

4. SERPONG LINE DOUBLE TRACKING, ACCESS IMPROVEMENT AND INTEGRATED LAND DEVELOPMENT

4.1 INTRODUCTION

4.1.1 Background

The transportation master plan proposed in SITRAMP revealed that enhancement of public transportation is key to the successful establishment of an effective and efficient transportation system in Jabodetabek. A railway system is expected to play an important role since the Jabodetabek region is a broadly spread area of around 6,800 sq. km. and its population will increase to 26 million in 2020.

On the other hand, double-double tracking on the Bekasi Railway Line is currently on the way. Taking advantage of this development, direct operation between the Serpong Railway Line and the Bekasi Railway Line was proposed in SITRAMP accompanying double-tracking development of the Serpong Railway Line.

Current conditions of access roads to the railway stations and rail station-squares remain poor. Most of roads are too narrow to accommodate large bus services. In addition, well organized station squares for interchange function between railway and other transportation modes are seldom seen, or they are very cramped or occupied by street vendors, if any.

It is greatly important to make use of impacts by investment in double-tracking on the Serpong Railway Line in order to maximize railway development as a whole. Some real estate developers, such as Bintaro Jaya and BSD (Bumi Serpong Damai), have a plan to develop an integrated transportation terminal facility to be combined with a railway station in cooperation with the railway operator, PT KA.

Another aspect is how to promote land development near railway stations. The railway stations have a large potential for housing and commercial development due to better accessibility and large numbers of boarding and alighting passengers, who will constitute potential purchasing power for commercial business.

4.2 PROFILE OF LAND USE AND TRAVEL DEMAND OF THE SERPONG RAILWAY LINE CORRIDOR

4.2.1 Land Use along the Corridor

(1) Existing Land Use Pattern

The existing land use along the Serpong Line is mainly residential areas as shown in Figure 4.2.1. Large-scale, estate-type housing complexes have been developed along the corridor. This includes Bintaro Jaya and BSD.

(2) Population and Employment

Population density along the corridor is lower than other corridors supported by major transportation corridors such as Daan Mogot, Bekasi Raya, Bogor Raya corridors (see Figure 4.2.2, Population Density in 2002). This is partly attributable to lack of efficient transportation services in both road network and railway network.

Inhabitants in estate-type housing are relatively wealthy and they belong to middle- and high-income households, while people living in the rural Kampung (villages) are relatively lower income groups. On the other hand, people in rural villages are largely working in local areas, whereas majority of residents living in Bintaro Jaya and BSD have work places in the CBD of Jakarta.

4.2.2 Present Travel Demand in the Corridor

(1) Travel Demand and Pattern

Major destinations of the commuting trips generated in the areas are in DKI Jakarta, especially in the CBD area, as shown in Figure 4.2.3.

(2) Modal Share

The share of person trips made by private passenger cars in the areas including Bintaro Jaya and BSD indicates much higher than average due to higher average income of households (see Figure 4.2.4).

People living in these housing areas have strong preference for private modes of transportation. The challenge is how to attract these people to use public transportation.

