

## 1.2 Current Road Network and its Development Plans

Up to 2005, four (4) road network development plans have been developed, providing a framework for road network planning.

<Regional road network plan>

- Mamminasata Spatial Plan 2003-2012

<Urban road network plan>

- The Ujung Pandang Highway Development Study (JICA, 1989): (JICA Study 1989)
- Makassar City Development Plan 2005-2025 (planned to be finalized at the end of 2005)
- Other road development plans by Kabupaten (Maros, Gowa, Takalar)

### 1) Mamminasata Spatial Plan 2003-2012

The Mamminasata Spatial Plan (2002) was formulated in the light of the road network proposed in the Ujung Pandang Highway Development Study (JICA, 1989) and the network extension to the surrounding areas within Mamminasata to strengthen the regional linkage for further economic development.

Almost all the network components had been kept similar to the JICA Study in 1989. Only one exception is a route of “Outer Ring Road”, and its junction with Jl. Perintis had been shifted towards the northern side of the Hasanuddin Airport. This is attributable to the difficulty of land acquisition since the on-going route had been developed into a residential area at higher speed of urban sprawl than expected. The new route runs through a low land where settlements have not yet advanced. This road is expected to relieve heavy traffic congestions at Perintis Road<sup>3</sup>.

This spatial plan gives a development framework for whole the Mamminasata metropolitan area. However, no follow-up study at the feasibility level has been conducted yet and the spatial plan has remained conceptual.

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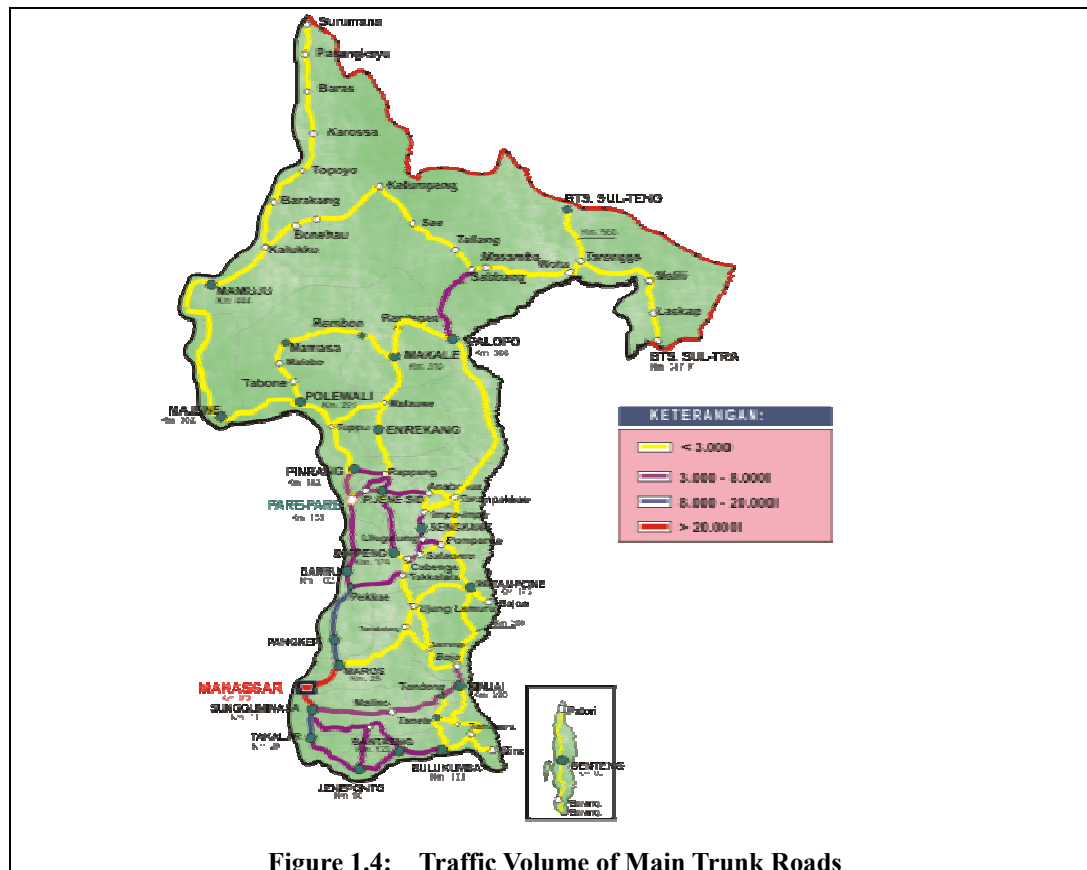
<sup>3</sup> Perintis road is one of the most important road of Makassar connecting with Hasanuddin airport.

