 | 61.3 | 62.8 | 52.5 | 54.0 |

## Appendix 4-10-1 Calculation for Adjustment of Traffic Demand

Adjustment was made by dividing the inter-zonal traffic ($\tilde{T}ij$) by the ratio of the link traffic to transport capability (RECLn) of the corresponding link.

$$RFCLn = DLn/CLn$$

$$ATij = \tilde{T}ij/RFCLn$$

Where:

RFCLn : Overcapability ratio in link n

CLn : Transport capability of link n

DLn : Link traffic of link n

ATij : Adjusted inter-zonal traffic volume between i and j

$\tilde{T}ij$ : Inter-zonal traffic demand between i and j

The above calculation was repeated for all links until the adjusted link traffic will reach the transport capability.

Appendix 4-10-2　Passenger OD Table after Adjustment by Capability

Passenger OD Table　(1992)　[With]　　Mode: Express　　　(Unit: 1,000 pass.)

| O | 1~19 | 20.PRUWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 11.7 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.6 | 0.0 | 182.4 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 8.1 |
| 4~19.JABOTABEK | 0.0 | 13.9 | 69.7 | 315.6 | 5.5 | 0.0 | 1,701.1 | 463.4 | 2.8 | 1,264.9 |
| 20.PRUWAKARTA | 13.9 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 1.5 | 7.6 | 0.0 | 0.1 |
| 21.CIKAMPEK | 69.7 | 0.6 | 0.0 | 0.2 | 0.0 | 0.0 | 2.9 | 2.7 | 0.0 | 217.0 |
| 22.PEGADENBARU | 315.6 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 44.1 |
| 23.SUKABUMI | 5.5 | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 | 0.0 | 6.4 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 1,702.0 | 1.5 | 2.9 | 0.0 | 0.0 | 6.4 | 0.0 | 2.2 | 0.0 | 0.0 |
| 26.JATIBARANG | 468.2 | 7.6 | 2.7 | 0.9 | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 | 3.5 |
| 27.JATIWANGI | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 1,467.1 | 0.1 | 217.0 | 44.1 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 |
| 29.BREBES | 166.0 | 0.2 | 1.4 | 31.3 | 0.0 | 0.0 | 0.0 | 10.8 | 0.0 | 1.0 |
| 30.BANJAR | 471.3 | 15.4 | 20.5 | 2.3 | 0.1 | 5.1 | 378.0 | 2.6 | 0.0 | 10.7 |
| 31.SEMARANG | 1,241.8 | 1.1 | 21.9 | 14.6 | 0.0 | 0.0 | 0.0 | 11.7 | 0.0 | 9.5 |
| 32.YOGYAKARTA | 2,404.1 | 0.9 | 53.4 | 14.6 | 0.0 | 1.0 | 370.1 | 18.6 | 0.0 | 54.0 |
| 33.SURABAYA | 783.2 | 0.1 | 3.0 | 0.9 | 0.0 | 0.2 | 115.6 | 0.3 | 0.0 | 35.3 |
| 34.MADIUN | 539.7 | 0.1 | 0.5 | 0.0 | 0.0 | 0.0 | 52.1 | 0.1 | 0.0 | 17.0 |
| 35.JEMBER | 16.8 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 0.3 |
| TOTAL | 9,667.7 | 41.5 | 394.3 | 424.5 | 9.7 | 16.8 | 2,634.3 | 529.2 | 2.8 | 1,859.6 |

| O | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUN | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.8 | 0.0 | 5.2 | 31.2 | 4.4 | 3.3 | 0.1 | 56.9 |
| 2.PANDEGLANG | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 187.4 |
| 3.RANGKASBITUNG | 0.0 | 0.1 | 0.0 | 0.3 | 0.1 | 0.1 | 0.1 | 9.7 |
| 4~19.JABOTABEK | 165.1 | 471.2 | 1,236.5 | 2,372.5 | 773.7 | 536.3 | 16.5 | 9,413.7 |
| 20.PRUWAKARTA | 0.2 | 15.4 | 1.1 | 0.9 | 0.1 | 0.1 | 0.0 | 41.5 |
| 21.CIKAMPEK | 1.4 | 20.5 | 21.9 | 53.4 | 3.0 | 0.5 | 0.5 | 394.3 |
| 22.PEGADENBARU | 31.3 | 2.3 | 14.6 | 14.6 | 0.9 | 0.0 | 0.0 | 424.5 |
| 23.SUKABUMI | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.7 |
| 24.CIANJUR | 0.0 | 5.1 | 0.0 | 1.0 | 0.2 | 0.0 | 0.0 | 16.8 |
| 25.BANDUNG | 0.0 | 378.0 | 0.0 | 370.1 | 115.6 | 52.1 | 3.5 | 2,634.3 |
| 26.JATIBARANG | 10.8 | 2.6 | 11.7 | 18.6 | 0.3 | 0.1 | 0.0 | 529.2 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 |
| 28.CIREBON | 1.0 | 10.7 | 9.5 | 54.0 | 35.3 | 17.0 | 0.3 | 1,859.6 |
| 29.BREBES | 0.0 | 0.5 | 2.3 | 18.4 | 0.4 | 0.0 | 0.1 | 232.4 |
| 30.BANJAR | 0.5 | 0.0 | 0.0 | 237.2 | 116.8 | 51.4 | 12.5 | 1,324.4 |
| 31.SEMARANG | 2.3 | 0.0 | 0.0 | 216.0 | 180.4 | 0.0 | 0.4 | 1,699.7 |
| 32.YOGYAKARTA | 18.4 | 237.2 | 216.0 | 0.0 | 281.3 | 7.1 | 56.1 | 3,802.8 |
| 33.SURABAYA | 0.4 | 116.8 | 180.4 | 281.3 | 0.0 | 1,322.6 | 83.9 | 2,924.0 |
| 34.MADIUN | 0.0 | 51.4 | 0.0 | 77.1 | 1,322.6 | 0.0 | 269.1 | 2,329.7 |
| 35.JEMBER | 0.1 | 12.5 | 0.4 | 56.1 | 83.9 | 269.1 | 0.0 | 443.2 |
| TOTAL | 232.4 | 1,324.4 | 1,699.7 | 3,802.8 | 2,924.0 | 2,329.7 | 443.2 | 28,336.6 |

Passenger OD Table (1992) [With] Mode: Local

(Unit: 1,000 pass.)

