Chapter 3. RECOMMENDATIONS

CHAPTER 3 RECOMMENDATIONS

On the basis of the analysis and planning work undertaken in this study the following recommendations have been made:

1) **Rerouting of Public Transport vehicles along the LRT Corridor:**
   - When completed, the LRT will form a public transport axis along the corridor. In order to avoid unnecessary competition between the LRT, bus and jeepney, and to achieve an effective transportation system based on their financially sound operation, the sub-modal split of public transportation vehicles along the corridor should be regulated. Balanced modal shares among LRT, bus, and jeepney along the LRT corridor could be realized through the rerouting of jeepneys as shown in Figure 3.1.
   - To achieve the objectives of rerouting, routes should be restructured; at the same time, the allocation of the number of units to their respective routes should be controlled. The RMC (route measured capacity) or the number of units to be allocated to meet the demand adequately which is estimated as a guideline, should be duly taken into account.
   - When changes become necessary, the implication of a route or route structure with others should be carefully studied. For this purpose, the route list has been prepared in a manner wherein all routes "before" and "after" rerouting can be explicitly related to each other.
   - For the rerouting of existing routes and re-allocation of units, considerations should be given to the proposed new jeepney routes for possible operation.

2) **Associated Improvements of Facilities**
   - In order to realize the smooth operation of vehicles and provide adequate services to users, improvements for affected road sections and areas should be considered. They are given as follows (see Table 3.1):
     a) The surface of affected road sections should be improved.
     b) Traffic signals should be installed.
     c) A one-way traffic control system should be implemented.
     d) The control of curbside parking and on-road vendor activities should be strengthened.
   - Since the above activities are not directly controlled by MOTC, adequate coordination should be made with all relevant government agencies, most especially, when modifications are made for the rerouting plan.

3) **Further Rerouting**
   - In order to achieve the optimum functional split among existing public transportation modes and to provide better public transport services, the following aspects should be further taken into account:
     a) Rerouting for the rest of Metro Manila in relation to the proposed rerouting plan along the LRT corridor
     b) Rerouting for the entire Metro Manila, from a mid-term viewpoint: Anticipated impacts as a result of the improvements of committed transportation projects, as well as foreseeable changes in demand, urban development, etc. should be considered.

4) **Additional Studies on Mode Interchange Area Improvement**
   - Mode interchange functions have to be strengthened for the entire Metro Manila to increase public transport service level and operational efficiency, and to facilitate regulation of public transportation routes and operation.

- Detailed studies should be undertaken primarily for selected key mode interchange areas (See Figure 3.2 and Table 3.2). Since these areas will play an even more significant role in the future, the studies should not only be conducted on a short-term range but also on a mid-term range, incorporation the following factors: modal-split and rerouting directions, completion of committed transportation projects and urban development directions.

5) **Preparation of a Reliable Public Transportation Route List**

- In order to effectively manage and regulate the public transport operation, an accurate and up-to-data official route list should be elaborated to cover all existing and franchised routes. The following items should be clearly identified and regularly updated for each route:

    a) route name (based on standardized names of terminals/roads passed)
    b) route description and location
    c) route length
    d) legal status of the route
    e) number of units (operating and authorized)
    f) correspondence with BOT/MOTC route code

6) **Maintenance of Data Base and Public Transportation Planning Procedures**

- Different data bases and planning procedures were developed and processed for further use of MOTC for various analysis and planning purposes (See Table 3.3). In order that MOTC may use them effectively, an adequate maintenance and management system should be provided.
- The above data base forms a part of the total MOTC data base system, in order to expand and improve the system further, MOTC should strengthen its function with regards to collection, updating, processing, control and utilization of data.

