

TPA:MAL 26439

ASIAN DEVELOPMENT BANK

TECHNICAL ASSISTANCE PERFORMANCE AUDIT REPORT

ON THE

**URBAN TRANSPORT PLANNING PROJECT
(TA No. 1958-MAL)**

IN

MALAYSIA

December 1996

CURRENCY EQUIVALENTS

Currency Unit - Ringgit (RM)

		At TA Approval	At TA Completion	At TA Evaluation
RM1.00	=	\$0.3918	\$0.4056	\$0.3969
\$1.00	=	RM2.5523	RM2.4655	RM2.5195

The ringgit is linked to a weighted basket of currencies of the country's major trading partners.

ABBREVIATIONS

EPU	-	Economic Planning Unit
HPU	-	Highway Planning Unit
MOW	-	Ministry of Works
TOR	-	Terms of Reference

NOTES

- (i) The fiscal year (FY) of the Government ends on 31 December.
- (ii) In this Report, "\$" refers to US dollars.

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BASIC TA DATA
Urban Transport Planning
(TA No. 1958-MAL)

TA TITLE	TA NUMBER	IMPLEMENTING DIVISION/OFFICE
Urban Transport Planning	1958-MAL	Transport and Communications Div. East (IETC)

TOTAL TA COST (\$ '000)

<u>Item</u>	<u>Estimated Cost</u>			<u>Actual Cost</u>		
	<u>Foreign</u>	<u>Local</u>	<u>Total</u>	<u>Foreign</u>	<u>Local</u>	<u>Total</u>
Consultants	425.50	76.50	502.00	n.a.	n.a.	n.a.
Reports	12.00	-	12.00	n.a.	n.a.	n.a.
Supplies and Equipment	10.00	-	10.00	n.a.	n.a.	n.a.
Seminar/Workshop	-	7.50	7.50	n.a.	n.a.	n.a.
Field Surveys	-	53.00	53.00	n.a.	n.a.	n.a.
Administrative Support	-	71.00	71.00	n.a.	n.a.	n.a.
Miscellaneous Expenses	2.50	-	2.50	n.a.	n.a.	n.a.
Contingencies	48.00	28.00	76.00	n.a.	n.a.	n.a.
TOTAL	498.00	236.00	734.00	n.a.	n.a.	699.85

RECIPIENT/EXECUTING AGENCY: Highway Planning Unit, Ministry of Works

KEY DATES

	<u>Expected</u>	<u>Actual</u>
Government Request for TA		n.a.
President's/Board Approval		29 Sep 1993
Invitation of Proposals		2 Nov 1993
Signing of TA Agreement (if any) with the Government		24 Jan 1994
Signing of Consultants' Contract		23 Feb 1994
Submission of Consultant's Inception/Interim Report		n.a.
Submission of Consultant's Draft Final Report		Dec 1994
Submission of Revised Final Report		Jun 1995
TA Completion	Jan 1995	Dec 1995
TCR Completion	Dec 1995	Sep 1995

CONTRACTED CONSULTANT PERSON-MONTHS (INTERNATIONAL)

<u>Expertise</u>	<u>Expected Person-months</u>		<u>Actual Person-months</u>	
	<u>International Consultant</u>	<u>Local Consultants</u>	<u>International Consultant</u>	<u>Local Consultants</u>
Transport Planner	7.50	5.25	7.50	5.25
Traffic Engineer	4.50	2.50	4.50	3.00
Urban/Regional Planner	1.00	2.00	1.00	2.00
Highway Engineer	1.00	4.00	1.00	2.00
System Analyst	2.00	3.00	2.00	3.75
Public Transport	1.00	2.00	1.00	2.00
Transport Economist	1.50	-	1.50	-
	18.50	18.75	18.50	18.75

TRAINING PROGRAM/CONFERENCES

<u>Title of Program</u>	<u>Dates</u>	<u>Number of Participants</u>
Seminar on the Use of the Manual for the Preparation of Transport Plan in Malaysia	December 1994	150

MISSION DATA

<u>Type of Mission</u>	<u>Number of Missions</u>	<u>Person-days</u>
Inception	1	2
Review	1	4
Postevaluation	1	4

I. BACKGROUND

A. Introduction

1. At the time of the TA, rapid urban growth in Malaysia was placing considerable strain on urban infrastructure, including transport. However, the urban transport planning process was not well developed, and there was a lack of detailed urban transport plans, as well as shortages of staff with skills in traffic management techniques. Consequently, the Government requested Bank advisory technical assistance to prepare urban transport plans and to strengthen sector institutions.

B. Objectives and Scope

2. The objective of the TA was to help the Government formulate specific proposals for the development of efficient and effective transport networks and services for Johor Bahru, Ipoh, and Sungai Petani, and produce a manual that will assist in developing skills in transport planning and traffic management techniques.

3. The scope of the TA was to formulate specific proposals for the development of urban transport in three towns in Malaysia, and to draft a manual detailing and summarizing the methodology and analysis required to prepare such transport plans. The urban transport plans for each of the individual towns were to cover the immediate needs (over the next 2 years), the short term (up to 5 years), the medium term (up to 10 years) and the long term (15+ years). Prioritized investment programs in line with urban structure and local development plans for each of the towns were to be formulated corresponding to the respective five-year national planning periods. The towns of Johor Bahru, Ipoh, and Sungai Petani were chosen on the basis of their economic activity, level of development, and emerging transport constraints to demonstrate the different aspects of transport planning. The TA was also to review the institutional framework and establish training needs and organizational adjustments to improve both urban transport planning methods and analysis, and the effectiveness of implementing plans and policies.

II. ASSESSMENT OF IMPLEMENTATION

A. Design of the TA

1. Appropriateness of Concepts and Approaches

4. The Government's overall strategy in the urban transport subsector is to focus on improving urban transportation to alleviate the rapidly emerging traffic congestion problems in urban areas. In smaller urban areas, the emphasis is on maximizing the use of existing infrastructure through improvement of traffic management techniques, controls on parking, and traffic prioritization. The design of the TA closely reflected these strategic concerns, and provided training to enable Government staff to develop urban transport plans on their own. However, the production of a training manual alone does not seem to be sufficient to attain the continuous skills development needed in the Highway Planning Unit (HPU) and local government. The TA was in line with the Bank's strategy in the sector.

2. Degree of Recipient Agency Involvement in TA Design

5. The draft terms of reference (TOR) of the TA were prepared by the Government. Only minor modifications were made to the TOR, and thus the design of the TA reflected a high degree of Government input.

3. Quality and Adequacy of Physical Inputs Provided

6. The hardware (three personal computers, two printers, one mobile telephone, one projector and screen) and software (two urban transport planning programs, EMME/2 and TRANSYT) provided under the TA were "user friendly" and considered by the Government a substantial improvement over systems already in place in HPU of the Ministry of Works. However, no software was provided to the planning authorities in the three towns for which urban transport plans were prepared. These planning authorities felt that this software would have been useful in their work, although none of the planning authorities possessed the required skills (strong technical background in transport planning and traffic management, and systems analysis) to utilize this software.