| O/D | 1~19 | 20.PRIWAKA | 21.CIKAMPEK | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 59.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.6 | 3.9 | 0.0 | 0.0 | 0.0 | 400.5 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 516.6 | 456.3 | 1,387.1 | 600.6 | 29.5 | 49.8 | 43.3 | 1.7 | 0.0 | 5.1 |
| 20.PRIWAKARTA | 1,371.7 | 0.0 | 29.6 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 435.8 |
| 21.CIKAMPEK | 600.6 | 29.6 | 0.0 | 97.0 | 0.0 | 0.0 | 0.0 | 13.8 | 0.0 | 37.5 |
| 22.PEGADENBARU | 29.5 | 0.0 | 97.0 | 0.0 | 0.0 | 0.0 | 52.8 | 114.9 | 0.4 | 131.9 |
| 23.SUKABUMI | 49.8 | 0.0 | 0.0 | 0.0 | 0.0 | 225.1 | 198.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 400.5 | 0.0 | 0.0 | 0.0 | 225.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 1.7 | 43.3 | 13.8 | 114.9 | 52.8 | 198.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30.4 |
| 27.JATIWANGI | 5.1 | 0.0 | 37.5 | 131.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 0.0 | 435.8 | 0.0 | 22.2 | 0.0 | 0.0 | 97.0 | 30.4 | 0.0 | 16.8 |
| 29.BREBES | 1.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 17.4 | 0.0 | 0.0 |
| 30.BANJAR | 0.0 | 0.1 | 0.3 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.SEMARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34.MADIUN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL | 2,977.1 | 1,025.4 | 1,550.1 | 967.0 | 307.4 | 473.5 | 792.0 | 178.2 | 0.4 | 657.5 |

| O/D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.2 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.5 |
| 4~19.JABOTABEK | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 2,912.2 |
| 20.PRIWAKARTA | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1,025.4 |
| 21.CIKAMPEK | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 1,550.1 |
| 22.PEGADENBARU | 22.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 967.0 |
| 23.SUKABUMI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 307.4 |
| 24.CIANJUR | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 473.5 |
| 25.BANDUNG | 0.0 | 97.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 792.0 |
| 26.JATIBARANG | 17.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 178.2 |
| 27.JATIWANGI | 16.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 28.CIREBON | 0.0 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 | 657.5 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 31.7 | 0.0 | 0.0 | 0.0 | 62.3 |
| 30.BANJAR | 5.9 | 0.0 | 0.1 | 94.8 | 40.9 | 0.0 | 0.0 | 131.0 |
| 31.SEMARANG | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 142.3 |
| 32.YOGYAKARTA | 0.0 | 31.7 | 94.8 | 0.0 | 0.0 | 51.7 | 0.2 | 178.5 |
| 33.SURABAYA | 0.0 | 0.1 | 40.9 | 0.0 | 0.0 | 511.9 | 0.1 | 553.1 |
| 34.MADIUN | 0.0 | 0.2 | 0.0 | 51.7 | 511.9 | 0.0 | 0.4 | 564.7 |
| 35.JEMBER | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.4 | 0.0 | 0.7 |
| TOTAL | 62.3 | 131.0 | 142.3 | 178.5 | 553.1 | 564.7 | 0.7 | 10,561.2 |

Passenger OD Table (1992) [With] Mode: Bus (Unit: 1,000 pass.)

| O | 1~19 | 20.PRKWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 52.0 | 85.7 | 6.1 | 205.9 | 16.3 | 665.7 | 138.4 | 7.5 | 140.1 |
| 2.PANDEGLANG | 0.0 | 50.1 | 4.0 | 0.1 | 238.1 | 96.8 | 452.7 | 29.0 | 0.1 | 29.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 1,107.4 | 12.0 | 212.6 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 905.1 | 3,344.3 | 856.1 | 3,024.5 | 1,577.0 | 8,095.4 | 2,789.8 | 1,204.6 | 5,376.6 |
| 20.PRWAKARTA | 1,007.2 | 0.0 | 406.7 | 803.8 | 0.0 | 72.7 | 855.3 | 152.1 | 0.1 | 0.0 |
| 21.CIKAMPEK | 3,434.0 | 406.7 | 0.0 | 427.3 | 17.2 | 5.4 | 869.3 | 132.1 | 14.9 | 685.2 |
| 22.PEGADENBARU | 862.3 | 803.8 | 427.3 | 0.0 | 12.2 | 126.5 | 1,696.1 | 470.2 | 3.1 | 143.1 |
| 23.SUKABUMI | 4,575.9 | 0.0 | 17.2 | 12.2 | 0.0 | 73.2 | 939.6 | 0.1 | 27.3 | 285.8 |
| 24.CIANJUR | 1,702.1 | 72.7 | 5.4 | 126.5 | 73.2 | 0.0 | 2,438.9 | 0.1 | 6.3 | 20.2 |
| 25.BANDUNG | 9,426.4 | 855.3 | 869.3 | 1,696.1 | 939.6 | 2,438.9 | 0.0 | 752.9 | 673.3 | 2,668.4 |
| 26.JATIBARANG | 2,957.2 | 152.1 | 132.1 | 470.2 | 0.1 | 0.1 | 752.9 | 0.0 | 179.2 | 1,631.5 |
| 27.JATIWANGI | 1,212.3 | 0.1 | 14.9 | 3.1 | 27.3 | 6.3 | 673.3 | 179.2 | 0.0 | 765.2 |
| 28.CIREBON | 5,545.7 | 0.0 | 685.2 | 143.1 | 285.8 | 20.2 | 2,668.4 | 1,631.5 | 765.2 | 0.0 |
| 29.BREBES | 1,107.7 | 15.3 | 3.0 | 0.0 | 0.1 | 0.0 | 71.4 | 160.8 | 0.1 | 127.2 |
| 30.BANJAR | 5,873.6 | 180.5 | 452.4 | 61.0 | 307.7 | 357.2 | 8,618.3 | 59.1 | 1,460.8 | 1,012.4 |
| 31.SEMARANG | 9,257.6 | 44.2 | 180.2 | 193.2 | 15.1 | 0.1 | 899.3 | 318.4 | 22.6 | 1,971.5 |
| 32.YOGYAKARTA | 3,604.3 | 21.9 | 413.6 | 121.3 | 30.2 | 7.5 | 301.9 | 191.9 | 102.7 | 647.6 |
| 33.SURABAYA | 2,683.1 | 0.1 | 6.8 | 7.1 | 0.1 | 45.3 | 271.8 | 0.6 | 0.1 | 218.9 |
| 34.MADIUN | 1,459.7 | 15.0 | 1.4 | 0.1 | 7.5 | 0.1 | 207.2 | 0.8 | 7.5 | 68.0 |
| 35.JEMBER | 472.2 | 0.1 | 105.2 | 0.0 | 0.0 | 0.1 | 78.1 | 0.0 | 0.1 | 30.2 |
| TOTAL | 55,181.3 | 3,575.0 | 7,154.0 | 4,927.3 | 6,292.1 | 4,855.6 | 30,766.2 | 7,007.0 | 4,475.6 | 15,820.9 |

