THE WAY FORWARD TO SUSTAINABLE TRANSPORT IN GREATER JAKARTA, INDONESIA

by:
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1
EXISTING CONDITION
GREATER JAKARTA (JABODETABEK)

CHALLENGE : SPRAWL!

Greater Jakarta includes 3 provinces and 8 municipalities

Population: 31 million

Source: BPS
PROPORTION OF COMMUTING TRIP

Number of Vehicle: 24.9 million

Motorcycle: 18.5 million units (74%)

Private car: 5.9 million units (24%)

Buses: 512 thousand units (2%)

Trip = 47.5 million / day
## O/D MATRIX 2015

| ZONA | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | Total 2015 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 1    | 4,514,137 | 36,678 | 151,060 | 259,766 | 409,221 | 189,447 | 352,430 | 269,431 | 124,242 | 152,088 | 225,107 | 116,415 | 30,450 | 36,254 | 29,099 | 34,076 | 23,176 | 6,953,078 |
| 2    | 33,525 | 780,004 | 10,158 | 52,377 | 4,540 | 3,842 | 143,153 | 4,408 | 3,078 | 5,821 | 18,862 | 2,087 | 2,040 | 8,320 | 2,089 | 2,269 | 2,118 | 1,078,692 |
| 3    | 148,636 | 10,917 | 367,522 | 29,263 | 4,713 | 3,481 | 15,666 | 54,366 | 4,871 | 5,091 | 7,997 | 2,437 | 3,496 | 1,990 | 1,284 | 1,158 | 722,886 | 663,010 |
| 4    | 232,566 | 54,131 | 28,166 | 719,203 | 14,029 | 12,045 | 136,540 | 9,536 | 5,763 | 12,553 | 35,088 | 4,952 | 2,350 | 9,988 | 1,634 | 3,011 | 3,344 | 1,284,899 |
| 5    | 397,448 | 5,012 | 4,587 | 14,544 | 1,888,969 | 47,238 | 35,208 | 57,123 | 113,082 | 145,605 | 35,660 | 101,936 | 5,811 | 8,880 | 9,639 | 15,830 | 10,490 | 2,897,062 |
| 6    | 187,253 | 4,263 | 4,251 | 13,192 | 40,561 | 1,459,584 | 42,972 | 10,361 | 9,992 | 68,088 | 64,726 | 6,450 | 3,099 | 11,244 | 3,983 | 9,939 | 10,847 | 1,950,804 |
| 7    | 346,843 | 148,368 | 14,536 | 122,564 | 35,478 | 39,512 | 2,785,760 | 17,175 | 15,250 | 28,323 | 240,476 | 12,576 | 5,659 | 43,695 | 4,372 | 5,120 | 8,861 | 3,874,568 |
| 8    | 261,313 | 4,690 | 56,872 | 9,955 | 55,349 | 10,826 | 19,290 | 2,251,927 | 115,466 | 16,230 | 16,781 | 16,480 | 27,411 | 5,382 | 2,234 | 2,999 | 2,406 | 2,875,609 |
| 9    | 122,807 | 3,133 | 4,922 | 6,316 | 111,318 | 10,057 | 15,946 | 124,888 | 3,183,221 | 16,201 | 21,149 | 68,483 | 178,878 | 5,611 | 2,576 | 3,214 | 1,849 | 3,880,570 |
| 10   | 152,300 | 5,871 | 4,626 | 13,922 | 140,442 | 67,918 | 29,047 | 18,546 | 2,505,458 | 26,420 | 25,413 | 2,920 | 6,071 | 16,730 | 46,736 | 56,393 | 3,135,049 |
| 11   | 226,972 | 18,342 | 7,289 | 36,006 | 31,279 | 64,656 | 227,466 | 17,517 | 21,127 | 25,225 | 3,967,599 | 7,456 | 3,262 | 179,845 | 3,254 | 4,807 | 17,756 | 4,860,008 |
| 12   | 113,042 | 2,523 | 2,731 | 4,874 | 103,883 | 9,360 | 12,196 | 17,429 | 65,698 | 25,749 | 9,979 | 1,299,055 | 20,557 | 1,731 | 2,912 | 10,954 | 1,759 | 1,703,782 |
| 13   | 31,125 | 2,420 | 3,383 | 2,240 | 6,124 | 3,034 | 5,755 | 29,096 | 182,445 | 2,939 | 3,410 | 20,382 | 2,471,282 | 2,346 | 1,574 | 27,886 | 1,846 | 2,797,286 |
| 14   | 36,490 | 7,810 | 2,205 | 10,184 | 9,952 | 10,862 | 44,863 | 5,455 | 6,060 | 6,991 | 179,786 | 1,789 | 579,1357 | 2,604,351 | 914,2318 | 790,0932 | 14,101 | 3,141,982 |
| 15   | 26,902 | 1,941 | 1,345 | 1,745 | 9,608 | 3,825 | 4,426 | 2,476 | 2,406 | 16,643 | 2,605 | 3,213 | 646,1143 | 1,332 | 980,764 | 162,117 | 115,981 | 1,337,976 |
| 16   | 34,901 | 2,488 | 1,408 | 2,818 | 15,453 | 10,512 | 4,784 | 3,368 | 3,776 | 47,482 | 4,985 | 11,058 | 28,083 | 1,640 | 169,946 | 1,885,981 | 73,508 | 2,302,193 |
| 17   | 21,827 | 2,501 | 623,569 | 2,852 | 10,160 | 10,709 | 8,054 | 2,183 | 2,062 | 54,642 | 17,844 | 1,666 | 757,6981 | 16,959 | 114,991 | 72,808 | 2,476,402 | 2,817,042 |
| Total 2015 | 6,888,088 | 1,091,092 | 665,687 | 1,301,821 | 2,890,477 | 1,956,906 | 3,883,556 | 2,892,973 | 3,877,237 | 3,134,529 | 4,877,276 | 1,701,799 | 2,787,281 | 3,145,639 | 1,347,993 | 2,289,695 | 2,821,559 | 47,553,609 |