4. Terms of Reference of Consultants

7. The terms of reference of the consultants were clear, comprehensive, and appropriate for attaining the objectives of the TA.

B. Engagement of Consultants

8. Seven international consultants and six local consultants for a total of 18.5 and 18.75 person-months, respectively, were engaged in accordance with the Bank's *Guidelines on the Use of Consultants* (see Basic TA Data). One additional consultant was added to the international team for a short term. This was accomplished by reducing the time of another consultant, thus requiring no additional funding. One domestic consultant was replaced at the beginning of the Project. The TA began on schedule on 4 April 1994 as agreed during contract negotiations.

C. Organization and Management

9. The HPU of the Ministry of Works was designated as the Executing Agency for the TA. The bulk of the work of the consultants was undertaken at HPU offices, including training of counterpart staff. The consultants collaborated closely with HPU staff and staff of local governments in Johor Bahru, Ipoh, and Sungai Petani. At the end of the TA, a seminar was held in Kuala Lumpur to disseminate the findings of the studies and review the training manual.

D. Implementation Schedule and Financing Arrangements

10. All components were implemented within the original time frame. The actual cost of the TA was \$699,850 compared with the estimated cost of \$734,000. The actual amount funded by the Bank of \$565,850 (compared with \$600,000 estimated) was utilized for consulting services, equipment, and software. The contribution by HPU was in kind by way of counterpart staff, a vehicle, telecommunication facilities, field surveys, and office accommodation as required.

by the TA Agreement. However, due to the unforeseen commencement of school holidays, all data collection had to be conducted simultaneously in the three towns which required substantial additional funding and intensive training by the consultants. The Government responded to this unforeseen contingency by providing an additional RM100,000.

E. Supervision

11. Bank supervision during TA implementation consisted of only two missions—an inception mission (two days) and a review mission (four days)—because of budgetary constraints. However, missions supervising two RETAs based in Malaysia provided some additional supervision of the Project. In general, Bank supervision of the TA was adequate.

12. The Executing Agency provided good, well-furnished office accommodation and a full-time vehicle and support staff, but were unable to provide sufficient counterpart staff on a full-time or part-time basis. Several experienced counterparts were assigned to the study but left Government service shortly thereafter. Thus the Executing Agency did not receive the full benefit of the TA. Also, the lack of a Director at HPU resulted in poor supervision on the part of the Executing Agency.

III. EVALUATION OF OUTPUTS AND IMPACT

A. Adequacy and Quality of Reports and Services Provided

13. The output of the TA comprised six reports: an Executive Report, three detailed urban transport studies for Johor Bahru, Ipoh, and Sungai Petani, a report on the training needs for urban transport planners, and a manual for the preparation of urban transport plans in Malaysia. All reports were of good quality and the Government was generally satisfied with the performance of the consultants in preparing the reports. The urban transport plans for Johor Bahru, Ipoh, and Sungai Petani proposed plans of action for each town which are currently under various stages of implementation. See Appendix 1 for a summary of the action plans for the three towns. The primary constraint to fully implementing the action plans is the lack of financial resources because local governments have limited sources of revenue and are dependent almost exclusively on State allocations as well as Federal funds for the financing of urban transport projects. Action plans that required little or no financing have been to a greater extent implemented.

14. The study results were presented at a two-day seminar in Kuala Lumpur at the end of the TA. The seminar was attended by more than 150 persons from the Government and municipalities from around the country. The seminar was considered generally successful.

B. Training and Transfer of Technology

15. The TA required that the consultants ensure that the transfer of technology to Government staff "be effected to the greatest extent possible." At least three HPU personnel were to be trained in the analytical techniques developed and used in the study to enable the manual to be updated periodically. Counterpart staff were also to be trained in the use of the software packages used in the study.

16. A number of HPU staff were seconded for training by the consultants; however, the exact number was not known because of the high rate of turnover in staff in HPU. Secondments of staff from the local governments did not materialize because of a shortage of available staff.

17. The Government felt that training was weak and consisted primarily of biweekly seminars for two to three hours on major topics on urban transport planning (see Appendix 2 for a listing of these seminars). In their opinion, the TA was too ambitious vis-à-vis the resources provided under the TA to formulate urban transport plans and train staff simultaneously. The Government also felt that their staff needed more basic instruction in the use of computers before being trained on the software installed on HPU computers. However, after completion of the TA, all HPU staff trained under the TA eventually left HPU for other jobs, mostly in the private sector. As a result, HPU effectively received no lasting benefit from the TA in terms of training and skills transfer.

C. Institution Building

18. Under the TA, the consultants were required to prepare a report on an assessment of human resources available for transport planning, determine future needs, and identify training requirements necessary to provide sufficient numbers of skilled personnel. The report was prepared after urban transport plans were developed for the three towns which served as a representative sample of the urban transport planning environment at the time. This analysis was supplemented by interviews with Malaysia's leading educational institutions with significant transport interests, and with Government staff. The report was generally well prepared and identified the major shortcomings in Government institutions in urban transport planning, and made appropriate recommendations on future directions in the building up of institutional capacities.

D. Performance of Consultant

19. The consultant performed satisfactorily. The consultant's approach was professional and the consultant established cordial relationships with Executing Agency staff which resulted in a high degree of cooperation. The objectives of the TA were essentially met, although training was not achieved to the extent envisaged. However, the Government felt that the amount of resources under the TA was insufficient to prepare three urban transport plans and to engage in effective training at the same time. Since the urban transport plans were considered by both the Government and the consultant to have a higher priority, less training was provided.

IV. CONCLUSIONS

A. Key Issues

20. The urban transport plans formulated by the consultant were well thought out and effectively addressed the issues at hand. However, most municipalities face strict budgetary constraints because of a lack of revenue sources and dependence on State and Federal budgets for operating and investment funds. If plans are formulated without considering these budgetary implications, investments may not be made optimally in urban transport infrastructure. Thus,

"second best" solutions to urban transport problems that take into account budgetary constraints should be considered and made part of the terms of reference of future TAs.

21. The risk of executing agency staff trained under a Bank TA leaving the executing agency shortly after completing training is ever present. Training increases the market value of an individual's labor and thus opportunities for higher remuneration elsewhere will undoubtedly arise. However, there are usually few ways to prevent departures or to effectively compete for job skills in the labor market by the executing agencies, primarily because of budgetary constraints. Thus, it is important that TAs be designed to ensure that some continuity in the transfer of skills is established. One way to accomplish this would be to put more emphasis on the training of trainers in the TA's terms of reference along with some assurances that the trainers will remain on the job for a reasonable period of time.

B. Overall Assessment

22. The objectives of the TA were largely achieved—urban transport plans for Johor Bahru, Ipoh, and Sungai Petani were developed, training needs identified, and a manual to assist in the development of skills in transport planning and traffic management techniques was produced. Although training did not achieve the expected results, training was provided to the extent possible as required by the TA. Thus, it is concluded that the TA was generally successful.