| O | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUN | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 14.5 | 159.8 | 26.4 | 103.3 | 44.0 | 7.4 | 0.5 | 1,673.6 |
| 2.PANDEGLANG | 0.1 | 30.2 | 0.0 | 0.0 | 7.5 | 0.1 | 0.1 | 937.9 |
| 3.RANGKASBITUNG | 0.0 | 188.7 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 1,521.1 |
| 4~19.JABOTABEK | 1,093.1 | 5,494.9 | 9,231.2 | 3,501.0 | 2,631.5 | 1,452.1 | 471.5 | 51,048.7 |
| 20.PRWAKARTA | 15.3 | 180.5 | 44.2 | 21.9 | 0.1 | 15.0 | 0.1 | 3,575.0 |
| 21.CIKAMPEK | 3.0 | 452.4 | 180.2 | 413.6 | 6.8 | 1.4 | 105.2 | 7,154.7 |
| 22.PEGADENBARU | 0.1 | 61.0 | 193.2 | 121.3 | 7.1 | 0.1 | 0.0 | 4,927.3 |
| 23.SUKABUMI | 0.1 | 307.7 | 15.1 | 30.2 | 0.1 | 7.5 | 0.0 | 6,292.1 |
| 24.CIANJUR | 0.0 | 357.2 | 0.1 | 7.5 | 45.3 | 0.1 | 0.0 | 4,855.6 |
| 25.BANDUNG | 71.4 | 8,618.3 | 899.3 | 301.9 | 271.8 | 207.2 | 76.1 | 30,766.2 |
| 26.JATIBARANG | 160.8 | 59.1 | 318.4 | 191.9 | 0.6 | 0.8 | 0.0 | 7,007.0 |
| 27.JATIWANGI | 127.2 | 1,460.8 | 22.6 | 102.7 | 0.1 | 7.5 | 0.0 | 4,475.6 |
| 28.CIREBON | 127.2 | 1,012.4 | 1,971.5 | 647.6 | 218.9 | 68.0 | 30.2 | 15,820.9 |
| 29.BREBES | 0.0 | 804.4 | 2,229.0 | 122.9 | 1.3 | 3.4 | 0.1 | 4,696.7 |
| 30.BANJAR | 804.4 | 0.0 | 4,151.1 | 3,895.8 | 151.0 | 218.9 | 50.4 | 27,654.6 |
| 31.SEMARANG | 2,279.0 | 4,151.1 | 0.0 | 7,414.8 | 10,606.7 | 497.6 | 437.8 | 38,289.2 |
| 32.YOGYAKARTA | 122.9 | 3,895.8 | 7,414.8 | 0.0 | 2,435.8 | 3,547.0 | 242.3 | 23,101.5 |
| 33.SURABAYA | 1.3 | 151.0 | 10,606.7 | 2,435.8 | 0.0 | 10,775.5 | 16,051.9 | 43,256.4 |
| 34.MADIUN | 3.4 | 218.9 | 497.6 | 3,547.0 | 10,775.5 | 0.0 | 9,023.7 | 25,833.4 |
| 35.JEMBER | 0.1 | 50.4 | 437.8 | 242.3 | 16,051.9 | 9,023.7 | 0.0 | 26,490.2 |
| TOTAL | 4,696.7 | 27,654.6 | 38,289.2 | 23,101.5 | 43,256.1 | 25,833.4 | 26,490.2 | 329,377.4 |

Passenger OD Table (1992)　[Without]　Mode:　Express　(Unit: 1,000 pass.)

| O\D | 1~19 | 20.PRUWAKA | 21.CIKAMPO | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBANG | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.1 | 0.0 | 8.1 |
| 4~19.JABOTABEN | 0.0 | 0.0 | 69.6 | 237.5 | 5.5 | 0.0 | 947.8 | 98.7 | 0.0 | 426.2 |
| 20.PRUWAKARTA | 7.2 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 |
| 21.CIKAMPEK | 69.6 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 2.9 | 1.4 | 0.0 | 3.2 |
| 22.PEGADENBARU | 237.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 3.3 |
| 23.SUKABUMI | 5.5 | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 | 0.0 | 6.4 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 947.8 | 1.5 | 2.4 | 0.0 | 0.0 | 6.4 | 0.0 | 0.0 | 0.0 | 3.5 |
| 26.JATIBARANG | 98.8 | 0.0 | 1.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.JATIWANGI | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| 28.CIREBON | 434.3 | 0.0 | 3.2 | 3.5 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 |
| 29.BREBES | 130.2 | 0.7 | 0.7 | 3.2 | 0.1 | 0.0 | 0.0 | 10.2 | 0.0 | 1.0 |
| 30.BANJAR | 415.1 | 13.6 | 17.4 | 2.1 | 0.0 | 5.1 | 378.1 | 2.6 | 0.0 | 10.7 |
| 31.SEMARANG | 985.8 | 0.0 | 6.1 | 4.0 | 0.0 | 0.0 | 0.0 | 5.3 | 0.0 | 9.5 |
| 32.YOGYAKARTA | 2,190.4 | 0.1 | 14.1 | 7.6 | 0.0 | 1.0 | 370.1 | 14.3 | 0.0 | 54.0 |
| 33.SURABAYA | 755.1 | 0.0 | 2.2 | 0.4 | 0.0 | 0.2 | 115.6 | 0.3 | 0.0 | 35.3 |
| 34.MADIUN | 526.9 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 52.1 | 0.0 | 0.0 | 17.0 |
| 35.JEMBER | 10.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 0.3 |
| TOTAL | 6,814.9 | 23.0 | 118.6 | 258.6 | 9.7 | 16.8 | 1,873.0 | 136.8 | 0.0 | 572.3 |

