Project No.	Project Title				Sector
C-03	Unification and Upgra Jakarta	ding of Area Tra	affic Co	ntrol System in	☐ Road ☐ Railway ☐ Bus
Project Locatio	on	Project Prior	ity	Implementation	🖌 Traffic Management
	ed intersections in	Short-tern	n	Period	Safety and Security Environment
Jakarta		🛛 Medium-te	erm	3 years	City Planning
		Long-term			Institution/Funding
1. Summary of	f Objectives		2. Ex	pected Benefits/Ou	tputs
- To improve eff	ficiency of signal contro	ol –	- Hig	her travel speed and	shorter travel time
- To alleviate co	ngestion at bottleneck		- Les	s fuel consumption	
- To collect and	disseminate traffic info	rmation	- Les	s pollutant	
3. Project Dese	cription		4. Pro	oject Linkages/Othe	er Sector Linkages
	fic responsive and adap detectors for efficient s				
- Total of 400 in	ntersections				
5. Important A	ssumptions/Conditions	ons for the Pro	oject	6. Implementing	Agency
- Replace the ex	xisting three (3) ATC sy	rstems		DKI, Dinas Perhubu	ngan
7. Estimated I (in 2003 prices	nvestment Requirem s)	ent	8. Sp -	ecial Considerations	S
Project Impleme	entation: <u>R</u>	<u>p. 210 B</u>			
Annual Recurrer	nt O & M: <u>F</u>	<u>Rp. 4.2 B</u>			
9. Environmen	tal Impact	10. Locat	ion Ma	p/Information/Dra	wings
1) Social Enviro	nment				
Resettlement ne					
	omic activity patterns:     movement patterns: [				
Cultural Heritage	e: D				
Water right, fish Public health: B	ing right: D				
Construction wa	stes: D				
Risk for disaster					
2) Natural Envir	onment				
Aesthetics: D River, undergrou	und water and erosion:	D			
Flora and Fauna					
Meteorology: D					
3) Pollution Air pollution: B					
Water pollution:	D				
Soil contaminati Noise and vibrat					
Land depression					
Stench: D		_			
A: Serious impa					
B: Impact expect C: Unknown (fu	cted rther study necessary)				
D: No impact ex					

Project No.	Project Title				Sector
C-04	Bus Priority Measures in Jakarta				☐ Road ☐ Railway
Project Locatio	n	Project Prior	itv	Implementation	- ∐ Bus ⊠ Traffic Management
Major bus corrid		Short-terr	-	Period	Safety and Security
		Medium-te		7 years	Environment
		☐ Long-term			City Planning Institution/Funding
1. Summary of	Objectives			 pected Benefits/Ou	
-	y to bus operation and	cupport		-	ting to public transportation
better bus ser	, ,	support			
			- Les	ss fuel consumption ov	ving to use of mass transit
3. Project Desc	cription		4. Pr	oject Linkages/Othe	er Sector Linkages
Hardware imp	rovement measures				
Exclusive bus	s lane				
Bus contra-fl	low lane				
Bus priority s	signal				
	f buses from turning re				
-	provement measure				
	ind adherence to time t	able			
Bus location					
Various disco					
Long operati	-			-	
5. Important A	ssumptions/Conditions	ons for the Pro	oject	6. Implementing A	Agency
				Dinas Perhubungan,	DKI Jakarta
	nvestment Requirem	ent	8. Sp	ecial Considerations	5
(in 2003 prices	5)				
Project Impleme	entation:	-			
Annual Recurren	nt O & M:	-			
9. Environmen	tal Impact	10. Locat	ion Ma	p/Information/Dra	wings
1) Social Enviror	nment				
	omic activity patterns: I I movement patterns: I e: D ing right: D stes: D				
2) Natural Envir	onment				
Aesthetics: D	and water and erosion:	D			
3) Pollution					
Air pollution: B Water pollution: Soil contaminati Noise and vibrat Land depression Stench: D	on: D ion: B	_			
A: Serious impa B: Impact expec C: Unknown (fu D: No impact ex	ted rther study necessary)				