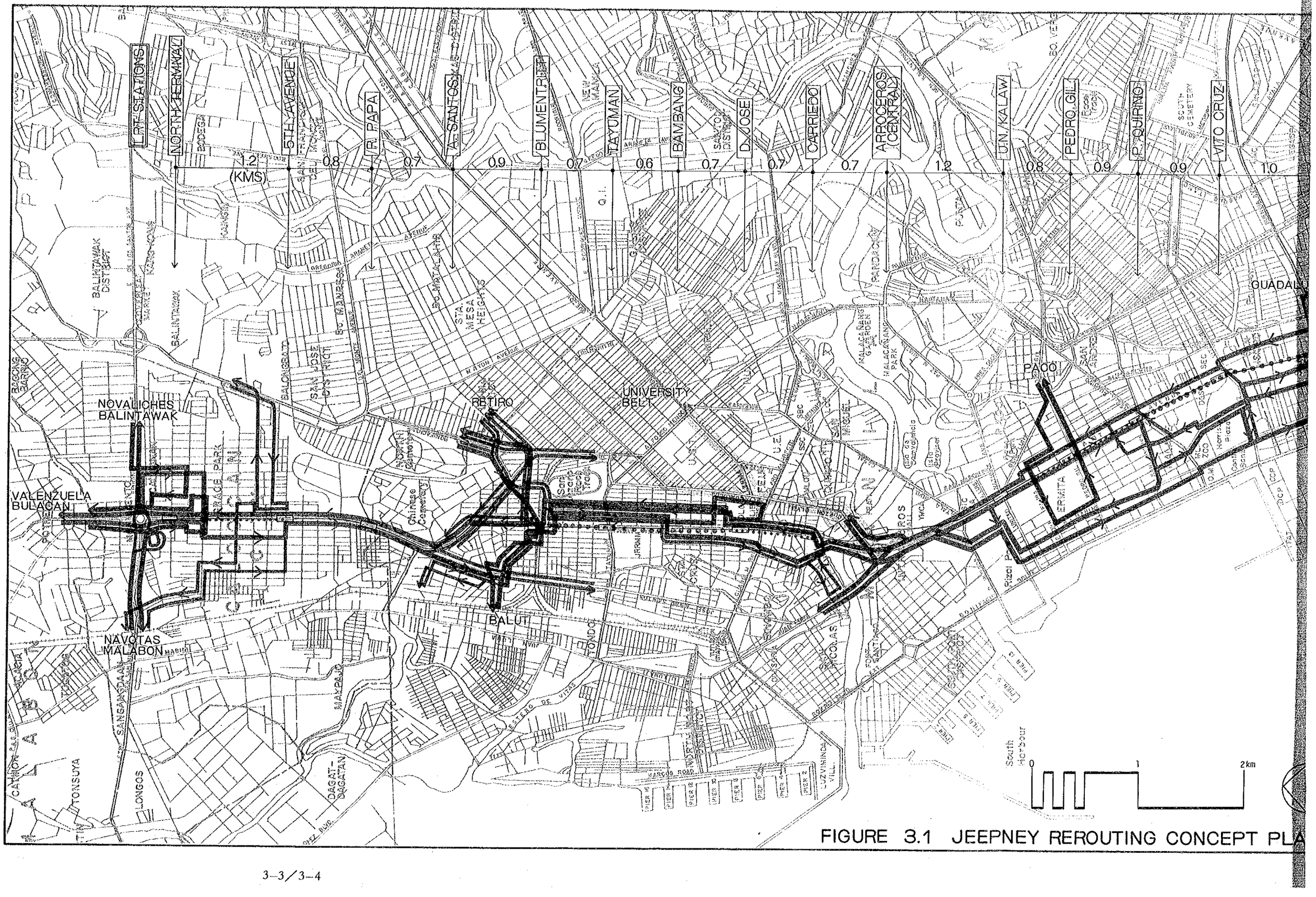

FIGURE 3.1 JEEPNEY REROUTING CONCEPT PLA

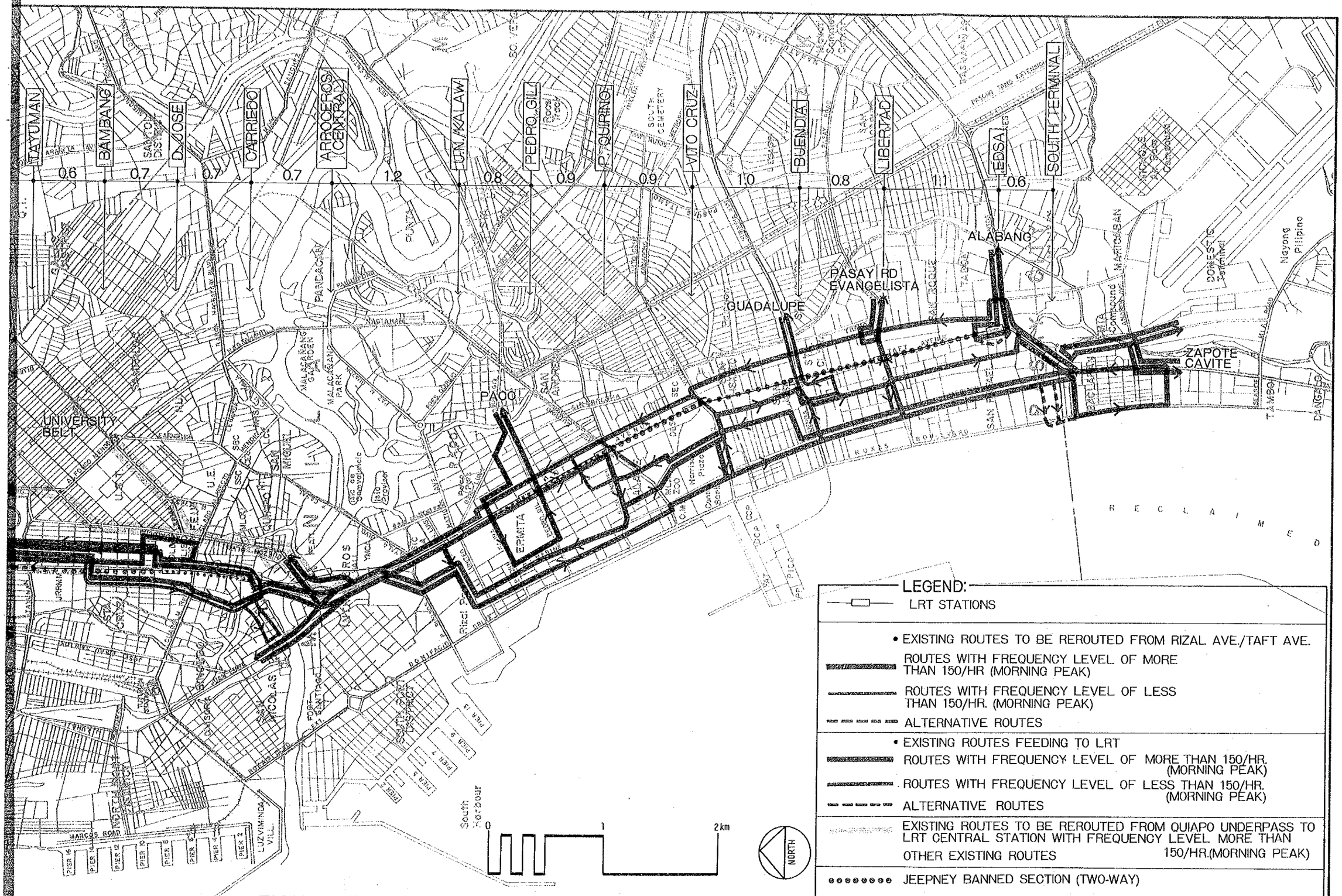

FIGURE 3.1 JEEPNEY REROUTING CONCEPT PLAN

Table 3.1
Associated Improvements/Countermeasures Required for Rerouting

1. Road Sections where Maintenance/Rehabilitations are Required:

	National Roads	Other Roads
First Priority Group: Immediate Action Needed	1) Mexico Road 2) F.B. Harrison (V. Cruz-Estrella and Ortigas-Mexico Rd)	1) Leveriza (P. Quirino-J. Rizal M.S.) 2) Dominga (200m. southward from V. Cruz) 3) T. Bugallon (Cavite-J.A. Santos) 4) Laguna (S. Reyes-F. Huertas)
Second Priority Group: Detailed Investigation Needed Immediately	1) Quirino Ave. (Redemptorist-Real) 2) P. Faura (Florida-Taft) 3) Oroquieta (Antipolo-Lope de Vega)	1) Redemptorist 2) A. Luna (Cartimar-Libertad) 3) Batangas (S. Reyes-F. Huertas) 4) 6th Ave. (M. Clara-A. Bonifacio) 5) 7th Ave. (M.H. del Pilar-3rd St.) 6) 10th Ave. (Rizal Ave.-J. Luna)