| O\D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.8 | 12.6 | 1.6 | 2.9 | 0.1 | 18.1 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 |
| 3.RANGKASBITUNG | 0.0 | 0.1 | 0.0 | 0.3 | 0.1 | 0.0 | 0.1 | 8.7 |
| 4~19.JABOTABEN | 130.2 | 415.0 | 984.9 | 2,177.4 | 753.4 | 524.0 | 10.4 | 6,787.8 |
| 20.PRUWAKARTA | 0.7 | 17.4 | 6.1 | 0.0 | 0.1 | 0.4 | 0.0 | 23.0 |
| 21.CIKAMPEK | 3.2 | 2.1 | 4.0 | 14.1 | 2.2 | 0.0 | 0.0 | 118.6 |
| 22.PEGADENBARU | 0.0 | 0.1 | 0.0 | 7.6 | 0.4 | 0.0 | 0.0 | 258.6 |
| 23.SUKABUMI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.7 |
| 24.CIANJUR | 0.0 | 5.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 16.8 |
| 25.BANDUNG | 10.2 | 378.1 | 370.1 | 370.1 | 115.6 | 52.1 | 3.5 | 1,878.0 |
| 26.JATIBARANG | 0.0 | 2.6 | 5.3 | 14.3 | 0.3 | 0.1 | 0.0 | 136.8 |
| 27.JATIWANGI | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 0.0 | 10.7 | 9.5 | 54.0 | 35.3 | 17.0 | 0.3 | 572.3 |
| 29.BREBES | 0.5 | 0.5 | 2.3 | 18.4 | 18.4 | 0.0 | 0.1 | 167.0 |
| 30.BANJAR | 2.3 | 0.0 | 0.0 | 237.2 | 116.8 | 51.4 | 12.5 | 1,263.2 |
| 31.SEMARANG | 18.4 | 237.2 | 216.0 | 216.0 | 180.4 | 0.0 | 0.4 | 1,409.8 |
| 32.YOGYAKARTA | 0.4 | 116.8 | 180.4 | 0.0 | 281.3 | 77.1 | 56.1 | 3,537.6 |
| 33.SURABAYA | 0.0 | 51.4 | 0.0 | 281.3 | 0.0 | 1,322.6 | 83.9 | 2,894.6 |
| 34.MADIUN | 0.0 | 0.0 | 0.4 | 77.1 | 1,322.6 | 0.0 | 269.1 | 2,316.7 |
| 35.JEMBER | 0.1 | 12.5 | 0.4 | 56.1 | 83.9 | 269.1 | 0.0 | 436.6 |
| TOTAL | 167.0 | 1,263.2 | 1,409.8 | 3,537.6 | 2,894.6 | 2,316.7 | 436.6 | 21,854.2 |

Passenger OD Table (1992) [Without] Mode: Local　　　　　　　　(Unit: 1,000 pass.)

| O \ D | 1~19 | 20.PRUWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 25.7 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.6 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 426.9 | 1,366.5 | 56.3 | 29.5 | 49.8 | 95.8 | 0.0 | 0.0 | 0.0 |
| 20.PRUWAKARTA | 453.3 | 0.0 | 29.9 | 0.0 | 0.0 | 0.0 | 43.3 | 0.0 | 0.0 | 0.0 |
| 21.CIKAMPEK | 1,370.6 | 29.9 | 0.0 | 9.4 | 0.0 | 0.0 | 0.1 | 7.5 | 0.0 | 0.6 |
| 22.PEGADENBARU | 56.3 | 0.0 | 9.4 | 0.0 | 0.0 | 0.0 | 0.0 | 40.8 | 0.2 | 10.4 |
| 23.SUKABUMI | 29.5 | 0.0 | 0.0 | 0.0 | 0.0 | 225.1 | 52.8 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 49.8 | 0.0 | 0.0 | 0.0 | 225.1 | 0.0 | 198.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 95.8 | 43.3 | 0.1 | 0.0 | 52.8 | 198.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 0.1 | 0.0 | 7.5 | 40.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30.3 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 0.0 | 0.0 | 0.6 | 10.4 | 0.0 | 0.0 | 0.0 | 30.3 | 0.0 | 0.0 |
| 29.BREBES | 0.0 | 0.1 | 0.0 | 2.3 | 0.0 | 0.0 | 0.0 | 16.8 | 0.0 | 16.8 |
| 30.BANJAR | 0.9 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 97.0 | 0.0 | 0.0 | 0.0 |
| 31.SEMARANG | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34.MADIUN | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL | 2,056.8 | 526.6 | 1,418.3 | 119.4 | 307.4 | 473.5 | 487.0 | 95.3 | 0.2 | 58.1 |

| O \ D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUN | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.9 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.4 |
| 4~19.JABOTABEK | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 2,026.2 |
| 20.PRUWAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 526.6 |
| 21.CIKAMPEK | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1,418.3 |
| 22.PEGADENBARU | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 119.4 |
| 23.SUKABUMI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 307.4 |
| 24.CIANJUR | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 473.5 |
| 25.BANDUNG | 0.0 | 97.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 487.0 |
| 26.JATIBARANG | 16.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 95.3 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 28.CIREBON | 16.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 58.1 |
| 29.BREBES | 0.0 | 0.0 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 | 41.6 |
| 30.BANJAR | 0.0 | 0.0 | 31.7 | 0.0 | 0.0 | 0.0 | 0.0 | 130.8 |
| 31.SEMARANG | 5.9 | 31.7 | 0.0 | 94.8 | 40.9 | 0.0 | 0.0 | 141.8 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 94.8 | 0.0 | 0.1 | 51.7 | 0.1 | 178.5 |
| 33.SURABAYA | 0.0 | 0.0 | 40.9 | 31.7 | 0.0 | 511.9 | 0.2 | 553.1 |
| 34.MADIUN | 0.0 | 0.0 | 0.0 | 51.7 | 511.9 | 0.0 | 0.4 | 564.7 |
| 35.JEMBER | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4 | 0.0 | 0.7 |
| TOTAL | 41.6 | 130.8 | 141.8 | 178.5 | 553.1 | 564.7 | 0.7 | 7,153.8 |

Passenger OD Table  [Without]  Mode: Bus

(Unit: 1,000 pass.)