Project No.	Project Title				Sector
C-05	C-05 Traffic Information System for Surface				☐ Road ☐ Railway
Project Location Various key inte	n rsections in Jakarta	Project Prior	n erm	Implementation Period 1.8 years	<ul> <li>☐ Bus</li> <li>☐ Traffic Management</li> <li>☐ Safety and Security</li> <li>☐ Environment</li> <li>☐ City Planning</li> <li>☐ Institution/Funding</li> </ul>
1. Summary of	Objectives			pected Benefits/Out	·
<ul> <li>To collect and disseminate traffic information for better management of road traffic</li> </ul>		- Les - Les	s congestion s fuel consumption s pollutant		
3. Project Des	cription		4. Pr	oject Linkages/Othe	er Sector Linkages
<ul> <li>Vehicle detect</li> <li>Jakarta</li> </ul>	ors at 100 key intersec	tions in			
- Data transmis	sion through existing s	ignal system			
- 16 changeable	e message signs				
- Establishment	of Traffic Information	Center			
5. Important A	ssumptions/Conditions	ons for the Pro	oject	6. Implementing A	lgency
<ul> <li>Technical feas existing ATC s</li> </ul>	ibility to add vehicle de ystem	tectors to the		DKI, Dinas Pekerja U	Jmum
7. Estimated Investment Requirement		8. Sp	ecial Considerations	5	
(in 2003 prices)			•	nt of the existing ATC systems	
Project Impleme		<u>). 57.6 B</u>	wo	uld be more economic	al in the long run
Annual Recurrer		<u>Rp. 1.2 B</u>			
9. Environmen	tal Impact	10. Locat	ion Ma	p/Information/Drav	wings
Change of socia Cultural Heritage Water right, fish Public health: B Construction wa Risk for disaster 2) Natural Envir Aesthetics: D River, undergrou Flora and Fauna Meteorology: D 3) Pollution Air pollution: B Water pollution: B Water pollution: Soil contaminati Noise and vibrat Land depression Stench: D A: Serious impa	becessity: D bmic activity patterns: I movement patterns: I e: D ing right: D stes: D /accident: B onment ind water and erosion: : D D on: D cion: B : D ct expected				
B: Impact expect C: Unknown (fu D: No impact ex	rther study necessary)				

Project No.	Project Title				Sector	
C-06	Management of Public	c Transportation	in Bod	etabek	☐ Road ☐ Railway	
Congested point (Pasar) bus term	Project Location       Project Priori         Congested points such as market       Short-term         (Pasar) bus terminals, and       Medium-terminals         intersections where passengers are       Long-term		n erm	Implementation Period 4 years	<ul> <li>Bus</li> <li>Traffic Management</li> <li>Safety and Security</li> <li>Environment</li> <li>City Planning</li> <li>Institution/Funding</li> </ul>	
1. Summary of	Objectives		2. Ex	l pected Benefits/Out	l tputs	
-	affic congestion by regi	lating public	- Less congestion			
transportation	5 , 5	facing public	- Less fuel consumption			
				s pollutant		
3. Project Desc	-		4. Pro	oject Linkages/Othe	er Sector Linkages	
An oversupply of public transport is observed, at least, during off-peak hours. Regulatory measures to make behavior of public transport operators more orderly must be implemented, and, if necessary, reduction of the supply such as rotation of operation by plate number can be considered.						
5. Important A	ssumptions/Conditions	ons for the Pro	oject	6. Implementing A	lgency	
-				Dinas Perhubungan,	Local Government	
7. Estimated Investment Requirement (in 2003 prices)		8. Sp	ecial Considerations	5		
Project Impleme	ntation:					
Annual Recurren						
9. Environmen	tal Impact	10. Locat	ion Ma	p/Information/Dray	wings	
1) Social Enviror	nment					
	omic activity patterns: movement patterns: I e: D ing right: D stes: D					
2) Natural Enviro	onment					
Aesthetics: D River, undergrou Flora and Fauna Meteorology: D	ind water and erosion: : D	D				
3) Pollution						
Air pollution: B Water pollution: Soil contaminati Noise and vibrat Land depression Stench: D	on: D ion: B					
A: Serious impace B: Impact expect C: Unknown (fur D: No impact ex	ted ther study necessary)					