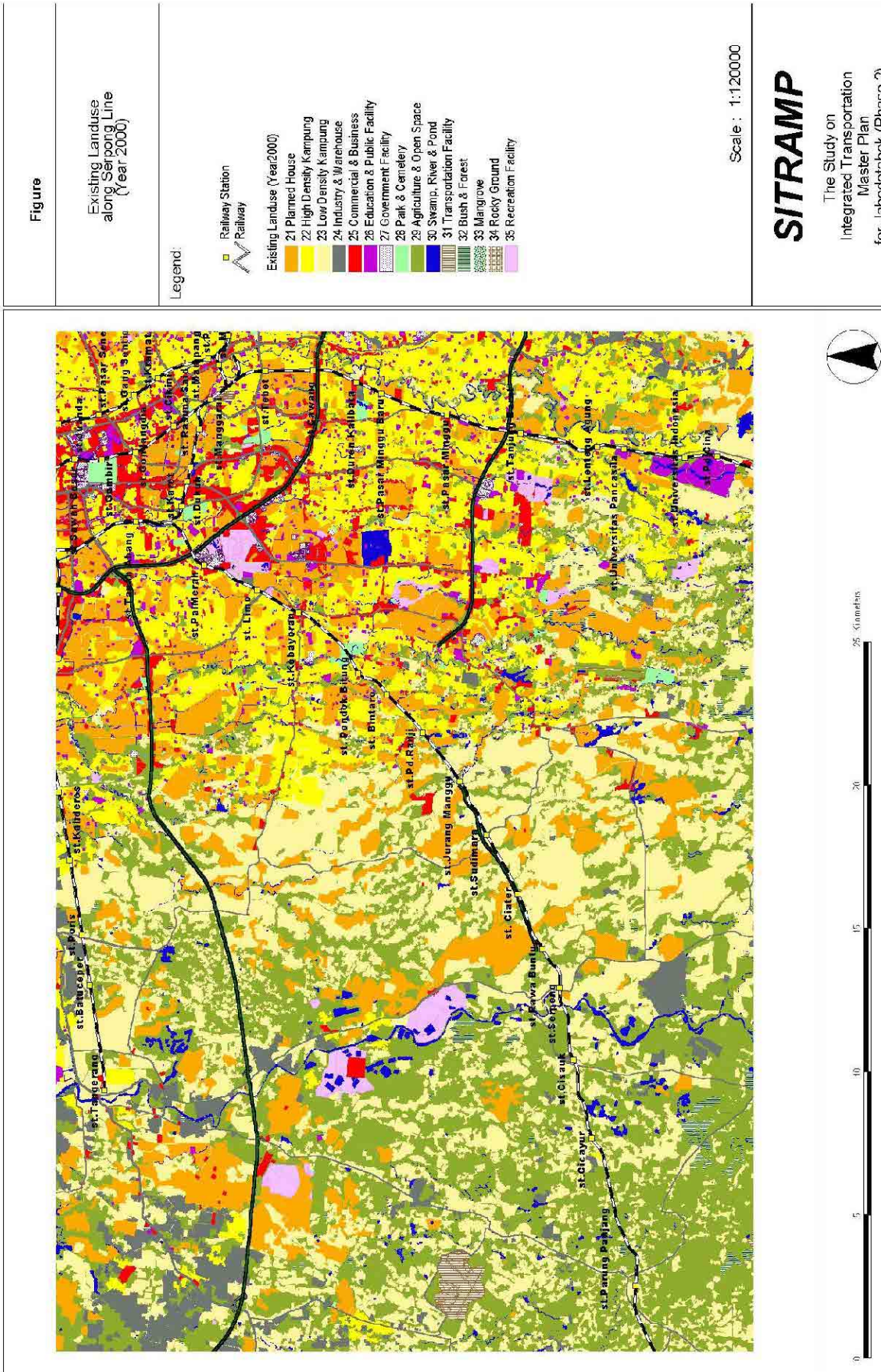


Figure 4.2.1 Existing Land Use

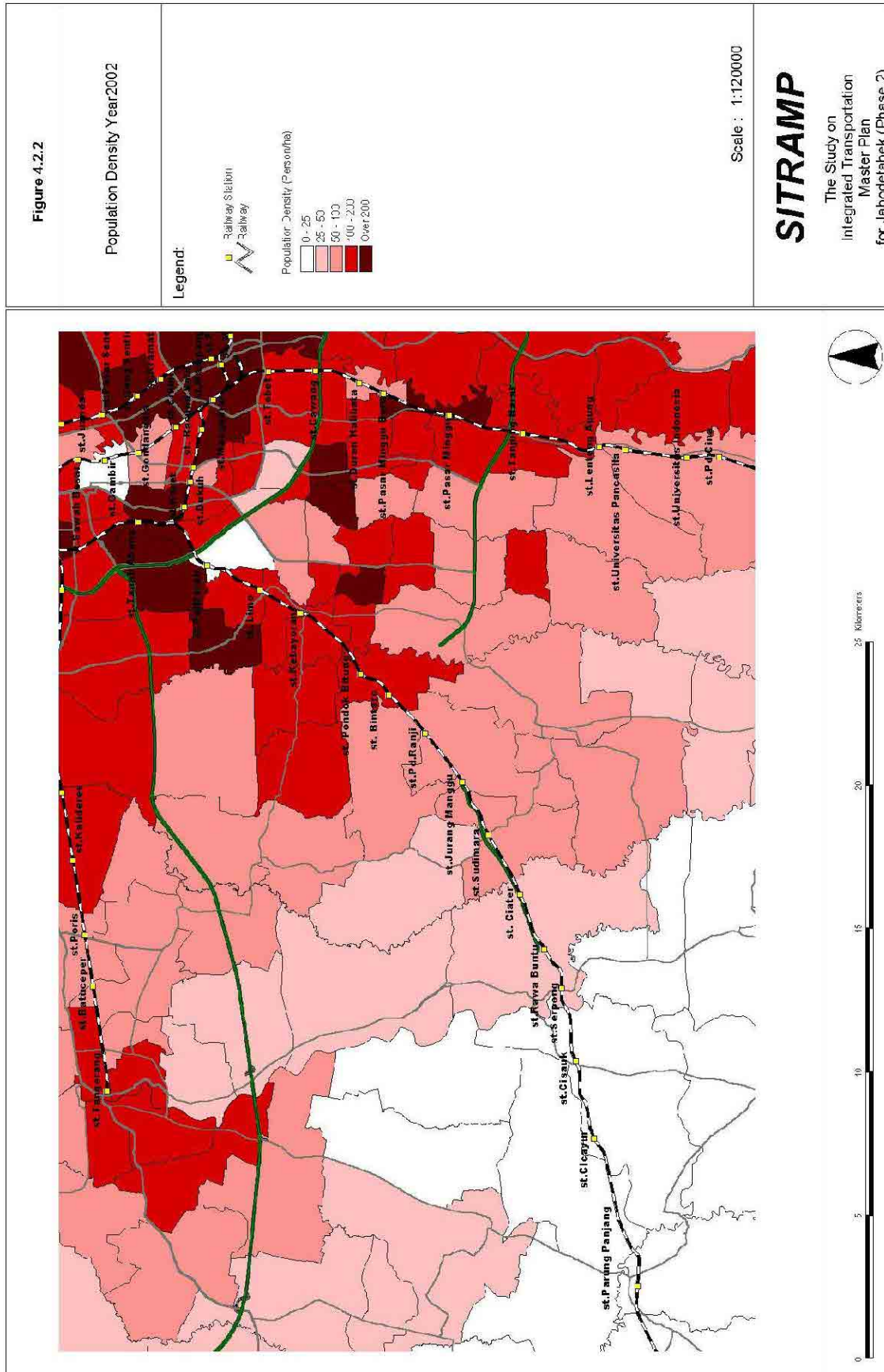


Figure 4.2.2 Population Density 2002

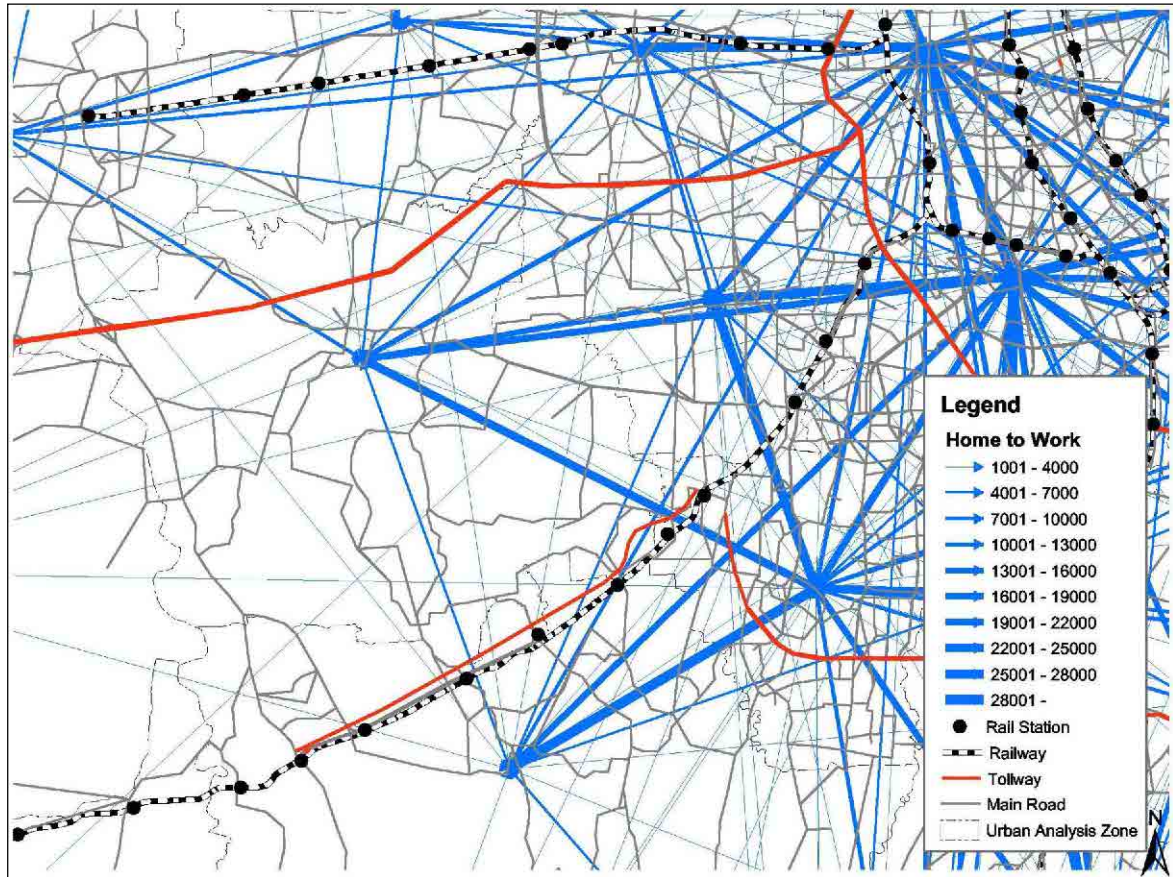


Figure 4.2.3 Home-Based Work Trip Desire Line along the Serpong Corridor

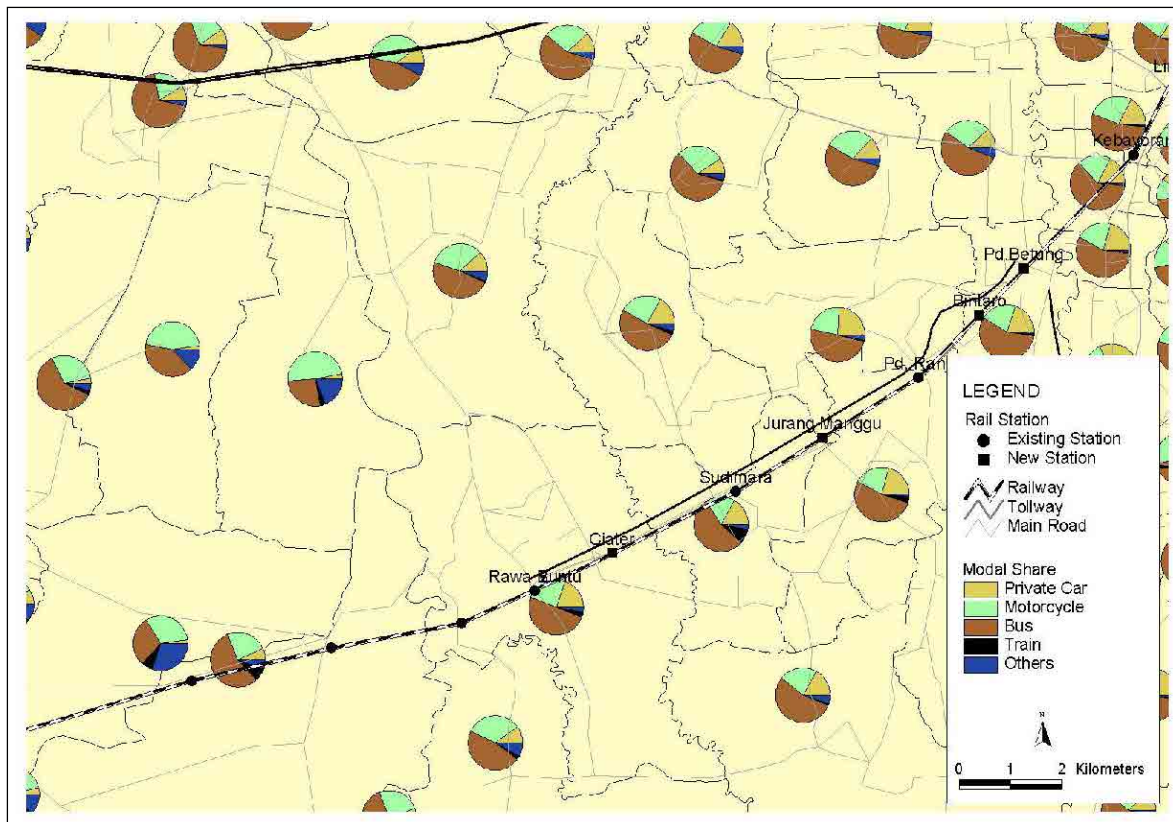


Figure 4.2.4 Motorized Modal Shares along the Serpong Corridor

4.2.3 Present Transportation System

(1) Present Road Network

Although large housing developments have progressed in the corridor and population will be further increased in the future, arterial road network development has been delayed and the roads to Jakarta from these areas are seriously congested every morning. Therefore, it takes a long time to travel from these areas to Jakarta CBD. The present road network in the corridor is depicted in Figure 4.2.5. Recently the Jakarta - Serpong toll road has extended to Ulujami and the south section of Jakarta Outer Ring Road (JORR) has also extended the stretch to Bitaro Permai. Both toll roads will be connected soon, thus accessibility to the southern part of Jakarta from Bintaro Jaya and BSD will be much improved, although access to the CBD will still be weak.