2. Intersections where Traffic Signals are to be Installed:

	Covered by MMTEAM	Additional JUMSUT Proposal
First Priority Group: Immediate Action Needed	1) J.A. Santos/T. Bugallon 2) Buendia/Dominga 3) Taft/EDSA 4) Mexico Rd./Redemptorist 5) Libertad/P. Burgos 6) Blumentritt/Dimasalang	1) EDSA/5th St. 2) Rizal Ave./Laguna 3) P. Gil/L. Guinto 4) P. Quirino/Leveriza 5) V. Cruz/Adriatico 6) Libertad/Leveriza 7) T. Claudio/Quirino Ave. 8) Buendia/Leveriza
Second Priority Group: Detailed Investigation Needed Immediately	1) EDSA/Rizal Ave. Ext, 2) A. Bonifacio/7th Ave. 3) Rizal Ave./Cavite 4) Rizal Ave./Batangas 5) Rizal Ave./V. Fugoso	1) T.M. Kalaw/Mabini 2) F. Huertas/V. Fugoso

3. Road Sections where Traffic Control Measures are to be Undertaken:

3.1 Proposed One-way Road Sections	1. F.B. Harrison (P. Quirino - San Juan) 2. San Andres (Roxas Blvd. - Taft) 3. Leveriza (Vito Cruz - Libertad) 4. Donada 5. San Juan (F.B. Harrison - Leveriza) 6. Libertad (Leveriza - Zamora) 7. Vergel 8. Dominga 9. L. Guinto (P. Faura - P. Quirino) 10. Leveriza (Adriatico - Remedios) 11. Remedios (Leveriza - L. Guinto) 12. T. Mapua (Bam bang - Ongpin) 13. Oroquieta (Antipolo - V. Fugoso) 14. F. Huertas (Antipolo - Lope de Vega) 15. Lope de Vega (Rizal Avenue - F. Huertas) 16. V. Fugoso (Oroquieta - Quezon Blvd.) 17. Antipolo (L. Rivera - S. Reyes)	18. Laguna (T. Mapua - Oroquieta) 19. Blumentritt (Rizal Avenue - A. Bonifacio) 20. Cavite (S. Reyes - Dimasalang) 21. T. Mapua (Cavite - Laguna) 22. S. Reyes (Antipolo - Cavite) 23. East 7th Avenue 24. East 6th Avenue 25. M.H. del Pilar (5th Avenue - 8th Avenue) 26. East 5th Street (EDSA - 10th Avenue) 27. A. del Mundo (5th Avenue - 10th Avenue) 28. 8th Avenue (M.H. del Pilar - F. Sevilla) 29. West Avenue (D. Aquino - Rizal Ave. Ext.) 30. F. Sevilla (8th Avenue - 10th Avenue) 31. D. Aquino (5th Avenue - 10th Avenue) 32. San Diego 33. Bustamante 34. 11th Avenue (A. del Mundo - San Diego)
3.2 Control of Curbside Parking	1. Taft Avenue (P. Quirino - EDSA) 2. F.B. Harrison (P. Quirino - Mexico Road) 3. Rizal Avenue (Plaza Sta. Cruz - Aurora Avenue) 4. T. Bugallon (Cavite - J.A. Santos) 5. Cavite (T. Bugallon - Dimasalang) 6. T. Mapua (Cavite - Laguna) 7. Laguna (S. Reyes - Oroquieta) 8. Antipolo (S. Reyes - L. Rivera) 9. Bam bang (Oroquieta - T. Mapua) 10. Lope de Vega (Rizal Avenue - F. Huertas)	11. T. Mapua (Bam bang - Ongpin) 12. San Andres (Taft - Mabini) 13. Donada (Vito Cruz - Buendia) 14. Leveriza (Vito Cruz - Libertad) 15. Park Avenue (Libertad - F. Rein) 16. Zamora (EDSA - Libertad) 17. P. Burgos (Libertad - Buendia) 18. Dominga (Buendia - Vito Cruz) 19. L. Guinto (Vito Cruz - P. Faura)
3.3 Control of On-Road Market and Street Vendors	20. Monumento 21. Blumentritt	22. Libertad 23. Baclaran