Project No.	Project Title				Sector
C-07	Traffic Management at Pasar in Bodetabek				☐ Road ☐ Railway
Project Locatic Vicinity of pasar kabupaten		Project Prior	n erm	Implementation Period 1.7 years	<ul> <li>☐ Bus</li> <li>☑ Traffic Management</li> <li>☐ Safety and Security</li> <li>☐ Environment</li> <li>☐ City Planning</li> <li>☐ Institution/Funding</li> </ul>
1. Summary of	Objectives		2. Ex	pected Benefits/Out	tputs
<ul> <li>To alleviate congestion and streamline traffic around pasar</li> </ul>		<ul> <li>Higher travel speed and shorter travel time</li> <li>Less fuel consumption</li> <li>Less pollutants</li> </ul>			
3. Project Desc				s traffic accident	v Costov Linkovo
<ul> <li>Application of techniques to</li> </ul>	various traffic manage		4. PR	oject Linkages/Othe	er Sector Linkages
			de et		
5. Important A	ssumptions/Conditions		Ject	6. Implementing A Dinas Pekerja Umum Kota and Kabupaten	n or Dinas Perhubungan in
7. Estimated In (in 2003 prices	nvestment Requirem 5)	ent	8. Sp -	ecial Considerations	5
Project Impleme	entation: <u>R</u> r	<u>b. 12.4 B</u>			
Annual Recurrer	t O & M:	None			
9. Environmen	tal Impact	10. Locat	ion Ma	p/Information/Drav	wings
1) Social Enviror	nment				
	omic activity patterns: I movement patterns: I e: D ing right: D stes: D				
2) Natural Envir					
Aesthetics: D River, undergrou Flora and Fauna Meteorology: D	Ind water and erosion:	D			
3) Pollution					
Air pollution: B Water pollution: Soil contaminati Noise and vibrat Land depression Stench: D	on: D ion: B	_			
A: Serious impa B: Impact expec C: Unknown (fu D: No impact ex	ted ther study necessary)				

Project No.	Project Title				Sector
C-08	Traffic Engineering (Geometric) Impr			nt in Bodetabek	☐ Road ☐ Railway
Project Locatio	on	Project Prior	ity	Implementation	Bus Traffic Management
Various bottlene	ck points in	Short-tern	n	Period	☐ Safety and Security ☐ Environment
Bodetabek		☐ Medium-te		2.5 years	City Planning
		Long-term			Institution/Funding
1. Summary of	-			pected Benefits/Ou	-
<ul> <li>To alleviate co Bodetabek</li> </ul>	ngestion at bottleneck	sections in	<ul> <li>Higher travel speed and shorter travel time</li> <li>Less fuel consumption</li> </ul>		
				s pollutant	
				s accident	
2 Droject Deer	vintion				- Costor Linkagos
3. Project Dese	-	<b></b>	4. Pr	oject Linkages/Othe	er Sector Linkages
traffic enginee	at bottleneck sections ring measures such as traffic signal, traffic re sign	geometric			
- Total of 42 bot Kabupaten	ttleneck sections in 7 K	ota and			
5. Important A	ssumptions/Conditions	ons for the Pro	oject	6. Implementing A	lgency
				Dinas Pekerja Umun Kota and Kabupaten	n or Dinas Perhubungan of
7. Estimated Investment Requirement (in 2003 prices)			8. Sp	ecial Considerations	5
Project Impleme	entation: <u>R</u> p	<u>o. 21.5 B</u>	-		
Annual Recurrer	it O & M:	None			
9. Environmen	tal Impact	10. Locat	ion Ma	p/Information/Drav	wings
1) Social Enviror	nment				
	omic activity patterns: movement patterns: I e: D ing right: D stes: D				
2) Natural Envir	onment				
Flora and Fauna Meteorology: D	ind water and erosion: : D	D			
3) Pollution					
Air pollution: B Water pollution: Soil contaminati Noise and vibrat Land depression Stench: D	on: D ion: B	_			
A: Serious impa B: Impact expec C: Unknown (fur D: No impact ex	ted ther study necessary)				

