What’s up with our Mass Transit

Discover our current state of public transport
What defines public transport

**TRIP**
- Collective movement of people

**ROUTE**
- Servicing common corridor with greater efficiency

**PLATFORM**
- Facilitated by pooled resources (stations, street signals, dedicated lanes etc)
Why people do not use public transport

**TRIP**
- “can’t arrive there on time and in one piece”
- (Mass) transit journey is too tiring

**ROUTE**
- “don’t know how to get there”
- Transit routes are very complicated

**PLATFORM**
- “don’t want to go through all the hassle”
- Transit points are not accessible
TRIP: Transit journeys too tiring

LONG WAIT

- No fix schedule; operators modify schedule to reap maximum occupancy out of their fixed routes

BADLY DESIGNED ROUTES

- Intercity lines choose time-consuming routes and local lines zigzag and loop excessively in the suburban areas
TRIP: Transit journeys too tiring

TRAVEL DISCOMFORT

- Overcrowding of entrances, exits and gangways
- Restricted commuter flow and door failure cause delays
- Sardine-packed conditions for very long duration
ROUTE: Transit routes are very complicated

DIFFERING FEE STRUCTURE AND NO INFO

• Unfair distribution of fee pricing across commuters from differing places where a short trip involving multiple routes can cost more than a long, single route trip
• No integrated transit information across different operators, service lines and transit points
• Info not user friendly, confusing and hard to obtain
ROUTE: Transit routes are very complicated

HARD TO SINGLE OUT TARGETED VEHICLE

- Too many different lines share the same clogged routes
- Bus signs hard to be identified
- Commuters have to be over-alert and venture onto the traffic space so as not to miss the fast approaching targeted vehicle
PLATFORM: Transit points are not accessible

NO FIRST & LAST MILE CONNECTIVITY

- Available infrastructure not friendly to pedestrians
- Distance between halts are inconsistent with population distribution around halts
PLATFORM:
Transit points are not accessible

BAD TRANSIT PILE-UP

- Transit flow blocked by idling and parked public and private vehicles
- Haphazard loitering of vehicles with no proper platforms, signs and spaces to facilitate passenger pick-up and drop-off
PLATFORM: Transit points are not accessible

BAD TRANSIT CONNECTIONS

- Neighboring communities are divided by limited access Tolled Highways and congested Freeways, limiting direct transit interconnection possibilities
- Paths from hubs to highway exits are very complex, congested and time-consuming

Kicker: This tunnel in Tropicana provides easy access for the residents of Tropicana Golf and Country Homes to get to LDP.
Why we must improve our Mass Transit FAST

Why we must move our Mass Transit forward
Making it easy for people to move around is part of faith.

“Belief has over sixty branches. The best of them is the words, ‘There is no god but Allah’ and the least of them is to remove an obstacle from the road.” (Hadith)
## LONG TERM OBJECTIVE

<table>
<thead>
<tr>
<th>Current State</th>
<th>Short Term Goal</th>
<th>Long Term Objective</th>
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<tbody>
<tr>
<td>Traffic gridlock</td>
<td>Free traffic flow</td>
<td>✓ Higher economic growth due to lower cost of mobility</td>
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<tr>
<td>Long commuting hours</td>
<td>Short commuting hours</td>
<td>✓ Reduced road fatalities/injuries</td>
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<tr>
<td>Complex travel paths</td>
<td>Simplified travel paths</td>
<td>✓ Increased productivity due to reduced commuting time</td>
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<td>Air and noise pollution</td>
<td>Cleaner air and less stressful environment</td>
<td>✓ Increased socioeconomic interaction among suburban areas</td>
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<td></td>
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<td>✓ Savings in road maintenance expenditures</td>
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<td></td>
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<td>✓ Increased city living satisfaction</td>
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<tr>
<td></td>
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<td>✓ Lower cost of hospitalization</td>
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Why current system cannot work

The single most important competitor to public transport is private transport. Taxpayers’ money has not been used to fund common infrastructure to support public transport the way it is used to build and maintain roads for cars.

