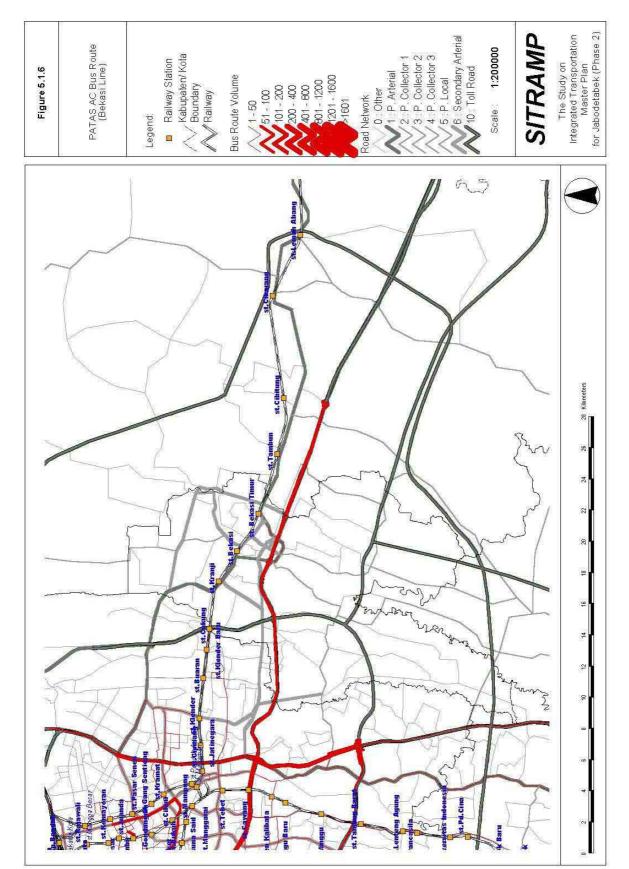


Figure 4.7.5 Small Bus Route (Serpong Line)



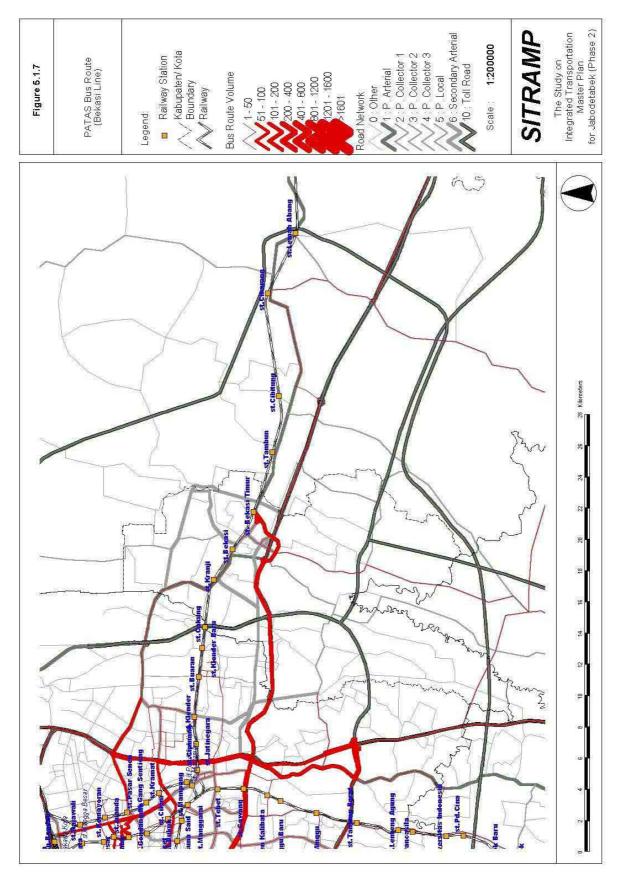


Figure 4.7.7 Patas Route (Bekasi Line)