Project No.	Project Title				Sector
C-09	Toll Road Traffic Infor	mation System			Road     Railway
Project Locatio	on	Project Prior	ity	Implementation	- ∐ Bus ⊠ Traffic Management
	ban Tollway, Sections	Short-tern	n	Period	Safety and Security
of radial toll road Ring Road	ds, Jakarta Outer	K Medium-te	erm	Phase 1: 3 years	<ul> <li>Environment</li> <li>City Planning</li> </ul>
		Long-term	1	Phase 2: 3 years	Institution/Funding
1. Summary of	Objectives		2. Ex	pected Benefits/Ou	tputs
	icient and safe operatio	on of toll road	- Les	s severe traffic conge	stion
network in Jat	oodetabek area		- Qui	cker response to incid	lent
			- Les	s pollutant	
			- Bet	ter service to toll road	lusers
3. Project Desc	cription		4. Pro	oject Linkages/Othe	er Sector Linkages
- System covers	a total of 215 km of t	oll road			
- Control center	will be established				
- Various survei	llance equipment				
- Digital commu	inication network along	toll road			
- System will be	e constructed in two ph	ases			
5. Important A	ssumptions/Conditions	ons for the Pro	oject	6. Implementing A	Agency
				PT. Jasa Marga	
7. Estimated In (in 2003 prices	nvestment Requirem	ent	8. Sp	ecial Considerations	5
Project Impleme	entation:	<u>Rp. 872 B</u>	-		
Annual Recurren	tO&M (Phase 1):	<u>Rp. 28.5 B</u>			
	(Phase 2):	<u>Rp. 44.8 B</u>			
9. Environmen	tal Impact	10. Locat	ion Ma	p/Information/Dray	wings
1) Social Enviror	nment				
Change of social Cultural Heritage Water right, fish Public health: B Construction wa Risk for disaster	omic activity patterns: movement patterns: I e: D ing right: D stes: D /accident: B				
2) Natural Enviro	onment				
Aesthetics: D River, undergrou Flora and Fauna Meteorology: D	ind water and erosion: : D	D			
3) Pollution					
Air pollution: B Water pollution: Soil contaminati Noise and vibrat Land depression Stench: D	on: D ion: B	_			
A: Serious impace B: Impact expect C: Unknown (fur D: No impact ex	ted <sup>·</sup> ther study necessary)				

Project No.	Project Title				Sector
C-10	C-10 Electronic Toll Collection (ETC) System				☐ Road ☐ Railway
Project Location		Project Prior Short-tern Medium-te	n erm	Implementation Period 2.5 years	<ul> <li>☐ Bus</li> <li>☑ Traffic Management</li> <li>☐ Safety and Security</li> <li>☐ Environment</li> <li>☐ City Planning</li> <li>☐ Institution/Funding</li> </ul>
1. Summary of	Objectives			l pected Benefits/Out	
- To achieve fas	ter toll transaction at t	oll gate	- No	stopping at toll gate for	or ETC users
		-	- Less queue at toll plaza		
			- Les	s pollutant	
3. Project Des	cription			oject Linkages/Othe	er Sector Linkages
- All on- and off	-ramp in Jabodetabek ETC equipped toll gate				-
<ul> <li>Central computing transactions</li> </ul>	iter for batch processin	g of toll			
- On-board tag	to be purchased by use	er			
5. Important A	ssumptions/Conditions	ons for the Pro	oject	6. Implementing A	Igency
- Rationalization	n of toll structure is neo	cessary.		Jasa Marga or a thire	d party
7. Estimated Investment Requirement (in 2003 prices)		8. Sp	ecial Considerations	3	
Project Impleme	entation: <u>Rp.</u>	<u>610.8 B</u>			
Annual Recurrer	it O & M: <u>R</u> r	<u>р. 14.7 В</u>			
9. Environmen	tal Impact	10. Locat	ion Ma	p/Information/Drav	wings
1) Social Enviro	nment				
	omic activity patterns: movement patterns: I e: D ing right: D stes: D				
2) Natural Envir	onment				
Aesthetics: D River, undergrou Flora and Fauna Meteorology: D	ind water and erosion: : D	D			
3) Pollution					
Air pollution: B Water pollution: Soil contaminati Noise and vibrat Land depression Stench: D	on: D ion: B				
A: Serious impa B: Impact expec C: Unknown (fu D: No impact ex	ted ther study necessary)				

Project No.	Project Title				Sector
C-11	Rehabilitation and Ins	stallation of Traf	fic Sign	als	Road     Railway
Project Location	on	Project Prior	ity	Implementation	Bus Iraffic Management
Major intersectio Bodetabek	ons in Jakarta and	Short-terr	erm	Period 4 years	<ul> <li>Safety and Security</li> <li>Environment</li> <li>City Planning</li> <li>Institution/Funding</li> </ul>
1. Summary of	Objectives		2. Ex	pected Benefits/Ou	tputs
	cient traffic flows and e abilitation and installation		_	oother traffic flows	
signals				s delays at intersectio er from vehicular traf	
3. Project Des	cription		4. Pro	oject Linkages/Othe	er Sector Linkages
	traffic signals and insta	allation of	Instal	lation of new traffic si	gnals should be consistent developments in the future
5. Important A	ssumptions/Conditions	ons for the Pro	oject	6. Implementing	Agency
				Dinas Perhubungan	
7. Estimated I (in 2003 prices	nvestment Requirem s)	ent	8. Sp	l ecial Considerations	5
Project Impleme	entation: R	р. 245 <u>В</u>	-		
Annual Recurrer					
9. Environmen	tal Impact	10. Locat	ion Ma	p/Information/Dra	wings
1) Social Enviro	nment	Net an eif		h	
	omic activity patterns: I movement patterns: I e: D ing right: D stes: D		ed on t	пе тар	
2) Natural Envir	onment				
Aesthetics: D River, undergrou Flora and Fauna Meteorology: D	ind water and erosion: : D	D			
3) Pollution					
Air pollution: B Water pollution: Soil contaminati Noise and vibrat Land depression Stench: D	on: D ion: B	_			
A: Serious impa B: Impact expec C: Unknown (fu D: No impact ex	ted rther study necessary)				