**TRIP**
- Collective movement of people

**ROUTE**
- Servicing common corridor with greater efficiency
  Operators pit against each other by every cost savings they can get away with in absence of any standards, regulations and enforcements

**PLATFORM**
- Facilitated by pooled resources (stations, street signals, dedicated lanes etc)
  Mass transit vehicles compete scarce travel space with private vehicles
  Operators maximize whatever they can squeeze from any loophole in public infrastructure (i.e. loitering of parked busses, unruly road hogging and speeding)
When competitors cut corners…

Safety got the first cut
How to make people use public transport

**TRIP**
MAKE TRIP FAST AND COMFORTABLE
• (Mass) transit journey is too tiring

**ROUTE**
MAKE GETTING TO PLACES SIMPLE AND STRAIGHT FORWARD
• Transit routes are very complicated

**PLATFORM**
MAKE TRANSFERS CONVENIENT AND HASSLE FREE
• Transit points are not accessible
The bottom line of public transport

MAKE TRIP **FAST AND COMFORTABLE**
MAKE GETTING TO PLACES **SIMPLE AND STRAIGHT FORWARD**
MAKE TRANSFERS **CONVENIENT AND HASSLE FREE**

**KEY PERFORMANCE INDICATORS**

- Accessibility
- Availability
- Reliability
- Safety
- Comfort

The measurement of performance is the key, because……

- If you can’t measure it, you can’t control it…
- If you can’t control it, you can’t manage it…
- If you can’t manage it, you can’t improve it.
Standards have to be established for operators

- Safety
- Comfort
- Availability
- Accessibility
- Reliability
Standards have to be established for authorities too.
Standards have to be established for authorities too.
The bottom line of public transport

Fair allocation of risks and responsibilities between operators and authorities

KPIs
- Accessibility
- Availability
- Reliability
- Safety
- Comfort

INPUTS
- Taxpayers Money
- Technology
- Infrastructure Resources
- Labor

PRODUCED OUTPUTS
- Journey covered/labor
- Operational cost/mile
- Vehicle seats/mile

CONSUMED OUTPUTS
- Passenger/mile
- Passenger energy unit
- Infra. KPIs
- Service KPIs

SERVICE EFFICIENCY

COST EFFECTIVENESS

AUTHORITIES’ SCOPE

OPERATORS’ SCOPE

COST EFFICIENCY
Financing model

Non-discriminating distribution of tax revenue and fee income to cover entire population

LOCAL GOVT
Quit rent rates depend on proximity to transit connections
Congestion charges, summons

FEDERAL GOVT
Taxes, royalties, duties, levies

FUNDING

TRANSPORT AUTHORITIES

PENALTY IF KPIs NOT MET

LOCAL GOVT
Quit rent rates depend on proximity to transit connections
Congestion charges, summons

FEDERAL GOVT
Taxes, royalties, duties, levies

PENALTY IF KPIs NOT MET

PAYOUTS BASED ON DISTANCE TRAVELLED AND DRIVING MANHOURS

OPERATORS
Contracted to:
Private local
GLC-funded local
Private foreign

CIVIL DUTY

COMMUTERS

UNIFORM FEE COLLECTION (integrated ticketing system)

EXTRA FEE FOR VALUE-ADDED SERVICE
How can we improve our Mass Transit

Quick fix solutions to move our Mass Transit forward
TRIP: Transit journeys too tiring

LONG WAIT
BADLY DESIGNED ROUTES
TRAVEL DISCOMFORT

• Make all routes simpler, frequent, faster and convenient
• More bus lanes with full time DBKL/traffic enforcement
• Allow buses to use emergency lane during traffic gridlock, with police enforcement and proper signage
• Segregate lines depending on travel journey (express, trunk, local, intracity)
• Utilize expressways such as KESAS, Pantai, NKVE, Sprint, Putrajaya
Dedicated, Continuous Bus Lanes and Signals

EXCLUSIVE BUS LANE SIGNAL
FOR QUEUE JUMP AT INTERSECTIONS

EMERGENCY / BUS LANE

YELLOW BOX IN TRAFFIC INTERWEAVING POINTS
SO EMERGENCY/ BUS LANE IS ALWAYS UNOBSOCTED
ROUTE: Transit routes are very complicated

DIFFERING FEE STRUCTURE

NO INFORMATION

HARD TO SINGLE OUT TARGETED VEHICLE

- Uniform fee pricing by central collector with pay-outs to operators based on results for established KPIs
- Integrated transit information across different operators, service lines and transit points (user friendly)
- Routes are simplified with intercity buses feeding to KL public transport gateways via:
  - Westbound: KL Sentral
  - Eastbound: Dang Wangi LRT (thru elevated hway)
  - Southbound: Pasar Rakyat bus station, Bandar Tasik Selatan
  - Northbound: Titiwangsa hub, Sentul Timur LRT

Current intercity buses’ destination points are clogged
Jln Tun Sambanthan Lebuh Pasar Central Market
PLATFOR: Transit points are not accessible