C. Lessons Learned

23. Two major lessons were learned from the implementation experience of the TA. First, the design of the TA should require that the terms of reference include provisions for the consultant to assess the budgetary implications of the proposed urban transport plans. If such plans are unrealistic in terms of financing requirements, then "second best" plans may need to be formulated.

24. Second, it is important that future TAs put more emphasis, as well as allocate more resources, to the training of trainers to ensure that some continuity in skills development is established. The risk of departures of trained staff, particularly in developing member countries with labor shortages such as Malaysia, is significant and a system to replace departing staff needs to be put in place.

D. Follow-up Actions and Recommendations

25. The TA provided state-of-the-art urban transport planning software to HPU. However, all HPU staff trained on this software have now left HPU, and the software is largely unused because of the absence of anyone with sufficient understanding of the operation of the software among current HPU staff. The Bank should thus encourage the Government to finance a small-scale project for a short training course on the software for all HPU staff, as well as a course for the training of trainers for a small select group of HPU staff. This would ensure that benefits from the Bank's investment in the software are realized in the future. It is also recommended that the urban transport planning software be provided to town planning authorities together with appropriate training to enable them to prepare urban transport plans on their own.

REVIEW OF URBAN TRANSPORT PLANS FOR JOHOR BAHUR, IPOH, AND SUNGAI PETANI

A. Johor Bahur

1. Johor Bahru, the largest of the three towns, currently has a population of some 490,000 within its city boundaries. It is rapidly becoming part of a much larger conurbation that is projected to have a total population of some 1.6 million by the year 2010. Like all cities in Malaysia, its transport system is predominantly road-based, and its road network is radial in nature. Situated at the southern extremity of Peninsular Malaysia, near the southern end of the North-South Expressway, it is joined by a causeway to Singapore. While this brings the benefits of international trade to Johor Bahru's economy, it also causes significant volumes of causeway-related traffic passing through or close to the city center. Traffic surveys have indicated that some 19 percent of cars and motorcycles and 72 percent of commercial vehicles currently using the causeway travel to or from areas of Malaysia outside Johor Bahur. At the same time, about 25-30 percent of traffic on the main radial roads in Johor Bahur is related to the causeway.

2. The urban transport action plan for Johor Bahur is largely confined to the central area of the city, since this is where most of the existing problems were observed to occur. Some improvements or mitigation measures were also identified for areas outside the city center. The emphasis of the urban transport plan is on (i) making the best use of existing road space by improving the traffic circulation system; (ii) separating different types of traffic by establishing a clear functional road hierarchy; and (iii) reducing conflict between vehicles and pedestrians by defining 'user priority areas'.

3. The action plan for Johor Bahru in the immediate term and its implementation status is as follows:

Activity	Status
City Center Traffic Circulation Scheme	Under implementation.
Central Area Parking Control Strategy	Not yet implemented.
City Center Bus Priority and Improvement Schemes	Implemented.
Central Area Pedestrian Movement Scheme	Implemented.
Jalan Tebrau Traffic Signal Coordination Scheme	n.a.
Larkin Bus Terminal Access Scheme	Implemented.
Junction Improvement Scheme	Not yet implemented.
Area Traffic Calming Schemes	Not yet implemented.
Adoption of Road Network Hierarchy	Implemented.

4. The medium and long-term plans for Johor Bahur consist of a series of inter-related actions that form part of a staged implementation plan. To clarify the nature of the actions required and the rationale behind them, the actions were combined into a number of 'objectives'. Some of these involve the provision of additional road space (for example, new roads and road widening), while others are more concerned with the provision of better public transport and the development of clear urban transport policies. The recommended medium/long-term transport plan for Johor Bahur is as follows:

- (i) agree and implement a clear roads hierarchy;
- (ii) provide more appropriate routes to the causeway for longer distance traffic;
- (iii) complete the inner ring road around the city center;
- (iv) improve/widen the network of primary routes and district distributor roads;
- (v) upgrade the Pasir Gudang Highway;
- (vi) implement the city center parking policy;
- (vii) provide high standard public transport services to and from the city center;
- (viii) implement a strategic road signing scheme; and
- (ix) provide ongoing monitoring of the city's traffic and transport system.

5. The location of the road infrastructure projects is illustrated in Figures 1-4.

B. Ipoh

6. Ipoh is the main administrative and commercial center of the state of Perak with a current population of about 430,000. During the 1980s, there was a decline in the tin mining activities in the Ipoh area causing population growth to fall below the national average level. However, the town is now on a course of economic recovery with an increased emphasis on new industrial activity. The population is expected to grow moderately (at 2.5 percent per annum) over the longer term.

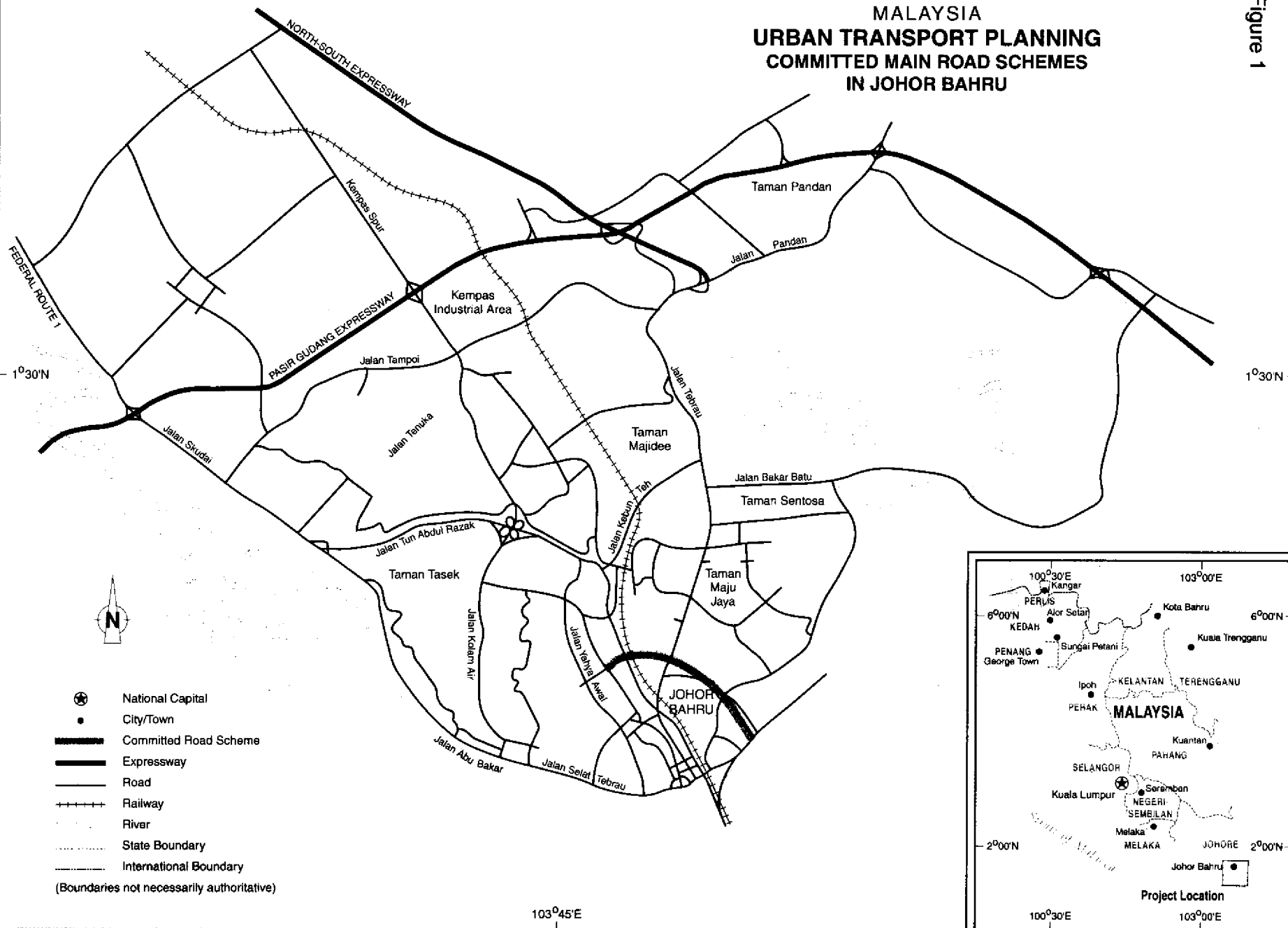
7. Although the North-South Expressway and the recent redefinition of Federal Route 1 have taken long-distance through traffic out of the city center, Ipoh's road network remains largely radial in nature, with many cross-city journeys having to pass through the central area. Both the Sungai Kinta road and the main railway line bisect the city in the north-south direction, resulting in restrictions to traffic movement.