Project No.	Project Title				Sector	
PB-01	Busway System (1) K	ota-Lubak Bulu	S			
	(Extension of Kota-Bl	ok M)			☐ Railway ⊠ Bus	
Project Location	l on	Project Prior	ity	Implementation	<ul> <li>Traffic Management</li> <li>Safety and Security</li> </ul>	
-	Blok M – Monas - Kota	Short-tern	-	Period	Environment	
		Medium-te	erm	4 years	City Planning Institution/Funding	
		Long-term	1	(2004-2007)		
1. Summary of	f Objectives		2. Ex	pected Benefits/Out	tputs	
- Promoting pu	blic transport system		- Red	ucing travel time of th	e public mode	
			- Imp	roving quality of life		
			- Incr	easing employment or	oportunities	
3. Project Des	cription		4. Pr	oject Linkages/Othe	er Sector Linkages	
- Introduction of	of Busway System		Coord	lination with MRT proje	ect	
- Total length :	21.0 km					
5. Important A	Assumptions/Condition	ons for the Pro	oject	6. Implementing A	lgency	
				DKI Jakarta and/or		
				Jakarta Transport Au	Ithority	
7. Estimated I (in 2003 price	nvestment Requirem	ent	8. Sp	ecial Considerations	5	
For Project cost	-	<u>Rp. 771.7 B</u>	- Exc	clusive bus lanes along	the median will be required	
-	-	•		<ul> <li>Road widening will be done where the number of lanes is less than 6</li> </ul>		
Road widening ( Others:	(K-24)	<u>Rp. 711.1 B</u> <u>Rp. 60.6 B</u>	<ul> <li>Large terminal facilities will be needed at the major</li> </ul>			
			transferring points			
9. Environmen	ital Impact	10. Locat	ion Ma	p/Information/Drav	wings	
1) Social Enviro	nment		3274 #12(8)			
	is needed where road		T	5-18CPS		
widening is request 2) Natural Envir		ALS.	1	Kota		
- Unknown	onment	NA STATE		HERRY		
3) Pollution		Kalider	es			
- Improving the	Air pollution					
			素的品		KARA	
				S I AL	Pulo gadung	
		PB01	Line Line Li	Dulue	公式市民管理社	
			- Lebak nsion of	Kota - Blok M)		
		·王家				
			Xa			
		對大陸	A			
				<b>从</b> 图 名言语		
			Lebak	Bulus Ragunan	Kp. Rambutan	
		could be a construction of the pro-		II. I. I. BORNELLES, MARKET AVE.	an an weak of the state of the	

Project No.	Project Title				Sector	
PB-02	Busway System (2) K	<ul> <li>□ Road</li> <li>□ Railway</li> <li>⊠ Bus</li> <li>□ Traffic Management</li> <li>□ Safety and Security</li> <li>□ Environment</li> <li>□ City Planning</li> <li>□ Institution/Funding</li> </ul>				
Project Location	on	Project Prior	ity	Implementation		
Ragunan – Kuni	ngan – Monas - Kota	Short-tern	erm	Period 4 years (2004-2007)		
1. Summary of	f Objectives		2. Ex	pected Benefits/Out	tputs	
- Promoting pul	blic transport system		- Red	ucing travel time of the	e public mode	
			- Imp	roving quality of life		
			- Incr	easing employment op	oportunities	
3. Project Des	cription		4. Pr	oject Linkages/Othe	er Sector Linkages	
	of Busway System				-	
- Total length :						
5. Important A	Assumptions/Condition	ons for the Pro	oject	ject 6. Implementing Agency		
	-		DKI Jakarta and/or Jakarta Transport Authority			
	nvestment Requirem	ent	8. Special Considerations			
(in 2003 price	-		- Exclusive bus lanes along the median will be required			
For Project cost		<u>. 151.8 B</u>	- Large terminal facilities will be needed at the major			
Road widening Others		<u>. 0</u> . 151.8 B	transferring points			
9. Environmen	tal Impact	10. Locat	ion Ma	p/Information/Drav	wings	
<ol> <li>Social Enviro</li> <li>Resettlement i widening is requ</li> <li>Natural Envir</li> <li>Unknown</li> <li>Pollution</li> <li>Improving the</li> </ol>	s needed where road iired onment	Kalider	Lebak	K	Pulo gadung Dulo gadung ta - Ragunan Kp. Rambutan	