NO FIRST & LAST MILE CONNECTIVITY
BAD TRANSIT PILE-UP
BAD TRANSIT CONNECTIONS

- Get local authority involved in pedestrian and cyclist friendly pathways
- Standby patrol officer to be able to dispatch to emergency call from emergency mini towers in crime prone areas
- Off service buses sent to depot instead of idling on road
- Express intercity buses must be exclusively guided from gateways directly to expressways
- Enhance connectivity between bus stops at intersections
LDP Suspension Bridge Interchange for Komuter, LDP and Fed. Hway Trunk Lines

- LDP Northbound
- Fed.Hw Eastbound
- Fed.Hw Westbound
- LDP Southbound
- KTM Komuter
- Stairs/Lifts, pedestrian overpass and underpass
- Local lines’ Terminal to Seri Setia and Sunway

TRUNK LINES
How can we improve our Mass Transit

Long term solutions to move our Mass Transit forward
Who does what in public transport

**TRIP**
- Collective movement of people

**ROUTE**
- Servicing common corridor with greater efficiency

**PLATFORM**
- Facilitated by pooled resources (stations, street signals, dedicated lanes etc)

This highly systemic and strategic task should be trusted to a centralized authority with federal-level legislative and enforcement powers.

This operational task is typically taken by private or quasi-government operators.

Pooled resources refer to commonly shared infrastructures funded by taxpayers. Ownership by local and regional level authorities is a must.
Available railway network hard to be extended due to uncontrolled urban sprawlings
Who does what in public transport: CENTRALIZED AUTHORITY

- Power vested by the taxpayers to legislate policies and authorize enforcements at the federal level for systemic and strategic planning, implementation and review of the nation’s mass transit performance, cascading to local level.
- Formulate and monitor performance measures (initiatives, KPIs, standards and targets) for each responsible parties
- Has bargaining power and expertise in allocating risks and responsibilities between operators and authorities, and designing non-discriminating tax revenue distributing scheme.
Who does what in public transport: **LOCAL AUTHORITY**

- Power vested by taxpayers to fine-tune national policies and authorize enforcements at the local level.
- Manage federal grants to provide dedicated lanes, signals and structures, depots, stations, hubs, halts and rationalized transit paths.
- Manage local funds to provide infrastructure for safe and convenient pathways to transit halts.
- Assign routes and schedules based on feedback.
- Transparent contracting to competent operators.
Who does what in public transport: OPERATORS

• Operational costs: labor, fuel, maintenance, administration
• Contract renewal based on conformance to standards monitored by centralized authority
• Bonus and incentives for increased accessibility (handicapped and seniors) and pollution free engines (NGVs, hybrids)
• Penalties for not achieving agreed KPIs.
• Express buses chartered out during non-peak hours
Integrated Rapid Transit System (IRTS)

**BUSES**
- Downtown: Bus Rapid Transit (BRT)
- Intercity: Expressway Rapid Transit (ERT)
- Trunk: Local to Local transit
- Local: Suburban feeder service to intercity and trunk
BRT

- Dedicated contiguous bus lanes (from available 3-lane streets) exclusive for BRT vehicles
- Feeds commuters from main Intercity Gateways to KL downtown areas
- Very high frequency service
- Very few operating service lines
- Exclusive traffic right-of-way signals at intersections
- Heavily monitored and enforced

DUKE Highway Gateway

Extend Sentul Timur LRT until Gateway

Titiwangsa BRT Station
Expressway Rapid Transit (ERT)

Consider expressways not heavily utilized as *rapid transit tracks*.
Imagine these rapid transit tracks with intercity terminals on top and local terminals on the sides.
Integrate with rail network, with strategic terminals allowing bus-train and local/city-intercity transit.
Serdang Gateway Complex

SINCE EXPRESSWAYS CUT OFF TRAVEL BETWEEN SECTIONS OF POPULATION, OVERHEAD PLATFORMS ARE THE ONLY WAY FOR FAST INTERCHANGE

Serdang Intercity and Interstate Gateway
Komuter and ERL
NSE Bus Terminal
Sg Besi Bus Terminal

Bus Depot

Local Lines Terminal to Balakong and Cheras

Local Lines Terminal to Seri Kembangan and Serdang
Local Lines as feeders to Intercity and Trunk Lines

- Local lines feed to intercity and trunk
- Trunk line serves interneighborhood trip that can’t be served by intercity
- Local lines only ply main roads and serve smaller neighborhood areas with well-spaced out stops
- Safe and easy access to local stops from inner neighborhood areas (pathways and bike lanes)
Example of rationalization of local routes by local authorities

TO GO WEST, TAMAN SG BESI INDAH FOLKS HAVE TO MAKE U-TURN ON THE FAR EAST SIDE

PASSAGEWAY FOR BUSSSES SHOULD BE SIMPLIFIED, HENCE THE NEED FOR A SHORTCUT