3) Design Standard

Road design standards (1997) are defined by Jenderal Bina Marga<sup>2</sup> and Indonesian Highway Capacity Manual (IHCM by English version, 1997). This Study will follow two authorized road design guidelines.

4) Traffic Volume on Trunk Roads in Mamminasata

Traffic volume data of trunk road, national and provincial, have been up-dated by Bina Marga every year. The 2004 figures show that a maximum traffic is recorded around Makassar city, exceeding 20,000 vehicles per day, and the slightly less volume could be observed on connecting roads to Makassar. And the least volume is observed in remote areas with less than 3,000 per day as shown in the following table.



<sup>2</sup> Guide Line for Geometric Plan for Inter-City Road (Tata Cara Perencanaan Geometrik Jalan Antar Kota)

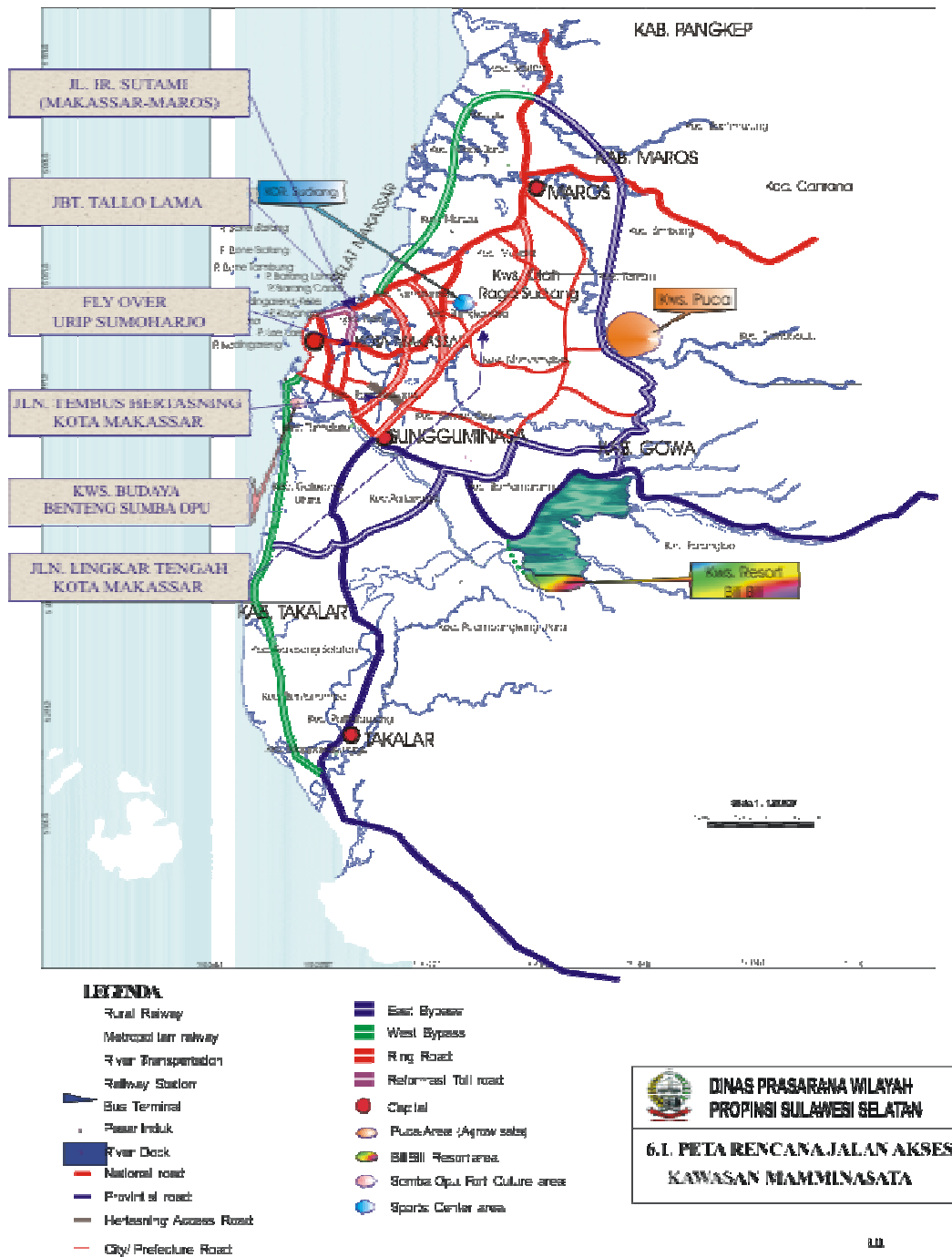


Figure 1.5: Road Development Plan of Mamminasata Spatial Plan 2003-2012

2) Ujung Pandang Highway Development Study, JICA (1989)

“The Ujung Pandang Highway Development Study” (so-called JICA Study 1989) suggested a major road network in Makassar City up to 2009. It also identified major traffic channels connecting Makassar and Maros, Gowa, and Takalar as shown in Figure 1.6. This Study is still a basis of road network planning. Its covers (i) five arterial trunk roads, (ii) three ring roads spread with Makassar city center as a hub. It appears that the framework itself had been well coordinated with town planning, and can be best suited with the geographical conditions and trends of urban cum industrial development.