8. The main emphasis of Ipoh's action plan is to define a clear functional hierarchy within the road system, to separate local traffic from longer-distance movements, and to designate 'user priority' areas to improve the pedestrian environment in the city center. Rationalization of on-street and off-street parking policies and coordination of central area traffic signals also feature in the plan. The action plan for Ipoh in the immediate term and its implementation status is as follows:

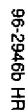
103°45'E

MALAYSIA URBAN TRANSPORT PLANNING COMMITTED MAIN ROAD SCHEMES IN JOHOR BAHRU

Figure 1



**MALAYSIA
URBAN TRANSPORT PLANNING
RECOMMENDED ROAD IMPROVEMENTS (Priority 1A)
IN JOHOR BAHRU**



103°45'E

MALAYSIA URBAN TRANSPORT PLANNING RECOMMENDED ROAD IMPROVEMENTS (Priority 1B) IN JOHOR BAHRU

Figure 3

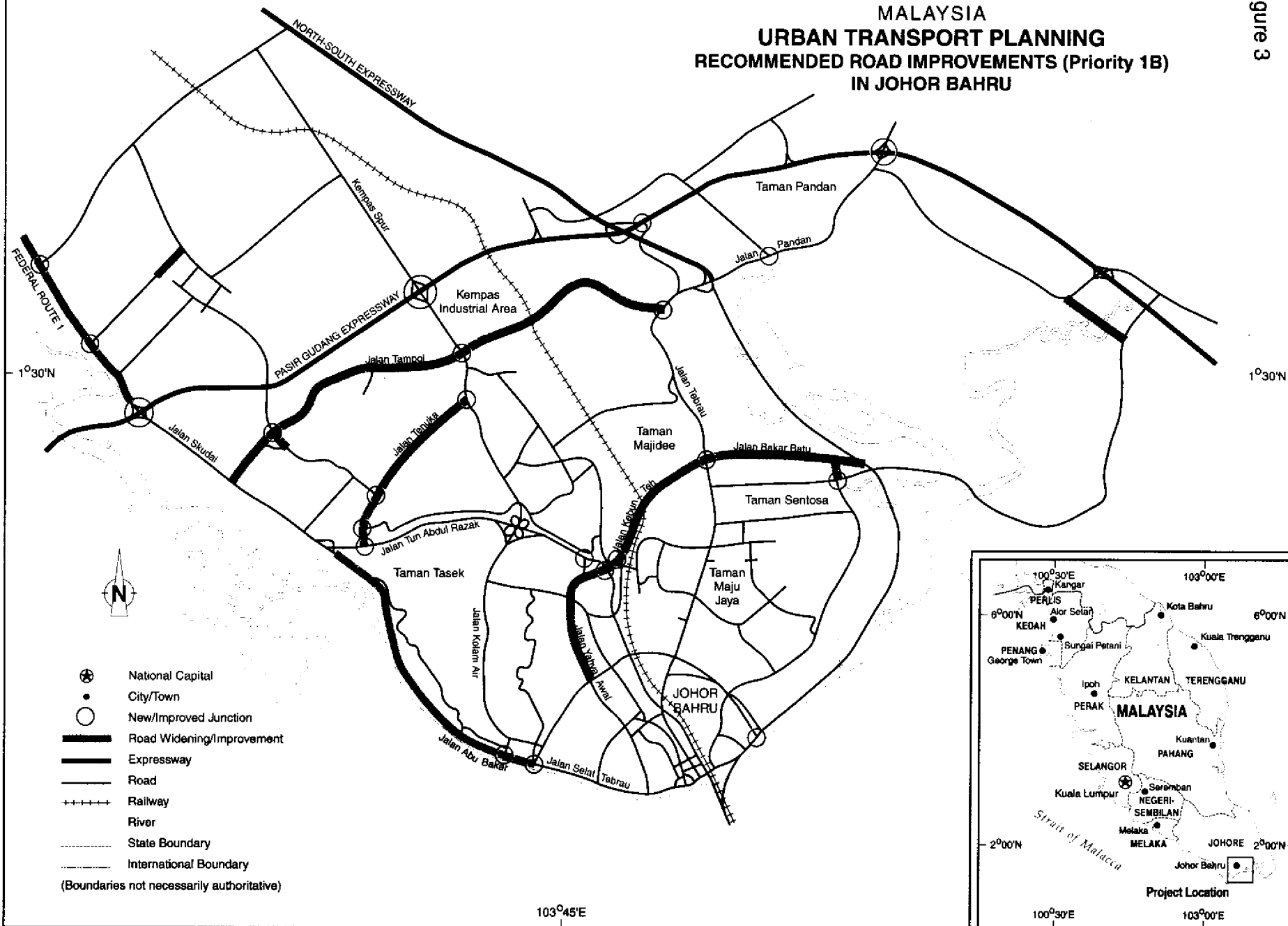
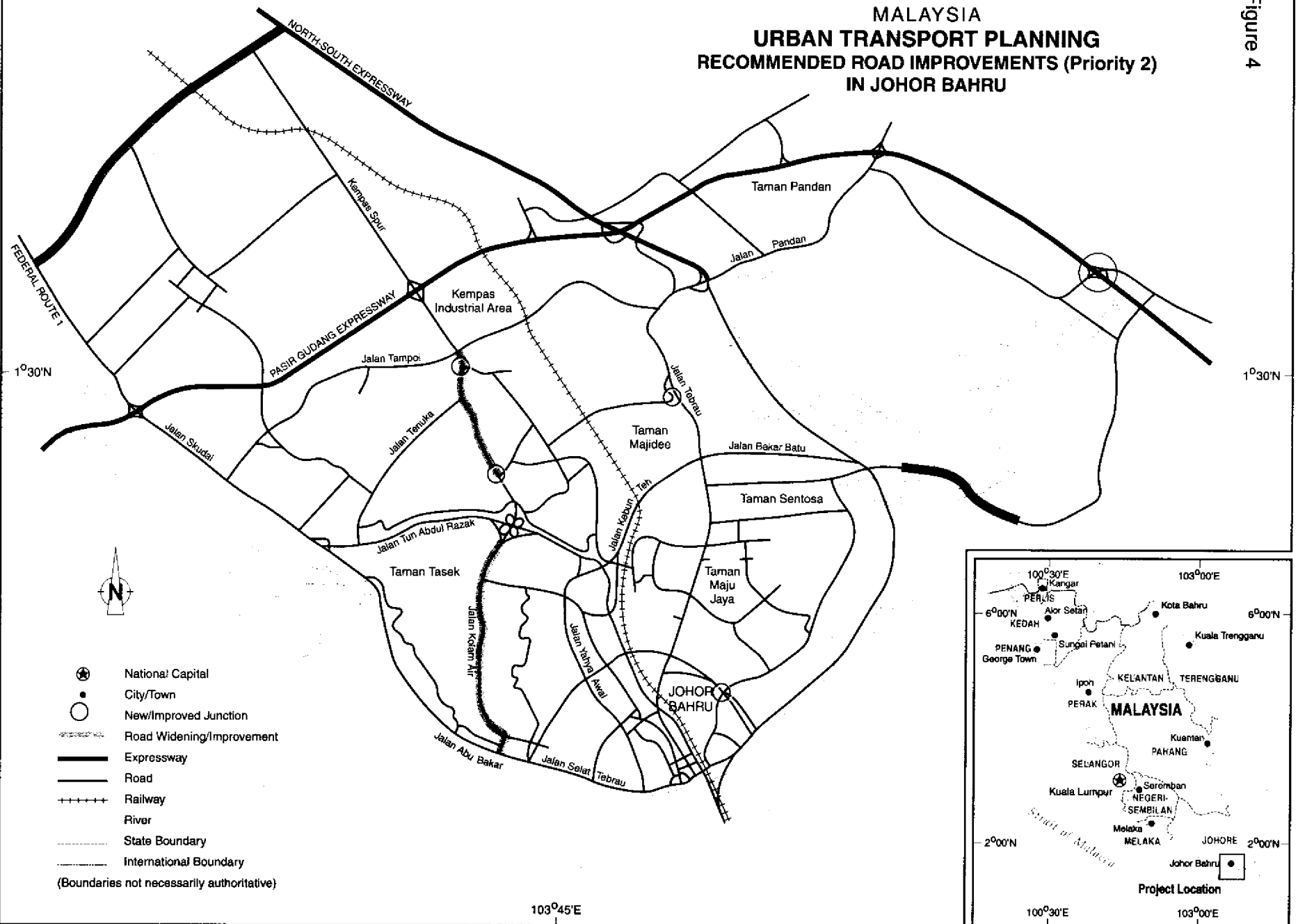