| O\D | 1~19 | 20.PRUWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 52.0 | 85.7 | 6.1 | 205.9 | 16.3 | 665.7 | 138.6 | 7.5 | 151.8 |
| 2.PANDEGLANG | 0.0 | 84.1 | 4.4 | 0.0 | 238.1 | 96.8 | 452.7 | 33.6 | 0.1 | 211.3 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.1 | 0.0 | 1,107.4 | 12.0 | 213.4 | 0.0 | 0.1 | 0.0 |
| 4~19.JABOTABEN | 0.0 | 941.2 | 3,345.0 | 1,478.4 | 3,024.5 | 1,577.0 | 9,153.6 | 3,156.2 | 1,207.5 | 6,220.1 |
| 20.PRUWAKARTA | 1,077.3 | | 406.7 | 803.8 | 0.0 | 72.7 | 855.3 | 159.8 | 0.1 | 435.0 |
| 21.CIKAMPEK | 3,435.2 | 406.7 | | 515.2 | 17.2 | 5.4 | 869.3 | 139.6 | 14.9 | 938.0 |
| 22.PEGADENBARU | 1,484.6 | 803.8 | 515.2 | | 12.2 | 126.5 | 1,696.1 | 544.9 | 3.3 | 305.2 |
| 23.SUKABUMI | 4,575.3 | 0.0 | 17.2 | 12.2 | | 73.2 | 939.6 | 0.1 | 27.3 | 285.8 |
| 24.CIANJUR | 1,702.1 | 72.7 | 5.4 | 126.5 | 73.2 | | 2,438.9 | 0.1 | 6.3 | 20.2 |
| 25.BANDUNG | 10,485.4 | 855.3 | 869.3 | 1,696.1 | 939.6 | 2,438.9 | | 755.1 | 673.3 | 2,668.4 |
| 26.JATIBARANG | 3,328.4 | 159.8 | 139.6 | 544.9 | 0.1 | 0.0 | 755.1 | | 179.2 | 1,631.6 |
| 27.JATIWANGI | 1,215.2 | 0.1 | 14.9 | 3.3 | 27.3 | 6.3 | 673.3 | 179.2 | | 765.2 |
| 28.CIREBON | 6,583.2 | 435.9 | 936.0 | 305.2 | 285.8 | 20.2 | 2,668.4 | 1,631.6 | 765.2 | 0.0 |
| 29.BREBES | 1,143.5 | 15.5 | 3.7 | 48.1 | 0.1 | 0.1 | 71.4 | 162.2 | 0.1 | 127.2 |
| 30.BANJAR | 5,929.9 | 182.2 | 455.5 | 61.2 | 307.7 | 357.2 | 8,618.3 | 59.1 | 1,460.8 | 1,012.4 |
| 31.SEMARANG | 9,513.3 | 45.3 | 196.2 | 203.8 | 15.1 | 0.1 | 899.6 | 324.8 | 22.6 | 1,971.5 |
| 32.YOGYAKARTA | 3,818.0 | 22.8 | 452.8 | 128.3 | 30.2 | 7.5 | 301.9 | 196.2 | 102.7 | 647.6 |
| 33.SURABAYA | 2,711.2 | 0.1 | 7.5 | 7.5 | 0.7 | 45.3 | 271.8 | 0.6 | 0.1 | 218.9 |
| 34.MADIUN | 1,472.4 | 15.1 | 1.4 | 0.1 | 7.5 | 0.1 | 207.2 | 0.9 | 7.5 | 68.0 |
| 35.JEMBER | 473.1 | 0.1 | 105.7 | 0.0 | 0.0 | 0.0 | 76.1 | 0.0 | 0.1 | 30.2 |
| TOTAL | 58,953.7 | 4,092.7 | 7,562.3 | 5,940.8 | 6,292.1 | 4,855.6 | 31,827.7 | 7,482.6 | 4,478.7 | 17,707.3 |

| O\D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 15.2 | 159.8 | 30.7 | 121.9 | 46.8 | 7.8 | 0.5 | 1,712.3 |
| 2.PANDEGLANG | 0.1 | 30.2 | 0.0 | 0.0 | 7.5 | 0.1 | 0.1 | 1,159.2 |
| 3.RANGKASBITUNG | 0.0 | 188.7 | 0.0 | 0.0 | 7.5 | 0.1 | 0.1 | 1,522.0 |
| 4~19.JABOTABEK | 1,128.2 | 5,551.2 | 9,482.6 | 3,696.1 | 2,656.8 | 1,464.4 | 477.4 | 54,560.2 |
| 20.PRUWAKARTA | 15.5 | 182.2 | 45.3 | 22.8 | 0.0 | 15.1 | 105.7 | 4,092.7 |
| 21.CIKAMPEK | 3.7 | 455.5 | 196.2 | 452.8 | 7.5 | 1.4 | 0.0 | 7,562.3 |
| 22.PEGADENBARU | 48.1 | 61.2 | 203.8 | 128.3 | 7.5 | 0.1 | 0.0 | 5,940.8 |
| 23.SUKABUMI | 0.1 | 307.7 | 15.1 | 30.2 | 45.3 | 7.5 | 0.1 | 6,292.1 |
| 24.CIANJUR | 0.0 | 357.2 | 0.1 | 7.5 | 0.1 | 0.1 | 0.0 | 4,855.6 |
| 25.BANDUNG | 71.4 | 8,618.3 | 899.6 | 301.9 | 271.8 | 207.2 | 76.1 | 31,827.7 |
| 26.JATIBARANG | 162.2 | 59.1 | 324.8 | 196.2 | 0.6 | 0.9 | 0.0 | 7,482.6 |
| 27.JATIWANGI | 0.1 | 1,460.8 | 22.6 | 102.7 | 0.1 | 7.5 | 0.1 | 4,478.7 |
| 28.CIREBON | 127.2 | 1,012.4 | 1,971.5 | 647.6 | 218.9 | 68.0 | 30.2 | 17,707.3 |
| 29.BREBES | 0.0 | 804.4 | 2,279.0 | 122.9 | 1.3 | 3.4 | 0.1 | 4,782.9 |
| 30.BANJAR | 804.4 | | 4,151.1 | 3,895.8 | 151.0 | 218.9 | 50.4 | 27,715.9 |
| 31.SEMARANG | 2,279.0 | 4,151.1 | 0.0 | 7,414.8 | 10,606.7 | 497.6 | 437.8 | 38,579.3 |
| 32.YOGYAKARTA | 122.9 | 3,895.8 | 7,414.8 | 0.0 | 2,435.8 | 3,547.0 | 242.3 | 23,386.6 |
| 33.SURABAYA | 1.3 | 151.0 | 10,606.7 | 2,435.8 | 0.0 | 10,775.5 | 16,051.9 | 43,285.3 |
| 34.MADIUN | 3.4 | 218.9 | 497.6 | 3,547.0 | 10,775.5 | 0.0 | 9,023.7 | 25,846.3 |
| 35.JEMBER | 0.1 | 50.4 | 437.8 | 242.3 | 16,051.9 | 9,023.7 | 0.0 | 26,496.6 |
| TOTAL | 4,782.9 | 27,715.9 | 38,579.3 | 23,386.6 | 43,285.3 | 25,846.3 | 26,496.6 | 339,266.4 |