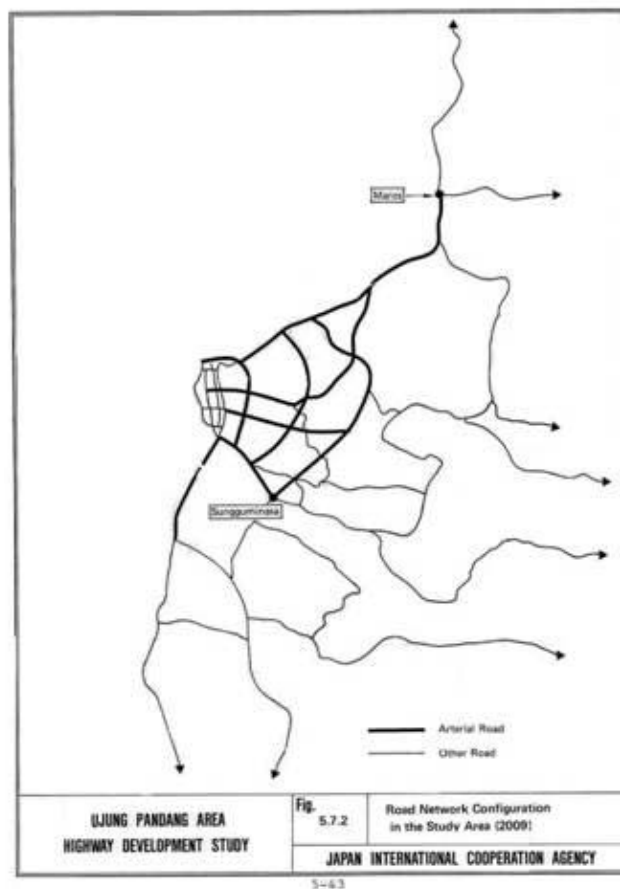


Figure 1.6: Road Development Plan by JICA

The provincial government prefers to make a new spatial plan consistent with this JICA Study 1989. However, the JICA Study 1989 reveals its vulnerability to the social and environmental changes as the fact that the town has sprawled at a higher speed than expected, making it difficult to execute land acquisition. Furthermore, the requirement for environmental conservation has come up to be a more critical, and an in depth environmental impact assessment is required. It is evident that some modification should be done.

3) Makassar City Development Plan 2005-2025

This study is on-going for Makassar City. As shown in the following figure, the alignment of Middle Ring Road and Outer Ring Road are kept same as proposed in the JICA Study 1989. Almost all the road network is the same as the Mamminasata Spatial Plan 2003-2012, except that the Losari Beach road had been widened to 20-40m as part of the West Outer Ring Road.

Other salient feature is a development of coastal area and the Tallo River estuary, where a large area of land is planned for reclamation as a new residential, commercial and industrial area by 2025. Its impact on the traffic volume has not been well coordinated with the road network plan. Extension of the “Inner Ring Road” to the southern part of the Jeneberang river remain unchanged despite of difficulties in land acquisition.