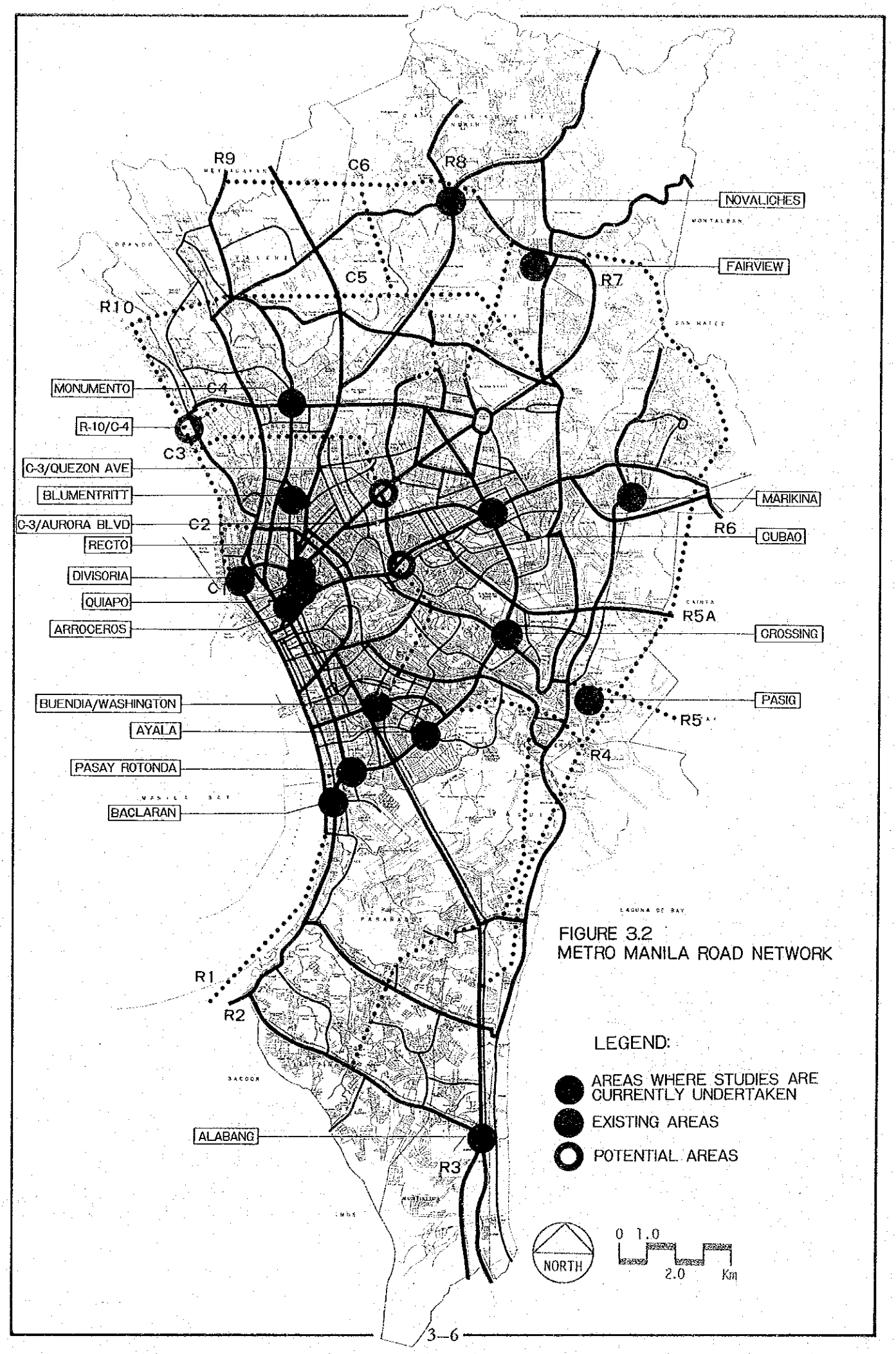

FIGURE 3.2
METRO MANILA ROAD NETWORK

Table 3.2
Selected Key Mode Interchange Areas in
Relation with Various Impact Factors[1]