Figure 4

MALAYSIA URBAN TRANSPORT PLANNING RECOMMENDED ROAD IMPROVEMENTS (Priority 2) IN JOHOR BAHRU



Activity	Status
City Center Coordinated Traffic Signal Scheme	Not yet implemented.
Central Area Traffic Management Scheme	Not yet implemented.
Central Area Parking Control Strategy	Under implementation.
Old Town Area Traffic Calming Scheme	Will not be implemented. ¹
Chateau Garden Area Traffic Calming Scheme	Will not be implemented. ¹
Junction Improvement Schemes	Implemented.
Jalan Lahat Access Scheme	Not yet implemented.
Pedestrian Crossing Scheme	Not yet implemented.
Strategic Route Signing Scheme	Not yet implemented.
Accident Remedial Scheme	Under implementation.
City Center Bus Management Schemes	Not yet implemented.
Adoption of Road Network Hierarchy	Implemented.

9. The emphasis of the medium and long-term transport plans is to establish a clear functional road hierarchy, with more adequate facilities for orbital traffic to avoid the city center. New road links will be required to enable the city's road network to benefit from the Ipoh-Lumut Highway that is currently under construction on the western side of the city. The recommended medium/long-term transport plan for Ipoh is as follows:

- (i) agree and implement a clear roads hierarchy;
- (ii) complete the outer/middle ring road and connections to the Ipoh-Lumut Highway;
- (iii) create an inner ring road around the city center;
- (iv) improve all primary and district distributor roads to dual two-lane standard;
- (v) implement a city center parking policy;
- (vi) provide high standard public transport services to and from the city center; and
- (vii) provide ongoing monitoring of the city's traffic and transport system.

10. The location of the road infrastructure projects is illustrated in Figures 5-7.

C. Sungai Petani

11. Sungai Petani is the smallest of the three urban areas. It is situated on Federal Route 1 between the Penang/Butterworth conurbation and the Kedah State capital of Alor Setar. The town, located in the district of Kuala Muda, has recently been given Municipal status and the newly-gazetted town area has a present-day population of some 270,000. Located on the periphery of the Penang conurbation, Sungai Petani is receiving great attention from potential

¹ Traffic planners dispute the appropriateness of the proposal.