(2) Present Railway Operation

Service level of the Serpong Line is still low because of single track and shortage of train cars. In the morning peak hours as of 2002, one express train and six ordinary trains are operated. An average frequency of commuter trains on this line is 17 minutes. Passenger volume of 14,100 exceeds its transport capacity of 6,800 passengers. The loading factor accounts for 207 percent. Due to low frequency of the railway service, passenger demand on the Serpong Line is moderate and total number of boarding passengers accounts for some 3,000 persons per day at major stations.

Recently PT. KA started two executive train operations in the morning using newly produced PT. INKA electric train cars from Sudimara station and Serpong station. These trains first go to Tanah Abang Station and switch back to Sudirman Station where many offices are located. Many passengers have been attracted to this railway service because of travel time saving and comfort (air-conditioned and seat guarantee), even though the fare at Rp. 6,000 is much higher than Economy class.

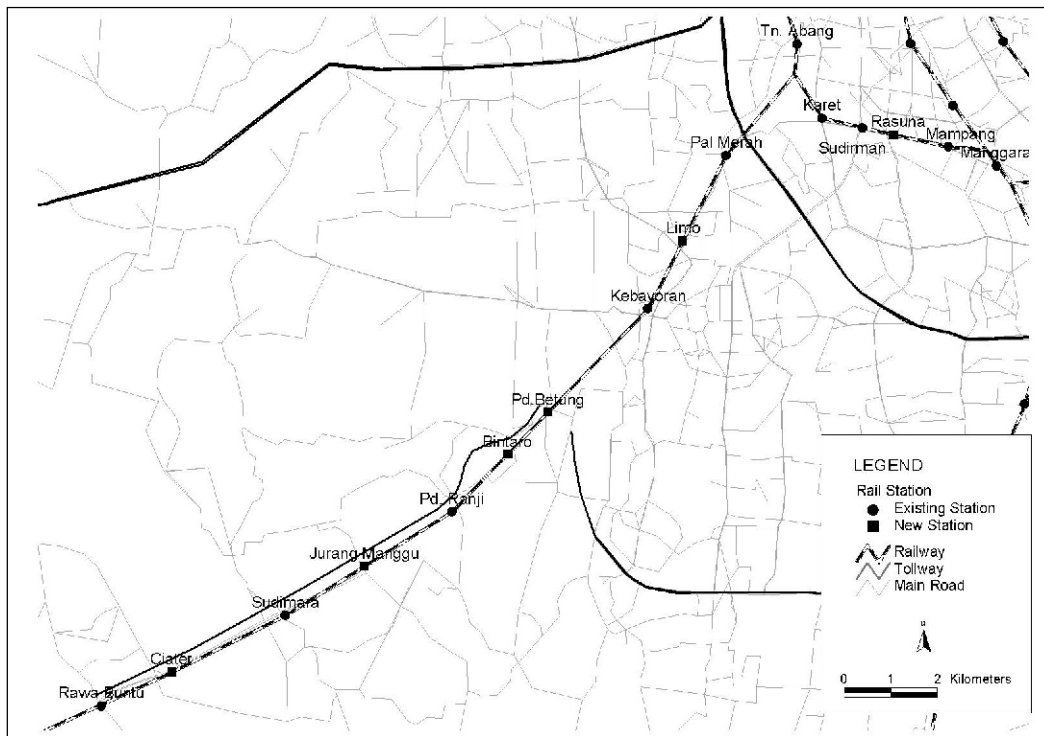


Figure 4.2.5 Present Road Network along the Serpong Corridor

4.3 FUTURE PERSPECTIVE OF THE CORRIDOR

(1) Land Use plan

Land use plans in the Serpong Line corridor have been prepared by relevant local governments; DKI Jakarta, Kabupaten Tangerang and Kabupaten Bogor. These land use plans are illustrated in Figure 4.3.1.

(2) New City Development in the Corridor

Large-scale housing complexes have been developed along the corridor. Among the housing developments Bintaro Jaya and Bumi Serpong Damai are the largest new city developments along the corridors. On the other hand, Perumnas has planned housing development in the southern part of station Parung Panjang.