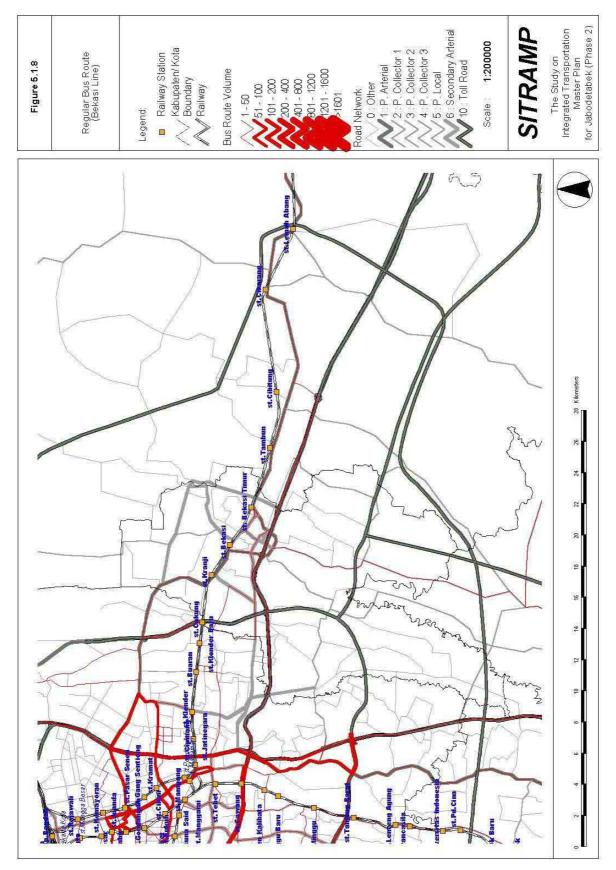


Figure 4.7.8 Regular Bus Route (Bekasi Line)



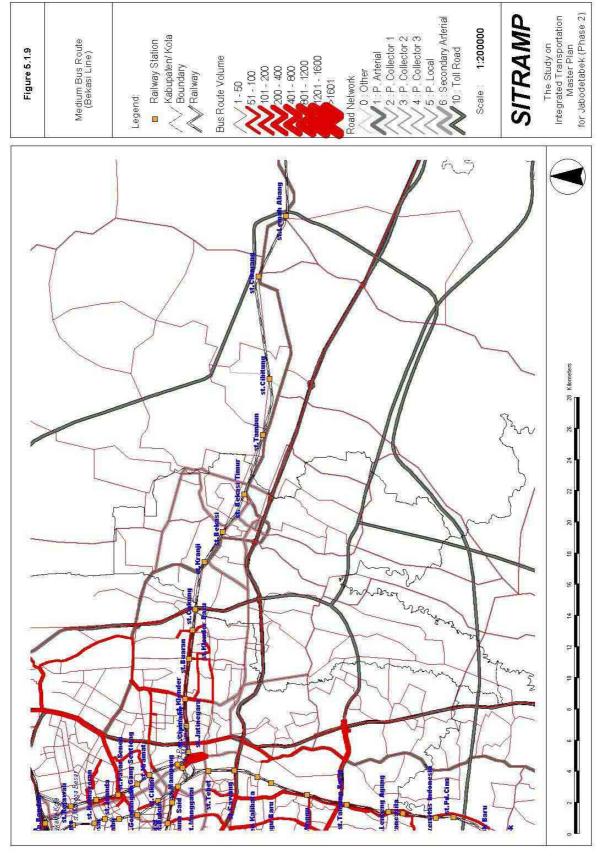


Figure 4.7.10 Small Bus Route (Bekasi Line)

#### (2) Bekasi Line

#### 1) Current Bus Route

#### a. Patas AC and Patas

Patas AC is covering only the west-side of Beraran station and Cikampek toll road. Patas routes are similar to those of Patas AC but its coverage area extends to Bekasi bus terminal and Cikarang railway station.

## b. Regular Bus

Regular bus routes are running on Jl. Bekasi Raya and some are connecting to railway stations from Bekasi Raya.