**Total Trip in Jabodetabek 2015 : 47.5 million / day**

Greater Jakarta Transport Authority
Worsening Traffic Jam

- Significantly decreased vehicle speed since 10 years ago
- In Jakarta, average speed at peak hour 10km/hour
- Volume Capacity Ratio (VCR) in metropolitan area exceeded 1
- Economic losses due to traffic congestion up to USD 1.3 billion (2010), and predicted to be USD 6.5 billion in 2020;
GREATER JAKARTA TRANSPORT AUTHORITY
“To develop, manage and improve integrated transport services in Greater Jakarta area (Jakarta, Bogor, Depok, Tangerang, and Bekasi)"

"To execute its duties, Greater Jakarta Transport Authority (GJTA) refers to Transportation Grand Design for Greater Jakarta (Presidential Decree)"
Seamless Transport Through Integration

• Planning and Policy Integration
• Transport network and services Integration
• Modal Integration
• Fare Integration
• Finance/budget integration
3

KEY PERFORMANCE INDICATORS
1. Public transport share is 60%.
2. Maximum travel time from origin to destination is 1.5 hours at peak hours.
3. Minimum average speed is 30 km/h at peak hours.
4. Coverage of public transport services in urban areas is 80% of the length of the road.
5. Maximum walking distance to public transport is 500 m.
6. Each region must have feeder line connected to the trunk line in transit point.
7. The transit must have facilities for pedestrians and car park and ride, with the maximum transfer distance between mode is 500 m.
MAIN TARGET: INCREASE PUBLIC TRANSPORT SHARE

Greater Jakarta Transport Authority
THE WAY FORWARD
DEVELOPMENT OF PUBLIC TRANSPORT IN JABODETABEK

1. Light Rail Transit (LRT), Jakarta Government / JAKPRO
2. Light Rail Transit (LRT), Ministry Of Transportation / Adhi Karya
3. Light Rail Transit (LRT), Jababeka
4. Mass Rapid Transit (MRT), PT. MRT
5. Airport Railway (CL dan Ekspress), PT. KAI
6. Jakarta – Bandung High-speed Train (KCIC)
7. Automatic People Mover system (APMS), Soekarno-Hatta Airport
8. Commuter Line (CL), PT. KCJ
9. Bus Rapid Transit (BRT), PT. Transjakarta
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MULTI-MODAL CONNECTIVITY AND INTEGRATION AT DUKUH ATAS

Sudirman Baru Station (Airport Railway)
MRTJ Dukuh Atas Station
Old Sudirman Station (KRL)
Transjakarta Bus Shelter
LRT Station

Greater Jakarta Transport Authority
MASS TRANSPORT CONNECTIVITY AND INTEGRATION IN DUKUH ATAS

Train station Sudirman Baru
Pedestrian bridge connected to artificial deck of train Station
Artificial deck as interchange area to the MRT station, busway terminals and train station
Pedestrian bridge as a connection between 4 block area in Dukuh Atas area

Greater Jakarta Transport Authority
MASS TRANSPORT INTEGRATION AT MRT DEPOT LEBAK BULUS

BUS TERMINAL
ACCESS FROM BUS TERMINAL TO MRT STATION
MRT DEPOT
TRANSIT ORIENTED DEVELOPMENT (TOD)
SKY WALK
Information: Keterangan:

Area I
- Blok M – St Kota
- Gatsu (Kuningan – Senayan)
- Rasuna Said – Tendean
- Tendean – Blok M
- Asia Afrika - Pejompongan

Area II
- Dukuh Atas – Manggarai – Matraman – Gunung Sahari
- Jatinegara – Kampung Melayu – Casablanca – Satrio - Tanah Abang

Area III
- Grogol – Roxi – Harmoni
- Tomang – Harmoni – Pasar Baru
- Cempaka Putih – Senen – Gambir
- Cawang – Pluit – Tanjung Priok
- Cawang - Tanjung Priok
- Sunter - Kemayoran
AREA TRAFFIC MANAGEMENT SYSTEM

Greater Jakarta Transport Authority
INTEGRATED APPLICATION OF PUBLIC TRANSPORT

GJTA: conducting data collection, filtering and processing the related respective information.
Thank You
Terima kasih