Appendix 4-10-3   Freight OD Table after Adjustment by Capability

Freight OD Table  (1992)   [With]   Mode: Railway   [All Commodities]   (Unit: 1,000 ton)

| O D | 1~19 | 20.PURWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 0.1 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 53.1 | 0.0 | 0.2 | 10.4 | 0.0 | 9.6 | 2.4 | 0.0 | 109.0 |
| 20.PURWAKARTA | 3.4 | 0.0 | 0.0 | 53.9 | 0.0 | 0.0 | 1.9 | 0.0 | 0.0 | 80.3 |
| 21.CIKAMPEK | 2.6 | 0.0 | 0.0 | 55.0 | 0.0 | 0.0 | 35.1 | 67.4 | 0.0 | 102.9 |
| 22.PEGADENBARU | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.SUKABUMI | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 22.9 | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 |
| 27.JATIWANGI | 15.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 33.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.6 | 0.0 | 0.0 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 13.6 | 1.7 | 1.4 | 0.0 | 0.0 | 0.2 | 12.6 | 0.2 | 0.0 | 5.0 |
| 31.SEMARANG | 45.5 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 |
| 32.YOGYAKARTA | 20.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 241.2 | 0.0 | 8.5 | 7.1 | 0.0 | 0.0 | 5.1 | 11.8 | 0.0 | 15.4 |
| 34.MADIUN | 13.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 7.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 0.0 | 0.0 |
| TOTAL | 430.9 | 57.1 | 10.8 | 116.2 | 10.8 | 0.1 | 98.8 | 95.1 | 0.0 | 320.6 |

| O D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUN | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.2 | 0.0 | 0.5 | 0.0 | 0.1 | 1.4 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 6.9 | 109.0 | 73.5 | 297.7 | 10.7 | 2.2 | 684.7 |
| 20.PURWAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 139.5 |
| 21.CIKAMPEK | 0.0 | 51.5 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 342.1 |
| 22.PEGADENBARU | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.7 |
| 23.SUKABUMI | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 25.BANDUNG | 0.0 | 27.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 52.8 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 1.4 | 0.0 | 5.0 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.8 |
| 28.CIREBON | 0.0 | 0.0 | 0.0 | 0.2 | 3.2 | 0.0 | 0.0 | 60.3 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 42.2 | 0.0 | 155.9 | 252.0 | 27.7 | 2.7 | 0.0 | 515.2 |
| 31.SEMARANG | 0.0 | 0.3 | 0.0 | 0.0 | 49.7 | 0.0 | 0.2 | 97.7 |
| 32.YOGYAKARTA | 0.0 | 0.1 | 0.2 | 0.0 | 70.6 | 0.0 | 0.0 | 93.5 |
| 33.SURABAYA | 3.0 | 38.4 | 77.7 | 30.2 | 0.0 | 361.3 | 475.0 | 1,274.7 |
| 34.MADIUN | 0.0 | 2.1 | 1.6 | 2.3 | 7.4 | 0.0 | 0.6 | 34.4 |
| 35.JEMBER | 0.0 | 0.1 | 0.5 | 0.0 | 25.6 | 0.1 | 0.0 | 32.1 |
| TOTAL | 45.2 | 128.0 | 347.2 | 358.2 | 482.4 | 376.2 | 478.1 | 3,356.0 |

Freight OD Table (1992) [With] Mode: Truck [All Commodities] (Unit: 1,000 ton)

| O\D | 1-19 | 20.PRUWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 14.1 | 0.0 | 65.0 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 33.0 | 0.0 | 0.0 | 6.3 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 2,248.5 | 157.9 | 8.0 | 914.2 | 576.6 | 2,008.4 | 1.5 | 0.0 | 1,284.0 |
| 20.PRUWAKARTA | 1,084.0 | 0.0 | 154.3 | 732.0 | 0.0 | 0.0 | 451.9 | 0.0 | 0.0 | 0.0 |
| 21.CIKAMPEK | 4,098.6 | 4.8 | 0.0 | 2.9 | 39.6 | 0.0 | 37.4 | 3.6 | 0.0 | 182.0 |
| 22.PEGADENBARU | 597.3 | 225.7 | 145.5 | 0.0 | 0.0 | 0.0 | 399.5 | 0.0 | 0.0 | 5.8 |
| 23.SUKABUMI | 501.5 | 0.0 | 0.0 | 0.0 | 0.0 | 11.3 | 31.8 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 142.1 | 25.4 | 0.0 | 0.0 | 3.4 | 0.0 | 65.2 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 748.9 | 571.4 | 85.6 | 268.4 | 221.4 | 422.0 | 0.0 | 120.3 | 236.7 | 384.1 |
| 26.JATIBARANG | 129.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 842.6 | 0.0 | 62.9 | 2,041.3 |
| 27.JATIWANGI | 218.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1,660.1 | 160.5 | 0.0 | 97.8 |
| 28.CIREBON | 1,155.0 | 67.9 | 0.0 | 0.0 | 21.2 | 0.0 | 627.9 | 1,356.3 | 202.8 | 0.0 |
| 29.BREBES | 28.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0 | 8.9 | 0.0 | 19.3 |
| 30.BANJAR | 476.2 | 1.8 | 0.0 | 0.0 | 4.8 | 0.0 | 1,002.5 | 0.0 | 13.3 | 166.5 |
| 31.SEMARANG | 601.9 | 6.7 | 30.4 | 0.0 | 0.0 | 0.0 | 128.3 | 0.0 | 0.0 | 161.0 |
| 32.YOGYAKARTA | 187.8 | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 | 46.6 | 0.0 | 0.0 | 8.5 |
| 33.SURABAYA | 775.3 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 78.8 | 0.0 | 0.0 | 159.6 |
| 34.MADIUN | 170.5 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 38.8 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 30.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.2 | 0.0 | 0.0 | 0.0 |
| TOTAL | 10,945.3 | 3,154.6 | 575.2 | 1,011.3 | 1,224.6 | 1,010.5 | 7,532.0 | 1,650.2 | 517.2 | 4,516.2 |