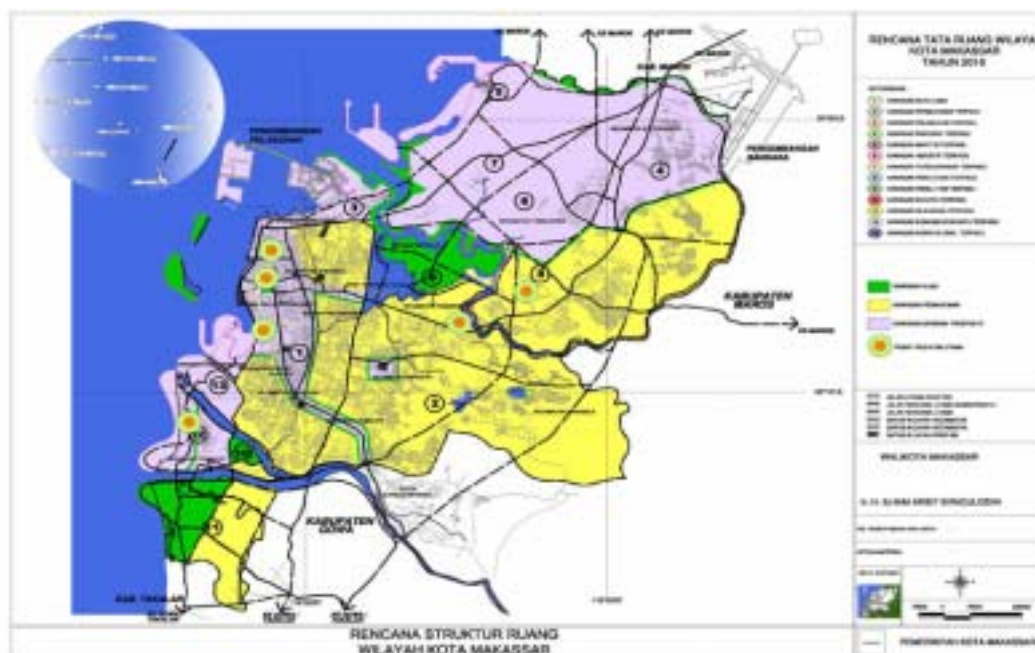


Figure 1.7: Road Development Concept of Makassar City Development Plan 2005-2025

#### 4) Other Road Development Plans

Three Kabupatens in Mamminasata have set an respective road development plan without an integrated road network plan.

Kab. Maros: Coastal road from Seaport to Northern area of Maros city through KIROS<sup>5</sup>.

Kab. Gowa: New road plan out of Outer-Ring Road to connect GOWA prefecture with Maros and Takalar directly.

- Kab. Takalar:
- 1) Widening of existing coastal road from Tanjung Bunga to Takalar.
  - 2) New access road from middle point of existing Takalar access road to south area.

These plans are summarized as shown in the following figure; however any plan has not been materialized, having (i) many bridge works required, (ii) land acquisition problems, (iii) road planned in flood prone area, (iv) geographical

<sup>5</sup> KIROS (KIMA 2): New industrial area to be developed in the coastal area of Maros.

constrains.

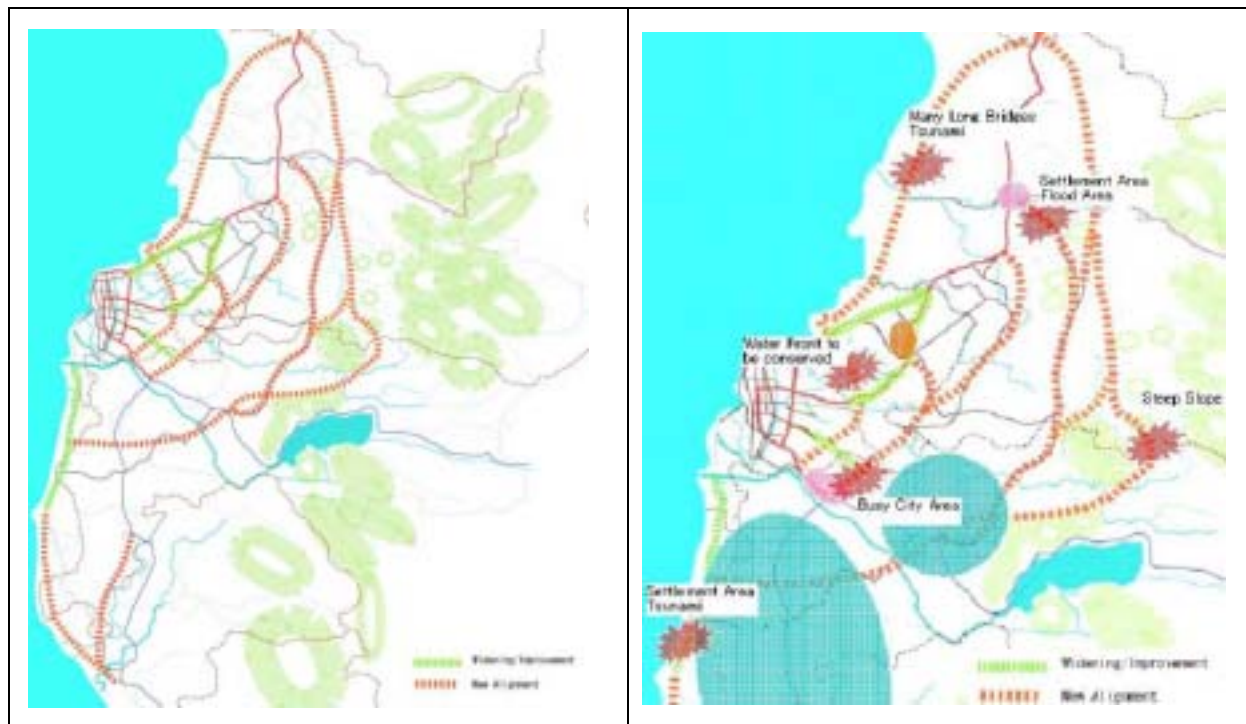


Figure 1.8: Current Road Development Plan