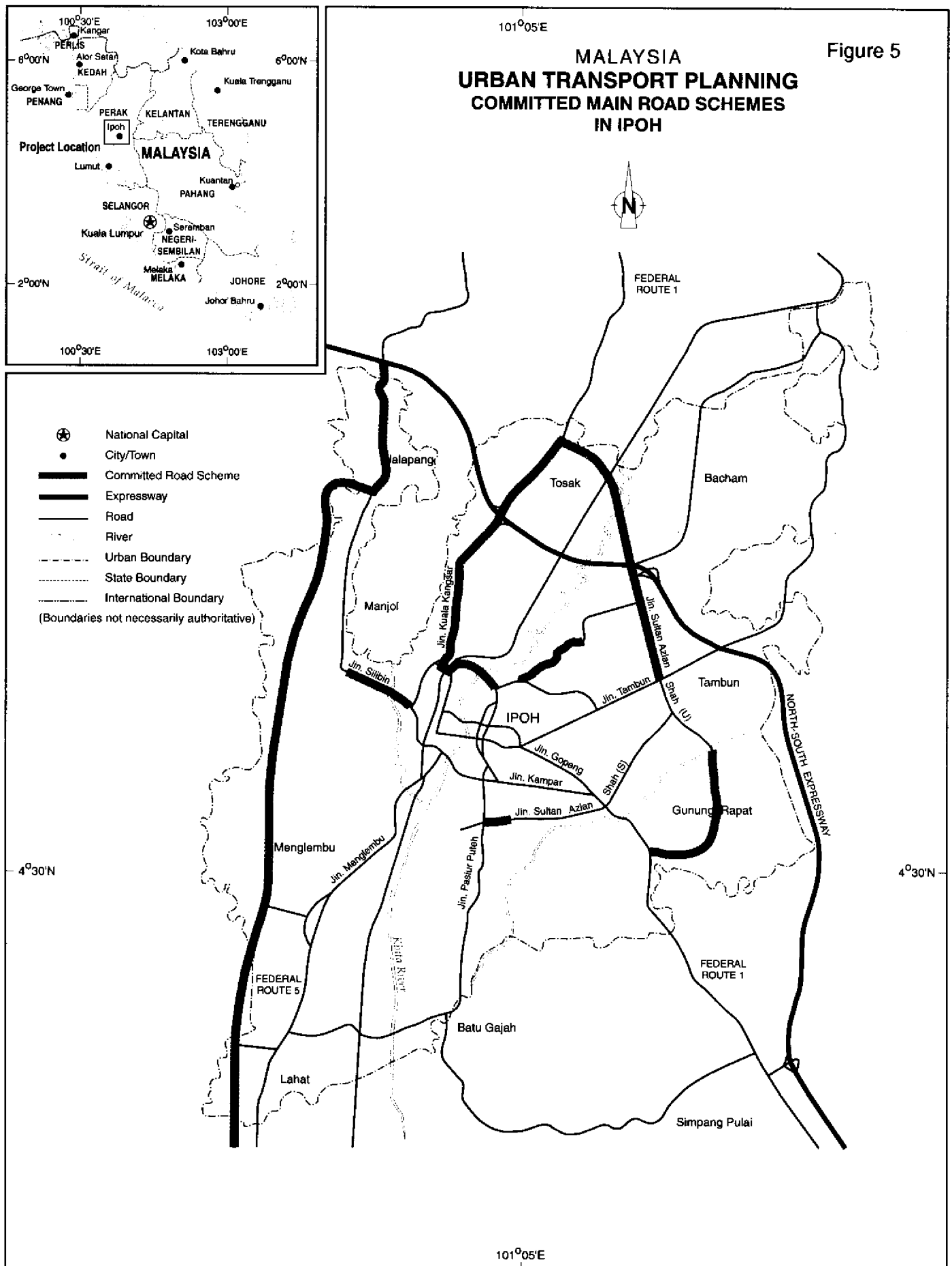


Figure 6

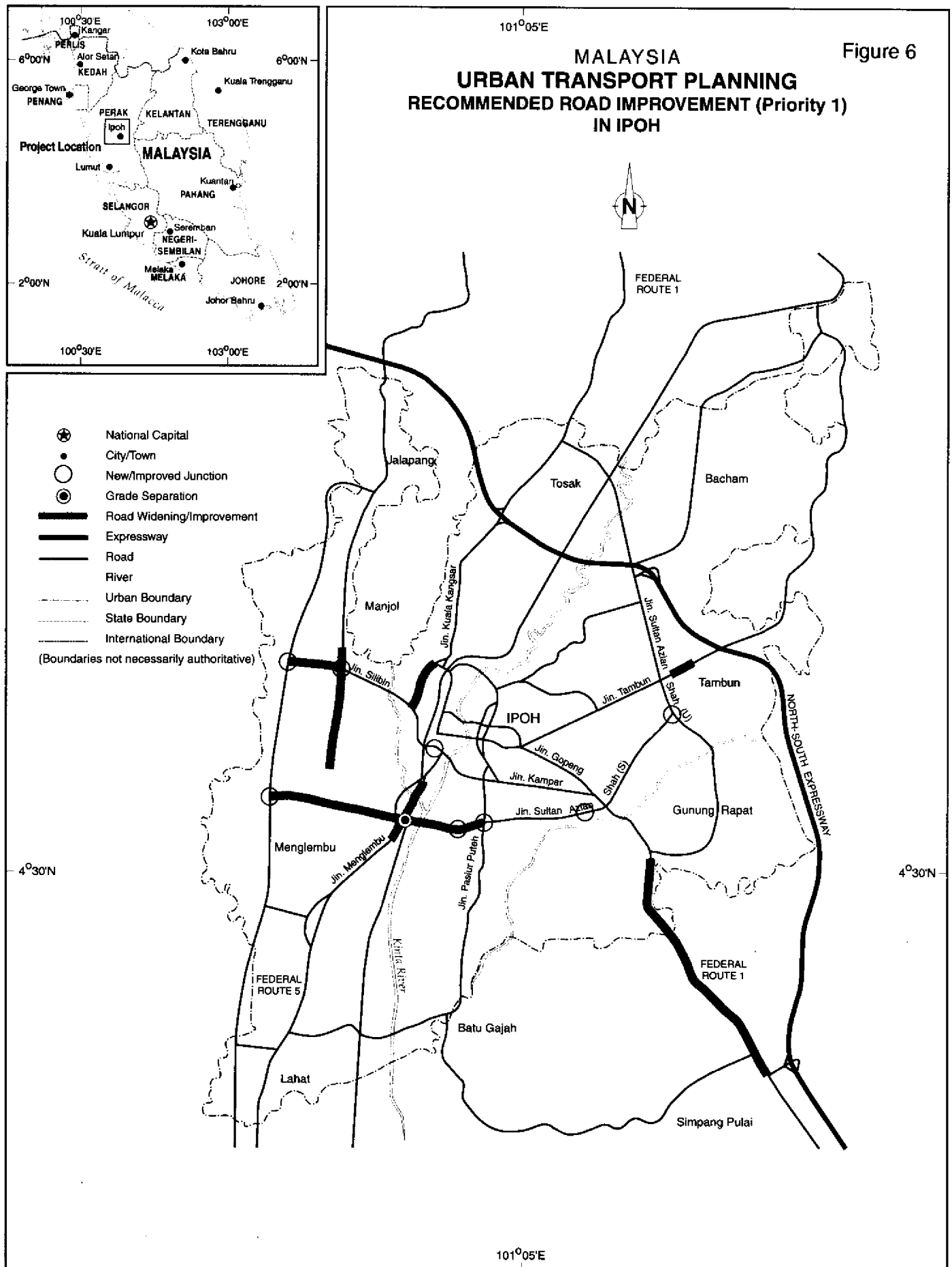
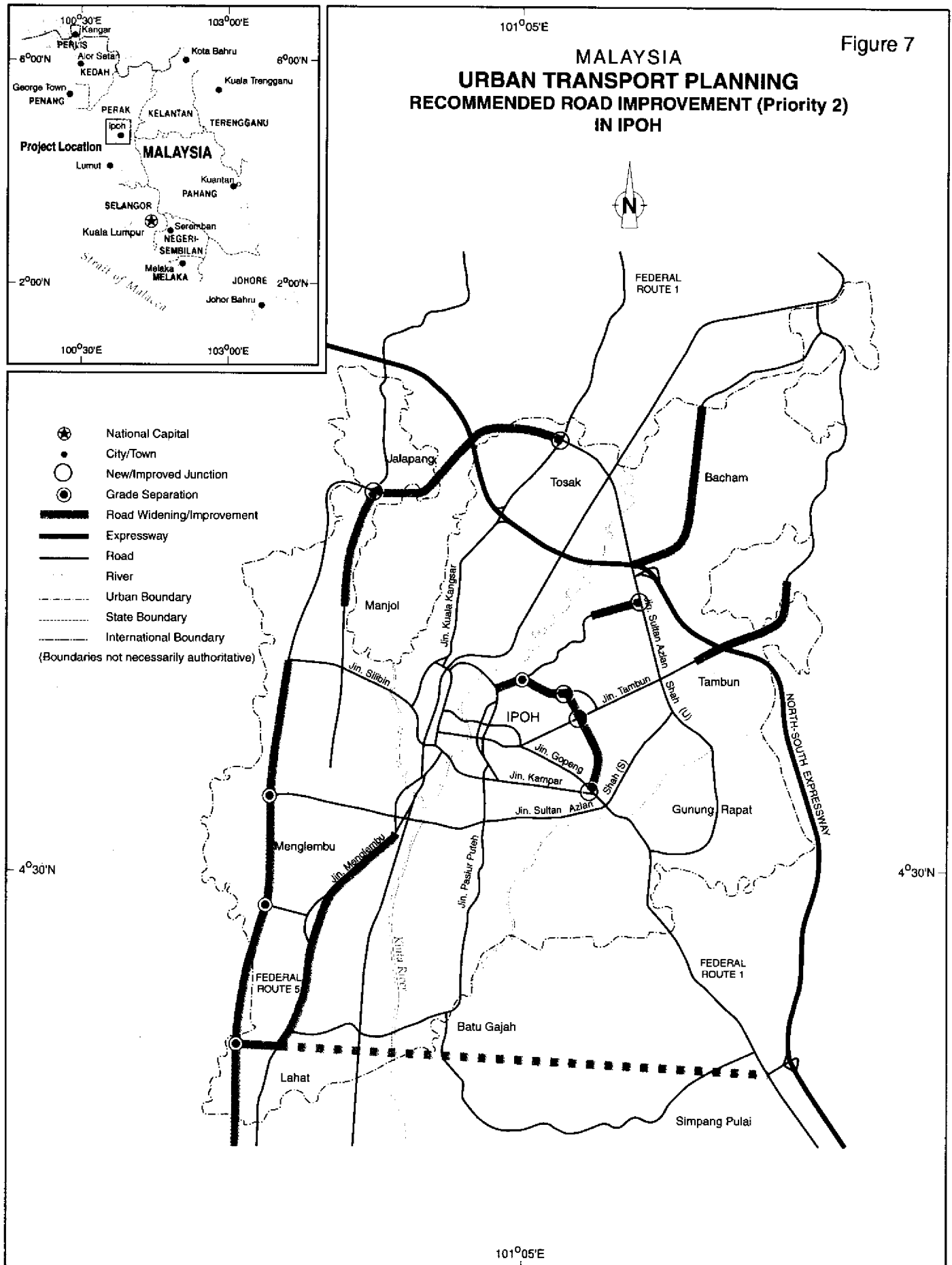