| O\D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 3.3 | 5.9 | 2.4 | 0.0 | 18.9 | 11.1 | 4.7 | 125.4 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 39.5 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 |
| 4~19.JABOTABEK | 4.7 | 969.6 | 1,119.0 | 601.2 | 1,190.8 | 148.7 | 35.9 | 11,269.0 |
| 20.PRUWAKARTA | 0.0 | 0.0 | 20.4 | 3.2 | 0.0 | 0.0 | 0.0 | 2,607.4 |
| 21.CIKAMPEK | 17.2 | 146.5 | 2.8 | 8.2 | 1.6 | 0.0 | 0.0 | 4,369.4 |
| 22.PEGADENBARU | 0.0 | 29.4 | 5.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1,417.4 |
| 23.SUKABUMI | 0.0 | 95.6 | 0.0 | 2.3 | 0.0 | 0.0 | 0.0 | 648.2 |
| 24.CIANJUR | 0.0 | 12.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 248.9 |
| 25.BANDUNG | 27.6 | 1,281.9 | 213.3 | 39.6 | 72.8 | 23.9 | 0.8 | 4,718.7 |
| 26.JATIBARANG | 18.4 | 49.4 | 64.5 | 12.7 | 0.0 | 27.6 | 0.0 | 3,249.3 |
| 27.JATIWANGI | 0.0 | 110.1 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2,288.7 |
| 28.CIREBON | 80.9 | 434.0 | 160.7 | 17.1 | 48.7 | 5.1 | 1.4 | 4,179.0 |
| 29.BREBES | 0.0 | 102.9 | 169.3 | 7.2 | 0.0 | 0.0 | 0.0 | 331.7 |
| 30.BANJAR | 41.3 | 0.0 | 891.4 | 1,228.5 | 71.5 | 9.7 | 0.7 | 3,912.3 |
| 31.SEMARANG | 191.6 | 384.7 | 0.0 | 1,752.8 | 739.1 | 137.3 | 53.8 | 4,193.0 |
| 32.YOGYAKARTA | 0.0 | 433.7 | 2,430.7 | 0.0 | 179.0 | 129.8 | 7.9 | 3,424.0 |
| 33.SURABAYA | 4.8 | 129.4 | 808.6 | 907.4 | 3,506.2 | 6,532.9 | 4,593.6 | 13,994.4 |
| 34.MADIUN | 0.0 | 4.8 | 223.1 | 542.4 | 7,826.0 | 0.0 | 650.6 | 5,150.7 |
| 35.JEMBER | 0.0 | 17.6 | 55.3 | 68.2 | 0.0 | 358.7 | 0.0 | 8,349.6 |
| TOTAL | 389.8 | 4,205.5 | 6,168.6 | 5,190.8 | 13,654.6 | 7,384.8 | 5,349.4 | 74,480.8 |

Freight OD Table (1992) [With] Mode: Ship [All Commodities](Unit: 1,000 ton)

| O\D | 1~19 | 20.PRUWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 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 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| 2.PANDEGLANG | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.6 | 0.0 | 71.3 | 0.0 | 0.0 | 79.9 |
| 20.PRUWAKARTA | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21.CIKAMPEK | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22.PEGADENBARU | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.SUKABUMI | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.JATIWANGI | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29.BREBES | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.SEMARANG | 5.2 | 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 | 0.8 | 0.0 | 4.1 | 10.1 |
| 32.YOGYAKARTA | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 43.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 63.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 108.6 |
| 34.MADIUN | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 16.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.1 |
| TOTAL | 65.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 64.5 | 0.0 | 0.0 | 8.6 | 0.0 | 72.2 | 0.0 | 5.3 | 215.8 |

Freight OD Table (1992) [Without] Mode: Railway[All Commodities] (Unit: 1,000 ton)

| O \ D | 1~19 | 20.PRWAKA | 21.JIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAN | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 12.7 | 0.0 | 0.0 | 8.5 | 0.0 | 4.2 | 0.0 | 0.0 | 0.2 |
| 4~19.JABOTABEK | 3.7 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 2.1 | 0.0 | 2.0 |
| 20.PRWAKARTA | 2.9 | 0.0 | 0.0 | 58.0 | 0.0 | 0.0 | 35.1 | 71.0 | 0.0 | 114.8 |
| 21.CIKAMPEK | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22.PEGADENBARU | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.SUKABUMI | 10.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 32.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 13.1 | 0.0 | 1.4 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | 3.0 |
| 27.JATIWANGI | 0.4 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 12.6 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 3.5 | 0.0 | 8.5 | 7.1 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 |
| 29.BREBES | 157.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 1.8 | 0.0 | 15.4 |
| 30.BANJAR | 7.4 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 5.1 | 0.0 | 0.0 | 0.0 |
| 31.SEMARANG | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.0 | 0.0 | 0.0 | 0.0 |
| TOTAL | 236.3 | 54.1 | 9.9 | 65.3 | 8.9 | 0.1 | 90.1 | 85.6 | 0.0 | 135.4 |

| O \ D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.8 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 3.0 | 21.9 | 3.2 | 144.4 | 1.0 | 1.9 | 243.8 |
| 20.PRWAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 |
| 21.CIKAMPEK | 0.0 | 51.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 353.0 |
| 22.PEGADENBARU | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.4 |
| 23.SUKABUMI | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 24.CIANJUR | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 25.BANDUNG | 0.0 | 27.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 47.3 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 0.0 | 0.0 | 0.0 | 0.2 | 3.2 | 0.0 | 0.0 | 36.2 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 42.2 | 0.0 | 155.9 | 314.6 | 34.5 | 3.4 | 0.0 | 584.8 |
| 31.SEMARANG | 0.0 | 0.3 | 0.0 | 0.0 | 49.7 | 0.0 | 0.2 | 61.7 |
| 32.YOGYAKARTA | 0.0 | 0.1 | 0.2 | 0.0 | 70.6 | 0.0 | 0.0 | 76.5 |
| 33.SURABAYA | 3.0 | 38.4 | 77.7 | 30.2 | 0.0 | 361.3 | 475.0 | 1,190.9 |
| 34.MADIUN | 0.0 | 2.1 | 1.6 | 2.3 | 7.4 | 0.0 | 0.6 | 28.0 |
| 35.JEMBER | 0.0 | 0.1 | 0.5 | 0.0 | 25.6 | 0.1 | 0.0 | 31.6 |
| TOTAL | 45.2 | 123.9 | 257.8 | 350.5 | 335.8 | 365.8 | 477.7 | 2,664.9 |