Location		Terminals currently playing relatively important roles	Terminals which will play more important roles as a result of the completion of the LRT	Terminals which will become important when PNR is strengthened	Terminals which will become important when planned roads are completed[2]	Terminals which will become important due to their development	Terminals which will become important when constraints are relieved
Within C-2		Quiapo Recto Divisioria Pier	T.M. Kalaw P. Gil Arroceros	Divisoria Paco	Divisoria		Recto (Old Bilibid Prison) Divisoria (Squatter)
Between C-2 & C-4	North	Monumento Blumentritt	Monumento Blumentritt	Blumentritt	5th Avenue R10/C4		
	East	Cubao Crossing Guadalupe Sta. Mesa/ Stop & Shop		Sta. Mesa/ Stop & Shop	C3/Quezon Ave C3/Aurora	Crossing (Ortigas Com'l Complex)	
	South	Baclaran Pasay Rtda. Libertad Ayala	Baclaran Pasay Rtda. Libertad Vito Cruz	Buendia/ Washington	Pasay Rtda. Buendia/ Washington	Ayala	
Outside C-4	North	Navotas Malinta		Sangandaan		Fairview Novaliches	
	East	Marikina Pasig				Marikina Pasig	
	South	Zapote Alabang		Alabang Sucat		Alabang	

[1] areas in boxes are considered relatively more important both in the present and in the future
[2] include committed projects; R10, C3 and EDSA extension

Table 3.3
List of JUMSUT Data Base

Category	Title	Form[1]
Primary Data Base	A. HIS Data	
	1. 1980 HIS Sample Master	MT (JUMSUT 06, 07)
	2. 1983 HIS Sample Master	MT (JUMSUT 08)
	3. 1980 HIS Expanded Sample Master	
	1) Household Information	MT (JUMSUT 09)
	2) Household Member Information	MT (JUMSUT 10)
	3) Trip Information	MT (JUMSUT 11)
	4. 1983 HIS Expanded Sample Master	
	1) Household Information	MT (JUMSUT 12)
	2) Household Member Information	MT (JUMSUT 13)
	3) Trip Information	MT (JUMSUT 14)
	5. 1980 HIS Revised Trip Information (80 & 83 merged)	MT (JUMSUT 15)
	6. 1980 Cordonline Data	
	1) All Vehicle Information	MT (JUMSUT 22)
	2) Public Transport Passenger Information	MT (JUMSUT 23)
	7. 1980 Screenline Data	Original Survey Sheets
	8. 1980 OD Tables (217 Zones)	
	1) Person Base for Daily and Peak Hour	MT (JUMSUT 16-19)
	2) Vehicle Base for Daily and Peak Hour	MT (JUMSUT 19-21)
	B. Public Transport Data	
	1. 1983 Bus/Jeepney Route List	SD-No. 5
	2. 1983 Bus/Jeepney Route Frequency	MT (JUMSUT 03) & SD-No. 6
	3. 1983 Bus/Jeepney Operation Characteristics Sample Master	MT (JUMSUT 02)
Planning Data Base	1. 1980 Metro Manila Socio-economic Data (202-Zone base)	Diskette
	2. Metro Manila Road Network	
	1) EDP Network (1,687 sections)	CD & SD-No. 6
	2) Road Inventory (major roads)	SD-No. 7
	3. Metro Manila Road Traffic Data (1978-1981)	
	1) Traffic Volume by Vehicle Type	SD-No. 7
	2) Traffic Characteristics	SD-No. 7
	4. Metro Manila Public Transport Data	
	1) Operation/Passenger Demand Characteristics (by route)	MT (JUMSUT 04, 05)/SD-No. 6
	2) Operation/Passenger Demand Characteristics (by section)	SD-No. 6
	3) Terminal Inventory (all buses, jeepneys, tricycles)	SD-No. 7
	5. Summarized Metro Manila Jeepney Route Information (on simplified road network)	Diskette
Program	1. TRANSTEP (JUMSUT Version)	MT (JUMSUT 01)
	1) PTEDIT	with Manual (SD-
	2) PTPATH	No. 4)
	3) PTLOAD	
	2. Highway Type Traffic Assignment Program	Diskette with Manual (SD-No. 3)
	3. Jeepney Route Information Management System (PT MANAGE) including Relevant Data	Diskette with Manual (SD-No. 3)

[1] MT: Magnetic Tape (code number) Diskette: for Micro-computer
SD: JUMSUT Supporting Document CD: Card Deck

JICA