#### c. Medium Bus

Regular bus routes are serving Jl. I.G. Ngurah Rai up to JORR (Outer Ring Road). The route pattern is very similar to those of regular buses but frequency of service is higher than those of regular buses.

#### d. Small Bus

Small bus routes are covering all the area along Bekasi Railway Line and have comparatively higher frequency of service.

#### 2) General View

The same tendency can be observed in Bekasi Railway Line as that of Serpong Line. It is, however, the bus sharing by type of buses on routes that is more conspicuous in Bekasi Railway Line than in Serpong Line. The reason is the three major arterial roads along Bekasi Railway Line; Cikampek Toll, Jl Bekasi Raya and Jl. I.G. Ngurah Rai. Larger buses are running on these arterial roads and smaller buses are serving from the arterial roads to the railway stations through minor roads. It can be said that the bus terminal in Bekasi is playing a key role – distributing various types of buses and providing a connection between them.

#### **4.7.3** Park & Ride

## (1) Current Situation

Station squares are playing an important role to connect railway and private mode of transport. PT. KA is engaging in parking business and charging the users. There are several station squares on the Serpong and Bekasi Lines and many motorcycles and some passenger cars are using these station squares at present. On the other hand, only a small space or no space at all is allocated to bus transportation.

## (2) Existing Station Squares

Table 4.7.2 shows approximate size of the existing railway station squares on the Serpong and Bekasi Lines.

**Table 4.7.2 Existing Station Squares** 

No.	Line	Station	Existing Area (m2)
1		Karet	0
2	West Line	Dukuh Atas	0
3		Mampang	0
4	Serpong Line	Tanah Abang	0
5		Palmerah	0
6		Kebayoran	0
7		Pondok Ranji	2,000
8		Sudimara	3,000
9		Rawa Buntu	800
10		Serpong	4,000
11	Bekasi Line	Jatinegara	440
12		Klender	1,800
13		Buaran	0
14		Klender Baru	2,500
15		Cakung	2,740
16		Kranji	3,580
17		Bekasi	8,370
18		Tambun	100
19		Cibitung	0
20		Cikarang	2,000

# 4.8 ISSUES RELATED TO THE SERPONG AND WESTERN LINES

# 4.8.1 Additional Tracking Plan

The alignment of additional track on the Serpong line is selected at eastern side of the existing single track because space is left in the eastern side of the existing track when "Modernization Project on Serpong Line" was undertaken in 1993 – 1997. The electric poles are also located to the east side. The existing electric poles are too high, the planning height of electric poles is lower than the existing ones (refer to Figures 4.8.1 and 4.8.2.)

On the contrary the alignment of additional track between Palmerah and Tanah Abang (L=1.2 km) is western side of the existing track in order to connect with the Western line at the Tanah Abang station, and taking an obstacle of existing water gate (Banjir Kanal) into account. The situation is shown in Figures 4.8.1 and 4.8.2.





Figure 4.8.1 Rawa Buntu station

Figure 4.8.2 Pondok Betung station

The Serpong Line will not be able to accommodate the increasing passenger demand with the existing single track. To increase the passenger transport capacity of the line, double track between Tanah Abang and Serpong is required. This double tracking also contributes to enhance safety of train operation and would reduce significantly the number of railway accidents.

It should also be noted that in order to accommodate the increasing commuter travel demand, the following conditions are be provided:

- Supplementary tracks at both up and down directions shall be provided as long as the station yard area can accommodate this requirement. Supplementary tracks enable various train operations according to their classes or their stopping destinations, in which the higher class trains need overtake lower class trains.
- 2) All lines shall be facilitated with OHC system.
- 3) Electric Car (EC) Depot is imperatively required. Since double track will be able to accommodate more train operations, additional cars should be provided. It will consequently lead to the development of Depot at the Tanah Abang Serpong line.