- 51 -

Freight OD Table (1992) [Without] Mode: Truck [All Commodities] (Unit: 1,000 ton)

| O \ D | 1~19 | 20.PRUWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 14.1 | 0.0 | 65.0 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 34.4 | 0.0 | 0.0 | 6.3 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 1,084.0 | 2,249.0 | 157.9 | 8.3 | 916.2 | 576.6 | 2,014.0 | 0.0 | 1.5 | 1,392.6 |
| 20.PRUWAKARTA | 4,098.6 | 4.8 | 154.3 | 786.0 | 0.0 | 0.0 | 453.8 | 0.0 | 0.0 | 262.3 |
| 21.CIKAMPEK | 597.8 | 225.7 | 145.5 | 0.0 | 39.6 | 0.0 | 37.4 | 0.0 | 0.0 | 0.0 |
| 22.PEGADENBARU | 501.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 399.5 | 0.0 | 0.0 | 0.0 |
| 23.SUKABUMI | 142.1 | 25.4 | 0.0 | 0.0 | 0.0 | 11.9 | 31.7 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 751.8 | 573.6 | 85.6 | 268.4 | 221.4 | 0.0 | 65.2 | 120.3 | 236.7 | 384.1 |
| 25.BANDUNG | 130.0 | 0.0 | 0.0 | 0.0 | 0.0 | 422.0 | 0.0 | 0.0 | 62.9 | 2,043.2 |
| 26.JATIBARANG | 234.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 842.6 | 160.5 | 0.0 | 97.8 |
| 27.JATIWANGI | 1,165.7 | 68.0 | 0.0 | 0.0 | 21.2 | 0.0 | 1,660.1 | 1,389.9 | 202.8 | 0.0 |
| 28.CIREBON | 28.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 627.9 | 0.0 | 0.0 | 19.3 |
| 29.BREBES | 476.8 | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 636.7 | 6.7 | 31.3 | 0.0 | 4.8 | 0.0 | 1,002.5 | 8.9 | 13.3 | 166.5 |
| 31.SEMARANG | 204.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 128.3 | 0.0 | 0.6 | 161.0 |
| 32.YOGYAKARTA | 859.3 | 2.4 | 0.0 | 0.0 | 1.6 | 0.0 | 46.6 | 0.0 | 0.0 | 8.5 |
| 33.SURABAYA | 176.3 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 78.8 | 0.0 | 0.0 | 159.6 |
| 34.MADIUN | 30.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 38.8 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.2 | 0.0 | 0.0 | 0.0 |
| TOTAL | 11,118.3 | 3,157.4 | 576.1 | 1,062.7 | 1,226.6 | 1,010.5 | 7,540.8 | 1,660.2 | 517.2 | 4,701.2 |

| O \ D | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUN | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 3.3 | 0.0 | 2.6 | 0.0 | 19.0 | 11.1 | 4.8 | 126.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 40.7 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 |
| 4~19.JABOTABEK | 4.7 | 973.6 | 1,206.3 | 671.5 | 1,347.0 | 158.4 | 36.2 | 11,713.8 |
| 20.PRUWAKARTA | 0.0 | 146.6 | 0.0 | 3.2 | 0.0 | 0.0 | 0.0 | 2,743.6 |
| 21.CIKAMPEK | 17.2 | 29.4 | 22.0 | 8.2 | 1.6 | 0.0 | 0.0 | 4,353.8 |
| 22.PEGADENBARU | 0.0 | 95.6 | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 1,417.9 |
| 23.SUKABUMI | 0.0 | 12.8 | 5.2 | 2.3 | 0.0 | 0.0 | 0.0 | 648.3 |
| 24.CIANJUR | 27.6 | 1,281.9 | 213.5 | 39.6 | 72.8 | 23.9 | 0.0 | 248.9 |
| 25.BANDUNG | 18.4 | 49.4 | 64.6 | 12.7 | 0.0 | 29.0 | 0.8 | 4,724.0 |
| 26.JATIBARANG | 0.0 | 110.1 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3,252.8 |
| 27.JATIWANGI | 80.9 | 434.0 | 160.7 | 17.0 | 48.7 | 0.0 | 1.4 | 2,264.5 |
| 28.CIREBON | 0.0 | 102.9 | 169.3 | 7.2 | 0.0 | 5.1 | 0.0 | 4,203.3 |
| 29.BREBES | 41.3 | 0.0 | 891.4 | 1,165.8 | 64.6 | 0.0 | 0.7 | 331.8 |
| 30.BANJAR | 191.6 | 384.7 | 0.0 | 1,752.8 | 739.1 | 9.0 | 53.8 | 3,842.6 |
| 31.SEMARANG | 0.0 | 0.0 | 2,430.7 | 0.0 | 179.0 | 137.3 | 7.9 | 4,228.7 |
| 32.YOGYAKARTA | 4.8 | 433.7 | 808.6 | 907.4 | 0.0 | 129.8 | 129.8 | 3,440.9 |
| 33.SURABAYA | 0.0 | 129.4 | 223.1 | 542.4 | 3,506.2 | 6,532.9 | 4,593.6 | 14,078.4 |
| 34.MADIUN | 0.0 | 17.6 | 55.3 | 68.2 | 826.0 | 358.7 | 650.6 | 5,156.5 |
| 35.JEMBER | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8,350.2 |
| TOTAL | 389.8 | 4,209.8 | 6,258.1 | 5,198.3 | 13,804.0 | 7,395.2 | 5,349.8 | 75,176.0 |

Freight OD Table (1992) [Without] Mode: Ship [All Commodities] (Unit: 1,000 ton)

| O | 1~19 | 20.PRUWAKA | 21.CIKAMPE | 22.PEGADEN | 23.SUKABUM | 24.CIANJUR | 25.BANDUNG | 26.JATIBAR | 27.JATIWAN | 28.CIREBON |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20.PRUWAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21.CIKAMPEK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22.PEGADENBARU | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.SUKABUMI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.SEMARANG | 5.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 43.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 63.9 |
| 34.MADIUN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 16.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 |
| TOTAL | 65.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 64.5 |

| O | 29.BREBES | 30.BANJAR | 31.SEMARAN | 32.YOGYAKA | 33.SURABAY | 34.MADIUM | 35.JEMBER | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 1.MERAK | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| 2.PANDEGLANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.RANGKASBITUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4~19.JABOTABEK | 0.0 | 0.0 | 8.5 | 0.0 | 68.5 | 0.0 | 0.0 | 77.0 |
| 20.PRUWAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21.CIKAMPEK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22.PEGADENBARU | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.SUKABUMI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.CIANJUR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.BANDUNG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.JATIBARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.JATIWANGI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.CIREBON | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29.BREBES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.BANJAR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.SEMARANG | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 4.1 | 10.1 |
| 32.YOGYAKARTA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.SURABAYA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 108.6 |
| 34.MADIUN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.JEMBER | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.1 |
| TOTAL | 0.0 | 0.0 | 8.5 | 0.0 | 69.4 | 0.0 | 5.3 | 212.9 |