Figure 7



investors. Both industry and commerce are planned to expand rapidly in the area with a corresponding increase in population to 800,000 within the next 15 to 20 years.

12. The main problem with the present road network in Sungai Petani is the dominance of Federal Route 1. Although the North-South Expressway passes close to the town center, much of the through traffic remains on the old road. In addition, most of the residential, commercial, and industrial developments in the town have access to the Federal Route so that the majority of local traffic movements also needs to use this road. This mixture of local and longer-distance traffic, together with high traffic volumes, accounts for many of the operational and safety problems that are experienced in Sungai Petani. Problems are also being experienced at the main railway crossing near the town center, which causes extensive queuing during closure periods. In the longer term, the presence of the railway bisecting the town from north to south and the limited number of crossings available will further constrain Sungai Petani's road network.

13. The action plan for Sungai Petani in the immediate term and its implementation status is as follows:

Activity	Status
Coordinated Traffic Signal Scheme	Not yet implemented.
Central Area Traffic Management Scheme	Under implementation.
Central Area Parking Control Strategy	Not yet implemented.
Federal Route 1 Scheme	Implemented.
Federal Route 67 Scheme	Under implementation.
Town Center Pedestrian Movement Scheme	Under implementation.
Truck Routing Scheme	Not yet implemented.
Bus Routing Scheme	
(i) construction	Not yet implemented.
(ii) post-construction	Not yet implemented.
Adoption of Road Network Hierarchy	Implemented.

14. The medium/long-term plans for Sungai Petani concentrate on creating a more appropriate road structure within the town with particular emphasis being placed on reducing the dependence on Federal Route 1 and developing a road network that can support the anticipated pattern of land use. The recommended medium/long-term transport plan for Sungai Petani is as follows:

- (i) agree and implement a clear road hierarchy;
- (ii) complete the outer ring road and immediate connections to the existing road network;
- (iii) create an inner ring road around the town center;
- (iv) realign/restructure the district distributor road network;
- (v) widen primary route access to the town;

- (vi) implement a town center parking policy;
- (vii) provide high standard public transport services within the town;
- (viii) implement a strategic direction signing and truck routing system; and
- (ix) provide ongoing monitoring of the town's traffic and transport system.