#### 4.8.2 Issue of Station Facilities

Table 4.8.1 Issues of Each Station (1/2)

	1 1001 1001 10010 01 2001 0 01 (1/2)					
No.	Station Name	Problem / Issue				
1	Mampang*	-The station has not been well maintained.				
2	Rasuna Said**	-The bridge of Jl. Rasuna Said over Banjir Kanal is narrow compared to the previous road section and becomes a bottleneck on the corridor.				
		-The distance from Sudirman Station is short (at + 600 m).				
3	Sudirman*	-Passengers alighting at this station must use the pedestrian bridge about 300 m away from the station or cross Jl. Sudirman because there is not a pedestrian bridge nearby the station.  -This station has a lot of passengers boarding and alighting but busbay is not available in front of the station; therefore buses waiting for passengers create traffic jam on Dukuh Atas flyover in peak hours.				

# Table 4.8.1 Issues of Each Station (2/2)

1 able 4.8.1 Issues of Each Station (2/2)					
No.	Station Name	Problem / Issue			
4	Karet*	-Station Karet is located near the level crossing, so that railway passengers can get			
		into the platforms directly through the railway track.			
		-The station is located near the intersection between JI Penjernihan and JI			
	D 1 1	Margono, thus it could result in vehicular traffic obstructing the track.			
5	Palmerah	-The station is located between the roads with high traffic volume, thus it is			
		difficult for passengers to approach the station.			
		-Lack of integrated pedestrian link from the land adjacent to the station, especially			
	T ' did.	from the main arterial roads to the station.			
6	Limo**	-Simprug Golf Resident is located in the eastern side of the station, thus space is			
		rather restricted.			
		-There is a need to provide a busbay and a connecting bridge for passengers from			
	77.1	the south part.			
7	Kebayoran	-Trading and commercial activities often block access to the station entrance.			
		Traffic jam occurs frequently in the commercial areas along the main access street			
		to the station.			
		-Market activities cover the station entrance from the main access; therefore it is			
0	Dondola Datana 44	difficult to identify the station.			
8	Pondok Betung**	-JI Bintaro Permai in front of the station is a one-way street; access to this road			
		from the surrounding area is difficult, especially for passengers by public			
0	Din4: 44	transportation.			
9	Bintaro**	-Land is limited but there is possibility of developing a suitable station square.			
10	Pondok Ranji	-The station is located near the level crossing.			
		-Traffic jam occurs because buses are waiting for passengers getting off from			
		trainsMixed traffic of pedestrians and vehicles on the access street to station area			
		causes traffic congestion.			
11	Jurang Manggu**	-Bintaro Jaya plans to develop this station for major entrance station for their			
11	Julang Manggu	housing estate because it is located close to the CBD of Bintaro Jaya. A wide			
		access road has been already developed.			
12	Sudimara	-Lack of well-ordered commercial activities inside the station makes the			
12	Sudilliaia	platforms busy and dirty.			
13	Ciater**	-The station is located in the housing area but the southern part of the station is			
13	Ciatei	still vacant.			
14	Rawa Buntu	-The present station is small and located rather concealed and lack of access roads			
14	Kawa Duntu	makes it difficult to access the station by vehicles.			
		-BSD (Bumi Serpong Damai) plans to develop an integrated transportation			
		terminal at this location. The integrated terminal will provide interchange			
		facility with other modes of transportation such as shuttle bus, taxi and mikrolet.			
15	Serpong	-Land owned by PT. KA (Persero) south to the station is used as market place. It			
13	Scrpong	is proposed to use the land for maintenance facilities.			
		-It should be noted that two kinds of train stop at this station: long distance &			
		commuter train. Special attention should be paid for designing platforms for			
		different height of train cars.			
		-A level crossing is located close to the entrance road. Market is also located in			
		the vicinity of the station, thus traffic congestion occurs on the access road.			
<u></u>	l	the vicinity of the station, thus traffic congestion occurs on the access foat.			

<sup>\*)</sup> Western Line \*\*) New Station