Project No. PB-03	Project Title Busway System (3) k	ota-Kampung R	ambuta	an	Sector
<b>Project Locatic</b> KP Rambutan – Kota	on Cawan – Senen –	Project Prior Short-tern Medium-te	n erm	Implementation Period 4 years (2004-2007)	<ul> <li>Kallway</li> <li>Bus</li> <li>Traffic Management</li> <li>Safety and Security</li> <li>Environment</li> <li>City Planning</li> <li>Institution/Funding</li> </ul>
<ul> <li>1. Summary of Objectives         <ul> <li>Promoting public transport system</li> </ul> </li> <li>3. Project Description         <ul> <li>Introduction of Busway System</li> <li>Total length : 24.0 km</li> </ul> </li> <li>5. Important Assumptions/Conditions for the Pro-</li> </ul>			2. Expected Benefits/Outputs  - Reducing travel time of the public mode  - Improving quality of life  - Increasing employment opportunities  4. Project Linkages/Other Sector Linkages  - R22 Improvement of intersections to flyover/underpasses  Dject  6. Implementing Agency  DKI Jakarta and/or Jakarta Transport Authority		
(in 2003 prices	oject cost in Total: <u>Rp. 489.7 B</u> widening (R-12) <u>Rp. 400.7 B</u>		<ul> <li>8. Special Considerations</li> <li>Exclusive bus lanes along the median will be required</li> <li>Road widening will be done where the number of lanes is less than 6</li> <li>Large terminal facilities will be needed at the major transferring points</li> </ul>		
<ul> <li>9. Environmen</li> <li>1) Social Environ</li> <li>Resettlement i widening is requ</li> <li>2) Natural Environ</li> <li>Unknown</li> <li>3) Pollution</li> <li>Improving the</li> </ul>	nment s needed where road iired onment	10. Locati			wings

Project No.	Project Title				Sector	
PB-04	Busway System (4) Kalideres-Pulogadung			☐ Road ☐ Railway		
Project Location Kalideres - Monas - Senen - Pulogadung		Project Priority ☑ Short-term ☑ Medium-term ☑ Long-term		Implementation Period 4 years (2004-2007)	<ul> <li>Bus</li> <li>Traffic Management</li> <li>Safety and Security</li> <li>Environment</li> <li>City Planning</li> <li>Institution/Funding</li> </ul>	
1. Summary of Objectives			2. Expected Benefits/Outputs			
- Promoting public transport system			- Reducing travel time of the public mode			
			- Improving quality of life			
			- Increasing employment opportunities			
3. Project Description			4. Project Linkages/Other Sector Linkages			
- Introduction of Busway System						
- Total length : 25.5 km						
5. Important Assumptions/Conditions for the Pro			oject	6. Implementing A	gency	
			DKI Jakarta and/or Jakarta Transport Authority			
7. Estimated Investment Requirement			8. Special Considerations			
(in 2003 prices)			- Exclusive bus lanes along the median will be required			
For Project cost in Total: <u>Rp. 247.3 B</u>			<ul> <li>Road widening will be done where the number of lanes is less than 6</li> </ul>			
Others	Road widening (R-28)         Rp. 148.8 B           Others         Rp. 98.5 B		- Large capacity terminal facilities will be needed at the			
			major transfer points			
9. Environmental Impact 10. Locatio				on Map/Information/Drawings		
<ol> <li>Social Environment</li> <li>Resettlement is needed where road widening is required</li> <li>Natural Environment</li> <li>Unknown</li> <li>Pollution</li> <li>Improving the Air pollution</li> </ol>				kota ulo Gadung Bulus Ragunan	Pulo gadung Kp. Rambutan	