15. The location of road infrastructure projects is illustrated in Figures 8-10.

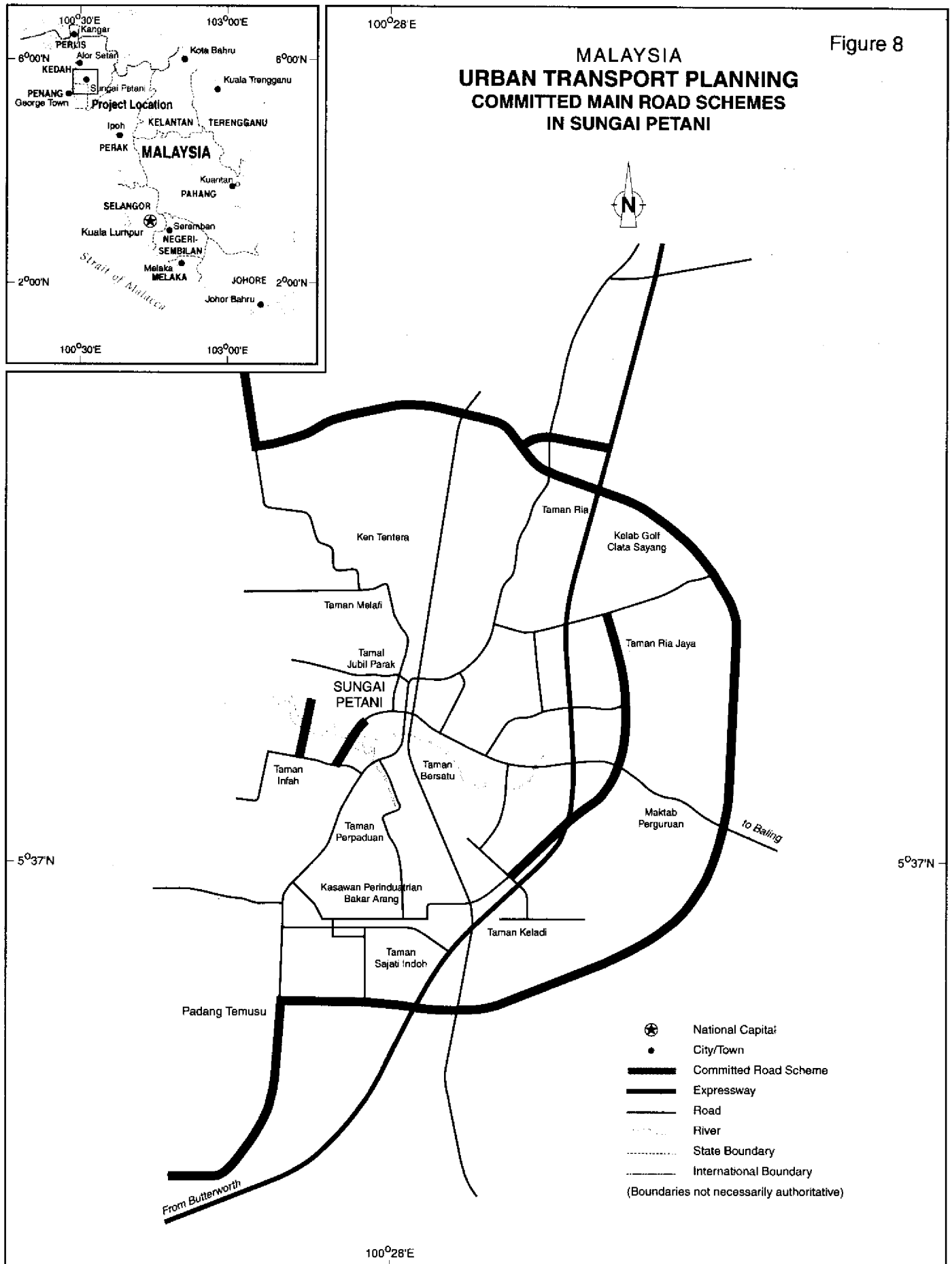
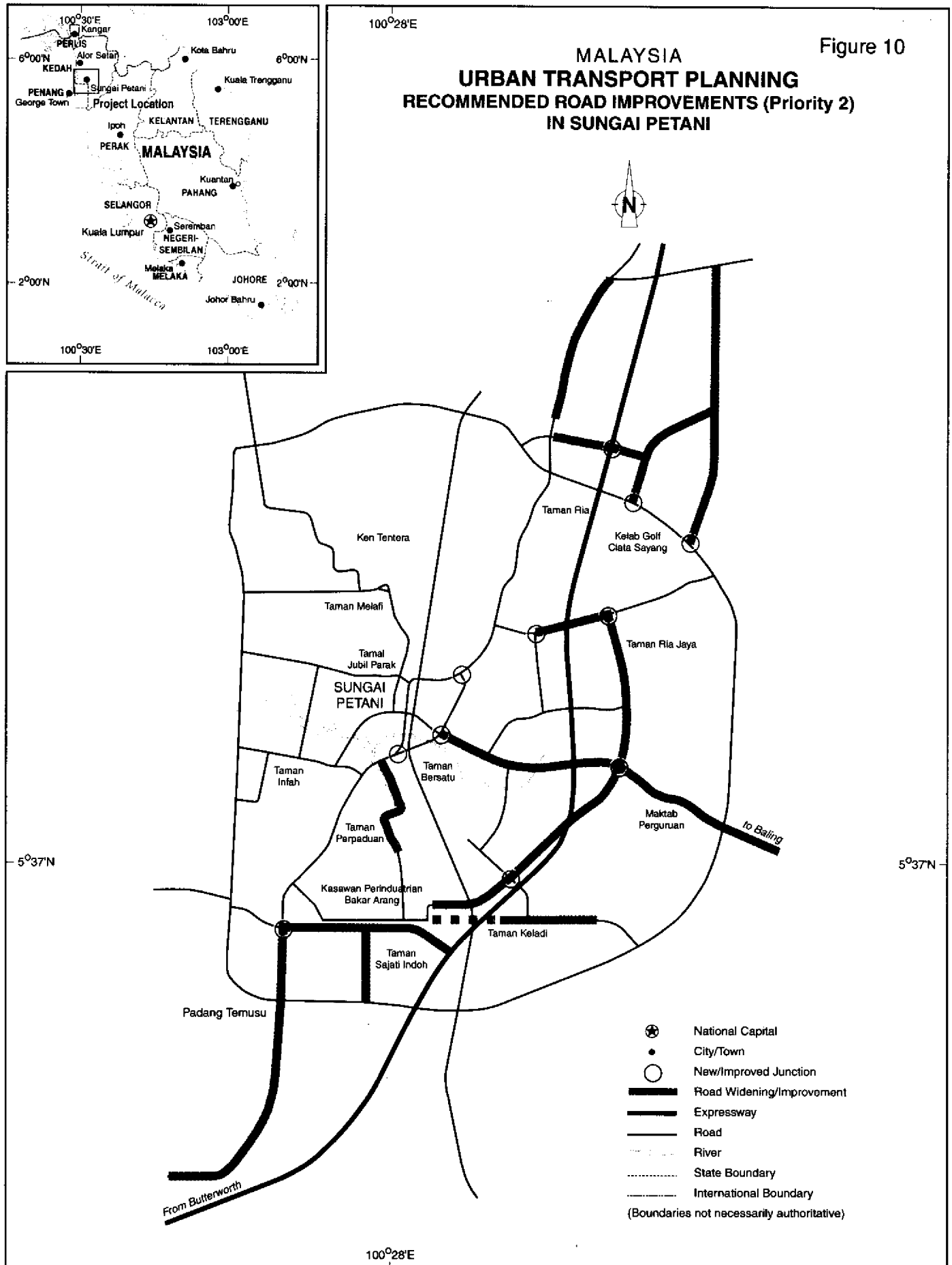




Figure 10

MALAYSIA
URBAN TRANSPORT PLANNING
RECOMMENDED ROAD IMPROVEMENTS (Priority 2)
IN SUNGAI PETANI



LIST OF WORKSHOPS/SEMINARS

Topic of Workshop/Seminar	Date
1. Objectives and Scope of the Project	11 May 1994
2. Data Requirements and Collection	25 May 1994
3. Audit of Existing Situation	8 June 1994
4. An Introduction to Transport Modeling	22 June 1994
5. Land Use Planning Context	6 July 1994
6. Building a Base Year Road Planning Model	20 July 1994
7. Traffic Management and Road Safety Measures	3 August 1994
8. Improving Bus Operations	17 August 1994
9. Forecasting and Scheme Testing Using the Road Planning	1 September 1994
10. Preparing and Justifying Action Plans	14 September 1994
11. Project Appraisal	19 September 1994